PSOMAS

ON-CALL ENGINEERING DESIGN SERVICES FOR UTILITIES (SEWER, STORM DRAIN)

City of
Hermosa Beach

RFQ#20-02
09.21.2020

PSOMAS

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PSOMAS

Balancing the Natural and Built Environment

September 21, 2020

Andrew Nguyen, Assistant Engineer
City of Hermosa Beach
City Clerk Office
1315 Valley Drive
Hermosa Beach, CA 90254

Re: On-Call Engineering Design Services for Utilities (Sewer, Storm Drain)
RFQ No. 20-02

Dear Mr. Nguyen:

Psomas looks forward to partnering again with the City of Hermosa Beach to fulfill the City's engineering design needs for upcoming sewer and storm drain projects. In doing so, our mission is clear: to offer professional services that will benefit the City and its constituents in the near and long term.

Since 1946, Psomas has established a reputation on the front lines of sustainable engineering. Our engineers combine strong client relationships and project management skills with technical and procedural expertise to deliver projects that are both environmentally contextual and cost effective. Focusing on project delivery, Psomas' Engineering team has the right mix of professionals to verify sewer and storm drain (drainage) projects are designed and constructed efficiently. To us, this means being able to fully serve the City on sewer and storm drain projects that involve feasibility studies, environmental clearance, preliminary plans, all the way through final design and construction. As demonstrated in our proposal, our capabilities and experience include projects involving:

- Sewer, Storm Drain Master Plan and Studies
- Feasibility Study and Analysis
- Assessment and Rehabilitation of Sewer and Storm Drain Facilities
- Water Quality Management and Post-Construction Mitigation
- Sewer and Storm Drain Design

Our clients have included the City of Hermosa Beach, as well as numerous cities and counties throughout Los Angeles County and the greater Southern California area.

The Psomas Team has the required resources, track record, and relevant experience in successfully delivering identical services to other cities and local agencies. As Contract Manager, I (**Joseph Boyle, PE**) have learned the most important attributes a consultant can offer a City are responsiveness, flexibility, and understanding of technical issues and the community. This awareness will be reinforced by our Project Managers, **Maira Salcedo, PE, ENV SP**, and **Ryan Lynch, PE, QSD, LEED AP**, who are experts in sewer and storm drain design, respectively, and have successfully designed numerous similar projects in Los Angeles County.

555 South Flower Street
Suite 4300
Los Angeles, CA 90071
Tel: 213.223.1400

www.Psomas.com

All of these attributes are the reasons Psomas is a solid choice for the City. As an on-call consultant, the Psomas Team is an extension of your staff and, thus, it is important to be good stewards of tax dollars and sensitive to community concerns.

When you select the Psomas Team, you can expect the following benefits:

Responsiveness: Being responsive to an as-needed task order request is second nature to Psomas, especially to myself as Contract Manager, as well as Maira Salcedo and Ryan Lynch. As a firm, we have more numerous on-call public agency contracts, with a majority of them coming from repeat clients. One of the keys to successfully managing as-needed contracts is my commitment to responsiveness and meeting the City's response time for all task orders. Being responsive and delivering on promises is at the core of as-needed contract management, as well as the basis of good, professional service.

Contextualized: Design services will be performed to be consistent with the Sewer and Storm Drain Master Plans. Any task and assignment performed will consider these master plans as the City's 'big picture' goal in meeting its current and future needs. Such mindfulness allows Psomas to provide the City with the most cost-effective professional services during design and especially for construction.

Flexibility: Demonstrating flexibility means being able to expand and contract to the needs of the City on short notice. This can be difficult for many firms given they may not have the resources to deliver these types of services, but not for Psomas. To augment the staff we have named in this proposal, Psomas can draw upon additional resources throughout the firm.

Understanding the Hermosa Beach Community: As a vibrant city in the South Bay region, the City of Hermosa Beach has a stellar reputation for being a great place to live and visit. This reputation has come as a result of both staff and your consultants understanding the community they are serving, as well as a commitment to going above and beyond. The Psomas Team understands the City's goals for delivering projects on time and within budget, and Psomas is the right firm to deliver innovative, timely and cost effective professional engineering solutions to enhance the community and quality of life of your residents. Our Team is committed to delivering the highest quality services based on our experience serving the communities of Redondo Beach, Manhattan Beach, Newport Beach, Laguna Beach, Dana Point, and other Southern California beach cities.

As a Vice President of Psomas, a California corporation, I am authorized to bind the firm and will serve as the point of contact during the proposal process. Psomas has not received any addenda to the City's RFP for this project. This proposal is valid for a period of 90 days from the date of submittal.

As a Southern California based firm, Psomas is in the position to respond to the City's needs quickly and with staff that are qualified and firm, but fair. We are excited about the opportunity to provide the City of Hermosa Beach with Professional Engineering Design Services and we look forward to your favorable review of our statement of qualifications.

Sincerely,

PSOMAS

Joseph Boyle, PE
Vice President/Principal

Section 2

FIRM PROFILE

Psomas

Dedicated to balancing the natural and built environment, Psomas provides sustainably engineered solutions to public and private clients worldwide. As a full-service consulting firm, we help our clients create value and deliver complex projects.

Markets served include transportation, water, site development, and energy with the following services offered:

- Civil engineering
- Land surveying and geospatial services including use of drones, 3D laser scanning and subsurface utility locating
- Site development engineering
- Transportation and traffic engineering
- Structural engineering
- Water and wastewater engineering
- Environmental planning and resource management
- Land planning and urban design
- Land use entitlements
- Construction management
- GIS consulting

Sustainable practices are incorporated into all of our services. From designing Institute for Sustainable Infrastructure (ISI) certified projects such as removing pollutants from urban stormwater runoff to site design for LEED™-certified projects, Psomas is in the forefront of the sustainable design movement. We currently have over 100 staff who are ENV SPs (Envision Sustainability Professionals through ISI) and/or LEED APs.

Official Name/Address

Psomas
555 South Flower Street, Suite 4300, Los Angeles, CA 90071

Primary Point of Contact

Joseph Boyle, PE
555 South Flower Street, Suite 4300, Los Angeles, CA 90071
joeboyle@psomas.com | 714.481.8060

Type of Business Entity

Psomas is a California Corporation.

Federal Employer ID No.

95-2863554

Years of experience providing required, equivalent, or related services

More than 70 years.

Any failures or refusals to complete a contract

None.

Firm Locations

California

Los Angeles | 555 South Flower Street
Suite 4300, Los Angeles, CA 90071
Phone: 213.223.1400 | Fax: 213.223.1444

Santa Ana | 5 Hutton Centre Drive
Suite 300, Santa Ana, CA 92707
Phone: 714.751.7373 | Fax: 714.545.8883

Culver City | 100 Corporate Pointe
Suite 265, Culver City, CA 90230
Phone: 310.703.1371 | Fax: 310.703.1388

Pasadena | 225 South Lake Avenue
Suite 1000, Pasadena, CA 91101
Phone: 626.351.2000 | Fax: 626.351.2030

Auburn | 11661 Blocker Drive
Suite 200 Auburn, CA 95603
Phone: 530.885.7072 | Fax: N/A

Bakersfield | 1430 Truxtun Avenue
5th Floor, Bakersfield, CA 93301
Phone: 661.437.4398 | Fax: 661.437.4399

Riverside | 1500 Iowa Avenue
Suite 210, Riverside, CA 92507
Phone: 951.787.8421 | Fax: 951.682.3379

Roseville | 1075 Creekside Ridge Drive
Suite 200, Roseville, CA 95678
Phone: 916.788.8122 | Fax: 916.788.0600

Sacramento | 3550 Watt Avenue
Suite 140, Sacramento, CA 95821
Phone: 916.979.7640 | Fax: N/A

San Diego | 401 B Street, Suite 1600
Wells Fargo Plaza, San Diego, CA 92101
Phone: 619.961.2800 | Fax: 619.961.2392

Valencia | 27220 Turnberry Lane
Suite 190, Valencia, CA 91355
Phone: 661.219.6000 | Fax: 661.775.2718

Walnut Creek | 1660 Olympic Boulevard
Suite 300, Walnut Creek, CA 94596
Phone: 925.933.2300 | Fax: N/A

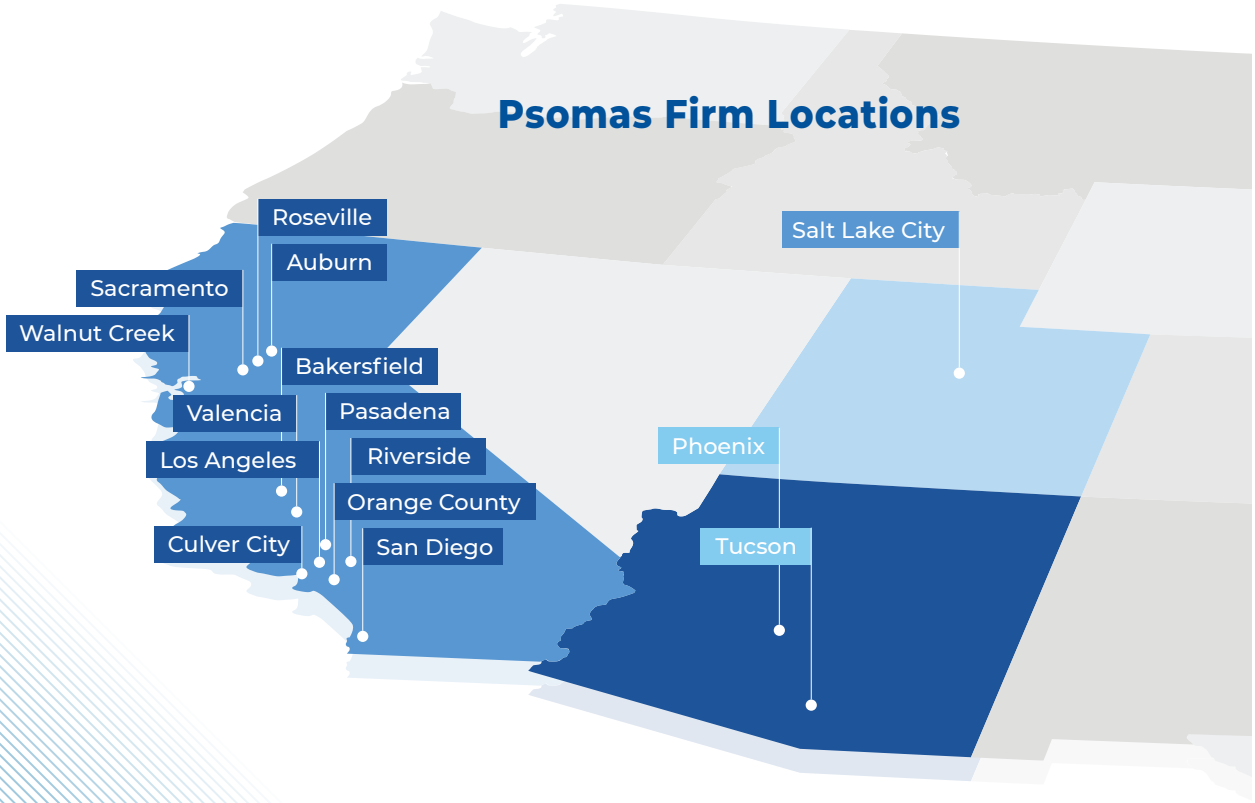
Arizona

Tucson | 333 E. Wetmore Road
Suite 450, Tucson, AZ 85705
Phone: 520.292.2300 | Fax: 520.292.1290

Phoenix | 4600 E Washington Street
Suite 300, Phoenix, AZ 85034
Phone: 602.222.8260 Fax: N/A

Utah

Salt Lake City | 4179 Riverboat Road
Suite 200, Salt Lake City, UT 84123
Phone: 801.270.5777 | Fax: 801.270.5782



Section 3

PROJECT UNDERSTANDING AND APPROACH

Project Understanding

Psomas' multi-disciplinary teams of experts thrive on providing practical, creative, and cost-effective solutions. In so doing, our approach and considerations have always been geared and focused on our clients' short- and long-term needs. Relative to upcoming sewer and storm drain improvement projects, they entail:

Our approach and considerations have always been geared and focused on our clients' short- and long-term needs

- Sewer Preliminary Design Technical Memorandum considers all feasible alignment, diversion and sizing alternatives and meets build-out capacity requirements
- Sewer design identifies all potential utility conflicts and includes extensive potholing to eliminate construction surprises – consider utility relocation or construction of storm drain "squash boxes" as solution to sewer alignment
- Recommended sewer project is the optimum alternative based on all aspects including cost, construction, permitting, impacts on the community, and operational considerations
- Careful analysis of existing drainage patterns for mitigation opportunities
- Verification of existing hydrology/hydraulic studies, as applicable, and accurate implementation of hydrology studies based on land use conditions and the City's zoning criteria
- Storm drain alignment that considers impacts to residential, commercial/retail, and institutional (i.e., schools) neighborhoods, both quantitative and qualitative
- Design that considers existing utility crossings and the respective allowable ground cover, slopes, and potential conflicts
- Design that considers optimum cost of construction, which implies a conservative alternative analysis and value engineering during the Project Design Study
- Design must allow for future storm drain connections and Low Impact Development (LID) alternatives in accordance with the Master Plan
- Construction cost estimate that reflects most recent bid results and up-to-date information on construction items

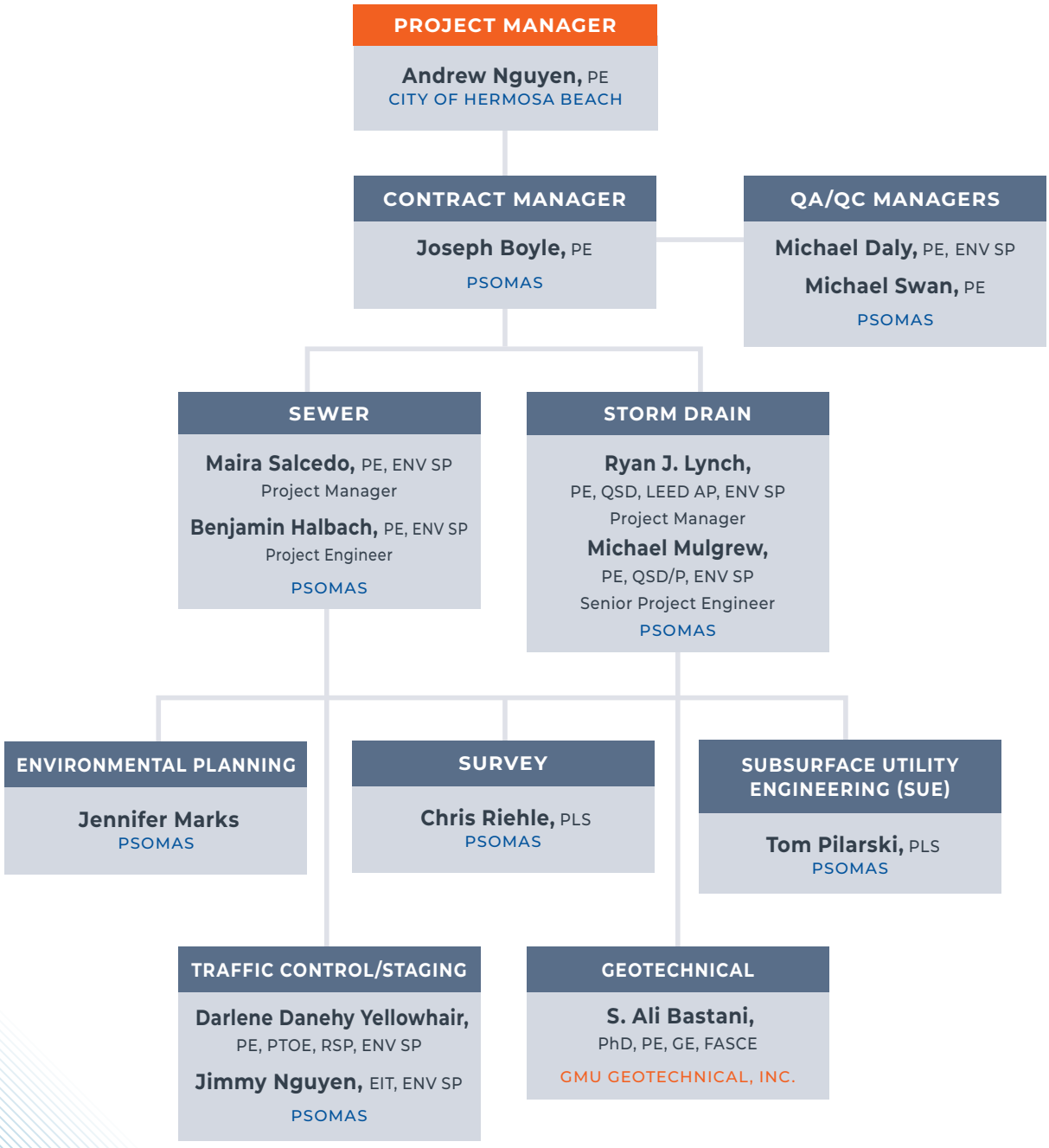
Key Reference Documents

In performing Scope of Services associated with Sewer and Storm Drain improvement projects, Psomas team members will review and utilize the following guiding documents, among others:

- PLAN Hermosa, the City's Comprehensive General Plan and Local Coastal Program, adopted August 2017
- PLAN Hermosa Environmental Impact Report, certified August 2017
- Hermosa Beach 2019/20 Capital Improvement Program, adopted June 2018

- City's Master Plan of Sanitary Sewers
- Water Quality Management Templates and Guidelines
- City's Storm Drainage Master Plan Program
- City Public Works Department Standard Plans and Details
- Los Angeles County Hydrology Manual
- Los Angeles County's SUSMP Guideline
- Standard Plans for Public Works Construction (SPPWC, latest edition)
- Standard Specifications for Public Works Construction (SSPWC, latest edition and its supplements)
- Caltrans Standard Plans and Specifications, latest edition, as applicable to drainage/sewer infrastructure

Organization Chart



Approach to Work Program

Psomas proposes to complete the City's Sewer and Storm Drain Improvement projects based on the following workflow:

1. Preliminary engineering work, which usually culminates in a Preliminary Design, Technical Memorandum, Study or Report;
2. Final engineering work, which will result in a complete Plans, Specifications, and Estimates package; and,
3. Bidding and Construction Phase services, where Psomas can assist the City as requested during construction of proposed improvement projects.

At the beginning of each project, the Psomas Team will initiate a project meeting with the City, review the proposed scope of work, and integrate the requirements and objectives of the identified project. The kick-off meeting will include Psomas team members, City staff, and other affected parties and agencies, and will provide the forum to identify clear lines of communication and review the final scope, schedule, milestones and other pertinent project details.

The kick-off meeting is often followed by a field visit to the project site to review existing conditions and determine all of the issues that may be affected by the proposed improvements.

Task 1: Research and Data Collection

In addition to the field review, any preliminary plans, studies, and reports that may exist regarding the project or project area will be researched and obtained from the City, County and pertinent local utility providers. Available site infrastructure will be collected. Such data may include right-of-way maps, as-built plans, preliminary planning or studies, hydrology/hydraulic calculations in the case of drainage improvements, utility plans, and other data. Additionally, Psomas will review relevant design considerations for existing conditions, and assess deficiencies and the need for corrective action.

Task 2: Topographic Survey and Base Map

Psomas will perform survey of the project site under the direction of a professional land surveyor or civil engineer properly registered in the State of California. This survey will consist of a field topographic survey and cross-sectional survey. The survey information will produce a Topographic Base Map at appropriate scale with all elevations tied to City/County benchmark(s).

At the completion of the project, all survey notes will be turned over to the City in their original format for permanent recordkeeping. A typical Topographic Survey/Base Map includes the following:

- Survey Control
- Researched City/County records with centerline ties and benchmarks near and within the project
- Locate sufficient number of monuments to plot the centerline and right-of-way
- Topographic survey of project area/limits
- Perform detailed survey with cross sections at a specified interval

- Dip existing storm drain catch basins, sewer and storm drain manholes, as required
- Reduce, adjust, and process the field collected survey data
- Plot points into CADD drawing, draw breakline, and generate digital terrain model
- Research, calculate and plot the centerline and right-of-way in the project area
- Provide ASCII file, CADD drawing and field notes
- Upon completion of field work, the survey data will be reduced, imported and plotted into an AutoCAD drawing with field edits to ensure the accuracy and completeness of the drawing

Task 3: Geotechnical Investigation

Working with our subconsultant, GMU Geotechnical, Psomas will perform soil testing which may include bearing, trench/backfill constraints, groundwater presence, and other types of testing to gather information and characterize subsurface soil for purposes of trench excavations, bedding, backfill materials, and slopes and embankment construction.

Task 4: Environmental

With the support of our in-house Environmental Services Team, Psomas will prepare pertinent environmental documentation to meet the requirements of CEQA and NEPA. The team will submit environmental findings to Caltrans' Environmental section, subject to the approval of City Council. Technical studies to the project will be prepared.

For qualified projects, Psomas staff typically provides a project description and graphic, as well as fills out the City's Environmental/Project Information Form and a Notice of Exemption for City staff to process. Public meetings and workshops may be part of the environmental process and documentation.

Task 5: Utility Notification/Research/Mapping

Psomas will perform a detailed utility investigation of the project site. This will include a request through Dig Alert and an investigation of available records for data needed to avoid design conflicts. Available plans from the City's Public Works Department will also be obtained. Notices will be sent out to utility companies known to be present within the project limits requesting utility locations, atlas maps and plans. A project log of all utilities will be generated showing the status of each information request. The log will be updated during the life of the project.

Psomas' Subsurface Utility Engineering (SUE) team will pothole and locate utilities that are deemed to be critical and may be impacted by the proposed underground construction. Considering the gravity nature of either a storm drain or sewer pipeline, the importance of utility conflict detection and resolution cannot be overstated.

A topographic base map will be used to prepare a utility base map that will show estimated alignment of underground utilities combined with the above ground utilities located in the topographic base map. The utility base map will be an AutoCAD drawing at appropriate scale and will be used to determine if any

utility relocations, either horizontal or vertical, may be needed for the proposed improvements.

Upon completion and approval of Preliminary Engineering work (prior to Draft submittal), a second utility notice with preliminary plans will be sent, requesting verification of facilities and required coordination of anticipated relocation or protection of existing facilities. Final improvement plans will be transmitted to all utility companies whose facilities are within the project site, informing them of the anticipated bidding period, anticipated construction schedule, and proposed timeframe of any relocation required of them.

Task 6: Preliminary Engineering

On sewer and storm drain projects, Preliminary Engineering work will typically include considerations and analysis of multiple alternative pipe alignments and the evaluation of right-of-way constraints, environmental, utility impacts, and stakeholders' interests.

Sewer Manhole - CIP 17-416 Project

Based on the aforementioned, a preliminary horizontal and vertical layout will be produced, along with details, sections and renderings, as necessary.

On sewer improvement projects, we will utilize the load values and capacities noted in the City's current Sewer Master Plan to verify proposed improvement sizes. If requested, we will prepare a Preliminary Design Technical Memorandum evaluating replacement in kind or alternative alignments. Once the proposed improvement is determined, we will prepare plans, specifications and a cost estimate as noted in the RFP.

For sewer rehabilitation projects, Psomas' NASSCO-certified PACP and MACP engineers will review videos of the sewers and manholes to determine the appropriate means of rehabilitation including lining, spot repairs, or replacement. Capacity calculations will be prepared to verify any lining will not compromise the design capacity of the particular pipeline segment. The recommendations will be documented in a Preliminary Design Report for review and approval by City staff.

For storm drain improvement projects, in order to produce cost-effective storm drain design that improves the overall drainage area, Psomas recommends preparation of a Preliminary Drainage Study (PDS) where consensus on key design elements is typically reached. The PDS will typically consist of geometric approval drawings, a review of utility constraints and possible relocations, alternative pipe materials/ construction methods (pre-cast versus cast-in-place), and costs for various alternatives.

Alternatives will also drive the need to verify or conduct hydrology and hydraulic studies to ensure that future downstream and upstream improvements are compatible with the design. Hydraulic calculations using the Water Surface Pressure Gradient Program (WSPG) will be prepared to verify that applicable 10-, 25-, and 100-year flood protection level hydraulic grade lines (HGL) are within acceptable limits, based upon the City's design manual and parameters.

Task 7: Construction Document Preparation Phase

Final design will commence upon approval of Preliminary Engineering work by the City. Changes or additions required as a result of the preliminary design review will be incorporated into the final design as deemed necessary. Final calculations and studies will also be performed and completed, and 'preferred' alternative alignments, structures, materials will be developed.

As part of the Construction Document PS&E package, final construction plans and details will be prepared which will show all of the proposed improvements to successfully complete projects. The plans will be concise and constructible showing the disposition of all existing facilities within the project area and limits of all proposed improvements so the project can be bid and constructed with a minimal number of questions/requests for information. Base plans of the project site will be prepared at the appropriate scale and final plans can be provided to the City digitally. Base plans will display existing topographic features and accumulated data, including pipe stationing, rights-of-way, surface features, pertinent street or other reference alignment stationing, and existing utilities.

Based on the approved Preliminary Engineering work, utility research, base mapping, and the topographic survey prepared during the preliminary engineering phase, Psomas will prepare plans, profiles and details for a proposed improvement project, and any utility line relocations. PS&E packages will be prepared for submittal to the City at Draft, Final Draft, and Final (100%) completion levels. Depending on project improvements at hand, the PS&E package may include the following:

- Title Sheet including Index Map
- Typical Section and/or Details
- Sewer Plan and Profile
- Storm Drain Plan and Profile
- Details Sheets
- Construction Staging and Traffic Control Plans
- Water Quality Management Plan, as applicable

At Psomas, we pride ourselves on producing biddable, constructible plans for our clients. We have over 70 years of experience in producing plan sets that include every detail needed to do just that.

Special Provisions: Psomas will also prepare special provisions to be incorporated into the boilerplate project specifications provided by the City, which are assumed to provide the notice inviting bids, instructions to bidders, bidder's information, agreement, bond and insurance forms, general conditions, and other applicable information. Final specifications, including special provisions and references to supplement the Standard Specifications for Public Works Construction (Green Book) and/or the Caltrans Standard Specifications, will be prepared and will include Federal provisions as required.

Technical specifications may include dewatering requirements. Standard specifications including those of Los Angeles County's Gray Book and others will be included, as needed. Standard plans, special permitting requirements, potholing and geotechnical reports, and a sample contract will be provided in the Appendix.

A final construction quantity estimate and bid schedule will be incorporated into the contract documents and an Estimate of Probable Construction Costs will be submitted. The final design package will then be submitted to the City and appropriate agencies for review and approval.

Calculation Backups: As required, Psomas will submit calculation backups pertinent to a PS&E submittal that may include hydrology, and drainage and sewer hydraulic calculations.

Task 8: Project Meetings and Coordination

Depending on the size and complexity of the project, Psomas strives to meet with project stakeholders on a regular basis to provide project status reports, updated schedules, and a list of outstanding issues and coordination required. The project status reports will identify the status of tasks, possible issues, and proposed solutions.

Task 9: Bidding and Construction Phase Services

Assistance will be provided to City staff during construction bidding, including review and recommendation for approval of addenda and clarification to the plans and specifications. Our proposed project manager will typically attend the pre-bid meetings, respond to RFIs and Addenda, and assist in bid evaluation.

Psomas can also attend pre-construction meetings with the construction contractor and will be available to answer any questions that may arise. Our project team will review shop drawings and material submittals and make comments and recommendations as required. Informal field investigations, including the marking of removal areas, will be performed. Our project team will be available on short notice for on-site reviews of construction.

Based upon red-lined as-builts furnished by the City/Contractor, Psomas will revise the original construction drawings to reflect "Record Drawing" conditions and furnish final drawings in the format requested by the City.

Roles and Responsibilities for City Staff

We have carefully reviewed the City's proposed scope of services and have provided a team of Psomas professionals, as well as subconsultants, to address these needs. We anticipate City staff will only have to provide comments on deliverables provided by Psomas.

Section 4

PROJECT MANAGEMENT PLAN

Communications Approach

Our approach to effective project communications will be similar to Psomas' approach as provided on projects under our current on-call contract with the City. We expect to have daily email communication between Psomas and City Project Managers. Meetings will be scheduled on a weekly basis by phone to keep the City apprised of project status and milestones.

Quality Assurance/Quality Control

The individuals responsible for our Quality Control Program (QCP) are the Project Manager and the Quality Assurance/Quality Control (QA/QC) Manager. Our QCP will be implemented for the duration of the projects under this contract, and is not merely a series of individual events/plan checks at a few points on the schedule. There are three major stages in our QCP: quality assurance (are we doing the right things?), quality control (are we doing things right?), and post-completion quality evaluation (what can we do better?).

In the quality planning stage, we will use the kickoff meeting to determine your QCP expectations. Our QA/QC Manager will then develop a work plan with the Project Manager based upon the client's input, the schedule, and the budget. The work plan identifies specific work products and establishes a set of relevant measures and standards of quality for each of those products. Once the work plan is completed, it is reviewed and approved by the Principal-in-Charge.

Once work on the project begins, we move on to the quality control stage. In this stage we track the execution of the work plan, review our designs and work products, and communicate with the client and team members. We provide project information through our intranet, allowing all team members to monitor the progress of our work plan. Also in this stage, the Quality Control Manager facilitates detailed technical reviews of our design and those of all team members to ensure they meet the quality standards defined in the quality planning stage. This review is continuous throughout the life of the project and ensures a smooth and "constructible" approach.

We have enhanced this stage by taking advantage of new technologies and now save a master plan set in a cloud environment to reduce the number of coordination errors.

By having all team members reviewing and commenting on only one document, we can track the comments and the coordination effort.

Finally, during the post-completion quality evaluation stage, we solicit verbal and written feedback from our client and subconsultants to assess our overall performance and identify improvement opportunities. All of these elements contribute to the success of our design review process.

Our QA/QC Manager will be responsible for independent peer review of each submittal. The following provides a summary of our Quality Assurance and Quality Control Plan:

Quality Assurance — The Process — A Management Oversight Activity

Quality Assurance refers to the process used to meet the Project Objectives and create the deliverables. Our QA/QC Manager will develop a project specific QA Manual with process checklists and project reviews, as well as monitor that the project deliverables are responsive based on the process used to create them.

The Psomas Quality Assurance Program ensures that processes and systems are developed and adhered to in such a way that the deliverables are of good quality. The process is meant to produce deliverables that meet the standard of care the first time with minimal rework.

Quality Assurance processes will be outlined concurrent with starting your project and will include process documentation, establishing standards, developing checklists, conducting project plan checks, and training.

Quality Control — Quality of Deliverables — A Technical Review of the Deliverables

Quality Control refers to quality related activities associated with the creation of the project deliverables. Quality Control is used to verify that deliverables are of acceptable quality and that they are complete and correct. Psomas, Quality Control activities include deliverable peer reviews and the plan check process.

Quality Control is the “check” or the “end-of-the-immediate-task-at-hand” record or analysis that determines the acceptability of the project deliverables. Tasks related to Quality Control will include documented reviews of reports, drawings, specifications and opinions of cost, independent review of calculations, etc. Quality Control reviews will occur with each submittal.

The Psomas Quality Control Program also compares the project deliverables against the original scope of work, project objectives and client expectations, which were developed before the project started.

Psomas Quality Control is a work product-based approach. We check whether the deliverables satisfy the quality requirements as well as the scope of work of the client. Depending upon the results, suitable corrective action is taken by the design team. Quality Control begins once the project design commences.

Based on City of Hermosa Beach requirements and standards developed during the Quality Assurance process, the Quality Control team checks whether the work products (reports, plans, specifications, cost estimates, etc.) meet all those requirements with each submittal.

Section 5

EXPERIENCE AND QUALIFICATIONS

Relevant Projects and References

Relevant project descriptions highlighting Psomas' experience providing services similar to the RFQ's Scope of Work are provided below and on the following pages. Each project description includes contact information for client references whom we are eager for the City to contact.

2018 Sewer Rehabilitation

Rossmoor and Los Alamitos, CA | **Rossmoor/Los Alamitos Area Sewer District**

RELEVANCE TO THIS PROJECT

- Sewer Pipeline Lining
- Sewer Point Repairs
- CCTV Evaluation

KEY PERSONNEL

Joesph Boyle, PE

Michael Swan, PE

Maira Salcedo, PE, ENV SP

Benjamin Halbach, PE ENV SP

CONTRACT VALUE

$262,000

REFERENCE

Rossmoor/Los Alamitos Area Sewer District
3243 Katella Avenue
Los Alamitos, CA 90720

Susan Bell
General Manager
(562) 431-2223
losalsewerdistrict@gmail.com

Psomas has served as District Engineer for the Rossmoor/Los Alamitos Area Sewer District (RLAASD) since January 2014. The RLAASD owns and maintains approximately 300,000 feet of VCP sewer ranging in size from 8 inches to 18 inches in diameter in the City of Los Alamitos, the unincorporated Rossmoor area of Orange County, and portions of the City of Seal Beach. District Engineer, Maira Salcedo, is responsible for overseeing all engineering-related matters, including review and approval of developer's plans, maintenance of the District's GIS sewer system files, coordination of annual CCTV coverage with the District's sewer cleaning and maintenance operator, and attendance at District Board of Director meetings on an as-needed basis.

As the District Engineer, Psomas staff is also responsible for reviewing approximately 20,000 to 40,000 LF of sewer system CCTV inspections annually and

2018 Sewer Rehabilitation (Continued)

making appropriate recommendations. Based on the 2016 and 2017 CCTV review (60,000 LF), Psomas made appropriate recommendations for repairs and provided design and construction services for the sewer segment rehabilitation in various locations within the District. The rehabilitation design comprised a combination of CIPP lining of approximately 2,830 feet of 8- through 18-inch-diameter sewer in 11 separate locations; UV-Cured Point Repairs (trenchless) at 68 locations; removal and replacement of approximately 860 feet of 8- and 10-inch-diameter pipe in four areas; and point repairs to 8- through 18-inch pipe at 14 different locations.

Bidding phase services were provided for this project, which included project advertisement coordination, meetings, addenda preparation, and evaluation of the four bids received, and recommended project award. Construction of the project was completed in December 2019. Construction phase services included construction inspection, RFI review, Shop Drawing review, review of pre-construction and post-construction CCTV, progress payment coordination, daily inspection reports, and record drawing preparation.

Psomas reviewed CCTV files and generated cost-effective rehabilitation recommendations including CIPP lining, trenchless point repairs, and replacement only where absolutely necessary. Using a combination of various rehabilitation methods and mechanical cleaning equipment to mitigate calcium deposits at various locations, Psomas' design was able to maximize the amount of lineal footage rehabilitated to enhance the pipeline life cycle.

2015 Sewer Repair

Rossmoor/Los Alamitos, CA | **Rossmoor/Los Alamitos Area Sewer District**

RELEVANCE TO THIS PROJECT

- Sewer Pipeline Lining
- Sewer Point Repairs
- CCTV Evaluation

KEY PERSONNEL

Joesph Boyle, PE

Maira Salcedo, PE, ENV SP

Benjamin Halbach, PE ENV SP

CONTRACT VALUE

$130,000

REFERENCE

Rossmoor/Los Alamitos Area Sewer District
3243 Katella Avenue
Los Alamitos, CA 90720

Susan Bell
General Manager
(562) 431-2223
losalsewerdistrict@gmail.com

Psomas has served as District Engineer for the Rossmoor/Los Alamitos Area Sewer District (RLAASD) since January 2014. The District serves a population of approximately 24,000 people residing in the City of Los Alamitos, the unincorporated Rossmoor area of Orange County, and portions of the City of Seal Beach. RLAASD owns and operates approximately 300,000 feet of VCP sewer ranging in size from 8 to 18 inches in diameter. District Engineer, Maira Salcedo, is responsible for overseeing all engineering-related matters, including review and approval of developer's plans, maintenance of the District's GIS sewer system files, coordination of annual CCTV coverage with the District's sewer cleaning and maintenance operator, and attending District Board of Directors meetings on an as-needed basis.

In 2014, Psomas also updated the District's 15-year-old hydraulic sewer model to determine the system's current ability to serve its customer base. As District Engineer, Psomas staff is also responsible for reviewing approximately 20,000 to 40,000 LF of sewer system CCTV tapes annually and making appropriate recommendations for repairs where needed. Based on the 2014 CCTV review, Psomas recommended a combination of CIPP lining of approximately 2,300 feet of 8-inch-diameter sewer in seven separate locations, UV-Cured Point Repairs (trenchless) at eight locations, removal and replacement of approximately 1,800 LF of 8- and 12-inch-diameter pipe in seven areas (including 980 LF of pipe bursting), and point repairs to 8- and 10-inch pipe at 16 different locations.

As part of the project design, Psomas was responsible for obtaining preliminary encroachment permits from the City of Los Alamitos and the County of Orange. Psomas staff coordinated project advertising, evaluated the seven bids received, and recommended project award. A construction contract was awarded by the District's Board of Directors in September 2015. Psomas handled shop drawing review, and provided daily construction inspection services. Construction of the project was completed in June 2016.

Additionally, Psomas provided Construction Management services to the District and was responsible for inspection of construction methods, materials, techniques, and sequences to evaluate the contractor's compliance with the construction documents, provide observation of material testing, and review all construction prior to burial. Other responsibilities included assisting with monthly progress payment recommendations, measurements of bid items, and assisting with contractor meetings to resolve any differences.

On-Call Design Services for CIP 17-416 Sewer Improvements

Hermosa Beach, CA | **City of Hermosa Beach**

RELEVANCE TO THIS PROJECT

- Sewer Pipeline Lining
- Sewer Pipeline Replacement
- CCTV Evaluation
- Point Repair

KEY PERSONNEL

Joseph Boyle, PE

Maira Salcedo, PE, ENV SP

Benjamin Halbach, PE ENV SP

Jimmy Nguyen, EIT, ENV SP

CONTRACT VALUE

$205,000

REFERENCE

City of Hermosa Beach
1315 Valley Drive
Hermosa Beach, CA
90254

Andrew Nguyen, PE
Assistant Engineer
(310) 318-0212
anguyen@hermosabeach.gov

Under an On-Call contract with the City of Hermosa Beach, Psomas was retained to prepare construction plans and specifications for approximately 2,700 LF of sewer lining, 9,200 LF of sewer replacement, and 39 manholes to be rehabilitated. The project was organized into four distinct areas, including:

- Area 1: Highland
- Area 2: Harper Avenue
- Area 3: Hermosa Avenue
- Area 4: 24th Street

These areas were derived from the 2017 Sewer Master Plan (SMP) and depicted in four separate exhibits. In March 2018, the City hired Psomas to evaluate the existing conditions of these selected sewer segments and confirm the SMP's recommendations or provide supplemental recommendations, if appropriate. Our NASSCO certified engineers evaluated the CCTV reports and videos and categorized each of the segments into one of the following:

1. Remove and Replace: Removal and replacement of the entire pipe segment from manhole to manhole
2. Point Repair: Removal and replacement of localized portions of a pipe typically 3–15 LF)
3. Line Pipe: Cured-in-place (CIPP) liner from manhole to manhole
4. Deposit/Root Removal: No structural deficiencies, but has heavy deposits or roots that may result in blockage of flow or future structural damage
5. No Repair

Psomas found that, although the City's sewer system is reaching the end of its design life, the majority of the concrete pipe is in good condition overall and not structurally compromised. As a result, we were able to reduce the amount of remove and replace from 9,200 LF to 1,850 LF and increase the amount of lining from 2,700 LF to 7,900 LF, resulting in significant construction cost savings.

In addition, we performed a field evaluation of approximately 90 sewer manholes within the project area to determine if the SMP recommendations for improvement are confirmed or need supplemental modifications. The final design plans resulted in 1,850 LF of remove and replace segments; 100 LF of point repairs at 23 locations; 7,900 LF of lining; 700 LF of deposit and root removal; and approximately 650 LF where no repair or rehabilitation was required.

On-Call Design Services for CIP 19-421 Sewer Improvements

Hermosa Beach, CA | **City of Hermosa Beach**

RELEVANCE TO THIS PROJECT

- Sewer Pipeline Lining
- Sewer Pipeline Replacement
- CCTV Evaluation
- Point Repair

KEY PERSONNEL

Joesph Boyle, PE

Michael Swan, PE

Maira Salcedo, PE, ENV SP

Benjamin Halbach, PE ENV SP

Tom Pilarski, PLS

Christopher Riehle, PLS

CONTRACT VALUE

$201,000

REFERENCE

City of Hermosa Beach
1315 Valley Drive
Hermosa Beach, CA
90254

Andrew Nguyen, PE
Assistant Engineer
(310) 318-0212
anguyen@
hermosabeach.gov

Soon after construction completion of the CIP 17-416 Sewer Improvement project design by Psomas, under an On-Call contract with the City of Hermosa Beach in 2019, Psomas was asked to prepare construction plans and specifications for approximately 1,700 LF of sewer lining, 10,900 LF of sewer replacement, and 116 manholes to be rehabilitated. An additional 5,800 LF of sewer pipe within an upcoming City paving project was added and evaluated for structural and operational deficiencies. The project was organized into six distinct areas, including:

- Area 1: Prospect Avenue
- Area 2: Aviation Boulevard
- Area 3: Hermosa Avenue
- Area 4: 25th Street
- Area 5: Beach Drive
- Area 6: Bayview Drive

These areas were derived from the 2017 Sewer Master Plan (SMP) and depicted in six separate exhibits. Psomas evaluated the existing conditions of these selected sewer segments and confirmed the SMP's recommendations or provided supplemental recommendations, as appropriate. Our NASSCO certified engineers evaluated the CCTV reports and videos and categorized each of the segments into one of the following:

1. Remove and Replace: Removal and replacement of the entire pipe segment from manhole to manhole
2. Point Repair: Removal and replacement of localized portions of a pipe (typically 4–35 LF)
3. Line Pipe: Cured-in-place (CIPP) liner from manhole to manhole
4. Deposit/Root Removal: No structural deficiencies, but has heavy deposits or roots that may result in blockage of flow or future structural damage
5. No Repair

On-Call Design Services for CIP 19-421 Sewer Improvements (Continued)

Psomas found that, although the City's sewer system is reaching the end of its design life, the majority of the pipe is overall in good condition and not structurally compromised.

As a result, we were able to reduce the amount of remove and replace from 10,900 LF to 4,500 LF and increase the amount of lining from 1,700 LF to 7,900 LF, resulting in engineering cost savings and significant construction cost savings, so much so that additional segments were added to the original scoped segments within the engineering design contract. Over 60% (2,800 LF) of the removed and replaced segments are being relocated from public concrete sidewalks into the street's travel lanes.

In addition, Psomas performed a field evaluation of 116 sewer manholes within the project area to determine if the SMP recommendations for improvement are confirmed or need supplemental modifications. The final design plans resulted in 4,500 LF of remove and replace segments; 100 LF of point repairs at 12 locations; 8,000 LF of lining; 20 LF of deposit and root removal; and 57 rehabilitated manholes.

Pelican Hill Golf Club Sewer Pipeline Rehabilitation

Newport Coast, CA | **Irvine Ranch Water District**

RELEVANCE TO THIS PROJECT

- Sewer Pipeline Lining
- Sewer Point Repairs
- CCTV Evaluation

KEY PERSONNEL

Joesph Boyle, PE

Michael Swan, PE

Maira Salcedo, PE, ENV SP

Benjamin Halbach, PE ENV SP

Jimmy Nguyen, EIT, ENV SP

CONTRACT VALUE

$109,000

REFERENCE

Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618

Christian Kessler
Engineer
(949) 453-5441
kessler@irwd.com

Irvine Ranch Water District (IRWD) owns and maintains four sewer pipelines that convey flows through the Pelican Hill Golf Club (PHGC) and Pelican Hill Community Association. The four sewer pipelines were constructed in the early 1990s with a mix of polyvinyl chloride (PVC) and epoxy-lined ductile iron pipe (DIP) ranging from 8- through 12-inch-diameter. As part of IRWD's routine CCTV inspection, portions of these areas were found to be experiencing material pitting, and deformation and/or liner failure at various locations.

In May 2019, IRWD hired Psomas to evaluate the existing conditions of 6,027 LF of sewer pipe and provide professional design services for the four sewer pipelines. Our NASSCO certified engineers evaluated the CCTV reports and videos. We found the majority of the pipelines were in good overall condition. As part of the design services provided, Psomas assisted in coordination with the PHGC to minimize disruption to its operations, and preparation of conceptual construction area layouts and conceptual construction access to manholes within the PHGC. The final design plans completed in November 2019 resulted in 2,420 LF of lining, 5 LF of root removal, and 35 LF of calcium deposit removal.

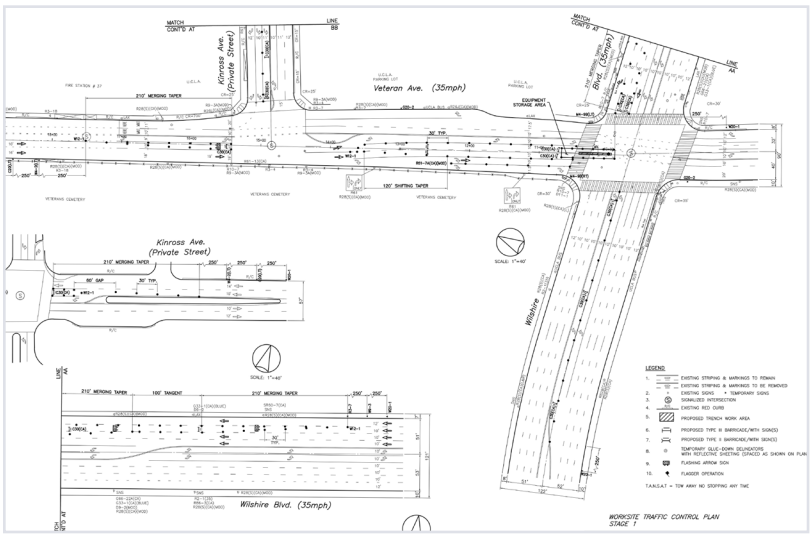
Construction phase services included RFI review, Shop Drawing review, review of pre-construction, pre-lining, and post-construction CCTV, and record drawing preparation. IRWD decided to complete the record drawings due to the minor contractor as-built markups. Construction of the project was completed in April 2020.

University of California, Los Angeles, Veteran Avenue Sewer Improvements

Los Angeles, CA/University of California, Los Angeles

RELEVANCE TO THIS PROJECT

- Utility Research
- Preliminary and Final Design
- Agency Coordination



KEY PERSONNEL

Ryan Lynch, PE, QSD, LEED AP, ENV SP

Michael Swan, PE

CONTRACT VALUE

$88,000

REFERENCE

University of California, Los Angeles
405 Hilgard Avenue, 3rd Floor
Los Angeles, CA 90095

Ara Aroyan, PE
Project Director, Design and Construction
(310) 206-0348
aaroyan@caponet.ucla.edu

This project included upgrades to 1,600 LF of the existing City of Los Angeles sanitary sewer main, located under Veteran Avenue between Wilshire and Sunset Boulevards, to accommodate future University projects. Psomas, as the Engineer of Record, managed and coordinated all design and construction document preparation tasks and construction administration responsibilities. The scope of work included review of future project requirements and recommending upgrades to the existing underground sewer line. Psomas also developed traffic control plans, the challenging aspects involved restrictive work hours, required maintenance of identified access routes, specified construction equipment, project schedule, and coordination with the City of Los Angeles, UCLA, and the local fire department.

Milton Street Park

Los Angeles, CA/SWA Group

RELEVANCE TO THIS PROJECT

- Stormwater Management Improvements
- Preliminary and Final Design
- Construction Phase Services

KEY PERSONNEL

Ryan Lynch, PE, QSD, LEED AP, ENV SP

Michael Mulgrew, PE, QSD/P, ENV SP

CONTRACT VALUE

$103,000

REFERENCE

Mountains Recreation and Conservation Authority
5750 Ramirez Canyon Road
Malibu, CA 90265

Ana Straabe
Deputy Chief of Urban Projects and Watershed Planning Division
(323) 221-9944 x107
ana.straabe@mrca.ca.gov

Psomas provided civil engineering services for the Milton Street Park, a new 1.2-acre urban park along the Ballona Creek Bike Trail. Approximately 1,000 feet in length and 45 feet wide, the park includes bike trail enhancements, seating and picnic areas, naturally vegetated open space, native plantings, bird watching platforms, as well as the creation of an interpretative ecological habitat. The park incorporated Low Impact Development (LID) measures, a regional stormwater capture and treatment facility, and utilized the City of Los Angeles Green Street Standards for project elements such as vegetated stormwater curb extensions (VSCEs) and interlocking pavers in parking areas.

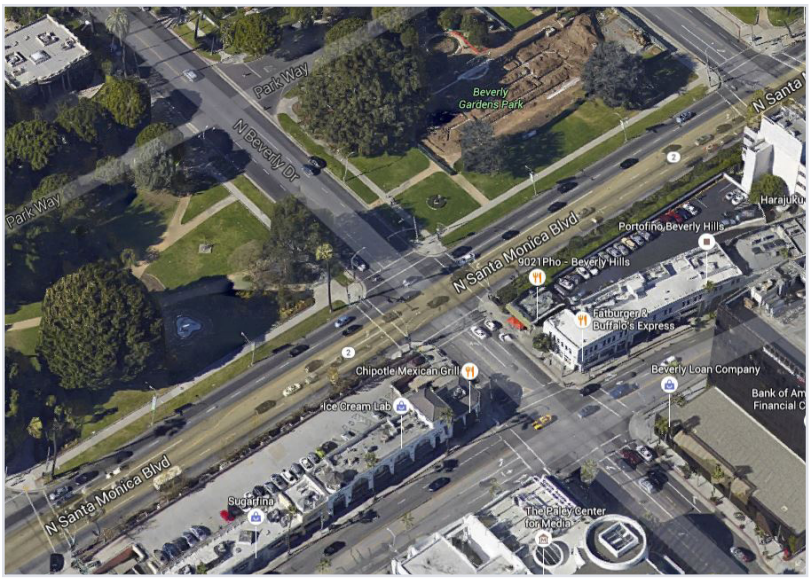
Psomas' civil engineering services included pre-design, design phase, and construction document phase services, Storm Water Pollution Prevention Plan (SWPPP), Standard Urban Stormwater Mitigation Plan (SUSMP), bidding and construction support, meetings, and coordination with the City of Los Angeles Department of Building and Safety, Department of Public Work Bureau of Engineering (DPW-BOE,) and Department of Transportation Processing. Psomas also provided revocable permit processing, design, bid, and construction administration services. In addition, public improvements "B" Permit documents were prepared during the construction document phase that were submitted to the Bureau of Engineering and the Department of Transportation for review and approval.

City of Beverly Hills, North Santa Monica Boulevard (NSMB) Reconstruction

Beverly Hills, CA/City of Beverly Hills

RELEVANCE TO THIS PROJECT

- Stormwater Management Improvements
- Traffic Control Plans
- Permitting Assistance



KEY PERSONNEL

Ryan Lynch, PE, QSD, LEED AP, ENV SP

Michael Mulgrew, PE, QSD/P, ENV SP

Jimmy Nguyen, EIT, ENV SP

CONTRACT VALUE

$1.3 million

REFERENCE

City of Beverly Hills
405 Hilgard Avenue, 3rd Floor
Los Angeles, CA 90095

Samer Elayyan, PE
Project Manager
(310) 285-2524
selayyan@beverlyhills.org

The City of Beverly Hills reconstructed North Santa Monica Boulevard (NSMB) from the eastern city limit with West Hollywood to the western city limit with Los Angeles. As one of the major east-west arterials in the City, fronted by many city landmarks including the Beverly Gardens Park, this was a significant undertaking and was closely monitored by the public. Since roadway and stormwater management improvements were required due to the deteriorated conditions, this reconstruction project provided the City with a once-in-a-lifetime opportunity to improve the design of the corridor by the implementation of sustainable practices and urban design enhancements including pedestrian and bicycle mobility.

While preserving the local character and enhancing public spaces, Psomas provided a sustainable approach to design services for the complete reconstruction of NSMB that included extensive public outreach, paving and surface drainage improvements, traffic signal design, stormwater management, raised crosswalks, and urban design improvements.

Psomas also provided civil engineering design services included the design of the corridor, implementation of sustainable practices, urban design enhancements, and pedestrian improvements. Phase I services included project management and outreach plan, and Pre-Design Report. Phase II services included Plans, Specifications, and Estimates (PS&E); permitting and agency coordination; bid and award support;.

Joseph Boyle, PE

Contract Manager

Joe Boyle has 36 years of experience in the planning and design of wastewater facilities, water transmission, distribution, and storage facilities. He has prepared plans and specifications for water and sewer main, storm drain, and roadway design, as well as provided construction phase services. Mr. Boyle also has extensive experience in the planning and design of public works projects, including site development, grading and storm drain design, and streets and highways.

REGISTRATION

1989/CA/Professional Engineer/Civil/44497

EDUCATION

1984/BS/Civil Engineering/ California Polytechnic State University, San Luis Obispo

PROFESSIONAL AFFILIATIONS

American Water Works Association

California Water Environment Association

Orange County Water Association

Association of California Water Agencies

American Society of Civil Engineers, Orange County Branch

EXPERIENCE

With Psomas for 24 years; with other firms for 12 years

Experience

On-Call Design Services for CIP 17-416 Sewer Improvements, City of Hermosa Beach, CA: Team Leader for preparation of construction plans and specifications for approximately 2,700 LF of sewer lining, 9,200 LF of sewer replacement, and 39 manholes to be rehabilitated. The project was organized into four distinct areas. Psomas evaluated the existing conditions of these selected sewer segments and confirmed the SMP's recommendations or provided supplemental recommendations, if appropriate. CCTV reports and videos for each of the segments were evaluated and categorized. Field evaluation was performed on approximately 90 sewer manholes. Final design plans resulted in 1,850 LF of remove and replace segments; 100 LF of point repairs at 23 locations; 7,900 LF of lining; 700 LF of deposit and root removal; and approximately 650 LF where no repair or rehabilitation was required.

2018 Sewer Rehabilitation Project, Rossmoor/Los Alamitos, CA: Team Leader for the design of sewer segment rehabilitation in various locations in Rossmoor and the City of Los Alamitos for Rossmoor/Los Alamitos Area Sewer District. As District Engineer, Psomas staff reviewed 60,000 feet of sewer system CCTV tapes and made appropriate recommendations for repairs where needed. The rehabilitation design comprised a combination of CIPP lining of approximately 2,830 feet of 8- through 18-inch-diameter sewer in 11 separate locations; UV-Cured Point Repairs (trenchless) at 68 locations; removal and replacement of approximately 860 feet of 8- and 10-inch-diameter pipe in four areas; and point repairs to 8-inch through 18-inch pipe at 14 different locations. Duties included obtaining preliminary encroachment permits from the City of Los Alamitos and the County of Orange, coordination for project advertising, evaluation of the bids received, and recommendation of project award.

Pelican Hill Golf Club Sewer Pipeline Rehabilitation, Newport Coast, CA: Team Leader for evaluation of the existing conditions of 6,027 LF of sewer pipe, and to provide professional design services for the four sewer pipelines conveying flows through the Pelican Hill Golf Club and Pelican Hill Community Association for Irvine Ranch Water District. Also provided construction phase services that included, but were not limited to, active participation in construction meetings, review and response to shop drawings and contractor Request for Information, site visits, and record drawing preparation.

REGISTRATION

1999/AZ/Professional Engineer/Civil/33984

2002/CA/Professional Engineer/Civil/63340

EDUCATION

1992/BS/Hydrology and Water Resources/College of Engineering and Mines, University of Arizona

CERTIFICATIONS

Envision Sustainability Professional/Institute for Sustainable Infrastructure

EXPERIENCE

With Psomas for 21 years; with other firms for 7 years

Michael Daly, PE, ENV SP

QA/QC Manager

Mike has 28 years of experience in the field of water resource design. He currently manages our utility design and water resources team, which completes a variety of project types including watershed and floodplain studies, flood control mitigation studies and design, sanitary sewer and storm drain planning and design, potable water system planning and design, and utility coordination modifications.

Mike has managed numerous water resources and flood control related projects under on-call contracts for numerous clients in both Arizona and California. Locally, these clients include Pima County, Santa Cruz County, City of Tucson, City of Benson, Town of Sahuarita, and Town of Oro Valley. He understands the often unique challenges of these projects with regards to aggressive schedule and budget limitations and strives to provide valve by fully understanding the goals of the project.

Experience

City of Los Angeles, North Spring Street Bridge over the Los Angeles River, Los Angeles, CA: Drainage Engineer for the widening of the North Spring Street Bridge over the Los Angeles River. This high-profile, $36 million project addressed seismic and geometric deficiencies, improved pedestrian and cyclist safety, and will preserve the historic integrity of the bridge. The new design consisted of widening the south side of the bridge and the approaches, adding a new signalized intersection, rehabilitating existing street lights and fabricating new street lights, street improvements, and new park improvements.

65th Street Transit Center Relocation, Sacramento, CA: Drainage Engineer responsible for the management and oversight of the preliminary engineering, design, and preparation of PS&E for the relocation of the existing 65th Street Bus Transfer Facility. The purpose of the project was to vacate the existing RT-owned parcel between 65th Street and 67th Street to make way for a proposed development of this block. The project involved significant coordination with Sacramento Housing and Redevelopment Agency (SHRA), the developer, City of Sacramento, and RT. The design also included consideration of elements of the proposed "ultimate" station design for the 65th Street Station. The project included traffic analysis, roadway and drainage design, traffic signal and lighting design, landscaping and irrigation, utility coordination, right-of-way engineering, and extensive stage construction and traffic handling to maintain bus operations during construction.

Centennial, EIR Studies Reports, Tejon Ranch, CA: Drainage Engineer for a new development to be built on 6,000 acres of an 11,700-acre site. Plans include 23,000 homes, a business district, schools, libraries, retail, entertainment, recreation centers and medical facilities to be built over 20 years. 5,500 acres will be devoted to open space. Created a detailed XPSWMM MODRAT hydrology model covering offsite and onsite watersheds for both existing and preliminary proposed conditions. Prepared and submitted a Masterplan Hydrology report for review by Los Angeles County.

Michael Swan, PE

QA/QC Manager

Mike has 45 years of experience in project engineering and management of diverse public works and public finance projects throughout Southern California. He has extensive experience in water resources master planning and design, as well as the development and implementation of financing for these and other public works projects.

REGISTRATION

1975/CA/Professional Engineer/Civil/25737

EDUCATION

1970/BS/Civil Engineering/ University of California, Davis

PROFESSIONAL AFFILIATIONS

Association of California Water Agencies

Orange County Water Association

EXPERIENCE

With Psomas for 18 years; with other firms for 27 years

Experience

On-Call Design Services for CIP 17-416 Sewer Improvements, City of Hermosa Beach, CA: QA/QC Manager for preparation of construction plans and specifications for approximately 2,700 LF of sewer lining, 9,200 LF of sewer replacement, and 39 manholes to be rehabilitated. The project was organized into four distinct areas. Psomas evaluated the existing conditions of these selected sewer segments and confirmed the SMP's recommendations or provided supplemental recommendations, if appropriate. CCTV reports and videos for each of the segments were evaluated and categorized. Field evaluation was performed on approximately 90 sewer manholes. Final design plans resulted in 1,850 LF of remove and replace segments; 100 LF of point repairs at 23 locations; 7,900 LF of lining; 700 LF of deposit and root removal; and approximately 650 LF where no repair or rehabilitation was required.

On-Call Design Services for CIP 19-421 Sewer Improvements, City of Hermosa Beach, CA: QA/QC Manager for preparation of construction plans and specifications for approximately 1,700 LF of sewer lining, 10,900 LF of sewer replacement, and 116 manholes to be rehabilitated. An additional 5,800 LF of sewer pipe within an upcoming City paving project was added and evaluated for structural and operational deficiencies. The project was organized into six distinct areas. Psomas evaluated the existing conditions of these selected sewer segments and confirmed the SMP's recommendations or provided supplemental recommendations, if appropriate. CCTV reports and videos for each of the segments were evaluated and categorized. Field evaluation was performed on approximately 116 sewer manholes. Final design plans resulted in 4,500 LF of remove and replace segments; 100 LF of point repairs at 12 locations; 8,000 LF of lining; and 20 LF of deposit and root removal.

2018 Sewer Rehabilitation Project, Rossmoor/Los Alamitos, CA: QA/QC Manager for design of sewer segment rehabilitation in various locations in Rossmoor and the City of Los Alamitos for Rossmoor/Los Alamitos Area Sewer District. As District Engineer, Psomas staff reviewed 60,000 feet of sewer system CCTV tapes and made appropriate recommendations for repairs where needed. The rehabilitation design comprised a combination of CIPP lining of approximately 2,830 feet of 8- through 18-inch-diameter sewer in 11 separate locations; UV-Cured Point Repairs (trenchless) at 68 locations; removal and replacement of approximately 860 feet of 8- and 10-inch-diameter pipe in four areas; and point repairs to 8- through 18-inch pipe at 14 different locations.

Pelican Hill Golf Club Sewer Pipeline Rehabilitation, Newport Coast, CA: QA/QC Manager for evaluation of the existing conditions of 6,027 LF of sewer pipe, and to provide professional design services for the four sewer pipelines conveying flows through the Pelican Hill Golf Club and Pelican Hill Community Association for Irvine Ranch Water District. Assisted in the coordination with the PHGC to minimize disruption to it's operations and preparation of conceptual construction area layouts and conceptual construction access to manholes within the PHGC.

Maira Salcedo, PE, ENV SP

Project Manager/Sewer

Maira has over 15 years of experience in design of sewer systems, water systems, and report preparation on public works projects throughout Southern California. Her computer experience includes AutoCAD (including Civil3D), ArcView, MS Project, and various spreadsheet and word processing software packages.

REGISTRATION

2011/CA/Professional Engineer/Civil/77370

EDUCATION

2006/BS/Civil Engineering/ California State University, Fullerton

CERTIFICATIONS

Envision Sustainability Professional/Institute for Sustainable Infrastructure

Pipeline Assessment Certification Program/#U-508-700/ NASSCO

Manhole Assessment Certification Program/#U-508-7002/ NASSCO

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers, Orange County Branch

Orange County Water Association

EXPERIENCE

With Psomas for 15 years; with other firms for 1 year

Experience

On-Call Design Services for CIP 17-416 Sewer Improvements, City of Hermosa Beach, CA: Project Manager for preparation of construction plans and specifications for approximately 2,700 LF of sewer lining, 9,200 LF of sewer replacement, and 39 manholes to be rehabilitated. The project was organized into four distinct areas. Psomas evaluated the existing conditions of these selected sewer segments and confirmed the SMP's recommendations or provided supplemental recommendations, as appropriate. CCTV reports and videos for each of the segments were evaluated and categorized. Field evaluation was performed on approximately 90 sewer manholes. Final design plans resulted in 1,850 LF of remove and replace segments; 100 LF of point repairs at 23 locations; 7,900 LF of lining; 700 LF of deposit and root removal.

On-Call Design Services for CIP 19-421 Sewer Improvements, City of Hermosa Beach, CA: Project Manager for preparation of construction plans and specifications for approximately 1,700 LF of sewer lining, 10,900 LF of sewer replacement, and 116 manholes to be rehabilitated. An additional 5,800 LF of sewer pipe within an upcoming City paving project was added and evaluated for structural and operational deficiencies. The project was organized into six distinct areas. Psomas evaluated the existing conditions of these selected sewer segments and confirmed the SMP's recommendations or provided supplemental recommendations, if appropriate. CCTV reports and videos for each of the segments were evaluated and categorized. Field evaluation was performed on approximately 116 sewer manholes. Final design plans resulted in 4,500 LF of remove and replace segments; 100 LF of point repairs at 12 locations; 8,000 LF of lining; and 20 LF of deposit and root removal.

Pelican Hill Golf Club Sewer Pipeline Rehabilitation, Newport Coast, CA: Project Manager for evaluation of the existing conditions of 6,027 LF of sewer pipe, and to provide professional design services for the four sewer pipelines conveying flows through the Pelican Hill Golf Club (PHGC) and Pelican Hill Community Association for Irvine Ranch Water District. Also assisted in coordination with the PHGC to minimize disruption to its operations and preparation of conceptual construction area layouts and conceptual construction access to manholes with the PHGC.

2018 Sewer Rehabilitation Project, Rossmoor/Los Alamitos, CA: Project Manager for the design of sewer segment rehabilitation in various locations in Rossmoor and the City of Los Alamitos for Rossmoor/Los Alamitos Area Sewer District. As District Engineer, Psomas staff reviewed 60,000 feet of sewer system CCTV tapes and made appropriate recommendations for repairs where needed. The rehabilitation design comprised a combination of CIPP lining of approximately 2,830 feet of 8- through 18-inch-diameter sewer in 11 separate locations; UV-Cured Point Repairs (trenchless) at 68 locations; removal and replacement of approximately 860 feet of 8- and 10-inch-diameter pipe in four areas; and point repairs to 8-inch through 18-inch pipe at 14 different locations. Duties included obtaining preliminary encroachment permits from the City of Los Alamitos and the County of Orange, coordination for project advertising, evaluation of the bids received, and recommendation of project award.

Benjamin Halbach, PE, ENV SP

Project Engineer/Sewer

Benjamin Halbach has over six years of experience in design of water and sewer systems and facilities, including design of new pipelines, pipeline and manhole assessment and rehabilitation, transmission valve replacements, pump stations, and groundwater production wells. His experience includes involvement in all phases of client deliverable creation, including comprehensive plan development in AutoCAD Civil 3D, specification writing, and detailed cost estimates. Ben's design experience also includes site layout plans and rough grading. Benjamin has worked on projects for a variety of clients throughout southern California, including Liberty Utilities, UC Irvine, Irvine Ranch Water District, Elsinore Valley Municipal Water District, Long Beach Water Department, and the cities of Anaheim, Hermosa Beach, and Newport Beach.

REGISTRATION

2017/CA/Professional Engineer/Civil/87555

EDUCATION

2014/BS/Civil Engineering/ University of California, Irvine

CERTIFICATIONS

Envision Sustainability Professional/Institute for Sustainable Infrastructure

Pipeline Assessment Certification Program/ #U-1115-07002009/NASSCO

Manhole Assessment Certification Program/ #U-1115-07002009/NASSCO

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

Theta Tau Professional Engineering

EXPERIENCE

With Psomas for 6 years

Experience

On-Call Design Services for CIP 17-416 Sewer Improvements, City of Hermosa Beach, CA: Project Engineer for preparation of construction plans and specifications for approximately 2,700 LF of sewer lining, 9,200 LF of sewer replacement, and 39 manholes to be rehabilitated. The project was organized into four distinct areas. Psomas evaluated the existing conditions of these selected sewer segments and confirmed the SMP's recommendations or provided supplemental recommendations, if appropriate. CCTV reports and videos for each of the segments were evaluated and categorized. Field evaluation was performed on approximately 90 sewer manholes. Final design plans resulted in 1,850 LF of remove and replace segments; 100 LF of point repairs at 23 locations; 7,900 LF of lining; 700 LF of deposit and root removal; and approximately 650 LF where no repair or rehabilitation was required.

On-Call Design Services for CIP 19-421 Sewer Improvements, City of Hermosa Beach, CA: Project Engineer for preparation of construction plans and specifications for approximately 1,700 LF of sewer lining, 10,900 LF of sewer replacement, and 116 manholes to be rehabilitated. An additional 5,800 LF of sewer pipe within an upcoming City paving project was added and evaluated for structural and operational deficiencies. The project was organized into six distinct areas. Psomas evaluated the existing conditions of these selected sewer segments and confirmed the SMP's recommendations or provided supplemental recommendations, if appropriate. CCTV reports and videos for each of the segments were evaluated and categorized. Field evaluation was performed on approximately 116 sewer manholes. Final design plans resulted in 4,500 LF of remove and replace segments; 100 LF of point repairs at 12 locations; 8,000 LF of lining; and 20 LF of deposit and root removal.

2018 Sewer Rehabilitation Project, Rossmoor/Los Alamitos, CA: Project Engineer for design of sewer segment rehabilitation in various locations in Rossmoor and the City of Los Alamitos for Rossmoor/Los Alamitos Area Sewer District. As District Engineer, Psomas staff reviewed 60,000 feet of sewer system CCTV tapes and made appropriate recommendations for repairs where needed. The rehabilitation design comprised a combination of CIPP lining of approximately 2,830 feet of 8-inch through 18-inch-diameter sewer in 11 separate locations; UV-Cured Point Repairs (trenchless) at 68 locations; removal and replacement of approximately 860 feet of 8- and 10-inch-diameter pipe in four areas; and point repairs to 8-inch through 18-inch pipe at 14 different locations. Duties included obtaining preliminary encroachment permits from the City of Los Alamitos and the County of Orange, coordination for project advertising, evaluation of the bids received, and recommendation of project award.

Ryan J. Lynch, PE, QSD, LEED AP, ENV SP

Project Manager/Storm Drain

Ryan Lynch has 17 years of civil engineering experience focused on clients, project management, and communication. He has successfully managed projects that involved complex grading, drainage, and utilities solutions for municipal and state projects. Ryan is a strong, tactful, straight-forward communicator with a dedication to his client's best interests.

REGISTRATION

2007/CA/Professional Engineer/Civil/71441

EDUCATION

2003/BS/Civil Engineering/ University of Southern California

CERTIFICATIONS

Envision Sustainability Professional/Institute for Sustainable Infrastructure

LEED Accredited Professional/U.S. Green Building Council

EXPERIENCE

With Psomas for 5 years; with other firms for 12 years

Experience

North Santa Monica Boulevard Reconstruction, City of Beverly Hills, CA: As Project Manager, provided civil engineering design services to reconstruct North Santa Monica Boulevard (NSMB). Improvements include the design of the corridor, implementation of sustainable practices, addition of bicycle lanes, urban design enhancements, and pedestrian improvements. Phase I services include project management and outreach plan, and Pre-Design Report. Phase II services include plans, specifications and estimate (PS&E), permitting and agency coordination, bid and award support, construction administration and project close-out support.

Parcel B Mixed-Use Development, Culver City, CA: Project Manager for civil engineering design services for a mixed-use project. Elements of the project include a retail and office building, two levels of underground parking, and a community town plaza which is developed in collaboration with the City. Also providing construction of a storm drain in the right-of-way that will be owned by the City of Culver City.

California State Polytechnic University, Pomona, Student Housing Replacement, Pomona, CA: Assistant Project Manager providing civil engineering services for design and construction support for this 300,000 GSF/800- to 1,000-bed student housing project with an expanded mechanical central plant and a stand-alone 35,000 GSF single story dining commons to support the housing and student, faculty, and staff campus dining needs. Psomas' scope of services includes: 1) realignment of Kellogg Drive; 2) onsite rough grading; demolition of existing Kellogg Drive; preparation of building pads; relocation of on-site CPP water, sewer and storm drain utilities; and design of proposed water, sewer and storm drain backbone utilities to serve the new housing buildings; 3) onsite precise grading, hardscape, paving, water, fire water, sewer and drainage infrastructure of the housing, central plant and dining commons.

City of Beverly Hills, Beverly Gardens Park, Beverly Hills, CA: Project Manager provided civil engineering design services and construction support for the reconstruction of the existing historic park. The scope of services focused on grading and Americans with Disabilities Act (ADA) compliance. Historic pergolas were analyzed for the structural condition and repairs were recommended. In addition, Traffic Calming Measures were incorporated into the improvements on North Santa Monica Blvd. Psomas designed 10 Portland Cement Concrete (PCC) raised crosswalks on various east/west side streets to slow vehicles down as they approach Beverly Gardens Park. Two new catch basins were designed at each raised crosswalk location to address stormwater flow. The City chose to install catch basins instead of pipes through the raised crosswalks to avoid ponding, debris collection, and frequent maintenance.

University of California, Los Angeles, Veteran Avenue Sewer Improvements, Los Angeles, CA: Project Manager for providing professional services to upgrade existing City of Los Angeles sanitary sewer pipes to accommodate future University projects and comply with City requirements. Psomas, as the engineer-of-record, managed and coordinated all design and construction document preparation tasks and construction administration responsibilities.

Michael Mulgrew, PE, QSD/P, ENV SP

Senior Project Engineer/Storm Drain

Michael Mulgrew has 21 years of practical engineering experience in the areas of street and highway design, site development, utilities, storm drain hydrology and hydraulics, and various construction methods. He has a proven track record of managing and delivering complex projects on time and within budget. He has practical knowledge of Caltrans standards and procedures and is proficient in AutoCAD and Microstation design software. As a Certified QSP/D, Michael prepares, oversees, and implements many Storm Water Pollution Prevention Plans (SWPPPs) for our education clients.

REGISTRATION

2003/CA/Professional Engineer/Civil/64232

EDUCATION

1999/BS/Civil Engineering/ California State Polytechnic University, Pomona

CERTIFICATIONS

Envision Sustainability Professional/Institute for Sustainable Infrastructure

Qualified SWPPP Developer/California Stormwater Quality Association

Qualified SWPPP Practitioner/California Stormwater Quality Association

EXPERIENCE

With Psomas for 7 years; with other firms for 14 years

Experience

Mt. San Antonio College, Farm Precinct Plan, Walnut, CA: Project Engineer performing analysis of Plan-Phase I Existing Site Conditions that involved the evaluation, documentation, and reporting of existing site conditions; this collected data will inform Phase II Precinct Plan Preparation. Civil engineering services included aerial topographic survey, site data collection, existing conditions hydrology study, storm drain system needs assessment, stormwater quality regulatory compliance evaluation, existing conditions report, meetings and coordination, and optional survey and subsurface utility investigation.

Milton Street Park, Los Angeles, CA: Project Engineer for civil engineering design for a new 1.2-acre urban park alongside the Ballona Creek Bike Trail. The park includes native plantings, bird watching platforms, bike trail enhancements, seating areas, outdoor picnic areas, and an onsite stormwater capture and treatment system. Public improvements included "green street' measures within the Milton Street right-of-way abutting the park site, including new landscape, hardscape, and stormwater management facilities.

City of Beverly Hills, North Santa Monica Boulevard (NSMB) Reconstruction, Beverly Hills, CA: Project Engineer providing civil engineering design services to reconstruct North Santa Monica Boulevard (NSMB). Improvements include the implementation of storm drain reconstruction and upgrades, design of the corridor, implementation of sustainable practices, addition of bicycle lanes, urban design enhancements, and pedestrian improvements. Responsible for the eastern city limit with West Hollywood to the western city limit with Los Angeles. Improvements include the implementation of storm drain reconstruction and upgrades, the design of the corridor, implement sustainable practices, bicycle lanes, urban design enhancements and pedestrian improvements. Phase I services include project management and outreach plan, and Pre-Design Report. Phase II services include plans, specifications and estimate (PS&E), permitting and agency coordination, bid and award support, construction administration and project close-out support.

Mt. San Antonio College, Athletic Complex Stormwater Improvements, Walnut, CA: As Project Engineer, provided civil engineering design services for a new stormwater treatment facility at the Athletic Complex East (ACE) project site to treat stormwater runoff from the ACE site and future Gym, Parking Structure 'R' and Parking Structure 'S' project sites; the stormwater treatment system was integrated in to the design of these projects. The stormwater treatment system was designed to comply with the County of Los Angeles Low Impact Design (LID) guidelines.

EDUCATION

1999/BS/Natural Resources, Planning and Interpretation/Humboldt State University

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

Environmental and Water Resources Institute

EXPERIENCE

With Psomas for 21 years; with other firms for 1 year

Jennifer Marks

Environmental Planning

Jennifer Marks is a Senior Project Manager with over 22 years of experience in environmental documentation and analysis consistent with CEQA and NEPA. Jennifer's career has focused on a wide variety of projects, including mixed-use, residential, office, and resort developments; specific plan and general plan analyses; transportation infrastructure; and various utility infrastructure projects. She has managed multiple water and wastewater infrastructure projects, including projects for the Santa Margarita Water District; Irvine Ranch Water District; City of Anaheim Public Utilities Department for water projects and Public Works Department for sewer projects; and the Water Replenishment District of Southern California. She has also prepared environmental documentation and supplemental information to meet specific agency requirements, including those for the following agencies: Caltrans; State Water Resources Control Board; U.S. Bureau of Reclamation; U.S. Environmental Protection Agency; USACE; USFWS; CDFW; various local planning and development departments; and private developers. Through her project work, Jennifer has developed strong working relationships with agency personnel, County and City staff, private developers, and a variety of specialty consultants.

Experience

Irvine Ranch Water District Irvine Lake Pipeline Conversion Project Initial Study/Mitigated Negative Declaration, Orange County, CA: Project Manager for preparation of environmental documentation for conversion of the northern segment of the Irvine Lake Pipeline from an untreated water pipeline to a recycled water pipeline. The project involves construction of a new recycled water storage tank, installation of recycled water pipelines, and conversion of existing domestic water facilities to accommodate the recycled water supply. Psomas prepared a mitigated negative declaration for this project and completed additional technical studies to comply with CEQA-Plus guidelines pursuant to the Clean Water State Revolving Fund requirements.. This project represents the first task order associated with Psomas' On-Call CEQA and NEPA Consultation Services agreement with IRWD.

Eastern Municipal Water District, Murrieta Road Transmission Pipeline Project IS/MND,Menifee, CA: Project Manager, Archaeologist for the IS/MND to construct and operate a 36- to 42-inch-diameter water transmission line from the Perris II Desalter Complex (Desalter) in the City of Menifee approximately 1.33 miles south, mostly in the Murrieta Road right-of-way, to La Piedra Road, where the proposed pipeline will connect to an existing 36-inch-diameter water main in La Piedra Road about 250 feet east of its intersection with Murrieta Road. The proposed project will provide capacity to transmit potable water from the Desalter to the existing main in La Piedra Road.

Intersection Improvements on Hyperion Avenue and Glendale Boulevard (TOS 004E),Los Angeles, CA: Environmental Project Manager for the intersection improvements funded by LA Metro's Call for Projects. Scope of services involve traffic queuing analysis, on-street parking considerations, design of exclusive turn lanes to alleviate queuing and traffic congestion, Class II Bike lanes, a new crosswalk to facilitate safe pedestrian passage across Glendale Boulevard, traffic signal improvements, and improving the drainage system and infiltration basins. Jennifer oversaw preparation of a Categorical Exemption Memorandum with a full Initial Study Checklist for the project and managing development of environmental technical studies.

Christopher Riehle, PLS

Survey

Chris Riehle has 19 years of experience in a wide array of survey and mapping disciplines, including ALTA/NSPS Land Title Surveys, boundary analysis, topographic mapping, preparation and review of parcel maps, final maps and Records of Survey, lot line adjustments, legal description preparation, analysis and mapping of rights-of-way and easements, and extensive GPS post-processing and geodetic control network establishment throughout California and Nevada.

REGISTRATION

2018/CA/Professional Land Surveyor/9453

EDUCATION

2002/BS/Geography, GIS Minor/California State Polytechnic University, Pomona

PROFESSIONAL AFFILIATIONS

California Land Surveyors Association

American Council of Engineering Companies

Women's Transportation Seminar, Orange County Chapter

EXPERIENCE

With Psomas for 3 years; with other firms for 16 years

Experience

On-Call Design Services for CIP 19-421 Sewer Improvements, Task Order #2, Hermosa Beach, CA: Survey Manager for preparation of construction plans and specifications for approximately 1,700 LF of sewer lining, 10,900 LF of sewer replacement, and 116 manholes to be rehabilitated. An additional 5,800 LF of sewer pipe within an upcoming City paving project was added and evaluated for structural and operational deficiencies. The project was organized into six distinct areas. Psomas evaluated the existing conditions of these selected sewer segments and confirmed the SMP's recommendations or provided supplemental recommendations, if appropriate. CCTV reports and videos for each of the segments were evaluated and categorized. Field evaluation was performed on approximately 116 sewer manholes. Final design plans resulted in 4,500 LF of remove and replace segments; 100 LF of point repairs at about 12 locations; 8,000 LF of lining; and 20 LF of deposit and root removal.

Arbor Street and Locust Avenue Sewer Improvement (SC-0373) – Long Beach, CA: Survey Manager for preparation of a sewer study for an area with approximately 15,000 LF of sewer mains with much of the system constructed in the 1930s and 1940s. Sewers in the study area present many challenging issues including portions with capacity constraints, sags, a siphon under a storm channel, a crossing under a railroad, and sewers running under backyards and a mobile home park. A hydraulic model was prepared in InfoSewer using the City's sewer GIS and available as-builts. Flow monitoring was conducted, and the model was calibrated to both dry and wet weather flow conditions. The calibrated model was used to develop potential improvements that would upsize, divert, and/or realign facilities to alleviate capacity issues identified for peak dry and wet weather flow. Utility research and sewer manhole surveys were conducted to determine feasible alternatives and recommendations for capital improvements. A preliminary design report documented the entire study with recommended capital improvements.

Sewer System Evaluation Study - Hydraulic Analysis Component – Maywood, CA: Project Surveyor for preparation of a hydraulic model of the City's entire sewer collection system consisting of approximately 21.5 miles of 8- to 15-inch sewer lines. The City was under a mandate by the State Water Board to complete this sewer model in order to check sewer line capacity due to sewer spills that had occurred within their system. A model in InfoSewer was quickly prepared using the City's existing GIS. The GIS had invert inconsistencies and missing invert information on many manholes, so assumptions were made regarding slopes based on research of limited available plans and/or assuming an equal slope between manholes where it appeared there was good invert data.

REGISTRATION

2010/CA/Professional Land Surveyor/8732

EDUCATION

2008/Diploma/M.Div./ Religious Studies/The Master's University/Santa Clarita

1990/BA/Political Science/ University of California, Los Angeles

CERTIFICATIONS

PROFESSIONAL AFFILIATIONS

California Land Surveyors Association

American Society of Civil Engineers

American Council of Engineering Companies

Utility Engineering and Surveying Institute

EXPERIENCE

With Psomas for 13 years; with other firms for 13 years

Tom Pilarski, PLS

Subsurface Utility Engineering

Tom Pilarski has 26 years of experience in surveying and mapping. He oversees our ASCE Standard 38-02 Utility Detection and Mapping team. Since Psomas expanded its suite of services into the subsurface utility locating and mapping business line, Tom has overseen projects that involved utility location where little or no as-built data existed. He also provides a second opinion when Psomas utility detection crews followed the 811 Dig alert locator to verify the utilities detected. He is responsible for development of Records of Survey, right-of-way mapping, tract and parcel maps, condominium plans, ALTA surveys and easement legal descriptions.

Experience

On-Call Design Services for CIP 19-421 Sewer Improvements, City of Hermosa Beach, CA: Utilities Detection Manager for preparation of construction plans and specifications for approximately 1,700 LF of sewer lining, 10,900 LF of sewer replacement, and 116 manholes to be rehabilitated. An additional 5,800 LF of sewer pipe within an upcoming City paving project was added and evaluated for structural and operational deficiencies. The project was organized into six distinct areas. Psomas evaluated the existing conditions of these selected sewer segments and confirmed the SMP's recommendations or provided supplemental recommendations, if appropriate. CCTV reports and videos for each of the segments were evaluated and categorized.

Disney Prospect Studios, Subsurface Utility Detection, Burbank, CA: Utilities Detection Manager for paving and utility improvements including complete grading and utility submittal to the City of Los Angeles. The project also involved the use of multiple utility detection equipment to detect and mark multiple utilities that were known and unknown to the studio maintenance staff. Tom performed subsurface utility detection services for the design of a new water line.

Sempra Pipeline Safety Enhancement Plan (PSEP), Los Angeles, Ventura, and Orange Counties, CA: Utilities Detection Manager for providing surveying and mapping and subsurface utility detection services in support of hydrotest, replacement projects, and valve upgrades across Southern California. Psomas provided full-time staff augmentation to develop project standards to be used for the surveying and mapping components. Supervising subsurface utility detection services for various PSEP projects. These projects involve utility detection at the beginning of the project to detect and mark various utilities to aid in the pipeline design and prior to construction to verify that the 811 Dig Alert marks were accurate and complete.

EJ Gallo Fermentation and Glass Facilities, Subsurface Utility Detection, Modesto, CA: Utilities Detection Manager for performing subsurface utility detection services for the design of additional facilities being built. This project involved the use of multiple utility detection equipment to detect and mark multiple utilities that were known and unknown to the facilities staff.

SL38-101 Replace Section 1 & 2, Bakersfield, CA: Utilities Detection Manager as a subconsultant to Snelson to provide second opinion utility detection services prior to excavating and constructing two gas pipeline replacement projects.

REGISTRATION

2009/AZ/Professional Engineer/Civil/50215

2017/CA/Traffic Engineer/2827

EDUCATION

2006/MS/Civil Engineering/ Cornell University

2004/BS/Civil Engineering/ University of Arizona

CERTIFICATIONS

Envision Sustainability Professional/Institute for Sustainable Infrastructure

Professional Traffic Operations Engineer/ Transportation Professional Certification Board Inc.

LEED Accredited Professional/U.S. Green Building Council

PROFESSIONAL AFFILIATIONS

Institute of Transportation Engineers

American Society of Civil Engineers

EXPERIENCE

With Psomas for 14 years

Darlene Danehy Yellowhair, PE, PTOE, RSP, ENV SP

Traffic Control/Staging

Darlene Danehy has extensive experience with a variety of traffic engineering projects, including traffic impact studies, traffic reports, safety studies, signal warrant studies, corridor studies, signal timing and coordination, signing and striping design, and traffic signal design. She also has experience with design and studies for alternate modes of travel, Road Safety Assessments, transportation planning, and roadway design. Darlene is well-versed in Synchro, SimTraffic, HCS, SIDRA, and GIS, and has experience with AutoCAD, MicroStation, and InRoads.

Experience

Coronado Cays Entrance Improvements and Bayshore Bikeway Traffic Study, Coronado, CA: Traffic Engineer for developing alternatives and conceptual plans to resolve safety concerns associated with vehicular/bike conflicts at the entrance to the Coronado Cays. The entrance to the Cays crosses the Bayshore Bikeway and has been the site of numerous crashes and near-misses. A public workshop was held to gather information prior to developing conceptual plans, which demonstrated multiple potential improvements for the intersection. Project also included extensive coordination with the City of Coronado and the public. Darlene was responsible for analyzing existing data, developing the alternatives, and coordinating with the City and the public.

Dana Point Town Center at Pacific Coast Highway and Del Prado,Dana Point, CA: Traffic Engineer for the Dana Point downtown revitalization project that converted the roadway at Pacific Coast Highway (PCH) and Del Prado from one-way to two-way. Psomas designed signal modifications for nine intersections in the Dana Point Town Center and conducted a planning-level analysis to provide all direct property access via alleys in the Town Center. The design enhanced the pedestrian experience by widening sidewalks while retaining on-street parking; reflects the unique coastal environment; and created stronger linkages to the natural features along the bluff and other destinations such as the Marina. The project required right-of-way improvements to return PCH to two-way operations, traffic signalization, striping and signing modifications, new bus stops, several landscaped medians, a new storm drain system, and road widening. Darlene was involved with preparing the alley capacity analysis discussion, which evaluated the ability of the existing alleys to serve as the exclusive access points to businesses in the town center.

Earvin Magic Johnson CEQA Addendum and Traffic Study, Los Angeles County, CA: Lead Traffic Engineer for this project, which consists of environmental permitting and planning for the development of an existing County park and the redevelopment of adjacent sites, covering a total area of over 100 acres in the County of Los Angeles. In addition to the traditional park amenities, the site will include a major cultural complex which will include an art museum, music center, and nature lab. Darlene was responsible for the traffic evaluation memorandum for this project, which was developed as an addendum to a previously prepared traffic impact analysis report. The traffic memorandum included an evaluation of trip generation and distribution for the updated project master plan, a comparison to project traffic volumes in the previous study, and operational analyses for several County and City of Los Angeles intersections in the project area. The project also required significant coordination with multiple County departments as well as the City, and the evaluation of multiple project alternatives throughout the process.

Jimmy Nguyen, EIT, ENV SP

Traffic Control/Staging

Jimmy Nguyen has been responsible for various design and drafting assignments focusing on public works and transportation projects situated throughout Southern California. Having successfully developed many traffic engineering construction documents, he is well-versed in the guidelines and standards that govern the making of geometric/signing, striping, traffic control, signal modification, and street improvement plans. Jimmy also possesses strong MicroStation, AutoCAD, and Civil 3D skillsets.

EDUCATION

2015/BS/Civil Engineering/ California State Polytechnic University, Pomona

CERTIFICATIONS

Envision Sustainability Professional/Institute for Sustainable Infrastructure

EXPERIENCE

With Psomas for 6 years;

Experience

Pelican Hill Golf Club Sewer Pipeline Rehabilitation, Newport Coast, CA: Project Designer for evaluation of the existing conditions of 6,027 LF of sewer pipe, and to provide professional design services for the four sewer pipelines conveying flows through the Pelican Hill Golf Club (PHGC) and Pelican Hill Community Association for Irvine Ranch Water District. Also assisted in coordination with the PHGC to minimize disruption to its operations and preparation of conceptual construction area layouts and conceptual construction access to manholes with the PHGC.

Marine Avenue and Liberty Village Improvement Projects,Manhattan Beach, CA: Project Designer for the design of pavement rehabilitation and ADA accessibility improvements on Marine Avenue between Sepulveda Boulevard and Aviation Boulevard, and in Liberty Village. Psomas is designing the final construction plans, specifications, and estimates (PS&E) as well as critical pedestrian accessibility improvements by upgrading curb ramps to meet current ADA requirements, refreshing striping, and restoring impacted traffic signal loops at necessary intersections. Jimmy is responsible for the development and completion of signing/striping plans for the project.

City of Los Angeles, North Spring Street Bridge over the Los Angeles River, Los Angeles, CA: Project Designer for the widening of the North Spring Street Bridge over the Los Angeles River. This high-profile, $36 million project addressed seismic and geometric deficiencies, improved pedestrian and cyclist safety, and will preserve the historic integrity of the bridge. The new design consisted of widening the south side of the bridge and the approaches, adding a new signalized intersection, rehabilitating existing street lights and fabricating new street lights, street improvements, and new park improvements.

Pavement Design for Pearblossom Highway Reconstruction, City of Palmdale, CA: Signing/Striping/Traffic Handling for pavement design and developing PS&E to reconstruct Pearblossom Highway from 55th to 25th Street East for the City of Palmdale. This is a multi-segment roadway reconstruction project extending 3.3 miles along one of the busiest truck corridors within the City. Scope of services covers traffic index computation, utility coordination, surveying, geotechnical investigation, and multi-phase PS&E.

Pacific Trade Center in Northwest El Monte, CA: Responsibilities included analyzing the traffic impacts associated with the proposed Pacific Trade Center project and designing the parking layout for new buildings at the project site.

REGISTRATIONS

1995/Professional Engineer/ Civil/CA/#53924

1999/Geotechnical Engineer/CA/#2458

EDUCATION

PhD/Civil and Environmental Engineering/University of California, Davis

M.S/Civil and Environmental Engineering/University of California, Davis

BS/Civil Engineering/ Polytechnic of Tehran

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

Earthquake Engineering Research Institute

Consortium of Organizations for Strong-Motion Observation Systems

Network for Earthquake Engineering Simulation

Seismological Society of America

Orange County Water Association

EXPERIENCE

25+ years;

Ali Bastani, PhD, PE, GE, FASCE

Geotechnical

Dr. Bastani has more than 25 years of diversified experience in geotechnical, earthquake, and environmental engineering. His experience covers all aspects of the consulting engineer's profession including a comprehensive knowledge and applied use of conceptual, physical, and numerical modeling for geotechnical and environmental engineering solutions.

Dr. Bastani's professional experience entails performance, management and providing practical solutions for variety of projects including: Geotechnical investigation and monitoring for foundation design of bridges, water reservoirs, pipelines, power plants, commercial and industrial facilities, and landfills; Seismic ground motion studies, site response analysis, liquefaction analysis, determination of seismic induced deformations, and seismic retrofit evaluations; Deep-seated and shallow landslide investigation, analysis, and mitigation; Design of shoring and stabilization systems including tie back and soil nail retaining structures Groundwater flow and contaminant transport evaluation and modeling; and Seismic hazard evaluation, probabilistic and deterministic, for various seismic zones around the United States and abroad.

Experience

Los Patrones Parkway, Rancho Mission Viejo, CA: Project Geotechnical Engineer of Record for Los Patrones parkway extending from Oso Parkway to Cow Camp Road, approximately 5 miles. The road included maximum fill depth of 120 feet, cut depth of 110 feet, 140 feet high cut slope, and 150 feet high fill slope.

Alton Parkway, Lake Forest, CA:. Project Manager in charge of the geotechnical design and construction quality assurance of Alton Parkway Gap Closure project. This project included approximately one mile of six-lane roadway through natural hillsides of Orange County. The design efforts included slope stability analyses, evaluation of unsuitable hydro-collapsible alluvium depth, and roadway pavement structural section. Dr. Bastani also managed the geotechnical observation, testing, and material inspection of this APWA and ASCE award-winning project.

Cow Camp Road, Planning Area 2 & 3, County of Orange:, CA Performed geotechnical investigation, pavement design, and construction testing/inspection for a new 6-lane arterial roadway east of Antonio Parkway. Two major bridges are proposed to span approximately 1,400 feet over Chiquita Canyons. Geologic conditions are characterized by up to 80 feet of saturated alluvial soils with high liquefaction potential. Geotechnical analysis for slope stability and roadway and bridge foundation design addressed liquefaction issues such as seismic settlement, lateral spreading, flow failures, downdrag on piles, decreased lateral and vertical capacity, and potential ground improvement/liquefaction remediation.

Assignment of Key Personnel

Our proposed Project Managers and Project Engineers as shown on the organization chart are committed to providing on-call engineering services to the City of Hermosa Beach for any project that may arise. We have demonstrated this commitment under our current on-call services contract with the City.

Psomas understands the City's restrictions to changes in key personnel. However, in the event there are proposed changes in key personnel, including subconsultants, during the term of the agreement that are outside of Psomas' control, or if the City requests such changes, Psomas will implement the following proven steps that can be represented by the acronym "**NOTICE**". Each letter represents a step by which Psomas will undertake, as follows:

Notify..... Psomas' Contract or Project Manager will let the City know of the impending change, preferably at least two to four weeks in advance of the anticipated occurrence.

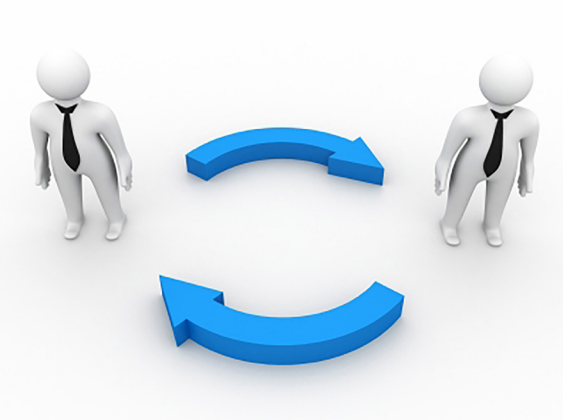
Offer..... Psomas will offer the City a replacement candidate/subconsultant by way of resume or qualification submittal and/or briefing.

Transition.... Psomas will bring candidates/subconsultants proposed as substitutes to a coordination meeting with the City and/or participate in a conference call to discuss outstanding or ongoing project items to be undertaken.

Integrate..... At the point where the City is comfortable enough with the replacement that Psomas will begin to include said substitutes into the team in the accounting and project communication protocols.

Certify..... This is the point where applicable billing rate and/or agreement is either amended or supplemented, with written concurrence by the City.

Execute..... This is the point where proposed substitutes officially become the latest Psomas team members serving the City towards meeting and exceeding the goals and objectives that have been set for a project resulting from the On-Call contract.



Section 6

REQUIRED FORMS

Required forms are provided on the following pages.

- Certification of Proposal
- Non-Collusion Affidavit
- Compliance with Insurance Requirements
- Acknowledgement of Professional Services Agreement

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: _____

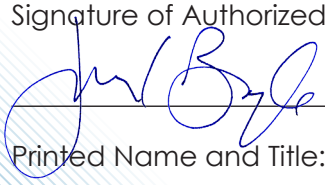
   Addendum: _____

   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:

Joseph Boyle, PE, Vice President

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:

Printed Name and Title:

Joseph Boyle, PE, Vice President

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:

Joseph Boyle, PE, Vice President

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:

None

Signature of Authorized Representative:

Printed Name and Title:

Joseph Boyle, PE, Vice President

PSOMAS

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