

PROFESSIONAL SERVICES CONTRACT BETWEEN
THE CITY OF HUNTINGTON BEACH AND
COWI NORTH AMERICA, INC.
FOR
ON-CALL CIVIL ENGINEERING, SURVEYING & PROFESSIONAL
CONSULTING SERVICES

THIS AGREEMENT ("Agreement") is made and entered into by and between the City of Huntington Beach, a municipal corporation of the State of California, hereinafter referred to as "CITY," and COWI NORTH AMERICA, INC, hereinafter referred to as "CONSULTANT."

WHEREAS, CITY desires to engage the services of a consultant to provide on-call civil engineering, surveying and professional consulting services; and

Pursuant to documentation on file in the office of the City Clerk, the provisions of the Huntington Beach Municipal Code, Chapter 3.03, relating to procurement of professional service contracts have been complied with; and

CONSULTANT has been selected to perform these services,

NOW, THEREFORE, it is agreed by CITY and CONSULTANT as follows:

1. SCOPE OF SERVICES

CONSULTANT shall provide all services as described in **Exhibit "A,"** which is attached hereto and incorporated into this Agreement by this reference. These services shall sometimes hereinafter be referred to as the "PROJECT."

CONSULTANT hereby designates Jack Gerwick, who shall represent it and be its sole contact and agent in all consultations with CITY during the performance of this Agreement.

2. CITY STAFF ASSISTANCE

CITY shall assign a staff coordinator to work directly with CONSULTANT in the performance of this Agreement.

3. TERM; TIME OF PERFORMANCE

Time is of the essence of this Agreement. The services of CONSULTANT are to commence on _____, 20____ (the "Commencement Date"). This Agreement shall automatically terminate three (3) years from the Commencement Date, unless extended or sooner terminated as provided herein. All tasks specified in **Exhibit "A"** shall be completed no later than one year from the Commencement Date. The time for performance of the tasks identified in **Exhibit "A"** are generally to be shown in **Exhibit "A."** This schedule may be amended to benefit the PROJECT if mutually agreed to in writing by CITY and CONSULTANT.

In the event the Commencement Date precedes the Effective Date, CONSULTANT shall be bound by all terms and conditions as provided herein.

4. COMPENSATION

In consideration of the performance of the services described herein, CITY agrees to pay CONSULTANT on a time and materials basis at the rates specified in **Exhibit "B,"** which is attached hereto and incorporated by reference into this Agreement, a fee, including all costs and expenses, not to exceed Two Hundred Fifty Thousand Dollars (\$250,000.00).

5. EXTRA WORK

In the event CITY requires additional services not included in **Exhibit "A"** or changes in the scope of services described in **Exhibit "A,"** CONSULTANT will undertake such work only after receiving written authorization from CITY. Additional compensation for such extra work shall be allowed only if the prior written approval of CITY is obtained.

6. METHOD OF PAYMENT

CONSULTANT shall be paid pursuant to the terms of **Exhibit "B."**

7. DISPOSITION OF PLANS, ESTIMATES AND OTHER DOCUMENTS

CONSULTANT agrees that title to all materials prepared hereunder, including, without limitation, all original drawings, designs, reports, both field and office notices, calculations, computer code, language, data or programs, maps, memoranda, letters and other documents, shall belong to CITY, and CONSULTANT shall turn these materials over to CITY upon expiration or termination of this Agreement or upon PROJECT completion, whichever shall occur first. These materials may be used by CITY as it sees fit.

8. HOLD HARMLESS

A. CONSULTANT hereby agrees to protect, defend, indemnify and hold harmless CITY, its officers, elected or appointed officials, employees, agents and volunteers from and against any and all claims, damages, losses, expenses, judgments, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) arising out of or in connection with CONSULTANT's (or CONSULTANT's subcontractors, if any) negligent (or alleged negligent) performance of this Agreement or its failure to comply with any of its obligations contained in this Agreement by CONSULTANT, its officers, agents or employees except such loss or damage which was caused by the sole negligence or willful misconduct of CITY. CONSULTANT will conduct all defense at its sole cost and expense and CITY shall approve selection of CONSULTANT's counsel. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as limitation upon the amount of indemnification to be provided by CONSULTANT.

B. To the extent that CONSULTANT performs "Design Professional Services" within the meaning of Civil Code Section 2782.8, then the following Hold Harmless provision applies in place of subsection A above:

"CONSULTANT hereby agrees to protect, defend, indemnify and hold harmless CITY and its officers, elected or appointed officials, employees, agents and volunteers, from and against any and all claims, damages, losses, expenses, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) to the extent that the claims against CONSULTANT arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of CONSULTANT. In no event shall the cost to defend charged to CONSULTANT exceed CONSULTANT's proportionate percentage of fault. However, notwithstanding the previous sentence, in the event one or more other defendants to the claims and/or litigation is unable to pay its share of defense costs due to bankruptcy or dissolution of the business, CONSULTANT shall meet and confer with CITY and other defendants regarding unpaid defense costs. The duty to indemnify, including the duty and the cost to defend, is limited as provided in California Civil Code Section 2782.8.

C. Regardless of whether subparagraph A or B applies, CITY shall be reimbursed by CONSULTANT for all costs and attorney's fees incurred by CITY in enforcing this obligation. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT.

9. PROFESSIONAL LIABILITY INSURANCE

CONSULTANT shall obtain and furnish to CITY a professional liability insurance policy covering the work performed by it hereunder. This policy shall provide coverage for CONSULTANT's professional liability in an amount not less than Two Hundred Fifty Thousand Dollars (\$250,000.00) per occurrence and in the aggregate. The above-mentioned insurance shall not contain a self-insured retention without the express written consent of CITY; however an

insurance policy "deductible" of Ten Thousand Dollars (\$10,000.00) or less is permitted. A claims-made policy shall be acceptable if the policy further provides that:

- A. The policy retroactive date coincides with or precedes the initiation of the scope of work (including subsequent policies purchased as renewals or replacements).
- B. CONSULTANT shall notify CITY of circumstances or incidents that might give rise to future claims.

CONSULTANT will make every effort to maintain similar insurance during the required extended period of coverage following PROJECT completion. If insurance is terminated for any reason, CONSULTANT agrees to purchase an extended reporting provision of at least two (2) years to report claims arising from work performed in connection with this Agreement.

If CONSULTANT fails or refuses to produce or maintain the insurance required by this section or fails or refuses to furnish the CITY with required proof that insurance has been procured and is in force and paid for, the CITY shall have the right, at the CITY's election, to forthwith terminate this Agreement. Such termination shall not effect Consultant's right to be paid for its time and materials expended prior to notification of termination. CONSULTANT waives the right to receive compensation and agrees to indemnify the CITY for any work performed prior to approval of insurance by the CITY.

10. CERTIFICATE OF INSURANCE

Prior to commencing performance of the work hereunder, CONSULTANT shall furnish to CITY a certificate of insurance subject to approval of the City Attorney evidencing the foregoing insurance coverage as required by this Agreement; the certificate shall:

- A. provide the name and policy number of each carrier and policy;
- B. state that the policy is currently in force; and

- C. shall promise that such policy shall not be suspended, voided or canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice; however, ten (10) days' prior written notice in the event of cancellation for nonpayment of premium.

CONSULTANT shall maintain the foregoing insurance coverage in force until the work under this Agreement is fully completed and accepted by CITY.

The requirement for carrying the foregoing insurance coverage shall not derogate from CONSULTANT's defense, hold harmless and indemnification obligations as set forth in this Agreement. CITY or its representative shall at all times have the right to demand the original or a copy of the policy of insurance. CONSULTANT shall pay, in a prompt and timely manner, the premiums on the insurance hereinabove required.

11. INDEPENDENT CONTRACTOR

CONSULTANT is, and shall be, acting at all times in the performance of this Agreement as an independent contractor herein and not as an employee of CITY. CONSULTANT shall secure at its own cost and expense, and be responsible for any and all payment of all taxes, social security, state disability insurance compensation, unemployment compensation and other payroll deductions for CONSULTANT and its officers, agents and employees and all business licenses, if any, in connection with the PROJECT and/or the services to be performed hereunder.

12. TERMINATION OF AGREEMENT

All work required hereunder shall be performed in a good and workmanlike manner. CITY may terminate CONSULTANT's services hereunder at any time with or without cause, and whether or not the PROJECT is fully complete. Any termination of this Agreement by CITY shall be made in writing, notice of which shall be delivered to CONSULTANT as provided herein. In the

event of termination, all finished and unfinished documents, exhibits, report, and evidence shall, at the option of CITY, become its property and shall be promptly delivered to it by CONSULTANT.

13. ASSIGNMENT AND DELEGATION

This Agreement is a personal service contract and the work hereunder shall not be assigned, delegated or subcontracted by CONSULTANT to any other person or entity without the prior express written consent of CITY. If an assignment, delegation or subcontract is approved, all approved assignees, delegates and subconsultants must satisfy the insurance requirements as set forth in Sections 9 and 10 hereinabove.

14. COPYRIGHTS/PATENTS

CITY shall own all rights to any patent or copyright on any work, item or material produced as a result of this Agreement.

15. CITY EMPLOYEES AND OFFICIALS

CONSULTANT shall employ no CITY official nor any regular CITY employee in the work performed pursuant to this Agreement. No officer or employee of CITY shall have any financial interest in this Agreement in violation of the applicable provisions of the California Government Code.

16. NOTICES

Any notices, certificates, or other communications hereunder shall be given either by personal delivery to CONSULTANT's agent (as designated in Section 1 hereinabove) or to CITY as the situation shall warrant, or by enclosing the same in a sealed envelope, postage prepaid, and depositing the same in the United States Postal Service, to the addresses specified below. CITY and CONSULTANT may designate different addresses to which subsequent notices, certificates or other communications will be sent by notifying the other party via personal delivery, a reputable overnight carrier or U. S. certified mail-return receipt requested:

TO CITY:

City of Huntington Beach
ATTN: Chris Tanio
2000 Main Street
Huntington Beach, CA 92648

TO CONSULTANT:

COWI North America, Inc.
ATTN: Jack Gerwick
555 12th Street, Suite 1700
Oakland, CA 94607

17. CONSENT

When CITY's consent/approval is required under this Agreement, its consent/approval for one transaction or event shall not be deemed to be a consent/approval to any subsequent occurrence of the same or any other transaction or event.

18. MODIFICATION

No waiver or modification of any language in this Agreement shall be valid unless in writing and duly executed by both parties.

19. SECTION HEADINGS

The titles, captions, section, paragraph and subject headings, and descriptive phrases at the beginning of the various sections in this Agreement are merely descriptive and are included solely for convenience of reference only and are not representative of matters included or excluded from such provisions, and do not interpret, define, limit or describe, or construe the intent of the parties or affect the construction or interpretation of any provision of this Agreement.

20. INTERPRETATION OF THIS AGREEMENT

The language of all parts of this Agreement shall in all cases be construed as a whole, according to its fair meaning, and not strictly for or against any of the parties. If any provision of this Agreement is held by an arbitrator or court of competent jurisdiction to be unenforceable, void, illegal or invalid, such holding shall not invalidate or affect the remaining covenants and provisions of this Agreement. No covenant or provision shall be deemed dependent upon any other unless so expressly provided here. As used in this Agreement, the masculine or

neuter gender and singular or plural number shall be deemed to include the other whenever the context so indicates or requires. Nothing contained herein shall be construed so as to require the commission of any act contrary to law, and wherever there is any conflict between any provision contained herein and any present or future statute, law, ordinance or regulation contrary to which the parties have no right to contract, then the latter shall prevail, and the provision of this Agreement which is hereby affected shall be curtailed and limited only to the extent necessary to bring it within the requirements of the law.

21. DUPLICATE ORIGINAL

The original of this Agreement and one or more copies hereto have been prepared and signed in counterparts as duplicate originals, each of which so executed shall, irrespective of the date of its execution and delivery, be deemed an original. Each duplicate original shall be deemed an original instrument as against any party who has signed it.

22. IMMIGRATION

CONSULTANT shall be responsible for full compliance with the immigration and naturalization laws of the United States and shall, in particular, comply with the provisions of the United States Code regarding employment verification.

23. LEGAL SERVICES SUBCONTRACTING PROHIBITED

CONSULTANT and CITY agree that CITY is not liable for payment of any subcontractor work involving legal services, and that such legal services are expressly outside the scope of services contemplated hereunder. CONSULTANT understands that pursuant to *Huntington Beach City Charter* Section 309, the City Attorney is the exclusive legal counsel for CITY; and CITY shall not be liable for payment of any legal services expenses incurred by CONSULTANT.

24. ATTORNEY'S FEES

In the event suit is brought by either party to construe, interpret and/or enforce the terms and/or provisions of this Agreement or to secure the performance hereof, each party shall bear its own attorney's fees, such that the prevailing party shall not be entitled to recover its attorney's fees from the nonprevailing party.

25. SURVIVAL

Terms and conditions of this Agreement, which by their sense and context survive the expiration or termination of this Agreement, shall so survive.

26. GOVERNING LAW

This Agreement shall be governed and construed in accordance with the laws of the State of California.

27. SIGNATORIES

Each undersigned represents and warrants that its signature hereinbelow has the power, authority and right to bind their respective parties to each of the terms of this Agreement, and shall indemnify CITY fully for any injuries or damages to CITY in the event that such authority or power is not, in fact, held by the signatory or is withdrawn.

28. ENTIRETY

The parties acknowledge and agree that they are entering into this Agreement freely and voluntarily following extensive arm's length negotiation, and that each has had the opportunity to consult with legal counsel prior to executing this Agreement. The parties also acknowledge and agree that no representations, inducements, promises, agreements or warranties, oral or otherwise, have been made by that party or anyone acting on that party's behalf, which are not embodied in this Agreement, and that that party has not executed this Agreement in reliance on any representation, inducement, promise, agreement, warranty, fact or circumstance not expressly set forth in this

Agreement. This Agreement, and the attached exhibits, contain the entire agreement between the parties respecting the subject matter of this Agreement, and supersede all prior understandings and agreements whether oral or in writing between the parties respecting the subject matter hereof.

29. EFFECTIVE DATE

This Agreement shall be effective on the date of its approval by the City Council.
This Agreement shall expire when terminated as provided herein.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their authorized officers.

CONSULTANT,
COWI NORTH AMERICA, INC.

By: Jack Gervick
print name

ITS: (circle one) Chairman/President/Vice President

AND

By: _____
print name

ITS: (circle one) Secretary/Chief Financial Officer/Asst.
Secretary - Treasurer

CITY OF HUNTINGTON BEACH, a
municipal corporation of the State of
California

Mayor

City Clerk

INITIATED AND APPROVED:

Director of Public Works

REVIEWED AND APPROVED:

City Manager

APPROVED AS TO FORM:

City Attorney myl

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CONSULTANT,
COWI NORTH AMERICA, INC.

CITY OF HUNTINGTON BEACH, a
municipal corporation of the State of
California

By: _____

print name

ITS: (circle one) Chairman/President/Vice President

Mayor

AND

By: _____

George Niktaris

print name

ITS: (circle one) Secretary/Chief Financial Officer/Asst.
Secretary - Treasurer

City Clerk

INITIATED AND APPROVED:

Director of Public Works

REVIEWED AND APPROVED:

City Manager

APPROVED AS TO FORM:

City Attorney *myl*

EXHIBIT "A"

A. STATEMENT OF WORK: (Narrative of work to be performed)

CONSULTANT shall provide consulting services on an 'as- needed' basis for projects to be determined during the term of the agreement. During the term of the agreement, CITY may elect to solicit proposals from CONSULTANT. CITY shall issue task order for each project based upon the scope of services, work schedule, and fee proposal submitted to CITY for its review and approval.

B. CONSULTANT'S DUTIES AND RESPONSIBILITIES:

CONSULTANT'S duties and responsibilities shall be per CONSULTANT'S Statement of Qualification (Exhibit A), consistent with the City of Huntington Beach Request for Qualifications for On Call Civil Engineering Consulting Services. Upon award, and the contract period, if CONSULTANT chooses to assign different personnel to the project, CONSULTANT must submit the names and qualifications of these staff to CITY for approval before commencing work.

C. CITY'S DUTIES AND RESPONSIBILITIES:

1. Furnish scope of work request for each project.
2. Furnish construction plans and specifications to the CONSULTANT.

D. WORK PROGRAM/PROJECT SCHEDULE:

A project schedule will be developed for each project assigned by City.



April 8, 2021

Response to RFQ for

**ON CALL OCEAN ENGINEERING &
PROFESSIONAL CONSULTING SERVICES**

for Public Works Department
CITY OF HUNTINGTON BEACH

COWI

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A. COVER LETTER

City of Huntington Beach
Public Works Department
2000 Main Street, 1st Floor
Huntington Beach, CA 92648
April 8, 2021



2355 Main Street, Suite 210
Irvine, CA 92614

Subject: City of Huntington Beach – On-call Ocean Engineering & Professional Consulting Services

Dear Madams/Sirs,

Through this On-call Ocean Engineering Services (Project), the City seeks to step up its efforts towards preserving coastal resources such as piers, seawalls, bulkheads, harbors, and beaches, which may include ocean studies; the City also seeks assistance with issues or permits related to the California Coastal Commission (CCC).

With more than 90 years of experience in marine and coastal engineering and specializing in pier, seawall, bulkhead, harbor, and beach projects, involving ocean studies, COWI North America, Inc. (COWI) is excited to offer our services in engineering and coastal solutions and plan preparation to deliver a successful project for the City. Below is a summary of our key qualifications:

Extensive Experience in Southern California City Agency Projects

As a global and national industry leader in marine engineering and coastal preservation, COWI has deep roots in providing success to City agency projects in Southern California, having delivered similar projects for cities of Seal Beach, Long Beach, Newport Beach, and Los Angeles, among others. Most recently, the City of Newport Beach selected COWI to reprise its role as engineering consultant on the Ocean Piers Condition Assessment Study Project after our firm's having successfully delivered on its 2017 Ocean Pier Inspection and Repair Project.

The City of Seal Beach Project involved structural inspection and assessment of the Seal Beach Municipal Pier, the second longest wooden pier in California. The City of Long Beach Project consisted of a post-event and routine inspection of the Belmont Pier and floats, including both underwater and under deck inspections; the Belmont Pier is a concrete ocean pier, and it had suffered damages from a series of storms in 2017. The City of Newport Beach consisted of raising the cap elevation by about nine inches over approximately 7,420 LF of existing seawall surrounding this waterfront community to facilitate a 25-year design life. This project involved coordination for permit with the CCC.

A Local and Proven Project Manager

Our Project Manager Warren Stewart is a highly regarded California registered Professional Engineer and Structural Engineer with over 48 years of experience in coastal engineering projects involving piers, sea-walls, bulkheads, harbors, beaches, and ocean studies, as well as coordination with CCC. A resident of Seal Beach, he has led many successful similar projects out of our Irvine office. He is also a Diplomat of the Academy of Coastal, Ocean, Port & Navigation Engineers, which certifies experienced marine engineers in Port Engineering.

A Well-Rounded Team with Local Project Experience

Warren is supported by a team of expert professionals who have worked on numerous projects in Southern California for clients such as the City and in similar configuration. With Warren as the Project Manager and often involving the same remaining proposed personnel that include: Principal-in-Charge Jack Gerwick, QA/QC Lead Ted Trenkwalder, Inspection Lead Jim Kearney, and Wave Studies and Coastal Lead Jean O. Toilliez.

Of note, and highlighting his qualifications in coastal systems and wave studies is Jean's involvement in the Pebble Beach Drive Storm Damage Project for the City of Crescent City, which entails the permitting and design of coastal protection systems to manage the risk associated with bluff erosion along a major corridor transportation infrastructure asset in Northern California.

Rounding up our team is ESA, an environmental consulting firm with 50 years of experience, that will provide permitting and liaison with the CCC and other permitting agencies. ESA also brings their expertise in nature-based designs and support COWI's own coastal engineering expertise. COWI and ESA bring established collaboration record, having worked on at least seven marine and coastal engineering projects throughout California.

We invite you to review our extensive experience and value we bring to this project. Our rates are uploaded separately.

Should you have any questions on the proposal, or need additional information, please call either Warren Stewart at (562) 547-3918 or Jack Gerwick at (650) 468-7583.

Sincerely,

COWI North America, Inc.



Warren Stewart, P.E., S.E., D.PE

Project Manager

REQUEST FOR PROPOSAL
VENDOR APPLICATION FORM

TYPE OF APPLICANT: ☐ NEW ☐ CURRENT VENDOR

Legal Contractual Name of Corporation: _____

Contact Person for Agreement: _____

Corporate Mailing Address: _____

City, State and Zip Code: _____

E-Mail Address: _____

Phone: _____

Fax: _____

Contact Person for Proposals: _____

Title: _____

E-Mail Address: _____

Business Telephone: _____

Business Fax: _____

Is your business: (check one)

☐ NON PROFIT CORPORATION

☐ FOR PROFIT CORPORATION

Is your business: (check one)

☐ CORPORATION

☐ INDIVIDUAL

☐ PARTNERSHIP

☐ LIMITED LIABILITY PARTNERSHIP

☐ SOLE PROPRIETORSHIP

☐ UNINCORPORATED ASSOCIATION

Names & Titles of Corporate Board Members

(Also list Names & Titles of persons with written authorization/resolution to sign contracts)

Names	Title	Phone
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Federal Tax Identification Number: _____

City of Huntington Beach Business License Number: _____
(If none, you must obtain a Huntington Beach Business License upon award of contract.)

City of Huntington Beach Business License Expiration Date: _____

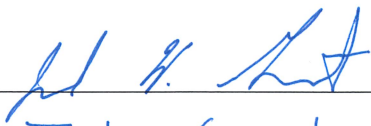
EXHIBIT A: PRE-QUALIFICATION FORM
ON-CALL OCEAN ENGINEERING & PROFESSIONAL CONSULTING SERVICES

JK (Initial) Consultant is willing to execute the Agreement as drafted (See **Appendix B**).

JK^{*} (Initial) Consultant is able to provide the insurance as required (See **Appendix C**).

Firm Name: COWI North America Inc

Firm Address: 555 12th Street, Suite 1700, Oakland, CA 94607

Signature:  Date: 4/8/21
Jack Gerwick - Vice President

* Note that our PL policy has a self-insured retention so we will need City consent per sample contract.

D. SERVICE CATEGORY

FIRM QUALIFICATIONS

01. FIRM CAPABILITIES

COWI North America, Inc. (COWI), which counts Ben C. Gerwick, Inc. — a West Coast specialty marine and ocean engineering firm with 90 years of experience — as one of its legacy firms, is an industry-leading specialist in marine, bridge and tunnel engineering, operating out of nine offices in the U.S. and Canada and supported by more than 250 technical experts.

For several decades, in Southern California (SoCal) and throughout the U.S. east and west coasts, we have successfully delivered multiple projects similar to the City of Huntington Beach's On-Call Ocean Engineering services Project (Project). Led by our proposed Project Manager Warren Stewart from our office in Irvine, CA, we have delivered many such projects which involved providing engineering solutions to preserve coastal resources such as piers, seawalls, bulkheads, harbors, and beaches. We have also provided ocean studies to determine the effects of waves, tides, currents, sand and the salt-water environment, as well as provided the cities with services and permit preparation related to the California Coastal Commission (CCC). Please refer to Section 3: Agency Reference/Project Examples for our showcase projects.

Specializing in consultation, planning, inspection, analysis, and design services, we provide expert solutions to coastal and structural engineering com-

plications associated with the inspection and rehabilitation of existing structures, design and planning of new marine structures, dredged material management design, environmental permitting, and construction administration.

COWI brings demonstrated record for producing reliable, economical, innovative, and constructible designs, with short durations. As evidence of our successful work on hundreds of projects, COWI enjoys recognition as an industry leader in groundbreaking techniques and proven delivery, on time and on budget.

Our highly-qualified and experienced engineering professionals cover all the major areas for waterfront projects including:

- › Structural engineering, evaluation and design
- › Inspection, condition assessments, and repair/rehabilitation design
- › Foundation and geotechnical engineering
- › Coastal engineering and hydraulic modeling
- › Permitting, dredging and land reclamation
- › Construction cost estimating and specifications
- › Construction management and inspection
- › Construction engineering (for contractors on complex structures)

02. KEY PERSONNEL QUALIFICATIONS

COW brings a team of highly qualified professionals with extensive experience in projects similar to this On-Call Project. Their combined experience includes several dozens of coastal engineering projects, many of them involving ocean studies, in addition to providing assistance for the cities with issues or permits related to the California Coastal Commission (CCC).

ESA, an environmental planning and design firm out of Irvine, CA, will provide permitting and environmental services, bringing their expertise in coordination with CCC over many coastal preservation projects.

WARREN STEWART, PE, SE, D.PE

Project Manager

Warren has over **48 years of marine and coastal engineering experience** on a variety of projects for local, state, and federal agencies, including over 30 years in Southern California managing waterfront, port & harbor, piers, seawalls, bulkheads, and beach, and other projects. On over 150 projects, he led the production, coordination of engineering design and construction documents, cost estimates, project specifications, construction management, report writing and/or reviews. Among the showcase projects Warren worked on **Seal Beach Municipal Pier Inspection & Assessment, Post-Event Inspection of Belmont Pier, Balboa Island Seawall Rise Project, and South Texas Gateway Terminal.**

JACK GERWICK, P.E.

Principal-in-Charge

With 20 years of experience in the design and construction of heavy civil marine structures, Jack specializes in the design of piers, wharves, and port facilities, with emphasis on bulk terminals and has worked on bridge and hurricane protection construction projects. Jack is the VP of Operation in the West Region and the organizational lead of offices in Irvine, CA, Oakland, CA, Seattle, WA, and Portland, OR. Jack worked on **Seal Beach Municipal Pier Inspection & Assessment, Post-Event Inspection of Belmont Pier, Balboa Island Seawall Rise Project, and South Texas Gateway Terminal.**

TED TRENKWALDER, P.E., S.E.

QA / QC Lead

Ted is a Civil and Structural Engineer with over **40 years of experience** in the quality management, inspection, assessment, analysis and design of piers, wharves, bulkheads, seawalls and beach structures throughout the West Coast, including in Southern California. He has led the design and repair of bulkheads, combi-walls, and repair design for concrete, steel, and timber wharves and terminals, with his roles also involving quality management. Among the showcase projects Ted worked on **Post-Event Inspection of Belmont Pier, Pebble Beach Dr. Bank Stabilization, and South Texas Gateway Terminal.**

JIM KEARNEY, P.EInspection Lead

With over 34 years of experience in civil and structural design of landside and marine structures, Jim brings extensive experience in condition and construction inspection, construction engineering, and construction management of a variety of projects, including dozens of pier, wharf, bulkhead and seawall projects. Jim led the above water inspections and contributed to the repair design for nine marine terminals and the California Maritime Academy Boathouse repairs. Among the showcase projects Jim worked on **Balboa Island Seawall Rise Project, Seal Beach Municipal Pier Inspection & Assessment, Morro Bay Seawall Repairs, 845 Embarcadero, and Post-Event Inspection of Belmont Pier.**

MARC PERCHER, P.E.Structural Analysis & Design

Mr. Percher is a Civil Engineer with more than **17 years of experience** in structural engineering design and analysis, including above water inspection of marine structures. He has acted as lead analyst or reviewer of seismic analyses, mooring and berthing analysis. He has acted as the Senior Designer for multiple ferry terminals as well as other civil or military marine structures.

JEAN O. TOILLIEZ, PHD, PEWave Studies & Coastal Lead

Dr. Toilliez is a versatile marine and coastal engineer with over **12 years of experience** on projects in the West Coast. Jean has served as coastal project manager for several high-visibility living shoreline projects in the San Francisco Bay region, focussing on leveraging nature-based features to achieve resilience while maximizing biological benefits. Jean recognizes the relevance of achieving multiple objectives in coastal projects and the importance of synergizing engineering and environmental staff early in the design process. Among the showcase projects Jean has worked on the **Pebble Beach Dr. Bank Stabilization, SFO Airport Shoreline Protection Program Environmental Review, Balboa Island Seawall Rise Project, and South Texas Gateway Terminal.**

NICHOLAS J. GARRITY, PEPermitting and Environmental Lead

Nick is a hydrologist and civil engineer with more than 20 years of experience in environmental review, permitting, and design of river, estuarine, and coastal systems. His technical and project management experience includes CEQA/NEPA compliance, regulatory permitting, environmental impact assessments, flood hazard studies, hydrodynamic modeling, restoration planning and design, geomorphic assessments, and post-project monitoring and evaluation. Nick has managed the planning and design of multiple large-scale coastal restoration projects through the environmental, permitting, and design phases. Nick has worked on **Manhattan Beach Climate Resiliency.**

03. AGENCY REFERENCE / PROJECT EXAMPLES

NO.	PROJECT NAME & LOCATION	PIERS	SEAWALLS	BULKHEADS	HARBORS	BEACHES	OCEAN STUDY	CALIFORNIA COASTAL COMMISSION	JOINT WORK BETWEEN COWI AND ESA
1	Seal Beach Municipal Pier Structural Safety Assessment	*		*					
2	Long Beach Post Event inspection for Belmont Veterans Memorial Pier	*			*				
3	Newport Beach Seawall Rise Project, Balboa Island	*	*	*	*	*		*	
4	Pebble Beach Drive Bank Stabilization Project		*			*	*	*	*
5	Morro Bay Seawall Repairs, 845 Embarcadero		*	*	*	*			
6	SFO Airport Shoreline Protection Program Environmental Review		*				*		*
7	South Texas Gateway VLCC Terminal Design	*	*	*	*	*	*		
8	Manhattan Beach Climate Resiliency	*					*	*	
9	City of Newport Beach and Newport Bay Conservancy, Big Canyon Water Quality and Habitat Restoration Project						*	*	

 COWI Projects

 ESA Projects

Agency References:

Please note that, while the requirement was for minimum of three references, we have provided six references: five for COWI's top five projects and one for ESA's projects.

CITY OF SEAL BEACH - SEAL BEACH MUNICIPAL PIER INSPECTION & ASSESSMENT

Seal Beach, CA | 2/2015 - 7/2015



The City of Seal Beach retained COWI to perform structural inspection and assessment of the 1,865 ft-long Seal Beach Municipal Pier—the second longest wooden pier in California—originally built in 1906.

Since being torn in half in 1983 by severe winter storms, the pier has also endured fires and earthquake damage. The timber structure consists of piles, longitudinal and lateral bracing, cap beams, stringers, blocking, deck and railing. Various utilities run under or alongside the deck.

The project involved inspecting and evaluating existing conditions, preparing a structural condition assessment, and providing recommendations for repair and maintenance. The inspection was performed in compliance with ASCE MOP 130 – Waterfront Facilities Inspection and Assessment and ASCE Underwater Investigations, Standard Practice Manual No. 101.

A six-person inspection team completed all the inspection work, including above water inspection, within four days. A specially modified trailer-mounted

snooper platform was utilized to gain close access to the underdeck structure and utilities.

During the inspection, notes were collected using a special purpose Access database running on a laptop, and an iPad running Bluebeam Review, in addition to by hand and with audio recording. The above water and underwater inspection notes were merged into a single database. Inspectors noted the severity of the items in the field while recording the data. **Client:** City of Seal Beach. **Construction Cost:** NA.

Reference:

David Spitz, Associate Engineer
City of Seal Beach
(562) 431-2527 ext. 1331
dspitz@sealbeachca.gov

Personnel Involved:

Warren Stewart / Project Manager
Jim Kearney - Inspection Lead
Jack Gerwick - QA / QC Lead

CITY OF LONG BEACH - POST EVENT INSPECTION FOR BELMONT VETERANS MEMORIAL PIER

Long Beach, CA | 2/2017 - 6/2017



The project consisted of a post-event and routine inspection of the Belmont Pier and floats, including both underwater and under deck inspections. Storms in early March of 2017 caused damage to this iconic public access **concrete ocean pier** in the Belmont area of Long Beach. The entire pier was closed afterwards, pending inspection and verification that it was safe to open. The post-event evaluation, which was conducted first, found no storm damage to the main structure and after the second day of the inspection, the pier was reopened (having blocked off the small boat dock areas that were damaged). The routine inspection followed immediately thereafter, which assessed the overall condition of the pier and noted additional deterioration since the last inspection in 2013. Both inspections followed ASCE MOP-130 Waterfront Facilities Inspection and Assessment guidelines. **Client:** City of Long Beach.

Construction Cost: NA

Reference:

Sean Crumby
Public Works Director
City of Huntington Beach
(714) 374-5348
DSpitz@sealbeachca.gov

Personnel Involved:

Warren Stewart - Project Manager
Jim Kearney - Project Engineer
Jack Gerwick - QA / QC
Ted Trenkwalder - Principal in Charge

CITY OF NEWPORT BEACH - SEAWALL RISE PROJECT, BALBOA ISLAND

Newport Beach, CA | 1/2016 - 6/2019



Improvements to Balboa Island, in Newport Harbor, were begun in early 1900's and expanded over the decades. When built in the 1930's, the cap elevation of seawall did not anticipate today's sea level rise expectations. As such, from time to time the island experiences flooding due to overtopping during a combination of king tides and storm waves.

This project raised the cap elevation by about 9 inches over approximately 7,420 LF of existing seawall surrounding this waterfront community. This should suffice for the 25-year design life before other measures are in place. Complicating the design are approximately 80 private and public docks constructed on the waterside of, and requiring access over, the seawall. Also, the California Coastal Commission required gaps in the seawall for beach access. Thirty-five 3-ft wide gaps were included with composite stop-boards and stainless-steel hardware. These will be installed by the City maintenance department during periods of extreme high tides.

The project also included sidewalk and drainage system improvements behind the bulkhead. Services included planning, design, and preparation and submittal of **permits to the CCC** and to the City's own environmental department. **Client:** City of Newport Beach. **Construction Cost:** \$1.5M

Reference:

Robert Stein
Assistant City Engineer
City of Newport Beach
O: (949) 644-3322
M: (949) 795-2308
rstein@newportbeachca.gov

Personnel Involved:

Warren Stewart - Project Manager
Jack Gerwick - Principal-in-Charge
Jim Kearney - Inspection Lead
Jean Toilliez - Construction Cost Estimator

PEBBLE BEACH DR. BANK STABILIZATION

Crescent City, CA | 5/20 to 12/22 (est)



The project entails the permitting and design of coastal protection systems to manage the risk associated with bluff erosion along a critical transportation infrastructure asset in Northern California. The work includes geotechnical exploration, design of soil improvement and **bluff stabilization** (soil nail wall) techniques, **design of coastal protection systems** (buried berms, sacrificial protective layers), civil and roadway improvement, and a broad range of special studies in support of the **permitting process**. A critical transportation corridor and a vibrant cultural hub for the community, Pebble Beach is also within the **California Coastal Commission jurisdiction**. **Client:** City of Crescent City. **Construction Cost:** \$1.5M

Reference:

Jonathan Olson, City Engineer, City of Del Norte
(707) 464-7483 X234; jolson@crescentcity.org

Personnel Involved:

Jean Toilliez - Project Manager

Ted Trenkwalder - Principal-in-Charge

SEAWALL REPAIRS, 845 EMBARCADERO

Morro Bay, CA | 8/2018 - 5/2019



COWI provided engineering design and construction support on this design-build project led by a contractor to repair the seawall. COWI was engaged after the permit with the California Coastal Commission had been obtained. The original repair design tried to honor this requirement, but construction of a new steel sheet pile wall proved impossible due to the presence of the building and the need to run tie-backs underneath. The CCC was petitioned and the owner received permission to eliminate the requirements of the wall and reconstruct a rock dike to match adjacent properties. **Client:** Associated Pacific Constructors, Inc. **Construction Cost:** \$2M
Reference:

Paul Gillen, Associated Pacific Constructors, Inc.
(805) 234-5055 | paul@associatedpacific.com

Personnel Involved:

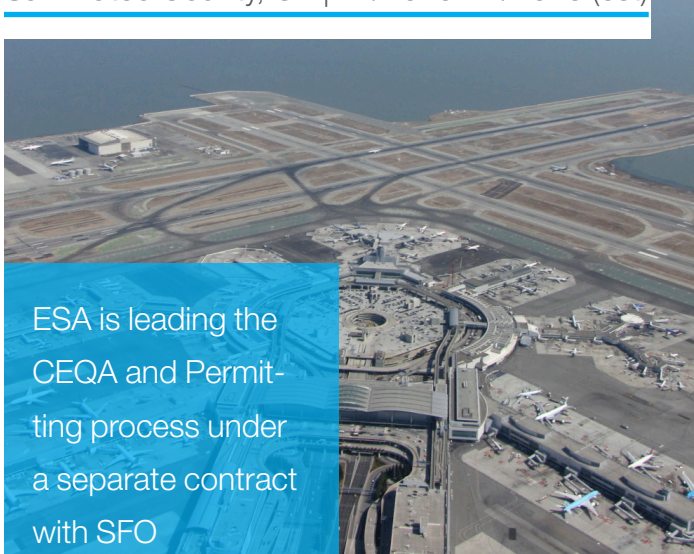
Warren Stewart - Project Manager

Jim Kearney - Inspection Lead

Jack Gerwick - Principal-in-Charge

AIRPORT SHORELINE PROTECTION PROGRAM ENVIRONMENTAL REVIEW

San Mateo County, CA | 11/2019-12/2023 (est)



COWI is the Lead JV Partner for the design and modification of the shoreline protection systems that will provide flood protection of the San Francisco International (SFO) Airport. In order to accommodate projected increases in air traffic the Airport will require future construction and renovation projects that will also have to follow the NFIP and local regulations for a flood hazard area. The Airport is developing alternatives for modification and improvement of its existing shoreline protection systems to address flood risks with the ultimate goal of taking the SFO Campus out of the SFHA.

The modified system will be designed to meet FEMA's criteria for accreditation, provide capacity against increasing flood risk associated with sea-level rise and regional climatic shifts, and be approved through all stages of CEQA/NEPA review. **Client:** City of San Francisco. **Construction Cost:** \$587M.

Personnel Involved:

Jack Gerwick - Principal-in-Charge

Jean O. Toilliez - Lead engineer

SOUTH TEXAS GATEWAY TERMINAL DESIGN

Ingleside, TX | 1/2019 - 12/2020



COWI was responsible for the marine terminal, including construction of two berths and access structures, serving as Program Manager, Lead Design Engineer-of-Record, and Construction Management Support.

The project involved new USACE permit application based on improved layout; demolition of extensive site improvements, including large graving dock and slip ways; dredging of ~4 million cy and design and construction of dredge material placement areas; navigation studies, risk assessment and full mission bridge simulations; and coastal design basis criteria development; among others. **Client:** Buckeye Partners **Construction Cost:** confidential.

Personnel Involved:

Ted Trenkwalder - Project Manager

Warren Stewart - Program Management / Liaison

Jack Gerwick - Principal-in-Charge

Jean Toilliez - Lead coastal engineer

MANHATTAN BEACH CLIMATE RESILIENCY

Manhattan Beach, CA | 02/2020 –Present



ESA is assisting the City of Manhattan Beach with the development of a climate action and adaptation plan, sea-level rise vulnerability assessment and adaptation plan, and a Local Coastal Program update. The project is intended to inform the update to the City's safety element and local hazard mitigation plan. As part of the Sea-Level Rise Vulnerability Assessment, ESA has teamed with the USGS to apply the Coastal Storm Modeling System (CoSMoS) sea-level rise modeling results to the city's shoreline and analyze the impacts to the city's assets and infrastructure, stormwater system, and groundwater. The project includes an analysis of the stormwater system and higher ocean water levels with sea-level rise.

Client: City of Manhattan Beach

Reference: Dana Murray, (310) 802-5508, dmurray@citymb.info

Personnel Involved: Nick Garrity -
Project Manager

BIG CANYON WATER QUALITY AND HABITAT RESTORATION PROJECT

Newport Beach, CA

ESA collaborated with NBC, the City, a TAC, and other partners to permit, design and implement this multi-phased restoration program. For Phase 1, ESA led the creek stabilization and revegetation design, as well as CEQA documentation and permitting. We prepared a successful Initial Study/MND and permit applications for five resources. We also prepared the habitat mitigation and monitoring plan and provided construction support and biological compliance monitoring and reporting during implementation. Phase 2, which is being constructed this year, covers more than 11 acres located just downstream from the Phase 1 project site. ESA performed all the Phase 2 work, including design, permitting, CEQA documentation, and construction support. We completed design plan drawings and specifications and prepared and submitted permit application packages to the US Army Corps of Engineers (USACE), CDFW, and Santa Ana RWQCB in August 2018. ESA also performed technical studies, including biological and cultural resources, and prepared the MND for CEQA. The project received two separate grants to fund construction.

Client: City of Newport Beach

04. OVERALL BENEFIT FOR THE CITY AND OUR UNDERSTANDING OF THE SCOPE OF SERVICES

BENEFITS TO THE CITY

COWI North America, Inc. (COWI) is uniquely positioned to delivery success to the On-Call Ocean Engineering Project (Project) for the City of Huntington Beach (City). Equipped with a thorough understanding of the scope of the services, we bring multiple benefits to the City. Among them are:

Proven Project Manager with Local Experience.

Our proposed Project Manager Warren Stewart has over 48 years of experience in coastal and marine engineering projects, majority of them in Southern California. An Orange County resident, Mr. Stewart works out of our office in Irvine. He has delivered dozens of similar successful projects in the project vicinity, including for cities of Newport Beach, Seal Beach, Long Beach, Los Angeles.

“A” Team with Established Collaboration Record.

Led by Warren, the COWI team comprises of expert personnel from COWI and ESA, our subconsultants, each of whom bring in-depth experience in projects similar to the Project, having successfully delivered services in the proposed roles for this Project. Particularly, our Project Director Ted Trenkwalder, Inspection Lead Jim Kearney, and Wave Studies/Coastal Lead Jean O. Toilliez, all of them California P.E.s, have prior experience working together on similar projects throughout the West Coast, including in Southern California.

COWI and ESA bring established collaboration record, having worked on numerous marine and coastal engineering projects throughout California, including Pebble Beach Drive bank stabilization for City of Crescent City, Pebble Beach Storm Damage Project for County Of Del Norte, SFO Airport Shoreline Protection Program Environmental Review, a flood control project in Santa Cruz, Terminal 4 demolition for City of Richmond, and two climate resiliency projects for Caltrans District 1.

OUR UNDERSTANDING OF THE SCOPE OF SERVICES

The COWI Team brings a clear understanding of the Project Scope of Services, based on our deep bench of experience in similar projects for clients encompassing the majority of city agencies throughout Southern California. Throughout the entire length of the coastlines, we have provided inspection, assessment and repair of piers, seawalls, bulkheads, harbors, and beaches, as well as provided ocean studies to determine the effects of waves, tides, currents, sand and the salt-water environment, including assisting the cities with issues or permits related to the California Coastal Commission (CCC).

Our subconsultant ESA will also assist with sea-level rise analyses as required by the California Coastal Commission for Coastal Development Permits. ESA has completed sea-level rise analyses for a range of projects and clients.

05.RESUMES. Please find our resumes, which are outside the page count, in Appendix A.

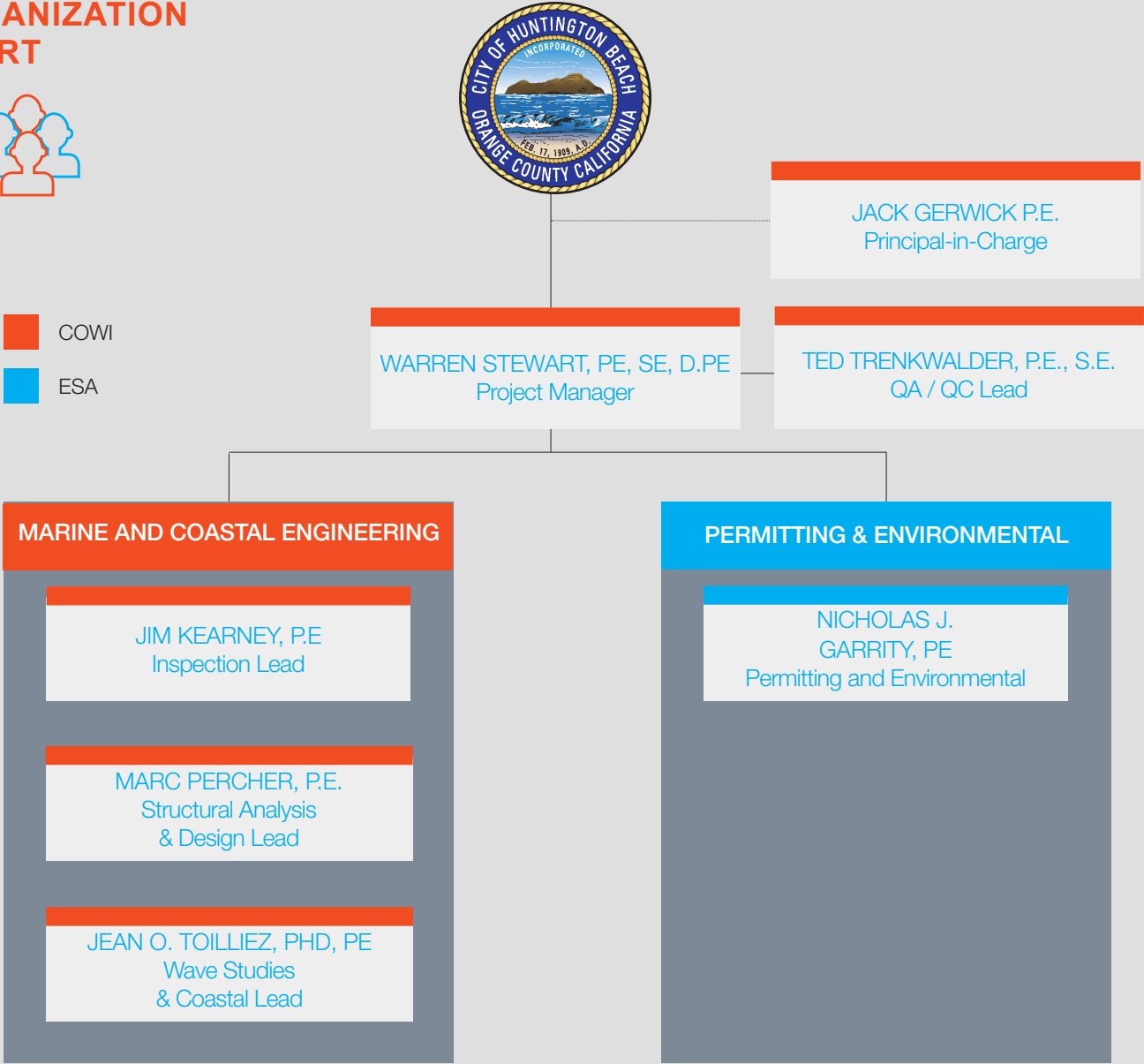
STAFFING

The organization chart below shows the reporting structure and role assignment of our team members, all of them P.E.s, led by Project Manager Warren Stewart. The respective roles denote the functions the personnel will provide. Majority of team members have established working relationships from past projects, including in Southern California. COWI and ESA share at least eight projects on which we have worked together.

ORGANIZATION CHART



- COWI
- ESA



Please find our resumes, which are outside the page count, in Appendix A.

UNDERSTANDING & METHODOLOGY SECTION

The 32 mile-long City of Huntington Beach extends from the Seal Beach Naval Weapons Station National Wildlife Refuge to the north to the Costa Mesa and Newport Beach to the south, and includes Huntington Harbor, Sunset Beach, and about nine miles of coastal beach front (a portion of which is maintained by the City). The iconic Huntington Beach Pier is at Main Street in the downtown area. The City sponsors several beach events including the US Open Surfing Championships and AVP Beach Volleyball.

We expect that this on-call contract would follow other similar contracts we have had where the City would contact us to discuss a particular project or study that they would like for us to undertake. The project could be from your CIP, something that occurs on a routine basis, or something that occurs unexpectedly. We are capable of handling any circumstance: our proposed Project Manager lives in Seal Beach and works out of our Irvine office. After discussing the project with you, reviewing any documentation, and making a site visit, we would then present a formal cost proposal with scope of work for your review and discussions. The proposal would also include a list of personnel and equipment (if needed) to be used, the schedule, either a lump sum or NTE fee, and proposed deliverables. With your approval and written task order, we would then execute the work.

When required, we will use personnel from our sub-consultant, ESA. While their primary role is permitting and liaison with the Coastal Commission and



other permitting agencies, they have expertise in nature-based designs and can backstop COWI's own coastal engineering expertise.

One recent example of innovative solutions is found in our Balboa Island Seawall Rise showcase project (above). During the planning and design, it became apparent that the CCC would require a similar level of beach access after the 9-inch rise was completed. The public could either cross the wall with it being 9 inches higher or walk to one of the gaps and cross the wall there. The problem with the gaps is they would allow water to overflow, like before, and flood the residential area. Thus, COWI developed a uniform stop-board system to close off the gaps during flooding events. These would be installed by the City's maintenance department and removed after the threat was over. The stop-board were manufactured from recycled plastic with molded polyurethane seals. Each gap was fitted with stainless steel fittings to accept the boards and their bolted connection. To make sure that the stop-board system was universal (i.e., any board could go in any gap), all of the end fittings embedded into the concrete were set with only 3 match-fit steel templates, which were QA/QC checked before use.

APPENDIX A: RESUMES

(Resumes are outside the 15 page limit)



EDUCATION:

M.S., Structural
Engineering, Virginia Tech

B.S., Civil Engineering,
Virginia Tech

PROFESSIONAL REGISTRATIONS AND MEMBERSHIPS:

Structural Engineer,
1988, CA S3066

Civil Engineer, 1986, CA
C41358

ACOPNE Academy of
Coastal, Ocean, Port &
Navigation Engineers,
Diplomate

ASCE American Society
of Civil Engineers,
Member, TCLEE Ports
Committee

COPRI Coasts, Oceans,
Ports, & Rivers Institute,
Member, Ports & Harbor
Committee

WARREN A. STEWART, P.E., S.E., D.PE PROJECT MANAGER

Mr. Stewart has over 48 years of professional engineering experience on a variety of projects for local, state, and federal agencies, including over 30 years managing a variety of pier, harbor, and other projects. On over 150 projects, he has been responsible for the production, coordination and review of engineering design and construction documents, cost estimates, project specifications, construction management, report writing and/or reviews. He has made numerous forensic analyses and inspection for repairs of various types of structures and facilities. As Project Manager he has been responsible for development of project work plans, implementation of the work plans including all technical issues, client satisfaction, project financial performance, schedules, and construction phase service.

SELECTED PROJECT EXPERIENCE

City of Seal Beach - Inspection of The Seal Beach Municipal Pier, Seal Beach, CA. 2015. Project Manager. The project included above and underwater inspections and evaluation of existing conditions, structural condition assessment report, and recommendations for repair and maintenance. The inspection was performed in compliance with ASCE Waterfront Facilities Inspection and Assessment, MOP 130 and ASCE Underwater Investigations, Standard Practice Manual No. 101. COWI mobilized a six-man inspection team to complete all the work within four days.

City of Long Beach - Post-Event Inspection of the Belmont Pier, Long Beach, CA. 2017-2018. Project Manager. Project Manager for a post-event and routine inspection of the Belmont Pier, including both underwater and under deck inspections. Following some storm damage 2017 to this iconic concrete ocean pier, the entire pier was closed, pending inspection and verification that it was safe to open. The post-event evaluation found no storm damage to the main structure and after the second day of the inspection, the pier was reopened. The routine inspection followed immediately thereafter, which assessed the overall condition of the pier and noted additional deterioration since the last inspection in 2013. Both inspections followed ASCE MOP-130 Waterfront Facilities Inspection and Assessment guidelines.

[**City of Newport Beach - Seawall Rise Project, Balboa Island, Newport Beach, CA.**](#) 2016-2018. Project manager for improvements to approximately 7,420 LF of existing seawall surrounding this prestigious waterfront community. Services during construction included: reviewing submittals and RFI's; coordinating inspectors; site meeting and observations; preparing additional work change order (CO) requests by City and contractor; review of CO proposals. Construction cost approx. \$1.5M

[**Associated Pacific Constructors - Seawall Repairs, 845 Embarcadero, Morro Bay, CA.**](#) 2018. Project Manager. COWI was hired to provide the engineering design and construction support. While most of the bulkhead along the ½ mile of the Embarcadero is rock dike (circa 1940), this portion had a concrete wall in a double-V configuration built on top of the rock dike. Constructed in the 50's as haul-out area for a small boat yard, the site had been redeveloped as retail/commercial with a building constructed within 10 feet of the wall. Reconstruction of the wall was required by the California Coastal Commission. COWI was engaged after the permit with the CCC had been obtained.

[**Buckeye Partners - South Texas Gateway Crude Oil Export Terminal, Ingleside, TX.**](#) 2019-2020. Program Management / Liaison. The project included planning, monitoring, coordination, permitting, analysis and design, and construction assistance of two VLCC berths, demolition of former fabrication yard including removal of graving dock, excavation and dredging. Relevant studies included navigation risk studies, coastal and environmental design considerations, mooring and berthing analyses with passing vessel effects, and HAZID studies. The project permitting application was completed within the first three months, and the design phase within six months.

[**City of Newport Beach Ocean Piers Maintenance Inspection and Design Newport Beach, CA.**](#) 2016-2018. Project Manager. These two timber piers are approximately 1,000 feet in length and extend into the Pacific Ocean to a depth of about -20 ft MLLW. Project manager for the repair design inspection of the Newport and Balboa ocean piers, 75 and 100 years old respectively, and the design of the resulting repair project(s). The underdeck was inspected using a special purpose snooper which allowed up-close visual and tactile inspections. Upon completion of the inspection, contract documents (PS&E's) for the repair project were prepared. A construction contract for the repairs was let by the contract in the fall of 2017 with completion Q2 2018. Construction phase services were provided. Construction cost, \$1.2M.

[**Associated Pacific Constructors - Rincon Island Causeway Inspection & Repairs, Ventura, CA.**](#) 2015-2016. Project Manager. Project Manager for the inspection and repairs of the steel and timber structure leading to the man-made Rincon oil production island approximately ½ mile off-shore. Work included underwater inspection of the remaining piles, review of previous inspections and UDT steel thickness data, and design of temporary repairs to obtain a 10-ton load rating.

EDUCATION:

M.B.A. Haas School of Business, U.C. Berkeley. 2018

M.Sc., Design/Construction Integration Program. Stanford University, USA. 2002

B.E., Civil Engineering. Vanderbilt University, USA. 2001

PROFESSIONAL REGISTRATIONS AND MEMBERSHIPS:

Registered Civil Engineer, California, #68726

American Society of Civil Engineers; Deep Foundations Institute; Member of ASCE's COPRI Ports and Harbors Committee;

JACK GERWICK, P.E. PRINCIPAL-IN-CHARGE

With 20 years of experience in the design and construction of heavy civil marine structures, Jack specializes in the design of piers, wharves, and port facilities, with emphasis on bulk terminals and has worked on bridge and hurricane protection construction projects. Jack is the VP of Operation of COWI West Region.

SELECTED PROJECT EXPERIENCE

[City of Seal Beach - Inspection of The Seal Beach Municipal Pier, Seal Beach, CA.](#) 2015. QA / QC Lead. The project included above and underwater inspections and evaluation of existing conditions, structural condition assessment report, and recommendations for repair and maintenance.

[City of Long Beach - Post-Event Inspection of the Belmont Pier, Long Beach, CA.](#) 2017-2018. QA / QC Lead. QA / QC Lead for a post-event and routine inspection of the Belmont Pier, including both underwater and under deck inspections.

[City of Newport Beach - Seawall Rise Project, Balboa Island, Newport Beach, CA.](#) 2016-2018. Principal-in-Charge for improvements to approximately 7,420 LF of existing seawall surrounding this waterfront community.

[Associated Pacific Constructors - Seawall Repairs, 845 Embarcadero, Morro Bay, CA.](#) 2018. Principal-in-Charge. COWI was hired to provide the engineering design and construction support.

[Buckeye Partners - South Texas Gateway Crude Oil Export Terminal, Ingle-side, TX.](#) 2019-2020. Principal-in-Charge. COWI's role was focused on the marine terminal including construction of two berths and access structures. COWI served as Program Manager, Lead Design Engineer-of-Record, and Construction Management Support.

[Port of Redwood City Wharves 3 and 4 Fender Replacement Project, Redwood City, CA.](#) Project Manager for multidisciplinary team including environmental, geotechnical, and surveying subconsultants tasked with inspection, detailed design, permitting, and construction management for nine new dolphins, a new access pier, and six new fender systems.

EDUCATION:

M.S., Structural Engineering. University of California, Berkeley. 1984
B.S., Civil Engineering. University of California, Davis. 1979

PROFESSIONAL REGISTRATIONS AND MEMBERSHIPS:

Registered Civil Engineer, CA; Registered Structural Engineer, AK, CA, & TX; ASCE COPRI Seismic Committee for Piers and Wharves; ASCE Tsunami Loads and Effects Subcommittee; SEAONC Structural Engineers Association of Northern California; ASCE American Society of Civil Engineers; DFI Deep Foundations Institute

TED W. TRENKWALDER, P.E., S.E. QA/QC LEAD

Mr. Trenkwald is a civil and structural engineer with over 40 years of experience in the inspection, assessment, analysis and design of piers, wharves and waterfront structures. He has been responsible for the design and repair of bulkheads, combi-walls, alternative ground improvements, and repair design for concrete, steel, and timber wharves and terminals and related support structures. He has provided extensive QA/QC on most of his projects.

SELECTED PROJECT EXPERIENCE

County of Del Norte - Pebble Beach Drive Storm Damage Project, Crescent City, CA. 2020. Principal-in-Charge. The project entails the permitting and design of coastal protection systems to manage the risk associated with bluff erosion along a critical transportation infrastructure asset in Northern California. The work includes geotechnical exploration, design of soil improvement and bluff stabilization (soil nail wall) techniques, design of coastal protection systems (buried berms, sacrificial protective layers), and a broad range of special studies in support of the permitting process.

Buckeye Partners - South Texas Gateway Crude Oil Export Terminal, Ingle-side, TX. 2019-Present. Project Manager/Project Engineer. Mr Trenkwald is responsible for Program Management of a multidiscipline team for fast-track permitting and design of major new crude oil export terminal. Mr Trenkwald planned, monitored, coordinated, and led the permitting, analysis and design, and construction assistance of two VLCC berths, demolition of former fabrication yard including removal of graving dock, excavation and dredging. Relevant studies included navigation risk studies, coastal and environmental design considerations, mooring and berthing analyses with passing vessel effects, and HAZID studies. The project permitting application was completed within the first three months, and the design phase within six months.

City of Long Beach - Post-Event Inspection of the Belmont Pier, Long Beach, CA. 2017-2018. Principal in Charge. The project involved post-event and routine inspection of the Belmont Pier, including both underwater and under deck inspections. Following damage from storms in 2017, the pier was closed, and after inspection and verification that it was safe to do so,

it was opened. The later routine inspection assessed the overall condition of the pier and noted additional deterioration since the last inspection in 2013.

Crescent City Harbor District - Crescent City Harbor Marina Rehabilitation and Tsunami Mitigation Project, Crescent City, CA. 2009-2014 Project Manager. Project Manager responsible for rehabilitation of harbor and marina after tsunami damage. The work includes numerical modeling of wave agitation within the harbor and inner boat basin, numerical modeling of tsunami waves, assessment of hydrodynamic loads on moored vessels, assessment of wave-current loads on piles, planning and layout. Also developed design for the wave attenuators, marina floats, and piling. Assisted District during fabrication and installation of new floats and docks.

City of Monterey Wharf 1 And 2 Assessment and Upgrade, Monterey, CA. Ongoing. Project Director. The City of Monterey has undertaken a program to rehabilitate the wharves and selected COWI to lead a team tasked with inspection, assessment, environmental permitting, and repair/upgrade design. Inspections were coordinated with the harbour master to minimize impacts to tenants and the public as well as commercial fishing activities. Inspections were performed in accordance with ASCE's Underwater Inspection Manual as well as MOTEMS inspection standards. One of the primary focuses of the inspection was the condition of the more than 2,000 timber piles which support the wharves. As Project Director, I was responsible for the overall project performance related to budget, schedule, inspection compliance and detail, and prioritizing repairs for best value to the City.

Port of San Francisco On Call Engineering, San Francisco, CA. 2018-Present. Project Manager. Responsible for the analysis and design of various as needed engineering services for the Port. Specific Tasks have included the review and assessment of Pier 96 and Pier 31.5 to accommodate building and vehicle loads; Pier 96 Improvement Study for Bulk Material Terminal; Pier 40 Marina Float and Breakwater Assessment and Repair, Hyde Street Harbor Float and Breakwater Assessment and Repair, and Mission Bay Ferry Terminal Feasibility Study. The Port requires studies to determine permitting, design, costs, and scheduling for planning and budgetary purposes.

Tesoro Avon and Amorco Motems Inspection And Audit, Martinez, CA. 2002-2019. Project Manager/Project Engineer. Completed inspection and condition assessment ratings of timber, steel, and concrete wharves and dolphins in accordance with Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS). Developed remedial action plan and designed repair schemes to allow terminal operation for selected tankers and barges. The assessment included berthing and mooring analyses of selected vessels to determine maximum approach velocities wind restrictions for the existing mooring hardware and structure.

EDUCATION:

B.S., Architectural
Engineering. California
Polytechnic University at
San Luis Obispo, USA.
1986

PROFESSIONAL REGISTRATIONS AND MEMBERSHIPS:

Registered Professional
Engineer, State of
California; Registered
Civil Engineer, 1994,
California, C052439;
ASCE; Coasts, Oceans,
Ports, and Rivers Institute
(COPRI); National Society
of Professional Engineers

JAMES W. KEARNEY JR., P.E. INSPECTION LEAD

With over 34 years of experience in civil and structural design of landside and marine structures, Jim brings extensive experience in condition and construction inspection, construction engineering, and construction management of a variety of projects, including dozens of pier, wharf, bulkhead and seawall projects. Jim led the above water inspections and contributed to the repair design for nine marine terminals and the California Maritime Academy Boathouse repairs. He was coauthor and presented the ASCE Ports 2010 paper, "Practical Repair of Marine Timber Structures".

SELECTED PROJECT EXPERIENCE

[City of Seal Beach - Inspection of The Seal Beach Municipal Pier, Seal Beach, CA.](#) 2015. Project Engineer. Lead Inspector. Directed and performed above water inspection and coordinated with underwater inspectors for a complete structural condition assessment of the Seal Beach Pier. Completed Inspection Report and repair recommendations.

[City of Long Beach - Post Event Inspection Belmont Veterans Memorial Pier, Long Beach, CA.](#) 2017. Project Engineer. Performed post storm event inspections of the pier and floats following a winter storm that caused serious damage to the structure and appurtenances of the pier in early 2017. Provided a report of findings, recommendations for allowable loading, allowing the pier to reopen to pedestrian and fishing use and recommendations for the repair and plan forward for the City.

[City of Newport Beach - Ocean Pier Inspection and Repair, Balboa Pier, Newport Beach, CA.](#) 2016-2017, 2020-2021. Project Engineer, Lead Inspector. Directed and performed above water inspection and coordinated with underwater inspectors for a complete structural condition assessment of the Balboa Pier. Completed Inspection Report and repair recommendations. COWI was invited to reprise role as inspector.

[Associated Pacific Constructors - Seawall Repairs, 845 Embarcadero, Morro Bay, CA.](#) 2018. Inspection Lead. COWI was hired to provide the engineering design and construction support. While most of the bulkhead

along the ½ mile of the Embarcadero is rock dike (circa 1940), this portion had a concrete wall in a double-V configuration built on top of the rock dike.

City of Newport Beach - Ocean Pier Inspection and Repair, Newport Pier, Newport Beach, CA. 2016-2017. Project Engineer/Lead Inspector. Directed and performed above water inspection and coordinated with underwater inspectors for a complete structural condition assessment of the Newport Pier. Completed Inspection Report and repair recommendations.

Associate Pacific Contractors - Rincon Island Causeway and Wharf Inspection and Repair Design. Ventura County, CA. 2015. Project Engineer. Lead Inspector. Directed and performed above water inspection and coordinated with underwater inspectors for a complete structural condition assessment of the Rincon Island causeway and wharf. Provided repair designs and recommendations for additional strengthening of existing, overstressed structures.

Port of Los Angeles - Port Of Los Angeles, Berths 57-60 Condition Survey and Upgrade Concepts, San Pedro, CA. 2011-2012. Project Engineer. Project Engineer in charge of conducting and coordinating above and underwater inspections of the Port of Los Angeles “City Dock 1” piers. Two piers of concrete pile and deck construction, over 2500 ft. in length, the inboard pier was constructed in 1913 with an addition, outboard in 1938. All elements were assigned condition ratings, individual defects were noted and recommended repairs to defects, with cost estimate were developed for the report. Seismic Upgrade concepts were developed and priced for POLA use in planning.

City of Martinez Public Fishing Pier, Martinez, CA. 2020. Project Manager/Lead Engineer. Project manager and lead inspector/designer of recommended repairs for a municipal fishing pier in Martinez, CA. Prioritize and recommend repairs to existing public fishing pier. Provide City with a Condition Report and Drawings and recommended repairs and budgeting cost estimate by repair priority. Inspection, Design, Project management.

City of Monterey - Monterey Wharf I And II Programmatic, Monterey, CA. 2018. Supervising Engineer. Supervising engineer directing above and underwater inspection in the field. Reviewed data collection, calculations, drawings, and reports prior to submittal.

City of Monterey - Monterey Wharf II Condition Assessment, Monterey, CA. 2012. Project Engineer. Project Engineer conducted above water structural inspection of Wharf II in Monterey, CA. Noted and categorized deficiencies and developed repair priorities for the City of Monterey.

EDUCATION:

BS Civil Engineering.
Tufts University. 9/1998-
5/2001

Master of Science in
Structural Engineering.
Tufts University.

PROFESSIONAL REGISTRATIONS AND MEMBERSHIPS:

License: California, Civil,
68072

American Society of
Civil Engineers - Coast,
Oceans, Ports & Rivers
Institute member

Committee Member -
ASCE Ports and Harbors
Waterfront Rehabilitation
Manual

Committee Member
- ASCE 61 – Seismic
Design of Piers and
Wharves

MARC PERCHER, P.E. STRUCTURAL ANALYSIS & DESIGN

Mr. Percher is a civil engineer with more than 17 years of experience in structural engineering design and analysis of marine structures, oil and gas facilities for earthquakes, and building structures for blast loads. He has acted as lead analyst or reviewer of seismic analyses, mooring and berthing analysis, and acted as the Audit Team Lead for numerous marine oil terminals as part of audits for California's Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) requirements. As part of this work he performed and evaluated response spectrum and nonlinear pushover analyses using displacement-based performance criteria and incorporating soil-structure interaction and nonlinear material performance. He has also acted as the senior designer for multiple ferry terminals as well as other civil or military marine structures. Mr. Percher has also been involved with post-earthquake investigations of port facilities in Chile in 2010 and led a team in Japan in 2011.

SELECTED PROJECT EXPERIENCE

POLB - BP Port of Long Beach Terminal 2, Berths 77 and 78, Seismic Analysis and Retrofit Design, Port of Long Beach, CA. 2011-2012. Senior Engineer. Senior engineer performed detailed review of seismic analysis of concrete pile structures, and development of retrofit design. Kinematic loading due to liquefaction was included in the project.

Chemoil / Port Of Long Beach - Berths F209 and G211a Seismic Analysis, Long Beach, CA. 2008. Senior Engineer. Senior engineer performed detailed review of seismic analysis of cellular bulkhead wall and concrete pile structures. The work included kinematic loading due to liquefaction within cells.

BP/ Port Of Long Beach - Berth 121 Seismic Analysis, Long Beach, CA. 2008-2009. Senior Engineer. Project engineer performed response spectrum and nonlinear pushover analysis of steel piled structure and approach trestle. Included pushover analysis using displacement-based criteria for multiple earthquake events. Pushover analysis combined kinematic loads due to liquefaction and inertial loading via nonlinear soil spring and structure interaction.

Power Engineering Construction - Treasure Island Ferry Terminal Design Build, San Francisco, CA. 2015-2020. Senior Engineer. Technical lead for developed of design-build construction documents for a new ferry terminal. The design incorporated a 100 ft bridge section which spanned a large rock dike expected to see significant kinematic movements during a seismic event. The steel and concrete pier structure was then design for expected soil movement and shaking loads. The terminal design also incorporated two concrete sheetpile breakwaters and a gangway from the pier to a steel float. Design services were performed in a rapid staggered submission format to match the ordering of long-lead items. Coordination with review agencies was arranged to allow for staggered submissions.

National Parks - Alcatraz Wharf Repairs and Seismic Strengthening, San Francisco, CA. 2018 - 2019 Senior Engineer. Senior technical advisor for repair and seismic upgrade design of historic concrete wharf structure. Provided criteria selection, repair design, and retrofit analysis input for development of appropriate and economical repair / upgrade. Performed field investigations to verify existing conditions at the wharf.

Confidential - Evaluation of Existing Marginal Wharf Terminal for Public Access, Oakland, CA. 2019. Project Manager / Senior Engineer. Project manager for project incorporating performance of nonlinear seismic evaluation at a feasibility study level for conversion of an existing marginal wharf terminal to allow for public access as open park space. Determined the appropriate design criteria for public access on a marine structure, which is not well defined in build codes. Developed a typical single bent model which allowed for determination of system sensitivity to added mass and determination of feasibility for the project.

Developer - Encinal Wharf Redevelopment, Alameda, CA. Senior Engineer. Performed evaluation of an existing 1500 ft long container terminal facility for based on redevelopment as a condominium complex. Design included evaluation of seismic loads based on nonlinear pushover methods. Developed conceptual retrofit schemes providing for an economical upgrade which satisfies current codes.

Chevron - Chevron Richmond Long Wharf Upgrades, Richmond, CA. 2012-2014. Senior Engineer. Performed detail design and developed design drawings for miscellaneous repairs as well as installation of new composite fender piles. Design of new fender piles included evaluation of berthing energy and development of an appropriate design methodology based on physical testing.

EDUCATION:

PhD, University of California, Berkeley (2008) in fluid dynamics and applied mathematics (College of Engineering)

MS, University of California, Berkeley (2004) in marine hydrodynamics (College of Engineering)

MS, Paris Tech, France (2004) in engineering mechanics, quality control and statistics

PROFESSIONAL REGISTRATIONS AND MEMBERSHIPS:

PE license CA-77499

Qualified SWPPP Designer C77499

ASCE/COPRI Ports and Harbors

JEAN O. TOILLIEZ, PHD, PE WAVE STUDIES & COASTAL LEAD

Dr. Toilliez is a marine and coastal engineer with over 12 years of experience in projects on the West Coast. Jean has served as coastal project manager for several high-visibility living shoreline projects in the San Francisco Bay Area, focused on leveraging nature-based features to achieve resilience while maximizing biological benefits. Jean recognizes the relevance of achieving multiple objectives in coastal projects and the importance of synergizing engineering and environmental staff early in the design process.

SELECTED PROJECT EXPERIENCE

City of Crescent City - Pebble Beach Drive Storm Damage Project, Crescent City, CA. 2020. Project Manager. The project entails the permitting and design of coastal protection systems to manage the risk associated with bluff erosion along a critical transportation infrastructure asset in Northern California. The work includes geotechnical exploration, design of soil improvement and bluff stabilization (soil nail wall) techniques, design of coastal protection systems (buried berms, sacrificial protective layers), civil and roadway improvement, and a broad range of special studies in support of the permitting process. The project is high-visibility at the confluence of several key drivers: Pebble Beach is critical transportation corridor for the local community, it is a culturally critical area, and is within the California Coastal Commission jurisdiction band. The project is being performed in partnership with Stover Engineering of Crescent City.

City of Newport Beach - Seawall Rise Project, Balboa Island, Newport Beach, CA. 2016-2018. Construction Cost Estimator. Project involved improvements to approximately 7,420 LF of existing seawall surrounding this prestigious waterfront community. Services during construction included: reviewing submittals and RFI's; coordinating inspectors; site meeting and observations; preparing additional work change order (CO) requests by City and contractor; review of CO proposals. Construction cost approx. \$1.5M

SFO - Engineering Support Services for the Airport Shoreline Protection Program Environmental Review Project at SFO Airport, San Francisco, CA. 2020. Lead engineer. In charge of the preparation of a CLOMR package on

behalf of San Francisco International Airport as part of the Shoreline Protection Program. The project involves the design of a continuous high-crested perimeter wall designed per FEMA requirements. The project goal is to amend the existing FEMA-delineated flood zone and remove the SFO campus from the 1% flood zone and into the Zone X (0.2% flood zone). The coastal engineering scope of work includes FEMA-required calculations necessary for the preparation of a CLOMR package for the proposed high-crested perimeter wall. It also includes the preparation of several large-scale studies to support the on-going permitting process, including no-rise studies, impact of the proposed structure on waves and sediment transport, induced storm surge distribution, transect-based analysis of wave effects, overtopping rates, and effects of sea-level rise on various processes.

State Coastal Conservancy - Terminal 4 Wharf, Warehouse, and Piling Removal Project Richmond, CA. 2018-2019. Engineer in Charge. The derelict Terminal Four Wharf site is made up of over 2,500 concrete-encased and creosote-contaminated timber piles, plus a wharf building, decking, and other appurtenant structures. The removal project consisted of the preparation of 60% plans, specifications, engineer's estimates, permit applications, CEQA documentation. With COWI and with a previous firm, Jean's work focused on coastal processes modeling using Delft3D, SWAN, and XBEACH, engineering, construction sequencing, cost estimating, and permit support. The project featured a "living shoreline" slope protection system featuring artificial oyster reefs, vegetated face, and biological enhancements.

Port of San Francisco - 16th Street Mission Bay Terminal, Port of San Francisco Wave Agitation Study, San Francisco, CA. 2018-2019. Conducted wave agitation study using a phase-averaged spectral action balance equation model (MIKE 21 SW FM). The goal was to assess the exposure of a proposed terminal location to heavy weather and wave action. The model was forced using long-term statistics calculated from nearby NOAA met towers. The results were aggregated into a transfer function capable of estimating the wave height and period for any wind speed and direction pair. The approach included line structures integrated into the flexible mesh to represent large floating structures. These wave estimates were then combined with wind speed to create wave height and wind speed pairs, which were used as the basis for a downtime assessment. The findings were documented and informed further planning and capital allocation forecasting.

City of Santa Cruz, Department of Public Works, Head-Driven Culvert for Flood Management at the San Lorenzo River, CA. 2019-2020. Engineer in charge. Preparation of the 60%, 90%, and Final construction plans, specifications, and estimate (PS&E) for a permanent passive drainage system. The culvert will be used to manage flood levels in the San Lorenzo River lagoon during summer months, when a beach berm obstructs the river mouth, and will reduce the risk of flooding on the historic Santa Cruz Boardwalk and adjacent residential areas. The culvert features significant advantages over the existing lagoon water level management approach, consisting of a mechanical breaching of the mouth.

EDUCATION:

MS, Civil and
Environmental
Engineering, University of
California at Berkeley

BS, Geology–
Physics/Mathematics,
Brown University

PROFESSIONAL REGISTRATIONS AND MEMBERSHIPS:

Civil Engineer, State of
California, C72603

Nicholas J. Garrity, PE PERMITTING AND ENVIRONMENTAL

Nick is a hydrologist and civil engineer with more than 20 years of experience in environmental review, permitting, and design of river, estuarine, and coastal systems. His technical and project management experience includes CEQA/NEPA compliance, regulatory permitting, environmental impact assessments, flood hazard studies, hydrodynamic modeling, restoration planning and design, geomorphic assessments, , and post-project monitoring and evaluation. Nick has managed the planning and design of multiple large-scale coastal restoration projects through the environmental, permitting, and design phases. Nick has advanced innovative approaches to flood hazard analyses, wetland restoration, and environmental compliance.

SELECTED PROJECT EXPERIENCE

Manhattan Beach Climate Resiliency Program, Manhattan Beach, CA.

Project Director. Nick is overseeing the development of a climate action and adaptation plan, sea-level rise vulnerability assessment and adaptation plan, and a Local Coastal Program update for the City. The project is intended to inform the update to the City's safety element and local hazard mitigation plan. In addition to directing the overall project, Nick is providing technical oversight for preparation of the sea-level rise vulnerability assessment and adaptation plan and the public outreach presentations.

City of Newport Beach and Newport Bay Conservancy, Big Canyon Water Quality and Habitat Restoration Project.

ESA collaborated with NBC, the City, a TAC, and other partners to permit, design and implement this multi-phased restoration program. For Phase 1, ESA led the creek stabilization and revegetation design, as well as CEQA documentation and permitting. We prepared a successful Initial Study/MND and permit applications for five resource agencies. We also prepared the habitat mitigation and monitoring plan and provided construction support and biological compliance monitoring and reporting during implementation. Phase 2, which is being constructed this year, covers more than 11 acres located just downstream from the Phase 1 project site. ESA performed all the Phase 2 work, including design, permitting, CEQA documentation, and construction support. We completed

design plan drawings and specifications and prepared and submitted permit application packages to the US Army Corps of Engineers (USACE), CDFW, and Santa Ana RWQCB in August 2018. ESA also performed technical studies, including biological and cultural resources, and prepared the MND for CEQA. The project received two separate grants to fund construction.

Los Cerritos Wetlands Authority, Los Cerritos Wetlands Restoration Program EIR, Long Beach and Seal Beach, CA. Restoration Lead. Led by the Los Cerritos Wetlands Authority (LCWA), a joint power agreement between the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC), State Coastal Conservancy (SCC), City of Long Beach, and City of Seal Beach, ESA was retained to prepare a Program Environmental Impact Report (PEIR) and develop an Optimized Restoration Alternative and Restoration Plan for 500 acres of salt marsh, seasonal wetlands, and other freshwater marsh in the Los Cerritos Wetland Complex. As part of the PEIR, ESA prepared multiple technical reports, including hydrology, water and sediment quality, biology, and cultural resources. Nick lead the restoration design and associated technical reports.



California State Coastal Conservancy, Ballona Wetlands Restoration, Los Angeles, CA. Project Manager. Since 2005, ESA has worked with the Coastal Conservancy and California Department of Fish and Wildlife to plan wetland restoration and enhancement, preserve open space, and create managed public access compatible with the natural resources for the 600-acre Ballona Wetlands Ecological Reserve in Los Angeles near Marina del Rey. ESA prepared a Restoration Plan and Feasibility Report, developed the preliminary engineering design, and performed a range of technical analyses to support the EIR and permitting, including a U.S. Army Corps of Engineers Section 408 approval. ESA has completed the Final EIR for California Department of Fish and Wildlife's certification. Nick managed the restoration design and led engineering analyses including hydrodynamic modeling of Ballona Creek to assess potential effects of the project on flood levels.


Malibu Coastal Vulnerability Assessment, Malibu, CA. Project Director. Nick is directing the preparation of a Coastal Vulnerability Assessment and developing adaptation strategies to address sea-level rise, storm surge, and coastal flooding in the city of Malibu. ESA is analyzing the potential impacts of sea-level rise and coastal flooding, and supporting the City in developing adaptation measures to manage Malibu's coastline and protect public health and safety.

Aliso Creek Estuary Restoration Plan, Laguna Beach. Project Manager. Nick managed the development of a Conceptual Restoration Plan for the Aliso Creek Estuary in Laguna Beach, California. The goal of the project, funded by the California State Coastal Conservancy and others, was to identify a feasible plan to restore the lagoon at the mouth of Aliso Creek to a healthy estuary. ESA's analysis included hydrologic modeling of coastal, estuary, and fluvial processes; ecological assessments; and restoration site planning and design. The end product is a CEQA/NEPA-ready plan, developed with strong local support and well-positioned to seek funding for implementation.

COPIES OF P.E. AND S.E. LICENSES


WARREN A. STEWART, P.E., S.E., D.PE







BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS


LICENSING DETAILS FOR: 41358

NAME: STEWART, WARREN AVERILL
LICENSE TYPE: CIVIL ENGINEER
LICENSE STATUS: CLEAR 

ADDRESS
220 16TH ST
SEAL BEACH CA 90740
ORANGE COUNTY
[MAP](#)


ISSUANCE DATE
NOVEMBER 14, 1986
EXPIRATION DATE
JUNE 30, 2021
CURRENT DATE / TIME
APRIL 7, 2021
4:55:21 PM





BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS



LICENSING DETAILS FOR: 3066


NAME: STEWART, WARREN AVERILL
LICENSE TYPE: STRUCTURAL ENGINEER
LICENSE STATUS: CLEAR 

ADDRESS
220 16TH ST
SEAL BEACH CA 90740
ORANGE COUNTY
[MAP](#)

ISSUANCE DATE
FEBRUARY 26, 1988
EXPIRATION DATE
JUNE 30, 2021
CURRENT DATE / TIME
APRIL 7, 2021
4:15:05 PM


JACK GERWICK, P.E.





BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

LICENSING DETAILS FOR: 68726

NAME: GERWICK, JACK WILLIAM
LICENSE TYPE: CIVIL ENGINEER
LICENSE STATUS: CLEAR 

ADDRESS
1601 PACIFIC AVE 402
SAN FRANCISCO CA 94109
SAN FRANCISCO COUNTY
[MAP](#)

ISSUANCE DATE
JUNE 24, 2005
EXPIRATION DATE
SEPTEMBER 30, 2021
CURRENT DATE / TIME
APRIL 7, 2021
4:41:52 PM

TED W. TRENKWALDER, P.E., S.E.



BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

LICENSING DETAILS FOR: 3731

NAME: TRENKWALDER, TED WILLIAM
LICENSE TYPE: STRUCTURAL ENGINEER
LICENSE STATUS: CLEAR

ADDRESS
4416 WINTERBERRY CT
CONCORD CA 94521
CONTRA COSTA COUNTY
[MAP](#)

ISSUANCE DATE
JANUARY 29, 1993
EXPIRATION DATE
SEPTEMBER 30, 2021
CURRENT DATE / TIME
APRIL 7, 2021
4:41:10 PM



BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

LICENSING DETAILS FOR: 35585

NAME: TRENKWALDER, TED WILLIAM
LICENSE TYPE: CIVIL ENGINEER
LICENSE STATUS: CLEAR

ADDRESS
4416 WINTERBERRY COURT
CONCORD CA 94521
CONTRA COSTA COUNTY
[MAP](#)

ISSUANCE DATE
AUGUST 18, 1982
EXPIRATION DATE
SEPTEMBER 30, 2021
CURRENT DATE / TIME
APRIL 7, 2021
4:40:14 PM

JAMES W. KEARNEY JR., P.E.



BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS



LICENSING DETAILS FOR: 52439


NAME: KEARNEY, JAMES WILLIAM JR.
LICENSE TYPE: CIVIL ENGINEER
LICENSE STATUS: CLEAR

ADDRESS
19090 CREST AVE
CASTRO VALLEY CA 94546
ALAMEDA COUNTY
[MAP](#)

ISSUANCE DATE
JULY 8, 1994
EXPIRATION DATE
DECEMBER 31, 2022
CURRENT DATE / TIME
APRIL 7, 2021
4:45:03 PM


MARC PERCHER, P.E.



**BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS**



ISSUANCE DATE
JANUARY 21, 2005
EXPIRATION DATE
JUNE 30, 2021
CURRENT DATE / TIME
APRIL 7, 2021
4:46:21 PM


LICENSING DETAILS FOR: 68072

NAME: PERCHER, MARC IAN
LICENSE TYPE: CIVIL ENGINEER
LICENSE STATUS: CLEAR 

ADDRESS
5311 GREENRIDGE ROAD
CASTRO VALLEY CA 94552
ALAMEDA COUNTY
[MAP](#)


JEAN O. TOILLIEZ, PHD, PE



**BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS**



ISSUANCE DATE
JANUARY 7, 2011
EXPIRATION DATE
JUNE 30, 2021
CURRENT DATE / TIME
APRIL 7, 2021
4:47:38 PM


LICENSING DETAILS FOR: 77499

NAME: TOILLIEZ, JEAN ODILON
LICENSE TYPE: CIVIL ENGINEER
LICENSE STATUS: CLEAR 

ADDRESS
1300 CLAY ST STE 700
OAKLAND CA 94612
ALAMEDA COUNTY
[MAP](#)


NICHOLAS J. GARRITY, PE



**BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS**

ISSUANCE DATE
JANUARY 25, 2008
EXPIRATION DATE
JUNE 30, 2022
CURRENT DATE / TIME
APRIL 7, 2021
4:53:09 PM

LICENSING DETAILS FOR: 72603

NAME: GARRITY, NICHOLAS JAMES
LICENSE TYPE: CIVIL ENGINEER
LICENSE STATUS: CLEAR 

ADDRESS
550 KEARNY ST STE 900
SAN FRANCISCO CA 94108
SAN FRANCISCO COUNTY
[MAP](#)

CONTACT

WARREN STEWART

Project Manager

Mobile: (562) 547-3918

Email: wnsx@cowi.com

EXHIBIT "B"

Payment Schedule (Hourly Payment)

A. Hourly Rate

CONSULTANT'S fees for such services shall be based upon the following hourly rate and cost schedule:

B. Travel Charges for time during travel are not reimbursable.

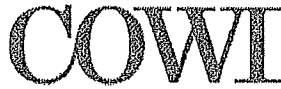
C. Billing

1. All billing shall be done monthly in fifteen (15) minute increments and matched to an appropriate breakdown of the time that was taken to perform that work and who performed it.
2. Each month's bill should include a total to date. That total should provide, at a glance, the total fees and costs incurred to date for the project.
3. A copy of memoranda, letters, reports, calculations and other documentation prepared by CONSULTANT may be required to be submitted to CITY to demonstrate progress toward completion of tasks. In the event CITY rejects or has comments on any such product, CITY shall identify specific requirements for satisfactory completion.
4. CONSULTANT shall submit to CITY an invoice for each monthly payment due. Such invoice shall:
 - A) Reference this Agreement;
 - B) Describe the services performed;
 - C) Show the total amount of the payment due;
 - D) Include a certification by a principal member of CONSULTANT's firm that the work has been performed in accordance with the provisions of this Agreement; and
 - E) For all payments include an estimate of the percentage of work completed.

Upon submission of any such invoice, if CITY is satisfied that CONSULTANT is making satisfactory progress toward completion of tasks in accordance with this Agreement, CITY shall approve the invoice, in which event payment shall be made within thirty (30) days of receipt of the invoice by CITY. Such approval shall not be unreasonably withheld. If CITY does not approve an invoice, CITY shall notify CONSULTANT in writing of the reasons for non-approval and the schedule of performance set forth in **Exhibit "A"** may at the option of CITY be suspended until the parties agree that past performance by CONSULTANT is in, or has been brought into compliance, or until this Agreement has expired or is terminated as provided herein.

5. Any billings for extra work or additional services authorized in advance and in writing by CITY shall be invoiced separately to CITY. Such invoice shall contain all of the information required above, and in addition shall list the hours expended and hourly rate charged for such time. Such invoices shall be approved by CITY if the work performed is in accordance with the extra work or additional services requested, and if CITY is satisfied that the statement of hours worked and costs incurred is accurate. Such approval shall not be unreasonably withheld. Any dispute between the parties concerning payment of such an invoice shall be treated as separate and apart from the ongoing performance of the remainder of this Agreement.

EXHIBIT B



COWI North America Inc. 2021 Standard Rates

Labor Category	COWI Level	2021 Rate (USD)
Senior Vice President	10	\$ 300
Vice President/Project Director/Technical Director	9	\$ 275
Assoc. Technical/Project Director	8	\$ 250
Senior Engineer/Specialist/Project Manager	7	\$ 230
Senior Engineer/Specialist/Project Manager	6	\$ 210
Specialist/Engineer/Project Manager	5	\$ 180
Specialist/Engineer	4	\$ 165
Designer	3	\$ 145
Intern	2	\$ 90
CAD Manager	6	\$ 180
CAD Specialist	5	\$ 165
Senior CAD Technician	4	\$ 150
CAD Technician II	3	\$ 135
CAD Technician I	2	\$ 120
Diver	3	\$ 145
Diver	2	\$ 130
Senior Project Coordinator	5	\$ 145
Project Coordinator	3	\$ 120
Administrative Support	2	\$ 110
Assistant	1	\$ 80

Additional Notes (Unless Otherwise Provided in Written Agreement)

The above rates include direct overhead, indirect overhead, and profit.

The above rates do not include Other Direct Costs (ODC).

All subcontractor invoices are marked up 5%.

Annual escalation is 3%.

ESA's Nick Garrity will be subject to the same rate as COWI Level 7 personnel.

Bidder's List for Ocean & Engineering - 2021

Company Name	Phone
Anchor QEA	949-347-2780
Coastal Frontiers Corp	818-341-8133
COWI	562-547-3918
GHD Inc	949-385-5218
Moffatt & Nichol	562-590-6500
Tetra Tech	949-809-5120



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
05/12/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Marsh Risk & Insurance Services CA License #0437153 633 W. Fifth Street, Suite 1200 Los Angeles, CA 90071 Attn: LosAngeles.CertRequest@marsh.com 110267539-Stnd-GAWUP-21-22		CONTACT NAME: PHONE (A/C, No. Ext): FAX (A/C, No): E-MAIL ADDRESS:	
INSURED COWI North America, Inc. 1191 2nd Avenue Seattle, WA 98101-2952		INSURER(S) AFFORDING COVERAGE INSURER A: Fireman's Fund Insurance Company INSURER B: American Automobile Ins Co INSURER C: Lexington Insurance Company INSURER D: StarNet Insurance Company INSURER E: AIG Specialty Insurance Company INSURER F:	
		NAIC #	
		21873	
		21849	
		19437	
		40045	
		26883	

COVERAGES

CERTIFICATE NUMBER:

LOS-002546929-01

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			USC013712210	04/01/2021	04/01/2022	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			SCV009425-21-01	04/01/2021	04/01/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> DED <input type="checkbox"/> RETENTION \$ 10,000			080877661	04/01/2021	04/01/2022	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	KEY0138046 (USL&H Included)	04/01/2021	04/01/2022	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
E	Professional Liability			02-701-50-14	03/31/2021	03/31/2022	Each Claim: 2,000,000 Aggregate: 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Re: For Bidding Purposes Only

The City of Huntington Beach, The City of Huntington Beach, its officers, elected or appointed officials, employees, agents and volunteers are included as additional insured where required by written contract with respect to General Liability and Automobile Liability. Umbrella Liability is follow form of primary General Liability, Automobile Liability and Employers Liability policies subject to policy terms, conditions and exclusions. Continue next page...

CERTIFICATE HOLDER

City of Huntington Beach
 Attn: Risk Manager and City Attorney
 2000 Main Street
 Huntington Beach, CA 92648

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
 of Marsh Risk & Insurance Services

Daniel Zarate

Daniel Zarate

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ADDITIONAL REMARKS SCHEDULE

Page 2 of 2

AGENCY Marsh Risk & Insurance Services		NAMED INSURED COWI North America, Inc. 1191 2nd Avenue Seattle, WA 98101-2952
POLICY NUMBER		
CARRIER	NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 **FORM TITLE:** Certificate of Liability Insurance

Maritime Employers Liability:
Carrier: StarNet Insurance Company
Policy Number: BOUMA211983
Effective Date: 04/01/2021
Expiration Date 04/01/2022
Limit of Liability
\$1,000,000 Limit
\$5,000 Deductible

Waiver of subrogation applies in favor of The City of Huntington Beach, The City of Huntington Beach, its officers, elected or appointed officials, employees, agents and volunteers on the General Liability, Automobile Liability and Workers Compensation policies on a blanket basis where required by written contract and subject to policy terms and conditions. General Liability and Automobile Liability insurance is primary and non-contributory over any existing insurance and limited to liability arising out of the operations of the named insured subject to policy terms and conditions.

PROFESSIONAL SERVICES CONTRACT BETWEEN
THE CITY OF HUNTINGTON BEACH AND

FOR

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PROFESSIONAL SERVICE AWARD ANALYSIS

SERVICE: On-Call Ocean & Engineering

SERVICE DESCRIPTION: Engineering support for City's annual Capital Improvement Program projects.

VENDOR: Moffatt & Nichol

OVERALL RANKING: 1 out of 6

SUBJECT MATTER EXPERTS/RATERS:

1. Principal Civil Engineer 2. Environmental Services Manager 3. Project Coordinator

I. MINIMUM QUALIFICATIONS REVIEW

- Written Proposal Score: Ave. of 83

Moffatt & Nichol – Minimum Qualifications Review		
<u>Criteria</u>	<u>Total Weighted Score</u>	<u>Maximum Score</u>
Proposal Clarity	9	10
Qualifications	25	20
Staffing	25	20
Understanding and Methodology	14	15
References and Background	10	10
Interview (Optional)	-	15
Total	83	100

II. DUE DILIGENCE REVIEW

Moffatt & Nichol – Summary of Review
<ul style="list-style-type: none">• Moffatt & Nichol has worked with City in the past and proposal is clear and concise

Moffatt & Nichol – Pricing
<ul style="list-style-type: none">• Low end from \$94/hr• High end to \$282/hr for Principal Engineer / Scientist

PROFESSIONAL SERVICE AWARD ANALYSIS

SERVICE: On-Call Ocean & Engineering

SERVICE DESCRIPTION: Engineering support for City's annual Capital Improvement Program projects.

VENDOR: Anchor QEA

OVERALL RANKING: 2 out of 6

SUBJECT MATTER EXPERTS/RATERS:

1. Principal Civil Engineer 2. Environmental Services Manager 3. Project Coordinator

I. MINIMUM QUALIFICATIONS REVIEW

- Written Proposal Score: Ave. of 75

Anchor QEA – Minimum Qualifications Review		
<u>Criteria</u>	<u>Total Weighted Score</u>	<u>Maximum Score</u>
Proposal Clarity	7	10
Qualifications	22	20
Staffing	22	20
Understanding and Methodology	14	15
References and Background	10	10
Interview (Optional)	-	15
Total	75	100

II. DUE DILIGENCE REVIEW

Anchor QEA – Summary of Review
<ul style="list-style-type: none">• Anchor QEA proposal was clear and concise and their overall methodology was easy to understand

Anchor QEA – Pricing
<ul style="list-style-type: none">• Low end from \$112/hr• High end to \$286/hr for Principal

PROFESSIONAL SERVICE AWARD ANALYSIS

SERVICE: On-Call Ocean & Engineering

SERVICE DESCRIPTION: Engineering support for City's annual Capital Improvement Program projects.

VENDOR: COWI

OVERALL RANKING: 3 out of 6

SUBJECT MATTER EXPERTS/RATERS:

1. Principal Civil Engineer 2. Environmental Services Manager 3. Project Coordinator

I. MINIMUM QUALIFICATIONS REVIEW

- Written Proposal Score: Ave. of 75

COWI – Minimum Qualifications Review		
<u>Criteria</u>	<u>Total Weighted Score</u>	<u>Maximum Score</u>
<i>Proposal Clarity</i>	9	10
<i>Qualifications</i>	22	20
<i>Staffing</i>	22	20
<i>Understanding and Methodology</i>	13	15
<i>References and Background</i>	10	10
<i>Interview (Optional)</i>	-	15
Total	75	100

II. DUE DILIGENCE REVIEW

COWI – Summary of Review
<ul style="list-style-type: none">• COWI proposal is clear and concise and has resources to meet City's project needs.

COWI – Pricing
<ul style="list-style-type: none">• Low end from \$80/hr• High end to \$300/hr for Senior Vice President