STAFF REPORT



CITY OF OCEANSIDE

DATE:

January 25, 2023

TO:

Honorable Mayor and City Councilmembers

FROM:

City Manager's Office

SUBJECT: PROFESSIONAL SERVICES AGREEMENT FOR PHASE 2 OF THE

SAND NOURISHMENT AND RETENTION PILOT PROJECT

SYNOPSIS

Staff recommends that the City Council approve a Professional Services Agreement with GHD Inc., in the amount of \$2,591,681, for consultant services in support of Phase 2 of the Sand Nourishment and Retention Pilot Project; and authorize the City Manager to execute the agreement upon receipt of all supporting documents.

BACKGROUND

Oceanside has an 80-year history of beach erosion resulting in large part from construction of the Camp Pendleton Boat Basin (Boat Basin) in 1942 and the Small Craft Harbor in 1963, collectively referred to as the Harbor Complex. The Harbor Complex traps sand north of these facilities, which limits sand inputs into the Oceanside Littoral Cell that extends from the Oceanside Harbor to approximately Black's Beach to the south. Since construction of the Harbor Complex, over 20 million cubic yards (cy) of sand have been artificially placed on City beaches from either dredging to build the two harbors (5M cy), the U.S. Army Corps of Engineers annual harbor dredging program (13M cv) or one-off, local or regional nourishment events (5M cy). Despite all of these efforts, coastal areas south of Harbor Beach (i.e. south of South Jetty) have been largely unable to sustain a dry sand beach for recreational, ecological and coastal storm damage protection purposes.

In 2020, the City conducted a year-long preliminary engineering evaluation and Feasibility Study to identify deficiencies in current coastal management actions as well as to determine a suite of solutions to lessen long-term beach erosion and mitigate the effects of the Harbor Complex. The Feasibility Study (Phase 1) concluded that 1) a high-quality source of sand, coupled with a beach nourishment program, needed to be identified to provide more consistent beach nourishment opportunities, and 2) retention structure(s) are desirable as a means of retaining placed sand, since historical surveys and anecdotal data have shown that placed sand does not persist on many of Oceanside's beaches.

At an August 2021 public workshop, the City Council gave staff direction to pursue the recommendations given in Phase 1. Specifically, staff was directed to move forward with the environmental analysis, design, and permitting of a Pilot Project that would provide both beach nourishment and sand retention options. Project types offered in Phase 1 of the Feasibility Study included the design and re-initiation of a sand bypass system that would move sand from around the Harbor Complex to the south and back into the Oceanside littoral cell, as well as the design a groin or system of groins that would be deployed to retain placed sand.

In fall 2021, the City issued a Request for Proposals (RFP) for coastal engineering and consultant services in support of Phase 2 of the Sand Nourishment and Retention Pilot Project. The City received a bid from one team led by GHD Inc.

While several local stakeholders expressed support of the City Council's direction, some stakeholder groups, residents, and coastal cities to the south expressed concern about the potential for a sand retention device to cause erosion problems downcoast. Some of the feedback received also urged the City to pursue more innovative and/or nature-based solutions to the City's sand retention problem. Staff asserts that the actions proposed through the Phase 2 contract recognize these concerns and provide an opportunity to refine the program in a manner that will allow the consideration of additional retention and nourishment options, addressing concerns that were raised following Phase 1 of the Project.

Adjustments to the scope of Phase 2 of the Sand Nourishment and Retention Pilot Project and negotiations with the consultant team have been ongoing since early spring 2022. Additional public outreach has also occurred throughout the refinement of Phase 2 of the Pilot Project, including staff level meetings with downcoast cities and key stakeholders, such as the Surfrider Foundation. The City has also developed a Coastal Zone Management webpage to inform residents and interested individuals about ongoing coastal management efforts. Additionally, informative presentations have been provided by city staff at the following public meetings:

- May 2022 Encinitas Environmental Commission Meeting
- June 2022 SANDAG Shoreline Preservation Working Group Meeting
- October 2022 Carlsbad Beach Preservation Commission Meeting
- October 2022 Save Oceanside Sand (!SOS!) Member Meeting
- November 2022 SANDAG Shoreline Preservation Working Group Meeting

ANALYSIS

Through Phase 2 of Sand Nourishment and Retention Pilot Project (Project), GHD would serve as the prime consultant responsible for preparing major deliverables, coordinating the work of sub-consultants, managing the project schedule and budget, providing project status updates, and working with staff to ensure that all components of the project are consistent with and complementary to one another. In addition to GHD, the consultant team includes the following sub-consultants/contractors:

- Resilient Cities Catalyst (Public Outreach and Design Competition)
- Scripps Institution of Oceanography, University of California, San Diego (Baseline Assessments and Citizen Science Program)
- Moffatt and Nichol (Coastal Engineering)

The main tasks outlined in the Phase 2 scope include:

- Community and Stakeholder Engagement
- Baseline Monitoring Program
- Engineering, Analysis and Design
- Environmental Compliance and Permitting

Community and Stakeholder Engagement will occur throughout Phase 2 of the Project, with the majority occurring early in the process to capture any additional inputs, ideas, concerns, and recommendations provided by key stakeholders and the public. Community engagement will take the form of formal and informal public meetings, social media posts and surveys, and informational pop-ups.

The Baseline Monitoring Program has been ongoing since the kickoff of Phase 1. Baseline assessments will continue in Phase 2, with the goal of providing a robust dataset for the engineering analysis and design tasks. Baseline assessments will incorporate current surveys conducted by Scripps Institution of Oceanography and citizen science-led efforts into a coastal database. Additionally, the Baseline Monitoring Program will involve offshore surveys to seek out a high-quality, attainable sand source.

The majority of Phase 2 will include the Engineering, Analysis, and Design task. This task will incorporate findings from the Community and Stakeholder Engagements and the Baseline Monitoring Program into the design of a sand retention structure that is complemented by a reliable sand nourishment source. This task commences with a Design Competition to be completed by the end of 2023 and would engage up to three external design firms to bring innovative ideas to the sand retention and nourishment pilot project. The firms engaging in this competition will be provided with specific parameters and close oversight to ensure that their work is specific to Oceanside's unique shoreline conditions and that the designs being promoted are feasible from both a financial and permitting standpoint.

The Design Competition process is a proven method for incorporating regional and local stakeholder input, with an emphasis on developing a permittable project that has multibenefits for Oceanside, our downcoast neighbors, and natural ecosystems. A jury will be selected that represents a cross-section of regional and statewide interests to help review and make a recommendation on a preferred pilot design. The public will also be engaged during the design process and will have an opportunity to provide input on the designs. The Design Competition will be guided by the GHD Team, and based on information gathered in Phase 1 of the Study. Once a preferred and viable design is selected, staff will return to the City Council for approval, followed by final engineering of that option to facilitate the environmental compliance and permitting process.

Deliverables from this task include final plans and specifications utilized in the final task of Phase 2, Environmental Compliance and Permitting.

Environmental Compliance and Permitting tasks will include the development of a combined Environmental Impact Report and Environmental Assessment (EIR/EA), addressing both CEQA and NEPA requirements as needed, as well as the development of permit application materials and permit acquisition from the following state and federal regulatory/resource agencies:

- California Coastal Commission (CCC)
- Regional Water Quality Control Board (RWQCB)
- U.S. Army Corps of Engineers (Corps)

The consultant team's proposal, along with a summary schedule identifying key project deliverables, are appended to this staff report (Attachment 1 and 2). These materials provide extensive detail on the project scope of work, schedule, and budget.

FISCAL IMPACT

Description	Amount	Account	Available Balance
Consulting Services	\$2,449,330	Sand Replenishment	\$4,253,964
Contingency	\$142,351	837134221271.5305	
Total	\$2,591,681		

Funding source is the American Rescue Plan Act (ARPA) Sand Replenishment Account.

INSURANCE REQUIREMENTS

The City's standard insurance requirements will be met.

COMMISSION OR COMMITTEE REPORT

Does not apply.

CITY ATTORNEY'S ANALYSIS

The referenced documents have been reviewed by the City Attorney and approved as to form.

RECOMMENDATION

Staff recommends that the City Council approve a Professional Services Agreement with GHD Inc., in the amount of \$2,591,681, for consultant services in support of Phase 2 of the Sand Nourishment and Retention Pilot Project; and authorize the City Manager to execute the agreement upon receipt of all supporting documents.

PREPARED BY:

SUBMITTED BY:

Javane Timberlake

Coastal Zone Administrator

Jonathan Borrego City Mahager

REVIEWED BY:

Michael Gossman, Assistant City Manager

Hamid Bahadori, Public Works Director

Jill Moya, Financial Services Director

JOHN HB

ATTACHMENTS:

- 1. Professional Services Agreement
- 2. Consultant Team Proposal (Electronic) Oceanside Sand Nourishment and Retention Project, Phase 2 Scope of Work
- 3. Request for Proposals

CITY OF OCEANSIDE

PROFESSIONAL SERVICES AGREEMENT

PROJECT: Sand Nourishment and Retention Pilot Project

THIS AGREEMENT, dated January 25, 2023, for identification purposes, is made and entered into by and between the CITY OF OCEANSIDE, a municipal corporation, hereinafter designated as "CITY", and GHD Inc., hereinafter designated as "CONSULTANT."

NOW THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

- 1. SCOPE OF WORK. The project is more particularly described as follows: The Sand Nourishment and Retention Pilot Project is Phase 2 of the Oceanside Beach Sand Replenishment and Retention Device Study (Phase 1), which concluded in August 2021. Phase 2 of this Project seeks to design a sand nourishment and retention pilot project, providing an innovative and/or nature-based approach to the CITY's sand retention problem. In fall 2021, the CITY issued a Request for Proposals from qualified firms to perform preliminary engineering design for a beach sand retention device, associated sand nourishment program development, and processing of all environmental compliance permit needs. In Phase 2, the CONSULTANT will leverage technical data and knowledge gained through Phase 1. CONSULTANT tasks associated with Phase 2 include 1) Community and Stakeholder Engagement; 2) Development of a Baseline Monitoring Program; 3) Engineering, Analysis and Design; and 4) Environmental Compliance and Permitting. For more details on the scope of work, see Exhibit 1.
- 2. INDEPENDENT CONTRACTOR. CONSULTANT'S relationship to the CITY shall be that of an independent contractor. CONSULTANT shall have no authority, express or implied, to act on behalf of the CITY as an agent, or to bind the CITY to any obligation whatsoever, unless specifically authorized in writing by the City Engineer. The CONSULTANT shall not be authorized to communicate directly with, nor in any way direct the actions of, any bidder or the construction contractor for this project without the prior written authorization by the City Engineer. CONSULTANT shall be solely responsible for the performance of its employees, agents, and subcontractors under this Agreement, including the training of each employee regarding the rights and responsibilities of an employer and employee for any potential discrimination or harassment claim under state or federal law. CONSULTANT shall report to the CITY any and all employees, agents, and consultants performing work in connection with this project, and all shall be subject to the approval of the CITY.

3. WORKERS' COMPENSATION. Pursuant to Labor Code section 1861, the CONSULTANT hereby certifies that the CONSULTANT is aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and the CONSULTANT will comply with such provisions, and provide certification of such compliance as a part of this Agreement.

4. <u>LIABILITY INSURANCE</u>.

- 4.1. CONSULTANT shall, throughout the duration of this Agreement maintain comprehensive general liability and property damage insurance, or commercial general liability insurance, covering all operations of CONSULTANT, its agents and employees, performed in connection with this Agreement including but not limited to premises and automobile.
- 4.2 CONSULTANT shall maintain liability insurance in the following minimum limits:

Comprehensive General Liability Insurance
(bodily injury and property damage)

Combined Single Limit Per Occurrence	. \$ 2,000,000
General Aggregate	\$ 4,000,000*

Commercial General Liability Insurance (bodily injury and property damage)

General limit per occurrence	\$ 2,000,000
General limit project specific aggregate	\$ 4,000,000

Automobile Liability Insurance \$ 2,000,000

4.3 If coverage is provided through a Commercial General Liability Insurance policy, a minimum of 50% of each of the aggregate limits shall remain available at all times. If over 50% of any aggregate limit has been paid or reserved, the CITY may require additional coverage to be purchased by the CONSULTANT to restore the required limits. The CONSULTANT shall also notify the CITY'S Project Manager promptly of all losses or claims over \$25,000 resulting from work performed under this contract, or any loss or claim against the CONSULTANT resulting from any of the

^{*}General aggregate per year, or part thereof, with respect to losses or other acts or omissions of CONSULTANT under this Agreement.

CONSULTANT'S work.

- 4.4 All insurance companies affording coverage to the CONSULTANT for the purposes of this Section shall add the City of Oceanside as "additional insured" under the designated insurance policy for all work performed under this agreement. Insurance coverage provided to the City as additional insured shall be primary insurance and other insurance maintained by the City of Oceanside, its officers, agents, and employees shall be excess only and not contributing with insurance provided pursuant to this Section.
- 4.5 All insurance companies affording coverage to the CONSULTANT pursuant to this agreement shall be insurance organizations admitted by the Insurance Commissioner of the State of California to transact business of insurance in the state or be rated as A-X or higher by A.M. Best.
- 4.6 CONSULTANT shall provide thirty (30) days written notice to the CITY should any policy required by this Agreement be cancelled before the expiration date. For the purposes of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation.
- 4.7 CONSULTANT shall provide evidence of compliance with the insurance requirements listed above by providing, at minimum, a Certificate of Insurance and applicable endorsements, in a form satisfactory to the City Attorney, concurrently with the submittal of this Agreement.
- 4.8 CONSULTANT shall provide a substitute Certificate of Insurance no later than thirty (30) days prior to the policy expiration date. Failure by the CONSULTANT to provide such a substitution and extend the policy expiration date shall be considered a default by CONSULTANT and may subject the CONSULTANT to a suspension or termination of work under the Agreement.
- 4.9 Maintenance of insurance by the CONSULTANT as specified in this Agreement shall in no way be interpreted as relieving the CONSULTANT of any responsibility whatsoever and the CONSULTANT may carry, at its own expense, such additional insurance as it deems necessary.
- 5. PROFESSIONAL ERRORS AND OMISSIONS INSURANCE. Throughout the duration of this Agreement and four (4) years thereafter, the CONSULTANT shall maintain professional errors and omissions insurance for work performed in connection with this Agreement in the minimum amount of Two Million Dollars (\$2,000,000.00).

CONSULTANT shall provide evidence of compliance with these insurance

requirements by providing a Certificate of Insurance.

6. CONSULTANT'S INDEMNIFICATION OF CITY. To the greatest extent allowed by law (including, without limitation, California Civil Code section 2782.8), CONSULTANT shall indemnify and hold harmless the CITY and its officers, agents and employees against all claims for damages to persons or property arising out of CONSULTANT'S work, including the negligent acts, errors or omissions or wrongful acts or conduct of the CONSULTANT, or its employees, agents, subcontractors, or others in connection with the execution of the work covered by this Agreement, except for those claims arising from the willful misconduct, sole negligence or active negligence of the CITY, its officers, agents, or employees. CONSULTANT'S indemnification shall include any and all costs, expenses, attorneys' fees, expert fees and liability assessed against or incurred by the CITY, its officers, agents, or employees in defending against such claims or lawsuits, whether the same proceed to judgment or not. Further, CONSULTANT at its own expense shall, upon written request by the CITY, defend any such suit or action brought against the CITY, its officers, agents, or employees founded upon, resulting or arising from the conduct, tortious acts or omissions of the CONSULTANT.

CONSULTANT'S indemnification of CITY shall not be limited by any prior or subsequent declaration by the CONSULTANT.

- details, computations and other documents, prepared or provided by the CONSULTANT under this Agreement shall be the property of the CITY. CONSULTANT shall provide all such documents in electronic, editable format upon request by the CITY. The CITY agrees to hold the CONSULTANT free and harmless from any claim arising from any use, other than the purpose intended, of the plans and specifications and all preliminary sketches, schematics, preliminary plans, architectural perspective renderings, working drawings, including details, computation and other documents, prepared or provided by the CONSULTANT. CONSULTANT may retain a copy of all material produced under this Agreement for the purpose of documenting CONSULTANT's participation in this project.
- **8. COMPENSATION.** CONSULTANT'S compensation for all work performed in accordance with this Agreement, shall not exceed the total contract price of \$2,591,681.

No work shall be performed by CONSULTANT in excess of the total contract price without prior written approval of the City Engineer. CONSULTANT shall obtain approval by the City Engineer prior to performing any work that results in incidental expenses to CITY.

- 9. <u>TIMING REQUIREMENTS.</u> Time is of the essence in the performance of work under this Agreement and the timing requirements shall be strictly adhered to unless otherwise modified in writing. All work shall be completed in every detail to the satisfaction of the Coastal Zone Administrator within 4 years.
- 10. <u>ENTIRE AGREEMENT</u>. This Agreement comprises the entire integrated understanding between CITY and CONSULTANT concerning the work to be performed for this project and supersedes all prior negotiations, representations, or agreements.
- 11. <u>INTERPRETATION OF THE AGREEMENT</u>. The interpretation, validity and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. The Agreement does not limit any other rights or remedies available to CITY.

The CONSULTANT shall be responsible for complying with all local, state, and federal laws whether or not said laws are expressly stated or referred to herein.

Should any provision herein be found or deemed to be invalid, the Agreement shall be construed as not containing such provision, and all other provisions, which are otherwise lawful, shall remain in full force and effect, and to this end the provisions of this Agreement are severable.

- **12. AGREEMENT MODIFICATION.** This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by the parties hereto.
- 13. TERMINATION OF AGREEMENT. Either party may terminate this Agreement by providing thirty (30) days written notice to the other party. If any portion of the work is terminated or abandoned by the CITY, then the CITY shall pay CONSULTANT for any work completed up to and including the date of termination or abandonment of this Agreement. The CITY shall be required to compensate CONSULTANT only for work performed in accordance with the Agreement up to and including the date of termination.
- 14. <u>SIGNATURES</u>. The individuals executing this Agreement represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of the respective legal entities of the CONSULTANT and the CITY.

IN WITNESS WHEREOF, the parties hereto for themselves, their heirs, executors, administrators, successors, and assigns do hereby agree to the full performance of the covenants herein contained and have caused this Professional Services Agreement to be executed by setting hereunto their signatures on the dates set forth below.

By: Cherle W. James Popular Name/Title	CITY OF OCEANSIDE By: City Manager
Date: 01-09-2023	Date:
By: J. SECRETARY Name/Title	APPROVED AS TO FORM:
Date: 23 DEC 2022	City Attorney
98 - 0425935 Employer ID No.	

NOTARY ACKNOWLEDGMENTS OF CONSULTANT MUST BE ATTACHED.

I:\City Attorney\Professional Services Agreement Short Form (Design Professionals).doc

State of Arizona	
)
County of Maricopa)

On this 9th day of January, 2023, before me, Joy D. Rockwood, Notary Public in and for the State of Arizona, County of Maricopa, personally appeared Charles W. Janson, who acknowledged himself as an officer of GHD, and that in such capacity, being authorized to do so, executed the foregoing instrument for the purposes therein contained as his voluntary act and deed.

In witness whereof, I hereunto set my hand and official seal.

JOY D. ROCKWOOD

Notary Public - Arizona

Maricopa County

Commission # 574259

My Comm. Expires Dec 26, 2023

Notary Public/

D. Godwood W. Godwood State of Arizona) ss County of Maricopa

On this 23rd day of December, 2022, before me, Jerem, L Molega, Notary Public in and for the State of Arizona, County of Maricopa, personally appeared J. Duncan Findlay, who acknowledged himself to be the Secretary of GHD Inc., a California corporation, and that in such capacity, being authorized to do so, executed the foregoing instrument for the purposes therein contained as his voluntary act and deed.

In witness whereof, I hereunto set my hand and official seal.

JEREMY L MCLEAN NOTARY PUBLIC - ARIZONA Maricopa County Commission # 618147 My Commission Expires December 21, 2025

Jeremy L Molegn Morary Public



Oceanside Sand Retention Project

Phase 2 Scope of Work

City of Oceanside 16 December 2022

→ The Power of Commitment



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Introduction

Following the completion of Phase 1 of the Oceanside Beach Sand Replenishment and Retention Device Project, stakeholders, residents and several cities to the south of the City of Oceanside (City) have expressed concern about the potential for a sand retention device to cause erosional impacts along downcoast beaches. Additionally, we heard a desire from the region, stakeholders and the public to explore more innovative and/or nature-based solutions to the City's sand retention problem.

Our approach to Phase 2 is to leverage technical data and knowledge gained through Phase 1, while addressing these regional concerns and needs. Our Project delivery approach is summarized as follows:

- Community and Stakeholder Engagement. Phase 2 of the Project will include regular community and stakeholder engagement throughout the entire project lifecycle, with the majority occurring early in the process to capture inputs, ideas, concerns, and recommendations provided by key stakeholders and the public. Community engagement will take the form of formal and informal public meetings, social media posts and surveys, and informational pop-ups.
- Develop a Baseline Monitoring Program. Phase 2 will build on the prior phase's work to develop a physical baseline of the City's shoreline. The baseline assessment will include surveys being collected by the Citizen Science Program and augmented with seasonal beach profile data.
- Engineering, Analysis & Design. This task commences with a Design Competition, which will engage up to 3 external design firms to bring innovative ideas to the sand retention and nourishment pilot project. A jury will be selected that represents a cross-section of regional and statewide interests to help review and make a recommendation on a preferred pilot design. The public will also be engaged during the design process and will be asked to provide input on the designs. The Design Competition will be guided by the GHD Team such that knowledge gained through Phase 1 is relayed to the design firms and that solutions are technically viable, regionally grounded and environmentally acceptable. Once a preferred design is selected and shared with the City council for concurrence, preliminary engineering of that option will then commence to facilitate the environmental compliance and permitting process. Final engineering design will advance in parallel with the permitting process to incorporate regulatory feedback.
- Environmental Compliance and Permitting. This task includes the development of an EIR and an EA, as well as the carrying out the permitting phase of the project, which entails working towards permit from the California Coastal Commission, Regional Water Quality Control Board, and U.S. Army Corps of Engineers. Coordination with the resource agencies will begin immediately and occur frequently throughout this project phase. However, preparation of CEQA, NEPA and permit applications will commence concurrent with the start of the final engineering phase of the project.

1. Project Management

Brian Leslie served as the Project Manager (PM) through Phase 1 of the Project and will continue to serve as our team's PM. Brian will be supported by his discipline leads for community & stakeholder engagement, baseline monitoring program, engineering analysis & design, and environmental compliance & permitting. Brian will be the main point of contact, responsible for overall coordination and management of the team, directing resources and keeping the City informed of progress, planned activities, and upcoming milestones.

At the commencement of this project, a Work Plan and Project baseline schedule will be developed to detail the approach, task timelines and dependencies, milestones and budgets. The Work Plan will be utilized as a project management tool to provide transparency across the Project team, and for the City to review, monitor and comment on the approach and method to delivering this phase of the Project. The Work Plan will be considered a 'live' document and updated as the project progresses and potentially evolves. A detailed project schedule will accompany the Work Plan, which will serve the purposes of project tracking, forecasting and organization of resources. In addition, a Quality Assurance and Quality Control (QAQC) Plan will be drafted by our Quality Managers Craig Dengate and Michael Barnett, as a guideline and implementation plan for our commitment to project quality in all aspects of the project delivery, not just engineering.

Our PM will organize and attend monthly Project team meetings with the City to provide updates on status and to ensure key milestones are being met. Various members of the Project team will attend these meetings; contingent on the Project phase and discussion topics.

Deliverables:

- Project Work Plan detailing approach, schedule, budget, and QA/QC protocols
- Meeting agendas and minutes to document key decisions made
- Invoices and progress reports
- QAQC program

2. Community & Stakeholder Engagement / Project Advocacy

Alongside the City's leadership, we recognize that frequent and meaningful engagement with the community, regional and stakeholder groups is critically important to the success of this project. This section outlines our approach to engaging community, regional and stakeholder groups throughout the project lifecycle. Our approach will be to first detail our engagement strategy/plan at the onset of this task. This plan will be part of or appended to the Project Management Work Plan, discussed previously. Similar to the Work Plan, we will closely coordinate with the City Team to align on the engagement strategy and this document will be revised within Phase 2, as needed. A process diagram presenting our proposed approach to community and stakeholder engagement is provided in Section 6.

2.1 Local & Community Engagement

Based on the GHD Team's experience managing multi-stakeholder processes to develop projects, we see value and importance of consistent, clear, and open engagement throughout these next project phases. The purpose of engagement activities is to ensure that community members and stakeholders

understand the process, the City's goals and objectives and have an opportunity to inform the design, which can build a base of trust and support for the project.

Our proposed approach to local and community engagement is focused on conducting community engagement activities that punctuate the process with in-person public opportunities for learning more about the process and providing feedback to inform the design. These activities will be led by a team that has executed complex engagement activities around the world, bringing best-in-class experience and engagement design to this process. The GHD Team will design the engagements through a lens of co-development, which means the form of engagement may vary depending on stakeholders and ultimately meets the community where they are. In delivering these two key activities, The GHD Team will build and maintain a comprehensive stakeholder database that will be used throughout the project lifecycle, from design through to implementation.

During this phase of work, the GHD Team will work with the City's PM to establish an internal "City Team" of cross-discipline staff, whose role will be to provide additional insight into the overall Project development through the next phases of work. The goal of this City Team will be to streamline City input and decision making.

The GHD Team will conduct a number of local and community meetings to support the engineering Design Competition and overall Project outreach and engagement. The majority of engagement occurs in the first 12-months of the project to capture community input, develop consistent communication with public and regional partners, and inform on project updates. During the engineering and permitting phases of the project, community engagement will continue to keep community and stakeholders informed on the project process, next steps and key milestones. The GHD Team envisions the following meetings to occur over the course of Phase 2:

- Design Phase Public Workshops Meetings, up to 5
- Permitting Phase Public Meetings, up to 3
- · 'City Team' Meetings, up to 4

Deliverables:

- Community Engagement Strategy
- Organize, facilitate and present at 8 public meetings. Prepare agendas, attendee lists, and minutes from meetings.

2.2 Regional Engagement

A major challenge to permitting and implementation of the Project is regional opposition, should the project be perceived to be harmful to downdrift coastal communities, or contrary to visions for the region's coastline. In order to help ensure long term regional understanding of—and ideally buy-in and support for— the pilot from downdrift jurisdictions and key regional agencies and organizations, the GHD Team proposes regional engagement activities across Phase 2 of the project.

Key stakeholders include municipalities within the Oceanside Littoral Cell (e.g. Carlsbad, Encinitas, Solana Beach, Del Mar, San Diego), San Diego Association of Governments (SANDAG), resource agencies, nonprofits and advocacy groups (e.g. Surfrider Foundation, San Diego Regional Climate Collaborative), State Parks, USACE, Marine Corps Base Camp Pendleton, and state and federal elected officials who represent the region.

The GHD Team will conduct a number of regional meetings during the course of this next phase of work. The following meetings are included in this scope of work:

- Initial regional meeting (month 2) with opportunity to review and provide feedback of engagement strategy – including details around the Design Competition.
- Participation of regional stakeholders in special feedback sessions to Design teams during competition (through month 10)
- Special briefing of regional stakeholders post selection (but pre announcement) to explain the selected project and regional impact and learnings, and relevant risk mitigation to regional impacts (through month 12)
- Regional Key Stakeholder Meetings, up to 4
- · Regional Briefings, up to 2

Deliverables:

- · Regional engagement strategy, including stakeholder mapping
- Agendas and outputs of regional stakeholders meetings

2.3 Communications & Media Outreach

To broaden the reach of the local, community, and regional engagement, the GHD Team includes a local media consultant who will work closely between the project development team and City communications staff to help establish connections with local news and online outlets to amplify the work, highlight the process, and respond to misinformation or concerns that arise through the process. The work is twofold: (1) maintain and publicize a single website (either 3rd party or on the City's website) that provides a comprehensive and evolving source of information on the Project's purpose, process as well as the status of the proposed design and (2) to broaden the reach of the local, community, and regional engagement.

Deliverables:

- Create a project website
- Create and maintain appropriate social media accounts.
- Social Media toolkits created for use by City and the GHD Team
- Design competition press releases envisioned at the following phases: initial announcement, selection of teams, and winning team.
- Briefing materials for City staff and officials, jury, as well as GHD Team members, for all press engagements

3. Baseline Monitoring Program

Dr. Adam Young from the Scripps Institution of Oceanography (SIO) will lead the scientific Baseline Monitoring Program for Phase 2. Dr. Young led this work within Phase 1 and will continue to help build a robust coastal database for the City. This data will be invaluable during the permitting phase of this project in order to answer key questions and to build confidence around the objective, scientifically grounded nature of the pilot project. This task consists of collection of beach surveys and leading the citizen science program. GHD's PM will coordinate activities within this task to ensure surveys are collected at appropriate times and that the Citizen Science Program is being supported.

3.1 Beach Surveys

Twice annual, beach profile surveys will be collected from the Project area during Phase 2 to help build a baseline database of the physical condition of the shoreline. Two beach surveys would be conducted at historical transect OS-0947 (Crosswaithe St.) and at a new transect at Wisconsin Avenue to augment the regional SANDAG beach monitoring program. Methods of data collection at these two transects would be identical to the regional program, which capture the beach profiles twice a year (Spring and Fall) from the back beach to the offshore depth of closure at other transect locations. These two profiles would be collected twice a year over a two-year period (a total of four times) during this phase of work. This data would supplement the Citizen Science Program's database, which is focused on capturing the condition and changes to the subaerial beach (i.e. dry sand beach as captured during low tides). Additionally, this data will be supplement data collected through the Regional Shoreline Monitoring Program.

Deliverables:

 Beach profile data collection from 2 transects (Crosswaithe St. and Wisconsin Ave.) twice annually (Spring and Fall) during a two-year period (total of 4 monitoring events).

3.2 Littoral Sub Cell Study

Based on regional dialogue during Phase 1 efforts, it was identified that the understanding of sediment transport (i.e. direction and rates of sediment movement) within the heavily altered, modern-day Oceanside Littoral Cell may be poorly understood. A lack of understanding of this system has the potential to unnecessarily expand the bounds of Project impacts and mitigation required for this pilot project. Therefore, the GHD Team has identified that a study to further our understanding of the littoral sub cell is critically important to pilot project development.

This task will commission an independent study from a respected academic entity or consultant to describe sediment transport volumes and pathways within the Oceanside Littoral Cell within the Project area (i.e. between the Oceanside Harbor and Agua Hedionda Lagoon) over a recent timescale (assumed last 20 years). The study will utilize existing coastal data such as: prior beach profile data, SIO offshore bathymetric data, aerial imagery and historical studies to help describe modern conditions of the cell. Data gaps to further our understanding of transport pathways and volumes will be identified as part of this study to focus future monitoring and research efforts.

Deliverables:

Littoral Sub Cell Study (Draft and Final)

3.3 Citizen Science Program

The grassroots Citizen Science Program (CSP) that formed between members of the community and SIO during Phase 1 of this Project is providing a unique and valuable service to the City and the Project. The CSP has collected almost a year's worth of survey-grade monthly beach width data at transects throughout the City. The frequency of this data collection allows for an understanding of event-scale changes of the beaches. This data is a critical element of the baseline establishment, which will play an important element in the testing of the pilot, informing the Littoral Sub Cell Study, and in establishing metrics for management actions within the Adaptive Management Plan.

This task includes labor hours for SIO to assist the CSP with the setup of this equipment, QA/QC of the data being collected and general coordination. GHD will provide oversight and general coordination of activities being carried out as part of the CSP.

Deliverables:

- GHD Team coordination and oversight of the CSP.
- RTK survey data from Citizen Science Program (by others)

4. Engineering Analysis & Design

Building on Phase 1, it is evident to the Project Team that the Sand Retention Pilot would benefit from innovative solutions and inclusion of nature-based design or living elements – to the extent practical. Though the GHD Team is comprised of technical experts in nature-based design, we see value in gathering ideas from creative firms working on coastal resiliency projects from around the world through a design competition format. This type of approach has been used successfully in San Francisco Bay (Resilient by Design), Vancouver (Sea2City) and New York (Rebuild by Design) to name a few. These types of competitions bring creative ideas and can support City leadership in achieving a vision for the coast and build community and stakeholder engagement and ownership in the Project.

Our approach would be to begin the Engineering & Design phase of this project with this Design Competition, with GHD and RCC as co-leads, to ensure that that ideas or concepts put forth are meeting the City's Project goals and objectives while also being technically and environmentally viable to implement. The Design Competition process is estimated to take one year to complete, at which time the final engineering and environmental phases will commence.

4.1 Design Competition

The following sub-tasks are envisioned for the Design Competition over the course of a one-year period.

4.1.1 Prepare Design Brief and Design Firm Solicitation Package

An important first step will be to set the parameters of the Design Competition to relay technical knowledge gained within the first phase of the Project and regional knowledge for outside firms to understand the physical, social, regulatory and political context. The GHD Team will establish a clear set of design criteria to set boundaries and constraints around the project within a Design Brief. The creation of design criteria enables the GHD Team to capture all relevant project parameters, technical details, creative and geographic boundaries and project goals into a concise document.

Within the brief will be a clear definition around the Design Competition timeline, geographic boundaries of the design (assumed from the pier to the Buena Vista Lagoon mouth), financial considerations (with a maximum allotment for overall project implementation), and technical basis for the sand retention strategy (envisioned to be a synthesis of findings from the Phase 1 study).

Deliverables:

- Design Brief providing a synthesis of technical and regional contextual information and establishing the geographic bounds of the competition.

Timeline:

- 8-weeks (2-months)
- Up to 1 round of feedback, input, from stakeholder and city partners

4.1.2 Procure Design Teams

We propose inviting up to 10-firms to respond to the Design Brief and selecting up to 3-firms to work through the Design Competition process. The firms' submissions will be measured against the preestablished design criteria to guide the delineation from 10-firms down to 3-firms, whose project understanding and ability to respond to the design brief are best suited to meet the project goals. Each selected firm would be provided a stipend to work as a subcontract to the GHD Team and will be provided technical advisory services and guidance from the GHD Team and City Project Delivery Team.

Deliverables:

- Selection of design teams to compete within the Design Competition

Timeline:

- 12-weeks (3-months)
- 2 meetings with stakeholder partners, including the city, for final selection of 3-design teams

4.1.3 Collaborative Design Development

The Design Teams will work closely with the GHD Team during design development such that technical and regional knowledge can be shared. It is envisioned that up to 3 Design Charrettes will occur where the Design Teams can work collaboratively with the GHD Team and the City on their designs. These charrettes would ensure that the designs stay within acceptable boundaries to the City and have technical and environmental validity. GHD and the City will meet up to three times with each Design Team.

Deliverables:

• 3 design charettes co-hosted with City partners and GHD team to support the design generation and iteration by all 3-firms.

Timeline:

- 24-weeks (6-months)
- 3 collaborative meetings between Design Team and GHD Team with City partners
- Up to 2 rounds of design revisions for review and feedback by City Partners

4.1.4 Select a Design Competition Jury

The GHD and City Project Delivery Team will develop a Design Competition Jury (Jury), which will consist of 8 to 10 people from Federal, State and local organizations, non-profits and agencies, to select the preferred design from the Design Competition firms. The composition of the Jury is intended to appropriately reflect the various interests in implementation of a project of this type. For example, we might consider representatives from permitting agencies like the Coastal Commission, potential funding agencies like Ocean Protection Council, coastal geomorphology experts, leaders of key stakeholder groups like local surf clubs (e.g. Oceanside Boardriders Club, Oceanside Longboard Surfing Club, etc.), as well as regional stakeholders. Below is an example of the types of roles and distribution of expertise the GHD Team anticipates for the Jury.

1	Federal Agency (e.g. Army Corps of Engineers)
2	State Agency (e.g. California Coastal Commission)

3	State Funder (e.g. California Coastal Conservancy, Ocean Protection Council)
4	Policy Representative (e.g. Ocean Science Trust)
5	Coastal Science Representative (e.g. BEACON, Coast Keeper, Scripps Institution of Oceanography)
6	Social Science Representative (e.g. anthropology, sociology and climate science intersection)
7	Regional Representative (e.g. Climate Science Alliance, San Diego Regional Climate Collaborative or SANDAG chair)
8	Community Representative (e.g. surf community group, youth organization or local non-profit)
9	Youth Representative (e.g. youth non-profit organization or advocacy group)
10	Surf Industry Representative (e.g. Oceanside Boardriders Club, Oceanside Longboard Surfing Club, USA Surfing).

Deliverables:

Selection of Design Competition Jury

Timeline:

- 2-weeks—Selection of Jury occurs at the beginning of the process, to solicit input and feedback from the team on design brief and firm selection processes, as well as final design
- 10-months—full term of Jury engagement

4.1.5 Select Preferred Design

In close alignment with the City's goals and objectives for a sand retention solution in Oceanside, design teams will deliver a final proposed approach, with architectural drawings and conceptual renderings, for sand nourishment and retention within 6 months. These final deliverables would be reviewed initially by the Project Team, and then packaged and delivered to the Jury. The Design Teams will present their designs to the Jury, which would be a publicly advertised and attended event. The Jury would subsequently review the various proposals from Design Teams and score them against a set of criteria established by the Project Team. The public would also be able to opine on their preferred design. The GHD Team would then be responsible for ensuring that the Jury selected design is feasible, meets all established Design Criteria and is acceptable to the City who will ultimately have to approve and implement the project. The City Project Delivery Team would also review the selected design and provide the final recommendation to City Council.

Regarding the "prize" that a competition winner receives, we envision guaranteeing the winning firm a role in the engineering design or environmental tasks within the Project. A budgetary placeholder is held for their involvement in this phase as a subconsultant to the GHD Team.

Deliverables:

Three sand retention and nourishment designs from the Design Competition firms.

- One Design Competition presentation to Jury and public.
- A selected Design Competition winner.
- A presentation to City Council on the selected and recommended Design.

Timeline:

2-weeks from completion of 10 month Jury engagement and Task 4.1.4

4.2 Preliminary Engineering Analysis and Design

The preliminary engineering design and analysis will provide the basis for the environmental analysis, permit applications, and preliminary design drawings that illustrate the location and configuration of the preferred sand retention pilot project — an output of the Design Competition. Our approach to preliminary engineering design of each project element is described below.

4.2.1 Evaluate Pilot Location & Future Phasing

This task will evaluate the viability of the siting of the proposed pilot, as specified as an output from the Design Competition. The evaluation of the pilot location will account for the following factors:

- Public amenities benefits afforded by the project should maximize public benefits.
- Coastal access proximity of the project to public beach access locations and parking.
- Land ownership opportunities or constraints posed by land ownership boundaries at each location.
- Lifeguard operations opportunities or constraints to lifeguard services at each location based on feedback from City lifeguards.
- Biological resources influence of project location on biological resources at Loma Alta Creek and Buena Vista Lagoon.
- Downcoast impacts influence of project location on downcoast sediment supply.
- Sand management logistics influence of project location on ability to manage sediment supply within and downcoast of the retention system.

A technical memorandum will be produced summarizing the findings of this siting analysis. The memo will also address how the pilot project could be scaled up or phased in the future to provide a broader benefit to the City's shoreline. It is assumed the findings from this analysis will be presented at one community or stakeholder meeting.

Deliverables:

- Draft technical memorandum summarizing project pilot siting analysis and future phasing.
- Final technical memorandum incorporating review comments from City staff.
- Presentation of findings for community & stakeholder outreach purposes.

4.2.2 Evaluate Pilot Sand Retention System

Our approach within this task will be to validate and further engineer the proposed sand retention system – an output of the Design Competition task. Though the GHD Team will be involved throughout the competition, as a technical resource for the teams to draw upon, this task would analyze the

geomorphic response of shorelines in the immediate vicinity of the sand retention system and downdrift beaches. This analysis will be supplemented by numerical modeling of the sand retention system and beach nourishment program to evaluate its effect on local shorelines.

Additional preliminary engineering design considerations will include evaluation of the type of materials used and detailing the typical design cross section and profiles. Material types to be considered may include natural materials, baycrete units, concrete, quarry stone, sheet piles, geotextiles or alternative materials. The adaptability and reversibility of the sand retention system will likely be a key factor to consider in the selection of material type.

Based on the sand retention system type, geometry and material type selection, the GHD Team will perform engineering calculations to determine the size and composition of each structure following guidance that may include the Shore Protection Manual (USACE, 1984), Coastal Engineering Manual (USACE, 2004), The Rock Manual (CIRIA, 2007), CIRIA Beach Management Manual (second edition, C685B) and other relevant literature.

4.2.3 Develop Beach Nourishment Program

Beach nourishment will be an essential element of project performance – both to introduce a consistent supply of coarse sand to the sand retention system but also to downcoast beaches. The GHD team will develop preliminary coastal engineering requirements for the beach nourishment program to estimate initial placement location, volume and frequency along the project reach. GHD will utilize the Littoral Sub Cell Study to generate a first-cut estimate of the initial nourishment volume and also the anticipated renourishment volume and frequency needed to maintain a beach in the pilot area and to mitigate potential downcoast impacts.

GHD will then test these sand volume estimates using the numerical model built within the feasibility study phase. The model will yield estimates of the longevity of the initial beach fill with the pilot area and the fills fate down the coastline. Note, that numerical modeling of shoreline morphology is inherently imprecise because of the difficultly in mathematically describing the complicated dynamics of coastal processes and inability to forecast future metocean conditions and their effect on nearshore littoral processes. Despite these limitations, numerical modeling remains one of a few desktop tools that can be applied to evaluate various design parameters associated with the proposed sand retention system. The numerical model provides a tool for evaluating the sensitivity of retention system performance to the following parameters:

- Retention system configurations length, spacing and location of sand retention structures/features
- Different combinations of beach nourishment volume and placement location
- Wave climate variations typical wave climate vs. extreme wave climate associated with a strong
 El Niño event

The preliminary engineering report will describe the objectives, design criteria, design calculations, numerical modeling and other analyses performed for the Phase 1 sand retention system and Beach Nourishment program.

Deliverables:

- Draft Preliminary Engineering Report
- Final Preliminary Engineering Report
- Presentation of findings for community & stakeholder outreach purposes

4.2.3.1 Offshore Sand Source Investigation

This task will investigate sand sources offshore of the City of Oceanside, from approximately Oceanside Harbor to Buena Vista Lagoon, with the intent of finding a close proximity, high-quality sand borrow area that a cutter-head suction dredge could utilize for future beach nourishment projects. Cutter-head suction dredges, like the HR Morris that is used to dredge the Oceanside Harbor annually, moves a lot of sand quickly from the dredge site to the fill site but have the limitation of water depth and being able to sail to and from a borrow area. Understanding these limitations (but also key advantages) the GHD Team will evaluate sand sources within the geographic reach of interest and in water depths shallower than 50 feet (the current depth limitation of these dredges).

The offshore investigation will leverage prior offshore investigations in the area, including RBSP I & II, USGS and USACE to scope the areas for the field investigation. Our team consists of the people that conducted these prior offshore investigations so that knowledge and data will be used to target the areas of highest likelihood of success within the field campaign. Once investigation targets have been set, a Sampling and Analysis Plan (SAP) will be prepared by the GHD Team to be submitted to the USACE, EPA and RWQCB for approval.

Once the SAP has been approved, an offshore vibracore subconsultant will implement the offshore field campaign under the direction of the GHD Team. The offshore sampling will include conducting vibratory coring to collect subsurface sediment samples at 25 to 30 locations within the offshore study area. This assumes up to five (5) days of offshore sampling with two (2) weather standby days. Sampling may be clustered in three or four broad potential borrow areas to be investigated. Some "exploratory" vibracores may be relatively widely spaced over the study area.

Final sample locations shall be corrected for tide and reported as depth in feet below MLLW and locations given according to appropriate horizontal coordinate system with units (i.e. Northings and Eastings). Final locations of the cores may have to be adjusted in the field based on sampling success and other conditions encountered. Bottom elevations at sample locations may range from -30 to -60 feet MLLW. A differential Global Positioning System (DGPS) will be used to locate and record actual sample locations.

Sediment samples will be collected using a vibratory corer made of steel barrel/casing that can penetrate and obtain samples to below the seafloor into a depth of 20 feet that is reasonable for site conditions. An offshore "Alpine type" vibracore will be used or a device similar. The average rate of penetration of the vibratory corer will be measured and recorded. At sites where the depth of refusal is reached prior to the sample depth, up to two (2) additional attempts shall be made to reach the sample depth if there is a reasonable chance of obtaining better results.

A detailed geotechnical log will be prepared for all sampling locations using gINT. At a minimum, these logs will include all depth measurements recorded in feet below MLLW and position of the vibracore locations. The description of the sediment will include at a minimum: grain size, color, maximum particle size, estimation of density (sand) or consistency (silts and clays), odor (if present), and description of amount and types of organics and other material present.

Geotechnical gradation testing will be performed to evaluate beach replenishment suitability. Geotechnical testing will include grain size laboratory analyses following ASTM procedures. Sediment samples will be field classified in accordance with the Unified Soil Classification System (ASTM D 2487). Up to fifty (50) samples may be selected for analysis over varying intervals of the core, based on geotechnical assessment of the core samples. The vibracore samples will be stored at a location provided by the City.

Bulk Sediment Chemistry Testing will be performed on up to 4 sediment composite samples, envisioned to a representative sample from each investigation "cluster area". Analyses will be conducted using USEPA approved methodologies that are suitable for marine sediments and which yield the required

reporting limits for beach replenishment suitability. The analysis type and sampling density will be outlined in the SAP, to be approved by the USACE and EPA.

The results of the field investigation and laboratory test results will be summarized in an Offshore Geotechnical Data Report. The report will include logs of the vibracores, descriptions of field operations, laboratory data and other evaluations as needed to support preliminary assessment of borrow suitability. The report will dually serve as the SAP Results report, which could be used for approval of use of these offshore borrow areas.

Deliverables:

- Sampling and Analysis Plan (Draft & Final)
- Offshore Geotechnical Data Report / SAP Results Report

4.2.3.2 Sand Bypass - Project Advocacy

GHD will provide as-needed Project advocacy at the federal level. We understand that the City has an existing relationship with The Ferguson Group who advocates to the USACE for the City to develop a solution for the shoreline impacts resultant of the construction of the harbor complex. Given that existing relationship, GHD will support the City on issues related to sand bypassing around Oceanside Harbor, and collaborating with the USACE Study team in developing effective mitigation solutions for Oceanside and the region. A budgetary placeholder of \$10,000 has been included in our proposal for potential advocacy tasks that will be used as-needed based on coordination with the City.

Success of the Phase 1 sand retention system will be contingent on a frequent supply of coarse gradation sediment. The feasibility study evaluated several local onshore sources and concluded the fillet upcoast of Oceanside Harbor is the most logical and economical source of coarse gradation sediment for downcoast beaches. Political and jurisdictional challenges remain the most significant barriers to this sand source. GHD will support the City in discussions and coordination with USACE and MCBCP on a bypass system to restore and maintain the supply of coarse sand to beaches downcoast of harbor.

Deliverables:

- Memorandum summarizing discussions with City staff, USACE and MCBCP.
- Presentation of sand bypassing concepts for use in meetings with USACE and MCBCP.

4.3 Adaptive Management Plan

GHD will work closely with the project team and City staff to develop an Adaptive Management Plan (AMP) that outlines the range of management strategies that could be used improve the performance of the sand retention pilot project. The AMP will include specific strategies and actions, tied to a monitoring program, in response to potentially adverse impacts associated with the project. The AMP will describe the methods for monitoring waves, water levels, shoreline change, sand movement, and surfing resources. The AMP will include triggers for adaptive management activities such as redistribution of sand in the vicinity of the pilot retention system, system modification, alternative sand placement locations and volumes for follow-up nourishments. GHD will develop estimated costs associated with these adaptive management efforts such that funding can be secured and available for use in implementing the AMP.

Development of the final AMP will be a collaborative effort among project team members, City staff, local and regional stakeholders and regulators to clearly illustrate how the project performance will be monitored, measured and adapted to avoid adverse impacts to coastal resources. GHD will be the lead author of the AMP and will update the document at each stage of the design process to reflect feedback

obtained from the variety of project stakeholders, regulators and design team.

Deliverables:

- Draft Monitoring and Adaptive Management Plan based on Preliminary Design Information.
- Revisions to the Monitoring and Adaptive Management Plan incorporating feedback from City staff, community/stakeholder outreach, and the environmental and regulatory process. Assume three revisions of plan as project progresses toward final design (i.e. 60%, 90% and Final).

4.4 Final Engineering and Basis of Design Report

Tasks 4.1 through 4.4 reflect the anticipated design work required to develop a preliminary engineering report and design drawings with sufficient detail to begin the environmental and permitting phases of the Project. Based on prior project experience, detailed analysis of the proposed project and feedback from regulators during this process often results in changes to the project to avoid or minimize potential adverse impacts. The advancement of engineering analysis and design tasks will be paced by the feedback obtained throughout the environmental and regulatory review process. It is important not to let final engineering and analysis get too far ahead of the permitting process to minimize the risk of "rework".

The GHD Team will perform detailed and final engineering analysis and design of the sand retention pilot and beach nourishment program on an as-needed basis to reflect changes to the Project and additional details requested as part of the environmental and permitting process. This task may include additional coastal engineering analysis, calculations and/or modeling required at the request of the regulators. This is difficult to estimate in advance of consultation. We have included a placeholder budget for this task with specific scope tasks to be developed based on specific needs of the environmental review and permitting process and coordination with the City. The updated design information will be summarized in a Basis of Design Report to accompany the 60%, 90% and Final plan submittals.

Deliverables:

- Draft Basis of Design Report to accompany 60% and 90% plan submittals.
- Final Basis of Design Report to accompany final PS&E submittal.

4.5 Plans, Specifications & Estimate (PS&E)

The final design of the sand retention pilot and beach nourishment program will be influenced by the input of government agencies, regulatory approvals and other local and regional stakeholders. GHD and our subconsultants have prepared this scope in good faith, based on our experience on similar projects, but cannot predict in what ways, or to what extent this input will influence the final design and PS&E tasks. However, GHD will work closely with the City to discuss any potential changes to scope, budget or schedule at the earliest indication, based on input from external stakeholders. We are committed to cost control and will ensure that no work is completed ahead of the authorized budget.

Our experience delivering projects with similar regulatory constraints has confirmed that it is advantageous to pace the design work in response to the environmental and permitting efforts to limit the risk of rework. When the project enters the PS&E phase GHD will update the Work Plan specific to confirmed key milestones for design work and agency/stakeholder submittals.

4.5.1 30% Plans, Outline of technical Specifications & Estimate

GHD will prepare 30% plans for use in developing the CEQA Project Description and scoping the environmental document. Drawing details will be sufficient to illustrate the location and dimensions of the major project features (i.e., sand retention system, beach nourishment, revetment repairs, etc.) based on the outcome of the preliminary engineering analysis and design tasks (Tasks 4.1 – 4.4).

Plans will consist of scaled drawings prepared in AutoCAD and include (at a minimum) plan view, crosssections and elevations of the sand retention system, initial beach nourishment and potential sand management strategies. We assume the 30% plan set will consist of sheets including the following:

- Title Sheet
- · General notes, datums, abbreviations & symbols
- Overall Site Plan
- Sand retention system plan & elevation (4 sheets)
- Sand retention system typical section (1 sheets)
- Beach nourishment source plan & typical sections (2 sheets)
- Beach nourishment placement plan & typical sections (4 sheets)
- Preliminary sand management plans

GHD will review the 30% design with consideration of constructability and cost. Real value can be realized by identifying potential construction issues and value engineering alternatives early in the Project design. GHD's construction professionals will coordinate with construction industry partners to discuss the design, considering alternative construction means and methods, access, available resources and other pertinent aspects of the project construction.

Based on the findings from this constructability review GHD will develop an opinion of probable construction costs (OPCC) for the Project. Constructability review and cost estimating outputs will include forecasts of labor, equipment, materials, and schedule that will be a deliverable provided to the environmental team for use in scoping and performing CEQA analyses to quantify potential environmental impacts. This task will also identify the specification format to be used on the project and develop an outline of technical specifications.

Deliverables:

- Draft 30% design drawings, cost estimate and outline of technical specifications in PDF format for review by City staff.
- Revised 30% design drawings (PDF and AutoCAD format), cost estimate and outline of technical specifications that incorporate City review comments.

4.5.2 60% Plans, Technical Specifications & Estimate

GHD will prepare 60% plans based on the detailed engineering analysis and design performed in support of the environmental review and permitting process (Task 4.5). Design drawings will reflect any revisions or updates to the project based on mitigation measures identified in the environmental document and feedback received from permit agencies and community outreach.

60% plans will be prepared in AutoCAD Civil 3D and provide location, dimensions, and details associated with the major project elements. The 60% submittal is assumed to consist of sheets including the following:

Title Sheet

- General notes, datums, abbreviations & symbols
- Site plan sheets
- Survey control sheets
- Demolition sheets
- Staging, storage and site access sheets
- Sand retention system plan & elevations
- Sand retention system typical sections
- Beach nourishment source plan & typical sections
- Beach nourishment placement plan & typical sections
- Civil design of coastal access improvements
- Civil design details
- Sand management plans & details

Technical Specifications:

The specifications will outline the material properties and required performance needed to complete the work, construction tolerances and other technical (and environmental protection) considerations. Issues associated with site access or potential conflicts with existing public uses will also be detailed in the specifications. The 60% submittal will include an outline of specifications for major project elements including materials proposed for the sand retention system and beach nourishment. GHD intends to use the CSI Specifications format, however this can be discussed with the City if a different format would be preferred.

Constructability Review and Cost Estimate:

As the design progresses, GHD and the project team, will continue to review the design with consideration of constructability and cost. Further consultation and coordinate with construction industry partners will be used to qualify assumptions on construction means and methods, access, available resources, and other pertinent aspects of the Project construction. Constructability review and cost estimating outputs will include forecasts of labor, equipment, materials, and schedule that will accompany each PS&E submittal milestone. GHD will utilize in-house professional cost estimators and gather input from specialist marine construction general contractors with a focus on the following items:

- Prepare constructability review of design plans & specifications
- Evaluate the potential means and methods of construction for purposes of estimating construction costs
- Prepare opinion of probable construction cost

Deliverables:

- Draft 60% design drawings, cost estimate and technical specifications in PDF format for review by City staff.
- Revised 60% design drawings (PDF and AutoCAD format), cost estimate and technical specifications that incorporate City review comments.

4.5.3 90% Plans, Specifications & Estimate

GHD will prepare 90% (Pre-final) design drawings illustrating the location, dimensions and details of all project elements incorporating agency review comments on the 60% submittal and any conditions of approval agreed upon as a result of the permitting process. The 90% drawings will be prepared once significant progress has been made in permitting efforts with CCC, USACE and RWQCB such that the major project features, methods of construction, and measures for preventing or mitigating adverse impacts have been agreed upon.

GHD will prepare a complete set of specifications to accompany the 90% plans, assuming front end specifications are provided by the City. Special provisions will be drafted for work items not contained in standard specifications. Measurement and Payment terms will be identified for each item of work within the technical specifications. 90% specifications will incorporate conditions of approval associated with the Coastal Development Permit and other permits/approvals.

GHD will provide an updated constructability review and opinion of probable construction cost based on the design modifications made in the development of 90% plans & specifications. A draft bid sheet will also be prepared identifying the bid items and measurement/pricing for each item.

Deliverables:

 90% design drawings (PDF and AutoCAD format), complete specifications, bid sheet, and updated cost estimate.

4.5.4 Final Plans, Specifications & Estimate

GHD will prepare final design drawings, specifications and the engineer's estimate of probable construction cost. The final design package will incorporate review comments from the City on the 90% submittal. It is assumed the revisions will largely include minor edits to notes, callouts and details for consistency & clarification among the bid documents. Our estimated budget for this task doesn't allow for significant changes to the size, configuration and location of project elements. The final plan set will be signed and sealed for use by the City to acquire bids from qualified contractors.

Deliverables:

Final design drawings (PDF and AutoCAD format), complete specifications, and cost estimate.

5. Environmental Compliance & Permitting

The approach to California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) compliance for this project assumes preparation of an Environmental Impact Report (EIR) addressing the project for CEQA compliance and an Environmental Assessment (EA) for NEPA compliance; based on our experience on similar projects. The City will be the lead agency for the EIR, and the United States Army Corps of Engineers (USACE) will be the lead agency for the EA. Subconsultant, RECON will lead the preparation of these documents with support from GHD, M&A and M&N.

For CEQA compliance, an EIR will be prepared that addresses construction of the pilot sand retention system and beach nourishment program (initial nourishment and renourishment). This approach will allow for future phases to tier from the program EIR to facilitate environmental streamlining. The project-level component of the EIR will evaluate the first phase of project, which would consist of the construction of a sand retention system and the assumed placement of 300,000 cubic yards of sand imported from an offshore sand source. The programmatic portion of the EIR would evaluate future Phases of the project, which would likely include renourishment and potential adaptive management

actions.

One of the key topics that will be addressed in the EIR are impacts to downdrift beaches associated with implementation of the pilot project. The EIR will rely on the detailed technical studies prepared by the project team to evaluate how sand retention may impact the normal erosional forces and deposition of sand along beaches to the south. The potential loss of sand at beaches to the south and changes in beach sand depositional patterns would additionally be evaluated in the context of recreational impacts from loss of beach width and potential impacts to surfing resources from changing currents and surf zone sandbar formations. All sections of the EIR will be evaluated in the context of Coastal Act policies and compliance to facilitate Coastal Commission permitting.

The specific scopes of work for the CEQA and NEPA documents are detailed below.

5.1 CEQA Document

5.1.1 Project Description and Notice of Preparation

RECON and GHD will prepare a draft EIR project description early in the draft EIR preparation process that will be refined as the project alternatives are selected and technical analysis is completed. The project description will include detailed descriptions of the project-specific and programmatic components. Figures will be provided to accurately represent the scope of the project and its location. As part of this task, RECON will work closely with project team members to develop concise and accurate project objectives and to ensure that the project description comprises the "whole of the project," as defined in CEQA Section 21159.27. RECON will also prepare a draft of the Notice of Preparation (NOP) for staff review and distribution. RECON will prepare all documents and notices required for City filing.

Deliverables:

Submit the draft NOP and Scoping Letter to the City for their review and distribution.

5.1.2 Draft EIR

The GHD team will provide the necessary technical analysis to support EIR preparation, including analysis for Biological Resources (M&A) and Hydrology (M&N). Our approach to these technical studies is described as follows:

Biological Resources Studies (M&A)

Nearshore Habitat Mapping: Nearshore low-relief reefs exist along the Oceanside shoreline; predominately along the southern region of the City. Any impacts to reefs or other persistent hard bottom areas from the project would need to be mitigated, and therefore, these features need to be identified and quantified during the environmental planning and review process. This information is also useful during the project design phase and can assist in minimizing or avoiding impacts. Historical mapping efforts led by SANDAG are dated, and the more recent USACE data not at the level to provide a detailed assessment of potential impacts. M&A would use interferometric sidescan sonar to conduct fine scale mapping within the subtidal environment, and to quantify habitat types such as sand, rocky reef, or artificial structures. To assess acoustic mapping accuracy, ground-truthing would be performed by remotely operated vehicle (ROV) at random points to determine true habitat resources.

<u>Biological Technical Report / Essential Fish Habitat:</u> M&A, using existing information would prepare a marine biological technical report to support the CEQA analyses. The technical report will address all marine biological aspects of the project. The analysis will include consideration of short-term and long-term impacts of habitats and associated marine resources, including sensitive species such as federal and state threatened and endangered species protected under ESA and CESA, as well as protected

species under the Marine Mammal Protection Act. In addition, an Essential Fish Habitat (EFH) Assessment would be prepared for the project activity. The EFH will be provided in accordance with the 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act, which require the delineation of EFH for all managed species. Federal action agencies which fund, permit, or carry out activities that may adversely impact EFH are required to consult with the National Marine Fisheries Service (NMFS) regarding the potential effects of their actions on EFH and respond in writing to the NMFS's recommendations.

Hydrology (M&N)

Independent Coastal Engineering Technical Review: M&N would provide an independent review of the technical basis of design of the Pilot project and buildout program to support preparation of the EIR Hydrology section. The study will review materials from the Feasibility Study and the Draft Basis of Design (prepared by GHD). The study may be front-loaded within the schedule in order to provide this independent check during the pilot siting task and before other design phases commence. The study will answer CEQA Initial Study significance criteria to be provided by RECON.

Transportation & Traffic

No transportation analysis is anticipated as the only source of vehicle trips would be associated with construction workers and potentially hauling of materials for the sand retention features. RECON will work with the applicant team to identify the anticipated construction related trips and will provide a qualitative analysis of potential VMT impacts in the body of the EIR. While analysis for all CEQA topics will be addressed in the EIR, additional information about the scope of our analysis for aesthetics, archaeology, air quality, GHG, noise, recreation and flooding are provided below. These issues will be addressed in the body of the EIR and not as stand-alone technical report to provide streamlined analysis and review.

Aesthetics

The aesthetics section of the EIR will address the potential visual quality impacts of the project, including the sand retention system and beach nourishment program. RECON would take photographs of the project site and surrounding area and prepare visual representations of the proposed system and anticipated post-project accumulated sand. These images would be utilized to evaluate the extent of change related to project visibility from any key public vantage points and the degree of visual contrast and compatibility between project its surroundings. The analysis will consider potential impacts to important scenic views as identified in the City's General Plan, in addition to potential impacts to scenic resources such as the Pacific Ocean. The extent that the project would affect public views toward the ocean would be evaluated in the context of Coastal Act policy compliance.

Archaeology

Based on the location of the disturbance within disturbed beach sand and within the ocean, RECON does not anticipate the need for an archaeological survey. However, to address archaeology, particularly in the area of the sand distribution system, RECON will request a records search from the South Coastal Information Center with a 0.25-mile search buffer and a sacred lands search from the Native American Heritage Commission. Tribal letters will be sent from the list provided by the sacred lands search. Based on this information, RECON will prepare the cultural and tribal cultural resources section of the environmental document. This section will identify any impacts and, if necessary, recommend mitigation measures to reduce the impacts.

Air Quality and GHG Emissions

RECON's air quality and GHG emissions analysis will include a detailed description of all anticipated

construction and maintenance activities including construction start date and duration, equipment list, and sand /rock hauling details (e.g., type of vessel/trucks, distance to sand/rock source, hauling capacity, etc.). RECON's technical specialist will calculate construction emissions using the California Emissions Estimator Model (CalEEMod), the California Air Resource's Board Emissions Factor Model (EMFAC), or the Sacramento Metropolitan Air Quality Management District (SMAQMD) Harborcraft, Dredge, and Barge Emission Factor Calculator, as appropriate. Construction emissions will be based on the project schedule and equipment lists. Emissions will be calculated for Phase 1, and Phases 2 and 3 will be evaluated qualitatively. Depending on equipment and construction details for Phases 2 and 3, results of Phase 1 analysis may be able to inform the qualitative analysis for Phases 2 and 3. Total construction GHG emissions will be calculated and amortized over the lifetime of the project. The GHG analysis will evaluate whether the project would be consistent with state and local plans to reduce GHG emissions, including the 2017 Scoping Plan and the City's Climate Action Plan (CAP). A discussion of the applicable GHG emission reduction measures from the CAP will be included. The air quality analysis will address whether the project would obstruct or conflict with implementation of the Regional Air Quality Strategy (RAQS), would affect sensitive receptors to due construction activities and will assess whether calculated emissions would exceed applicable thresholds of significance. The results of each analysis will be used to address the CEQA Checklist thresholds for air quality and GHG emissions in the Draft EIR. The results of the modeling will be attached to the Draft EIR as an appendix.

Noise

RECON will complete a noise analysis in the body of the EIR based on CAD mapping of the anticipated project footprint, construction equipment types and locations. The analysis will assess the potential for construction activities to increase noise levels at adjacent properties. Construction noise contour mapping for Phase 1 will be developed using the SoundPLAN model. Phases 2 and 3 will be evaluated qualitatively. Depending on equipment and construction details for Phases 2 and 3, results of Phase 1 analysis may be able to inform the qualitative analysis for Phases 2 and 3 construction noise levels would be similar to Phase 1 noise levels. The results will be used to address the CEQA Checklist thresholds for noise in the Draft EIR. The results of the modeling will be attached to the Draft EIR as an appendix.

Recreation and Flooding (Hazards)

Our team understands that key issues of concern will be the potential for the project to result in downdrift impacts to beaches (e.g., Carlsbad, Encinitas, etc.) in terms of both shoreline erosion and recreation impacts. Due to the technical nature of these issues, RECON will work closely with the project technical team to ensure our analysis is technically accurate and reflects the technical analysis prepared. We will complete an internal team review of these key technical sections prior to distribution to the City for review. Our goal will be to simplify the complex technical analysis to provide information that is meaningful and understandable to the public and decision makers. We will ensure that all comments received during the NOP process are reviewed carefully to ensure all issues raised are fully addressed in the EIR.

EIR Screenchecks

RECON will prepare a Screencheck Draft EIR consistent with Section 15161 of the CEQA Guidelines for the project-level portion of the EIR and consistent with Section 15168 of the CEQA Guidelines for the programmatic portion. The EIR will include all CEQA mandated sections and will incorporate the latest updates to the CEQA Guidelines. The executive summary and project description will be prepared in such a manner that they provide sufficient detail to evaluate and review the environmental impacts of the project. A summary table will be included that identifies each subject area evaluated in the EIR, the significance conclusion, and any recommended mitigation measures. This will allow the reader to easily identify significance conclusions and proposed mitigation in one concise location.

Each environmental category evaluated in the EIR will identify existing conditions, thresholds of significance, impacts, level of significance prior to mitigation, mitigation, and level of significance after mitigation. Project-level, programmatic, and cumulative impacts will be analyzed in each section of the EIR. Appropriate tables and figures will be included within each section to summarize and graphically represent the information being presented.

Deliverables:

- Electronic submittal (Word and PDF) of the Screencheck Draft EIR to the City.
- Up to two cycles of revisions of the Draft Screencheck EIR.

5.1.3 Public Review Draft EIR

RECON will finalize the Screencheck Draft EIR and prepare the Public Review Draft EIR. RECON will submit a proof check Draft EIR to the City for final review before submitting the Public Review Draft EIR. RECON will prepare all required forms and notices for public review distribution of the EIR to the State Clearinghouse including the Notice of Completion (NOC), Summary Form, and Notice of Availability (NOA). RECON will complete the required electronic submittal. The scope assumes the City will complete distribution of the EIR to local stakeholders.

Deliverables:

- Electronic copy (Word and PDF) of the proof check Draft EIR.
- Electronic copy (Word and PDF) of the public review Draft EIR with all appendices included as PDF files
 on a CD or flash drive affixed to the back cover of the Public Review Draft EIR.
- Preparation of all required CEQA notices and submittal to the State Clearinghouse.
- File the NOC and NOA with County Clerk.

5.1.4 Final EIR

Screencheck Final EIR

RECON will prepare an Screencheck Final EIR, which will include response to comments letters received during public review of the Draft EIR. Response to comments will involve the following tasks: (1) compile and review comment letters received on the Draft EIR and bracket comment letters as appropriate and (2) submit a copy of the draft responses to comments to the City for preliminary review. Comments and draft responses will be organized into tables for ease of review by City staff. RECON will revise the draft responses to comments based on City review; prepare a list of persons, organizations, and agencies commenting on the Draft EIR; and finalize responses in side-by-side formatting for final responses to comments. This scope of work assumes that up to 25 comment letters, or 100 unique comments will be submitted on the Draft EIR during public review. RECON will also prepare a Mitigation Monitoring and Reporting Program pursuant to CEQA Guidelines Section 15097.

Deliverables:

Electronic submittal (Word and PDF) of the Screencheck Final EIR.

Final EIR

RECON will address City comments on the Screencheck Final EIR and prepare the Final EIR. RECON will submit a proof check Final EIR before preparing the Final EIR.

Deliverables:

- Electronic submittal (Word and PDF) of the proof check Final EIR.
- Electronic submittal (Word and PDF) of the Final EIR.

Findings of Fact and Statement of Overriding Considerations

RECON will prepare Findings of Fact and Statement of Overriding Considerations pursuant to CEQA

Guidelines sections 15091 and 15093. RECON will address one round of comments and submit a proof check before finalizing the Finding of Fact and Statement of Overriding Considerations.

Deliverables:

 Electronic submittal (Word and PDF) of the screencheck Findings of Fact and Statement of Overriding Considerations.

5.2 NEPA Document

RECON anticipates preparation of an Environmental Assessment to satisfy the requirements of the National Environmental Policy Act (NEPA). RECON will identify and evaluate a reasonable range of alternatives (at a minimum the No Action Alternative and Proposed Action Alternative) and the analysis will evaluate impacts of each alternative. The EA will be prepared consistent with USACE NEPA requirements, including preparation of an Administrative Record.

The EA will document compliance with applicable environmental laws, will assess potential direct, indirect, and cumulative impacts on the project area for each project alternative. Potential impacts shall be determined by comparing the future with and future without project conditions. Mitigation, if necessary, shall be formulated in close coordination with the USACE. Existing environmental conditions and potential environmental impacts for alternatives will be evaluated in accordance with the following factors: Physical Environment, Water Quality, Air Quality, Biological Environment, Cultural Resources, Socioeconomic Environment, Recreation, Safety, Land Use, Noise, Vehicular Traffic, Utilities, and Aesthetics.

RECON shall prepare a preliminary draft, draft, and a public review Draft EA. The work shall be accomplished in accordance with applicable USACE regulations, and in accordance with the National Environmental Policy Act (NEPA) and Council on Environmental Quality (CEQ) Regulations, ER 200-2-2.

RECON will respond to comments received on the Public Review Draft and prepare up to two cycles of revisions to the responses to comments based on review by USACE staff. A preliminary Final EA and Final EA will be prepared.

Deliverables:

- Preliminary Draft EA, Draft EA, and Public Review Draft EA
- Detailed summary of USACE coordination with resource agencies (Appendix to EA)
- Up to two cycles of responses to comments on the Public Review Draft EA
- Preliminary Final EA and Final EA
- Preparation of the Administrative Record
- Electronic submittal (Word and PDF) of deliverables to USACE.

5.3 Permitting

The Project will require permits from state and federal resource agencies including the RWQCB, U.S. Army Corps of Engineers (Corps), and California Coastal Commission (CCC). GHD will lead the permitting task, with support from M&N and M&A. Both M&N and M&A bring valuable insight through this process through implementation of the two Regional Beach Sand Projects and will support the team on developing strategy, technical reviews on the permit application packages, attendance at meetings and response to requests for information.

GHD's approach is to prepare a detailed project description document that would accompany all the permit applications. This document would differ from the CEQA project description in that it would detail the specific items that each of these agencies need to consider an application complete. For example, areas of direct and indirect impacts from the Project to jurisdictional waters will be provided for the

USACE and RWQCB.

Permit applications will be prepared and submitted to align with the 30% engineering design, Draft EIR and Draft EA stage, as is typical for projects of this type. Pre-application meetings (assume teleconference) will be held with each of the agencies to alert them to the project and to discuss any unique needs that the staffer may wish to see in the application.

Once the applications are submitted, the GHD team will be available to act as the City's agent to help respond to simple question as well as respond to formal requests for additional information (RFIs).

Permitting Assumptions:

- Permit application fees not included. Application fees are anticipated from the RWQCB at a minimum.
- The hours provided in GHD's budget are an estimate of that needed to gain approvals based on our experience with similar projects and include attendance at meetings, responding to RFIs, etc. Permits are not guaranteed within the time allotted.
- Scope of work assumes application for a Consolidated Coastal Development Permit through the CA Coastal Commission and that a local CDP is not required. City to prepare owner and occupant notification lists, supporting graphics and mailers for the CDP application. City to post and reasonably maintain Notice of Pending Permit application signs at public access locations within Project reach.
- Scope assumes Individual Permit applications are required from the USACE and RWQCB.
- Assume that the City's Lease of State Lands covers the proposed project activity and that a new lease or amendment from the State Lands Commission is necessary.

Deliverables:

- Permit application packages for the USACE, RWQCB and CCC.
- Minutes from resource agency coordination meetings

6. Project Budget & Schedule

6.1 Project Budget

An estimated budget for Phase 2 tasks was prepared using hourly rates for GHD staff and budget provided by each sub-consultant for their respective tasks. GHD staff working on the project will be billed at the hourly rate for their classification according to the rate sheet in Table 1. Table 2 describes the hourly rates for GHD's project-specific personnel. The rates shown below are effective through June 30, 2024 for the Oceanside Sand Retention Project after which time they are subject to annual escalation in line with industry standards.

Table 1 GHD Standard Rates

Project Role	Hourly Rate
Principal-In-Charge	\$ 275/hr
Senior Project Manager/Sr. Quality Manager	\$ 255/hr
Project Manager	\$ 235/hr
Technical Director	\$ 215/hr

Project Role	Hourly Rate
Senior Engineer	\$ 195/hr
Scientist/Technologist/Planner/Architect	\$ 170/hr
Project Engineer	\$ 155/hr
Staff Engineer	\$ 135/hr
Sr. CADD Designer	\$ 160/hr
Drafter	\$135/hr
Project Assistant	\$95/hr

Table 2 GHD Project Personnel-Specific Rates

Name	Project Role	Hourly Rate
Gillian Millar	Principal-in-Charge	\$ 253/hr
Brian Leslie	Project Manager	\$ 202/hr
Craig Dengate	Quality Assurance	\$ 220/hr
Aaron Holloway	Coastal Engineering Lead	\$ 223/hr
Mitch Duran	PS&E Lead	\$ 195/hr

Expenses and other similar project related costs are billed out at cost. The reimbursable cost of mileage will be billed at the IRS allowable rate. The services of sub-consultants will be charged at cost plus 10%.

6.2 Project Schedule

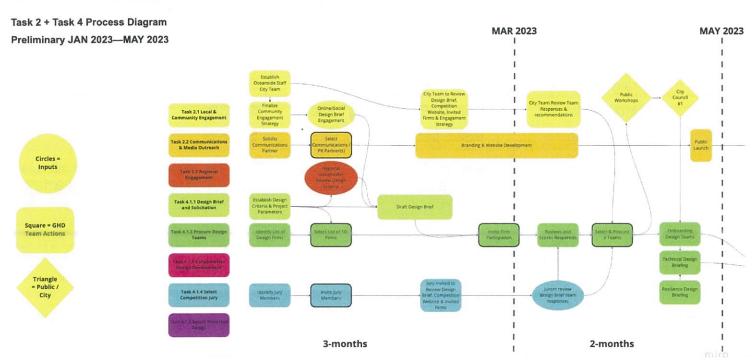
An anticipated overall schedule for the Project is provided below. A process diagram depicting our proposed approach to Task 2 (Community and Stakeholder Engagement) and Task 4.1 (Design Competition) is also provided.

6.3 General Assumptions

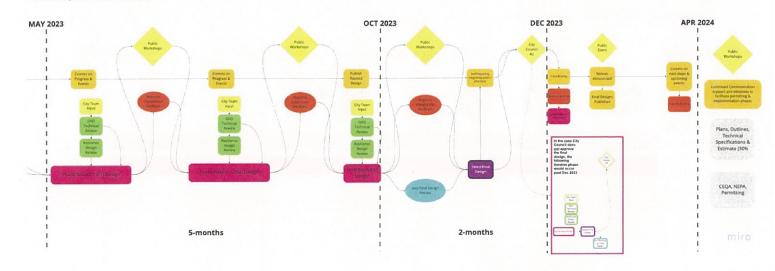
The following general assumptions have been considered in the development of the scope and fee for this project; in addition to the specific assumptions made in the scope descriptions above.

- 1. The Project will be influenced by the input of government agencies and other stakeholders. GHD and our subconsultants have prepared this scope in good faith, based on our experience of similar projects. We anticipate the scope may change based on input from agencies and stakeholders and subsequent direction from the City. Changes to the scope and fee presented in this document will be by agreement between the City and GHD.
- The anticipated duration of this work is approximately three years from notice to proceed.
 Extensions to this project duration may result in budgetary revisions. Please refer to estimated project schedule for the anticipated sequence and duration of tasks.
- 3. Development of this scope of work is based on the recommended concept presented within the Feasibility Study and presented to City Council in the summer of 2021.

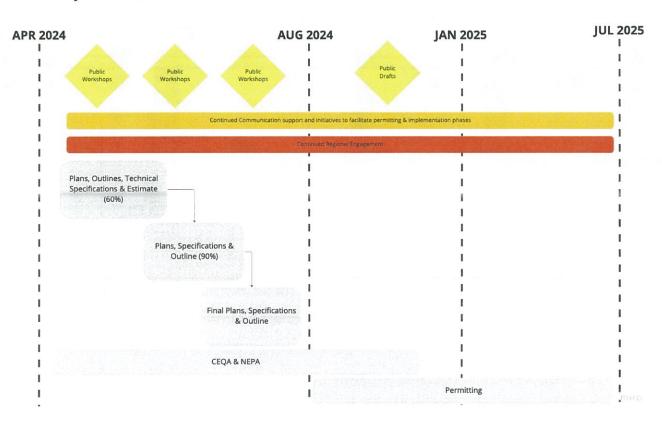
Community & Stakeholder Engagement Strategy



Task 2 + Task 4 Process Diagram Preliminary MAY 2023—APR 2024



Task 2 + Task 4 Process Diagram
Preliminary APR 2024—JUL 2025



GHD | City of Oceanside | 12560488 | Oceanside Sand Retention Project

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GHD

Design, CEQA/NEPA Documentation & Permitting Phase for the Oceanside Sand Retention Project

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CITY OF OCEANSIDE

Public Works Department

October 20, 2021

Request for Proposals (RFP) for Design, CEQA/NEPA Documentation & Permitting Phase for the Oceanside Sand Retention Project

The City of Oceanside's Public Works Department is seeking Proposals from qualified firms specializing in coastal engineering ("Consultant") with experience in the design and permit processing of coastal engineering projects in the Southern California's coastal zone, including extensive experience with community/stakeholder engagement efforts for large-scale, complex projects, preparation of CEQA/NEPA documents, and securing appropriate permits from all responsible agencies.

SCOPE OF WORK

The Scope of Work for this project generally consists of, but is not limited to, services by the Consultant including performing preliminary engineering design for a beach sand retention device and sand bypass system pilot project consistent with that which was authorized by the Oceanside City Council on August 11, 2021; and processing of all regulatory permits necessary for construction and completion of any requisite the CEQA and NEPA documents. The Consultant's work shall also include any and all needed public outreach and community consensus building efforts and active lobbying in support of the project at the regional, state, and federal levels.

BACKGROUND

Since construction of the Del Mar Boat Basin at Camp Pendleton, more than 80 years ago, the City of Oceanside and U.S. Army Corps of Engineers (USACE) have struggled to offset the erosional impacts to downdrift beaches. The federal government, as early as the 1950s, has acknowledged responsibility for the depletion of sand on Oceanside's beaches resulting from the construction of the Boat Basin and associated jetty. Since that time, the USACE and City have partnered on several beach sand replenishment projects aimed at mitigating the negative effects attributed to the Del Mar Boat Basin. However, all of these efforts have fallen short of providing the City with a sustained, dry sand beach for recreational, ecological, and coastal storm damage protection purposes.

In October 2019, the City of Oceanside ("City") initiated a process to identify feasible solutions to protect the beach from long-term erosion by either utilizing re-nourishment projects of beach suitable sands or construction of retention devices to retain/reduce the loss of sand, or a combination of both. A recently completed feasibility study evaluated several alternatives for the City of Oceanside Beach Sand Replenishment and Retention Device Project. Of the four alternatives developed and evaluated in the feasibility study, groins with nourishment option scored the highest based on a multi-criteria analysis of technical performance, financial and environmental criteria. A sand distribution system (buried pipeline) to restore a supply of sand to south Oceanside was also identified as a Project component to be advanced to the next phase.

On August 11, 2021, the Oceanside City Council authorized staff to proceed with the design and permitting of a sand retention and replenishment pilot project to include the development of a sand bypass system. A copy of the staff report for that meeting and the associated technical study can be accessed through the following link:

https://www.ci.oceanside.ca.us/civicax/filebank/blobdload.aspx?BlobID=55836.

SYNOPSIS

The City is requesting proposals and statements of qualifications from firms specializing in the design and approval of coastal engineering projects in the California coastal zone, including experience community/stakeholder engagement.

The proposed services by the Consultant will include performing preliminary engineering design for a beach sand retention device and sand bypass system project; processing of all regulatory permits necessary for construction and completion of any requisite the CEQA and NEPA documents. The Consultant services shall also include all the required community/stakeholder engagement efforts associated with the design process, including the selection of the final groin locations.

Due to the diverse qualifications, expertise and experiences needed in this project, teams comprised of multiple firms with different expertise are encouraged to submit a single proposal as the Consultant, clearly identifying the lead Consultant and each subconsultant with their specific respective areas of expertise and responsibilities in the Project.

The prospective consultant will be evaluated based on information submitted in response to the criteria included in this Request for Proposal (RFP). Evaluation of the RFP may include an oral/visual presentation and interview.

Once a selection is made, the City will enter into contract negotiations with the consultant firm. Upon successful negotiations, the City and consultant will enter into a professional services agreement with an anticipated project start date of early 2022.

SCOPE OF SERVICES

The Consultant shall demonstrate, through the submitted qualifications and proposal, the experience and resources necessary to perform outreach, engineering design, and regulatory permit/environmental permit processing for the beach sand replenishment and retention device pilot project.

This RFP describes the scope of services anticipated to advance the project through design, environmental review and permitting in order to develop a final design package for bidding purposes. Proposals shall include the scope of services and any additional scope items the consultant team considers necessary to complete the design, environmental services, and obtain permits for the implementation of the project.

1. Project Management

Consultant shall designate a Project Manager as the main point of contact who will be responsible for the management and coordination tasks for the duration of the Project. Project management tasks include, but are not limited to the following: prepare and implement a project schedule and work plan reflecting the sequence, timing, and budgets associated with project tasks; schedule and attend progress meetings on a monthly basis (frequency may change depending on tasks in progress); provide updates on the project schedule and work plan; prepare monthly invoices along with progress reports; develop a Quality Assurance and Quality Control (QAQC) program to be implemented throughout the project.

Deliverables:

- Project schedule and work plan
- Meeting agendas and minutes to document key decisions made
- Invoices and progress reports
- QAQC program

2. Community & Stakeholder Engagement/Project Advocacy

Consultant shall develop and lead a public engagement program that allows Oceanside community members and regional stakeholders to provide ideas and comments on the project. The consultant is also expected to develop and lead an advocacy strategy that seeks to build community and agency support of the project. The community engagement and project advocacy program shall include a list of meetings, the target audience for each meeting, objectives of the meeting and sequence of the meeting relative to the overall project schedule. The consultant shall also prepare online media resources, create a project webpage, manage an interested parties list, and participate in meetings hosted by other entities (SANDAG, Coastal Commission, Climate Collaborative, etc). The community engagement process is estimated to include a minimum of five public meetings, separate from any public agency meetings conducted as part of the CEQA document preparation or agency advocacy efforts. Consultant shall be responsible for scheduling, noticing, preparation of materials, facilitation of meetings, and a report summarizing each meeting. Use of a separate sub-consultant who specializes in community engagement and project advocacy is acceptable. If there will be a need for more than 5 public outreach meetings, the Consultant shall be compensated on the basis of staff hourly rates involved in these meetings plus any direct material costs associated with each meeting. .

Deliverables:

- Written public engagement and project advocacy strategy.
- Presentation materials and facilitation of five public meetings.
- Summary document for five public meetings.

3. Baseline Monitoring Program

Consultant shall:

- Conduct beach surveys of high spatial resolution to build baseline condition. Beach surveys should span from Oceanside Harbor to Tamarack Beach, and shall also include the Del Mar Beach in Camp Pendleton. Assume bi-annual survey for a period of two years.
- Lead a Citizen Science Program in collaboration with stakeholder groups and the community to monitor the subaerial beach in Oceanside and North Carlsbad.

4. Engineering Analysis & Design

4.1 Evaluate Phase 1 (Pilot) Locations & Future Phasing

Community feedback on the feasibility study indicated the location of the initial phase of the groin system warranted some additional analysis and consideration of locations throughout South Oceanside. The initial study recommendations suggest building the pilot groin field north of Wisconsin Street; however, there is wide community support for implementing the pilot program south of Wisconsin Street where beach widths are particularly constrained. Consultant shall develop up to four conceptual locations and layouts for Phase 1 of the Project and perform an analysis of the pros and cons of each location accounting for variety of factors such as coastal access, land ownership, community benefit, lifeguard operations, biological resources, downcoast impacts, and sand management logistics. Findings will be summarized in a technical memorandum. The Consultant will be expected to solicit feedback on Phase 1 groin locations via public meetings and stakeholder outreach to review potential locations and key considerations. The Phase 1 groin system will be selected based on feedback from outreach efforts and technical considerations.

Deliverables:

- Draft technical memorandum summarizing analysis of potential Phase 1 locations.
- Final technical memorandum incorporating review comments from City staff.

Presentation of findings for community & stakeholder outreach purposes.

4.2 Preliminary Engineering Analysis and Design

The preliminary engineering design and analysis will provide the basis for the environmental analysis, permit applications, and preliminary design drawings (Task 4) that illustrate the location, type and configuration of the major project elements which include a groin system and beach nourishment program. The preliminary engineering report shall describe the objectives, design criteria, design calculations, numerical modeling and other analyses performed for the following project elements.

Phase 1 Groin System

Building on the services performed in Tasks 1 through 4, the consultant shall perform the preliminary engineering analysis necessary to determine the location, length and spacing of the Phase 1 groin system (assumed to consist of four (4) groins); the materials used to build the groins; typical cross-section and profile of each groin. This task should also include the development of a phasing program which describes how the system will be scaled up to benefit the entire south Oceanside shoreline (Oceanside Pier to Buena Vista Lagoon). The Phase 1 Groin System is a pilot project and, as such, shall be designed in a manner that provides for its modification and/or removal should that need to occur.

Beach Nourishment Program

Consultant shall develop a beach nourishment program to place sand within and downcoast of the groin system. The program shall establish pre-fill volumes and locations within and around the groin system. Identify the probable sources of sand available for initial (pre-fill) nourishment and follow-up nourishments. Perform shoreline evolution modeling or analysis to estimate potential distribution of sand within and around the groin system along with an estimate for re-nourishment volume and frequency.

Deliverables:

- Draft Preliminary Engineering Report
- Final Preliminary Engineering Report
- Presentation of findings for community & stakeholder outreach purposes.

4.3 Sand Bypassing System

Consultant shall support the City in discussions and coordination with USACE and MCBCP on a bypass system to restore and maintain the supply of coarse sand to beaches downcoast of harbor. Consultant shall perform preliminary design of a sand distribution system (buried pipeline) along the Oceanside back beach. Design should determine pipe size and alignment such that system has the ability to work with both Corps annual harbor dredging and City sand bypassing activities. Consultant shall also evaluate borrow location, volume and frequency of City sand bypassing activities. Consultant should be aware and acknowledge in their Proposal that we cannot take for granted that the City will have access to sand in Camp Pendleton. This is an open question and requires considerable dialogue and coordination to reach an agreement.

Deliverables:

- Draft technical memorandum summarizing analysis of sand bypassing system.
- Revised technical memorandum incorporating review comments from City staff, USACE and MCBCP.
- Presentation of findings for use in meetings with USACE and MCBCP.
- Preliminary design of recommended sand bypass system.

4.4 Adaptive Management Plan

Consultant shall develop an adaptive management plan to measure performance of the Phase 1 groin system, once constructed. The plan shall include methods for measuring the effects on downcoast sediment supply and potential impacts to surfing resources. The monitoring program shall include methods to measure waves, water levels, shoreline change, sand movement, and surfing resources. Proposals shall describe potential monitoring techniques and frequency to evaluate performance & potential impacts within and adjacent to the groin system. The plan should develop triggers for adaptive management activities such as redistribution of sand in the vicinity of the groin system, groin modification, alternative placement locations and volumes for follow-up nourishments.

Deliverables:

- Draft Monitoring and Adaptive Management Plan
- Revisions to the Monitoring and Adaptive Management Plan incorporating feedback from City staff, community/stakeholder outreach, and the environmental and regulatory process.
- Assume three revisions of plan as project progresses toward final design.

4.5 Final Engineering and Basis of Design Report

Consultant shall perform detailed and final engineering analysis and design of the Phase 1 Groin System and Beach Nourishment Program. This task will include additional coastal engineering analysis, calculations and/or modeling performed as the project progresses through the environmental review, and management of the permitting process. The updated design information shall be summarized in a Basis of Design Report to accompany the 60%, 90% and Final plan submittals.

Deliverables:

- Draft Basis of Design Report to accompany 60% and 90% plan submittals.
- Final Basis of Design Report to accompany final PS&E submittal.

5. Plans, Specifications & Estimate (PS&E)

5.1 30% Plans, Outline of Technical Specifications & Estimate

Consultant shall prepare 30% plans based on the preliminary engineering analysis and design for use in developing the environmental document Project Description and scoping of the environmental document. Drawing details must be sufficient to illustrate the location and dimensions of the major project features based on the preliminary engineering analysis and design. Plans shall consist of scaled drawings prepared in AutoCAD and include (at a minimum) plan view, cross-sections and elevations of the groin system and initial beach nourishment. Consultant shall also prepare an opinion of probable construction cost estimate and an outline of the technical specifications to accompany 30% design package.

Deliverables:

- Draft 30% design drawings, cost estimate and outline of technical specifications in PDF format for review by City staff.
- Revised 30% design drawings (PDF and AutoCAD format), cost estimate and outline of technical specifications that incorporate City review comments.

5.2 60% Plans, Technical Specifications & Estimate

Consultant shall prepare 60% plans based on the detailed engineering analysis and design performed in support of the environmental review and permitting process (Task 4.5). Design drawings shall reflect any revisions or updates to the project based on mitigation measures identified in the environmental document, feedback received from permit agencies and community outreach. 60% design drawings shall provide location, dimensions, and details associated with the major project elements. Consultant shall prepare an updated opinion of probable construction cost and draft technical specifications to accompany the 60% design drawings.

Deliverables:

- Draft 60% design drawings, cost estimate and technical specifications in PDF format for review by City staff.
- Revised 60% design drawings (PDF and AutoCAD format), cost estimate and technical specifications that incorporate City review comments.

5.3 90% Plans, Specifications & Estimate

Consultant shall prepare set of 90% design drawings illustrating the location, dimensions and details of all project elements. Consultant shall prepare complete set of specifications, assuming front end specifications are provided by the City. Consultant shall provide an updated opinion of probable construction cost along with a list of bid items.

Deliverables:

 90% design drawings (PDF and AutoCAD format), complete specifications, bid sheet and cost estimate.

5.4 Final Plans, Specifications & Estimate

Consultant shall prepare final design drawings and specifications for bidding purposes. The final design package shall also include the engineer's estimate of probable construction cost.

Deliverables:

 Final design drawings (PDF and AutoCAD format), complete specifications, and cost estimate.

6. Environmental Compliance & Permitting

6.1 Environmental Document

Consultant shall prepare an environmental document to obtain the necessary project approvals under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Consultant shall perform the necessary technical assessments and special studies to support the environmental impact analysis of the project.

Consultant shall schedule and facilitate an initial public meeting with each resource agency to present the overall project and regulatory environmental compliance approach. Follow-up meetings shall be scheduled as needed to comply with CEQA requirements. The Consultant shall coordinate, organize, prepare any materials needed, and provide meeting summaries for all meetings as part of the environmental process.

Deliverables:

- Environmental document preparation, submitted at following stages: Administrative draft, Draft, and submitted Final)
- Technical assessments and special studies
- Required CEQA/NEPA public notices and associated filing forms
- Meeting agendas & minutes

6.2 Permitting

Prepare & Submit Permit Applications

The Consultant shall prepare the necessary environmental permits applications required to construct the Project. The following resource agency permits are anticipated:

United States Army Corps of Engineers (USACE) Section 404 and 10 Individual Permit

Regional Water Quality Control Board (RWQCB) Section 401 Water Quality Certification Consolidated Coastal Development Permit (CDP) from the California Coastal Commission (CCC).

The Consultant shall serve as the agent for the City for each permit and be responsible for coordination with each agency including the scheduling and facilitation of meetings and response to comments and requests for additional information. Proposals shall include a list of assumptions regarding meetings, coordination and additional studies required to support the permitting process.

STATEMENT OF QUALIFICATIONS

The RFP, at a minimum, shall include the following items:

- 1. The firm's name, address, and principal contact.
- 2. Organization and approach for completing the work and the proposer's overall understanding of the services required.
- 3. Background of firm and experience of employees providing services in the scope of work
- 4. Range of services offered by the firm.
- 5. Recent examples of successfully completing similar projects.
- 6. Provide a list of current and ongoing projects that show current and ongoing obligations of key staff members that would be involved in this contract. Provide a table showing existing workload and staff availability.
- 7. Provide one reference for each project of similar scope, including date of project, client name, address, and telephone numbers, and relevance to this project.
- 8. Provide a complete list of all individuals and their expertise who would provide services under this contract.
- Provide brief resumes of staff who would be involved in this project, including any sub-consultants.
- 10. Provide a fee schedule that indicates hourly bill rates for each member of the consultant's project team. The fee schedule shall be effective for the duration of the contract.
- 11. Provide detailed budget
- 12. Provide a master project schedule including start and finish dates for all of the Scope of Work activities and tasks; identifying the critical dates for submitting various permits to different agencies

All consultant personnel assigned to projects in response to this proposal request shall remain contract employees and shall not be eligible for City benefits. Any claims made by consultant personnel that they were "City Employees" for the duration of the assignment, and are therefore entitled to city paid benefits, will be paid by the consultant. Consultant staff will not direct the activities of City staff.

Consultant will be required to review assigned projects from the consultant's home or branch office and will not be provided office space at City Hall. The consultant shall anticipate reporting to City Hall when necessary and per the request of City staff. The consultant shall also anticipate possible attendance at City Council, Planning Commission, various community and committee meetings during the course of the project.

Mandatory Pre-proposal meeting

All Consultants who are interested in submitting a Proposal for this project shall have a representative attending a mandatory pre-proposal meeting which will be held at the following time, date and location:

Thursday November 18, 2021 12:30 pm — 3:00 pm City of Oceanside — City Council Chamber

Failure to attend this mandatory pre-proposal meeting will automatically disqualify a firm from consideration. Proposals from firms not having attended the mandatory pre-proposal meeting will NOT be reviewed by the City.

Proposal Submittals

- 1. Five (5) copies of the proposal shall be submitted for review and consideration.
- Three (3) copies of the proposed budget shall be submitted in a separately sealed envelope, with the Proposal. The budget shall be detailed showing number of hours for staff classification and their hourly rates for each task as shown in the Scope of Work. The budget shall also show all indirect costs associated with the Project.

Please submit your proposal no late than 5:00 pm (PST) on Tuesday December 7, 2021 to:

Hamid Bahadori
Interim Public Works Director
City of Oceanside
Public Works Department
300 North Coast Highway
Oceanside, California 92054

Attached is a sample Professional Services Agreement. Please review the form and ensure that your proposal includes the items required in the Agreement.

Any questions pertaining to this RFP shall be submitted in writing to Hamid Bahadori at hbahadori@oceansideca.org by **no later than 12:00 noon (PST) on Tuesday November 23, 2021**. No questions will be accepted or answered after this deadline.

Responses to all questions will be provided in a single document, shared ONLY with the consultants who have attended the pre-proposal meeting, by **no later than 5:00 pm. On Tuesday November 30, 2021.**

Thank you for your time and I look forward to receiving a proposal from your firm to perform this work. If you have any questions, please contact me at 760-435-5114.

Sincerely,

Hamid Bahadori

Interim Public works Director

Attachments: Sample Professional Services Agreement