



AGENDA REPORT

CITY OF SAN CLEMENTE

City Council Meeting

910 Calle Negocio
2nd Floor
San Clemente, California
www.san-clemente.org

Meeting Date: 11/1/2022

Agenda Item: 4D

Department: Public Works

Prepared By: Kiel Koger, Public Works Director/City Engineer

Subject:

APPROVE AMENDMENT 1 TO THE PROFESSIONAL SERVICES AGREEMENT WITH KPFF FOR ADDITIONAL SCOPE OF WORK ON THE MARIPOSA PEDESTRIAN BEACH TRAIL BRIDGE REPLACEMENT, PN 11810

Fiscal Impact:

Yes. There is adequate funding available for the additional scope of work of \$227,840 within the project budget of \$477,208 from Account 014-811-45300-11810 (Facilities Maintenance Reserve Fund).

Summary:

Staff recommends City Council approval of Amendment 1 of a Professional Services Agreement with KPFF Consulting Engineers for additional services concerning scope of work, design and permitting for the replacement of the Mariposa Pedestrian Beach Trail Bridge.

Background:

Staff recognizes the need to replace the Mariposa Pedestrian Bridge due to excessive corrosion from being in a marine environment and amount of required maintenance needed on the steel structure. A bluff failure of a private slope above the structure caused damage in November 2019 and the bridge was temporarily closed until soil debris could be cleared from the deck and around the foundations.

Staff retained KPFF in September 2020 to perform an alternatives analysis for the replacement of the bridge. This analysis compared different bridge materials (fiber-reinforced polymer, aluminum and timber) and configurations while exploring the corresponding costs, constructability methods and challenges, long-term maintenance, life span, risks, and permitting requirements. KPFF's analysis was based on the City's desire to replace the entire steel bridge with a material that is corrosion resistant and requires little maintenance while also reusing the existing foundations. Steel was not considered as a replacement option due to experience with maintenance issues. Aluminum and timber were the favored options as they are less expensive, can keep the same general geometric configuration as the existing bridge and would allow the use of existing foundations. Both are also low maintenance and have a long lifespan.

Staff initially recommended a timber bridge for replacement in February 2021 and Council asked staff to consider an aluminum bridge as an alternative. Staff brought back this alternative in March 2022 and received Council approval. The idea to raise/shift the new bridge from its current alignment to prevent potential future damage from slope failures was also discussed, as well as having the private slope above the bridge repaired in conjunction with the bridge replacement. Options for repairing the slope will be evaluated to determine the most economical method and additional environmental

review may be required in the future depending on the repair method chosen.

Design/permitting costs have increased based on the substantial changes in scope of work to now include shifting/raising of bridge alignment, surveying and geotechnical design work for the slope repair and to analyze the existing foundation capacity, and additional permitting required. Additional costs were also incurred during the alternative analysis phase to decide on the type of material to use and due to the project starting/stopping several times from employee turnover. The design/permitting costs for projects of this complexity are typically in the range of 10-15% of the estimated construction costs and the amended amount is more in line with other projects of similar scope and size.

Plan and Policy Consistency:

The project is consistent with the following General Plan Goals and Policies:

- Beaches, Park and Recreation Element - Goal: Provide a safe, environmentally sustainable and attractive open space and trails network, including walking, bicycling, hiking and equestrian trails, that connects key open space areas and recreational amenities.
- Policy BPR-4.02 - Trails and Staging Areas. We support the development, maintenance and enhancement of local trails and staging areas using best sustainable practices.
- Coastal Element - Goal: Create and maintain outstanding public access and recreational and visitor-serving opportunities in the Coastal Zone, consistent with effective resource conservation practices and the protection of private property rights.
- Policy C-1.01. - Coastal Access - we establish, maintain, and where feasible, expand public coastal access to the shoreline, beaches, tidelands, and recreational facilities in a manner that:
 - a. Maximizes public access to and along the shoreline;
 - c. Includes, where appropriate, pedestrian, hiking, bicycle, and equestrian trails;
 - d. Provides connections to beaches, parks, and recreational facilities and trail networks with adjacent jurisdictions;
 - g. Facilitates alternative modes of transportation, such as walking, bicycling, and public transit, including local shuttles;
- Policy C-1.11. Recreation - We protect, and where feasible, expand and enhance recreational opportunities in the Coastal Zone as addressed in the Land Use Element and Beaches, Parks and Recreation Element.

Council Strategy:

The project is consistent with Council Strategy 3, which is to update and maintain infrastructure that reflects best available technology and service.

Recommended Actions:

Staff Recommendation

Staff recommends that the City Council approve and authorize the City Manager to execute Amendment No. 1 to Contract C20-52 of a Professional Services Agreement with KPFF Consulting Engineers for additional services concerning scope of work, design and permitting for the replacement of the Mariposa Pedestrian Beach Trail Bridge. The amendment increases the contract from \$327,000 to an amount not to exceed \$554,840 and extends the contract term through July 31, 2024.

Attachment:
Amendment 1

Notification:
None

**FIRST AMENDMENT TO
PROFESSIONAL CONSULTANT SERVICES AGREEMENT FOR
Mariposa Pedestrian Beach Trail Bridge, Project No. 11810**

This First Amendment to Professional Consultant Services Agreement for **Mariposa Pedestrian Beach Trail Bridge, Project No. 11810** (this “First Amendment”) is made and entered into on this ____ day of _____, 20__, by and between the CITY OF SAN CLEMENTE, a California municipal corporation (“City”), and KPFF, a California Corporation, with its principal place of business at 400 Oceangate, Suite 500, Long Beach, CA 90802 (“Consultant”).

R E C I T A L S:

- A. City and Consultant entered into that certain Professional Consultant Services Agreement for Mariposa Pedestrian Beach Trail Bridge, Project No. 11810 (the “Agreement”) on September 15, 2020.
- B. City and Consultant desire to amend the Agreement in the manner provided herein.

C O V E N A N T S:

Section 1: Section 3.3.1 of the Agreement is hereby amended by increasing the total compensation from Three Hundred Twenty-Seven Thousand Dollars (\$327,000) to Five Hundred and Fifty-Four Thousand, and Eight Hundred Forty Dollars (\$554,840). In addition to the services to be performed by Consultant as referenced in Exhibit A to the Agreement, Consultant shall also perform those services described in Exhibit “A” to this First Amendment, which exhibit is attached hereto and incorporated herein by this reference.

Section 2: Section 3.1.2 of the Agreement is hereby amended to extend the Term of the Agreement to July 31, 2024.

Except as expressly amended by this First Amendment, the remaining portions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to be duly executed on the respective dates set forth opposite of their signatures.

CITY OF SAN CLEMENTE

By: _____

Its: _____

Dated: _____, 20__

ATTEST:

CITY CLERK of the City of
San Clemente, California

**APPROVED AS TO FORM:
BEST BEST & KRIEGER**

City Attorney

**APPROVED AS TO AVAILABILITY
OF FUNDING:**

Finance Authorization

_ KPFF
("CONSULTANT")

By: _____

Its: _____

Dated: _____, 20__

EXHIBIT "A"

Per the attached Scope and Fee Proposal dated October 11, 2022 from
KPF



October 11th, 2022

Kiel Koger, Director of Public Works
City of San Clemente
910 Calle Negocio
San Clemente, CA

**Re: San Clemente Mariposa Point Pedestrian Bridge Replacement & Slope Repair Project
KPFF Scope and Fee Proposal
(KPFF Job No. 10092000149)**

Dear Kiel,

KPFF is pleased to provide this scope and fee proposal for the Mariposa Point pedestrian bridge replacement and slope repair in San Clemente, California. As you are aware, KPFF previously provided a scope and fee proposal for the alternative analysis and bridge replacement dated August 26, 2020. Since then, the alternatives analysis has been completed and KPFF has been supporting the City in determining a feasible and economical approach for replacing the existing pedestrian bridge. Through this process the scope of the bridge replacement project has changed to now include the viability of modifying the bridge alignment to shift the bridge away from the hillside and the addition of the slope repair at the current failure location.

Project Overview

As previously described in the 2020 proposal, a slope failure occurred upslope of the Mariposa Point pedestrian bridge. This slope failure has resulted in damage of the existing bridge spans and the City intends to replace the existing pedestrian bridge with a new aluminum bridge while utilizing the existing abutment foundations.

KPFF previously performed an alternatives analysis which compared different bridge materials and configurations while exploring the corresponding costs, constructability methods and challenges, long term maintenance, life span, risks, and permitting requirements. This allowed for the City to decide on a replacement material for the proposed bridge and a viable construction method. In addition to the replacement of the bridge superstructure, the City would like to shift the bridge as much as feasible while still utilizing the existing foundations, and repair the failed hillside (as shown in the preliminary drawings dated 3/25/2020 provided by LGC Geotechnical, Inc.).

KPFF will work with a geotechnical engineer to perform a structural analysis of the existing bridge pile foundations to determine a feasible shift of the bridge and for slope repair recommendations. KPFF will provide bridge replacement and slope repair drawings and specifications required to articulate the bridge replacement, new bridge alignment, site access, repairs to the existing abutments, bridge design requirements, and slope repair. KPFF will assist the City with building permits, approvals from the Coastal Commission, and prepare a procurement package for public bid. KPFF will also assist the City through the bidding process.



This scope assumes that the replacement bridges will be a contractor designed element. If it is determined that a pre-designed bridge is the desired alternative, this scope of work will be amended to accommodate the bridge design.

Construction support and construction management can be provided by KPFF but is not included in this scope and fee proposal. After the completion of Task 3 the necessary construction support and construction management scope will be better understood.

We understand that this is a heavily utilized bridge and the City has an interest in fast tracking the project to re-open the bridge structure.

Scope of Services

Task 1 – Geotechnical Support for Bridge Alignment Shift

KPFF will work with the geotechnical subconsultant Group Delta, who provided the original geotechnical recommendations for the bridge, to provide soil capacities and recommendations for the structural modeling to determine the feasibility of shifting the bridge. See Attachment C for a detailed scope and fee proposal from Group Delta.

Task 1 Deliverables:

1. Geotechnical Preliminary Desktop Study Report (Related to Bridge Foundations)
2. Geotechnical Investigation Report (Related to Bridge Foundations)

Task 2 – Structural Analysis for Modified Bridge Alignment

KPFF will utilize the geotechnical soil recommendations to perform a full structural analysis of the existing bridge abutment foundations in order to determine the maximum allowable shift of the bridge both horizontally and vertically. KPFF will model the piles in SAP2000, check the capacity of the existing concrete piles utilizing the current building code, and provide the City with an updated final feasibility study memo and structural calculation package.

Task 2 Deliverables:

3. Final Feasibility Study Memo
4. Structural Calculation Package

Task 3 – Construction Drawings and Technical Specifications Development

KPFF will provide the required design drawings and specifications for the bridge replacement and slope repair. These drawings will detail the existing bridge demolition, bridge replacement, new bridge alignment including bridge approach profiles, site access (phasing, staging, laydown plans), temporary erosion and sediment control plan, repairs to the existing abutments, bridge design requirements, and civil grading plans for slope repair. KPFF will provide a Stormwater Pollution Prevention Plan (SWPPP) for submittal to the California Water Board.

KPFF will work with the surveyor subconsultant Cal Vada Surveying Inc to perform a topographic survey of the project site, including the more recent slope failure, which is not captured in the original drawings or survey. See Attachment D for a detailed scope and fee proposal from Cal Vada Surveying Inc.



Requirements for the contractor procured bridge sections will be outlined in a procurement specification.

KPFF will submit the design documents at 30%, 60%, and 90% completion for review by the City. KPFF will participate in a review meeting with the City at 30%, 60%, and 90%.

Task 3 Deliverables:

1. 30% complete Drawings & Specifications
2. 60% complete Drawings & Specifications
3. 90% complete Drawings, Specifications & Engineer's Estimate
4. Final Stamped Drawings & Technical Specifications for Permit & Construction

Task 4 – Geotechnical Support for Slope Repair

KPFF will work with the geotechnical subconsultant LGC Geotechnical, Inc to provide slope repair recommendations in order to provide a civil grading plan at the failed slope locations (see preliminary geotechnical slope repair drawings dated 3/25/2020 provided by LGC Geotechnical, Inc.). See Attachment E for a detailed scope and fee proposal from LGC Geotechnical, Inc.

Task 4 Deliverables:

1. Updated Geotechnical Report for Slope Repair

Task 5 – Permitting & Agency Coordination Support

KPFF will submit for the required permits to construct the project. This will include a City of San Clemente Building permit. The project may also require coordination with the California Coastal Commission (CCC). KPFF will work with a subconsultant, Dudek, to assess the possible coordination needed in Task 3 above.

Subconsultant Dudek previously provided a scope to perform initial coordination with the CCC, provide input for the alternatives analysis and an exemption to the CCC. Since then, it has been determined that this project does not qualify for an exemption and a permitting amendment is therefore required. The amendment support was previously excluded from the scope and outlined as an additive item to the scope, which is now required for the project. See Attachment F for an updated scope and fee proposal from Dudek, note that Task 2 Alternatives Analysis is complete, and this scope includes Task 1 CCC Coordination and Task 3 the CDP Amendment.

The project may also require coordination with the California Public Utilities Commission (CPUC), which has jurisdiction over all rail safety and the Southern California Regional Rail Authority (SCRRA), which owns the tracks. Coordination of construction activities will need to be coordinated with all of the track operators, which includes Amtrak, Metrolink, and BNSF, which currently indicates this rail track is part of their class 1 network. KPFF will work with SCRRA to coordinate with BNSF. The final selected construction sequencing method could require full coordination with the CPUC to allow construction during pauses in the rail line use. This scope of work has assumed a certain level of coordination effort will be required. If a greater level of effort is determined to be necessary after the completion of Task 3 30% Design, this scope task will be revisited.



Task 5 Deliverables:

1. Coastal Commission Coordination
 2. Approval from CPUC
 3. Project Coordination with SCRRRA
- (See Attachment F Dudek Scope of work for further details)

Task 6 – Procurement Package & Bid Support

KPFF will support the City’s procurement process to assemble a procurement bid package for the project. The documents will include:

- Construction drawings
- Technical specifications
- Assistance with front end division 01 and 00 specifications
- Assistance with a contractor bid form
- Engineer’s estimate for bid comparisons.
- Reference documents

KPFF will also provide support during the bidding process including responding to bidder questions and attendance at a pre-bid meeting.

Task 6 Deliverables:

1. Document Package for Bidding to Contractors

Assumptions/Exclusions

This scope of work has been compiled with the following assumptions:

- Engineering Construction Support and Construction Management are excluded from this scope. A separate scope and fee proposal will be submitted after the work defined in this scope is completed.
- Specialized training for working in close proximity to the railroad has been excluded from this proposal.
- The site plan will be finalized at the end of the 60% phase. If the site plan changes during the 90% phase, then KPFF may require additional budget.
- Fire protection and fire access is excluded.
- Utility design excluded.
- There are no major utilities that will require relocation as a part of this project.
- The municipal infrastructure utilities are sufficient to support the project. Existing utility capacity studies are not included in KPFF’s basic services.
- The horizontal and vertical location and size of existing utilities within the project limits will be determined from available record drawings and/or site surveys. If additional information is determined to be required during the design stage, we recommend that a separate company specializing in locating underground utilities and surveying be retained. The scope of this proposal does not include electronic or pothole utility investigation or survey.
- KPFF will provide an Engineer’s Opinion of Probable Construction Costs, actual Construction Cost estimating shall be provided by others.



- Excludes storm drainage design
- Excludes stormwater mitigation design
- Landscape, irrigation, electrical, lighting design, traffic engineering is excluded.
- Equipment haul routes and traffic control plans are excluded.
- Basic scope excludes SWPPP Inspection Monitoring during construction (QSP)
- KPFF will provide an ADA compliant design; however, architectural certification is excluded from this contract.
- Signage and striping plans are excluded.
- As-built drawings are not included in the basic scope.
- Record of Survey and County Surveyor Fees are excluded but can be provided if needed, per survey proposal Attachment D.
- Excludes storm drain pump stations and sewer lift stations. If the project develops this need, then KPFF can provide for an additional scope of work for these services.
- Excludes Mechanical Systems Coordination (Coordination of Chilled Water Lines, Steam Lines, oil, Distilled Water, etc.)
- Excludes environmental engineering or hazardous material design, demolition, or remediation.
- Temporary shoring design for structures or utility trenches will be designed by others.
- Excludes street and utility improvements.
- Excludes design to support a separate Rough Grading Permit. Assumes that only an overall grading permit will be necessary, similar to the existing bridge and trail as-builts provided to KPFF by the City.
- It is assumed that the bridge spans will be contractor designed and procured, and therefore their design is not included in this proposal.
- Services resulting from significant changes in the general scope, extent or character of the project or its design including, changes in size, complexity, schedule, and revising previously accepted studies, reports, design documents or Contract Documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes or orders enacted subsequent to their preparation, or are due to any other causes beyond KPFF's control are not included.
- Additional permits and agency approval may be required based on the final bridge replacement option and construction method. Those possible permits include, but are not limited to:
 - ACOE 404 permit
 - RWQCB 401 Water Quality Certification
 - CDFW Streambed Alteration Agreement
 - CA Fish and Game Code Section 2081 Incidental Take Permit
 - FESA Section 7/10 permit

Fees

This Scope of Services will be performed on an hourly not to exceed basis. Engineering hours will be charged hourly according to our attached engineering fee schedule. The total fee for this Scope of Services including direct salary costs and expenses for the services described in this letter is \$554,840. The City previously authorized \$327,000 and the remaining budget from this original authorized fee is approximately \$175,000, which leaves a delta of \$379,840 additional budget requested for KPFF and its subconsultants.

- Fees Described in this letter: \$554,840
- Approximate Fees Remaining: \$175,000
- **Amendment Request:** \$379,840



We appreciate this opportunity to perform this work for the City of San Clemente and are available to discuss this fee proposal in more detail if needed. Please contact me at (425) 501-6968 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ed DeBroeck'.

Ed DeBroeck, PE.
Associate

A handwritten signature in blue ink, appearing to read 'Amethyst Webb'.

Amethyst Webb, PE
Associate

CC: Bob Riley, PE, SE. Principal
Todd Graham, PE, Principal

Attachments:

- A: Agreement for Professional Services
- B: Hourly Fee Estimate
- C: Group Delta Proposal
- D: Cal Vada Surveying Inc Proposal
- E: LGC Geotechnical Inc Proposal
- F: Dudek Proposal



ATTACHMENT A - Agreement for Professional Services



Consulting Engineers

400 Oceangate, Suite 500, Long Beach, CA 90802 P: 562-437-9100 F: 562-437-9200 WWW.KPFF.COM

AGREEMENT FOR PROFESSIONAL SERVICES

DATE:	10/11/2022
JOB NUMBER:	10092000149
CLIENT:	Kiel Koger – City of San Clemente
PROJECT NAME:	San Clemente Mariposa Point Pedestrian Bridge Replacement Project and Slope Repair
LOCATION:	San Clemente, CA

SCOPE OF SERVICES: See attached scope proposal dated 10/11/2022

SPECIAL CONDITIONS: N/A

FEE: For more detail see Attachment B in the attached scope proposal dated 10/11/2022

<i>Fees Described in this letter:</i>	\$554,840
<u><i>Approximate Fees Remaining:</i></u>	<u>\$175,000</u>
Amendment Request:	\$379,840

Offered By KPFF, Inc.

Accepted by Client

(Signature)

(Signature)

Edward J DeBroeck, PE Associate

(Print Name/Title)

(Print Name/Title)



TERMS AND CONDITIONS

KPFF, Inc. ("KPFF") shall perform the services outlined in this agreement pursuant to the stated fee arrangement.

1. Additional Services

Should the Scope of Services change from those set forth in the Agreement for Professional Services, the fee for such additional services will be negotiated between Client and KPFF.

2. Limitation of Liability

To the greatest extent allowed by law, the aggregate liability of KPFF for any and all injuries, claims, demands, losses, expenses or damages, of whatever kind, arising out of or in any way related to this Agreement or the services provided by KPFF on this project, shall be limited to \$50,000 or the total fee received by KPFF pursuant to this Agreement, whichever is greater. Further, no officer, director, shareholder or employee of KPFF shall bear any personal liability to Client for any and all injuries, claims, demands, losses, expenses or damages, of whatever kind or character, arising out of or in any way related to this Agreement or the services provided by KPFF on this project.

3. Mediation

All disputes between Client and KPFF arising out of or relating to this Agreement shall be submitted to nonbinding mediation prior to commencement of any other judicial proceeding.

4. Dispute Handling

KPFF shall make no claim against Client without first providing Client with a written notice of damages and providing Client thirty (30) days to cure before an action is commenced. The Client shall make no claim either directly or in a third-party claim, against KPFF unless the Client has first provided KPFF with a written certification executed by an independent professional currently practicing in the same discipline as KPFF and licensed in the state of the subject project. This certification shall a) contain the name and license number of the certifier; b) specify each and every act or omission that the certifier contends is a violation of the standard of care expected of a professional performing professional services under similar circumstances; and c) state in complete detail the basis for the certifier's opinion that each such act or omission constitutes such a violation. This certificate shall be provided to KPFF not less than thirty (30) calendar days prior to the presentation of any claim or the institution of any judicial proceeding.

5. Suspension of Services

If Client fails to make payments to KPFF in accordance with this Agreement, such failure shall provide KPFF the option to suspend performance of services under this Agreement upon seven (7) days written notice to Client. In the event of a suspension of services, KPFF shall have no liability for any delays or damages caused because of such suspension. Before resuming services, KPFF shall be paid all sums due prior to suspension and any expenses incurred by KPFF in the interruption and resumption of its services. KPFF's fees for the remaining services and time schedules shall be equitably adjusted. If any invoice is in dispute, Client shall pay under written protest to keep the project on schedule and resolve the payment dispute after substantial completion.

6. Termination

This Agreement may be terminated by either party with seven (7) days written notice to the other in the event of a substantial failure of performance by the other party through no fault of the terminating party. If this Agreement is terminated, KPFF shall be paid for services performed to the termination notice date, including reimbursable expenses due.

7. Ownership of Documents

The drawings, calculations and specifications are instruments of service and are, and shall remain, the property of KPFF, whether the project for which they are made is executed or not. They are not to be used on other projects or extensions to this project except by agreement in writing.

8. Contract Administration

It is understood that KPFF will not provide design and construction review services relating to safety measures of any contractor or subcontractor on the project. Further, it is understood that KPFF will not provide any supervisory services relating to the construction for the project. Any opinions solicited from KPFF relating to any such review or supervisory services shall be considered only as general information and shall not be the basis for any claim against KPFF.

9. No Third-Party Beneficiary

Nothing in this Agreement shall create a contractual relationship with or a cause of action in favor of any third party against KPFF or Client.

10. No Assignments

Neither party to this Agreement shall transfer, sublet or assign any rights under or interest in this Agreement (including but not limited to monies that are due or monies that may be due) without the prior written consent of the other party.

11. Payments

KPFF will submit monthly invoices. Payment is due on the date of the invoice and becomes delinquent one month thereafter. A late charge will be added to delinquent amounts at the rate of one-and-one-half percent (1 ½ %) for each one month of delinquency (or the maximum allowable by law, whichever is lower).



ATTACHMENT B- Hourly Fee Estimate

Engineering Fee Schedule

Work Item	Principal	Senior Project / Construction Manager	Construction Manager	Project Manager (PMP)	Technical Specialist	Senior Engineer	Professional Engineer	Design Engineer	Sr. CAD Technician	CAD Technician	Project Mgmt. Assistant	Total Cost by Task
Task 0 - General Contract Management				12							12	\$4,716
Task 1 - Geotechnical Support for Bridge Alignment Shift												
Coordinate with Sub Consultant Group Delta						2	8					\$1,950
Review Preliminary Geotechnical Evaluation and Recommendations (Task 1: Desktop Study)	2					2	16					\$4,010
Review Geotechnical Investigation (Task 2)	2					2	16					\$4,010
Task 1 Total												\$9,970
Task 2 - Structural Analysis for Modified Bridge Alignment												
Structural Analysis of Existing Bridge Piers for modified bridge alignment												
Update demand loading for current code						2	4	16				\$3,830
Model Bridge Piers in SAP 2000 with soil springs from Geotech						2	8	24				\$15,320
Check pile concrete capacity						2	8	24				\$5,910
Structural Calc package						2	8	8				\$3,270
Memo - Summarize findings	4					2	8	8				\$4,350
QA / QC	4					4	4	8				\$2,700
Task 2 Total												\$35,380
Task 3 - Construction Drawings and Technical Specifications Development												
30% Design												
Civil - Evaluate Existing Records						2	4	4				\$1,850
Civil - Evaluate survey, drainage patterns/issues						2	8	8				\$3,270
Civil - Specs/Earthwork Calcs	1					2	8	6				\$3,210
Civil - SWPPP						2	8	8				\$1,750
Civil - Field Observations (assume 1 during design)						8	16	8			4	\$3,040
Civil - Plans/Detail Sheets	4					16	16	34				\$12,622
Civil - QA/QC						4	4	4				\$1,940
Civil - 30% Review Meeting						4	4	4				\$1,620
Civil - Address Plan Check Comments	4					3	6	4				\$2,445
Structural - Bridge Procurement Specifications	4					24	16	16			8	\$10,344
Structural - Project Specifications	4					8	16	16			8	\$6,904
Structural - Detail Sheets						8	24	24	8	40		\$17,600
Structural - Construction Sequencing / Phasing Drawings	2					4	20	4	8	20		\$9,560
Structural - 30% Review Meeting	4					4	4	4				\$2,700
60% Design												
Civil - Specs/Earthwork Calcs	1					4	8	14				\$4,960
Civil - SWPPP						4	4	8				\$2,180
Civil - Plans/Detail Sheets						24	30	45				\$18,285
Civil - QA/QC (PM to review each milestone set, Principal to review twice)						4	4	4				\$860
Civil - Address Plan Check Comments						2	16	2				\$3,800
Civil - 60% Review Meeting						4	4	4				\$1,620
Structural - Bridge Procurement Specifications	4					24	16	16			8	\$10,344
Structural - Project Specifications	4					12	16	16			8	\$7,764
Structural - Detail Sheets						6	20	24	8	40		\$16,410
Structural - Construction Sequencing / Phasing Drawings						4	20	4	8	20		\$9,020
Structural - 60% Review Meeting	4					4	4	4				\$2,700
90% Design												
Civil - Specs/Earthwork Calcs	1					4	12	14				\$5,720
Civil - SWPPP						4	4	4				\$1,520
Civil - Plans/Detail Sheets						30	40	78				\$26,920
Civil - Address Plan Check Comments						4	10	2				\$3,090
Civil - ROM Costs and Quantities for Grading Bond						12	8	8				\$5,420
Civil - QA/QC	4					4	4	4				\$1,940
Civil - 90% Review Meeting						4	4	4				\$1,620
Structural - Bridge Procurement Specifications						20	16	16			8	\$8,404
Structural - Project Specifications						32	24	24			8	\$12,504
Structural - Structural Detail Sheets						8	30	30				\$15,460
Structural - Construction Sequencing / Phasing Drawings						4	20	4	12	20		\$9,700
Structural - Engineer's Estimate	2					12	32	32			6	\$9,998
Structural - 90% Review Meeting						4	4	4				\$1,620
Final Design												
Structural - Final Construction Drawings	8					8	8	8		16		\$7,800
Structural - Final Construction Specifications	8					16	16	16				\$5,600
Civil - QA/QC						4	4	4				\$960
Civil - Final Specifications/Calcs	1					4	4	8				\$3,210
Civil - Plans/Detail Sheets						8	12	20				\$7,300
Civil - Final Review Meeting						2	2	2				\$430
Task 3 Total												\$285,914
Task 4 - Geotechnical Support for Slope Repair												
Structural - Coordinate with Sub LGC Geotechnical, Inc						2	8					\$1,950
Civil - Meetings with LGC Geotechnical, Inc						8	8					\$3,240
Structural - Review Documents & Support from Scope PRIOR to CCC Submission						2	8					\$1,950
Structural - Review Documents & Support from Scope AFTER CCC Submission						2	8					\$1,950
Task 4 Total												\$9,090
Task 5 - Permitting & Agency Coordination Support												
Coordination with Dudek on CCC Documents	2					8				12		\$4,060
Civil - Coordination with Env/Permitter						6						\$1,290
Coordination with Cali Public Regional Rail Authority	2					40	40					\$16,740
Coordination and project approval with CUPC	2					24	24					\$10,260
Task 5 Total												\$32,350
Task 6 - Procurement Package & Bid Support												
Civil - Answer Bidder Questions						4	8					\$2,380
Civil - Review Bids						8	2					\$2,100
Structural - Project support for Assembly of Bid Package		4	8	32								\$11,460
Structural - Final Engineer's Estimate for Bid						4	12					\$3,140
Structural - Pre Bid meeting			4									\$1,040
Structural - Management of Bidder questions				8								\$2,080
Structural - Review of Bids			12									\$3,120
Task 6 Total												\$25,320
Subtotal =												\$402,740
Total Estimated Fees												\$554,840
Total Hours	74	4	24	52	0	497	698	439	56	208	70	
Fee Schedule	\$270	\$265	\$260	\$260	\$219	\$215	\$190	\$165	\$170	\$150	\$133	
Sub Totals	\$19,980	\$1,060	\$6,240	\$13,520	\$0	\$106,855	\$132,620	\$72,435	\$9,520	\$31,200	\$9,310	

KPFF Fee Subtotal \$402,740
Expenses (travel, field obs.) \$1,000
KPFF Subtotal \$403,740

Sub consultants

Dudek Task 1 - CCC Coordination	\$9,000
Dudek Task 3 - CDP Amendment	\$33,750
Group Delta Task 1 - Desktop Study	\$9,835
Group Delta Task 2 - Geotechnical Investigation	\$10,640
Cal Vada - Survey	\$26,680
LGC Geotechnical, Inc Task 1 - Prior to CCC Submission	\$25,000
LGC Geotechnical, Inc Task 2 - Post CCC Submission	\$25,000
Subtotal Sub consultants	\$159,905
Markup (8%)	\$11,192

Assumptions & Notes
 1) This scope of work assumes the replacement bridges will be a contractor designed item
 2) Construction Support Services are not included in this scope and fee
 3) Construction Management Services are not included in this scope and fee



ATTACHMENT C - Group Delta Proposal



KPFF Consulting Engineers
400 Oceangate, Suite 500
Long Beach, CA 90802

August 23, 2022
Proposal No. IR22-052

Attention: Amethyst Webb

Subject: **Proposal for Geotechnical Recommendations**
Pedestrian Bridge Replacement
San Clemente, California

Dear Amethyst,

Group Delta Consultants, Inc. (Group Delta) is pleased to provide our proposal to KPFF Consulting Engineers (Client) to recommend soil/rock stiffness for the subject project.

PROJECT UNDERSTANDING

The proposed project site is located at the City of San Clemente, California. It is our understanding that the existing steel boardwalk pedestrian bridge will be replaced with aluminum bridges of equal or less weight. The project will start from Boardwalk Station 0+83.33 to Station 8+83.25 and from Boardwalk "A" Station 10+04.00 to Station 10+52.25. The existing drilled shaft foundation will support the new bridge. With the possibility of shifting the bridge horizontally away from the hillside and vertically, the loads exerted from the new superstructure to the drilled shaft foundation will be evaluated in accordance with current design standards.

KEY GEOTECHNICAL ISSUES

Our review of the readily available information for the project site indicate the following:

- Site is generally consisting of fill derived from local formations ranging from silty sand to clayey silt overlying Capistrano Formation (shale and mudstone with local sand and siltstone).
- Site is within a State of California Landslide Hazard Zone. Site has experienced a number of landslides and surficial failures on the hillside.
- Site is within a State of California Liquefaction Hazard Zone.
- Groundwater is shallow at the site at consistent levels with the ocean tides.

SCOPE OF WORK

Based on our understanding of the project needs, the scope of work includes the following:

- A desktop study to provide an evaluation of the existing foundations and provide preliminary geotechnical recommendations to assist the design team in a feasibility study of the proposed improvements.
- Geotechnical Investigation Report (Optional) to perform a site-specific investigation to confirm the preliminary (desktop study) design evaluations and provide a final design memorandum.

Desktop Study

Group Delta proposed scope of work is aimed at providing geotechnical recommendations for planning purposes to support the feasibility of the proposed bridge replacement. The proposed scope of work includes a study to summarize existing geotechnical and geological issues to identify and evaluate potential design issues. Group Delta will provide a preliminary assessment of the existing foundations that includes pile capacities, p-y springs, and point of fixity. Preliminary pile loads will be evaluated and included in our findings and recommendations, if provided. The feasibility study will be presented in a geotechnical memorandum that includes the following:

- Description of the site conditions.
- A narrative describing the geologic setting of the sites.
- Discussion of the geologic and seismic hazards, including fault rupture, seismic ground shaking, liquefaction and liquefaction induced settlement and lateral spreading at the sites.
- Comment on the potential for slope instability (landslides) and seismically induced landsliding at the site and in the general vicinity of the site with the potential to impact the bridge foundations.
- Evaluation of the geotechnical impacts and anticipated engineering characteristics of the soils at the sites based on readily available information.
- Preliminary feasibility geotechnical recommendations for support using the existing foundations.

Geotechnical Investigation Report (Optional)

A geotechnical investigation is recommended to confirm the soil conditions at the proposed improvements to finalize the soil profile characteristics and design parameters. The previous geotechnical investigations at the site were limited to one (1) dynamic cone penetrometer (DCPT)

performed within the project limit of the proposed improvements (which is approximately 900 ft long) and additional current information should be obtained for final design.

The demand on the piles will be impacted by the thickness of the fill derived soils overlying the intact Capistrano Formation. Group Delta will perform one day of field explorations using DCPTs along the bridge alignment. Prior to the field investigation, Group Delta will obtain the required permits from the California State Department of Parks and Recreation to access the DCPT locations, and notify Underground Service Alert, as required by law. Any environmental clearance should be performed by others and Group Delta will provide a geotechnical investigation work plan for use. The field explorations will be performed under the supervision of our engineer/geologist, who will maintain a detailed log of the DCPTs. The DCPTs will provide a relative density of the soil profile to be utilized in updated pile design evaluations. The structural integrity of the piles should be evaluated by others.

Our preliminary foundation design recommendations will be updated based on the current site specific field investigation and the results of our engineering evaluations will be presented in a geotechnical investigation report. The report will contain a project and site description, discussions of the geologic and seismic setting and seismic hazards, mapped seismic design parameters, detailed discussion of our field investigation and findings, and recommendations pertaining to the retrofit. Our geotechnical work and reports will follow Caltrans standards and will present the results of the site-specific explorations and design recommendations.

SCHEDULE

We are prepared to start work immediately following the receipt of your written authorization and estimate that our preliminary desktop geotechnical memorandum will be submitted three (3) weeks after notice to proceed. The field investigation can be advance following receipt of an encroachment permit from the State of California, Department of Parks and Recreation that typically takes 4 to 6 weeks. The geotechnical memorandum with our evaluations, site-specific investigation and final recommendations can be provided within three (3) weeks of the field investigation.

FEES

Our fee for the above scopes of work will be for the following lump-sum amounts:

Desktop Study	\$9,835.
Geotechnical Investigation Report (optional)	\$10,640.

The work will be done in accordance attached rate sheet and standard terms and conditions (see Attachment 1). Table 1 presents fee breakdown for the scope of work described above.

We will not exceed these fees unless additional effort or change of scope is required. In that event, we will discuss the situation with you before incurring any additional cost. Supplemental

services will be provided, as needed, on a time-and-materials basis in accordance with our approved Schedule of Fees.

We have based this proposal on the following assumptions and limitations:

- Client will provide permission to access the site
- Normal Monday through Friday daytime working hours
- Environmental studies and requirements for the optional site investigation will be provided by others
- Assumes no encroachment permit is required from the City of San Clemente
- CA State Encroachment fee (max allowance of \$1,000) assumes the investigation work will have an exempt status of Class 6, Section 15306 “Information Collection” since our work will not have any potential for significant impacts to the environment in compliance with Section 15300.4.
- Subsequent follow up, design development and responding to comments other than those described in the scope of work will be billed on a time and materials basis in accordance with our approved Schedule of Fees, upon authorization.

CONCLUDING REMARKS

We look forward to serving as your consultant on this project. Please feel free to call us if you have any questions on the contents of this proposal. If you accept the terms of this proposal and you wish us to perform the proposed services, please document your authorization to proceed by returning a countersigned copy of this letter or issuing some other type of written authorization. The following complete this proposal:

Table 1 Cost Estimate
Attachment 1 Standard Fee Schedule

Sincerely,

GROUP DELTA CONSULANTS



Michael Givens, PhD, PE, GE, PG
Associate Engineer / Office Manager

Distribution: Email to Addressee

TABLE 1 - COST ESTIMATE
Geotechnical Services
KPFF Pedestrian Bridge Replacement
San Clemente, California
Group Delta Proposal No. IR22-052

Task No.	TASK DESCRIPTION	PERSONNEL HOURS									TOTALS					
		Senior Principal	Principal	Associate	Senior	Project	Staff	Field/Lab Technician	Illustrator/Drafting	Clerical & Support Assistant	LABOR	Permit Fees	OUTSIDE EXPENSES	SUB CONTRACTS	Total ODC's	TOTAL
	Hourly Rate	\$295	\$245	\$225	\$195	\$180	\$155	\$122	\$100	\$80						
	TASK NAME															
	Task 1: Desktop Study (Preliminary Geotechnical Evaluations and Recommendations)															
	Data reduction and analyses			1		4	24				\$4,665					\$4,665
	Geotechnical Design Recommendation Memorandum			2		6	12				\$3,390					\$3,390
	QC/QA, Meetings, Project Admin			4		4				2	\$1,780					\$1,780
	Sub-Total			7		14	36			2	\$9,835					\$9,835
	Task 2: Geotechnical Investigation Report (Optional)															
	Work Plan, Site Visit for Field Markings, and Notify Digalert					2	6				\$1,290					\$1,290
	CA Dept of permit						2				\$310	\$1,000			\$1,000	\$1,310
	Field Exploration: Dynamic Cone Penetrometer Tests (DCPTs): 1 day, 2 staff, Prevailing Wage					10	10				\$3,350		\$300		\$300	\$3,650
	Data reduction and analyses					4					\$720					\$720
	Geotechnical Design Recommendation Memorandum			2		8				2	\$2,050					\$2,050
	QC/QA, Meetings, Project Admin			4		4					\$1,620					\$1,620
	Sub-Total			6		28	18			2	\$4,950					\$10,640
	Total															\$20,475

GROUP DELTA CONSULTANTS, INC.
FEE SCHEDULE AND TERMS &
CONDITIONS 2022

HOURLY CHARGES FOR PERSONNEL
(Engineer/Geologist/Scientist)

PRINCIPAL	\$245
ASSOCIATE	\$225
SENIOR	\$195
PROJECT	\$180
SENIOR STAFF	\$165
STAFF	\$155
SENIOR PRINCIPAL	\$295
DESIGNER / ILLUSTRATOR / AUTOCAD	\$100
TECHNICAL / PROJECT SUPPORT / ADMIN	\$80
DRIVER / PICKUP & DELIVERY OF SAMPLES	\$95

TESTING & INSPECTION SERVICES

PROJECT MANAGER	\$185
QUALITY CONTROL MANAGER	\$165
LABORATORY MANAGER	\$140
SENIOR ENVIRONMENTAL TECHNICIAN	\$140
ENVIRONMENTAL TECHNICIAN	\$100
TECHNICIAN / INSPECTOR - PREVAILING WAGE / UNION	\$122
TECHNICIAN / INSPECTOR – NON-PREVAILING WAGE	\$95
TECHNICIAN / LABORATORY TESTING	\$95

CHARGES FOR EQUIPMENT

VEHICLE:

FIELD VEHICLE	\$ 8/hour
MILEAGE (PER CURRENT IRS RATES)	\$ 0.625/mile
NUCLEAR DENSITY GAUGE	\$ 8/hour
PHOTO IONIZATION DETECTOR	\$ 35/hour
XRF DEVICE	\$ 100/day
HAZARDOUS GAS SAFETY MONITOR	\$ 25/hour

OTHER CHARGES

Outside services will be charged at cost plus 15 percent (15%). Technician and support personnel time for work over eight (8) hours per day will be charged at 1.5 times the regular rates. Holidays, hours over twelve (12) per day, and all weekends hours will be charged at 2.0 times the regular rates. Prevailing wage hourly rates will be increased in accordance with the Department of Industrial Relations annual increases as they take effect.

Fees for participation in deposition, arbitration, trial, etc., will be charged at an hourly rate of \$400 per hour, 4-hour minimum, portal to portal.



GROUP DELTA

LABORATORY TESTING FEE SCHEDULE 2022 (unit cost)

SOIL AND ROCK TESTS

CLASSIFICATION AND INDEX TESTS:

Atterberg Limits, Plasticity Index (ASTM D4318)	\$200
Non Plastic	\$145
Moisture Content (ASTM D2216)	\$30
% Passing #200 Sieve (ASTM D1140)	\$66
Sieve Analysis w/o Hydrometer (ASTM D422)	\$120
Sieve Analysis w/ Hydrometer (ASTM D422)	\$210
pH of Soil (CTM 643)	\$50
Soil Resistivity (CTM 643)	\$99
Soluble Sulfate (CTM 417)	\$50
Soil Chloride Content (CTM 422)	\$72
Corrosivity Series; Sulfate, Chloride, pH, Resistivity (CTM643, 417, 422)	\$270
Specific Gravity of Soil (ASTM D854)	\$132
Unit Weight/Moisture Content, wax (ASTM D2937)	\$50
Unit Weight/Moisture Content, Shelby tube (ASTM D2937)	\$55
Unit Weight/Moisture Content, ring sample (ASTM D2937)	\$45

STRENGTH TESTS:

Direct Shear, Residual (ASTM D3080)	\$800
Direct Shear, Consolidated (ASTM D3080)	\$265
Direct Shear, Consolidated (ASTM D3080), Remolded	\$330
R-Value, (ASTM D2844, CTM 301)	\$330
R-Value, Lime Treated in Lab (ASTM D2844, CTM 301)	\$390
R-Value, Aggregate Base (ASTM D2844, CTM 301)	\$375
R-Value, (less than 5) (ASTM 2844, CT 301)	\$125
California Bearing Ratio (D1883)	\$800
Torsional Ring Shear (ASTM D7608)	\$780
Vane Shear Test (ASTM D4648)	\$50
Unconfined Compression (ASTM D2166)	\$176

VOLUMETRIC CHANGE:

Consolidation Test (ASTM D2435), w/o time rate	\$300
Consolidation Test (ASTM D2435), w/ time rate	\$385
Consolidation Test (ASTM D2435), single point	\$160
Free Swell	\$245
Double Oedometer	\$430
Expansion Index (ASTM D4829)	\$200
Response to Wetting (ASTM D4546)	\$116
Soil Suction (ASTM D5298)	Quote

PERMEABILITY:

Permeability of Granular Soil (ASTM D2434)	Quote
--	-------

SOIL AND ROCK TESTS

COMPACTION:

Maximum Density and Optimum Moisture (ASTM D1557)	
4" Mold	\$250
4" with rock correction	\$265
6" Mold	\$280
6" with rock correction	\$285
Maximum Density Check Point (ASTM D1557)	\$80
Moisture Density of Soil-Cement Mixtures (ASTM D558)	Quote
California Impact Compaction, test only (CTM 216)	\$250

AGGREGATE/SUBGRADE:

Abrasion Test (ASTM C131/C535)	
100 and 500 Revs	\$275
500 & 1000 Revs	\$303
200 and 1000 Rev	\$303
500 revs only	\$138
1000 revs only	\$165
Clay Lumps/Friable Particles (ASTM C142)	\$132
Durability Index, Coarse (ASTM D3744/CTM229)	\$149
Durability Index, Fine (ASTM D3744/CTM229)	\$127
Durability Index, Coarse & Fine (ASTM D3744/CTM229)	\$275
Organic Impurities (ASTM C40)	\$88
Percent Fractured Aggregate (ASTM D5821) per sieve size	\$33
Fine Aggregate Angularity (ASTM C1252)	\$180
Sand Equivalent (ASTM D2419)	\$115
Sieve Analysis (ASTM C136)	
fine aggregate	\$120
coarse aggregate	\$105
Specific Gravity and Absorption:	
fine aggregate (ASTM C128)	\$165
coarse aggregate (ASTM C127)	\$135
Sulfate Soundness (ASTM C88) per sieve size	\$165
Cleaness Value (CTM 227)	\$145

Flat & Elongated Particles, (ASTM D4791) Per Screen Size	\$33
Unit Weight of Aggregate, loose/dry rod (ASTM C29)	\$90

SAMPLE PREPARATION

Sample preparation such as hand-cutting of samples, extraction from samplers, processing, and mixing of stabilized soils will be charged in addition to the individual test at the Engineering Technician hourly rate

\$95

GROUP DELTA CONSULTANTS, INC.

LABORATORY TESTING FEE SCHEDULE 2022

(unit cost)

CONSTRUCTION MATERIALS

ASPHALT CONCRETE:

Bulk Specific Gravity of Core, Coated (CTM 308, ASTM D1188)	\$83
Hveem Unit Weight (CTM 304/308), set of 3	\$295
Hveem Unit Weight (ASTM D2726), set of 2	\$235
Stabilometer /Hveem (ASTM1560, ASTM 2726) set of 2.....	\$335
Stabilometer /Hveem (CT 366) set of 3	\$360
Stabilometer Only, (CT 366) set of 3.....	\$297
Stabilometer Only, (ASTM D1560) set of 2	\$253
Bulk Sp. Gravity (Rice) (ASTM D2041).....	\$176
Bulk Sp. Gravity (Rice) (CT309)	\$88
Asphalt Concrete JMF Verification.....	Quote
Marshall Unit Weight (ASTM D1559), 3 plug average	\$281
Marshall Stability/Flow (ASTM D1560), set	\$300
Percent Bitumen (CTM 382)	\$138
Percent Bitumen & Gradation (CTM 382/202)	\$264
Film Stripping (CTM 302)	\$259
HMA Moisture Content (CTM 371).....	\$44
Ignition Oven Correction Factor Aggregate and oil	\$800
Ignition Oven Correction Factor Aggregate and oil w/ RAP	\$1000
Hveem AC Mix Design.....	Quote
Marshall AC Mix Design	Quote
Tensile Strength Ratio (TSR).....	Quote

REINFORCED CONCRETE TESTS:

Compressive Strength, per cylinder (ASTM C39)	\$42
Compressive Strength, per core (ASTM C39/42)	\$72
Flexural Strength, 6x6x18 beam (ASTM C78).....	\$90
Compressive Strength, Shotcrete Panel, Set of 3 (ASTM C39/42).....	\$360
Compressive Strength of Shotcrete, per core.....	\$72
Removal of Shotcrete Cores, In Lab, each	\$80
Compressive Strength, Light Weight Concrete Fill	\$35
Compressive Strength, Soil Cement.....	\$44
Drying Shrinkage, 3 specimens, 28-day	\$413
Modulus of Elasticity (ASTM C469).....	\$248

CONSTRUCTION MATERIALS

REINFORCED CONCRETE TESTS: (cont.)

Tensile Strength, Splitting (ASTM C496)	\$100
Petrographic Analysis of Cementitious Mat.....	Quote
Cement Content Analysis of Conc. (ASTM C1084)	Quote
Coefficient of Thermal Expansion.	Quote
Concrete Trial Batch w/ lab testing.....	Quote

STRUCTURAL MASONRY:

Compressive Strength Prism, All Sizes, each.....	\$132
Compressive Strength of Masonry Block, Set of 3 (ASTM C140)	\$396
Linear Shrinkage of Masonry Blk., set of 3 (ASTM C426)	\$363
Shear Test of Masonry Cores, 6" (DSA)	\$110
Compressive Strength of Masonry Cores, 6"	\$72
Dimensions of Masonry Block, Set of 3 (ASTM C140)	\$60
Absorption of Masonry Block (ASTM C140), Set of 3	\$138
Unit Weight of Masonry Block (ASTM C140), Set of 3	\$110
Moisture Content of Masonry Block (ASTM C140), Set of 3	\$110
Mortar Compressive Strength 2x4, per cylinder (UBC STD 21-16)	\$45
Grout Compressive Strength 2x2x2, per cube (ASTM C109)	\$39
3x3x6, per cube (UBC STD 21-18)	\$72
Brick Compressive Strength, 5 brick set (ASTM C67)	\$292
Brick Absorption Test (ASTM C67) 5 or 24-hour submersion, 5 brick set	\$292
1, 2, or 5-hour boiling, 5 brick set	\$292
Efflorescence, Brick, 5 brick set (ASTM C67).....	\$290
Modulus of Rupture, 5 brick set (ASTM C67).....	\$209
Moisture As-Received, 5 brick set (ASTM C67)	\$180
Saturation Coefficient/Absorption, 5 brick set (requires 24 hr. Submersion and 5 hr. boil Absorption test prior to calculation)	\$143

GROUP DELTA CONSULTANTS, INC.

LABORATORY TESTING FEE SCHEDULE 2022
(unit cost)

CONSTRUCTION MATERIALS

STRUCTURAL STEEL:

High Strength Bolt Testing (ASTM F606)	
Hardness, bolt, washer, or nut, each	\$28
Bolt Wedge Tensile, each.....	\$83
Bolt Proof Load, each.....	\$60
Nut Proof Load, each	\$50
Bolt Assembly Test Series, Set of 3	\$780
Set-Up, if less than three bolts are submitted	\$80
Rebar, Tensile Test (ASTM A370)	
No. 3 bar to No. 14 bar	\$75
No. 18 bar	\$200
Rebar, Bend Test (ASTM A370).....	\$63
Welded Rebar – Hoops (CTM 670)	\$75
Mechanically Spliced (CTM 670)	
No. 3 bar to No. 14 bar	\$100
No. 18 bar	\$200
Slippage Test in Addition to Tensile, each	\$75
Structural Steel, Tensile Test (ASTM A370)	
100k or less	\$85
101k-200k	\$105
Structural Steel, Bend Test	\$75
Structural Steel, Pipe Flattening Test.....	\$66
Seven Wire Strand, Tensile/MOE (ASTM A416).....	\$230
Seven Wire Strand, Tensile Only (ASTM A416)	\$155
Machining and Prep. of Structural Steel	Quote
Structural Steel Chemical Analysis.....	Quote
Skidmore Bolt Calibration, In Lab	\$170
Weld Procedure Qualification Test, Rebar.....	\$325
Welder Qualification Test, Rebar	\$175
Weld Procedure Qualification Test.....	\$375
Welder Qualification Test	Quote
Carbon Equivalent	\$150
Carbon Equivalent, Including Calculation	\$200
Macroetch Test of Welds.....	\$110
Nelson Stud Tensile (ASTM A370).....	Quote
Charpy Impact Testing	Quote

FIREPROOFING:

Spray-Applied Fireproofing, Density (ASTM E605)	
Oven-Dry Method	\$80
Displacement Method	\$75

ATTACHMENT D - Cal Vada Surveying, Inc Proposal

September 28, 2022

Casey Rasile, PE, QSD
Associate
KPFF Consulting Engineers (Long Beach)
400 Oceangate, Ste 500
Long Beach, CA 90802
Ph: 562-437-9100
casey.rasile@kpff.com

**Subject: Proposal for Professional Surveying Services
903 Buena Vista, San Clemente, CA**

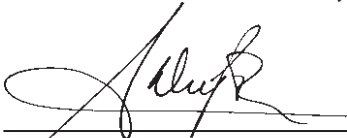
Dear Mr. Rasile,

CAL VADA Surveying, Inc. (CAL VADA) is a certified DVBE, MBE & SBE company established in 1989 with extensive experience providing land surveying services for projects ranging from small retail and office properties to large commercial developments. Our service philosophy is to provide our clients the most efficient and highest quality service, never sacrificing quality for timeliness. We are fully committed to making your project a success.

Should you have any questions on the attached proposal or need additional information, please contact me at (951) 280-9960. If this proposal is acceptable, please indicate by signing the terms at the end and return a copy to my attention by email or fax at (951) 280-9746 and we will begin work immediately. Our goal is to establish a great working relationship with you for this project, so that you have a surveying firm that you can count on in the future.

Thank you again for your consideration and we would welcome the opportunity to work with you on this project!

Kind Regards,

CAL VADA SURVEYING, INC.

Armando D. DuPont, PLS
President
adupont@calvada.com

Armando D. DuPont, Professional Land Surveyor 7780

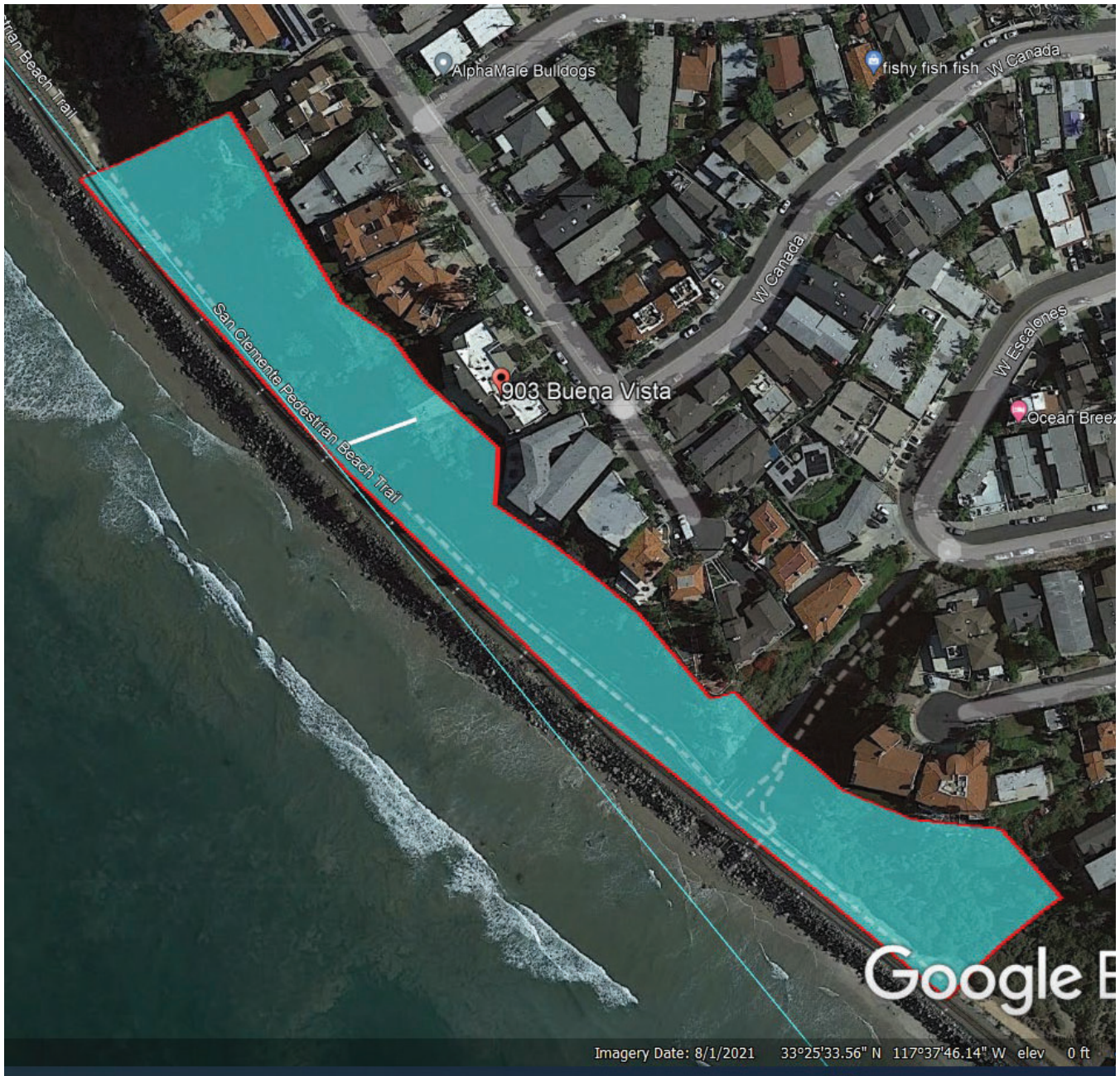
I SCOPE OF SERVICES**Topographic Survey**

A design level Topographic Survey is a professional services and will be provided for the area as outlined in the aerial picture shown on Exhibit "A". The site boundaries will be shown for reference based upon available record maps. We recommend that a complete title report be provided for the subject parcel in order to identify all of the underlying encumbrances. We will only plot those easement shown on available mapping and cannot guarantee that all easement/encumbrances will be shown.

The items that will include are as follows:

1. The vertical control will be based upon NAVD 88 Datum.
2. The horizontal control will be based on the California State Plane Coordinate System of 1983 (NAD 83).
3. Our base mapping will be created via aerial photogrammetry mapping and then further enhanced by our field crews; we will provide one foot contours.
4. Location, elevation, size, and type of existing utilities and improvements, on site and within 25 feet of the property line.
5. Spot elevations of grade breaks and flow lines of adjacent streets, curbs, or catch basins that terminate or commence offsite flow within the Site, along with all existing F.F. and of adjacent parking structure.
6. Flow line invert elevations and sizes of existing sanitary sewer and storm drain manholes adjacent to site, unless bolted down.
7. Existing driveways and intersections adjacent to Site.
8. Location of existing adjacent signing and striping, and traffic control signals within the Site.
9. Nearest public fire hydrants within the Site. If none are within the Site limits, the nearest two shall be provided.
10. Street lights across the street and within the Site's lateral limits.
11. Location of trees over 6 feet in height, regardless of caliper within the Site.

Exhibit "A"



Extent of Survey (4.2 acres)

1. Areas within the full Public Street Right of Way on streets which front the Site. This item includes topography up to the back of sidewalk or curb and any utilities within 5' of the back of sidewalk or curb.

Armando D. DuPont, Professional Land Surveyor 7780

411 Jenks Circle, Suite 205, Corona, CA 92880
info@calvada.com

Phone (951) 280-9960

Fax (951) 280-9746
www.CALVADA.com

III FEE

Pricing includes all labor (both field and office), materials, equipment, research and deliverables to client.

Topographic Survey	\$26,680.00
Record of Survey If Necessary Per V- 6 & 7 Below-Additional	\$6,600.00
(Excludes County Surveyors Fee, approximately \$800.00)	

INCLUDED IN THIS SCOPE

Field survey crews will locate the necessary existing boundary monuments for the resolution of the project boundary. If sufficient monumentation is not recovered during the field survey and monuments are required to be set, a Record of Survey may be required. For purposes of this proposal, the Record of Survey is not included and will be negotiated as a separate item at a later date if it becomes necessary.

IV SCHEDULE

We are available immediately to expedite this project and require 24-hour notice. The delivery of the topographic survey will be 18 business days from notice to proceed; subject to weather or other factors beyond our control. Should you require quicker services, CAL VADA will accommodate any reasonable schedule.

V ADDITIONAL SERVICES AND ASSUMPTIONS

Should changes to the Scope of Services or any additional services be required after commencement of the project work, an Agreement for changes in pricing, if any, will be reached for the extra work involved, the assumptions are as follows:

- 1) Current title reports will be supplied by the Client.
- 2) Deliverables will consist of a portable document format (PDF)/hard copy survey and CAD file.
- 3) Subject site will be accessible and clear of obstructions at requested time of survey (if access coordination is needed prior to survey, Client will provide needed information) and surveying will occur during normal business hours.
- 4) Lot Tie Agreement and Lot Line Adjustment efforts are excluded at this time as the specific requirements and lot configurations are unknown at this time.
- 5) **This is a NOT Prevailing Wage Project.**
- 6) Sufficient survey monumentation will be available at the controlling major intersections and key locations of the underlying record maps. In the event the monumentation is incomplete or deficient, then additional expanded scope may be required. If this should occur, we will discuss our findings in detail with the Client, and a fee adjustment to this agreement will be required.
- 7) Please note that a Record of Survey has not been included in the Scope of Services. We shall be required to file a Record of Survey if, in performing the boundary survey, material discrepancies are found between the field conditions and the "record" conditions or if any of the boundary lines being established are not shown on any previously recorded Subdivision Map, Official Map, or Record of Survey. A copy of those sections of the Professional Land Surveyor's Act describing

Armando D. DuPont, Professional Land Surveyor 7780

the requirement for a Record of Survey will be provided at Client's request. The preparation and filing of a Record of Survey shall be billed and paid for as "Additional Services."

ATTACHMENT E - LGC Geotechnical Inc, Proposal

August 15, 2022

Project No. 20015-01

Mr. Ed DeBroeck
KPFF
1601 Fifth Avenue, Suite 1300
Seattle, WA 98101

Subject: *Budget Request for Geotechnical Services Related to Remediation of a Landslide and Replacement of the Raised Portion of San Clemente Beach Trail (Mariposa) San Clemente, California*

Introduction

In accordance with your request, LGC Geotechnical is pleased to provide you with a budget request to provide geotechnical services during the design, planning and permitting stages for the remediation of the recent landslide (2020) and the replacement and re-positioning of the raised portion of the San Clemente Beach Trail. It is our understanding that you will be coordinating the design and preparation of all plans for the combined project. The landslide remediation plans will be based on our provisional geotechnical report for the site of July 30, 2022. Once all the plans and reports have been prepared and approved by the City of San Clemente, they will be submitted to the California Coastal Commission Staff for review and with the ultimate goal of approval from the Commission. Based on our conversations with Mr. Joe Street, the geotechnical representative on the CCC staff, and his visit to the site an in-depth geotechnical report will not be required. However, it has been our experience that once an official submission is made to CCC there is typically multiple requests for additional information. Frequently multiple remedial alternatives are requested, and additional investigation and analysis is required. We have prepared this cost estimate in good faith assuming that our existing report can be updated without significant changes for the initial submittal. After that we have included a budget assuming there will be some questions from Coastal Staff for budgetary purposes, but that the questions do not require subsurface investigation. We feel that our cost estimate prior to submittal is realistic. The cost estimate for services after submittal should be considered a placeholder only. Ultimately all our services will be performed on a time and material basis and the actual budget will to a large extent depend upon the requests of the CCC staff which is impossible to predict.

Key Staff

Tim Lawson will be the principal in charge of our work. Tim worked on the original beach trail design, construction, and monitoring. Tim has more than 30 years of geotechnical experience specifically in San Clemente and has worked on a multitude of landslide projects here. Tim has also testified in front of the CCC in regard to geotechnical issues. Tim's resume is attached to this cost estimate. Tim will be supported by a staff of Engineers and Geologists in our San Clemente office.

General Scope of Geotechnical Services PRIOR to Submission to California Coastal Commission Staff

- General coordination with KPFF in preparation of grading plans, geotechnical recommendations, and bridge remediation;
- Site meeting with CCC geotechnical staff;
- Prepare an updated geotechnical report outlining current conditions and recommendations for remediation to be provided to CCC based on input from staff;
- Geotechnical review of proposed grading plans;
- Preparation of Seismic recommendations for bridge remediation;
- Meetings and Co-ordination with City of San Clements and KPFF; and
- Attend conference calls.

Estimated cost \$25,000

General Scope of Geotechnical Services AFTER Submission to California Coastal Commission Staff

- Prepare conceptual geotechnical alternatives to the bridge re-positioning and proposed landslide remediation;
- Discuss and analyze existing slope stability;
- Evaluate sea level raise on proposed plans; and
- Respond to undetermined issues raised by CCC staff.

Estimated Cost \$25,000

Cost Estimate

At this time, we estimate a budget of Fifty Thousand Dollars (\$50,000.00) should cover these services. Our services will be billed on a time and materials basis in accordance with our attached 2022 professional fee schedule.

Closure

Our work will be performed in accordance with the professional standards of geotechnical consulting for this type of project in Southern California. No warrantee or guarantee is provided. We appreciate this opportunity to be of service. Should you have any questions or concerns regarding this estimate please do not hesitate to contact our office.

Sincerely,

LGC Geotechnical, Inc.



Tim Lawson, GE, CEG
Geotechnical Engineer/Geologist

TJL/amm

Attachment: 2022 Professional Fee Schedule
Terms and Conditions
Tim Lawson Resume

Distribution: (1) Addressee (electronic copy)



2022 PROFESSIONAL FEE SCHEDULE GEOTECHNICAL SERVICES

Professional Billing Rate (per hour)

Word Processing.....	\$ 70.00
CAD Operator	95.00
Junior Field Technician	95.00
Senior Field Technician.....	110.00
Field Technician/Prevailing Wage.....	150.00
Staff Engineer/Geologist	135.00
Senior Staff Engineer/Geologist	145.00
Field Supervisor/Operations Manager.....	110.00
Project Engineer/Geologist.....	170.00
Senior Project Engineer/Geologist.....	185.00
Associate Engineer/Geologist.....	195.00
Principal Engineer/Geologist.....	250.00

Engineering Equipment

Field Vehicle Usage	\$ 10.00/per hour
Vehicle Mileage.....	included in vehicle usage
Nuclear Soil Gauge and Inclinometer.....	included in hourly rate
Other Monitoring Equipment.....	<i>Upon Request</i>

Laboratory Tests

Moisture Content	\$ 24.00
Moisture and Density (ring samples).....	35.00
Maximum Dry Density (optimum moisture content)	294.00
Maximum Density Checkpoint.....	100.00
Sieve Analysis.....	165.00
Hydrometer Analysis.....	135.00
Sieve and Hydrometer Analysis.....	220.00
Percent Passing No. 200 Sieve.....	85.00
Liquid Limit and Plastic Limit	180.00
Liquid Limit – Non-Plastic (1pt).....	100.00
Sand Equivalent.....	125.00
Expansion Index.....	155.00
Direct Shear (shear rate of 0.05 in./min.)	345.00
Direct Shear (shear rate of lower than 0.05 in./min.).....	415.00
Single Point Shear.....	135.00
Unconsolidated Undrained Triaxial Shear	205.00
Consolidation (w/o time rate)	235.00
w/time rate, add (per increment)	55.00
w/extra load, add (per load).....	50.00
Collapse Test (ASTM D4546-B)	125.00
R-Value (untreated).....	375.00
R-Value (treated)	410.00
Sulfate Content.....	95.00
Chloride Content	85.00
Corrosive Suite (minimum resistivity, pH, sulfate and chloride).....	320.00
Organic Matter Content	85.00
Caltrans 216 Compaction.....	300.00

Stipulations

- ◆ All professional rates are accrued from portal to portal.
- ◆ Expert witness testimony, depositions, or mediation conferences, will be billed at 2.0 times the professional billing rate.
- ◆ All geologists, engineers, and technicians will be billed at time-and-a-half for overtime. Overtime is defined as more than 8 hours in one day and any time worked on weekends, state holidays or night shifts. Double time will be billed when more than 12 hours are worked in one day or more than 8 hours on weekends, state holidays or night shifts.
- ◆ Invoices are rendered monthly, payable upon receipt.
- ◆ Proposals are valid for 30 days, unless otherwise stated.
- ◆ Heavy equipment, subcontractor fees and expenses, supplemental insurance, travel, shipping, outside reproduction, and other reimbursable expenses will be invoiced at cost, plus 20 percent.
- ◆ Prior to initiating our field work, client agrees to provide all information in client's possession about actual or possible presence of underground utilities and/or hazardous materials on the site. Client agrees to reimburse LGC Geotechnical for all costs related to unanticipated discovery of utilities and/or hazardous materials.
- ◆ Prior to initiating our field work, client agrees to provide all information in client's possession with regard to restricted entry and/or exploration areas, such as areas of environmental contamination, hazardous soils, sensitive habitat areas, etc. Client agrees to reimburse LGC Geotechnical for all costs related to environmental contamination, hazardous soils, sensitive habitat areas, etc.
- ◆ Client is responsible for providing safe and legal access to the site at all times.
- ◆ LGC Geotechnical will not be liable for any loss, damage or liability to persons or property arising out of performance of our service that is not covered and paid for by our insurance. For any other loss, damage or liability which is not covered by insurance, our liability will be limited to the lessor of either \$10,000 or the total amount paid by client to LGC Geotechnical on the project in question.
- ◆ These rates are based on standard insurance coverage. If higher insurance limits are required client should discuss these limits, and the associated cost, with LGC Geotechnical prior to the initiation of our services.
- ◆ LGC Geotechnical's services will be performed in accordance with generally accepted standards of care and diligence normally practiced by geotechnical consulting firms performing services of a similar nature in Southern California. No other warranty, either expressed or implied, is included or intended in LGC Geotechnical's proposals, contracts, reports, etc.
- ◆ Quoted laboratory test rates assume samples are free of hazardous materials. Handling and testing of samples containing hazardous materials may include additional costs.



ATTACHMENT F - DUDEK PROPOSAL

Dudek Coastal Team

Dudek coastal planners include former California Coastal Commission (CCC) staff analysts that reside in the City of San Clemente and are intimately familiar with the San Clemente Railroad Corridor Pedestrian Beach Trail. Because of their CCC experience, they have in-depth understanding of all aspects of California coastal laws, regulations, procedures, and policy interpretation, including the most recent CCC Sea Level Rise Policy Guidance. These coastal planners have the ability to anticipate key coastal resource issues and leverage their positive working relationships with local CCC staff to facilitate coordination and issue resolution, thereby streamlining the CCC review process for the proposed project.

Scope

Task 1: CCC Coordination

Coordination with CCC staff is an important component to gain support for the project and identify opportunities to streamline coastal development permit (CDP) processing requirements. Our positive working relationship with CCC staff will serve to advance communication, information exchange, and review of required CCC approvals.

The City of San Clemente's Land Use Plan (LUP) was certified in 2018, but the Implementation Plan has not yet been approved by CCC. Therefore, CCC retains permitting authority in the City and the standard of review for projects is Chapter 3 of the California Coastal Act (CCA), with the certified LUP used as guidance. The original CDP for the San Clemente Railroad Corridor Pedestrian Beach Trail (Trail) was approved by CCC in 2004 (CDP No. 5-03-322). Since that time there have been several amendments to the CDP (CDP No. 5-03-322-A1, -A2, -A3, -A4).

Utilized by both residents and visitors, the Trail is a popular public recreational amenity and serves as an important component of the California Coastal Trail. The subject portion of the Trail, the bridge or elevated walkway in the northern stretch near Mariposa Point, provides a critical connection between the North Beach area and the central and southern areas, including the Pier. Without the bridge, lateral public access is limited, if not impossible, at times of higher tides and detouring through the blufftop neighborhoods is a deterrent because it requires traveling further inland and up a series of steep steps as well as navigating neighborhoods with complex street patterns.

While providing an important public access facility, the bridge travels through a highly constrained portion of the coastline. The bridge is located within the Orange County Transportation Authority (OCTA) right-of-way with steep bluffs immediately to the east and railroad tracks, a rock revetment and the ocean to the west. In addition, the bridge spans sensitive wetland areas at Mariposa Point. This landscape makes construction access to the site a challenge and will be an important consideration for this project.

Depending on the location and the extent of the proposed repair and/or replacement of the bridge, the project will likely require an amendment to CDP No. 5-03-322 from CCC. Based on our understanding of the project, we envision two potential permitting options:

1. CDP Amendment: If the proposed work requires non-exempt changes to the project as it was originally approved by CCC, or if the proposed work requires changes to the special conditions approved by CCC, then it would require a CDP amendment to CDP No.5-03-322. Per Section 13166 of the CCA Implementing Regulations, there are two types of CDP amendments:

- a. Material CDP Amendment: For development that has the potential for adverse impacts, either individually or cumulatively, on coastal resources or public access to and along the shoreline, as determined by the CCC Executive Director. Material amendments are presented to the Commission as part of the Consent or Regular Calendar at monthly hearings.
- b. Immaterial CDP Amendment: For development that has **no** potential for adverse impacts, either individually or cumulatively, on coastal resources or public access to and along the shoreline, as determined by the CCC Executive Director. Immaterial amendments must be reported to the Commission as part of the South Coast District Deputy Director's Report at monthly hearings. If three or more Commissioners object to the determination of immateriality, the project will be reviewed as a material amendment.

Based on this understanding of the key coastal issues and processing regulations, Dudek coastal planners will coordinate with CCC staff to streamline the project review process. Dudek coastal planners will prepare for and attend two (2) meetings with the City and CCC staff to discuss the proposed project, alternatives analysis, project's consistency with applicable CCA/LUP policies and the conditions of the original CDP to identify potential issues (Task 2), impact determinations, and any mitigation. This coordination prior to preparation and submittal of the formal CDP application package will streamline the CCC CDP process (Task 3).

Task 1 Deliverables

- Preparation of meeting agenda, presentation, and written materials for two (2) meetings with CCC staff and attendance at meetings (either in-person or virtually due to COVID-19).
- Meeting minutes from CCC meetings.

Task 1 Fee: \$9,000 **(REQUIRED)**

Task 2: Alternatives Analysis Support & California Coastal Act Consistency **(COMPLETED)**

Dudek will work closely with the technical consultants preparing the Alternatives Analysis and provide advice and recommendations regarding CCA/LUP consistency throughout the project. Dudek coastal planners will prepare a CCA/LUP consistency analysis for the proposed project alternatives. Dudek will also review each of the alternatives for consistency with the conditions of the original CDP that governs the Trail. This consistency analysis will inform CCC coordination (Task 2) and help City staff and the Project Team determine the preferred project alternative. This consistency analysis will also be provided to CCC as part of the CDP application and will help to streamline CCC staff's review process.

In addition, Dudek coastal planners will leverage their extensive working knowledge of CDP processing procedures to prepare an assessment of the required permitting pathways for each of the alternatives (e.g. CDP Amendment (Immaterial or Material)). As appropriate, based on CCC staff feedback obtained in Task 1, Dudek coastal planners will assist the City and project team to make project modifications to demonstrate the project's consistency with coastal resource protection policies. Together, the consistency analysis and the permitting pathways evaluation will help the City to determine which project alternative meets the goals of the project, is consistent with CCA requirements, and utilizes the most efficient process.

Task 2 Deliverables

- Guidance and advisement for technical consultants through preparation of the Alternatives Analysis, including discussions with the professional engineers developing the project alternatives
- Detailed CCA/LUP policy and CDP conditions consistency analysis of proposed project alternatives
- Evaluation of potential CCC processing pathway for proposed project alternatives
- Attendance and support for technical consultants with presentation of the Alternatives Analysis at one (1) City Council meeting

Task 2 Fee: \$21,000 (COMPLETED)

Task 3: CDP Amendment

Dudek will assemble the CDP amendment application package, including completing the CCC CDP amendment application form, compiling all required attachments, and preparing a submittal letter that summarizes environmental information and technical studies to demonstrate compliance with applicable policies and includes the LUP/CCA consistency analysis.

Following CCC staff's first 30-day review of the application submittal, Dudek coastal planners will review any requests for additional project information and provide recommendations to deem the application complete and prepare for decision-maker hearing. Because the project is located in a constrained site with sensitive coastal resources and important public access facilities, this scope assumes two 30-day CCC incomplete letter/review cycles to thoroughly address potential impacts to coastal resources.

After the CDP application is formally filed, Dudek will coordinate with CCC staff during development of the staff recommendation. Prior to the public CCC hearing on the CDP application, Dudek will review the final CCC staff report/recommendation and discuss the findings with the City. As needed, Dudek will support the City in preparing a presentation to address the staff recommendation and any specific special conditions. In addition, Dudek will attend the CCC hearing and be available to answer questions that come up during the hearing.

Assuming that CCC approves the CDP and the City is supportive of the approved conditions and wants to seek release of the permit, Dudek will help the City compile all of the materials needed to satisfy the special conditions of the permit. Dudek will coordinate with CCC staff, as necessary, to oversee issuance of the permit.

Given the level of uncertainty that exists in matters involving the CCC, including unanticipated data needs and technical study following review of application materials and the level of support required at the public hearing, additional work authorization may be required and would be subject to separate scope and fees.

Task 3 Deliverables

- Preparation of a CDP amendment application package;
- Preparation of two (2) responses to CCC incomplete letters;

- Review of CCC staff report, including conditions of approval and findings;
- Preparation for and attendance of CCC hearing to support City's presentation, if necessary; and
- Compilation of condition compliance materials.

Task 3a Fee: \$33,750 (REQUIRED)

Total Coastal Fee: \$63,750

Total Coastal Fee for Task 1 & Task 3: \$42,750