PROFESSIONAL CONSTRUCTION SERVICES AGREEMENT

This PROFESSIONAL CONSTRUCTION SERVICES AGREEMENT, (hereinafter referred to as "Agreement"), is made and entered into to be effective the «date» day of «Month», «year» by and between the ORANGE COUNTY SANITATION DISTRICT, (hereinafter referred to as "OC SAN"), and «CONSULTANT COMPANY», (hereinafter referred to as "CONSULTANT").

WITNESSETH:

WHEREAS, OC SAN desires to engage CONSULTANT to provide construction support services for **Taft Branch Improvements**, **Project No. 2-49** (Construction Support Services); and

WHEREAS, CONSULTANT is qualified to provide the necessary services for the Construction Support Services in connection with these requirements; and

WHEREAS, OC SAN has adopted procedures in accordance with OC SAN's current Purchasing Ordinance, Section 4.03(B), for the continuation of services and has proceeded in accordance with said procedures to perform the Construction Support Services; and

WHEREAS, at its regular meeting on «Board Meeting Date» the Board of Directors, by Minute Order, accepted the recommendation of the Operations Committee pursuant to OC SAN's current Purchasing Ordinance to approve this Agreement.

NOW, THEREFORE, in consideration of the promises and mutual benefits, which will result to the parties in carrying out the terms of this Agreement, it is mutually agreed as follows:

1. SCOPE OF WORK

CONSULTANT agrees to furnish necessary professional and technical services to accomplish those project elements outlined in the Scope of Work attached hereto as "Attachment A", and by this reference made a part of this Agreement.

- A. The CONSULTANT shall be responsible for the professional quality, technical accuracy, completeness, and coordination of all design, drawings, specifications, and other services furnished by the CONSULTANT under this Agreement, including the work performed by its subconsultants (Subconsultants). Where approval by OC SAN is indicated, it is understood to be conceptual approval only and does not relieve the CONSULTANT of responsibility for complying with all laws, codes, industry standards and liability for damages caused by errors, omissions, noncompliance with industry standards, and/or negligence on the part of the CONSULTANT or its Subconsultants.
- B. CONSULTANT is responsible for the quality of work prepared under this Agreement and shall ensure that all work is performed to the standards of best engineering practice for clarity, uniformity, and completeness.
- C. In the event that work is not performed to the satisfaction of OC SAN and does not conform to the requirements of this Agreement or any applicable industry

standards, the CONSULTANT shall, without additional compensation, promptly correct or revise any errors or deficiencies in its designs, drawings, specifications, or other services within the timeframe specified by the Project Engineer/Project Manager. OC SAN may charge to CONSULTANT all costs, expenses and damages associated with any such corrections or revisions.

D. All CADD drawings, figures, and other work shall be produced by CONSULTANTS and Subconsultants using OC SAN standard software. Conversion of CADD work from any other non-standard CADD format to OC SAN format shall not be acceptable in lieu of this requirement.

Electronic files shall be subject to an acceptance period of «Number of Days» calendar days during which OC SAN shall perform appropriate acceptance tests. CONSULTANT shall correct any discrepancies or errors detected and reported within the acceptance period at no additional cost to OC SAN.

E. All professional services performed by the CONSULTANT, including but not limited to all drafts, data, correspondence, proposals, reports, and estimates compiled or composed by the CONSULTANT, pursuant to this Agreement, are for the sole use of OC SAN, its agents and employees. Neither the documents nor their contents shall be released to any third party without the prior written consent of OC SAN. This provision does not apply to information that (a) was publicly known, or otherwise known to the CONSULTANT, at the time that it was disclosed to the CONSULTANT by OC SAN, (b) subsequently becomes publicly known to the CONSULTANT other than through disclosure by OC SAN.

2. COMPENSATION

Total compensation shall be paid to CONSULTANT for the Construction Support Services in accordance with the following provisions:

A. Total Compensation

Total compensation shall be in an amount not to exceed «Grand Total Written Amount» Dollars (\$«Grand Total Amount»). Total compensation to CONSULTANT including burdened labor (salaries plus benefits), overhead, profit, direct costs, and Subconsultant(s) fees and costs shall not exceed the sum set forth in Attachment "E" - Fee Proposal.

B. Labor

As a portion of the total compensation to be paid to CONSULTANT, OC SAN shall pay to CONSULTANT a sum equal to the burdened salaries (salaries plus benefits) actually paid by CONSULTANT charged on an hourly-rate basis to this project and paid to the personnel of CONSULTANT. Upon request of OC SAN, CONSULTANT shall provide OC SAN with certified payroll records of all employees' work that is charged to this project.

C. Overhead

As a portion of the total compensation to be paid to CONSULTANT, OC SAN shall compensate CONSULTANT and Subconsultants for overhead at the rate equal to the percentage of burdened labor as specified in Attachment "E" - Fee Proposal.

D. Profit

Profit for CONSULTANT and Subconsultants shall be a percentage of consulting services fees (Burdened Labor and Overhead). When the consulting or subconsulting services amount is \$250,000 or less, the maximum Profit shall be 10%. Between \$250,000 and \$2,500,000, the maximum Profit shall be limited by a straight declining percentage between 10% and 5%. For consulting or subconsulting services fees with a value greater than \$2,500,000, the maximum Profit shall be 5%. Addenda shall be governed by the same maximum Profit percentage after adding consulting services fees.

As a portion of the total compensation to be paid to CONSULTANT and Subconsultants, OC SAN shall pay profit for all services rendered by CONSULTANT and Subconsultants for this project according to Attachment "E" - Fee Proposal.

E. Subconsultants

For any Subconsultant whose fees for services are greater than or equal to \$100,000 (excluding out-of-pocket costs), CONSULTANT shall pay to Subconsultant total compensation in accordance with the Subconsultant amount specified in Attachment "E" - Fee Proposal.

For any Subconsultant whose fees for services are less than \$100,000, CONSULTANT may pay to Subconsultant total compensation on an hourly-rate basis [If there are no Subconsultants under \$100K, delete this phase 'per attached hourly rate schedule'.] per the attached hourly rate Schedule and as specified in the Scope of Work. OC SAN shall pay to CONSULTANT the actual costs of Subconsultant fees and charges in an amount not to exceed the sum set forth in Attachment "E" - Fee Proposal.

F. Direct Costs

OC SAN shall pay to CONSULTANT and Subconsultants the actual costs of permits and associated fees, travel and licenses for an amount not to exceed the sum set forth in Attachment "E" - Fee Proposal. OC SAN shall also pay to CONSULTANT actual costs for equipment rentals, leases or purchases with prior approval of OC SAN. Upon request, CONSULTANT shall provide to OC SAN receipts and other documentary records to support CONSULTANT's request for reimbursement of these amounts, see Attachment "D" – Allowable Direct Costs. All incidental expenses shall be included in overhead pursuant to Section 2 - COMPENSATION above.

G. Other Direct Costs

Other Direct Costs incurred by CONSULTANT and its Contractor due to modifications to the Scope of Work resulting from field investigations and field work required by the Agreement. These items may include special equipment, test equipment and tooling and other materials and services not previously identified. Refer to attachment "D" Allowable Direct Costs for payment information.

H. Reimbursable Direct Costs

OC SAN will reimburse the CONSULTANT for reasonable travel and business expenses as described in this section and further described in Attachment "D" - Allowable Direct Costs to this Agreement. The reimbursement of the abovementioned expenses will be based on an "accountable plan" as considered by Internal Revenue Service (IRS). The plan includes a combination of reimbursements based upon receipts and a "per diem" component approved by IRS. The most recent schedule of the per diem rates utilized by OC SAN can be found on the U.S. General Service Administration website at http://www.gsa.gov/portal/category/104711#.

The CONSULTANT shall be responsible for the most economical and practical means of management of reimbursable costs inclusive but not limited to travel, lodging and meals arrangements. OC SAN shall apply the most economic and practical method of reimbursement which may include reimbursements based upon receipts and/or "per diem" as deemed the most practical.

CONSULTANT shall be responsible for returning to OC SAN any excess reimbursements after the reimbursement has been paid by OC SAN.

Travel and travel arrangements – Any travel involving airfare, overnight stays or multiple day attendance must be approved by OC SAN in advance.

Local Travel is considered travel by the CONSULTANT within OC SAN general geographical area which includes Orange, Los Angeles, Ventura, San Bernardino, Riverside, San Diego, Imperial and Kern Counties. Automobile mileage is reimbursable if CONSULTANT is required to utilize personal vehicle for local travel.

Lodging – Overnight stays will not be approved by OC SAN for local travel. However, under certain circumstances overnight stay may be allowed at the discretion of OC SAN based on reasonableness of meeting schedules and the amount of time required for travel by the CONSULTANT. Such determination will be made on a case-by-case basis and at the discretion of OC SAN.

Travel Meals – Per-diem rates as approved by IRS shall be utilized for travel meals reimbursements. Per diem rates shall be applied to meals that are appropriate for travel times. Receipts are not required for the approved meals.

Additional details related to the reimbursement of the allowable direct costs are provided in the Attachment "D" - Allowable Direct Costs of this Agreement.

I. Limitation of Costs

If, at any time, CONSULTANT estimates the cost of performing the services described in CONSULTANT's Proposal will exceed the not-to-exceed amount of the Agreement, including approved additional compensation, CONSULTANT shall notify OC SAN immediately, and in writing. This written notice shall indicate the additional amount necessary to complete the services. Any cost incurred in excess of the approved not-to-exceed amount, without the express written consent of OC SAN's authorized representative shall be at CONSULTANT's own risk. This written notice shall be provided separately from, and in addition to any notification requirements contained in the CONSULTANT's invoice and monthly progress report. Failure to notify OC SAN that the services cannot be completed within the authorized not-to-exceed amount is a material breach of this Agreement.

3. REALLOCATION OF TOTAL COMPENSATION

OC SAN, by its Director of Engineering, shall have the right to approve a reallocation of the incremental amounts constituting the total compensation, provided that the total compensation is not increased.

4. PAYMENT

- A. Monthly Invoice: CONSULTANT shall include in its monthly invoice, a detailed breakdown of costs associated with the performance of any corrections or revisions of the work for that invoicing period. CONSULTANT shall allocate costs in the same manner as it would for payment requests as described in this Section of the Agreement. CONSULTANT shall warrant and certify the accuracy of these costs and understand that submitted costs are subject to Section 11 AUDIT PROVISIONS.
- B. CONSULTANT may submit monthly or periodic statements requesting payment for those items included in Section 2 COMPENSATION hereof in the format as required by OC SAN. Such requests shall be based upon the amount and value of the work and services performed by CONSULTANT under this Agreement and shall be prepared by CONSULTANT and accompanied by such supporting data, including a detailed breakdown of all costs incurred and work performed during the period covered by the statement, as may be required by OC SAN.

Upon approval of such payment request by OC SAN, payment shall be made to CONSULTANT as soon as practicable of one hundred percent (100%) of the invoiced amount on a per task basis.

If OC SAN determines that the work under this Agreement, or any specified task hereunder, is incomplete and that the amount of payment is in excess of:

- The amount considered by OC SAN's Director of Engineering to be adequate for the protection of OC SAN; or
- ii. The percentage of the work accomplished for each task.

- OC SAN may, at the discretion of the Director of Engineering, retain an amount equal to that which ensures that the total amount paid to that date does not exceed the percentage of the completed work for each task or the project in its entirety.
- C. CONSULTANT may submit periodic payment requests for each 30-day period of this Agreement for the profit as set forth in Section 2 COMPENSATION above. Said profit payment request shall be proportionate to the work actually accomplished to date on a per task basis. In the event OC SAN's Director of Engineering determines that no satisfactory progress has been made since the prior payment, or in the event of a delay in the work progress for any reason, OC SAN shall have the right to withhold any scheduled proportionate profit payment.
- D. Upon satisfactory completion by CONSULTANT of the work called for under the terms of this Agreement, and upon acceptance of such work by OC SAN, CONSULTANT will be paid the unpaid balance of any money due for such work, including any retained percentages relating to this portion of the work.
- E. Upon satisfactory completion of the work performed hereunder and prior to final payment under this Agreement for such work, or prior settlement upon termination of this Agreement, and as a condition precedent thereto, CONSULTANT shall execute and deliver to OC SAN a release of all claims against OC SAN arising under or by virtue of this Agreement other than such claims, if any, as may be specifically exempted by CONSULTANT from the operation of the release in stated amounts to be set forth therein.
- F. Pursuant to the California False Claims Act (Government Code Sections 12650-12655), any CONSULTANT that knowingly submits a false claim to OC SAN for compensation under the terms of this Agreement may be held liable for treble damages and up to a ten thousand dollars (\$10,000) civil penalty for each false claim submitted. This Section shall also be binding on all Subconsultants.

A CONSULTANT or Subconsultant shall be deemed to have submitted a false claim when the CONSULTANT or Subconsultant: a) knowingly presents or causes to be presented to an officer or employee of OC SAN a false claim or request for payment or approval; b) knowingly makes, uses, or causes to be made or used a false record or statement to get a false claim paid or approved by OC SAN; c) conspires to defraud OC SAN by getting a false claim allowed or paid by OC SAN; d) knowingly makes, uses, or causes to be made or used a false record or statement to conceal, avoid, or decrease an obligation to OC SAN; or e) is a beneficiary of an inadvertent submission of a false claim to OC SAN, and fails to disclose the false claim to OC SAN within a reasonable time after discovery of the false claim.

5. CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION AND RECORD OF WAGES

A. To the extent CONSULTANT's employees and/or Subconsultants who will perform work during the design and preconstruction phases of a construction

contract for which Prevailing Wage Determinations have been issued by the DIR and as more specifically defined under Labor Code Section 1720 et seq, CONSULTANT and Subconsultants shall comply with the registration requirements of Labor Code Section 1725.5. Pursuant to Labor Code Section 1771.4, the work is subject to compliance monitoring and enforcement by the DIR.

- B. The CONSULTANT and Subconsultants shall maintain accurate payroll records and shall comply with all the provisions of Labor Code Section 1776, and shall submit payroll records to the Labor Commissioner pursuant to Labor Code Section 1771.4(a) (3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.
- C. Pursuant to Labor Code Section 1776, the CONSULTANT and Subconsultants shall furnish a copy of all certified payroll records to OC SAN and/or general public upon request, provided the public request is made through OC SAN, the Division of Apprenticeship Standards or the Division of Labor Enforcement of the Department of Industrial Relations.
- D. The CONSULTANT and Subconsultants shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulation Section 16461(e).

6. DOCUMENT OWNERSHIP – SUBSEQUENT CHANGES TO PLANS AND SPECIFICATIONS

- A. Ownership of Documents for the Construction Support Services performed.
 - All documents, including but not limited to, original plans, studies, sketches, drawings, computer printouts and disk files, and specifications prepared in connection with or related to the Scope of Work or Construction Support Services, shall be the property of OC SAN. OC SAN's ownership of these documents includes use of, reproduction or reuse of and all incidental rights, whether or not the work for which they were prepared has been performed. OC SAN ownership entitlement arises upon payment or any partial payment for work performed and includes ownership of any and all work product completed prior to that payment. This Section shall apply whether the CONSULTANT's Construction Support Services are terminated: a) by the completion of the Agreement, or b) in accordance with other provisions of this Agreement. Notwithstanding any other provision of this paragraph or Agreement, the CONSULTANT shall have the right to make copies of all such plans, studies, sketches, drawings, computer printouts and disk files, and specifications.
- B. CONSULTANT shall not be responsible for damage caused by subsequent changes to or uses of the plans or specifications, where the subsequent changes or uses are not authorized or approved by CONSULTANT, provided that the service rendered by CONSULTANT was not a proximate cause of the damage.

7. INSURANCE

A. General

- i. Insurance shall be issued and underwritten by insurance companies acceptable to OC SAN.
- ii. Insurers must have an "A-" Policyholder's Rating, or better, and Financial Rating of at least Class VIII, or better, in accordance with the most current A.M. Best's Guide Rating. However, OC SAN will accept State Compensation Insurance Fund, for the required policy of Workers' Compensation Insurance subject to OC SAN's option to require a change in insurer in the event the State Fund financial rating is decreased below "B". Further, OC SAN will require CONSULTANT to substitute any insurer whose rating drops below the levels herein specified. Said substitution shall occur within twenty (20) days of written notice to CONSULTANT, by OC SAN or its agent.
- iii. Coverage shall be in effect prior to the commencement of any work under this Agreement.

B. General Liability

The CONSULTANT shall maintain during the life of this Agreement, including the period of warranty, commercial general liability insurance written on an occurrence basis providing the following minimum limits of liability coverage: One Million Dollars (\$1,000,000) per occurrence with Two Million Dollars (\$2,000,000) aggregate. If aggregate limits apply separately to this contract (as evidenced by submission of ISO form CG 25 03 or 25 04), then the aggregate limit may be equivalent to the per occurrence limit. Said insurance shall include coverage for the following hazards: premises-operations, blanket contractual liability (for this Agreement), products liability/completed operations (including any product manufactured or assembled), broad form property damage, blanket contractual liability, independent contractors liability, personal and advertising injury, mobile equipment, owners and contractors protective liability, and cross liability and severability of interest clauses. A statement on an insurance certificate will not be accepted in lieu of the actual additional insured endorsement(s). If requested by OC SAN and applicable, XCU coverage (Explosion, Collapse and Underground) and Riggers/On Hook Liability must be included in the general liability policy and coverage must be reflected on the submitted certificate of insurance. Where permitted by law, CONSULTANT hereby waives all rights of recovery by subrogation because of deductible clauses, inadequacy of limits of any insurance policy, limitations or exclusions of coverage, or any other reason against OC SAN, its or their officers, agents, or employees, and any other consultant, contractor, or subcontractor performing work or rendering services on behalf of OC SAN in connection with the planning, development, and construction of the project. In all its insurance coverages related to the work, CONSULTANT shall include clauses providing that each insurer shall waive all of its rights of recovery by subrogation against OC SAN, its or their officers, agents, or employees, or any other consultant, contractor, or subcontractor performing work or rendering services at the project. Where permitted by law, CONSULTANT shall require similar written express waivers and insurance clauses from each of its Subconsultants of every tier. A waiver of subrogation shall be effective as to any

individual or entity, even if such individual or entity (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium, directly or indirectly, and (c) whether or not such individual or entity has an insurable interest in the property damaged.

C. Umbrella Excess Liability

The minimum limits of general liability and automobile liability insurance required, as set forth herein, shall be provided for through either a single policy of primary insurance or a combination of policies of primary and umbrella excess coverage. Umbrella excess liability coverage shall be issued with limits of liability which, when combined with the primary insurance, will equal the minimum limits for general liability and automobile liability.

D. Automobile/Vehicle Liability Insurance

The CONSULTANT shall maintain a policy of automobile liability insurance on a comprehensive form covering all owned, non-owned, and hired automobiles, trucks, and other vehicles providing the following minimum limit of liability coverage: combined single limit of Five Hundred Thousand Dollars (\$500,000). A statement on an insurance certificate will not be accepted in lieu of the actual additional insured endorsement.

E. Drone Liability Insurance

If a drone will be used, drone liability insurance must be maintained by CONSULTANT in the amount of one million dollars (\$1,000,000) in form acceptable to OC SAN.

F. Workers' Compensation Insurance

The CONSULTANT shall provide such workers' compensation insurance as required by the Labor Code of the State of California in the amount of the statutory limit, including employer's liability insurance with a minimum limit of One Million Dollars (\$1,000,000) per occurrence. Such workers' compensation insurance shall be endorsed to provide for a waiver of subrogation in favor of OC SAN. A statement on an insurance certificate will not be accepted in lieu of the actual endorsements unless the insurance carrier is State of California Insurance Fund and the identifier "SCIF" and endorsement numbers 2570 and 2065 are referenced on the certificate of insurance. If an exposure to Jones Act liability may exist, the insurance required herein shall include coverage for Jones Act claims.

G. Errors and Omissions/Professional Liability

CONSULTANT shall maintain in full force and effect, throughout the term of this Agreement, standard industry form professional negligence errors and omissions insurance coverage in an amount of not less than Five Million Dollars (\$5,000,000) with limits in accordance with the provisions of this paragraph. If the policy of insurance is written on a "claims made" basis, said policy shall be

continued in full force and effect at all times during the term of this Agreement, and for a period of five (5) years from the date of the completion of the services hereunder.

In the event of termination of said policy during this period, CONSULTANT shall obtain continuing insurance coverage for the prior acts or omissions of CONSULTANT during the course of performing services under the term of this Agreement. Said coverage shall be evidenced by either a new policy evidencing no gap in coverage or by separate extended "tail" coverage with the present or new carrier.

In the event the present policy of insurance is written on an "occurrence" basis, said policy shall be continued in full force and effect during the term of this Agreement or until completion of the services provided for in this Agreement, whichever is later. In the event of termination of said policy during this period, new coverage shall be obtained for the required period to insure for the prior acts of CONSULTANT during the course of performing services under the term of this Agreement.

CONSULTANT shall provide to OC SAN a certificate of insurance in a form acceptable to OC SAN indicating the deductible or self-retention amounts and the expiration date of said policy and shall provide renewal certificates not less than ten (10) days prior to the expiration of each policy term.

H. Proof of Coverage

The CONSULTANT shall furnish OC SAN with original certificates and amendatory endorsements effecting coverage. Said policies and endorsements shall conform to the requirements herein stated. All certificates and endorsements are to be received and approved by OC SAN before work commences. OC SAN reserves the right to require, at any time, complete, certified copies of all required insurance policies, including endorsements, effecting the coverage required. The following are approved forms that must be submitted as proof of coverage:

Certificate of Insurance	ACORD Form or other equivalent certificate of insurance form
 Additional Insurance (General Liability) 	The combination of (ISO Forms) CG 20 10 <u>and</u> CG 20 37
	All other additional insured endorsements must be submitted for approval by OC SAN, and OC SAN may reject alternatives that provide different or less coverage to OC SAN.
 Additional Insured (Automobile Liability) 	Submit endorsement provided by carrier for OC SAN approval.

Submit workers' compensation waiver of

Waiver of Subrogation

subrogation endorsement provided by carrier for OC SAN approval.

Cancellation Notice

No endorsement is required. However, CONSULTANT is responsible for notifying OC SAN of any pending or actual insurance policy cancellation, as described in Article I. Cancellation and Policy Change Notice, below.

I. Cancellation and Policy Change Notice

The CONSULTANT is required to notify OC SAN in writing of any insurance cancellation notice it receives or other knowledge of pending or actual insurance policy cancellation, within two (2) working days of receipt of such notice or acquisition of such knowledge. Additionally, the CONSULTANT is required to notify OC SAN in writing of any change in the terms of insurance, including reduction in coverage or increase in deductible/SIR, within two (2) working days of receipt of such notice or knowledge of same.

Said notices shall be mailed to OC SAN at:

ORANGE COUNTY SANITATION DISTRICT 10844 Ellis Avenue Fountain Valley, CA 92708 Attention: Contracts, Purchasing & Materials Management Division

J. Primary Insurance

The general and automobile liability policies shall contain a "Primary and Non Contributory" clause. Any other insurance maintained by OC SAN shall be excess and not contributing with the insurance provided by CONSULTANT.

K. Separation of Insured

The general and automobile liability policies shall contain a "Separation of Insureds" clause.

L. Non-Limiting (if applicable)

Nothing in this document shall be construed as limiting in any way, nor shall it limit the indemnification provision contained in this Agreement, or the extent to which CONSULTANT may be held responsible for payment of damages to persons or property.

M. Deductibles and Self-Insured Retentions

Any deductible and/or self-insured retention must be declared to OC SAN on the certificate of insurance. All deductibles and/or self-insured retentions require approval by OC SAN. At the option of OC SAN, either: the insurer shall reduce

or eliminate such deductible or self-insured retention as respects OC SAN; or the CONSULTANT shall provide a financial guarantee satisfactory to OC SAN guaranteeing payment of losses and related investigations, claim administration and defense expenses.

N. Defense Costs

The general and automobile liability policies shall have a provision that defense costs for all insureds and additional insureds are paid in addition to and do not deplete any policy limits.

O. Subconsultants

The CONSULTANT shall be responsible to establish insurance requirements for any Subconsultant hired by the CONSULTANT. The insurance shall be in amounts and types reasonably sufficient to deal with the risk of loss involving the Subconsultant's operations and work.

P. Limits Are Minimums

If the CONSULTANT maintains higher limits than any minimums shown above, then OC SAN requires and shall be entitled to coverage for the higher limits maintained by CONSULTANT.

8. SCOPE CHANGES

In the event of a change in the Scope of Work or other terms in the Agreement, as requested by OC SAN, the parties hereto shall execute an Amendment to this Agreement setting forth with particularity all terms of the new Agreement, including, but not limited to, any additional CONSULTANT's fees. CONSULTANT hereby agrees to use any and all procedures, programs, and systems required by OC SAN to process and execute such Amendment(s), including, but not limited to, computer programs and systems.

9. PROJECT TEAM AND SUBCONSULTANTS

CONSULTANT shall provide to OC SAN, prior to execution of this Agreement, the names and full description of all Subconsultants and CONSULTANT's project team members anticipated to be used on this project by CONSULTANT. CONSULTANT shall include a description of the scope of work to be done by each Subconsultant and each CONSULTANT's project team member. CONSULTANT shall include the respective compensation amounts for CONSULTANT and each Subconsultant on a per task basis, broken down as indicated in Section 2 -COMPENSATION.

There shall be no substitution of the listed Subconsultants and CONSULTANT's project team members without prior written approval by OC SAN.

10. ENGINEERING REGISTRATION

The CONSULTANT's personnel are comprised of registered engineers and a staff of

specialists and draftsmen in each department. The firm itself is not a registered engineer but represents and agrees that wherever in the performance of this Agreement requires the services of a registered engineer, such services hereunder will be performed under the direct supervision of registered engineers.

11. AUDIT PROVISIONS

- A. OC SAN retains the reasonable right to access, review, examine, and audit, any and all books, records, documents and any other evidence of procedures and practices that OC SAN determines are necessary to discover and verify that the CONSULTANT is in compliance with all requirements under this Agreement. The CONSULTANT shall include OC SAN's right as described above, in any and all of their subcontracts, and shall ensure that these rights are binding upon all Subconsultants.
- B. OC SAN retains the right to examine CONSULTANT's books, records, documents and any other evidence of procedures and practices that OC SAN determines are necessary to discover and verify all direct and indirect costs, of whatever nature, which are claimed to have been incurred, or anticipated to be incurred or to ensure CONSULTANT's compliance with all requirements under this Agreement during the term of this Agreement and for a period of three (3) years after its termination.
- C. CONSULTANT shall maintain complete and accurate records in accordance with generally accepted industry standard practices and OC SAN's policy. The CONSULTANT shall make available to OC SAN for review and audit, all project related accounting records and documents, and any other financial data within 15 days after receipt of notice from OC SAN. Upon OC SAN's request, the CONSULTANT shall submit exact duplicates of originals of all requested records to OC SAN. If an audit is performed, CONSULTANT shall ensure that a qualified employee of the CONSULTANT will be available to assist OC SAN's auditor in obtaining all project related accounting records and documents, and any other financial data.

12. LEGAL RELATIONSHIP BETWEEN PARTIES

The legal relationship between the parties hereto is that of an independent contractor and nothing herein shall be deemed to make CONSULTANT an employee of OC SAN.

13. NOTICES

All notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of said notices in person or by depositing said notices in the U.S. mail, registered or certified mail, return receipt requested, postage prepaid.

Notices shall be mailed to OC SAN at:

ORANGE COUNTY SANITATION DISTRICT 10844 Ellis Avenue Fountain Valley, CA 92708-7018 Attention: «Contracts Administrator's Name», «Contracts Administrator's Title» Copy: «Project Manager's Name», Project Manager

Notices shall be mailed to CONSULTANT at:

«CONSULTANT COMPANY» «Street Address» «City, State Zip»

Attention: «CONSULTANT's Representative»

All communication regarding the Scope of Work, will be addressed to the Project Manager. Direction from other OC SAN's staff must be approved in writing by OC SAN's Project Manager prior to action from the CONSULTANT.

14. TERMINATION

OC SAN may terminate this Agreement at any time, without cause, upon giving thirty (30) days written notice to CONSULTANT. In the event of such termination, CONSULTANT shall be entitled to compensation for work performed on a prorated basis through and including the effective date of termination.

CONSULTANT shall be permitted to terminate this Agreement upon thirty (30) days written notice only if CONSULTANT is not compensated for billed amounts in accordance with the provisions of this Agreement, when the same are due.

Notice of termination shall be mailed to OC SAN and/or CONSULTANT in accordance with Section 13 - NOTICES.

15. DOCUMENTS AND STUDY MATERIALS

The documents and study materials for this project shall become the property of OC SAN upon the termination or completion of the work. CONSULTANT agrees to furnish to OC SAN copies of all memoranda, correspondence, computation, and study materials in its files pertaining to the work described in this Agreement, which is requested in writing by OC SAN.

16. COMPLIANCE

A. Labor

CONSULTANT certifies by the execution of this Agreement that it pays employees not less than the minimum wage as defined by law, and that it does not discriminate in its employment with regard to race, color, religion, sex or national origin; that it is in compliance with all federal, state and local directives and executive orders regarding non-discrimination in employment; and that it agrees to demonstrate positively and aggressively the principle of equal opportunity in employment.

B. Air Pollution

CONSULTANT and its subconsultants and subcontractors shall comply with all

applicable federal, state and local air pollution control laws and regulations.

C. Iran Contracting Act

CONSULTANT and its subconsultants and subcontractors shall comply with the Iran Contracting Act of 2010 (Public Contract Code sections 2200-2208).

17. AGREEMENT EXECUTION AUTHORIZATION

Both OC SAN and CONSULTANT do covenant that each individual executing this document by and on behalf of each party is a person duly authorized to execute agreements for that party.

18. DISPUTE RESOLUTION

In the event of a dispute arising between the parties regarding performance or interpretation of this Agreement, the dispute shall be resolved by binding arbitration under the auspices of the Judicial Arbitration and Mediation Service ("JAMS"), or similar organization or entity conducting alternate dispute resolution services.

19. ATTORNEY'S FEES, COSTS AND NECESSARY DISBURSEMENTS

If any action at law or in equity or if any proceeding in the form of an Alternative Dispute Resolution (ADR) is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, costs and necessary disbursements in addition to any other relief to which it may be entitled.

20. PROGRESS REPORTS

Monthly progress reports shall be submitted for review by the tenth day of the following month and must include as a minimum: 1) current activities, 2) future activities, 3) potential items that are not included in the Scope of Work, 4) concerns and possible delays, 5) percentage of completion, and 6) budget status.

21. WARRANTY

CONSULTANT shall perform its services in accordance with generally accepted industry and professional standards. If, within the 12-month period following completion of its services, OC SAN informs CONSULTANT that any part of the services fails to meet those standards, CONSULTANT shall, within the time prescribed by OC SAN, take all such actions as are necessary to correct or complete the noted deficiency(ies).

22. INDEMNIFICATION

To the fullest extent permitted by law, CONSULTANT shall indemnify, defend (at CONSULTANT's sole cost and expense and with legal counsel approved by OC SAN, which approval shall not be unreasonably withheld), protect and hold harmless OC SAN and all of OC SAN's officers, directors, employees, consultants, and agents (collectively the "Indemnified Parties"), from and against any and all claims, damages, liabilities, causes of action, suits, arbitration awards, losses, judgments, fines, penalties, costs and

expenses including without limitation, attorneys' fees, disbursements and court costs, and all other professional, expert or consultants fees and costs and OC SAN's general and administrative expenses (individually, a "Claim", or collectively, "Claims") which may arise from or are in any manner related, directly or indirectly, to any work performed, or any operations, activities, or services provided by CONSULTANT in carrying out its obligations under this Agreement to the extent of the negligent, recklessness and/or willful misconduct of CONSULTANT, its principals, officers, agents, employees, CONSULTANT's suppliers, consultants, subconsultants, subcontractors, and/or anyone employed directly or indirectly by any of them, regardless of any contributing negligence or strict liability of an Indemnified Party. Notwithstanding the foregoing, nothing herein shall be construed to require CONSULTANT to indemnify the Indemnified Parties from any Claim arising from:

- (A) the sole or active negligence or willful misconduct of the Indemnified Parties; or
- (B) a natural disaster or other act of God, such as an earthquake; or
- (C) the independent action of a third party who is neither one of the Indemnified Parties nor the CONSULTANT, nor its principal, officer, agent, employee, nor CONSULTANT's supplier, consultant, subconsultant, subcontractor, nor anyone employed directly or indirectly by any of them.

Exceptions (A) through (B) above shall not apply, and CONSULTANT shall, to the fullest extent permitted by law, indemnify the Indemnified Parties, from Claims arising from more than one cause if any such cause taken alone would otherwise result in the obligation to indemnify hereunder.

CONSULTANT's liability for indemnification hereunder is in addition to any liability CONSULTANT may have to OC SAN for a breach by CONSULTANT of any of the provisions of this Agreement. Under no circumstances shall the insurance requirements and limits set forth in this Agreement be construed to limit CONSULTANT's indemnification obligation or other liability hereunder.

The terms of this Agreement are contractual and the result of negotiation between the parties hereto. Accordingly, any rule of construction of contracts (including, without limitation, California Civil Code Section 1654) that ambiguities are to be construed against the drafting party, shall not be employed in the interpretation of this Agreement.

23. DUTY TO DEFEND

The duty to defend hereunder is wholly independent of and separate from the duty to indemnify and such duty to defend shall exist regardless of any ultimate liability of CONSULTANT and shall be consistent with Civil Code Section 2782.8. Such defense obligation shall arise immediately upon presentation of a Claim by any person if, without regard to the merit of the Claim, such Claim could potentially result in an obligation to indemnify one or more Indemnified Parties, and upon written notice of such Claim being provided to CONSULTANT. Payment to CONSULTANT by any Indemnified Party or the payment or advance of defense costs by any Indemnified Party shall not be a condition precedent to enforcing such Indemnified Party's rights to indemnification hereunder. In the event a final judgment, arbitration, award, order, settlement, or other final resolution

expressly determines that the claim did not arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the CONSULTANT, to any extent, then OC SAN will reimburse CONSULTANT for the reasonable costs of defending the Indemnified Parties against such claims.

CONSULTANT's indemnification obligation hereunder shall survive the expiration or earlier termination of this Agreement until such time as action against the Indemnified Parties for such matter indemnified hereunder is fully and finally barred by the applicable statute of limitations.

24. CONSULTANT PERFORMANCE

The CONSULTANT's performance shall be evaluated by OC SAN. A copy of the evaluation shall be sent to the CONSULTANT for comment. The evaluation, together with the comments, shall be retained by OC SAN and may be considered in future CONSULTANT selection processes.

25. COMPLIANCE WITH OC SAN POLICIES AND PROCEDURES

CONSULTANT shall comply with all OC SAN policies and procedures including the Contractor Safety Standards, as applicable, all of which may be amended from time to time.

26. CLOSEOUT

When OC SAN determines that all work authorized under the Agreement is fully complete and that OC SAN requires no further work from CONSULTANT, or the Agreement is otherwise terminated or expires in accordance with the terms of the Agreement, OC SAN shall give the Consultant written notice that the Agreement will be closed out. CONSULTANT shall submit all outstanding billings, work submittals, deliverables, reports or similarly related documents as required under the Agreement within thirty (30) days of receipt of notice of Agreement closeout.

Upon receipt of CONSULTANT's submittals, OC SAN shall commence a closeout audit of the Agreement and will either:

- i. Give the CONSULTANT a final Agreement Acceptance: or
- ii. Advise the CONSULTANT in writing of any outstanding item or items which must be furnished, completed, or corrected at the CONSULTANT's cost.

CONSULTANT shall be required to provide adequate resources to fully support any administrative closeout efforts identified in this Agreement. Such support must be provided within the timeframe requested by OC SAN.

Notwithstanding the final Agreement Acceptance the CONSULTANT will not be relieved of its obligations hereunder, nor will the CONSULTANT be relieved of its obligations to complete any portions of the work, the non-completion of which were not disclosed to OC SAN (regardless of whether such nondisclosures were fraudulent, negligent, or otherwise); and the CONSULTANT shall remain obligated under all those provisions of

the Agreement which expressly or by their nature extend beyond and survive final Agreement Acceptance.

Any failure by OC SAN to reject the work or to reject the CONSULTANT's request for final Agreement Acceptance as set forth above shall not be deemed to be acceptance of the work by OC SAN for any purpose nor imply acceptance of, or agreement with, the CONSULTANT's request for final Agreement Acceptance.

27. ENTIRE AGREEMENT

This Agreement constitutes the entire understanding and agreement between the Parties and supersedes all previous negotiations between them pertaining to the subject matter thereof.



IN WITNESS WHEREOF, this Agreement has been executed in the name of OC SAN and CONSULTANT by their respective duly authorized officers as of the day and year first written above.

	CC	NSULTANT: COMPANY NAME	
	Ву		
			Date
		Printed Name & Title	
	OR	RANGE COUNTY SANITATION DISTRICT	
	Ву		
	_,	Chad P. Wanke	Date
		Board Chairman	
	P.v.		
	Ву	Kelly A. Lore	Date
		Clerk of the Board	
	Div		
	Ву	Ruth Zintzun	Date
		Finance & Procurement Manager	Bate
Attachments:	Attachment "A" -	Scope of Work	
	Attachment "B" -		
	Attachment "C" –		
	Attachment "F" –	Allowable Direct Costs	
	Attachment "F" – Attachment "F" –	Not Used	
	Attachment "G" –	Not Used	
	Attachment "H" –		
	Attachment "J" – I	Cost Matrix and Summary	
		Minor Subconsultant Hourly Rate Schedule	
Attachment "L" – Contractor Safety Standards			

DM:xx

Attachment "M" - Iran Contracting Act Verification

PROJECT NO. 2-49

PROFESSIONAL CONSTRUCTION SERVICES AGREEMENT

ATTACHMENT A - SCOPE OF WORK

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I. SUMMARY

Provide construction engineering support services for the construction and installation, and closeout phases of this project.

II. PROJECT SCHEDULE

The schedule for the services specified in this Scope of Work (SOW) shall be provided per the construction contract schedule, and the following schedule constraints:

Task(s)	Period of Performance
Submittals	As described under Task 4.3 - Submittal Reviews
Request for Information	As described under Task 4.4 - Request for Information
Record Drawings	Draft Record Drawings shall be submitted to OC SAN within 60 days of receipt from OC SAN of the approved Contractor's As-Built Drawings. The final Record Drawings shall be submitted within 21 days of receipt of OC SAN's comments on the Draft Record Drawings.

III. PROJECT IMPLEMENTATION

All Orange County Sanitation District (OC SAN) projects are divided into six phases. The CONSULTANT shall provide engineering support services for Phase 4 Construction and Installation Services, and Phase 6 Closeout.

Phase 1 – Project Development – Completed

Phase 2 – Preliminary Design – Completed

Phase 3 – Final Design – Completed

Phase 4 – Construction and Installation Services

Phase 5 – Commissioning Services – Not Included

Phase 6 - Closeout

PHASE 4 – CONSTRUCTION AND INSTALLATION SERVICES

OC SAN will administer and provide field inspection for the construction contract. Construction engineering support services shall be provided by the CONSULTANT as requested by OC SAN.

The CONSULTANT shall provide the key project personnel as described in its proposal for this project. The CONSULTANT shall not reassign the key project personnel without prior approval of OC SAN. OC SAN may request reassignment of any of the CONSULTANT's or its subconsultant's personnel, based on poor performance.

For all services, the CONSULTANT shall refer to the Engineering Design Guidelines, Chapter 01 for detailed requirements.

Quality Assurance/Quality Control (QA/QC): The CONSULTANT shall administer a program of QA/QC procedures for producing quality work and shall effectively manage and control the work. Specific procedures shall include but not be limited to planning, coordination, tracking, checking, reviewing, and scheduling the work. The CONSULTANT shall subject all work products prepared by the CONSULTANT to the CONSULTANT's in-house QA/QC procedures

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prior to submittal to OC SAN. QA/QC hours and costs shall be incorporated into other tasks within this SOW.

Task 4.1 – Project Management

The CONSULTANT shall be responsible for detailed management of the work, including managing its subconsultants, and shall keep OC SAN apprised of the status of the work.

The CONSULTANT shall conduct monthly project management meetings with OC SAN. These meetings shall be attended by OC SAN's Project Manager and the CONSULTANT's Project Manager at a mutually agreeable time. The purpose of the meetings shall be to review the CONSULTANT's Project Manager's progress report and the status of the SOW, budget, and any issues which may affect completion of the work. Meetings should be arranged so that the progress report can be submitted three days before each meeting.

The CONSULTANT shall prepare and submit monthly invoices to OC SAN no later than the second Wednesday of the following month. The invoices shall document the hours and billing rate for each person that works on the project for each task in the work breakdown structure (WBS). Overhead, profit, and any direct costs shall also be shown for each task. As part of the summary section of the invoice, the CONSULTANT shall also include the following information:

- Budget
- Current billing period invoicing
- Previous billing period "total invoiced to date"
- Budget amount remaining
- Current billing period "total percent invoice to date"
- Current billing period "total percent completed to date"

The monthly progress report shall be submitted with the invoice as part of the monthly request for payment. The monthly progress report shall include the following:

- Work completed in the billing period
- Work anticipated for the upcoming month
- Outstanding project issues
- Status and issues impacting project scope and budget
- Percent complete, tabulated on a per task basis
- Cost to complete, tabulated on a per task basis
- Overall project budget, tabulated on a per task basis
- Travel and site visit summary
- Log documenting work completed to date on requests for information (RFIs), submittal reviews, Master Document Index (MDI), and change order preparation
- Log identifying and determining status of project risks
- Out of scope items log

The CONSULTANT shall also provide the percent budget spent for each of OC SAN's WBS cost codes (i.e. by work package and phase). OC SAN will provide a list of cost codes by phase to the CONSULTANT.

The CONSULTANT shall also provide a summary of progress and expenditures to date.

OC SAN will provide a sample invoice structure to the CONSULTANT after the issuance of the Notice to Proceed (NTP) for this SOW.

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Task 4.1.1 - PMWeb Procedures

This Agreement shall utilize PMWeb as the Project Control Management System (PCMS) for overall management of the Agreement. All PCMS related documents requiring formal signatures shall be digital, and all copies digitally distributed. The PCMS conforms to the requirements set forth in California Government Code section 16.5 regarding digital signatures; therefore, digital signatures are in full force and effect and are legally the same as a hand-written signature. At least one PCMS account shall have the authority to approve Amendments.

OC SAN shall maintain the PCMS and serve as the administrator for the duration of this Agreement. OC SAN will provide the CONSULTANT with user access for approved personnel as needed for the duration of the Agreement. OC SAN shall control access to the PCMS by assigning user profiles and login credentials. CONSULTANT shall notify OC SAN of any changes to personnel. Access modifications shall be coordinated as needed throughout the Agreement. Do not to share PCMS account passwords with anyone inside or outside of the company.

Routine maintenance of the PCMS system may be required during the Agreement. Access to the PCMS system may be restricted or unavailable at these times and will be scheduled outside of typical working hours whenever possible.

The PCMS is a web-based environment and is therefore subject to the inherent speed and connectivity problems of the Internet. The CONSULTANT is responsible for its own connectivity to the Internet. PCMS response time is dependent on the CONSULTANT's equipment, including processor speed, Internet access speed, Internet traffic, etc.

OC SAN will not be liable for any delays associated with the utilization of the PCMS including, but not limited to: slow response time, down time periods, connectivity problems, or loss of information.

The OC SAN will provide a one-time training session of up to two (2) hours to train CONSULTANT's designated staff on general system requirements, procedures, and methods.

Automated system notifications generated via PCMS (e.g., in-system notices, system generated email, or email with attachment) shall constitute a formal written notification in compliance with the Professional Construction Service Agreement (PCSA).

Task 4.1.2 - PM WEB SCHEDULE OF SUBMITTALS

OC SAN has standardized on a Schedule of Submittals to provide uniformity between projects, support a commissioning dashboard, and ensure that submittals are properly retained per the Record Retention Policy. OC SAN has developed an Excel template based on our master specifications.

OC SAN will provide a PMWeb Master Schedule of Submittals template that includes the submittals required by OC SAN's Master Specifications. The CONSULTANT shall not deviate from the Master PMWeb Schedule of Submittals, except as required by the project specifications. The CONSULTANT shall develop submittal items for specifications that are not part of OC SAN's Master Specifications.

After the CONSULTANT has developed the Schedule of Submittals, it will be provided to the Resident Engineer and the Contractor to finalize before submittals are loaded into PMWeb.

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Submittals will be loaded into PMWeb based on the package (general construction, safety, and commissioning packages) and commissioning phase.

Task 4.2 – Initial Project Meetings

4.2.1 - Construction Hand-Off Workshop

The CONSULTANT shall participate in a two-hour construction hand-off workshop. The purpose of the workshop is for the CONSULTANT and the OC SAN design team to transfer project-specific knowledge to the OC SAN construction management and inspection staff who will be managing and monitoring construction. Agenda to be used at the meet is below:

- 1. General Project Overview
 - 1. Summary of Work and Project Elements
 - 2. Work Sequence
 - 3. Work Restrictions
 - 4. Public Outreach
 - 5. Schedule/Milestones
- 2. Project Risks
 - 1. For example:
 - 1. Tricky construction
 - 2. Areas where extra care need to be taken
 - 3. Submittals that need to be completed early due to lead time
 - 2. Key decision log items (i.e. any key items/decisions discussed during design that cannot change and we do not want to entertain proposals from the contractor to change?)
 - 3. Long lead time equipment submittals (timely processing required to avoid delays)
 - 1. Electrical control panels
 - 2. Transformers
 - 3. Special equipment
 - 4. Other project risk items
- 3. Project Team
 - 1. OC SAN Engineering Team
 - 2. Consultant Team involvement in Submittals & RFIs.
 - 3. Stakeholders- include public, organizations, businesses, agencies, O&M-personnel
- 4. Entitlements
 - 1. Permits
 - 2. CEQA MMs
- 5. Contractor
 - 1. Subs
 - 2. Bid price issues (e.g., did they bid anything suspiciously low)
 - 3. Past Contractor performance at OC SAN
 - 1. Strengths
 - 2. Weaknesses
 - 4. LDs
 - 5. Status of PMWeb Submittals List and set up

The workshop will be led by OC SAN's Project Engineer and the CONSULTANT's Project Manager and Project Engineer.

4.2.2 - PMWeb and Submittal Review Procedures Meeting

The CONSULTANT shall participate in a two-hour PMWeb procedure meeting and submittal procedure meeting. The purpose of this meeting is to review the roles and logistics for review and acceptance of construction contract documents and Contractor submittals. The CONSULTANT's Project Manager and Project Engineer shall attend. This meeting will be led by the OC SAN Resident Engineer and will be more specific to this contract than the overall PMWeb training identified in Section 4.1.1.

The project will utilize PMWeb for submittal reviews, project communication, tracking, and management.

4.2.3 - Preconstruction Conference

The CONSULTANT shall participate in a two-hour preconstruction conference attended by OC SAN staff, the CONSULTANT, the Contractor, subcontractors, and vendors. This meeting will be scheduled and presided over by OC SAN. In this meeting, OC SAN's Resident Engineer will describe the CONSULTANT's role in the project as the Design Engineer and the services the CONSULTANT shall provide during construction. OC SAN will prepare meeting minutes and the CONSULTANT shall review and comment on the minutes. Only the Project Manager and Lead Project Engineer shall attend.

Task 4.3 – Submittal Reviews

OC SAN will receive all submittals from the Contractor through PMWeb. OC SAN will forward submittals requiring the CONSULTANT's review to the CONSULTANT via PMWeb. The CONSULTANT shall review the submittals for conformance with the requirements of the Contract Documents and provide review comments to OC SAN through PMWeb within ten (10) calendar days after receipt of a submittal. The CONSULTANT shall return comments to OC SAN allowing enough time for OC SAN to incorporate all comments into a combined review comment set that OC SAN will return to the Contractor. The CONSULTANT shall accommodate occasional expedited reviews for time-sensitive submittals. Submittals shall include but not be limited to shop drawings, vendor tests, certifications, and test reports. All submittals will be made available electronically (PDF) through PMWeb.

If the CONSULTANT has staff other than the assigned technical lead review submittals, the CONSULTANT's technical lead shall review all submittal comments prior to returning them to OC SAN. For all submittals reviewed by the CONSULTANT, the CONSULTANT shall assume that they are the only reviewer for that submittal review and shall not rely on supplemental OC SAN comments.

See Section V - Quantitative Assumptions in this SOW for the estimated number of submittals.

Task 4.4 – Request for Information

OC SAN will forward to the CONSULTANT certain Requests for Information (RFIs) generated by the Contractor or OC SAN. The CONSULTANT shall return written responses to OC SAN as soon as possible or within three (3) calendar days of receipt of the RFIs, clarifying the requirements of the Contract Documents. The CONSULTANT shall generate necessary sketches, figures, and modifications to the drawings for clarification. When required to avoid schedule delay or additional construction-related costs, the CONSULTANT shall expedite the review of time sensitive RFIs.

If any changes to the Contract Documents are required, the CONSULTANT shall prepare these documents and submit them as PDF files to OC SAN. The CONSULTANT shall update all AutoCAD drawings and specifications upon OC SAN acceptance of any changes resulting from RFIs and change orders.

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See Section V- Quantitative Assumptions in this SOW for the estimated number of RFIs.

Task 4.5 – Contract Document Modifications, Design Changes and Change Orders

If the Contract Documents require modifications due to changed conditions, OC SAN requested changes, omissions, or design errors; the CONSULTANT shall prepare preliminary change order documents and forward them to OC SAN, as needed. OC SAN shall review the preliminary change order documents and request the CONSULTANT to incorporate any changes. OC SAN will issue the change order documents in a formal Request for Proposal (RFP) or Field Change Order (FCO) to the Contractor. The CONSULTANT shall forward design calculations and other design backup documents as necessary to OC SAN.

Any Contract Document that requires changes shall be identified with the date of change and reference (RFI number, RFP number, FCO number, etc.) shown on the document. Changes shown on the drawings shall be clearly marked and "clouded" for accurate identification of the scope of the change to the Contractor and inspection staff. The CONSULTANT shall maintain up-to-date Contract Documents. When a change is required on a Contract Drawing that has previously undergone a change, the updated drawing showing the previous change shall be used as the base document to identify new changes.

The CONSULTANT shall submit complete change documentation to OC SAN for use in RFIs, RFPs, and FCOs. This change documentation shall include drawings, schematics, details, schedules, and specifications, as required.

The CONSULTANT shall prepare cost estimates for the changes when requested by OC SAN.

The CONSULTANT shall maintain a Master Document Index (MDI) to track all changes issued on the project. The MDI shall be updated monthly and located in PMWeb.

See Section V- Quantitative Assumptions in this SOW for the estimated number of hours.

Task 4.6 – Construction Progress Meetings and Site Visits

The CONSULTANT shall attend up to 20 construction progress meetings in person, as requested by OC SAN's Resident Engineer. The scope shall include the time for travel, follow-up, and review of meeting minutes. Construction progress meeting minutes will be prepared by OC SAN.

The CONSULTANT shall attend or be available by phone for one-hour weekly construction progress meetings.

The CONSULTANT shall make field visits to assist in field problem resolution and design clarification/verification to help resolve construction issues as they arise and as requested by OC SAN. The CONSULTANT shall report the nature of the field site visits, the problem resolved, and identify staff requesting the site visit in the CONSULTANT's monthly project report. OC SAN will provide project inspection, except as required in other sections of this SOW.

See Section V- Quantitative Assumptions in this SOW for the estimated number of hours.

Task 4.7 - Public Outreach

OC SAN will be leading all public outreach efforts required for this construction. The CONSULTANT shall provide support for various public outreach activities, such as stakeholder engagement including but not limited to managing public inquiries via email and phone calls, serving as community liaison; planning, developing, and distributing collateral materials; logistics for public meetings, etc.

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Public Outreach Plan and Messaging

Prior to construction, the outreach team will update the existing Public Outreach Plan that includes goals, objectives and tactics that detail the overarching outreach strategy to provide education about the purpose for implementing the project that aligns with the demographics of the community and includes effective key messages and communications tools and tactics.

This plan will incorporate public outreach strategies, tactics, refined messaging, and content for implementation to raise awareness, build understanding and trust, and create a relationship allowing for two-way communication between stakeholders and OC San. The plan will include a schedule of outreach tasks and a list of potential opportunities and challenges. A refresh of the stakeholder database will also be provided by the construction management team to ensure accurate contact information is available before construction begins.

Outreach Team Deliverables:

• Communications and Outreach Plan (draft and final)

NOTIFICATIONS

Notifications will be critical throughout construction to ensure stakeholders are informed about the purpose, need and benefits of the project, know what to expect in terms of construction activities and any changes that may arise. A variety of notifications will be use throughout construction, and specific tactics will be consistent with OC San's standard notification processes. The majority of notifications will be provided to stakeholders electronically, but there will also be notifications that are printed and distributed in person or via U.S. Postal Service. OC San's normal email and text notification systems will be used. Notifications will be provided in English and Spanish, and a translation vendor will be utilized for additional languages.

Outreach Team Deliverables:

- Construction Notice Templates (Doorhanger, Postcard, Flier)
- Pre-construction Notices (Postcard, Website Update, E-newsletter, Social Media Content)
- Two (2) Postcards with Printing and Mailing Services
- Two (2) Standard Doorhangers
- Eight (8) Fliers and E-newsletters
- Twelve (12) Website Updates
- Twelve (12) Social Media Posts

INFORMATIONAL MATERIALS

Base informational materials were initially created during Phases 2 and 3, and these will be updated for use throughout construction. The materials will be descriptive and visually appealing with a project description, a map, project team contact information and a clear project schedule. informational materials for Phase 4 will include a fact sheet, Frequently Asked Questions document, PowerPoint presentation, public-friendly map and public-friendly schedule to support outreach efforts. These materials will be produced to convey technical information accurately and succinctly in a manner that is understandable to non-technical individuals and is consistent with the established key messages. The materials will be provided in English and Spanish, and materials will be provided electronically with print versions provided as needed.

Outreach Team Deliverables

- One (1) Updated Fact Sheet Draft and final with graphic design
- One (1) FAQs Document Draft and final with graphic design

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• One (1) Updated PowerPoint Presentation – Draft and final with graphic design

STAKEHOLDER COORDINATION AND INQUIRY MANAGEMENT

Progress was made during Phase 3 on building relationships with stakeholders and conducting proactive outreach. Stakeholder coordination will continue throughout construction. Stakeholder coordination and inquiry management are critical for keeping stakeholders informed and for resolving issues that may arise during construction. During design, it is anticipated that three project updates will be delivered to the Board of Directors. In addition, early outreach to key stakeholders will be conducted to inform them about the project and receive targeted input, and up to two outreach events will be completed to communicate with the broader community. These events may be designed as community group presentations or pop-up outreach events in select areas.

Outreach Team Deliverables:

- Pre-construction Individual Contact with Stakeholders from Phase 3 Interviews
- Field Outreach to Sacramento Street Residents (Two Rounds; one before construction and one during construction)
- One-on-One Virtual and In-person Meetings with Stakeholders As Needed
- Inquiry Response and Tracking Through Phase 4

MEETINGS AND EVENTS

A virtual community meeting can be held before construction to inform the community and give a reminder about what to expect during construction. This meeting will also be focused on reaching the Sacramento Street residents who have not yet participated in a community meeting. Additional events and meetings can be arranged during construction as needed, should it be beneficial to meet with stakeholders as a group.

Outreach Team Deliverables:

• One (1) Virtual Community Meeting Before Construction

PROJECT MANAGEMENT/TEAM MEETINGS

Team coordination ensures the best possible outreach and ensures that outreach is conducted at the right times throughout construction. The Community Liaison will participate in weekly construction progress meetings to understand schedule and potential public-facing impacts and prepare for outreach. Monthly activity summaries will be submitted to show progress of outreach activities.

Outreach Team Deliverables:

- Participation in Weekly Progress Meetings to Anticipate Outreach Needs and Understand Current Schedule
- Monthly Activity Summaries (24 months)
- Strategic Counsel Hours As Needed

Task 4.8 – Traffic Control

The CONSULTANT shall secure the services of a Traffic Engineer to provide support for review, response, interpretation, and advice on project issues related to traffic control conditions, as well as to attend and participate in key meetings identified herein. Reviews and responses will be needed in support of RFIs, contract document modifications, and change order duties led by the CONSULTANT. The Traffic Engineer may be required to modify and generate new drawings to support the reviews and responses, and coordinate reviews and approvals with the permitting

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agency. The CONSULTANT's Traffic Engineer may be required to visit the site to inspect the traffic control set up at the request of OC SAN.

Task 4.9 – Geotechnical

The CONSULTANT shall provide Geotechnical Engineering services to provide support for review, response, interpretation, and advice on project issues related to geotechnical conditions, geotechnical logs, and data reports, as well as to attend and participate in key meetings identified herein. The CONSULTANT shall provide reviews and responses in support of shop drawing submittals, RFIs, contract document modifications and change order duties led by the CONSULTANT.

Task 4.10 – Shoring Support

The CONSULTANT shall provide shoring support to review submittals, RFIs, RFP, inspection, testing, and conformance to the conformed documents by the shoring designer of record.

Task 4.11 – CEQA Specialist Support

The CONSULTANT shall retain the services of qualified specialist (biologist/archeologist/etc.) to provide all training, monitoring, and/or specialty services to comply with all CEQA mitigation measures.

CONSULTANT proposes the following tasks to ensure compliance with Task 4.11 of the Professional Construction Services Agreement and the biological, cultural, tribal cultural, and paleontological Mitigation Measures (MMs) as outlined in the Mitigation Monitoring and Reporting Program (MMRP) for the Taft Avenue Sewer Improvement Project (project) in the City and County of Orange, California.

4.11.1. BIOLOGICAL RESOURCES

In compliance with Task 4.11, MM BIO-1, AND BIO-2, CONSULTANT will complete each of the tasks listed below.

TASK 4.11.1.1 BIOLOGICAL MONITORING PLAN

CONSULTANT will prepare a Biological Monitoring Plan to comply with the requirements of the MMRP and applicable mitigation measures for the project. Specifically, the Biological Monitoring Plan will define methods and strategies to be used by CONSULTANT biologists in the field to search for active nests and to define appropriate buffer areas, as well as identify any Street Trees that may be impacted by the project. As outlined in MM BIO-1, Nesting Bird Avoidance, the Biological Monitoring Plan will provide a narrative on existing conditions from previously completed studies and define methods, strategies, and timing for pre-construction surveys, biological resource monitoring timing during construction, appropriate noise abatement measures (if needed), and outline procedures if nesting birds are identified. BIO-1 defines buffer size for nesting birds as 300 feet for passerines, and 500 feet for raptors and special-status species. For MM BIO-2, Public and Parkway Trees, the Biological Monitoring Plan will provide guidance on how to identify Street Trees, assess their level of project impact, and whether a Street Tree Removal Permit is necessary to comply with the any local policies or ordinances, such as the City of Orange Tree Preservation Ordinance. CONSULTANT will provide one draft and one final Biological Monitoring Plan.

TASK 4.11.1.2. BIOLOGICAL AWARENESS TRAINING

CONSULTANT will prepare and implement a pre-construction Biological Resources Awareness Training (BRAT). The training will, at a minimum, include the Project

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Manager and construction contractor and will be conducted at the project site. The training will include a review of pertinent regulatory policies and a discussion of sensitive resources to be avoided. The BRAT will be presented at the same time as the cultural and paleontological training as outlined in Phase 4.

TASK 4.11.1.3. BIOLOGICAL SURVEYS, MONITORING AND REPORTING

CONSULTANT will provide one field biologist to conduct required pre-construction surveys and to monitor construction work as outlined in the Biological Monitoring Plan. If work takes place during nesting bird nesting season, CONSULTANT will mobilize pre-construction nesting bird surveys 3 days (72 hours) prior to construction implementation. It is assumed that all construction work will take place within the existing road area, no direct impacts to vegetation will be required and construction monitoring for biological resources will only be needed one day per week. It is estimated that no more than 30 days of biological construction monitoring will be necessary throughout the duration of construction. Each monitoring event will be limited to one day per week, up to 8 hours per event..

If nesting birds are identified, CONSULTANT will work with Orange County Sanitation District and the construction contractor to establish required buffers and implement noise mitigation efforts and other tasks to protect nesting birds. The CONSULTANT biological monitor will complete a Nest Log each week, which will track the status of specific nests, if any. Information to be recorded (to the extent discernible) may include species of bird; adult (parent) bird activity; the number of eggs, chicks, and fledglings; and when fledglings leave the nest.

If Street Trees are identified in the project area, their level of impact will be assessed and, per the Biological Monitoring Plan, the biologist will coordinate with OCSD to obtain the appropriate permits in order to cut, trim, prune, or remove the identified Street Trees.

CONSULTANT will provide a brief email report on the project status related to biological resources for each week that biological monitoring occurs. A draft and final report summarizing the results of biological monitoring will be provided at the conclusion of the construction activities.

4.11.2. CULTURAL RESOURCES

In compliance with Task 4.11, MM CUL-1, CUL-2, TCR-1, TCR-2, and TCR-3, CONSULTANT will complete each of the tasks listed below.

TASK 4.11.2.1. LETTER OF RETENTION

Prior to the start of construction, CONSULTANT will prepare a letter of retention to the Client for submittal to the County. The letter will state that a CONSULTANT qualified archaeologist has been retained for the project. The qualified archaeologist will be responsible for compliance with Task 4.11, MM CUL-1, CUL-2, TCR-1, TCR-2, and TCR-3 by way of Tasks 2.2 and 2.3. as described below.

TASK 4.11.2.2. ARCHAEOLOGICAL RESOURCE MANAGEMENT PLAN

To satisfy MM CUL-2 and TCR-2, CONSULTANT will develop an Archaeological Resource Management Plan (ARMP) that will outline the protocols to be implemented in the event of an unanticipated archaeological or tribal cultural resource. The ARMP will include, but not be limited to, the professional qualification standards for archaeological key personnel (following the Secretary of the Interior standards); communication protocols; protocols to follow in the event of an archaeological or potential tribal cultural

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resource discovery; an outline for significance evaluations of discovered resources; protocols for sampling, recovery, treatment, and analysis of resources; and reporting and curation requirements. In compliance with MM CUL-2 and TCR-3, the ARMP will also identify the process for contacting tribal groups in the event of inadvertent discovery of archaeological resources potentially affiliated with Native Americans, the County Coroner, and if appropriate, the Native American Heritage Commission, in the case of discovery of human remains.

TASK 4.11.2.3. WORKER ENVIRONMENTAL AWARENESS PROGRAM

In compliance with MM CUL-1 and TCR-1, CONSULTANT will prepare and provide a Worker Environmental Awareness Program (WEAP) to construction personnel and project staff. The training will explain the importance and legal basis for the protection of archaeological and tribal cultural resources and the reporting protocol should a resource be identified when an archaeological monitor is not present. The cultural resources WEAP will be presented at the same time as the biological and paleontological training as outlined in Phase 4.

4.11.3. PALEONTOLOGICAL RESOURCES

In compliance with Task 4.11 and MM GEO-1, CONSULTANT will complete each of the tasks listed below.

TASK 4.11.3.1. LETTER OF RETENTION

Prior to the start of construction, CONSULTANT will prepare a letter of retention to the Client for submittal to the County. The letter will state that a CONSULTANT qualified paleontologist has been retained for the project. This qualified paleontologist will be responsible for compliance with GEO-1, through execution of Tasks 2 and 3, as described below.

TASK 4.11.3.2. MONITORING PLANS

Prior to the commencement of ground disturbing activities, CONSULTANT will prepare a Paleontological Resources Impact Mitigation Program (PRIMP). The PRIMP will include, but not be limited to, the professional qualification standards for paleontological staff (following the Society for Vertebrate Paleontology standards); communication protocols; a description and maps noting the locations/depths where paleontological monitoring is required based on sensitivity and construction plans; the process for modifying monitoring frequency (reducing or discontinuing); protocols to follow in the event of a paleontological resource discovery, including work stoppage and notification procedures; an outline for significance evaluations of discovered resources; protocols for sampling, recovery, treatment, and analysis of resources; and reporting and curation requirements.

TASK 4.11.3.3. WEAP

CONSULTANT will prepare a paleontological training for construction field staff that will outline the requirements of MM GEO-2. The training will also explain the importance and legal basis for the protection of paleontological resources and the reporting protocol should a resource be identified when the paleontological monitor is not present. The paleontological resources WEAP will be presented at the same time as the biological and archaeological training as outlined in Phase 3, below.

TASK 4.11.3.4. PALEONTOLOGICAL MONITORING

As outlined in MM GEO-1, the qualified paleontologist will be on site during initial ground-disturbing activities in areas of previously undisturbed moderate and/or high

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paleontological resources sensitivity. It is estimated that no more than 60 "spot-checks" will be necessary throughout the duration of construction. In the event that paleontological resources (e.g., fossils) are unearthed, the processes outlined in the PRIMP will be followed. CONSULTANT will provide a brief email report on the project status related to paleontological resources for each week that paleontological monitoring occurs. A draft and final report summarizing the results of paleontological monitoring will be provided at the conclusion of the construction activities.

4.11.3. CONTRACTOR FIELD STAFF TRAINING MEETING

As outlined in Task 4.11 of the Professional Construction Services Agreement, CONSULTANT will prepare material outlining the biological, cultural, tribal cultural, and paleontological requirements as presented in the MMRP. CONSULTANT will provide the BRAT and WEAP to be included in the field staff training. The training will be presented periodically throughout the project's lifecycle to ensure that all construction personnel who join the project during the 2-year duration are all adequately trained. A handout of the topics covered will also be provided in advance of the training. A mandatory sign-in sheet will be circulated to document and track crew members receiving the training. It is assumed that all BRAT and WEAP trainings will occur on days that archaeological and biological monitoring occurs.

PHASE 5 – COMMISSIONING SERVICES (NOT USED)

PHASE 6 - CLOSEOUT

Closeout tasks include completion of punch list work by the Contractor, final inspection, completion of Record Drawings, and electronic data. The CONSULTANT shall submit a final invoice at the completion of the project.

Task 6.1 – Final Inspection and Punch Lists

The CONSULTANT's construction coordinator, and discipline leads shall attend the final inspection job walk with the Contractor and OC SAN staff. The CONSULTANT shall make recommendations on the completion of the work including, but not limited to, completion of punch list items, site cleanup, and SWPPP.

The CONSULTANT shall assist OC SAN in developing punch lists of items required to be completed prior to final acceptance of the project by OC SAN.

See Section V- Quantitative Assumptions in this SOW for the estimated number of hours.

Task 6.2 – Record Drawings

When requested by OC SAN, the CONSULTANT shall attend preliminary as-built meetings with OC SAN and the Contractor to inspect the Contractor's draft as-built drawings to verify that the Contractor has included all relevant information from approved change orders and RFIs. As part of the review process, the CONSULTANT shall verify that the Contractor's draft as-built drawings correctly reflect the information included in the approved shop drawings, RFIs, approved FCOs, plan clarifications, plan changes, and other deviations from the conformed Contract Documents, and that the information in the as-built drawings is complete. Based on the findings, CONSULTANT shall prepare a written report on the completeness of the field markup set. The CONSULTANT shall allow for two meetings/visits to review the Contractor's in progress as-built drawings, it is anticipated these meetings will occur when construction is 75% complete and before the draft final as-built set.

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The CONSULTANT shall independently keep a CAD ready set of draft as-built drawings throughout the project. After each meeting with the Contractor, the CONSULTANT shall transpose the Contractor's information to the CONSULTANT's draft CAD ready as-built drawings. The CONSULTANT shall be responsible for marking-up any differences between the Contractor's draft as-built drawings and the CONSULTANT's set.

After final completion of the project, OC SAN will transmit to the CONSULTANT the Contractor's final as-built drawings. At that time, the CONSULTANT shall meet with OC SAN's inspectors and Resident Engineer to review the Contractor's final as-built drawings for completeness.

The CONSULTANT shall prepare Draft Record Drawings based on the final as-built drawings for all drawings in accordance with the requirements in the CAD Manual. Traffic control plans and temporary bracing of shoring will not be updated. The CONSULTANT shall submit the Draft Record Drawings to the OC SAN Resident Engineer. The Draft Record Drawings will be reviewed for content and CAD compliance by OC SAN staff. A comment log will be returned to the CONSULTANT and, if any comments are generated, the CONSULTANT shall revise the Record Drawings and resubmit to the OC SAN Resident Engineer for review of the changes and acceptance of the Record Drawings.

When no additional comments are identified, the CONSULTANT shall prepare the Final Record Drawings and submit them to the OC SAN Project Manager. All hard copies of the Contractor's final as-built drawings shall be returned to OC SAN at this same time. All Record Drawings shall contain a stamp indicating:

Record Drawings

These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be herein as a result.

The stamp shall be placed in the title block and may be included by x-ref. In addition, a note shall be placed over the engineer's seal stating that "This drawing was originally approved for construction by [name of engineer] on [date] and sealed by [name of engineer] a licensed professional engineer in the State of California No. [License number] ". The CONSULTANT shall submit an electronic copy of the Record Drawings to OC SAN for review and acceptance. The acceptance of the Record Drawings shall be deemed a condition precedent for completion of the services provided in Phase 6 - Closeout.

The Contractor-generated as-built drawings described in the Engineering Design Guidelines and the shop drawings will not be updated by the CONSULTANT.

The format and quantities for delivery of the submittals shall be as listed below:

Contents	Draft Record Drawings	Final Record Drawings
Hard Copy Sets	None	None
All related electronic files,	Transmit Electronic Files to	Transmit Electronic Files to
including CAD and compiled	OC SAN	OC SAN
PDFs		

Task 6.3 – Project Management

The CONSULTANT shall also include project management support man-hours related to closeout activities per requirements stated in Phase 4, Project Management Task.

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IV. STAFF ASSISTANCE

The OC SAN staff member or designee assigned to work with the CONSULTANT on the construction phase of this project is Rich Leon at (714) 460-3485, email to: rleon@ocsan.gov.

V. QUANTITATIVE ASSUMPTIONS

The assumptions listed in the following table below shall be the basis for the assumed level of effort.

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Task	Description	Assumption
4.1	Project Management	From the effective date of the NTP for the construction contract to scheduled final completion. Assumes 24-month duration.
4.1.1	PMWeb Procedures Meeting	PM + PE: Prep and attend 2-hour meeting
4.2.1	Construction Hand-off Meeting	PM + PE: Prep and attend 2-hour meeting
4.2.2	PMWeb Submittal Procedures Meeting	PM + PE: Prep and attend 2-hour meeting
4.2.3	Preconstruction Conference	PM + PE + EOR: Attend 2-hour meeting
4.3	Submittals	50 – Original submittals items ¹ 40 – Resubmittal items 10 – 3 rd and later resubmittal items
4.4	Requests for Information	25 RFIs
4.5	Contract Document Modifications, Design Changes and Change Orders	800 hours
4.6	Construction Progress Meetings	Weekly Progress Meetings @ 1 hour each
	Site Visits During Construction	(virtually): assumes 24-month construction period (less in-person meetings) Construction meetings (in-person): assumes total of 20 meetings 50 Site Visits @ 2 hours each, includes attendance by PE (plus PM or EOR or Tech Lead)
4.7	Public Outreach	Assumes 1,000 hours total of subconsultant time to support; plus coordination time by prime
4.8	Traffic Control	Assumes 300-hours total of subconsultant time to support, including record drawings; plus coordination time by prime
4.9	Geotechnical Support	Assumes 136 hours total of subconsultant time to support; plus coordination time by prime. Includes review of shoring design, RFIs, submittals
4.10	Shoring Support	Shoring review by EOR, structural designer and geotechnical engineer; time is allocated in other tasks already
4.11	CEQA Specialist	Additional biological monitoring can be provided for a cost of \$2,304.00 per week. Additional paleontological monitoring can be provided for a cost of \$1,490.00 per full day of fieldwork.
6.1	Final Inspection and Punch Lists	2 Site Visits @ 4 hours each plus time to develop punch-list and review
6.2	Record Drawings	80 hours
6.3	Project Management	Assumes 4-month duration

¹Note that each submittal set includes multiple submittal items which may be individually submitted by the contractor. The counts listed in this table are considering the individual submittal items. The level of effort should assume these all are received individually.

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