

PROFESSIONAL SERVICES AGREEMENT

THIS PROFESSIONAL SERVICES AGREEMENT is made and entered into, to be effective the 23 day of June, 2020, by and between the GARDEN GROVE SANITARY DISTRICT, a California Special District, hereinafter referred to as "District," and JIG CONSULTANTS, a CORPORATION, a California corporation, hereinafter referred to as "Consultant." District and Consultant are sometimes hereinafter individually referred to as "Party" and hereinafter collectively referred to as the "Parties."

RECITALS

WHEREAS, District has determined that there is a need for professional services including Civil Engineering Design and Construction Management/Inspection for the Sewer System Rehabilitation Plan Phase 1 Sewer Main Replacement Project No. 2 & 3 (the "Project");

WHEREAS, District desires to retain Consultant to provide such services; and

WHEREAS, Consultant is qualified by virtue of experience, training, education, and expertise to perform the professional services required by this Agreement and has agreed to provide such services.

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:

AGREEMENT

I. SCOPE OF WORK

District agrees to retain Consultant, and Consultant agrees to perform the services set forth in the Scope of Services described in Exhibit "A", attached hereto and by reference made a part of this Agreement (hereinafter the "Services"). Consultant agrees that its provision of Services under this Agreement shall be within accepted standards within the profession, and its specialized services shall be in accordance with customary and usual practices in Consultant's profession. By executing this Agreement, Consultant warrants that it has carefully considered how the work should be performed and fully understands the facilities, difficulties, and restrictions attending performance of the work under this Agreement.

II. TERM

This Agreement shall be effective as of the date first set forth above. This Agreement shall commence upon the effective date of this Agreement, and shall remain and continue in effect until tasks described herein are completed unless otherwise terminated prior to this date pursuant to the provisions of this Agreement.

III. FEES

A. Accounting Records

Consultant shall keep complete, accurate, and detailed accounts of all time, costs, expenses, and expenditures pertaining in any way to this Agreement. Upon request of District, Consultant shall provide District with all records pertaining to this Agreement.

B. Total Payment

The Parties agree that Consultant shall bill for the Services provided by Consultant to District on an hourly basis and in accordance with the charges and fee schedule attached as Exhibit "A", except as otherwise set forth herein, provided compensation under this Agreement shall not exceed \$ 474,799.00 .

C. Monthly Payment

1. District agrees to pay Consultant monthly, in accordance with the payment rates and terms and the schedule of payment, as set forth in Exhibit "A," attached hereto based upon actual time spent providing the services outlined in this Agreement. Consultant shall submit to District monthly or periodic statements requesting payment. Such requests shall be based upon the amount and value of the Services performed by Consultant under this Agreement and shall be prepared by Consultant and accompanied by such reporting data including a detailed breakdown of all costs incurred and tasks performed during the period covered by the statement, as may be required by District. Invoices shall be submitted on or about the first business day of each month, for Services provided the prior month. District shall use reasonable efforts to make payment to Consultant within forty-five (45) days after the date of the invoice or as soon thereafter as reasonably practicable. If District determines that the approved written Scope of Work under this Agreement or any specified task hereunder is incomplete, the District General Manager, or his or her designee, shall notify Consultant and may withhold the payment amount for the unfinished work accordingly.

2. Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement, which are in addition to those set forth herein, unless such additional services are authorized in advance and in writing by the District General Manager.

IV. TERMINATION

District may terminate this Agreement for its convenience at any time, with or without cause, in whole or in part, upon giving Consultant thirty (30) days written notice. Upon said notice, District shall pay Consultant its allowable costs incurred to date of termination and those allowable costs determined by District to be reasonably necessary to effect such termination. Upon receipt of said notice, Consultant shall immediately cease all work under this Agreement, unless the notice provides otherwise. If District terminates a portion of this Agreement, such termination shall not make void or invalidate the remainder of this Agreement. Thereafter, Consultant shall have no further claims against District under this Agreement. Upon termination of the Agreement pursuant to this Section, Consultant will submit an invoice to District pursuant to Section III. Consultant may terminate this Agreement, with or without cause, upon thirty (30) days written notice to District.

V. DEFAULT OF CONSULTANT

A. Consultant's failure to comply with the provisions of this Agreement shall constitute a default. In the event Consultant is in default, except as provided for in Section XXI, District shall have no obligation or duty to continue compensating Consultant for any work performed after the date of default and can terminate the Agreement immediately upon written notice to Consultant.

B. If the District General Manager, or his/her designee, determines that Consultant is in default in the performance of any of the terms or conditions of this Agreement, it shall notify Consultant in writing of such default. Consultant shall have ten (10) days to cure the default by rendering a satisfactory performance. In the event Consultant fails to cure its default within such period of time, District shall have the right, notwithstanding any other provision of this Agreement, to terminate this Agreement without further notice and without prejudice of any remedy to which District may be entitled at law, in equity or under this Agreement. Consultant shall be liable for any and all reasonable costs incurred by District as a result of such default including, but not limited to, reprourement costs of the same or similar services defaulted by Consultant under this Agreement.

VI. LEGAL RELATIONSHIP BETWEEN THE PARTIES

A. The legal relationship between the Parties hereto is that of an independent contractor, and nothing herein shall be deemed to make Consultant a District employee. During the performance of this Agreement, Consultant and its officers, employees, and agents shall act in an independent capacity and shall not act as District officers, employees, or agents. The personnel performing the Services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Neither District nor any of its officers, employees, or agents shall have control over the conduct of Consultant or any of its officers, employees, or agents, except as

set forth in this Agreement. Consultant, its officers, employees, or agents shall not maintain an office or any other type of fixed business location at District's offices.

B. Consultant shall not incur or have the power to incur any debt, obligation, or liability against District, or bind District in any manner.

C. No District benefits shall be available to Consultant, its officers, employees, or agents in connection with any performance under this Agreement. Except for fees paid to Consultant as provided for in this Agreement, District shall not pay salaries, wages, or other compensation to Consultant for the performance of Services under this Agreement. District shall not be liable for compensation or indemnification to Consultant, its officers, employees, or agents for injury or sickness arising out of performing Services hereunder. If for any reason, any court or governmental agency determines that District has financial obligations, other than pursuant to Section III herein, of any nature related to salary, taxes, or benefits of Consultant's officers, employees, servants, representatives, subcontractors, or agents, Consultant shall indemnify District for all such financial obligations.

VII. MODIFICATIONS AND AMENDMENTS TO AGREEMENT

No modification or amendment of this Agreement or any of the provisions hereof shall be effective for any purpose unless set forth in writing signed by duly authorized representatives of both Parties.

VIII. ASSIGNMENTS AND SUBCONTRACTING

The experience, knowledge, capability, and reputation of Consultant, its principals and employees were a substantial inducement for District to enter into this Agreement. Consultant may not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, voluntarily or by operation of law, without the prior written approval of District. Except as otherwise expressly provided in the Scope of Services (Exhibit "A"), Consultant shall not contract with any other person or entity to perform the Services required without written approval of District. If Consultant is permitted to subcontract any part of this Agreement by District, Consultant shall be responsible to District for the acts and omissions of its subcontractor as it is for persons directly employed. Nothing contained in this Agreement shall create any contractual relationships between any subcontractor and District. All persons engaged in the work will be considered employees of Consultant. District will deal directly with and will make all payments to Consultant as provided for in Section III.

IX. SUCCESSORS IN INTEREST

This Agreement shall be binding upon and inure to the benefit of the Parties' successors and assignees.

X. THIRD PARTY BENEFICIARY

Except as may be specifically provided for herein, nothing contained in this Agreement is intended to confer, nor shall this Agreement be construed as conferring, any rights, including, without limitation, any rights as third-party beneficiary or otherwise, upon any entity or person not a party hereto.

XI. INSURANCE

A. Insurance Required

Consultant shall procure and maintain the insurance described herein for the duration of this Agreement, or as otherwise specified herein, against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by Consultant, its agents, representatives, or employees. Insurance required herein shall be provided by a reputable insurance company in good standing with the State of California and having a minimum A.M. Best's Guide Rating of A-, Class VII or better. District will require Consultant to substitute any insurer whose rating drops below the levels specified herein. Such substitution shall occur within twenty (20) days of written notice to Consultant by District.

Consultant shall provide to District certificates of insurance in a form acceptable to District indicating the deductible or self-retention amounts and the expiration date of the policy, and shall provide renewal certificates not less than ten (10) days prior to the expiration of each policy term. The certificates of insurance shall specifically identify this Agreement and shall contain express conditions that District is to be given at least thirty (30) days advance written notice of any material modification in or termination of insurance. Such insurance shall be primary to and not contributing with any other insurance maintained by the Garden Grove Sanitary District, City of Garden Grove, and/or their respective board members, officers, officials, employees, agents, and volunteers. The insurance shall name the Garden Grove Sanitary District, City of Garden Grove, and their respective board members, officers, , officials, employees, agents and volunteers as additional insureds by endorsement to the insurance policies. Except as expressly authorized herein, all insurance shall be on an occurrence basis.

1. Errors and Omissions Insurance

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 One Million Dollars (\$1,000,000.00) per claim or per occurrence and Two Million Dollars (\$2,000,000) aggregate, in accordance with the provisions of this Section. If the policy of insurance is written on a "claims made" basis, the policy shall be continued in full force and effect at all times during the term of this Agreement, and for a period of three (3) years from the date of the completion of the Services provided hereunder. In the event of termination of the

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 terms of this Agreement. The coverage shall be evidenced by either a new policy evidencing no gap in coverage, or by obtaining separate extended "tail" coverage with the present or new carrier.

In the event the policy of insurance is written on an "occurrence" basis, the 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 the policy during this period, new coverage shall be obtained for the required period to ensure coverage for the prior acts of Consultant during the course of performing the Services under the terms of this Agreement.

2. Workers' Compensation

Consultant shall obtain and maintain, during the term of this Agreement, Workers' Compensation Employer's Liability Insurance in the statutory amount as required by California Law. Such worker's compensation insurance shall be endorsed to provide for a waiver of subrogation against Garden Grove Sanitary District, City of Garden Grove, and their respective board members, officers, officials, employees, agents and volunteers.

B. Minimum Limits of Insurance

Consultant shall maintain limits not less than:

1. General Liability:

\$1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. **(claims made and modified occurrence policies are not acceptable)**; Insurance companies must be acceptable to DISTRICT and have an AM Best's Guide Rating of A-, Class VII or better, as approved by the DISTRICT.

2. Automobile Liability:

\$1,000,000 per accident combined single limit. **(claims made and modified occurrence policies are not acceptable)**; Insurance companies must be acceptable to DISTRICT and have an AM Best's Guide Rating of A-, Class VII or better, as approved by the DISTRICT.

3. Employer Liability:

\$1,000,000 per accident for bodily injury or disease. (**claims made and modified occurrence policies are not acceptable**); Insurance companies must be acceptable to DISTRICT and have an AM Best's Guide Rating of A-, Class VII or better, as approved by the DISTRICT.

C. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the District General Manager. At the option of the District General Manager, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Garden Grove Sanitary District, City of Garden Grove, and their respective board members, officers, officials, employees, agents and volunteers, or Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses, or Consultant shall otherwise provide an alternative satisfactory to the District General Manager.

D. Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The Garden Grove Sanitary District, City of Garden Grove, and their respective board members, officers, officials, employees, agents and volunteers are to be covered as additional insureds with respect to: liability arising out of activities and work performed by or on behalf of Consultant; products and completed operations of Consultant; premises owned occupied or used by Consultant; and automobiles owned, leased, hired, or borrowed by Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the Garden Grove Sanitary District, the City of Garden Grove, and their respective board members, officers, officials, employees, agents, and volunteers.

2. For any claims related to this Agreement, Consultant's coverage shall be primary insurance as respects the Garden Grove Sanitary District, City of Garden Grove, and their respective board members, officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by Garden Grove Sanitary District, City of Garden Grove, and their respective board members, officers, officials, employees, agents, and volunteers shall be in excess of Consultant's insurance and shall not contribute with it.

3. Any failure to comply with reporting or other provisions of the policies, including breaches of warranties shall not affect coverage provided to the

Garden Grove Sanitary District, City of Garden Grove, and their respective board members, officers, officials, employees, agents, and volunteers.

4. Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought except with respect to the limits of the insurer's liability.

5. Each insurance policy required by this Section shall be endorsed to state that coverage shall not be suspended, voided, cancelled by either party, reduced in coverage or in limits, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been provided to District.

6. Consultant agrees to ensure that subcontractors, and any other parties involved with the project who are brought onto or involved in the project by Consultant, provide the same minimum insurance coverage required of Consultant. Consultant agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this Section. Consultant agrees that upon request, all agreements with subcontractors and others engaged in the project will be submitted to District for review.

E. Verification of Coverage

Consultant shall furnish District with original endorsements effecting coverage required by this Agreement. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. All endorsements are to be received and approved by District before work commences.

If CONSULTANT maintains higher insurance limits than the minimums shown above, CONSULTANT shall provide coverage for the higher insurance limits otherwise maintained by the CONSULTANT

XII. INDEMNITY

A. Indemnification

To the fullest extent permitted by law, Consultant shall indemnify, defend (at Consultant's sole cost and expense), protect and hold harmless the Garden Grove Sanitary District, the City of Garden Grove, and their respective board members, officers, officials, employees, agents, and volunteers, (individually "Indemnified Party"; collectively "Indemnified Parties") against any and all liability, claims, judgments, costs, and demands (collectively, "Claims"), including Claims arising from injuries or death of persons (Consultant's employees included) and damage to property, which Claims arise out of, pertain to, or are related to the negligence, recklessness or willful misconduct of Consultant, its agents, employees, or subcontractors, or arise from Consultant's negligent, reckless or willful performance of or failure to perform any term, provision, covenant or condition of this Agreement ("Indemnified Claims"), but Consultant's liability

for Indemnified Claims shall be reduced to the extent such Claims arise from the negligence, recklessness or willful misconduct of the Garden Grove Sanitary District, the City of Garden Grove, and their board members, officers, directors, officials, employees, or agents.

Consultant shall reimburse the Indemnified Parties for any reasonable expenditures, including reasonable attorneys' fees, expert fees, litigation costs and expenses that each Indemnified Party may incur by reason of Indemnified Claims. Upon request by an Indemnified Party, Consultant will defend with legal counsel reasonably acceptable to the Indemnified Party all Claims against the Indemnified Party that may arise out of, pertain to, or relate to Indemnified Claims, whether or not Consultant is named as a party to the Claim proceeding. The determination whether a Claim may "arise out of, pertain to, or relate to" Indemnified Claims shall be based on the allegations made in the Claim and the facts known or subsequently discovered by the parties. In the event a final judgment, arbitration award, order, settlement, or other final resolution expressly determines that Claims did not arise out of, pertain to, nor relate to the negligence, recklessness or willful misconduct of Consultant to any extent, then District will reimburse Consultant for the reasonable costs of defending the Indemnified Parties against such Claims, except District shall not reimburse Consultant for attorneys' fees, expert fees, litigation costs and expenses as were incurred defending Consultant or any parties other than Indemnified Parties against such Claims.

Consultant's liability for indemnification hereunder is in addition to any liability Consultant may have to District 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.

Consultant's indemnification obligation hereunder shall survive the expiration or earlier termination of this Agreement until all actions against the Indemnified Parties for such matters indemnified hereunder are fully and finally barred by the applicable statute of limitations or, if an action is timely filed, until such action is final. This provision is intended for the benefit of third party Indemnified Parties not otherwise a party to this Agreement.

XIII. COMPLIANCE WITH LAW

A. Consultant certifies by the execution of this Agreement the following: 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, age, marital status, ancestry, or national origin; that Consultant is in compliance with all federal and state laws, local directives, and executive orders regarding non-discrimination in

employment; and that Consultant agrees to demonstrate positively and aggressively the principle of equal opportunity in employment.

B. Consultant shall keep itself informed of State and Federal laws and regulations, which in any manner affect those employed by it or in any way affect the performance of its Services pursuant to this Agreement. Consultant shall at all times observe and comply with all such laws and regulations. The Garden Grove Sanitary District, the City of Garden Grove, and their respective board members, officers, employees, and agents shall not be liable at law or in equity for Consultant's failure to comply with such laws and regulations.

XIV. LICENSES AND QUALIFICATIONS

Consultant represents and warrants to District that it has obtained all licenses, permits, qualifications, and approvals of whatever nature that are legally required to practice its profession. Consultant represents and warrants to District that Consultant shall, at its sole cost and expense, keep in effect at all times during the term of this Agreement, any license, permit, or approval, which is legally required for Consultant to perform Services under this Agreement.

XV. CONFIDENTIALITY AND OWNERSHIP OF DOCUMENTS

A. All information gained by Consultant in the performance of this Agreement shall be considered confidential and shall not be released by Consultant without District's prior written authorization. Consultant, its officers, employees, agents or subcontractors shall not, without written authorization from the District General Manager or unless requested by District's Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories, or other information concerning the Services performed under this Agreement or relating to any project or property location within District. Response to a subpoena or court order shall not be considered "voluntary" for the purposes of this Section, provided Consultant gives District proper notice of such subpoena or court order. Consultant shall properly notify District of any summons, complaints, subpoenas, notice of deposition, request for documents, interrogatories, requests for admissions or other discovery requests received by Consultant, its officers, employees, agents or subcontractors, related to Services performed pursuant to this Agreement. District retains the right, but has no obligation, to represent Consultant and/or be present at any deposition, hearing, or similar proceeding, the cost of which shall be borne by District. Consultant agrees to cooperate fully with District and to provide District with an opportunity to review and respond to discovery requests provided by Consultant, arising out of Services performed pursuant to this Agreement. However, District's right to review any such request or response does not imply or mean District has the right to control, direct, write or rewrite said response.

B. The documents and study materials for this project shall become the property of District upon the termination or completion of the work. Consultant agrees

to furnish to District 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 District.

XVI. INTERPRETED UNDER LAWS OF THE STATE OF CALIFORNIA

This Agreement and any dispute arising hereunder shall be governed and interpreted in accordance with the laws of the State of California. This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be employed in interpreting this Agreement, all parties having been represented by counsel in the negotiation and preparation hereof. Venue for any litigation concerning this Agreement shall be in the Superior Court for the County of Orange, California.

XVII. ATTORNEYS' FEES

If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing Party shall be entitled to reasonable attorneys' fees, costs, and necessary disbursements in addition to any other relief to which they may be entitled.

XVIII. WAIVER

No waiver of any provision of this Agreement shall be effective unless in writing and signed by a duly authorized representative of the Party against whom enforcement of a waiver is sought. Any waiver by the Parties of any default or breach of any covenant, condition, or term contained in this Agreement, shall not be construed to be a waiver of any subsequent or other default or breach, nor shall failure by the Parties to require exact, full, and complete compliance with any of the covenants, conditions, or terms contained in this Agreement be construed as changing the terms of this Agreement in any manner or preventing the Parties from enforcing the full provisions hereof.

XIX. NOTICES

All notices or other communications required or permitted hereunder shall be in writing and shall be personally delivered, sent by registered or certified mail, postage prepaid, return receipt requested, or delivered or sent by electronic transmission, and shall be deemed received upon the earlier of: (i) the date of delivery to the address of the person to receive such notice if delivered personally or by messenger or overnight courier; (ii) three (3) business days after the date of posting by the United States Post Office if by mail; or (iii) when sent if given by electronic transmission. Any notice, request, demand, direction, or other communication sent by electronic transmission

must be confirmed within forty-eight (48) hours by letter mailed or delivered. Notices or other communications shall be addressed as follows:

To District: Garden Grove Sanitary District
13802 Newhope Street
Garden Grove, CA 92843
Attention: Jessica Polidori

To Consultant: JIG Consultants
318 West Katella Avenue, Suite A
Orange, CA 92867
Attention: Joseph Gutierrez

Either Party may, by written notice to the other, designate a different address, which shall be substituted for that specified above.

XX. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the parties and supersedes all prior negotiations, arrangements, representations, and understandings, if any, made by or among the parties with respect to the subject matter hereof. No amendments or other modifications of this Agreement shall be binding unless executed in writing by both parties hereto, or their respective successors, assigns, or grantees.

XXI. FORCE MAJEURE

If either party shall be delayed or prevented from the performance of any service under this Agreement by reason of acts of God, strikes, lockouts, labor troubles, restrictive governmental laws or regulations or other cause, without fault and beyond the reasonable control of the party obligated (financial inability excepted), performance of such act shall be excused for the period of delay, and the period for performance of any such act shall be extended for a period equivalent to the period of such delay.

XXII. TIME IS OF THE ESSENCE

The Parties agree that time is of the essence of this Agreement with respect to the deadlines set forth herein.

XXIII. SEVERABILITY

Whenever possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this

Agreement shall be invalid under the applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of that provision, or the remaining provisions of this Agreement.

XXIV. PROHIBITED INTERESTS

Consultant covenants that, for the term of this Agreement, no Board Member, official, officer or employee of District during his/her tenure in office/employment, or for one (1) year thereafter, shall have any interest, direct or indirect, in this Agreement or the proceeds thereof. Consultant warrants that it has not given or paid and will not give or pay any third party money or other consideration for obtaining this Agreement.

XXV. SCOPE CHANGES

In the event of a change in the scope of the proposed project, as requested by District, the Parties hereto shall execute an addendum to this Agreement, setting forth, with particularity, all terms of the new Agreement, including but not limited to any additional Consultant's fees.

XXVI. NON-LIABILITY OF DISTRICT OFFICERS AND EMPLOYEES

No officer, employee or board member of the District or the City of Garden Grove shall be personally liable to the Consultant, or any successor in interest, in the event of any default or breach by the District or for any amount which may become due to the Consultant or its successor, or for breach of any obligation of the terms of this Agreement.

XXVII. AGREEMENT EXECUTION AUTHORIZATION

Each of the undersigned represents and warrants that he or she is duly authorized to execute and deliver this Agreement and that such execution is binding upon the entity for which he or she is executing this Agreement.

XXVIII. RECITALS

The Recitals above are hereby incorporated into this section as though fully set forth herein and each party acknowledges and agrees that such Party is bound, for purposes of this Agreement, by the same.

IN WITNESS WHEREOF, this Agreement has been executed in the name of District, by its officers thereunto duly authorized, and Consultant as of the day and year first above written.

"DISTRICT"
GARDEN GROVE SANITARY DISTRICT

By: _____
Scott C. Stiles
General Manager

ATTEST:

By: _____
Teresa Pomeroy
District Secretary

JIG Consultants
By: _____
Title: PRESIDENT
By: _____
Chief Financial Officer

If CONTRACTOR is a corporation, a Corporate Resolution and/or Corporate Seal is required. If a Partnership, Statement of Partnership must be submitted to CITY.

APPROVED AS TO FORM:

Woodruff, Spradlin & Smart

By: _____
Omar Sandoval
Garden Grove Sanitary District
General Counsel

EXHIBIT A

SCOPE OF SERVICES / FEE SCHEDULE

Section 5 – Scope of Work

Based on the Scope of Services outlined in the Request for Proposal (RFP), which is incorporated herein by reference as an integral part of this proposal, the following is our proposed Scope of Work to complete the project.

PROJECT TASKS

Task 1 – Project Management, Meetings and Coordination

- 1.1 *Project Management:* JIG will provide project management to ensure adherence to the project schedule and budget and to document all communication between JIG and the District.
- 1.2 *Meetings:* At the commencement of the project, JIG will hold a “kick-off” meeting with District staff to discuss the scope and parameters of the project. The Project Manager will arrange for and participate in review meetings with District staff to review progress of the work and exchange ideas and information at the PDR, 60% and 90% design milestones. JIG assumes the 99% and 100% comments will not require a review meeting but may be addressed via telephone and/or email. The proposal includes man-hours for attendance to a total of four meetings.
- 1.3 *Coordination:* JIG will coordinate efforts of the project team and subconsultants with representatives of utilities, government agencies, and outside stakeholders to determine requirements to be included in the construction document.

Task II – Preliminary Investigations and Topographic Mapping/Survey

This task is for preliminary investigations and topographic mapping/survey and is dedicated to collecting information available from the District and utility companies, performing ground control and survey, and completing geotechnical investigations. This task will also include a detailed field reconnaissance to become familiar with the project area and to note all visible relevant features along the pipeline alignment, including major utility structures within the street right-of-way, existing driveways, concrete gutters and access ramps, frontage properties, traffic and pavement conditions.

- 2.1 *Initial/Kickoff Meeting:* Set up and attend an initial/kickoff meeting with the District to introduce project team members, formalize project communications, discuss project schedule, review scope of work, and request available data, reports, documents, and plans from the District that are relevant to the Project.

Deliverables: Meeting Agenda; Meeting Minutes

- 2.2 *Records & Requirements Search:* Perform record and data search consisting of survey information (centerline control, benchmarks, assessor maps, parcel maps, record of survey, easements, etc.) and utility information consisting of existing water, sewer, and other utilities along the subject alignment. In addition, JIG will document all coordination with other public and private agencies involved to inform them about the project and obtain their records, approval, and permit requirements.

Deliverables: Utility Coordination Correspondence Table

- 2.3 *Ground Control and Survey:* JIG will establish project survey control using a combination of fast-static GPS and conventional survey methods. Horizontal control will be relative to the North American Datum of 1983 (NAD83), with coordinates based on the California Coordinate System as published by the California Spatial Reference Center. Vertical control will be based on the City of Garden Grove and Orange County benchmark system, relative to the North American Vertical Datum of 1988 (NAVD88), or another datum at the direction of the District’s staff.

Conventional topographic mapping will be conducted from right-of-way to right-of-way and would include the collection of items such as top of curb, flow line, edge of gutter, back of walks, walls, fences, roadway, driveway and surface and above ground utilities.

Once the fieldwork has been completed, the survey data will be reviewed, reduced and imported into a CAD base-file (AutoCAD 2018 format or others as requested). Field located topographic and utility features will be labeled with their respective point number, elevation and descriptions. Hall Land Surveying (survey sub-consultant) will produce a topographic base file of the surveyed scope at a mapping scale of 1"=40', including surface contours at one-foot intervals.

The proposal includes field survey of rim and invert of existing sewer/storm drain manholes within the project limits.

Deliverables: Topographic Map for Base File; Manhole Dip Data Information

- 2.4 *Geotechnical Investigations:* Perform geotechnical investigations to document existing subsurface conditions for use on sewer trench design and street rehabilitation design. This proposal is based on the number and depth of boreholes as listed in Table 3.

TABLE 3 GARDEN GROVE SANITARY DISTRICT SEWER SYSTEM REHABILITATION PLAN PHASE 1 – PROJECT 2 AND 3 NUMBER AND DEPTH OF PROPOSED BOREHOLES					
Reach	Location	Length (feet)	Boring Depth (ft)	No. of Borings	TCP Required
Project 2					
1	Galway Street (North of Garden Grove Blvd)	312	20	1	No
2	Gilbert Street (South of Garden Grove Blvd)	315	20	1	No
3	Gilbert Street (South of Kellogg Street)	340			No
4	Kellogg Street	255	20	1	No
5	Kellogg – Easement	216			No
6	Kerry Street	229	20	1	No
7	Alley (Off Donegal)	200	20	1	No
8	Crosby Avenue (East of Gilbert)	319	20	1	No
9	Crosby Avenue	242			No
10	Central Avenue (East of Gilbert)	329	20	1	No
11	Central Avenue	330			No
12	Acacia Avenue (East of Galway)	185	20	1	No
Project 3					
1	Trask Avenue (East of Newland)	330	20	1	Yes
2	Edgebrook Drive (Inside Parking Lot)	335	20	1	No
3	Garden Grove Boulevard (Dale to Louise)	325	20	0	Yes
4	Sycamore Street ⁽¹⁾	65	20	0	No
Total				10	

⁽¹⁾ Location of this sewer reach is unknown. No borings are required for this reach.

The exact location of the borings will be discussed with the District during the kick-off meeting.

Geotechnical investigations will be performed with traffic control measures per WATCH Manual except for any work on Garden Grove Boulevard and Trask Avenue. Project specific traffic control plans will be prepared for borings in these areas. Traffic control plans will be submitted to the City of Garden Grove for acquisition of encroachment permit (no-fee permit).

Laboratory testing will include 1) moisture content and dry density, 2) Atterberg limits, 3) sieve and hydrometer tests, 4) direct shear for evaluating soil shear strength, and 5) R-value tests for pavement.

After soil borings are completed, the pavement will be repaired using Perma-Patch or quick-set concrete. Use of hot asphalt mix is not included.

Deliverables: Geotechnical Investigations Report (Submitted with Preliminary Design Technical Memorandum - 1 PDF and 3 Hard Copies)

Task III – Preliminary Engineering

- 3.1 *Draft Preliminary Design Technical Memorandum:* Prepare a Draft Preliminary Design Technical Memorandum (PDTM) representing a 25% completion of the project design, summarizing the preliminary design complete with calculations and recommendations for use during the final design. The Draft PDTM will include the following:

- ▶ Summary of evaluation for street pavement condition
- ▶ Evaluation of method for sewer bypass
- ▶ Preliminary plan view of the proposed sewer alignment
- ▶ Table summary of sewer pipe hydraulics per sewer reach
- ▶ Permit requirements for proposed construction
- ▶ Preliminary schedule and estimated construction costs
- ▶ Recommendations of construction requirements, methods, and sequencing

Deliverables: Draft Preliminary Design Technical Memorandum (1 PDF and 3 Hard Copies)

- 3.2 *PDTM Submittal Review Meeting:* Meet with District staff to review comments on the Draft PDTM and respond to comments.

Deliverables: Meeting Agenda, Meeting Minutes

- 3.3 *Final Preliminary Design Technical Memorandum:* Revise the PDTM as necessary based on comments received from the meeting and submit Final PDTM to District.

Deliverables: Final Preliminary Design Technical Memorandum (1 PDF and 3 Hard Copies)

Task IV – Final Engineering

The Final PDTM will serve as the outline for executing the final design services which includes the following items:

- 4.1 *Permits and Utility Coordination:* Coordinate and submit the 60% construction drawings to permitting agencies, neighboring cities, and utility companies with copies of all correspondence and submittals to the District. Comments received from the various agencies will be incorporated into the final design.

Obtain encroachment permits for pipeline construction from the City of Garden Grove.

Deliverables: Copies of Correspondence with Utility Companies, City Encroachment Permit

- 4.2 *Utility Verification and Potholing:* Perform utility verification by potholing using an air vacuum excavation technique. Resulting pothole data will be accurately shown on the construction drawings. Per the Request for Proposal, a maximum of 50 potholes have been included in this proposal. All phone and electric underground will be exposed from top to bottom of structure, if possible. The exact quantity and location of the potholes will be determined and submitted to the District for review after acceptance of the Final PDTM.

Potholing will be performed with traffic control measures per WATCH Manual. Preparation of traffic control plans is not included in this scope. Potholes at the following locations are not included in the scope:

- Garden Grove Boulevard, Dale to Louise
- Garden Grove Boulevard and Gilbert intersection
- Garden Grove Boulevard and Galway intersection

If utilities in these areas are requested, additional compensation will be provided for preparation of Traffic Control Plans and for handling high volume traffic control during potholing operations.

The encroachment permit with the City of Garden Grove will be a no fee permit. After potholing is complete, the pavement will be repaired using Perma-patch or quickset concrete. Use of hot asphalt mix is not included.

A pothole summary report will be used to plot the utilities on the project base map. Field survey of potholed utilities is not included.

Deliverables: Pothole Investigation Report

- 4.3 *Construction Plans, Specifications, and Engineer's Estimate at 60%, 90%, 99%, and 100% Stages of Design:* Prepare construction drawings, specifications, and engineer's construction cost estimate incorporating District standard drawings, standard specifications, comments received from District, utility companies, and outside stakeholders for each project. The construction specifications will include the City's contract boilerplate documents, construction sequencing, and technical specifications. Traffic control plans will not be included in the construction plan sets.

The construction plans will consist of the following sheets at a minimum:

TABLE 4 GARDEN GROVE SANITARY DISTRICT SEWER SYSTEM REHABILITATION PLAN PHASE 1 – PROJECT 2 AND 3 CONSTRUCTION PLAN SHEET INDEX		
Sheet No.	Drawing No.	Description
1	G-01	Title Sheet
2	G-02	Vicinity Map, Location Map and Sheet Index, Symbols, General Notes
3	C-01	Plan and Profile Project No. 2 – Galway Street and Acacia Avenue
4	C-02	Plan and Profile Project No. 2 – Gilbert Street (North and South)
5	C-03	Plan and Profile Project No. 2 – Kellogg Street and Easement
6	C-04	Plan and Profile Project No. 2 – Kerry Street and Alley
7	C-05	Plan and Profile Project No. 2 – Crosby Avenue (East and West)
8	C-06	Plan and Profile Project No. 2 – Central Avenue
9	C-07	Plan and Profile Project No. 3 – Trask Avenue
10	C-08	Plan and Profile Project No. 3 – Edgebrook Drive and Sycamore Street
11	C-09	Plan and Profile Project No. 3 – Garden Grove Boulevard
12	C-10	Miscellaneous Civil Details
13	C-11	Miscellaneous Civil Details

Three (3) sets of the milestone submittals for each project will be sent to the District for review. This includes the construction plans, specifications, cost estimates, and calculations.

The following list outlines a suggested level of completion for various milestone submittals.

60% Milestone Submittal – This submittal will include preliminary horizontal and selected segments of vertical alignment, utility crossings, and abandonment methods. The submittal package will account for and be comprised of the following:

- ▶ Completed base map
- ▶ Preliminary hydraulic calculations
- ▶ Completed base drawing with street data and existing utilities
- ▶ Completed Title Sheet (including vicinity map, location map and index)
- ▶ Index Map
- ▶ General notes, abbreviations, legend (substantially complete)
- ▶ Horizontal alignment with stationing and control (substantially complete)

- ▶ Preliminary project specific details
- ▶ Preliminary annotations
- ▶ Table of contents for technical specifications
- ▶ Preliminary engineer's estimate

90% Milestone Submittal – This submittal will have a completed horizontal alignment and partially completed vertical alignment, construction notes, plan annotations, manhole details, and project details. The submittal package will account for and be comprised of the following:

- ▶ All items completed at the 60% milestone submittal
- ▶ Completed potholing information plotted on profile
- ▶ Completed final hydraulic calculations
- ▶ Completed general notes, abbreviations, and legend
- ▶ Completed horizontal alignment with stationing and control
- ▶ Vertical profile (substantially complete)
- ▶ Completed standard details
- ▶ Completed manhole and enlargement details
- ▶ Project specific details
- ▶ Plan annotations (substantially complete)
- ▶ Technical specifications (substantially complete)
- ▶ Front end documents (substantially complete)
- ▶ Engineer's estimate (90% level)
- ▶ Completed utility coordination

99% Milestone Submittal – This submittal is deemed the pre-final submittal and is the District's final opportunity for review prior to Mylar production. The construction plans will include a completed horizontal and vertical alignment, completed details, and completed plan annotations. The project specifications will include completed technical specifications, completed front end documents, and bid form.

100% Milestone Submittal – This submittal is considered the final submittal and will serve as a back check to make sure all comments from the 99% milestone submittal was addressed.

Deliverables: Three (3) Copies of the 60%, 90%, 99%, and 100% Design Milestone Submittals

- 4.4 *Progress Submittal Review Meetings:* Arrange a review meeting with District staff at the 60% and 90% design milestones to discuss the design, collect and respond to review comments. JIG assumes the 99% and 100% comments will not require a review meeting but will be addressed via telephone and/or email.

Deliverables: Meeting Agenda; Meeting Minutes

- 4.5 *Final Deliverable:* Submit two (2) bond copies of the construction plans along with a reverse read Mylar set for each project. Drawings will be 24-inch by 36-inch in size, drawn at 40 scale plan view and 4 scale vertical. Details will be 20 scale or less. All drawings shall conform to District standards and will be signed and stamped by a registered civil engineer in the State of California. Project specifications will also be signed and stamped by the Engineer of Record. Two (2) copies of the specifications will be submitted, one bound and the other unbound.

JIG will provide the District with two (2) copies of the Project Design Notebook. The notebook will include all pertinent correspondence, calculations, quantity and cost estimates. The final design notebook will be signed and stamped by the Engineer of Record.

A USB drive will be submitted containing pdfs of the bid documents, AutoCAD 2019 files without x-references for each drawing sheet of the plans. USB drive will also include the specifications in MS Word format, and the engineer's cost estimate in MS Excel format.

Deliverables: Final Design Submittal; Project Design Notebook; USB Drive

4.6 *Bid Phase Assistance:* Provide necessary support services to the District during the project bid phase. Support services shall include the following:

- ▶ Attendance at Pre-Bid Meeting
- ▶ Answering Contractor's questions and providing clarifications
- ▶ Preparation one (1) project addendum

Deliverables: Project Addendum; Design Clarifications

Task V - Pre-Construction Phase (Optional)

The first week of the project will be dedicated to the pre-construction phase which includes the preconstruction meeting and getting familiar with the contract documents and existing site conditions.

5.1 *Review and be knowledgeable of the contract documents and District Standard Plans and Specifications prior to the pre-construction meeting:* The Construction Manager and Inspector will review the contract documents, District Standard Plans and Specifications and become familiar with the design intent and typical construction methods employed by the District.

Review and be knowledgeable of existing site conditions: The Construction Manager and Inspector will visit the project site prior to the Pre-construction meeting and review existing facilities closely.

Deliverables: None

5.2 *Attend a pre-construction meeting and provide detailed meeting minutes of the meeting:* The Construction Manager will draft an agenda for the pre-construction meeting and submit it to the District for review. The agenda will also include any questions or discussions of interest to the Contractor. Unless otherwise required by the District, the Construction Manager will record meeting proceedings and draft meeting minutes to be sent to the District for review and comment, before distributing to all meeting participants.

Deliverables: Meeting Agenda; Meeting Minutes

Task VI - Construction Phase (Optional)

Construction of the project is estimated at 160 working days (32 weeks). A Construction Inspector will be on site full time for these days. The Construction Manager on average will be involved for five hours per week during this period.

6.1 *Serve as the District's representative and field liaison with the Contractor during the construction of the project:* The Inspector will serve as the District's representative on the project. However, the Inspector will not make any commitments on behalf of the District without the District's concurrence. The role of the Inspector will be of liaison and coordination. The Inspector will observe and report to the District daily.

Deliverables: None

6.2 *Provide daily construction inspection services of the work covered in the contract documents and change orders:* The Inspector will follow the contract documents during the construction phase of this project. The Inspector will not allow any deviations from the contract documents, unless authorized by the District through due process. Should the Contractor want to deviate from the contract documents, such requests must be submitted through RFI's, submittals, substitution requests, or through other procedures allowed in the contract documents. In all cases, the District will have the final authority. The Inspector will work closely with the Construction Manager and District staff and will fully inform the District staff on the project progress.

Deliverables: None

- 6.3 *Prepare and submit to the District daily inspection reports documenting the Contractor's workforce, material and equipment used, a summary of construction activities, field problems, disputes or claims, resolutions of issues and directions given to the contractor:* Inspection reports will be completed by the Inspector, reviewed by the Construction Manager, and submitted to the District weekly. The Inspector will prepare detailed daily reports in sufficient detail to fully inform the District on the progress of the project. The daily reports will be attached with pictures to give the District staff sufficient information about progress of the project. Items requiring decision by the District will be highlighted and followed up by e-mail and phone calls, after submitting the daily reports.

Deliverables: Daily Inspection Reports

- 6.4 *Maintain a tickets folder:* The Inspector will prepare a folder to collect all material delivery tickets. The tickets will be labeled to correspond with the Daily Inspection Reports.

Deliverables: Material Delivery Tickets - Organized

- 6.5 *Ensure the Contractor is working within the framework of the contract per Construction Contract Documents, City of Garden Grove / District Standard Specification and Plans, Garden Grove Municipal Code and other applicable standards:* Standard Plans and Specifications, as well as other applicable codes and standards, will be maintained electronically in the project files for use as reference during construction.

Deliverables: None

- 6.6 *Prepare and maintain a photo journal documenting the construction progress:* The Inspector will take photos before construction begins, during construction, and upon completion of the project. The journal will comply with the following:

- A. Kept in a three-ring binder that is clearly labeled on the cover and the spine with project name and number (more than one may be required for manageability)
- B. Date stamped color photographs with 4"x6" dimensions and stored on 32gb USB drive
- C. Captions for each photo describing orientation and the reason the shot was taken

The Inspector will take detailed digital photos before the project starts. Particular attention will be focused on areas which might change or deteriorate as a consequence of construction work. Examples are surface improvements, pavement, curb and gutter, etc. The Inspector will take many pictures daily to tell the story of what took place each day even to those who are remote from the project. The pictures will be attached with the Daily Reports with captions to explain the items in the pictures. The Inspector will also take pictures after the project completion. A few pictures will be attached to the Daily Report.

Deliverables: Photo Journal

- 6.7 *Confirm in writing that work being inspected conforms to the contract requirements and promptly report unacceptable work to the District and Contractor:* Work not conforming to the contract documents will be reflected in a Notice of Non-Compliance and saved in the contract files. However, the Contractor will be notified verbally should an item of non-compliance occur. Such verbal references will be reflected in the Daily Reports. Additionally, the Construction Manager will discuss such items with District staff and suggest actions to handle or rectify the situation.

Deliverables: None

- 6.8 *Monitor project work and adjacent areas for unsafe conditions and promptly report it to the District and the Contractor for resolution:* Safety, both of the public and of the workers, is of paramount importance in the implementation of this project. In general, the Inspector will bring to the attention of the Contractor any unsafe conditions and report it to the District. Due to the importance of safety issues, e-mail will be the mode of communication for good documentation

and tracking. If the safety issue is serious enough that it could threaten life and health, the Inspector will ask the District its permission to stop that particular operation until the unsafe condition is mitigated. In all conditions, the Inspector will work in close coordination with the Contractor and the District until the unsafe condition is mitigated.

Deliverables: None

- 6.9 *Enforce all of the provisions of the Storm Water Pollution Prevention Plan:* The Inspector will inquire with District staff regarding the SWPPP and follow-up with the Contractor to ensure that SWPPP issues are mitigated and SWPPP reports are turned in regularly. Since the project is less than one acre, a SWPPP is not required. Nonetheless, the Inspector will ensure Best Management Practices are followed by the Contractor.

Deliverables: None

- 6.10 *Perform all duties in a manner that promotes the cost-effective execution and progress of the work:* The Construction Manager is experienced in minimizing potential change orders and helping with managing project costs. Conditions that could be conducive to extra costs will be identified in advance, as well as means found to mitigate those conditions. The Construction Manager will discharge his duties in a timely manner to avoid delays in the project and, thus, eliminate potentials for costs caused by such delays. Where changes might become necessary during the project, the Construction Manager will provide recommendations to District staff in selecting the least costly options for bringing about those changes.

Deliverables: None

- 6.11 *Approve materials and workmanship that meet the contract requirements, notwithstanding the purview and authority of the Project Engineer, other authorized representative or regulatory authorities having jurisdiction:* The Inspector will see to it that the Contractor constructs the project in accordance with the contract documents. The Inspector will not approve any materials or workmanship that deviate from the contract documents. If such changes become necessary during the project, the Inspector will bring those changes to the attention of the Construction Manager and the District to resolve with the Project Engineer. Changes from the contract document must be backed up by RFIs and submittals, or other written documentation allowed in the contract documents. In summary, the job of the Inspector is to observe and report to the District. The Inspector will then work with the District and its Project Engineers to resolve the issues that need to be addressed.

Deliverables: Reviewed Submittals

- 6.12 *Coordinate compaction and materials testing using District's geotechnical consultant. Establish compaction location records to verify compaction coverage:* The Inspector will coordinate with the District's geotechnical consultant for compaction testing and backfill material inspections. The Contractor will provide sufficient advance notice to schedule the geotechnical consultant. This topic will need to be discussed in the pre-construction meeting and appropriate protocols will need to be established based on the contract documents.

Deliverables: Soils Compaction Reports (By Others)

- 6.13 *Coordinate survey requests using District's survey consultant:* The Inspector will coordinate with the District's survey consultant for Contractor's request for survey. The Contractor will provide sufficient advance notice to schedule the survey consultant.

Deliverables: Survey Documents (By Others)

- 6.14 *Verify and sign Contractor's daily extra work report documenting force account (time and materials) work:* The Inspector will first make sure the force account work is authorized by the District before this work is done. The Inspector will verify that the hours expended by the Contractor are documented daily. The Inspector will take pictures of the laborers and the equipment used on such force account work at various times of the day. These pictures will

provide additional documentation regarding the number of laborers working on the force account.

Daily review of the tickets will be strictly for the laborers and equipment. The Contractor will submit the complete documentation at a later date showing material quantities, prices, equipment hours and applicable rate, and other data for the Inspector and Construction Manager to review and forward to the District to process as an extra work item.

Deliverables: Force Account Documents

- 6.15 *Review and assist with contract change order negotiation with Contractor in cooperation and consultation with the District:* The Construction Manager will review and discuss with the Contractor any change orders. The Construction Manager will keep the District fully informed throughout the review process. The Construction Manager will forward the Contractor's final change order submittal to the District with his recommendation. The Construction Manager (or Inspector) will not be allowed to approve change orders. Change orders will be valid only when reviewed and approved by the District.

Deliverables: Change Order Requests

- 6.16 *Review Contractor's payment requests and verify quantities of completed work for progress payments to the Contractor followed by recommendations to the District's Project Engineer:* The Inspector will review the Contractor's progress payment requests and verify the quantities of work completed in the course of a month. The progress payment must have a set cut-off date to be valid. The cut-off date will need to be established at the pre-construction meeting, and in accordance with the contract documents. Any deviations from the cut-off date will need to be backed up with adequate documentation and approved by the District.

Deliverables: Progress Payments and Backup Info

- 6.17 *Conduct bi-weekly construction progress meetings:* The Construction Manager will conduct bi-weekly (every two weeks) construction progress meetings. The Inspector will attend the meeting as well as District representatives. The Construction Manager will work with the District and Contractor to resolve issues, even between the regular meetings.

Deliverables: Meeting Agenda; Meeting Minutes

- 6.18 *Issue written instructions to the Contractor regarding routine matters, follow-up of verbal instructions and as directed by the District's Project Engineer:* All communications and instructions to the Contractor will be in writing via emails. Verbal discussions will be followed-up in writing through an email. The designated District staff will be copied on all written communications to and from the Contractor. On those written communications that might have contractual impact, the Construction Manager will send a draft of what he intends to write to the Contractor and provide the District staff the opportunity to reflect in the email issues of interest to District staff.

Deliverables: Email Correspondence

- 6.19 *Prepare project correspondence log organized in chronological order with the following headings:*

Section 1 – Correspondence with the Contractor
Section 2 – General Correspondence
Section 3 – Inspection Reports
Section 4 – Material Information/Survey
Section 5 – Weekly Statement of Working Days
Section 6 – Financial Information

The correspondence log will be organized in a Project Binder and will be maintained by the Construction Manager. The District will have access to the Project Binder at any time during the construction. The Project Binder will be turned it to the District at the end of the project.

Deliverables: Correspondence Log and Binder

- 6.20 *Prepare weekly statement of working days documenting the construction progress, time of completion, delays and time extensions, and submit to the Contractor and the District on a weekly basis:* The Construction Manager will prepare Weekly Statements of Working Days and will submit to the District no later than each Monday morning for the previous week.

Deliverables: Weekly Statement of Working Days

- 6.21 *Effectively and expeditiously communicate with District staff, Design Consultants and Contractor to identify conflicts, construction problems, coordination issues and to obtain needed action and response to submittals and RFIs:* The Construction Manager will monitor and document all daily communication with all parties involved in the project through e-mail. Verbal communication will be backed up with e-mails for documentation purposes. E-mails may have as attachments diagrams, maps, tables, copies of submittal and RFIs. The project will be handled in such a manner that information can be traced even after a long lapse of time.

Deliverables: RFI Responses

- 6.22 *Review the construction progress schedules and provide assessment of the progress to the District with recommendations to maintain or improve adherence to the approved project schedule:* The Construction Manager will review the Contractor's master schedule and provide input and suggestion to the District. The Construction Manager will also review updates to the Contractor's schedule and identify areas where slippage is occurring. He will discuss with the Contractor ways in which the Contractor proposes to maintain the project progress. The Construction Manager will make recommendations to the District staff regarding improvements to the schedule. Progress meetings will be a good venue to discuss schedule issues in the presence of all parties, including the Contractor.

Deliverables: None

- 6.23 *Conduct pre-final inspection and prepare a written punch list documenting incomplete or corrective work:* The Construction Manager will conduct a pre-final inspection after receiving a written request from the Contractor to that effect. The Construction Manager will prepare a preliminary punch list of items that need to be corrected or completed. The Construction Manager will repeat this step, if necessary, until such time the Construction Manager is satisfied the project is ready for a final inspection with District staff. The District staff will be notified of the pre-final inspection, in case they wish to participate and see the progress of the project at the pre-final stage.

Deliverables: Punch List

- 6.24 *Conduct final inspection to verify all items on the punch list have been completed or corrected and make recommendation to the District concerning acceptance of the project:* The Construction Manager will conduct a final inspection after the Contractor has addressed all items on the pre-final punch list. The final inspection will be coordinated with District staff. The District Project Engineer can invite others who might be interested in the final inspections. Once all items on the punch list are corrected to the satisfaction of the District, the Construction Manager will make a recommendation for project acceptance.

Deliverables: Walk Through Documents

- 6.25 *Verify Contractor's progress on as-built plan preparation on a monthly basis. Verify that the as-built plans submitted by the Contractor are accurate:* The Inspector will maintain a marked-up set of drawings reflecting any field changes in the project. The Inspector will periodically

update his marked-up drawings to reflect the changes brought about through RFI's, field orders and other procedures allowed in the contract documents.

The Inspector will review the Contractor's as-built plans and compare them against his own marked-up drawings and notes to verify the Contractor's as-built plans are up to date and accurately reflect all as-built conditions. The Inspector will do this review and verification throughout the course of the project, and at the end of the project.

Deliverables: As-Built Redlines

- 6.26 *Confirm the re-establishment of survey monumentation in keeping with Senate Bill 1563, if required:* The Inspector will decide in cooperation with the District's survey consultant to determine whether this requirement is pertinent to either projects. If so, the Inspector will follow up with the Contractor to re-establish the survey monuments.

Deliverables: Corner Records (By Others)

Task VII - Post-Construction Phase (Optional)

The last week of the project will be dedicated to post-construction phase which represents project close-out. Inspection work is not required during this phase.

- 7.1 *Perform project closeout duties including final organization of project files and submit to District for approval:* The Construction Manager will maintain project files throughout the course of the project. The organization of the files will be discussed with District staff at the beginning of the project. The Construction Manager will submit a list of the files to the District upon project completion. Should the District wish to make adjustments in the organization of the files, the Construction Manager will address those adjustments to the District's satisfaction. The project files will be submitted to the District digitally.

Deliverables: Project Completion Binder

Exclusions

The following items are not included in the Scope of Work above:

- A. Survey of potholed utilities
- B. Survey of geotechnical boreholes
- C. Construction staking
- D. Environmental documentation
- E. Geotechnical and compaction testing
- F. Resetting of centerline monuments or filing of Corner Records
- G. Concrete compressive strength testing
- H. Preparation of record drawings
- I. All other items noted as exclusions to the Scope of Work

Section 5 – Scope of Work

Based on the Scope of Services outlined in the Request for Proposal (RFP), which is incorporated herein by reference as an integral part of this proposal, the following is our proposed Scope of Work to complete the project.

PROJECT TASKS

Task 1 – Project Management, Meetings and Coordination

- 1.1 *Project Management:* JIG will provide project management to ensure adherence to the project schedule and budget and to document all communication between JIG and the District.
- 1.2 *Meetings:* At the commencement of the project, JIG will hold a “kick-off” meeting with District staff to discuss the scope and parameters of the project. The Project Manager will arrange for and participate in review meetings with District staff to review progress of the work and exchange ideas and information at the PDR, 60% and 90% design milestones. JIG assumes the 99% and 100% comments will not require a review meeting but may be addressed via telephone and/or email. The proposal includes man-hours for attendance to a total of four meetings.
- 1.3 *Coordination:* JIG will coordinate efforts of the project team and subconsultants with representatives of utilities, government agencies, and outside stakeholders to determine requirements to be included in the construction document.

Task II – Preliminary Investigations and Topographic Mapping/Survey

This task is for preliminary investigations and topographic mapping/survey and is dedicated to collecting information available from the District and utility companies, performing ground control and survey, and completing geotechnical investigations. This task will also include a detailed field reconnaissance to become familiar with the project area and to note all visible relevant features along the pipeline alignment, including major utility structures within the street right-of-way, existing driveways, concrete gutters and access ramps, frontage properties, traffic and pavement conditions.

- 2.1 *Initial/Kickoff Meeting:* Set up and attend an initial/kickoff meeting with the District to introduce project team members, formalize project communications, discuss project schedule, review scope of work, and request available data, reports, documents, and plans from the District that are relevant to the Project.

Deliverables: Meeting Agenda; Meeting Minutes

- 2.2 *Records & Requirements Search:* Perform record and data search consisting of survey information (centerline control, benchmarks, assessor maps, parcel maps, record of survey, easements, etc.) and utility information consisting of existing water, sewer, and other utilities along the subject alignment. In addition, JIG will document all coordination with other public and private agencies involved to inform them about the project and obtain their records, approval, and permit requirements.

Deliverables: Utility Coordination Correspondence Table

- 2.3 *Ground Control and Survey:* JIG will establish project survey control using a combination of fast-static GPS and conventional survey methods. Horizontal control will be relative to the North American Datum of 1983 (NAD83), with coordinates based on the California Coordinate System as published by the California Spatial Reference Center. Vertical control will be based on the City of Garden Grove and Orange County benchmark system, relative to the North American Vertical Datum of 1988 (NAVD88), or another datum at the direction of the District’s staff.

Conventional topographic mapping will be conducted from right-of-way to right-of-way and would include the collection of items such as top of curb, flow line, edge of gutter, back of walks, walls, fences, roadway, driveway and surface and above ground utilities.

Once the fieldwork has been completed, the survey data will be reviewed, reduced and imported into a CAD base-file (AutoCAD 2018 format or others as requested). Field located topographic and utility features will be labeled with their respective point number, elevation and descriptions. Hall Land Surveying (survey sub-consultant) will produce a topographic base file of the surveyed scope at a mapping scale of 1"=40', including surface contours at one-foot intervals.

The proposal includes field survey of rim and invert of existing sewer/storm drain manholes within the project limits.

Deliverables: Topographic Map for Base File; Manhole Dip Data Information

- 2.4 *Geotechnical Investigations:* Perform geotechnical investigations to document existing subsurface conditions for use on sewer trench design and street rehabilitation design. This proposal is based on the number and depth of boreholes as listed in Table 3.

TABLE 3 GARDEN GROVE SANITARY DISTRICT SEWER SYSTEM REHABILITATION PLAN PHASE 1 – PROJECT 2 AND 3 NUMBER AND DEPTH OF PROPOSED BOREHOLES					
Reach	Location	Length (feet)	Boring Depth (ft)	No. of Borings	TCP Required
Project 2					
1	Galway Street (North of Garden Grove Blvd)	312	20	1	No
2	Gilbert Street (South of Garden Grove Blvd)	315	20	1	No
3	Gilbert Street (South of Kellogg Street)	340			No
4	Kellogg Street	255	20	1	No
5	Kellogg – Easement	216			No
6	Kerry Street	229	20	1	No
7	Alley (Off Donegal)	200	20	1	No
8	Crosby Avenue (East of Gilbert)	319	20	1	No
9	Crosby Avenue	242			No
10	Central Avenue (East of Gilbert)	329	20	1	No
11	Central Avenue	330			No
12	Acacia Avenue (East of Galway)	185	20	1	No
Project 3					
1	Trask Avenue (East of Newland)	330	20	1	Yes
2	Edgebrook Drive (Inside Parking Lot)	335	20	1	No
3	Garden Grove Boulevard (Dale to Louise)	325	20	0	Yes
4	Sycamore Street ⁽¹⁾	65	20	0	No
Total				10	

⁽¹⁾ Location of this sewer reach is unknown. No borings are required for this reach.

The exact location of the borings will be discussed with the District during the kick-off meeting.

Geotechnical investigations will be performed with traffic control measures per WATCH Manual except for any work on Garden Grove Boulevard and Trask Avenue. Project specific traffic control plans will be prepared for borings in these areas. Traffic control plans will be submitted to the City of Garden Grove for acquisition of encroachment permit (no-fee permit).

Laboratory testing will include 1) moisture content and dry density, 2) Atterberg limits, 3) sieve and hydrometer tests, 4) direct shear for evaluating soil shear strength, and 5) R-value tests for pavement.

After soil borings are completed, the pavement will be repaired using Perma-Patch or quick-set concrete. Use of hot asphalt mix is not included.

Deliverables: Geotechnical Investigations Report (Submitted with Preliminary Design Technical Memorandum - 1 PDF and 3 Hard Copies)

Task III – Preliminary Engineering

3.1 *Draft Preliminary Design Technical Memorandum:* Prepare a Draft Preliminary Design Technical Memorandum (PDTM) representing a 25% completion of the project design, summarizing the preliminary design complete with calculations and recommendations for use during the final design. The Draft PDTM will include the following:

- ▶ Summary of evaluation for street pavement condition
- ▶ Evaluation of method for sewer bypass
- ▶ Preliminary plan view of the proposed sewer alignment
- ▶ Table summary of sewer pipe hydraulics per sewer reach
- ▶ Permit requirements for proposed construction
- ▶ Preliminary schedule and estimated construction costs
- ▶ Recommendations of construction requirements, methods, and sequencing

Deliverables: Draft Preliminary Design Technical Memorandum (1 PDF and 3 Hard Copies)

3.2 *PDTM Submittal Review Meeting:* Meet with District staff to review comments on the Draft PDTM and respond to comments.

Deliverables: Meeting Agenda, Meeting Minutes

3.3 *Final Preliminary Design Technical Memorandum:* Revise the PDTM as necessary based on comments received from the meeting and submit Final PDTM to District.

Deliverables: Final Preliminary Design Technical Memorandum (1 PDF and 3 Hard Copies)

Task IV – Final Engineering

The Final PDTM will serve as the outline for executing the final design services which includes the following items:

4.1 *Permits and Utility Coordination:* Coordinate and submit the 60% construction drawings to permitting agencies, neighboring cities, and utility companies with copies of all correspondence and submittals to the District. Comments received from the various agencies will be incorporated into the final design.

Obtain encroachment permits for pipeline construction from the City of Garden Grove.

Deliverables: Copies of Correspondence with Utility Companies, City Encroachment Permit

4.2 *Utility Verification and Potholing:* Perform utility verification by potholing using an air vacuum excavation technique. Resulting pothole data will be accurately shown on the construction drawings. Per the Request for Proposal, a maximum of 50 potholes have been included in this proposal. All phone and electric underground will be exposed from top to bottom of structure, if possible. The exact quantity and location of the potholes will be determined and submitted to the District for review after acceptance of the Final PDTM.

Potholing will be performed with traffic control measures per WATCH Manual. Preparation of traffic control plans is not included in this scope. Potholes at the following locations are not included in the scope:

- Garden Grove Boulevard, Dale to Louise
- Garden Grove Boulevard and Gilbert intersection
- Garden Grove Boulevard and Galway intersection

If utilities in these areas are requested, additional compensation will be provided for preparation of Traffic Control Plans and for handling high volume traffic control during potholing operations.

The encroachment permit with the City of Garden Grove will be a no fee permit. After potholing is complete, the pavement will be repaired using Perma-patch or quickset concrete. Use of hot asphalt mix is not included.

A pothole summary report will be used to plot the utilities on the project base map. Field survey of potholed utilities is not included.

Deliverables: Pothole Investigation Report

- 4.3 *Construction Plans, Specifications, and Engineer's Estimate at 60%, 90%, 99%, and 100% Stages of Design:* Prepare construction drawings, specifications, and engineer's construction cost estimate incorporating District standard drawings, standard specifications, comments received from District, utility companies, and outside stakeholders for each project. The construction specifications will include the City's contract boilerplate documents, construction sequencing, and technical specifications. Traffic control plans will not be included in the construction plan sets.

The construction plans will consist of the following sheets at a minimum:

TABLE 4 GARDEN GROVE SANITARY DISTRICT SEWER SYSTEM REHABILITATION PLAN PHASE 1 – PROJECT 2 AND 3 CONSTRUCTION PLAN SHEET INDEX		
Sheet No.	Drawing No.	Description
1	G-01	Title Sheet
2	G-02	Vicinity Map, Location Map and Sheet Index, Symbols, General Notes
3	C-01	Plan and Profile Project No. 2 – Galway Street and Acacia Avenue
4	C-02	Plan and Profile Project No. 2 – Gilbert Street (North and South)
5	C-03	Plan and Profile Project No. 2 – Kellogg Street and Easement
6	C-04	Plan and Profile Project No. 2 – Kerry Street and Alley
7	C-05	Plan and Profile Project No. 2 – Crosby Avenue (East and West)
8	C-06	Plan and Profile Project No. 2 – Central Avenue
9	C-07	Plan and Profile Project No. 3 – Trask Avenue
10	C-08	Plan and Profile Project No. 3 – Edgebrook Drive and Sycamore Street
11	C-09	Plan and Profile Project No. 3 – Garden Grove Boulevard
12	C-10	Miscellaneous Civil Details
13	C-11	Miscellaneous Civil Details

Three (3) sets of the milestone submittals for each project will be sent to the District for review. This includes the construction plans, specifications, cost estimates, and calculations.

The following list outlines a suggested level of completion for various milestone submittals.

60% Milestone Submittal – This submittal will include preliminary horizontal and selected segments of vertical alignment, utility crossings, and abandonment methods. The submittal package will account for and be comprised of the following:

- ▶ Completed base map
- ▶ Preliminary hydraulic calculations
- ▶ Completed base drawing with street data and existing utilities
- ▶ Completed Title Sheet (including vicinity map, location map and index)
- ▶ Index Map
- ▶ General notes, abbreviations, legend (substantially complete)
- ▶ Horizontal alignment with stationing and control (substantially complete)

- ▶ Preliminary project specific details
- ▶ Preliminary annotations
- ▶ Table of contents for technical specifications
- ▶ Preliminary engineer's estimate

90% Milestone Submittal – This submittal will have a completed horizontal alignment and partially completed vertical alignment, construction notes, plan annotations, manhole details, and project details. The submittal package will account for and be comprised of the following:

- ▶ All items completed at the 60% milestone submittal
- ▶ Completed potholing information plotted on profile
- ▶ Completed final hydraulic calculations
- ▶ Completed general notes, abbreviations, and legend
- ▶ Completed horizontal alignment with stationing and control
- ▶ Vertical profile (substantially complete)
- ▶ Completed standard details
- ▶ Completed manhole and enlargement details
- ▶ Project specific details
- ▶ Plan annotations (substantially complete)
- ▶ Technical specifications (substantially complete)
- ▶ Front end documents (substantially complete)
- ▶ Engineer's estimate (90% level)
- ▶ Completed utility coordination

99% Milestone Submittal – This submittal is deemed the pre-final submittal and is the District's final opportunity for review prior to Mylar production. The construction plans will include a completed horizontal and vertical alignment, completed details, and completed plan annotations. The project specifications will include completed technical specifications, completed front end documents, and bid form.

100% Milestone Submittal – This submittal is considered the final submittal and will serve as a back check to make sure all comments from the 99% milestone submittal was addressed.

Deliverables: Three (3) Copies of the 60%, 90%, 99%, and 100% Design Milestone Submittals

- 4.4 *Progress Submittal Review Meetings:* Arrange a review meeting with District staff at the 60% and 90% design milestones to discuss the design, collect and respond to review comments. JIG assumes the 99% and 100% comments will not require a review meeting but will be addressed via telephone and/or email.

Deliverables: Meeting Agenda; Meeting Minutes

- 4.5 *Final Deliverable:* Submit two (2) bond copies of the construction plans along with a reverse read Mylar set for each project. Drawings will be 24-inch by 36-inch in size, drawn at 40 scale plan view and 4 scale vertical. Details will be 20 scale or less. All drawings shall conform to District standards and will be signed and stamped by a registered civil engineer in the State of California. Project specifications will also be signed and stamped by the Engineer of Record. Two (2) copies of the specifications will be submitted, one bound and the other unbound.

JIG will provide the District with two (2) copies of the Project Design Notebook. The notebook will include all pertinent correspondence, calculations, quantity and cost estimates. The final design notebook will be signed and stamped by the Engineer of Record.

A USB drive will be submitted containing pdfs of the bid documents, AutoCAD 2019 files without x-references for each drawing sheet of the plans. USB drive will also include the specifications in MS Word format, and the engineer's cost estimate in MS Excel format.

Deliverables: Final Design Submittal; Project Design Notebook; USB Drive

4.6 *Bid Phase Assistance:* Provide necessary support services to the District during the project bid phase. Support services shall include the following:

- ▶ Attendance at Pre-Bid Meeting
- ▶ Answering Contractor's questions and providing clarifications
- ▶ Preparation one (1) project addendum

Deliverables: Project Addendum; Design Clarifications

Task V - Pre-Construction Phase (Optional)

The first week of the project will be dedicated to the pre-construction phase which includes the preconstruction meeting and getting familiar with the contract documents and existing site conditions.

5.1 *Review and be knowledgeable of the contract documents and District Standard Plans and Specifications prior to the pre-construction meeting:* The Construction Manager and Inspector will review the contract documents, District Standard Plans and Specifications and become familiar with the design intent and typical construction methods employed by the District.

Review and be knowledgeable of existing site conditions: The Construction Manager and Inspector will visit the project site prior to the Pre-construction meeting and review existing facilities closely.

Deliverables: None

5.2 *Attend a pre-construction meeting and provide detailed meeting minutes of the meeting:* The Construction Manager will draft an agenda for the pre-construction meeting and submit it to the District for review. The agenda will also include any questions or discussions of interest to the Contractor. Unless otherwise required by the District, the Construction Manager will record meeting proceedings and draft meeting minutes to be sent to the District for review and comment, before distributing to all meeting participants.

Deliverables: Meeting Agenda; Meeting Minutes

Task VI - Construction Phase (Optional)

Construction of the project is estimated at 160 working days (32 weeks). A Construction Inspector will be on site full time for these days. The Construction Manager on average will be involved for five hours per week during this period.

6.1 *Serve as the District's representative and field liaison with the Contractor during the construction of the project:* The Inspector will serve as the District's representative on the project. However, the Inspector will not make any commitments on behalf of the District without the District's concurrence. The role of the Inspector will be of liaison and coordination. The Inspector will observe and report to the District daily.

Deliverables: None

6.2 *Provide daily construction inspection services of the work covered in the contract documents and change orders:* The Inspector will follow the contract documents during the construction phase of this project. The Inspector will not allow any deviations from the contract documents, unless authorized by the District through due process. Should the Contractor want to deviate from the contract documents, such requests must be submitted through RFI's, submittals, substitution requests, or through other procedures allowed in the contract documents. In all cases, the District will have the final authority. The Inspector will work closely with the Construction Manager and District staff and will fully inform the District staff on the project progress.

Deliverables: None

6.3 *Prepare and submit to the District daily inspection reports documenting the Contractor's workforce, material and equipment used, a summary of construction activities, field problems, disputes or claims, resolutions of issues and directions given to the contractor:* Inspection reports will be completed by the Inspector, reviewed by the Construction Manager, and submitted to the District weekly. The Inspector will prepare detailed daily reports in sufficient detail to fully inform the District on the progress of the project. The daily reports will be attached with pictures to give the District staff sufficient information about progress of the project. Items requiring decision by the District will be highlighted and followed up by e-mail and phone calls, after submitting the daily reports.

Deliverables: Daily Inspection Reports

6.4 *Maintain a tickets folder:* The Inspector will prepare a folder to collect all material delivery tickets. The tickets will be labeled to correspond with the Daily Inspection Reports.

Deliverables: Material Delivery Tickets - Organized

6.5 *Ensure the Contractor is working within the framework of the contract per Construction Contract Documents, City of Garden Grove / District Standard Specification and Plans, Garden Grove Municipal Code and other applicable standards:* Standard Plans and Specifications, as well as other applicable codes and standards, will be maintained electronically in the project files for use as reference during construction.

Deliverables: None

6.6 *Prepare and maintain a photo journal documenting the construction progress:* The Inspector will take photos before construction begins, during construction, and upon completion of the project. The journal will comply with the following:

- A. Kept in a three-ring binder that is clearly labeled on the cover and the spine with project name and number (more than one may be required for manageability)
- B. Date stamped color photographs with 4"x6" dimensions and stored on 32gb USB drive
- C. Captions for each photo describing orientation and the reason the shot was taken

The Inspector will take detailed digital photos before the project starts. Particular attention will be focused on areas which might change or deteriorate as a consequence of construction work. Examples are surface improvements, pavement, curb and gutter, etc. The Inspector will take many pictures daily to tell the story of what took place each day even to those who are remote from the project. The pictures will be attached with the Daily Reports with captions to explain the items in the pictures. The Inspector will also take pictures after the project completion. A few pictures will be attached to the Daily Report.

Deliverables: Photo Journal

6.7 *Confirm in writing that work being inspected conforms to the contract requirements and promptly report unacceptable work to the District and Contractor:* Work not conforming to the contract documents will be reflected in a Notice of Non-Compliance and saved in the contract files. However, the Contractor will be notified verbally should an item of non-compliance occur. Such verbal references will be reflected in the Daily Reports. Additionally, the Construction Manager will discuss such items with District staff and suggest actions to handle or rectify the situation.

Deliverables: None

6.8 *Monitor project work and adjacent areas for unsafe conditions and promptly report it to the District and the Contractor for resolution:* Safety, both of the public and of the workers, is of paramount importance in the implementation of this project. In general, the Inspector will bring to the attention of the Contractor any unsafe conditions and report it to the District. Due to the importance of safety issues, e-mail will be the mode of communication for good documentation

and tracking. If the safety issue is serious enough that it could threaten life and health, the Inspector will ask the District its permission to stop that particular operation until the unsafe condition is mitigated. In all conditions, the Inspector will work in close coordination with the Contractor and the District until the unsafe condition is mitigated.

Deliverables: None

- 6.9 *Enforce all of the provisions of the Storm Water Pollution Prevention Plan:* The Inspector will inquire with District staff regarding the SWPPP and follow-up with the Contractor to ensure that SWPPP issues are mitigated and SWPPP reports are turned in regularly. Since the project is less than one acre, a SWPPP is not required. Nonetheless, the Inspector will ensure Best Management Practices are followed by the Contractor.

Deliverables: None

- 6.10 *Perform all duties in a manner that promotes the cost-effective execution and progress of the work:* The Construction Manager is experienced in minimizing potential change orders and helping with managing project costs. Conditions that could be conducive to extra costs will be identified in advance, as well as means found to mitigate those conditions. The Construction Manager will discharge his duties in a timely manner to avoid delays in the project and, thus, eliminate potentials for costs caused by such delays. Where changes might become necessary during the project, the Construction Manager will provide recommendations to District staff in selecting the least costly options for bringing about those changes.

Deliverables: None

- 6.11 *Approve materials and workmanship that meet the contract requirements, notwithstanding the purview and authority of the Project Engineer, other authorized representative or regulatory authorities having jurisdiction:* The Inspector will see to it that the Contractor constructs the project in accordance with the contract documents. The Inspector will not approve any materials or workmanship that deviate from the contract documents. If such changes become necessary during the project, the Inspector will bring those changes to the attention of the Construction Manager and the District to resolve with the Project Engineer. Changes from the contract document must be backed up by RFIs and submittals, or other written documentation allowed in the contract documents. In summary, the job of the Inspector is to observe and report to the District. The Inspector will then work with the District and its Project Engineers to resolve the issues that need to be addressed.

Deliverables: Reviewed Submittals

- 6.12 *Coordinate compaction and materials testing using District's geotechnical consultant. Establish compaction location records to verify compaction coverage:* The Inspector will coordinate with the District's geotechnical consultant for compaction testing and backfill material inspections. The Contractor will provide sufficient advance notice to schedule the geotechnical consultant. This topic will need to be discussed in the pre-construction meeting and appropriate protocols will need to be established based on the contract documents.

Deliverables: Soils Compaction Reports (By Others)

- 6.13 *Coordinate survey requests using District's survey consultant:* The Inspector will coordinate with the District's survey consultant for Contractor's request for survey. The Contractor will provide sufficient advance notice to schedule the survey consultant.

Deliverables: Survey Documents (By Others)

- 6.14 *Verify and sign Contractor's daily extra work report documenting force account (time and materials) work:* The Inspector will first make sure the force account work is authorized by the District before this work is done. The Inspector will verify that the hours expended by the Contractor are documented daily. The Inspector will take pictures of the laborers and the equipment used on such force account work at various times of the day. These pictures will

provide additional documentation regarding the number of laborers working on the force account.

Daily review of the tickets will be strictly for the laborers and equipment. The Contractor will submit the complete documentation at a later date showing material quantities, prices, equipment hours and applicable rate, and other data for the Inspector and Construction Manager to review and forward to the District to process as an extra work item.

Deliverables: Force Account Documents

- 6.15 *Review and assist with contract change order negotiation with Contractor in cooperation and consultation with the District:* The Construction Manager will review and discuss with the Contractor any change orders. The Construction Manager will keep the District fully informed throughout the review process. The Construction Manager will forward the Contractor's final change order submittal to the District with his recommendation. The Construction Manager (or Inspector) will not be allowed to approve change orders. Change orders will be valid only when reviewed and approved by the District.

Deliverables: Change Order Requests

- 6.16 *Review Contractor's payment requests and verify quantities of completed work for progress payments to the Contractor followed by recommendations to the District's Project Engineer:* The Inspector will review the Contractor's progress payment requests and verify the quantities of work completed in the course of a month. The progress payment must have a set cut-off date to be valid. The cut-off date will need to be established at the pre-construction meeting, and in accordance with the contract documents. Any deviations from the cut-off date will need to be backed up with adequate documentation and approved by the District.

Deliverables: Progress Payments and Backup Info

- 6.17 *Conduct bi-weekly construction progress meetings:* The Construction Manager will conduct bi-weekly (every two weeks) construction progress meetings. The Inspector will attend the meeting as well as District representatives. The Construction Manager will work with the District and Contractor to resolve issues, even between the regular meetings.

Deliverables: Meeting Agenda; Meeting Minutes

- 6.18 *Issue written instructions to the Contractor regarding routine matters, follow-up of verbal instructions and as directed by the District's Project Engineer:* All communications and instructions to the Contractor will be in writing via emails. Verbal discussions will be followed-up in writing through an email. The designated District staff will be copied on all written communications to and from the Contractor. On those written communications that might have contractual impact, the Construction Manager will send a draft of what he intends to write to the Contractor and provide the District staff the opportunity to reflect in the email issues of interest to District staff.

Deliverables: Email Correspondence

- 6.19 *Prepare project correspondence log organized in chronological order with the following headings:*

Section 1 – Correspondence with the Contractor
Section 2 – General Correspondence
Section 3 – Inspection Reports
Section 4 – Material Information/Survey
Section 5 – Weekly Statement of Working Days
Section 6 – Financial Information

The correspondence log will be organized in a Project Binder and will be maintained by the Construction Manager. The District will have access to the Project Binder at any time during the construction. The Project Binder will be turned it to the District at the end of the project.

Deliverables: Correspondence Log and Binder

- 6.20 *Prepare weekly statement of working days documenting the construction progress, time of completion, delays and time extensions, and submit to the Contractor and the District on a weekly basis:* The Construction Manager will prepare Weekly Statements of Working Days and will submit to the District no later than each Monday morning for the previous week.

Deliverables: Weekly Statement of Working Days

- 6.21 *Effectively and expeditiously communicate with District staff, Design Consultants and Contractor to identify conflicts, construction problems, coordination issues and to obtain needed action and response to submittals and RFIs:* The Construction Manager will monitor and document all daily communication with all parties involved in the project through e-mail. Verbal communication will be backed up with e-mails for documentation purposes. E-mails may have as attachments diagrams, maps, tables, copies of submittal and RFIs. The project will be handled in such a manner that information can be traced even after a long lapse of time.

Deliverables: RFI Responses

- 6.22 *Review the construction progress schedules and provide assessment of the progress to the District with recommendations to maintain or improve adherence to the approved project schedule:* The Construction Manager will review the Contractor's master schedule and provide input and suggestion to the District. The Construction Manager will also review updates to the Contractor's schedule and identify areas where slippage is occurring. He will discuss with the Contractor ways in which the Contractor proposes to maintain the project progress. The Construction Manager will make recommendations to the District staff regarding improvements to the schedule. Progress meetings will be a good venue to discuss schedule issues in the presence of all parties, including the Contractor.

Deliverables: None

- 6.23 *Conduct pre-final inspection and prepare a written punch list documenting incomplete or corrective work:* The Construction Manager will conduct a pre-final inspection after receiving a written request from the Contractor to that effect. The Construction Manager will prepare a preliminary punch list of items that need to be corrected or completed. The Construction Manager will repeat this step, if necessary, until such time the Construction Manager is satisfied the project is ready for a final inspection with District staff. The District staff will be notified of the pre-final inspection, in case they wish to participate and see the progress of the project at the pre-final stage.

Deliverables: Punch List

- 6.24 *Conduct final inspection to verify all items on the punch list have been completed or corrected and make recommendation to the District concerning acceptance of the project:* The Construction Manager will conduct a final inspection after the Contractor has addressed all items on the pre-final punch list. The final inspection will be coordinated with District staff. The District Project Engineer can invite others who might be interested in the final inspections. Once all items on the punch list are corrected to the satisfaction of the District, the Construction Manager will make a recommendation for project acceptance.

Deliverables: Walk Through Documents

- 6.25 *Verify Contractor's progress on as-built plan preparation on a monthly basis. Verify that the as-built plans submitted by the Contractor are accurate:* The Inspector will maintain a marked-up set of drawings reflecting any field changes in the project. The Inspector will periodically

update his marked-up drawings to reflect the changes brought about through RFI's, field orders and other procedures allowed in the contract documents.

The Inspector will review the Contractor's as-built plans and compare them against his own marked-up drawings and notes to verify the Contractor's as-built plans are up to date and accurately reflect all as-built conditions. The Inspector will do this review and verification throughout the course of the project, and at the end of the project.

Deliverables: As-Built Redlines

- 6.26 *Confirm the re-establishment of survey monumentation in keeping with Senate Bill 1563, if required:* The Inspector will decide in cooperation with the District's survey consultant to determine whether this requirement is pertinent to either projects. If so, the Inspector will follow up with the Contractor to re-establish the survey monuments.

Deliverables: Corner Records (By Others)

Task VII - Post-Construction Phase (Optional)

The last week of the project will be dedicated to post-construction phase which represents project close-out. Inspection work is not required during this phase.

- 7.1 *Perform project closeout duties including final organization of project files and submit to District for approval:* The Construction Manager will maintain project files throughout the course of the project. The organization of the files will be discussed with District staff at the beginning of the project. The Construction Manager will submit a list of the files to the District upon project completion. Should the District wish to make adjustments in the organization of the files, the Construction Manager will address those adjustments to the District's satisfaction. The project files will be submitted to the District digitally.

Deliverables: Project Completion Binder

Exclusions

The following items are not included in the Scope of Work above:

- A. Survey of potholed utilities
- B. Survey of geotechnical boreholes
- C. Construction staking
- D. Environmental documentation
- E. Geotechnical and compaction testing
- F. Resetting of centerline monuments or filing of Corner Records
- G. Concrete compressive strength testing
- H. Preparation of record drawings
- I. All other items noted as exclusions to the Scope of Work

**GARDEN GROVE SANITARY DISTRICT
SEWER SYSTEM REHABILITATION PLAN PHASE I - SEWER MAIN REPLACEMENT PROJECT NO. 2 AND 3
FEE SUMMARY**

Scope of Work Tasks	Labor Hours						Total Hours	FEE	Subconsultants			Direct Costs	Total Fee
	PM/CM	QC	PE	CAD	Insp	Admin			Geotech	Survey	Pothole		
	\$180	\$140	\$160	\$95	\$130	\$50							
BASELINE TASKS													
TASK I - Project Management, Meetings & Coordination	60	0	0	0	0	0	60	\$9,800	\$0	\$0	\$0	\$0	\$9,800
TASK II - Preliminary Investigations & Topographic Mapping													
2.1 Initial Kick-Off Meeting	2	0	0	0	0	1	3	\$370	\$0	\$0	\$0	\$0	\$370
2.2 Records and Requirements Search	0	0	1	8	0	8	17	\$1,320	\$0	\$0	\$0	\$150	\$1,470
2.3 Ground Control and Survey	0	0	0	0	0	0	0	\$0	\$0	\$43,050	\$0	\$0	\$43,050
2.4 Geotechnical Investigations	0	0	0	0	0	0	0	\$0	\$50,620	\$0	\$0	\$0	\$50,620
Subtotal Task II -	2	0	1	8	0	9	20	\$1,690	\$50,620	\$43,050	\$0	\$150	\$95,510
TASK III - Preliminary Engineering													
3.1 Draft Preliminary Design Technical Memorandum	9	2	26	15	0	3	55	\$7,455	\$0	\$0	\$0	\$100	\$7,555
3.2 PDTM Submittal Review Meeting	2	0	0	0	0	1	3	\$370	\$0	\$0	\$0	\$0	\$370
3.3 Final Preliminary Design Technical Memorandum	3	0	8	5	0	1	17	\$2,285	\$0	\$0	\$0	\$100	\$2,385
Subtotal Task III -	14	2	34	20	0	5	75	\$10,110	\$0	\$0	\$0	\$200	\$10,310
TASK IV - Final Engineering													
4.1 Permits and Utility Coordination	2	0	2	4	0	8	16	\$1,420	\$0	\$0	\$0	\$0	\$1,420
4.2 Utility Verification and Potholing (50 potholes)	0	0	0	0	0	0	0	\$0	\$0	\$0	\$49,560	\$0	\$49,560
4.3 Construction Plans, Specs, and Estimate (60%, 80%, 99%, and 100%)	38	16	122	286	0	22	484	\$57,060	\$0	\$0	\$0	\$250	\$57,310
4.4 Progress Submittal Review Meetings (60% & 80%)	4	0	0	0	0	2	6	\$740	\$0	\$0	\$0	\$50	\$790
4.5 Final Deliverable	1	0	4	28	0	2	35	\$3,560	\$0	\$0	\$0	\$150	\$3,710
4.6 Bid Phase Assistance	1	2	0	12	0	4	19	\$1,780	\$0	\$0	\$0	\$0	\$1,780
Subtotal Task IV -	46	18	128	340	0	38	570	\$64,560	\$0	\$0	\$49,560	\$450	\$114,570
Baseline Tasks Total Estimated Hours and Fee (Tasks I to IV) -	122	20	163	368	0	52	725	\$85,960	\$50,620	\$43,050	\$49,560	\$800	\$229,990
OPTIONAL TASKS													
TASK V - Pre-Construction Phase	8	0	0	0	8	4	20	\$2,520	\$0	\$0	\$0	\$25	\$2,545
TASK VI - Construction Phase													
Estimated at 160 Working Days	160	0	0	0	1280	64	1504	\$195,200	\$0	\$0	\$0	\$300	\$195,500
TASK VII - Post-Construction Phase	20	0	0	0	0	8	28	\$3,600	\$0	\$0	\$0	\$0	\$3,600
Optional Tasks Total Estimated Hours and Fee (Tasks V to VII) -	188	0	0	0	1288	76	1552	\$201,320	\$0	\$0	\$0	\$325	\$201,645
Total Baseline and Optional Tasks (Tasks I to VII) -	310	20	163	368	1288	128	2277	\$287,280	\$50,620	\$43,050	\$49,560	\$1,125	\$431,635
10% Contingency Amount =													\$43,164
Total Baseline and Optional Tasks with Contingency Amount -													\$474,799

JIG CONSULTANTS