Garden Grove Sanitary District

INTER-DEPARTMENT MEMORANDUM

To:

Matthew J. Fertal

From: William E. Murray

Dept:

General Manager

Dept:

Public Works

Subject:

AWARD OF CONTRACT TO LEE & RO,

Date:

August 28, 2012

INC. FOR ENGINEERING SERVICES FOR PRIORITY SEWER IMPROVEMENTS PROJECT NOS. 43, 46, 54, 55, 68 AND

75

OBJECTIVE

To request the Garden Grove Sanitary District (District) Board approve an agreement for professional engineering services for the Priority Sewer Improvements Project Nos. 43, 46, 54, 55, 68 and 75 to Lee & Ro, Inc. in the amount of \$165,186.

BACKGROUND

Priority Sewer Improvements Project Nos. 43, 46, 54, 55, 68 and 75 were approved and budgeted for this fiscal year as a part of the Sewer System Capacity Assurance Plan. These projects will relieve capacity deficiencies of the existing sewers within Lamplighter Street, Lenore Avenue, Seneca Street, Monarch Street, Onyx Street, Lampson Avenue, Brookhurst Street and Bonser Avenue as shown in the attached location map. These improvements will allow new development and redevelopment The projects will be designed and constructed this Fiscal Year, in the area. 2012/13.

DISCUSSION

Staff requested proposals from five (5) firms to provide professional engineering services. Out of those five (5), four (4) consultants responded. members rated the submitted proposals on the basis of qualifications without considering cost. Based on evaluation results, Lee & Ro, Inc. rated highest in qualifications and its ability to provide professional engineering services for this project. The following is a summary of the ratings with the highest total being the most qualified:

AWARD OF CONTRACT TO LEE & RO, INC. FOR ENGINEERING SERVICES FOR PRIORITY SEWER IMPROVEMENTS PROJECT NOS. 43, 46, 54, 55, 68 AND 75 August 28, 2012

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	Lee & Ro, Inc.	Hunsaker & Associates	Civiltec Engineering,	Brady
	City of Industry, CA	Irvine, Inc. Irvine, CA	Inc. Monrovia, CA	Huntington Beach, CA
Rater A	164.5	161.5	151	136
Rater B	158.5	156.5	146	136
Rater C	159.5	160	143.5	137
Totals	482.5	478	440.5	409

Upon selection of the most qualified firm, District staff interviewed Lee & Ro, Inc. and negotiated an agreement for its services.

FINANCIAL IMPACT

The design will be financed with Sewer Funds in the amount of \$165,186. There will be no impact to the General Fund.

RECOMMENDATION

It is recommended that the District Board:

- Approve the Agreement with Lee & Ro, Inc., in the amount of \$165,186, for professional engineering services for the Priority Sewer Improvements Project Nos. 43, 46, 54, 55, 68 and 75; and
- Authorize the General Manager to execute the agreement and make minor modifications as appropriate on behalf of the District.

WILLIAM E. MURRAY, P.E.

Public Works Director/City Engineer

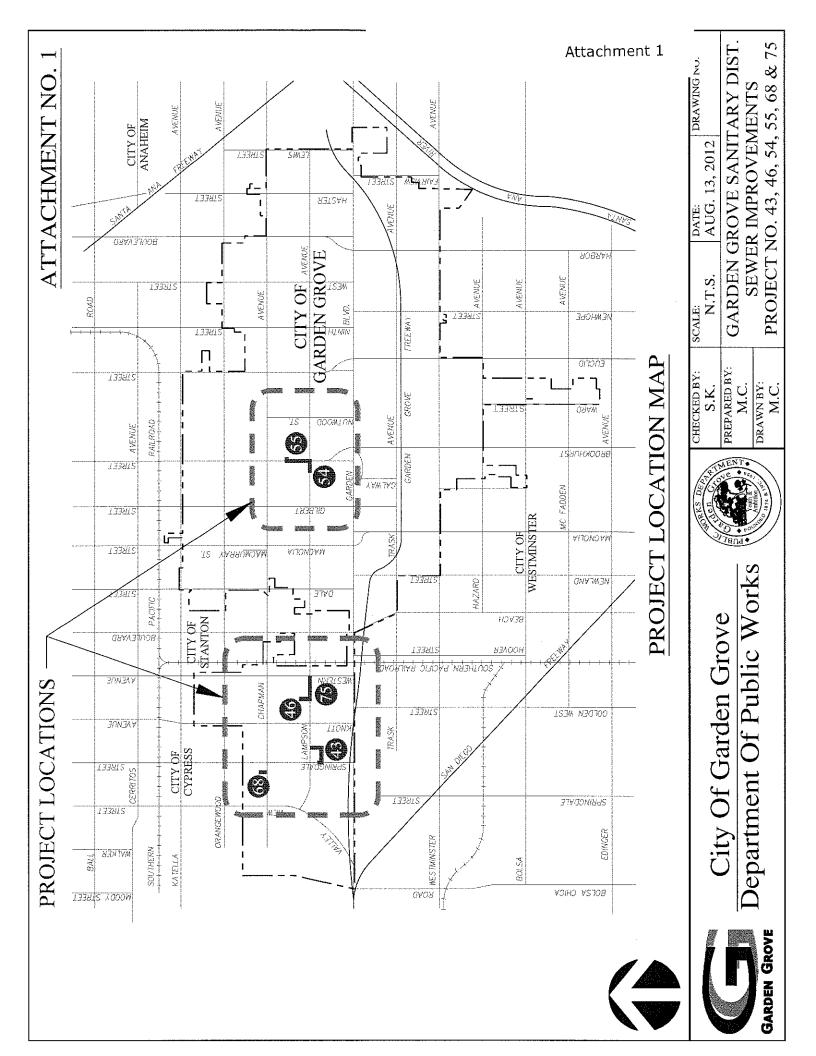
By: Myung Chun, P.E. Associate Engineer

Attachments: 1) Location Map

2) Professional Services Agreement

Recommended for Approval

Matthew Fertal General Manager



PROFESSIONAL SERVICES AGREEMENT

THIS PROFESSIONAL SERVICES AGREEMENT is made and entered into, to be effective the 28th day of August, 2012, by and between the GARDEN GROVE SANITARY DISTRICT, a California Special District, hereinafter referred to as "District," and Lee & Ro, Inc. 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 Útility Research, Design Survey, Potholing, Permitting and Engineering Services for the construction of Priority Sewer Improvements Project Nos. 43, 46, 54, 55, 68 and 75 (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:

<u>AGREEMENT</u>

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.

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II. <u>TERM</u>

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. <u>FEES</u>

A. <u>Accounting Records</u>

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. <u>Total Payment</u>

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 "B," except as otherwise set forth herein, provided compensation under this Agreement shall not exceed \$ 165,186.

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 "B," attached hereto based upon actual time spent providing the services outlined in this Consultant shall submit to District monthly or periodic statements Agreement. 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. <u>TERMINATION</u>

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. <u>DEFAULT OF CONSULTANT</u>

- 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, reprocurement costs of the same or similar services defaulted by Consultant under this Agreement.

VI. <u>LEGAL RELATIONSHIP BETWEEN THE PARTIES</u>

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. <u>ASSIGNMENTS AND SUBCONTRACTING</u>

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. <u>SUCCESSORS IN INTEREST</u>

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. <u>INSURANCE</u>

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 District or City and shall name the Garden Grove Sanitary District, City of Garden Grove, and their 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 occurrence, 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

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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 state 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, their officers, officials, agents, employees, and volunteers.

B. <u>Minimum Limits of Insurance</u>

Consultant shall maintain limits no less than:

1. <u>General Liability</u>:

\$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.

Automobile Liability:

\$1,000,000 combined single limit for bodily injury and property damage.

Employer Liability:

\$1,000,000 per accident for bodily injury or disease.

C. <u>Deductibles and Self-Insured Retentions</u>

Any deductibles or self-insured retentions must be declared to and approved by the District Risk Manager. At the option of the District Risk 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 officers,

officials, officers, employees, agents or 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 Risk 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 officers, officials, employees, agents and volunteers are to be covered as additional insureds with respect to: liability arising out of on-going operations 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 officers, officials, employees, agents, or 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 officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by Garden Grove Sanitary District, the City of Garden Grove, and their respective officers, officials, employees, agents, and volunteers shall be in excess of Consultant's insurance and shall not contribute with it.
- 3. A waiver of subrogation shall be provided, for all policies, against the Garden Grove Sanitary District, City of Garden Grove, and their officers, officials, employees, agents, and volunteers.
- 4. 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 officers, officials, employees, agents, and volunteers.
- 5. 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.
- 6. 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.
- 7. 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. <u>Verification of Coverage</u>

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.

XII. <u>INDEMNITY</u>

A. <u>Indemnification</u>

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 and its 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 and its 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.

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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 and its 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 is 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.

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XV. CONFIDENTIALITY AND OWNERSHIP OF DOCUMENTS

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. <u>INTERPRETED UNDER LAWS OF THE STATE OF CALIFORNIA</u>

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: Project Engineer

To Consultant:

Lee & Ro, Inc.

1199 South Fullerton Road City of Industry, CA 91748 Attention: M. Steve Ro, P.E.

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. <u>TIME IS OF THE ESSENCE</u>

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 reminder 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.

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XXVI. NON-LIABILITY OF DISTRICT OFFICERS AND EMPLOYEES

No officer or employee of the District 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. <u>RECITALS</u>

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:_______
Matthew J. Fertal
General Manager

ATTEST:

By:______
Kathy Bailor
District Secretary
APPROVED AS TO FORM:

Woodruff, Spradlin & Smart

Thomas F. Nixon

Garden Grove Sanitary District

General Counsel



Lee & Ro, Inc.

M. Stève Ro, P.E. President/CEO

BY: DHIRU PATEL, P.E

Secretary

EXHIBIT A

SCOPE OF SERVICES

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Project Understanding, Approach and Scope of Work

Project Understanding

The Garden Grove Sanitation District (District) is seeking the services of a professional engineering consultant to provide engineering services for the District's Sanitary Sewer Improvements – Priority Project Nos. 43, 46, 54, 55, 68 and 75. These sewers have been identified as hydraulically deficient and are being replaced with larger diameter sewer mains to provide additional capacity as part of the District's Sewer Master Plan Capital Improvement Program.

These sewer improvements are separated into six individual projects as described below.

1. Project 43 – Lamplighter St. / Lenore Ave. / Seneca St.

Project 43 consists of the replacement of approximately 1,633 LF of existing 8-inch diameter VCP sewer with new 12-inch diameter VCP sewer. The project begins at the intersection of Lamplighter St. and Lampson Ave. where the new sewer will connect to an existing manhole in Lampson Ave. The proposed alignment progresses southerly in Lamplighter St. approximately 170 LF to a manhole at the intersection of Lamplighter St. and Killarney Ave. and continues southerly in Lamplighter St. approximately 258 LF to a manhole located at the intersection of Lamplighter St and Lenore Ave. The alignment turns westerly in Lenore Ave. and progresses approximately 1,091 LF (three pipeline segments) connecting to a manhole located at the intersection of Lenore Ave. and Seneca St. The alignment turns northerly and progresses approximately 114 LF to a manhole in Seneca St. This manhole is also connected to the OCSD 51-inch trunk sewer through a short segment of existing 12-inch VCP sewer.

2. Project 46 - Monarch St.

Project 46 consists of the replacement of two segments of existing 8-inch diameter VCP sewer totaling approximately 540 LF with new 12-inch diameter VCP sewer in Monarch St. The project begins at the manhole located at the intersection of Monarch St. and Anaconda Ave. The alignment progresses southerly and terminates at the manhole located at the intersection of Monarch St. and Lampson Ave.

3. Project 75 – Lampson Ave. Between Monarch St. and Western Ave.

Project 75 consists of the replacement of approximately 1,320 LF of existing 12-inch diameter VCP sewer with new 15-inch diameter VCP sewer. The project commences at the manhole located at the intersection of Monarch St. and Lampson Ave. (see Project 46) and progresses westerly in Lampson Ave., terminating at the manhole located at the intersection of Lampson Ave. and Western Ave.

4. Project 68 – Onyx St. Between Santa Rita Ave. and Chapman Ave.

Project 68 consists of the replacement of one pipeline segment of existing 8-inch diameter VCP sewer with new 10-inch diameter VCP sewer. The project begins at the manhole located at the intersection of Santa Rita Ave. and Onyx St. and progresses southerly 253 LF, terminating at the first manhole located at the intersection of Onyx St. and Chapman Ave. This manhole is also connected to the OCSD trunk sewer through a short segment of existing 10-inch VCP sewer.



5. Project 54 - Lampson Ave. Between Spruce St. and Brookhurst St.

Project 54 consists of the replacement of two pipeline segments of existing 8-inch diameter VCP sewer with new 12-inch VCP sewer. The project begins at the manhole located at the intersection of Spruce St. and Lampson Ave. The alignment progresses westerly in Lampson Ave. approximately 565 LF, terminating in the manhole located at the intersection of Lampson Ave. and Brookhurst St.

6. Project 55 - Brookhurst St. / Bonser Ave.

Project 55 consists of the replacement of six pipeline segments of existing 8-inch diameter VCP sewer with new 12-inch diameter VCP sewer. The project begins at the manhole located at the intersection of Lampson Ave. and Brookhurst St. (see Project 54) and progresses approximately 1,220 LF northerly in Brookhurst St., connecting to an existing manhole located in Brookhurst St., approximately 13 LF north of the old Pacific Electric Railway easement. The alignment turns east at this manhole and continues easterly approximately 187 LF within a 10-foot wide easement terminating in an existing manhole located in the cul-de-sac at the end of Bonser Ave.

PROJECT OBJECTIVES

In addition to upsizing the sewer segments identified in the six projects above, all sewer flows shall be maintained during construction either through bypassing or diversion of sewer flows. All existing house lateral connections will be reconstructed into the new sewer pipelines. Utilities will be protected in place, with the exception that identified ACP water mains will be replaced with AWWA C-900 PVC piping where they cross the sewer pipeline trench.

Project Approach

MANAGEMENT APPROACH

LEE & RO's objective for the design and construction support services for this sanitary sewer improvements project is to provide the District with a successful project, completed on time and within budget. With experienced staff working on key project tasks the District can have confidence that a practical and economical design will be provided and that issues will be dealt with professionally as soon as they arise. Our Project Manager will be up-front and candid in keeping District staff appraised of the project status and will provide tangible information on project progress, accomplishments, potential problems and recommended solutions, utility companies and agencies coordination activities, and choices available to District. The LEE & RO Project Manager and his entire team are committed to the project with these goals in mind. Key management approach elements are as follows:

• Project Communication. Timely, frequent and detailed communication is an essential tool for project success. Everyone involved in the project should understand how communications affect the project as a whole. Effective communication is required to ensure appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information, such as status reporting, progress measurement, and forecasting. Communication must also follow the established lines and be well documented in order to assure that all project stakeholders that need to know are well informed. We will encourage freethinking, creative concepts and ideas, but at the end of the day the actual alternative selections and directives by the District will be well documented so that all parties clearly understand the chosen course.



- Willingness to Listen to and Work with District Staff. LEE & RO believes that
 the active participation of the District's engineering and operations staff in our
 design process not only improves the quality of our design, but also expedites
 the design process. We listen to clients and seek active participation and project
 ownership from their staff. We consider the LEE & RO Team as an extension of
 the District's staff.
- Monthly Project Progress Reports. The Project Manager will submit to the
 District Project Manager a monthly project progress report that will include
 discussion of significant events including decisions reached and a summary of
 task completions during the current reporting period, project progress to date
 (percent complete), potential problems or schedule slippage, a project budget
 tracking report, schedule updates, status of deliverables, upcoming significant
 events expected to occur during the next reporting period, and a summary of
 utility/agency coordination status.

Quality Assurance/Quality Control (QA/QC) LEE & RO will establish a QA/QC budget to carefully review the deliverables before they are submitted to the District. As a part of our QA/QC activities, our QA/QC team will review the District's engineering standards and guidelines applicable to the project to make sure that our deliverables are produced in accordance with job standards.

LEE & RO's QA/QC approach is two-pronged. The first prong focuses on the quality of our services and the second prong focuses on the quality of our deliverables.

QA/QC Components

LEE & RO's Design Quality Control components include:

- ✓ Incorporate City of Garden Grove Standards and Procedures.
- ✓ Plan for Quality, Not Just Review.
- Review Early When the Project Concept is Being Developed.
- "Clear and Concise" Presentation in Plans and Specifications and Reports.
- ✓ Plan and Perform Code, Permit and Constructability Reviews on Time.

LEE & RO QA/QC activities are led by a senior manager that is not directly involved in the day-to-day management and execution of the project. LEE & RO will perform technical and design QA/QC reviews before each milestone deliverable is submitted to the District. Unless the QA/QC review is completed, the Principal-in-Charge will not authorize the Project Manager to submit milestone deliverables. Our QA/QC reviews will include checks of relevant calculations, memoranda, drawings, specifications, and the engineer's estimate of probable construction costs.

TECHNICAL APPROACH

LEE & RO will evaluate and present alternative design scenarios along with recommendations in the Preliminary Design Report (PDR) to allow the District to select their preferred alternative. The existing sewer alignments will most likely be maintained. However, LEE & RO will evaluate the existing slopes to determine if all of the upsized sewer lines meet the minimum hydraulic requirements.

LEE & RO will also evaluate the condition of the existing manholes. The PDR will identify manholes that need to be rehabilitated or replaced. Manhole rehabilitation and/or replacement will conform to the latest District standard plans. Once preferred



alternatives have been selected by the District, LEE & RO will then prepare detailed design drawings, specifications and construction cost estimates and provide bidding services as described under the Project Tasks included later in this section.

KEY ISSUES

LEE & RO has identified the following important key issues that will affect the design and construction of the proposed sewer improvements.

KE	Y ISSUES
	Utilize Garden Grove Sanitary District Standards
	Satisfy sewer design criteria – Sewer hydraulics and slope
	Selection of pipe installation methods (open cut vs. trenchless) and materials
	State Department of health separation requirements
	Mitigation methods to limit disruption to homeowners and businesses
	Coordination with utility companies and/or regulatory agencies
	Replacement of sections of ACP water mains with AWWA C900 PVC
	Traffic control
	Sequencing of construction

LEE & RO's approach to address these key issues follows.

Garden Grove Sanitary District Standard Plans

LEE & RO will collect and review all applicable City of Garden Grove Public Works
Department and Garden Grove Sanitary District Standard Plans and Specifications. All
sanitary sewer improvements and the replacement of sections of ACP water mains
where they cross these sewers will be designed and constructed in accordance with the
applicable Standard Plans and Specifications.

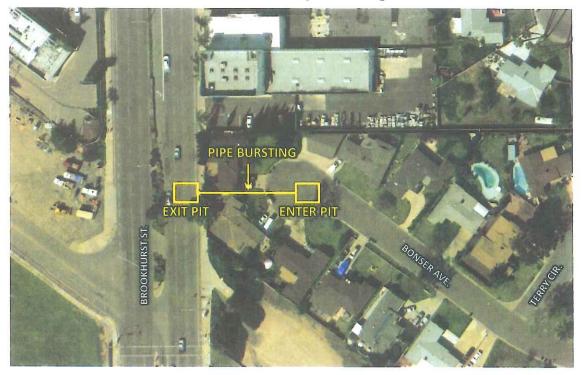
Pipe Replacement Methods

Upsizing and replacement of the existing 8-inch and 12-inch diameter VCP sewers will most likely utilize open cut construction. However, upsizing the Project No. 55 existing 8-inch sewer between Bonser Ave. and Brookhurst St. will likely require utilizing a trenchless construction method. LEE & RO will evaluate, as a preliminary design alternative, utilizing pipe bursting for this sewer improvement to avoid an open cut trench within the 10' wide sewer easement between the two residences (refer to **Exhibit 1-1**). Pipe bursting this segment will likely be more cost effective and will minimize disruption and possible damage to the homeowners' property.

Pipe Bursting. Pipe bursting is a common method used for upsizing an existing sewer without using open cut construction. This trenchless method utilizes a device that bursts the existing sewer pipe and pulls the new sewer pipe in place as it progresses from manhole to manhole.







The soil must be compressible enough to allow the burst head to radially compact the soil sufficiently to pull in the larger diameter pipe. Many pipe bursting operations pull in new high-density polyethylene pipe or fusible PVC; however, other materials of construction are available. As the bursting head is pulled forward splitting the existing pipeline, a rear cylinder pack pressure plate keeps the assembled VCP replacement pipe sections in compression.

The direct costs of pipe bursting are generally lower than traditional open cut construction methods. When factoring in time, social costs due to disruption, and restoration costs, pipe bursting can offer significant cost savings. Lower bids may be obtained by allowing the contractor to use pipe bursting.





PIPE BURSTING CONSIDERATIONS FOR PROJECT No. 55

- Open access pits required on Bonser Ave. and Brookhurst St
- · Successful installation depends on sewer depth
- No utilities adjacent to sewer line
- Highly dependent on soil conditions

Open Cut Construction. Open cut construction is required to remove the existing sewer pipe and replace it with a new sewer pipeline. With this method the current sewer alignments can be maintained utilizing either the existing manholes or new replacement manholes. To maintain continuous operation of the sewer during construction, flow bypassing will be necessary from manhole to manhole while a segment is replaced.





Manhole Rehabilitation / Replacement. LEE &RO will assess the condition of all sewer manholes during the preliminary site visit and summarize all recommendations in the PDR. The existing manholes will most likely require replacement due to their age, condition, and non-conformance to the latest District Standards. LEE & RO will, however, also investigate using manhole rehabilitation technologies that will be evaluated based on the installed costs, the existing condition of the manholes, and proven history of liner

performance. Manhole lining and structural enhancement methodologies include:

- Polyurethane Lining Systems (Spray Applied)
- Cementitious Coatings/Grouts (Spray Applied)
- Cured-in-Place Plastic Liner
- Prefabricated Fiberglass Reinforced Liner (Epoxy)

Flow Bypassing. If the existing sewers are replaced in the same location, either through open cut replacement or through trenchless pipe bursting methods, the existing flow must be bypassed to maintain continuous service to the community. The first option, and probably the easiest, is to bypass by pumping from an upstream manhole to a downstream manhole on the same sewer line. Another bypassing option is to pump the flow from an upstream manhole to a nearby manhole on a separate sewer line. The capacity of the separate sewer line must first be checked for excess capacity before this bypass option can be used. Road crossings can be utilized to facilitate vehicular traffic access across bypass piping crossing a roadway or driveway that must remain open. An example of a bypass piping roadway crossing is included as Figure A-1 in Appendix A. Bypass piping can also be recessed in shallow trenches topped with steel plates to allow traffic to pass over it.



The design of the bypassing system is critical. Flow monitoring data typically indicates the volume of flow likely to be encountered and therefore, the level of over pumping capacity required. Spill prevention is a priority for the bypass system design. At least two pumps should be provided where one pump is a standby to the other. A back up power supply should also be incorporated into the design. A spill prevention and containment plan will be required prior to the start of construction. Both local and remote alarms should be provided that



notify the Contractor and the District in the event of failure of any bypass system that could result in a spill. Noise should be mitigated in residential and business areas since the pumping may exceed the noise ordinance limitations. An example of a sound attenuated bypass pump is provided as **Figure A-2** in **Appendix A**.

Flow Bypassing Critical Requirements

- Primary and stand-by pumps
- Emergency spill response plan requirements
- Use of sound attenuated pumps within all areas

Sewer Hydraulic Calculations (Hydraulic Tables)

LEE & RO will use the flows provided by the District to check the sewer hydraulics. A sufficient sewer slope is required to maintain a minimal "scouring" velocity of 2 feet/second (typical). Sewers will be designed with a constant slope between the upstream and downstream manhole of each reach.

Manning's equation with an "n" value of .013 will be used to calculate the sewer flow depth (d/D) and velocity in the new sewers (see **Exhibit 1-2**). A minimal elevation drop will be designed through each manhole channel. Typically, a 0.10 - 0.20 foot drop is added in right angle turns within a manhole.

Exhibit 1-2: Manning's Equation

SCENARIO 1 15" NEW VCP PIPE with d/D= 0.50

Inputs:	slope, S (ft/ft)	0.0018
	dia, D (in)	15
	depth, d (in)	7.5
	Mannings coeff, n ()	0.013
Outputs:	d/D (in/in or ft/ft)	0.5
	D (ft)	1.25
	A/D^2 ()	0.39
	A (sf)	0.61
	rh/D ()	0.25
	rh (ft)	0.31
	Q (cfs)	1.37
	Q (gpm)	615
	Q (mgd)	0.886
	vel, v (fps)	2.23

SCENARIO 2 15" NEW VCP PIPE with d/D= 0.60

Inputs:	slope, S (ft/ft)	0.0018
1	dia, D (in)	15
	depth, d (in)	9
	Mannings coeff, n ()	0.013
Outputs:	d/D (in/in or ft/ft)	0.60
•	D (ft)	1.25
	A/D^2 ()	0.49
	A (sf)	0.77
	rh/D ()	0.28
	rh (ft)	0.35
	Q (cfs)	1.84
	Q (gpm)	827
	Q (mgd)	1.190
	vel, v (fps)	2.39

Separation Requirements for Water and Wastewater Lines

The California Department of Public Health (CDPH) has published standards that indicate various conditions under which pipelines conveying potable and non-potable products are required to be separated to help guarantee that the public's confidence in receiving a safe water supply is protected. LEE & RO is familiar with these basic standards, routinely incorporating them into our designs.

A 10 foot horizontal separation, measured from the outside edges, between an existing water line and the new sewer line is required for parallel construction. A sewer line crossing perpendicular to a water line cannot have joints within 10 feet on each side of the crossing. In addition, the sewer line will be kept at a minimum 1 foot below the water line to satisfy CDPH requirements. LEE & RO will verify the location of all water lines located in proximity to the existing sewer lines.

Mitigation Methods to Limit Disruption to Homeowners and Businesses

It is advantageous to coordinate with affected stakeholders early in the design phase to ensure a clear understanding of their requirements. We suggest limiting the work hours in Monarch Street (Project 46) and Brookhurst Street (Project 55) to night time or away from peak hours to minimize disruptions to the adjacent businesses.

Mitigation Measures Night Work Use of "Sound Attenuated" Bypass Pumps Benefits of Night Work Safer work environment Less pedestrian and car traffic

Coordination with Utility Companies and/or Regulatory Agencies

Identify Existing Utilities and Crossings Accurately. Accurate identification of existing utilities during design is critical to successful construction of the project. Our project team will follow the guidelines set out in ASCE Standard 38-02 – Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data for utility research. An extensive utility investigation will be performed that includes research of record drawings, field investigations for ground features, and discussions with the District about future potential project conflicts.

Project No.46, for example, presents several utility conflicts associated with the proposed sewer improvements and potholing to verify the exact location of the conflicting utilities will be necessary. The sewer alignment in Monarch St. crosses a 30-inch RCP storm drain at two locations, crosses an existing 34-inch high pressure gas pipeline (see discussion below), and also crosses an existing 12-inch ACP water main before the sewer connects to the existing manhole located in the intersection of Monarch St. and Lampson Ave. (see Exhibit 1-3).

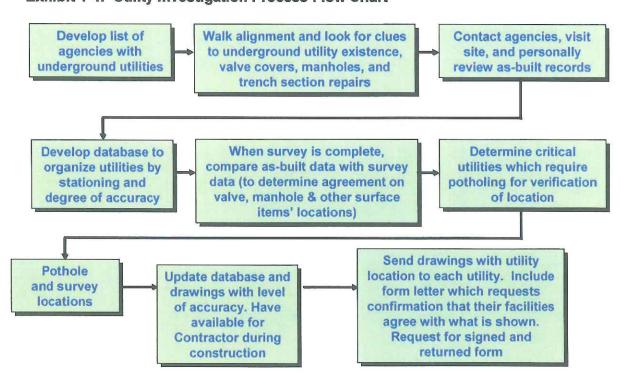


Exhibit 1-3: Project No. 46 Monarch St. Key Issues



Our team will create a utility database to document the information collected, including the size, ownership agency, material, location (horizontal and vertical), available potholing information, and the origin of the information. This database information is transferred to the design plan and profile drawings. A flow chart of the utility investigation tasks is shown in **Exhibit 1-4** below.

Exhibit 1-4: Utility Investigation Process Flow Chart





Permit Work Plan. A very important element of completing this project on schedule is obtaining agency approvals and permits for construction and operation of the facilities. In the PDR stage, LEE & RO will develop a Permit Work Plan to organize all permit processing required that will assure that all permits can be, and will be, obtained in a timely manner. All permits will be scheduled, outlined, and prioritized according to this project's needs. We maintain routine contact with the permitting agency's staff to discuss the permit's progress, and we continuously monitor that progress, proactively addressing any delays early in the process.

High Pressure Gas Lines. The proposed sewer improvements for Project No. 46 (upsizing the existing 8-inch VCP sewer to 12-inch VCP sewer in Monarch St. from Anaconda Ave. to Lampson Ave.) require crossing an existing 34-inch diameter gas line in Lampson Ave.

The sewer improvements for Project No. 75 require upsizing the existing 12-inch VCP sewer in Lampson Ave. from Monarch St. to Western Ave. An existing 10-inch gas line runs parallel to and approximately 4 feet south of the existing 12-inch sewer line in Lampson Ave.

We have contacted the Southern California Gas Company regarding requirements for work in the vicinity of their gas pipelines. The Gas Company requirements include the following:

- Consideration be given to the safety of the gas pipeline during the design and construction stages
- Power-operated or power-driven excavation or grading shall not be allowed closer than two feet from any unexposed portion of pipeline or valve
- A representative of The Gas Company must observe the excavation when working within 10' of their facilities to insure protection and to record pertinent data necessary for their operations
- If a conflict is identified and can only be resolved by the relocation of Gas Co. facilities, please be advised that the projected timetable for the completion of this relocation is one year. This includes planning, design, material procurement, cathodic protection, permits, environmental issues and construction.
- "Final" grading plans and construction profiles are required to be submitted prior to the start of construction

Replacement of Sections of ACP Water Mains with AWWA C900 PVC

The District has specified in the RFP that any Asbestos Cement Pipe (ACP) water mains shall be replaced with AWWA C900 PVC where the water main crosses the sewer pipeline trench. ACP is a mixture of cement and aspestos fibers and is defined under the National Emission Standard for Hazardous Air Pollutants (NESHAP) as a Category II, non-friable, non-regulated material in an intact state, but which may become friable upon removal, demolition and/or disposal. The ACP removal and replacement is categorized as Class II hazardous asbestos work and the handling of the ACP must comply with NESHAP and Cal-OSHA requirements. LEE & RO will include instructions on the plans and in the specifications requiring the Construction Contractor to provide trained and qualified personnel for the removal of these sections of ACP water mains.

LEE & RO will thoroughly review existing plans and documentation and will work closely with the District to identify the various locations where the proposed sewer



improvements will cross these existing ACP water mains. Replacement lengths of C900 PVC pipe will extend to at least 10 LF beyond each side of the sewer trench limits.

Traffic Control

The Construction Contractor is responsible for providing traffic control plans during construction. However, LEE & RO's design plans will show all traffic signal loops. We have assumed that the District is responsible for reprogramming of all cut traffic loops. LEE & RO will list the quantity of traffic loops that require replacement as a separate Bid item. The inclusion of the traffic loops in the Bid will reduce the potential for a possible change order.

Temporary traffic control during the design phase for subconsultant activities such as geotechnical borings, potholing and surveying will conform to the WATCH Manual.

Connections and Sequencing of Construction

The Contractor will be required to maintain service to all users along the pipeline alignments, abandon existing lines that are being taken out of service and replace the existing lines with the new 8-inch and 12-inch PVC pipelines. Construction can be staged so that the work near businesses or in Brookhurst Street can be conducted during evening hours.

Additionally, there are several businesses located on Monarch St. (Project No. 46) that have only a single entrance / exit from the street. The construction activity in Monarch St. may, therefore, need to be considered for night work to mitigate impacts to these businesses (see **Exhibit 1-3**).

We anticipate that the project will require a total of approximately 17 drawings. Proposed project drawings are provided in the following preliminary drawing list (**Exhibit 1-5**).

Exhibit 1-5 —Preliminary Drawing List

Sheet	No.	Description
G-1	1	Title Sheet, Vicinity Map, Location Map
G-2	2	List of Drawings, General Notes, Symbols & Abbreviations
G-3	3	Street Index Map
C-1	4	Project 43: Seneca St. 12-Inch VCP Sewer Plan & Profile, Sta. 0+00 to 1+14 and Lenore
		Ave. 12-Inch VCP Sewer Plan & Profile, Sta. 1+14 to 8+86
C-2	5	Project 43: Lenore Ave. 12-Inch VCP Sewer Plan & Profile, Sta. 8+86 to 12+05
C-3	6	Project 43: Lamplighter St. 12-Inch VCP Sewer Plans & Profile, Sta. 12+05 to 16+33
C-4	7	Project 68: Onyx St. 10-Inch VCP Sewer Plan & Profile, Sta. 0+00 to 2+53
C-5	8	Project 46: Monarch St. 12-Inch VCP Sewer Plan & Profile, Sta. 0+00 to 5+40
C-6	9	Project 75: Lampson Ave. 15-Inch VCP Sewer Plan & Profile, Sta. 5+40 to 15+40
C-7	10	Project 75: Lampson Ave. 15-Inch VCP Sewer Plan & Profile, Sta. 15+40 to 18+60
C-8	11	Project 54: Lampson Ave. 12-Inch VCP Sewer Plan & Profile, Sta. 0+00 to 5+65
C-9	12	Project 55: Brookhurst St. 12-Inch VCP Sewer Plan & Profile, Sta. 5+65 to 15+65
C-10	13	Project 55: Brookhurst St. 12-Inch VCP Sewer Plan & Profile, Sta. 15+65 to 17+85 and
		Bonser Ave. 12-Inch VCP Sewer Plan & Profile, Sta. 17+85 to 19+72
C-11	14	Civil Details
C-12	15	Flow Bypassing Details
C-13	16	Water Main Rehabilitation Details
C-14	17	Pipebursting Access Pit Details



Scope of Work

The Scope of Services from the Request for Proposal has been used as the basis for this proposal's project scope of services. Minor additions have been made to show LEE & RO's recommended Approach to the Work.

TASK I – Project Management, Meetings, and Coordination:

LEE & RO will provide overall project management throughout the duration of the project. This includes contract administration with the District, general administration of the project, attendance at meetings, monitoring schedules and budgets, and timely and regular reporting of project status. LEE & RO's Project Manager will coordinate the project activities, monitor schedules and budgets, and administer the contract with the District.

1.1 Work Plan: Once the notice-to-proceed is issued, LEE & RO will develop the project Work Plan. The Work Plan is a formal document that defines project deliverables and specifies how the project will be planned, executed, monitored and controlled, and closed. The Work Plan will identify the processes and procedures used to define how work will be executed to accomplish project objectives, define how changes will be monitored and controlled, how performance measurement baselines will be maintained and used, how project risk will be managed, and identify project close-out procedures.

The Work Plan will include a project schedule identifying significant milestones and deliverables that are complimentary to the established project goals and execution strategy. The Work Plan will also include the Quality Assurance / Quality Control Plan.

1.2 Project Kick-Off Meeting

Once the Work Plan is developed, the Project Manager will schedule a project kick-off meeting with District staff to discuss the scope and parameters of the project. LEE & RO will prepare the meeting agenda and also the meeting minutes. Specific project goals to be accomplished will be identified and an effective project execution strategy to accomplish these goals will be further developed and subsequently incorporated into the Work Plan.

1.3 Monthly Project Status Reporting and Miscellaneous Meetings

LEE & RO will prepare and submit monthly progress reports summarizing the actual work performed, project issues, and status of the project schedule and budget. The report will be submitted with each invoice. LEE & RO will meet with District staff, as necessary, to discuss and address any project issues. LEE & RO will prepare the agenda, as well as record and distribute the meeting minutes.

1.4 Public Access and Protection Coordination

LEE & RO will meet with District staff and contact all utility representatives, governmental agencies, City departments, neighborhood associations, and private homeowners to identify and develop the public protection and access requirements to be incorporated into the construction documents and implemented by the Contractor during construction activities.



TASK II- Preliminary Investigation and Design Survey

2.1 Field Data Collection and Utility Investigation

LEE & RO will collect and review applicable plans, specifications, reports and related documents and information provided by the District. LEE & RO will also research and obtain available record data from utility agencies pertinent to the project and conduct a thorough utility investigation, including review of available as-builts, to accurately show the location of utilities on the drawings. LEE & RO will field verify the record drawings by walking the project alignments with the plans looking for surface features that will validate the record drawings or indicate additional facilities that are not appropriately shown on the plans. Available information from the District's GIS database and utility records will be reviewed to identify the location and elevation of critical underground utilities. A set of utility base sheets will be prepared showing the information gathered through the plan and field research.

LEE & RO will coordinate with and submit this information and data to the necessary permitting agencies and other affected utilities to obtain their submittal requirements.

2.2 Surveying and Right-of-Way

LEE & RO will provide field surveys for the preparation of the construction drawings and specifications. Surveys will determine site topography, contours and utility locations along the pipeline alignment. LEE & RO subconsultant team member Advanced Survey Concepts, Inc. (ASC) will set horizontal and vertical controls per CCS NAD 83 and established local benchmarks and locate existing street rights-of-way and critical property corners along the pipeline alignments. Sewer and storm drain facilities will be dipped and rim elevations shot at each manhole within the project limits. Photographs will be taken of the manhole channel.

2.3 Geotechnical Investigation

LEE & RO's subconsultant, Associated Soils Engineering (ASE), will provide geotechnical services for this project. It is anticipated that the subsurface investigation will include one (1) boring for roughly every 1,000 feet of project length and/or one (1) boring for each isolated short segment for a project total of seven (7) borings. The depth of the borings shall be at least 5 feet deeper than the lowest required invert. Borings will be backfilled with excavated material and patched with cold patch asphalt. ASE will provide traffic control in accordance with the WATCH Manual, including lane closures, as necessary.

Appropriate laboratory testing for determination of classification, moisture/density of insitu samples, sieve analysis, laboratory maximum density, expansion index, sand equivalent values, corrosivity (pH, sulfates, chlorides, and electrical resistivity), consolidation, and shear strength of soil materials will be performed on soil samples.

ASE will prepare a Geotechnical Investigation Report for the project addressing these geotechnical parameters, including recommendations for earthwork factors, preliminary foundation design for possible replacement manhole structures, shoring and bedding. The soils report will be reviewed and approved by a registered Geotechnical Engineer.



TASK III- Preliminary Engineering

3.1 Preliminary Design Report (25% Design Submittal)

3.1.1 through 3.1.4 Prepare PDR

LEE & RO will prepare preliminary drawings as required to establish agreement on scope, horizontal alignment, design parameters, structural requirements, in addition to addressing maintenance concerns, constructability and construction phasing, traffic impacts, and general disruption to the area.

LEE & RO will prepare a permit work plan that includes a list of required permits, complete with contact names and numbers, probable requirements, schedule, and fee estimate.

The preliminary design report (PDR) will be submitted to the District for review and approval in accordance with the Work Plan prepared above. As a minimum the following will be included and addressed in the PDR:

- a) Recommended pipeline alignment including evaluation of impact on adjacent residences, businesses and traffic
- b) Alternative construction methods (*i.e.* trenchless, open cut, pipebursting) and materials of construction
- c) Identification of challenges and potential utility conflicts
- d) Bypassing and/or diversion of sewer flows
- e) Recommended manhole rehabilitation and/or replacement
- f) Identification of areas where construction is limited or constrained
- g) Preliminary schedule
- h) Preliminary construction cost estimate for the recommended improvements
- i) Permit and easement requirements
- j) Construction sequencing
- j) Recommended pothole locations
- GGSD sewer design criteria (see Exhibit 1-6)

Exhibit 1-6: Garden Grove Sanitary District Sewer Criteria

GGSD Sewer Criteria	Value
Velocity	Minimum 2 ft/s
velocity	Maximum 5-6 ft/s
d/D ratio (at peak dry weather flow, PDWF)	
District Design Standard – For all sewers ≤ 15-inch	≤0.50
District Design Standard – For all sewers > 18-inch	≤0.62
For all sewers (maximum)	≤0.80
Manning's n (gravity system)	0.013
Minimum Slope (typical)*	
12-inch	.0024
15-inch	.0016
Maximum Spacing between Manholes	400'

^{*:} Design to maximum slope not to exceed maximum velocity



3.1.5 Perform QA/QC Review

LEE & RO will perform a QA/QC review of the PDR (25% Design Submittal). QA/QC comments will be incorporated prior to submission to the District.

3.1.6 - 3.1.9 Submit PDR / District Review / PDR Review Meeting

LEE & RO will submit seven (7) sets of the PDR that will include preliminary drawings showing locations of facilities for District review and concurrence. The drawings will include pipeline plan horizontal alignments, manhole locations, construction phasing, proposed structures and details, layouts. figures and exhibits as required for the proposed construction, replacement or repair. The drawings will emphasize the impact on existing and adjacent utility facilities. Data and assumptions used in the design will be submitted to the District for concurrence and approval prior to proceeding to the final design.

After submittal of the PDR, LEE & RO will attend a review meeting with District staff to review the recommendations and confirm the preferred alternative. District comments from the PDR review meeting will be incorporated into the final design.

TASK IV- Final Engineering

Final Design

LEE & RO will be responsible for the final design of the proposed sewer improvements. The designs shall provide for maintaining continual operation of the existing sewer system during the construction of the project. LEE & RO will prepare two (2) sets of detailed drawings and specifications for competitive bidding for the proposed construction work. Drawings will be prepared on 24" x 36" sheets using computer generated drafting AutoCAD Version 2007 or newer format utilizing Garden Grove Sanitary District symbols and text standards. LEE & RO and/or Garden Grove Sanitary District standard construction details that are applicable to the project will be used. Final project drawings will be signed and sealed by a professional engineer registered in the appropriate discipline in the State of California. Plans will be drawn to a horizontal scale of 1" = 40' and vertical scale of 1" = 4'. Detailed plans will be drawn to a scale of 1" = 8' or larger. A construction phasing plan will be provided.

Specifications and contract documents will be based on Garden Grove Sanitary District standard documents edited for application to this project. Additional specification sections necessary to completely define the work will be prepared and coordinated with project drawings to produce a complete set of construction documents.

4.1 60% Design

4.1.1 Prepare 60% Design

LEE & RO will prepare a 60% design package that incorporates all PDR (25% design) drawing review comments, horizontal and vertical design elements, information from the geotechnical investigation, and input from the various interested permitting agencies and utilities. The plans will include hydraulic tables indicating average, peak dry weather, and peak wet weather flows with depths and ratio of depth to inside pipe diameter (d/D ratio) of each reach. The 60% design package will include a specification outline and an engineer's cost estimate, provisions for temporary handling and/or bypassing



of sewer flows, and requirements for odor control. Any easement and/or right-of-way issues will be presented to the District along with recommendations for resolution.

4.1.1.1 Potholing

Potholing will be performed for those utilities identified as potential conflicts. Potholing will be performed by SAF-r-DIG Utility Surveys. Special attention will be paid to gas main crossings and the high pressure gas line running parallel to the existing sewer alignment in Lampson Ave. All phone and electrical underground will be exposed top to bottom and measured during the investigation. In accordance with the RFP, a total of twenty (20) potholes have been included in the fee proposal for this work. A unit price for additional potholes is also provided.

4.1.2 Perform QA/QC Review

LEE & RO will perform a QA/QC review of the 60% Design Submittal. QA/QC comments will be incorporated prior to submission to the District.

4.1.3 Submit 60% Design

LEE & RO will submit seven (7) sets of the submittal package to the District for review at the 60% design stage. We have allowed for a two (2) week District review period in our preliminary schedule.

4.1.4 - 4.1.6 District Review / 60% Design Review Meeting

LEE & RO will attend a design review meeting to receive the District's comments related to the 60% design submittal. District comments from the 60% design review meeting will be incorporated into the 90% design. LEE & RO will summarize review comments into the following summary template (in **Exhibit 1-7**).

Exhibit 1-7: Design Submittal Review Comments (Sample)

111		DESIGN SUBMITTAL REVIEW COM	MENTS			
	Consultant:	LEE & RO		LEE & R	O Job No.:	
P	roject Name	Sanitary Sewer Improvements - Project Nos. 43, 46, 54, 55, 68, and 75.		Re	view Date:	5/30/2012
Su	bmittal Type:	☐ PDR ☐ 60% Design ☐ 90% Design ☑ 99% Design ☐ Final Design ☐ Other:		Comm	ents from:	Garden Grove Sanitary District
Reco	mmendation:	Reject Submittal Revise Submittal As Noted	Originators	: MC- Myun	ig Chun;	
	Actions:	Address Comments				
Item	Reference	Comment	Originator		LE	E & RO Response
	Sheet Number			Incor	essed/ porated	Remarks
-	144000155.70		110	By	Date	
1	1	 Comment on item 14 on Quantity Estimate table (Quantity on cost estimate adds to). Comment on item 15 (discrepancy with quantity on cost estimate sheet. Adds up to 50 EA). Change QTY of item 16 to 12,155 EA (discrepancy). 	MC	GC	5/30/12	Done.
2	1	Verify the Qty of item 5, 7, 10, and 15 on the Quantity Estimate table. 2. Comment on item 14 on Quantity Estimate table, "How install the Secondary Containment?	MC	GC	5/30/12	Done.



4.2 90% Design

4.2.1 Prepare 90% Design

LEE & RO will prepare a 90% design package that incorporates all 60% drawing review comments and input from permitting agencies and utilities. The 90% submittal will also include preliminary specifications and a revised engineer's cost estimate.

4.2.1.1 Permitting and Utility Agency Coordination

LEE & RO will provide the necessary permitting and utility agency coordination required to secure approvals and permits.

4.2.2 Perform QA/QC Review

LEE & RO will perform a QA/QC review of the 90% Design Submittal. QA/QC comments will be incorporated prior to submission to the District.

4.2.3 Submit 90% Design

LEE & RO will submit seven (7) sets of the drawings and specifications to the District for review at the 90% design stage. We have allowed for a two (2) week District review period in our preliminary schedule.

4.2.4 – 4.2.6 District Review / 90% Design Review Meeting

LEE & RO will attend a design review meeting to receive the District's comments related to the 90% design submittal. District comments from the 60% design review meeting will be incorporated into the 99% design.

4.3 99% Design

4.3.1 Prepare 99% Design

LEE & RO will prepare a 99% design package that incorporates all 90% drawing review comments and input from permitting agencies and utilities. The 99% submittal will include complete specifications and a revised engineer's cost estimate.

4.3.1.1 Permitting and Utility Agency Coordination

LEE & RO will provide the necessary permitting and utility agency coordination required to secure approvals and permits.

4.3.2 Perform QA/QC Review

LEE & RO will perform a QA/QC review of the 99% Design Submittal. QA/QC comments will be incorporated prior to submission to the District.

4.3.3 Submit 99% Design

LEE & RO will submit seven (7) sets of the drawings and specifications to the District for review at the 99% design stage. We have allowed for a two (2) week District review period in our preliminary schedule.

4.3.4 – 4.3.6 District Review / 99% Design Review Meeting

LEE & RO will attend a design review meeting to receive the District's comments related to the 99% design submittal. District comments from the 60% design review meeting will be incorporated into the 100% Final design.



4.4 100% Final Design

4.4.1 Prepare 100% Final Design

LEE & RO will prepare 100% design package final deliverables, including final plans, specifications, and cost estimate.

4.4.2 Perform QA/QC Review

LEE & RO will perform a QA/QC review of the 100% Final Design.

4.4.3 Submit 100% Final Design

LEE & RO will submit the 100% design package final deliverables, including final plans, specifications, and cost estimate. LEE & RO will provide two (2) hard copy sets of signed and stamped drawings (prints and mylars) and two (2) original sets of final specifications (bound and unbound). A design notebook containing the engineer's estimate of probable construction cost, in addition to all pertinent correspondence and calculations will be provided at the completion of final design.

TASK V- Bidding Phase Services

LEE & RO will provide bid phase support services to the District from the final approval of the bid documents through the pre-construction meeting. Bid phase services will include the following;

- 5.1 Provide Clarification or Revisions to the Bid Documents for Design-Related Issues
- 5.2 Preparation of Addenda for Design-Related Issues
- 5.3 Attend the Pre-Construction Meeting to Respond to Contractor Questions

Assumptions

LEE & RO's technical proposal and the associated fee proposal (included in a separate sealed envelope) are based on the following assumptions and Garden Grove Sanitary District responsibilities. We would be happy to discuss these assumptions with the District at your convenience.

- 1. The District will assign a Project Manager to act as the project focal point.
- The District will provide or make available upon request, reports, CAD drawings (title sheet, border), specifications, GIS land base maps (hard copy and digital), Garden Grove Sanitary District standard specifications, records and other data deemed useful for project development.
- 3. The District will provide partial boilerplate of contract documents or general articles with sample agreement, sample bonds, and insurance forms.
- The District will assist with plan research of available City plans.
- The District will advertise for bids, review bids and award contracts.
- 6. The District will administer the professional services agreement and make payments to LEE & RO.
- 7. The District will award a contract to a Construction Contractor, administer the contract and make payments to the Contractor.
- 8. Construction phase services are not included in LEE & RO's scope of services.



- 9. The District will be responsible for all printing and reproduction for bidding and construction.
- 10. The District will pay all permit fees required for the project.
- 11. The District will provide coordination to avoid interfering with other construction projects and major events occurring in the City of Garden Grove.
- 12. Traffic control plans for construction will be provided by the Construction Contractor and associated costs are not included in our fee proposal.
- 13. The preliminary schedule allows a ten (10) working day period for District review of design submittals.
- 14. Survey services include a field topographic survey. An aerial survey is not included.
- 15. We have budgeted for a maximum of 20 potholes for all six projects. Additional potholes can be provided for the unit price provided with the fee proposal.
- 16. We have assumed that no contaminated soils will be encountered during geotechnical borings and potholing and we have not budgeted for contaminated soils handling and/or disposal.

Work Hour Estimate

As instructed in the RFP, we have included our labor estimate in **Exhibit 1-8** on the following page.

Schedule

Preliminary project schedule milestones are highlighted below in **Exhibit 1-9**. For scheduling purposes we have assumed a Notice to Proceed date of August 1, 2012. The preliminary schedule for the project is attached as **Exhibit 1-10** on the following page. This schedule indicates an overall design phase duration of 148 working days, or just under 30 weeks. Bid phase support services are not shown on the schedule. The RFP specifies that approved contract documents are due by November 30, 2012. This milestone date is not realistic based on (1) the anticipated NTP date; (2) the addition of Project Nos 54 and 55 to the scope of work; (3) the number of design submittals (five total); and (4) a two-week District review period for each submittal. We have provided what we feel is a realistic schedule. We would be happy to discuss the schedule with the District should changes be deemed necessary.

Exhibit 1-9: Schedule Milestones

Notice to Proceed	August 1, 2012
Submit Preliminary Design Report for District Review	September 19, 2012
Complete Final Design	February 25, 2013

Exhibit 1-8: Work Hour Estimate

TASK	Labor Category: E6 Principal Engineer, E5 Senior Engineer, E2 Assistant Engineer, T6	E6	E5	E2	T6	T4	A3	Total
No.	Principal Designer, T4 Designer, and A3 Word Processor					-		Hours
	Task Description							
A	Non-Optional Work	200		63120				NO POR
	Project Management					11 16		
	Preliminary Investigation and Design Survey		10.00	2511		manns.		
2.1	Field Data Collection and Utility Investigation		4	40			4	48
2.2	Surveying and Right-of-Way		4		2	4		10
2.3	Geotechnical Investigation		4					4
	SUBTOTAL Task 2, Preliminary Investigation and Design Survey	0	12	40	2	4	4	62
TASK 3	Preliminary Engineering					EL/Si		
3.1	Preliminary Design Report (25% Design)		To lo	31-1				
3.1.1	Perform Alternatives Analysis		8	8				16
3.1.2	Prepare Preliminary Pipeline Alignment Plans		2		8	24		34
3.1.3	Develop List of Permit & Regulatory Requirements / Incorporate Utility Requirements			24		16		40
3.1.4	Prepare Preliminary Design Report		36	44	4	8	12	104
3.1.5	Perform QA/QC Review and Submit PDR	16				3		19
3.1.8	Attend PDR Review Meeting		6				2	8
3.1.9	Summarize and Incorporate District PDR Comments into 60% Design		8	8		16	4	36
	SUBTOTAL Task 3, Preliminary Engineering	16	60	84	12	67	18	257
TASK 4	Final Engineering		N HE WA	HARVE	200			E H
4.1	60% Design					L		
4.1.1	Prepare 60% Design		32	26	24	100	12	194
4.1.1.1	Utility Verification Potholing (Up to a maximum of 20 potholes)		4	8		2		14
4.1.2	Perform QA/QC Review	20				4		24
4.1.3	Submit 60% Design		2				4	6
4.1.4	60% Design Review Meeting		6				2	8
4.1.5	Summarize and Incorporate District 60% Comments into 90% Design		8	8		16		32
4.2	90% Design					116		
4.2.1	Prepare 90% Design		32	38	12	80	12	174
4.2.1.1	Permitting and Utility Agency Coordination			24		4	4	32
4.2.2	Perform QA/QC Review	16				4		20
4.2.3	Submit 90% Design		2				6	8
4.2.4	90% Design Review Meeting		6	_			2	8
4.2.5	Summarize and Incorporate District 90% Comments into 99% Design		8	8		12		28
4.3	99% Design		0.4		-	10	10	404
4.3.1	Prepare 99% Design		24	22	8	40	10	104
4.3.1.1		42	-	16	-	4	2	22
4.3.2	Perform QA/QC Review Submit 99% Design	12	2		-	2	8	14
4.3.4	99% Design Review Meeting	-	6		-	-	2	8
4.3.5	Summarize and Incorporate District 99% Comments into 100% Final Design		2	2	-	8	-	12
4.3.3	100% Final Design	or Environ	-	-	200	-		12
4.4.1	Prepare 100% Final Design		10			16	4	30
4.4.2	Perform QA/QC Review	4	1			1.0	Ė	4
4.4.3	Submit 100% Final Design	Ė	4				8	12
1000	SUBTOTAL Task 4, Final Engineering	52	148	152	44	292	76	764
TASK !	Bidding Phase Services	ALVA S		190	1000			
5.1	Provide Clarification/Revisions to Bid Documents for Design Related Issues		8			4	2	14
a refer to	Prepare Addenda (Assume 2 addenda) for Design-Related Issues		8			4	4	16
	II TEDATE AUGETUA (ASSUITE 2 AUGETUAT TOT DESIGNATERIALE ISSUES			я.			-	
5.2 5.3			4					4
5.2	Attend Pre-Construction Meeting SUBTOTAL Task 5, Bidding Phase Services	0	20	0	0	8	6	34

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						Garden Grove Sanitary District Sanitary Sower improvements Project Nos. 43, 46, 54, 55, 68, and 75 Preliminary Design Schedule	EXHIBIT 1-10
Total Control Total Contro		Torklane Malica V. Bronne	Duration	Start			7 Was Was Was
A A A A A A A A A A		Natura to Proceed The No. 7: Project The No. 7: Pro	168 days	Thu 8/2/1	2 2		-
Total control Total contro	-	1.2. ROCK-Off Meeting 1.3. Monthly-Bringer States Research on and Meeting Resolute Bringlish Meetings 1.3. Monthly-Bringlish Meeting and Meeting of Meeting Bringlish Meetings 1.3. Monthly-Bringlish 1.3. Mon	O days	Thu 3/9/1	Ц		
The state of the	1 00	North : Maring	1 day	Wed 9/5/1		8/5 Acarb 1 Mealing	
Company Comp		North & Meeling Manth 3 Meeling	dey	Wed 11771		Tays 🌪 Month & Nearling 18 Meating 18 Meati	
Part	e 0t	Month 4 Meeting	1 day	Wed 12/5/:		1218 💠 Mooth 4 Meeting 172	
1 1 1 1 1 1 1 1 1 1	2 2	Month & Manifig	1 day	Wed 2007			
	1	Tack No. 2: Preliminary investigation and Design Survey	32 days	Hzis atzw		10.5	
1 1 1 1 1 1 1 1 1 1	2 2	2.1.1 Oblait and twiew existing utility drawings	12 days	The M2/4			i
And the state And the stat	£ £	2.1.2. Obtain submilai requiramenta from pormitting sybrides 2.2 Surveying	syeb 5	Mon 5/207.		A STATE OF THE STA	
Control Cont	<u> </u>	2.2.2 Research Mars Banchanata: A Condust Field Survey	1 day	Fri 6/10/1			•
1	50	2.2.3 Centuct Site Vell and Perform Maniple Assessment	S days	Wed 6/22/1		76000000	
1	a 2	2.2.4 Pintúza Survey Topo ava Sukmili 2.3 Geotrobalces Investigation	6 days 26 deys	Mon 9/3/		0179	
15 cm 15 c	EZ.	2.3.1 Oblain Excavation Permit	S days	Fetrion	L.		
1	2 2	2.3.2 Field Borings and Tosting 2.3.3 Prepare and Statemi Gentechnical Report	20 deys	Wed 2/15/			
15 15 15 15 15 15 15 15	$\overline{}$	Task No. 3: Preliminary Engineering	35 days	Mon 8/20/1		COLOR DE LA COLOR	
1, 40 1, 4		1.4 Prefinitory Design Report (46%)	25 days	Mon M/20/1		PERSONAL PROPERTY OF THE PERSONAL PROPERTY OF	
	8	2.1.2 Afternatives analysis	n days	Mon \$200			
Control Cont	ge 3	3.1.3 Davelop list of permit, regulatory requirements, and incompones utility requirements	6 Gays	Friedolfri			
According to the part Acco	, g	3.1.4 Develop Fraimanny Design Report (FDR) 3.1.5 Perform GAUGO Review	2 days	Mon 9/17/1	┙		
1	8	3.1.6 Submit PDR	D days	Wed 97187	Ц	21	
1	* S	3.1.7 District Review of PDR 3.1.8 PDR Review Mailton	TO days	The M207	\perp	12 P	
15 2 4 pt 10 10 10 10 10 10 10 10 10 10 10 10 10		S.1.8 Sunmarize and Incorporate Disided Comments	2 days	Thu 10/4/1	1		
1	1	Task No. 4: Final Engineering 4: 60% Design	162 days 34 eays	Thu 19/4/1		671)	
	66	4.1.1 Prepare 60% Design (Plans, Specification Citiline and Cost Estimate)	20 days	Thu 10/4/	Π	and the state of t	
Compare Comp	9 =	4.1.1 Develop Polnoling Location Map, Obtain Excavalion Parmit, and Polnolo 4.1.2 Perform OAUGO Saview	70 days	Thu 11/1/1	1		÷
10 cts 1	45	4.1.3 Gubrin 80% Deubn	D days	Mon 11/6/1		五 1	
1	d 4	4.1.4 District Roview of 60% Dealgn 4.1.5 EDW Deskin Roview Mendino	10 days	Mon 11/57		17.7	
15 day World 1979 Wind 1979 Wind 1970 Wind 1	8	4.1.8 Summarize and incorpurate District Commonis	2 days	Mon 21/197			
1 ctr 1 ct	9 5	4.2.10% Dusign 4.2.1 Percent Oliv Basin Plans Smelffellons Cod Follmah)	35 days	Mon 11/197			-
S slop West 2019 West 20		4.2.1.1 Pormitting and Utility Agency Coordination	5 days	Wed 12/12/		<u> </u>	
10 dpg Thu 1202011 Weed 152101 Weed	9	4.2.2 Partorm CAVGG Raview 4.2.3 Suhmi BOX, Desirin	3 days	Fit 12/14/		110 m m m m m m m m m m m m m m m m m m	
Column C	2	4.2.4 Distitut Review of 1983 Design	10 days	Thu 12/20/1		19	
13 day Thurs 13 day Thurs Th	8	A.2.5 60% Design Review Meeting	D days	Wed 1/2/		1.00 m m m m m m m m m m m m m m m m m m	
19 dep 18 min 19 mi	3 5	A.J. 59% Design	Ze days	The fish		ca ca	
1 ctrop 1 ct	S2 5	4.3.1 Prepairs 89% Design (Plans, Specifications, Cost Estimate)	10 days	Thu 1/2		2.2	
Claps Lab Maritimate Claps Lab Maritimate Lab	25	4.3.2 Partimetry mac Couly Agency Coordination 4.3.2 Partime GA/GC Review	2 days	Thusan			
Compared	8	4.3.3 Subrill 09% Destjin	g days	Tue 1/22/		1, 1	•••
1 days 1 min 2003 1 min 2	9	4.3.5 98% Design Review Meeting	Octays	Tue 2/5/1		ST-P-1	
T days FT 2015 Max 2020 FT 2015 Max 2020 FT 2015 FT	£ 5	4.3.8 Summeride and Incorporate District Comments	2 days	Wad 2/6/			
2 dep 16.27/10 Wild 2007	3 2	4.4.1 Prepare 100% Plains, Epacifications, 4. Estimate and 4.4.1 Prepare 100% Final Plans, Spanishing and Cost Entimate	7 days	Fri 278th			
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minute + transfer (S28222255) underword (S28222255) market transfer trans	Prolect-S			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	62666666666	Anderson STREETING Manager A Landon	
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EXHIBIT B

SCHEDULE OF PAYMENT

528688.1

GARDEN GROVE SANITARY DISTRICT SEWER IMPROVEMENTS - PROJECT Nos. 43, 46, 54, 55, 68 & 75

EXHIBIT 1 - Fee Proposal

TASK	Labor Category Used for Fee Estimate: E6 Principal Engineer, E5 Senior Engineer, E2 Assistant Engineer, T6 Principal Designer, T4 Designer, and A3 Word Processor	9 8	E5	E2	TG	T4 /	A3	Total Lal	Labor	Other Direct	Subs	TOTAL
	Task Description	\$163	\$148	\$107	\$134	\$107 \$	\$82		, <u>U</u>	(oppos)		
A	Non-Optional Work							THE PARTY		NI SIGN		No. of Lot
TASK 1	Project Management						-					
TASK 2	Preliminary Investigation		2					-				
2.1	Field Data Collection and Utility Investigation		4	40	,	+	4	48	\$5,200		000	\$5,250
7.7	Sulveying and right-of-way		4	1	V	4	+	<i>P</i>	31,288	920	\$28,020	\$29,338
2.3		4	4	1	1	╢	4	+	\$592		\$8,975	\$9,567
	SUBTOTAL Task 2, Preliminary Investigation and Design Survey	0	12	6	2	4	4	62 \$7	\$7,080	\$100	\$36,995	\$44,175
TASK												
3.1	Preliminary Design Report (25% Design)						ins.					
3.1.1			œ	∞			+	=	\$2,040			\$2,040
3.1.2	Prepare Preliminary Pipeline Alignment Plans		7		œ	24		+	\$3,936			\$3,936
3.1.3	Develop List of Permit & Regulatory Requirements / Incorporate Utility Requirements			24	1	\dashv	4	4	\$3,424	\$100		\$3,524
3.1.4	4		98	78	4	†	12	67	\$10,700	1		\$10,700
3.1.5		12		1	1	က	4	\pm	\$2,277	\$50		\$2,327
3.7.8	Attend PUR Review Meeting		9	1	T	+	+	+	\$1,052	\$50	1	\$1,102
3.7.9	Summarize and Incorporate District PDR Comments into 60% Design	_11	20	20	1	-1	4	╬	\$4,080		1	\$4,080
	SUBTOTAL Task 3, Preliminary Engineering	42	8	88	72	59	9	229 \$27	\$27,509	\$200	\$0 \$0	\$27,709
TASK	TASK 4 Final Engineering						+					Con line
4.1	60% Design					-	4	-				
4.1.1	Prepare 60% Design		56	24	20	70	12	152 \$17	\$17,570			\$17,570
4.1.1.1	Utility Verification Potholing (Up to a maximum of 20 potholes)		4	80		2	\dashv	_	\$1,662	\$100	\$15,900	\$17,662
4.1.2	Perform QA/QC Review	12				4		220	\$2,384			\$2,384
4.1.3	Submit 60% Design		2				4	9	\$624	\$50		\$674
4.1.4	60% Design Review Meeting		9			200	_	-	\$1,052	\$50	AL	\$1,102
4.1.5	Summarize and Incorporate District 60% Comments into 90% Design		80	8	7	16		32 \$3	\$3,752			\$3,752
4.2	90% Design							-				
4.2.1	Prepare 90% Design		24	34	12	50 1	12	_	\$15,132			\$15,132
4.2.1.1	Permitting and Utility Agency Coordination			24		4	4	32 \$3	\$3,324	\$50		\$3,374
4.2.2	Perform QA/QC Review	9				4		10 \$1	\$1,406			\$1,406
4.2.3	Submit 90% Design		2			_	9	8	\$788	\$50		\$838
4.2.4	90% Design Review Meeting		9				2	_	\$1,052	\$50		\$1,102
4.2.5	Summarize and Incorporate District 90% Comments into 99% Design		00	80		12		28 \$3	\$3,324			\$3,324
4.3	99% Design					+	Ц	-				
4.3.1	Prepare 99% Design		12	24	_∞			+	\$9,232			\$9,232
4.3.1.1	Permitting and Utility Agency Coordination				†	+	7	+	\$1,448	1	1	\$1,448
4.5.2	Perform QA/QC Review	4	1	1	1	7	4	+	2866	1	1	\$866
4.5.3	Submit 99% Design		7		1		+	+	\$952	\$50	1	\$1,002
4.3.4	99% Design Review Meeting		9	1	†	+	7	+	\$1,052	\$20	1	\$1,102
4.5.0	Summarize and incorporate District 99% Comments into 100% Final Design		4	4		00		16	\$1,8/6			\$1,8/6
441	Prepare 100% Final Design		α			9	1	28	\$3 224	T	T	\$3 224
4.4.2	Perform QA/QC Review	2	,	T	T	+	-	╁	\$326	T	T	\$326
4.4.3	Submit 100% Final Design	1	4	T	T	F	8	1	\$1.248	\$300	T	\$1.548
	SUBTOTAL Task 4. Final Engineering	24	122	142	40	220 7	⊬	+	\$72.294		\$15.900	\$88.944
TASK 5	TASK 5 Bidding Phase Services				+	-	_	┾	+			
5.1	Provide Clarification/Revisions to Bid Documents for Design Related Issues		00	Γ	r	4	2	14 \$1	\$1,776		Γ	\$1,776
5.2	Prepare Addenda (Assume 2 addenda) for Design-Related Issues		œ	П	П	4	H	69	\$1,940			\$1,940
5.3		Щ	4	1	1	╢	4	╣	\$592	\$50	1	\$642
	SUBTOTAL Task 5, Bidding Phase Services	0	20	0	0	8	9	34 \$4	\$4,308	\$50	\$0	\$4,358
	TOTAL NOT TO EXCEED	36	214	250	54	291 104		949 \$111,191		\$1,100 \$52,895 \$165,186	52,895	165,186