

PROFESSIONAL CONSULTANT SERVICES AGREEMENT

LEE & RO, INC.

Engineering Design Services for the  
Fairgrounds Street and Dexter Drive Wastewater Lift Station

THIS PROFESSIONAL CONSULTANT SERVICES AGREEMENT ("Agreement") is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ ("Effective Date"), by and between the CITY OF RIVERSIDE, a California charter city and municipal corporation ("City"), and Lee & Ro, Inc, a California corporation ("Consultant").

1. **Scope of Services.** City agrees to retain and does hereby retain Consultant and Consultant agrees to provide the services more particularly described in Exhibit "A," "Scope of Services" ("Services"), attached hereto and incorporated herein by reference, in conjunction with Engineering Design Services for the Fairgrounds Street and Dexter Drive Wastewater Lift Station ("Project").

2. **Term.** This Agreement shall be effective on the date first written above and shall remain in effect until December 31, 2024, unless otherwise terminated pursuant to the provisions herein.

3. **Compensation/Payment.** Consultant shall perform the Services under this Agreement for the total sum not to exceed One Hundred Forty-Nine Thousand Four Hundred Ninety-Nine Dollars (\$149,499) payable in accordance with the terms set forth in Exhibit "B." Said payment shall be made in accordance with City's usual accounting procedures upon receipt and approval of an itemized invoice setting forth the services performed. The invoices shall be delivered to City at the address set forth in Section 4 hereof.

4. **Notices.** Any notices required to be given, hereunder shall be in writing and shall be personally served or given by mail. Any notice given by mail shall be deemed given when deposited in the United States Mail, certified and postage prepaid, addressed to the party to be served as follows:

To City

City of Riverside  
Public Works Department  
Attn: Public Works Director  
3900 Main Street, 4<sup>th</sup> Floor  
Riverside, CA 92522

To Consultant

Lee & Ro, Inc.  
Attn: Dhiru Patel, Principal-In-Charge  
1199 South Fullerton Road  
City of Industry, CA 91748

5. **Prevailing Wage.** If applicable, Consultant and all subcontractors are required to pay the general prevailing wage rates of per diem wages and overtime and holiday wages determined by the Director of the Department of Industrial Relations under Section 1720 et seq. of the California Labor Code and implemented by Resolution No. 13346 of the City Council of the City of Riverside. The Director's determination is available on-line at [www.dir.ca.gov/dlsr/DPreWageDetermination.htm](http://www.dir.ca.gov/dlsr/DPreWageDetermination.htm) and is referred to and made a part hereof; the wage rates therein ascertained, determined, and specified are referred to and made a part hereof as though fully set forth herein.

6. **Contract Administration.** A designee of the City will be appointed in writing by the City Manager or Department Director to administer this Agreement on behalf of City and shall be referred to herein as Contract Administrator.

7. **Standard of Performance.** While performing the Services, Consultant shall exercise the reasonable professional care and skill customarily exercised by reputable members of Consultant's profession practicing in the Metropolitan Southern California Area, and shall use reasonable diligence and best judgment while exercising its professional skill and expertise.

8. **Personnel.** Consultant shall furnish all personnel necessary to perform the Services and shall be responsible for their performance and compensation. Consultant recognizes that the qualifications and experience of the personnel to be used are vital to professional and timely completion of the Services. The key personnel listed in Exhibit "C" attached hereto and incorporated herein by this reference and assigned to perform portions of the Services shall remain assigned through completion of the Services, unless otherwise mutually agreed by the parties in writing, or caused by hardship or resignation in which case substitutes shall be subject to City approval.

9. **Assignment and Subcontracting.** Neither party shall assign any right, interest, or obligation in or under this Agreement to any other entity without prior written consent of the other party. In any event, no assignment shall be made unless the assignee expressly assumes the obligations of assignor under this Agreement, in a writing satisfactory to the parties. Consultant acknowledges that any assignment may, at the City's sole discretion, require City Manager and/or City Council approval. Consultant shall not subcontract any portion of the work required by this Agreement without prior written approval by the responsible City Contract Administrator. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement, including without limitation, the insurance obligations set forth in Section 12. The Consultant acknowledges and agrees that the City is an intended beneficiary of any work performed by any subcontractor for purposes of establishing a duty of care between any subcontractor and the City.

10. **Independent Contractor.** In the performance of this Agreement, Consultant, and Consultant's employees, subcontractors and agents, shall act in an independent capacity as independent contractors, and not as officers or employees of the City of Riverside. Consultant acknowledges and agrees that the City has no obligation to pay or withhold state or federal taxes or to provide workers' compensation or unemployment insurance to Consultant, or to Consultant's employees, subcontractors and agents. Consultant, as an independent contractor, shall be responsible for any and all taxes that apply to Consultant as an employer.

## **11. Indemnification.**

**11.1 Design Professional Defined.** For purposes of this Agreement, “Design Professional” includes the following:

- A. An individual licensed as an architect pursuant to Chapter 3 (commencing with Section 5500) of Division 3 of the Business and Professions Code, and a business entity offering architectural services in accordance with that chapter.
- B. An individual licensed as a landscape architect pursuant to Chapter 3.5 (commencing with Section 5615) of Division 3 of the Business and Professions Code, and a business entity offering landscape architectural services in accordance with that chapter.
- C. An individual registered as a professional engineer pursuant to Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code, and a business entity offering professional engineering services in accordance with that chapter.
- D. An individual licensed as a professional land surveyor pursuant to Chapter 15 (commencing with Section 8700) of Division 3 of the Business and Professions Code, and a business entity offering professional land surveying services in accordance with that chapter.

**11.2 Defense Obligation For Design Professional Liability.** Consultant agrees, at its cost and expense, to promptly defend the City, and the City’s employees, officers, managers, agents and council members (collectively the “Parties to be Defended”) from and against any and all claims, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services and whether or not caused in part by the negligence of an Indemnified Party. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel acceptable to City. Consultant will reimburse City for reasonable defense costs for claims arising out of Consultant’s professional negligence based on the percentage of Consultant’s liability. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant’s Services under this Agreement.

**11.3 Indemnity For Design Professional Liability.** When the law establishes a professional standard of care for Consultant’s services, to the fullest extent permitted by law, Consultant shall indemnify, protect and hold harmless the City and the City’s employees, officers, managers, agents, and Council Members (“Indemnified Parties”) from and against any and all claim for damage, charge, lawsuit, action, judicial, administrative, regulatory or arbitration proceeding,

damage, cost, expense (including counsel and expert fees), judgment, civil fines and penalties, liabilities or losses of any kind or nature whatsoever to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services and whether or not caused in part by the negligence of an Indemnified Party.

#### **11.4 Defense Obligation For Other Than Design Professional Liability.**

Consultant agrees, at its cost and expense, to promptly defend the City, and the City's employees, officers, managers, agents and council members (collectively the "Parties to be Defended") from and against any and all claims, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings which arise out of, or relate to, or are in any way connected with: 1) the Services, work, activities, operations, or duties of the Consultant, or of anyone employed by or working under the Consultant, or 2) any breach of the Agreement by the Consultant.

This duty to defend shall apply whether or not such claims, allegations, lawsuits or proceedings have merit or are meritless, or which involve claims or allegations that any or all of the Parties to be Defended were actively, passively, or concurrently negligent, or which otherwise assert that the Parties to be Defended are responsible, in whole or in part, for any loss, damage or injury. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel acceptable to City. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant's Services under this Agreement.

**11.5 Indemnity For Other Than Design Professional Liability.** Except as to the sole negligence or willful misconduct of the City, Consultant agrees to indemnify, protect and hold harmless the Indemnified Parties from and against any claim for damage, charge, lawsuit, action, judicial, administrative, regulatory or arbitration proceeding, damage, cost, expense (including counsel and expert fees), judgment, civil fine and penalties, liabilities or losses of any kind or nature whatsoever whether actual, threatened or alleged, which arise out of, pertain to, or relate to, or are a consequence of, or are attributable to, or are in any manner connected with the performance of the Services, work, activities, operations or duties of the Consultant, or anyone employed by or working under the Consultant or for services rendered to Consultant in the performance of this Agreement, notwithstanding that the City may have benefited from its work or services. This indemnification provision shall apply to any acts, omissions, negligence, recklessness, or willful misconduct, whether active or passive, on the part of the Consultant or anyone employed or working under the Consultant.

## **12. Insurance.**

**12.1 General Provisions.** Prior to the City's execution of this Agreement, Consultant shall provide satisfactory evidence of, and shall thereafter maintain during the term of this Agreement, such insurance policies and coverages in the types, limits, forms and ratings required herein. The rating and required insurance policies and coverages may be modified in writing by the City's Risk Manager or City Attorney, or a designee, unless such modification is prohibited by law.

**12.1.1 Limitations.** These minimum amounts of coverage shall not constitute any limitation or cap on Consultant's indemnification obligations under Section 11 hereof.

12.1.2 **Ratings.** Any insurance policy or coverage provided by Consultant or subcontractors as required by this Agreement shall be deemed inadequate and a material breach of this Agreement, unless such policy or coverage is issued by insurance companies authorized to transact insurance business in the State of California with a policy holder's rating of A or higher and a Financial Class of VII or higher.

12.1.3 **Cancellation.** The policies shall not be canceled unless thirty (30) days' prior written notification of intended cancellation has been given to City by certified or registered mail, postage prepaid.

12.1.4 **Adequacy.** The City, its officers, employees and agents make no representation that the types or limits of insurance specified to be carried by Consultant pursuant to this Agreement are adequate to protect Consultant. If Consultant believes that any required insurance coverage is inadequate, Consultant will obtain such additional insurance coverage as Consultant deems adequate, at Consultant's sole expense.

12.2 **Workers' Compensation Insurance.** By executing this Agreement, Consultant certifies that Consultant is aware of and will comply with Section 3700 of the Labor Code of the State of California requiring every employer to be insured against liability for workers' compensation, or to undertake self-insurance before commencing any of the work. Consultant shall carry the insurance or provide for self-insurance required by California law to protect said Consultant from claims under the Workers' Compensation Act. Prior to City's execution of this Agreement, Consultant shall file with City either 1) a certificate of insurance showing that such insurance is in effect, or that Consultant is self-insured for such coverage, or 2) a certified statement that Consultant has no employees, and acknowledging that if Consultant does employ any person, the necessary certificate of insurance will immediately be filed with City. Any certificate filed with City shall provide that City will be given ten (10) days' prior written notice before modification or cancellation thereof.

12.3 **Commercial General Liability and Automobile Insurance.** Prior to City's execution of this Agreement, Consultant shall obtain, and shall thereafter maintain during the term of this Agreement, commercial general liability insurance and automobile liability insurance as required to insure Consultant against damages for personal injury, including accidental death, as well as from claims for property damage, which may arise from or which may concern operations by anyone directly or indirectly employed by, connected with, or acting for or on behalf of Consultant. The City, and its officers, employees and agents, shall be named as additional insureds under the Consultant's insurance policies.

12.3.1 Consultant's commercial general liability insurance policy shall cover both bodily injury (including death) and property damage (including, but not limited to, premises operations liability, products-completed operations liability, independent contractor's liability, personal injury liability, and contractual liability) in an amount not less than \$1,000,000 per occurrence and a general aggregate limit in the amount of not less than \$2,000,000.

12.3.2 Consultant's automobile liability policy shall cover both bodily injury and property damage in an amount not less than \$1,000,000 per occurrence and an aggregate limit of not less than \$1,000,000. All of Consultant's automobile and/or commercial general liability insurance policies shall cover all vehicles used in connection with Consultant's performance of this Agreement, which vehicles shall include, but are not limited to, Consultant owned vehicles, Consultant leased vehicles, Consultant's employee vehicles, non-Consultant owned vehicles and hired vehicles.

12.3.3 Prior to City's execution of this Agreement, copies of insurance policies or original certificates along with additional insured endorsements acceptable to the City evidencing the coverage required by this Agreement, for both commercial general and automobile liability insurance, shall be filed with City and shall include the City and its officers, employees and agents, as additional insureds. Said policies shall be in the usual form of commercial general and automobile liability insurance policies, but shall include the following provisions:

It is agreed that the City of Riverside, and its officers, employees and agents, are added as additional insureds under this policy, solely for work done by and on behalf of the named insured for the City of Riverside.

12.3.4 The insurance policy or policies shall also comply with the following provisions:

- a. The policy shall be endorsed to waive any right of subrogation against the City and its sub-consultants, employees, officers and agents for services performed under this Agreement.
- b. If the policy is written on a claims made basis, the certificate should so specify and the policy must continue in force for one year after completion of the services. The retroactive date of coverage must also be listed.
- c. The policy shall specify that the insurance provided by Consultant will be considered primary and not contributory to any other insurance available to the City and Endorsement No. CG 20010413 shall be provided to the City.

12.4 **Errors and Omissions Insurance.** Prior to City's execution of this Agreement, Consultant shall obtain, and shall thereafter maintain during the term of this Agreement, errors and omissions professional liability insurance in the minimum amount of \$1,000,000 to protect the City from claims resulting from the Consultant's activities.

12.5 **Subcontractors' Insurance.** Consultant shall require all of its subcontractors to carry insurance, in an amount sufficient to cover the risk of injury, damage or loss that may be caused by the subcontractors' scope of work and activities provided in furtherance of this Agreement, including, but without limitation, the following coverages: Workers Compensation, Commercial General Liability, Errors and Omissions, and Automobile liability. Upon City's request,

Consultant shall provide City with satisfactory evidence that Subcontractors have obtained insurance policies and coverages required by this section.

13. **Business Tax.** Consultant understands that the Services performed under this Agreement constitutes doing business in the City of Riverside, and Consultant agrees that Consultant will register for and pay a business tax pursuant to Chapter 5.04 of the Riverside Municipal Code and keep such tax certificate current during the term of this Agreement.

14. **Time of Essence.** Time is of the essence for each and every provision of this Agreement.

15. **City's Right to Employ Other Consultants.** City reserves the right to employ other Consultants in connection with the Project. If the City is required to employ another consultant to complete Consultant's work, due to the failure of the Consultant to perform, or due to the breach of any of the provisions of this Agreement, the City reserves the right to seek reimbursement from Consultant.

16. **Accounting Records.** Consultant shall maintain complete and accurate records with respect to costs incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.

17. **Confidentiality.** All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other materials either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant, except as otherwise directed by City's Contract Administrator. Nothing furnished to Consultant which is otherwise known to the Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use City's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production, website, or other similar medium without the prior written consent of the City.

18. **Ownership of Documents.** All reports, maps, drawings and other contract deliverables prepared under this Agreement by Consultant shall be and remain the property of City. Consultant shall not release to others information furnished by City without prior express written approval of City.

19. **Copyrights.** Consultant agrees that any work prepared for City which is eligible for copyright protection in the United States or elsewhere shall be a work made for hire. If any such work is deemed for any reason not to be a work made for hire, Consultant assigns all right, title and interest in the copyright in such work, and all extensions and renewals thereof, to City, and agrees to provide all assistance reasonably requested by City in the establishment, preservation and enforcement of its copyright in such work, such assistance to be provided at City's expense but

without any additional compensation to Consultant. Consultant agrees to waive all moral rights relating to the work developed or produced, including without limitation any and all rights of identification of authorship and any and all rights of approval, restriction or limitation on use or subsequent modifications.

20. **Conflict of Interest.** Consultant, for itself and on behalf of the individuals listed in Exhibit "C," represents and warrants that by the execution of this Agreement, they have no interest, present or contemplated, in the Project affected by the above-described Services. Consultant further warrants that neither Consultant, nor the individuals listed in Exhibit "C" have any real property, business interests or income interests that will be affected by this project or, alternatively, that Consultant will file with the City an affidavit disclosing any such interest.

21. **Solicitation.** Consultant warrants that Consultant has not employed or retained any person or agency to solicit or secure this Agreement, nor has it entered into any agreement or understanding for a commission, percentage, brokerage, or contingent fee to be paid to secure this Agreement. For breach of this warranty, City shall have the right to terminate this Agreement without liability and pay Consultant only for the value of work Consultant has actually performed, or, in its sole discretion, to deduct from the Agreement price or otherwise recover from Consultant the full amount of such commission, percentage, brokerage or commission fee. The remedies specified in this section shall be in addition to and not in lieu of those remedies otherwise specified in this Agreement.

22. **General Compliance With Laws.** Consultant shall keep fully informed of federal, state and local laws and ordinances and regulations which in any manner affect those employed by Consultant, or in any way affect the performance of services by Consultant pursuant to this Agreement. Consultant shall at all times observe and comply with all such laws, ordinances and regulations, and shall be solely responsible for any failure to comply with all applicable laws, ordinances and regulations. Consultant represents and warrants that Consultant has obtained all necessary licenses to perform the Scope of Services and that such licenses are in good standing. Consultant further represents and warrants that the services provided herein shall conform to all ordinances, policies and practices of the City of Riverside.

23. **Waiver.** No action or failure to act by the City shall constitute a waiver of any right or duty afforded City under this Agreement, nor shall any such action or failure to act constitute approval of or acquiescence in any breach thereunder, except as may be specifically, provided in this Agreement or as may be otherwise agreed in writing.

24. **Amendments.** This Agreement may be modified or amended only by a written agreement and/or change order executed by the Consultant and City.

25. **Termination.** City, by notifying Consultant in writing, shall have the right to terminate any or all of Consultant's services and work covered by this Agreement at any time. In the event of such termination, Consultant may submit Consultant's final written statement of the amount of Consultant's services as of the date of such termination based upon the ratio that the work completed bears to the total work required to make the report complete, subject to the City's rights under Sections 15 and 26 hereof. In ascertaining the work actually rendered through the termination

date, City shall consider completed work, work in progress and complete and incomplete reports and other documents only after delivered to City.

25.1 Other than as stated below, City shall give Consultant thirty (30) days' prior written notice prior to termination.

25.2 City may terminate this Agreement upon fifteen (15) days' written notice to Consultant, in the event:

25.2.1 Consultant substantially fails to perform or materially breaches the Agreement; or

25.2.2 City decides to abandon or postpone the Project.

26. **Offsets.** Consultant acknowledges and agrees that with respect to any business tax or penalties thereon, utility charges, invoiced fee or other debt which Consultant owes or may owe to the City, City reserves the right to withhold and offset said amounts from payments or refunds or reimbursements owed by City to Consultant. Notice of such withholding and offset, shall promptly be given to Consultant by City in writing. In the event of a dispute as to the amount owed or whether such amount is owed to the City, City will hold such disputed amount until either the appropriate appeal process has been completed or until the dispute has been resolved.

27. **Successors and Assigns.** This Agreement shall be binding upon City and its successors and assigns, and upon Consultant and its permitted successors and assigns, and shall not be assigned by Consultant, either in whole or in part, except as otherwise provided in paragraph 9 of this Agreement.

28. **Venue.** Any action at law or in equity brought by either of the parties hereto for the purpose of enforcing a right or rights provided for by this Agreement shall be tried in the Superior Court, County of Riverside, State of California, and the parties hereby waive all provisions of law providing for a change of venue in such proceedings to any other county. In the event either party hereto shall bring suit to enforce any term of this Agreement or to recover any damages for and on account of the breach of any term or condition of this Agreement, it is mutually agreed that each party will bear their own attorney's fees and costs.

29. **Nondiscrimination.** During Consultant's performance of this Agreement, Consultant shall not discriminate on the grounds of race, religious creed, color, national origin, ancestry, age, physical disability, mental disability, medical condition, including the medical condition of Acquired Immune Deficiency Syndrome (AIDS) or any condition related thereto, marital status, sex, genetic information, gender, gender identity, gender expression, or sexual orientation, military and veteran status, in the selection and retention of employees and subcontractors and the procurement of materials and equipment, except as provided in Section 12940 of the California Government Code. Further, Consultant agrees to conform to the requirements of the Americans with Disabilities Act in the performance of this Agreement.

30. **Severability.** Each provision, term, condition, covenant and/or restriction, in whole and in part, of this Agreement shall be considered severable. In the event any provision, term,

condition, covenant and/or restriction, in whole and/or in part, of this Agreement is declared invalid, unconstitutional, or void for any reason, such provision or part thereof shall be severed from this Agreement and shall not affect any other provision, term, condition, covenant and/or restriction of this Agreement, and the remainder of the Agreement shall continue in full force and effect.

31. **Authority.** The individuals executing this Agreement and the instruments referenced herein on behalf of Consultant each represent and warrant that they have the legal power, right and actual authority to bind Consultant to the terms and conditions hereof and thereof.

32. **Entire Agreement.** This Agreement constitutes the final, complete, and exclusive statement of the terms of the agreement between the parties pertaining to the subject matter of this Agreement, and supersedes all prior and contemporaneous understandings or agreements of the parties. Neither party has been induced to enter into this Agreement by and neither party is relying on, any representation or warranty outside those expressly set forth in this Agreement.

33. **Interpretation.** City and Consultant acknowledge and agree that this Agreement is the product of mutual arms-length negotiations and accordingly, the rule of construction, which provides that the ambiguities in a document shall be construed against the drafter of that document, shall have no application to the interpretation and enforcement of this Agreement.

33.1 Titles and captions are for convenience of reference only and do not define, describe or limit the scope or the intent of the Agreement or any of its terms. Reference to section numbers, are to sections in the Agreement unless expressly stated otherwise.

33.2 This Agreement shall be governed by and construed in accordance with the laws of the State of California in effect at the time of the execution of this Agreement.

33.3 In the event of a conflict between the body of this Agreement and Exhibit "A" - Scope of Services hereto, the terms contained in Exhibit "A" shall be controlling.

34. **Exhibits.** The following exhibits attached hereto are incorporated herein to this Agreement by this reference:

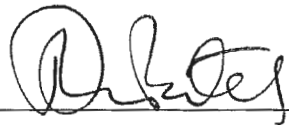
Exhibit "A" - Scope of Services  
Exhibit "B" - Compensation  
Exhibit "C" - Key Personnel

IN WITNESS WHEREOF, City and Consultant have caused this Agreement to be duly executed the day and year first above written.

CITY OF RIVERSIDE, a California  
charter city and municipal corporation

LEE & RO, INC.,  
a California corporation

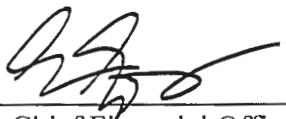
By: \_\_\_\_\_  
City Manager

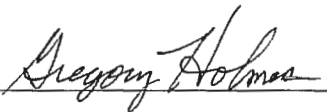
By:  \_\_\_\_\_

DHIRU PATEL  
[Printed Name]  
Chief Executive Officer  
[Title]

Attest: \_\_\_\_\_  
City Clerk

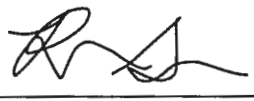
Certified as to Availability of Funds:

By:  \_\_\_\_\_  
Chief Financial Officer

By:  \_\_\_\_\_

GREGORY HOLMES  
[Printed Name]  
CHIEF FINANCIAL OFFICER  
[Title]

Approved as to Form:

By:  \_\_\_\_\_  
Ruthann M. Salera  
Deputy City Attorney

**EXHIBIT "A"**

**SCOPE OF SERVICES**

# B. STATEMENT OF UNDERSTANDING & APPROACH

## PROJECT UNDERSTANDING

The City of Riverside (City) is seeking engineering design services to replace its existing Fairgrounds Street wastewater lift station (Fairgrounds LS, built 1966) and Dexter Drive wastewater lift station (Dexter LS, built 1968) to conform to the City's Sewage Lift Station and Force Main Guidelines.

Fairgrounds LS is located at 3991 Fairgrounds Street in the street's parkway area fronting CubeSmart Self Storage. Dexter LS is located at 2981 Dexter Drive, behind single family homes in the rear parking lot of American Legion Post 79 near Lake Evans. Both existing stations were built with a wet well manhole and a pump chamber vault with pedestal mounted pumps in a duplex configuration (duty + standby). In order to conform to the City's design guidelines, the replacement lift stations will be designed with wet well submersible pumps and valve vaults.

Fairgrounds LS and Dexter LS are located on either side of 60 Freeway near Fairmont Park just east of Santa Ana River. These lift stations service separate sub areas of the Northside Basin as shown in Vicinity Map below per February 2008 Wastewater Collection System Master Plan. The service areas appear to be nearly built out, based on which the lift station replacements will be designed.

Implementation of this project will improve the system's overall performance, maintain reliability of the sewer system, and ensure the infrastructure up to the City's current standards.

The LEE + RO team has thoroughly reviewed the RFP and has outlined the following scope of work. LEE + RO understands the following salient features for this project and will incorporate them in the design as needed:

1. Review and confirm existing pump, wet well, and forcemain sizes per the City's as-built data, review of developments and demands, and research of existing utilities within the project site. This data will be used as the basis for the sizing and design alternative recommendations made.
2. Design alternatives and methods of construction for the new upgrades will be studied, evaluated, and presented in the feasibility study for City's selection.
3. Construction activities to have minimum impact on the community and neighboring residents. Sewage bypass pumping efforts are critical to ensure that the disruptions to service are minimized. LEE + RO will design the project and sequence of construction to keep the existing station running and minimize sewage bypass pumping to minimize disruptions and potential issues with bypass pumping.
4. LEE + RO will not only optimize the cost of construction but also reduce service outages and strive to reduce the volume of customer complaints to the City through efficient final design.

The LEE + RO team has multi-decades of experience in replacement of aging infrastructure in populated urban areas and will bring that experience and expertise to serve the City's needs. LEE + RO routinely designs numerous sewer improvement projects every year and the current lift station improvement project is the type of routine project LEE + RO performs on a regular basis. Refer to our **Sewer Improvements Matrix in Appendix E** showing our selected sewer design record. Our experienced team has already encountered many of the challenges required of this project in previous projects. LEE + RO understands how to cost-effectively handle these challenges and implement solutions clearly and concisely for our clients. The team will be led by Amritendu Maji, PE (Project Manager) and will be assisted by Murthy Kadiyala, PE (Project Engineer). Both Amritendu and Murthy have many decades of hands-on wastewater infrastructure experience, including the planning, design, and construction of pipelines, pump stations, and civil grading projects. Our team's extensive knowledge and experience with sewage pump stations and sewer pipeline projects and wastewater infrastructure will provide the City with quality design work, established in-house QA/QC protocols, and swift designs by our experienced team who regularly work on these kinds of projects.

### Vicinity Map



# CHALLENGES

LEE + RO has reviewed the project lift station location and performed value engineering/constructability review for the best project outcome. While the work appears relatively straight forward, there are significant challenges to anticipate and address pre-emptively. The anticipated construction challenges for this Project are identified in LEE + RO's Approach to Project Challenges Matrix below, along with our anticipated approaches to resolve them. These challenges include:

## LEE + RO'S Approach to Project Challenges Matrix

PROJECT CHALLENGES	LEE + RO APPROACH
Accurate Utility Location	<ul style="list-style-type: none"> <li>Review of existing as-built drawings and information of previous projects within the area</li> <li>If no as-built information is available, then perform a detailed site walk of the project area to determine the existing conditions</li> <li>Strategic potholes around the lift station to locate potentials for conflict</li> </ul>
Coordination with Local Neighborhood	<ul style="list-style-type: none"> <li>Communicate with Town and local neighborhood early and often to coordinate outreach efforts and timely notifications.</li> <li>Maintain communication through a single point of contact to control dissemination of information and mitigate confusion</li> <li>Always provide accurate and time-sensitive information to the stakeholders and keep them informed</li> </ul>
Permits Coordination	<ul style="list-style-type: none"> <li>Obtain all permits that the Contractor would need to pull, including Dig-Alert clearances, traffic control requirements, SWPPP/stormwater discharge, Cal-OSHA and others as needed</li> <li>Discuss with Town staff before submitting the permits to ensure that the work meets their expectations, and the work is permissible</li> </ul>

# APPROACH

LEE + RO's team is staffed with in-house multi-disciplinary engineers which allows our team to approach each Project with quick coordination and efficient design under one roof. The lift station replacement will require a careful design and methodic approach by our experienced team. Electrical improvements are required, and the site's existing electrical service will be included in our evaluation. Furthermore, appropriate erosion and stormwater Best Management Practices (BMPs) will also be evaluated and incorporated in the design.

Our seasoned team of engineers and quality control staff will assure constructability is built into the plans. The Team proposed for this Project consists of subject matter experts in lift station and pipeline planning, design, and construction support services. This will allow for an economical and a well-coordinated construction process which begins with a thorough and concise preliminary design. It is a testament to the quality of LEE + RO's work products and project completion capabilities that 90% of our firm's backlog is from repeat business with existing clients.

## 1. Research and Investigation

LEE + RO will review existing record drawings, perform utility research, site survey, and geotechnical investigations to accompany the feasibility study and provide the basis of our design.

LEE + RO will begin this Project by identifying and ensuring all utilities are carefully accounted for in the design documents. LEE + RO will carefully review the existing as-builts from the City and other utility owners to avoid surprises in the field and resultant runaway change order costs. LEE + RO will pothole the site to identify and

clear utilities that may be in conflict with the proposed upgrades. Potholing efforts will be performed by the subconsultant Bess Testlab, who has worked and is currently working with LEE + RO on multiple projects. These potholes will be performed to identify critical utilities required to complete any removal or relocation of existing utilities, or for any design adjustments needed and will be incorporated into the construction drawings.

LEE + RO has subcontracted the Prizm Group to perform topographic survey services. A topographic survey of the site and discharge invert will be performed. The Prizm Group will establish horizontal and vertical control and identify specific dimensions and locations of existing benchmarks and infrastructure to be used as the basis of design. The survey will include contour mapping for accurate pipeline alignment plan and profiles and earthwork quantity takeoffs and estimates.

Geotechnical investigation will be provided by Associated Soils Engineering to determine general subsurface soil conditions, soil classifications, relative compaction, and soil stability, if a new wetwell location or new forcemain alignment are determined to be required. These geotechnical services will include borings to provide the Contractor with the necessary trenching, shoring, and backfill requirements prior to construction.

## 2. Hydraulic Analysis

LEE + RO will evaluate the hydraulic data and run calculations as needed to determine the necessary pumping and storage capacities required for the anticipated demands. Our experts will clearly articulate the results of the hydraulic analysis findings into a concise

summary and will incorporate them in the preparation of a technical memorandum.

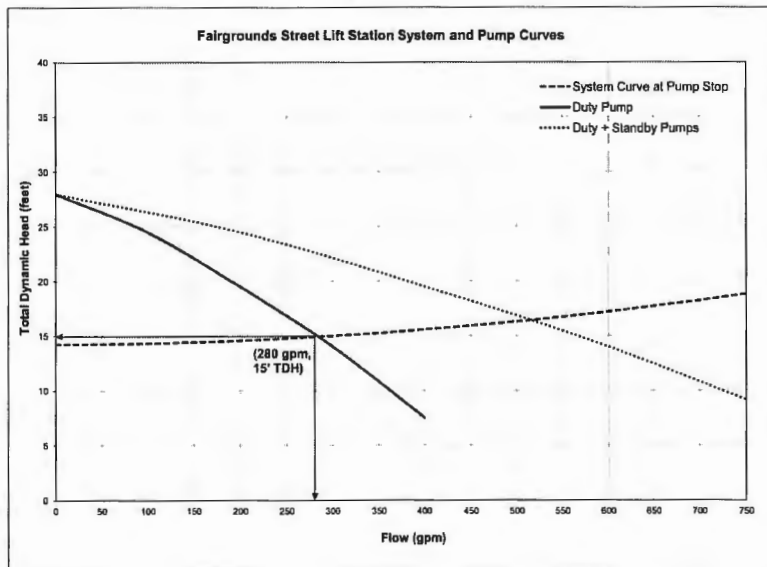
LEE + RO will determine the static lift and frictional losses that will be experienced by the submersible pumps in the wetwell. These will be used to calculate the Total Dynamic Head (TDH) for the system. The team has worked with several pump vendors in the area and will contact the vendors who are best suited for this project to provide pump curves and associated data. The pump curves will be plotted against the TDH curve to determine the final pumping capacity of the station.

The service area for Fairgrounds LS as shown in the Vicinity Map consists of approximately 350 homes and approximately 50 acres of industrial land uses. Applying the City's sewer generation factors and peaking factor, the peak inflows were calculated as 280 gpm, which was held as the preliminary design flow, for the lack of any

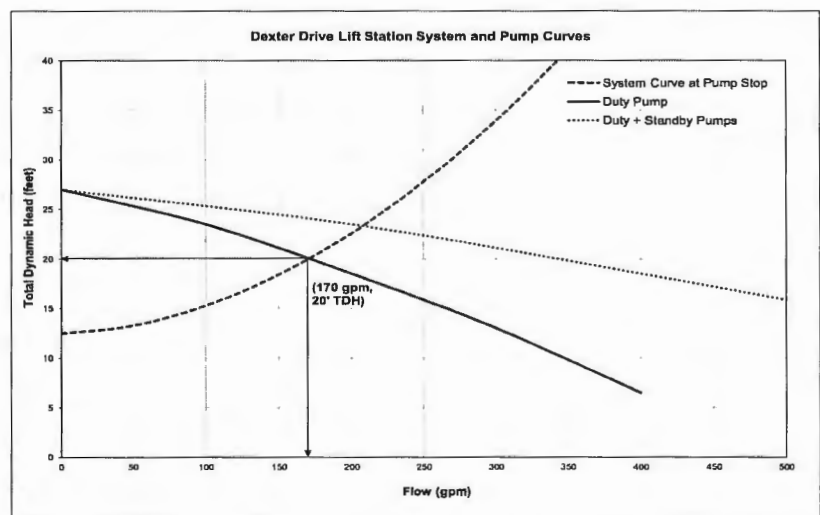
other information on existing pump capacity. The design head (TDH) was calculated as 15 feet at the design flow using static elevation differences and incorporating friction and minor head losses. A duty pump and a similarly sized standby pump will be sized based on confirmation of the design point. The design point for Dexter LS was provided in the RFP as 170 gpm at 20 feet of head.

The wet well operating volume for a new 10-ft diameter wet well was calculated using design guidelines, based on which the Duty Pump Start and Pump Stop levels are estimated. The emergency storage levels between High Water Level and Emergency Water Level are estimated based on standard practice, as it may be difficult to meet the required emergency storage volume for Fairgrounds LS due to high inflows. On the other hand, Dexter LS does not need a separate emergency storage structure due to low inflows. LEE + RO will gather the City's requirements on Emergency Storage during preliminary design and accordingly present options to the City.

## Fairgrounds St LS System and Pump Curves



## Dexter Dr LS System and Pump Curves



### 3. Conceptual Design

LEE + RO will analyze various design alternatives and the pros and cons of each constructible alternative will be presented. The pros and cons will be based on constructability (ease of replacement, proximity to adjacent utilities and/or structures), number of shutdowns and time required for construction, and cost of construction. LEE + RO will include an evaluation of the lift station's site and mechanical layouts in a technical memorandum.

Based on a field walk of Fairgrounds LS and Dexter LS and a thorough review of the attached as-builts, Conceptual Site Layouts and Wet Well Schematics were developed for both sites and included as exhibits below.

#### Fairgrounds LS Site Layout

The existing 12-inch diameter gravity sewer main is approximately 15 feet deep below grade as it had to pass under a large storm drain culvert crossing Fairgrounds Street approximately 300 feet west of Fairgrounds LS. The pipeline is in a 10-ft wide easement which passes alongside CubeSmart property's southerly fence line, before angling into the pump chamber approximately 20-ft deep. The gravity inflows are pumped and literally lifted up and immediately discharged into a 12-inch gravity sewer main. As the existing force main is very short, we can see that the system curve is very flat.

In conformance with the City's design guidelines, the conceptual site layout includes a new 10-ft diameter x 20-ft deep wet well. The new wet well is sited right next to the existing wet well manhole. Deep excavations require the contractors to emphasize on sheeting and shoring design during construction. Record geotech boring information on the as-builts indicate the presence of moist gravelly sand, with no groundwater.

The parkway is 20-ft wide, in which could be many utilities and services. A field walk revealed electric, telephone pullboxes, gas services, etc. and water main and gas main under the paving in the immediate vicinity. The presented concept may need some of these utilities to be temporarily or permanently re-routed.

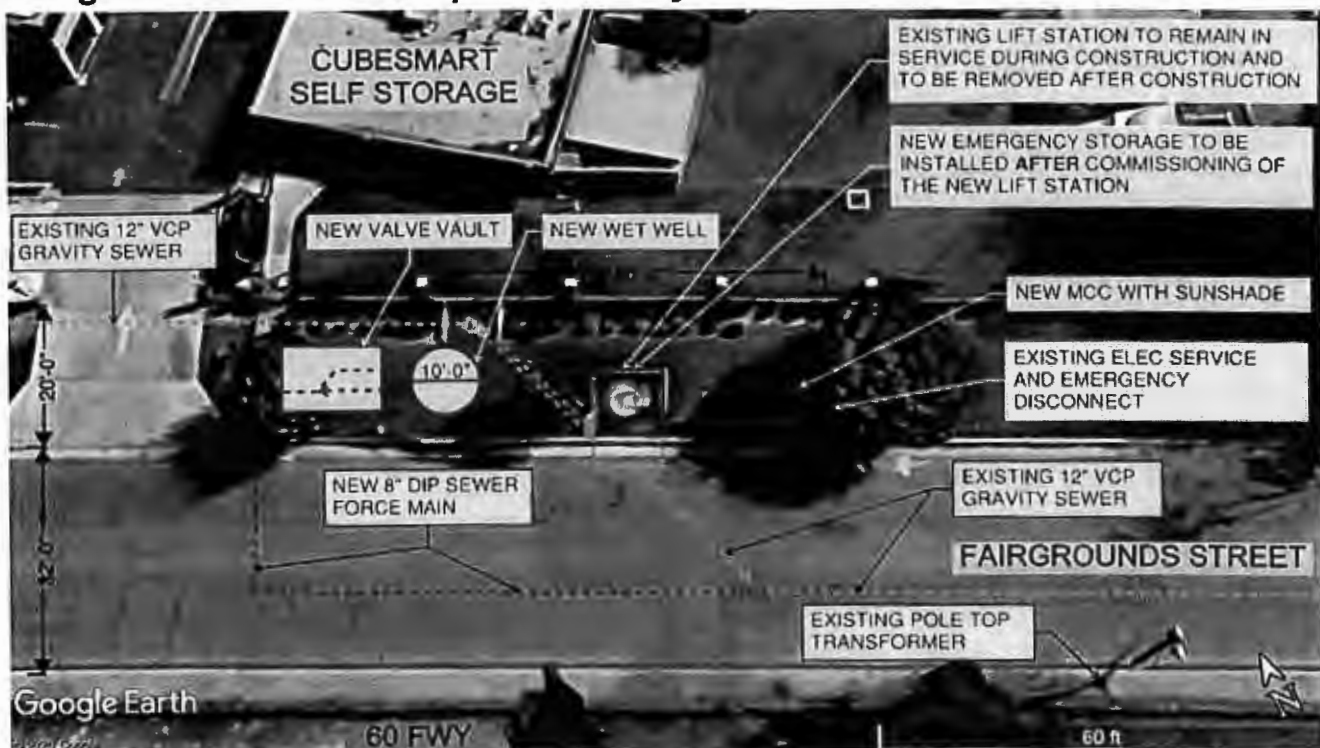
Construction of the new wet well will allow the existing well to remain in operation while the majority of the construction is undertaken, significantly reducing the requirement of bypass pumping and associated service outage to the community. Upon completion of the new wet well, the existing wet well will be converted to a new manhole to divert the collected flows to the new wet well.

The new valve vault is also sited in the parkway near the concrete driveway entrance to CubeSmart. The new 8-inch DIP force main is routed from the valve vault to the existing gravity manhole in the street.

The existing 230V electric service connection is from a pole top transformer and will need to be upgraded to 480V, 3-phase connection per design guidelines. A new MCC panel with sunshade is proposed near the existing drop connection with emergency disconnect, which may also require temporary re-routing of utilities.

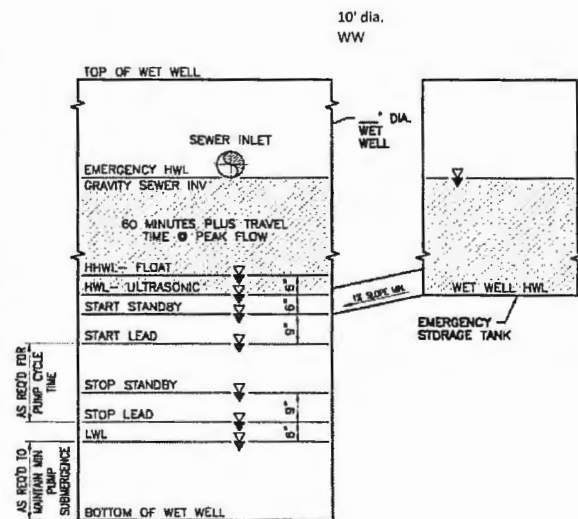
One requirement which will be difficult to conform to for Fairgrounds PS is the emergency storage which requires a very large footprint. The design guidelines require 60 minutes plus travel time from RWQCP, which is approximately 30 minutes away. A new emergency storage structure capable of providing some storage volume is proposed. Our approach is for this storage structure to be constructed after commissioning of the new station, by removing and replacing the existing pump chamber and retaining walls in the same footprint. The contractor will always be responsible for maintaining emergency bypass facilities during construction. Odor control facilities can be added if required by the City.

#### Fairgrounds St LS Conceptual Site Layout



## Fairgrounds St LS Wet Well Schematic

Fairgrounds St LS	Record Elevation	Record Depth	Conceptual New WW Levels
Pump Chamber Top	800		
		2.00'	
Wet Well Rim	798		
		2.92'	
Pump Chamber 12" Discharge Inv	795.08		
		2.85'	
Pump Chamber Top	792.23		
		7.48'	
Wet Well 12" VCP Influent Inv	784.75		
		2.00'	
Pump Chamber 8" CI Suction CG	782.75		
		1.00'	
Pump Chamber Inv	781.75		
		2.50'	
Wet Well Inv	779.25		



**WET WELL SCHEMATIC**

N.T.S.

## Dexter LS Site Layout

The existing 8-inch diameter gravity sewer main influent to Dexter LS is approximately 12 feet deep below grade. The pipeline is in a 10-ft wide easement which passes in between two single family homes to an existing wet well manhole and to pump chamber vault approximately 15-ft deep. The gravity inflows are pumped into a 6-inch diameter force main approximately 1,600 LF long before discharging into an interceptor sewer. As the existing force main is quite long and small diameter, we can see that the system curve is quite steep.

In conformance with the City's design guidelines, the conceptual site layout includes a new 10-ft diameter x 15-ft deep wet well. The new wet well is sited right next to the existing wet well manhole. Deep excavations require the contractors to emphasize on sheeting and shoring design during construction.

A field walk revealed presence of underground electric in the immediate vicinity. The presented concept may need electric utilities to be temporarily or permanently re-routed.

For the new valve vault siting, we came up with two different options. Option 1 new valve vault is located just south of the new wet well beneath paving in the parking spot. A few parking spots may have to be painted as "No Parking" zones for operator access to valve

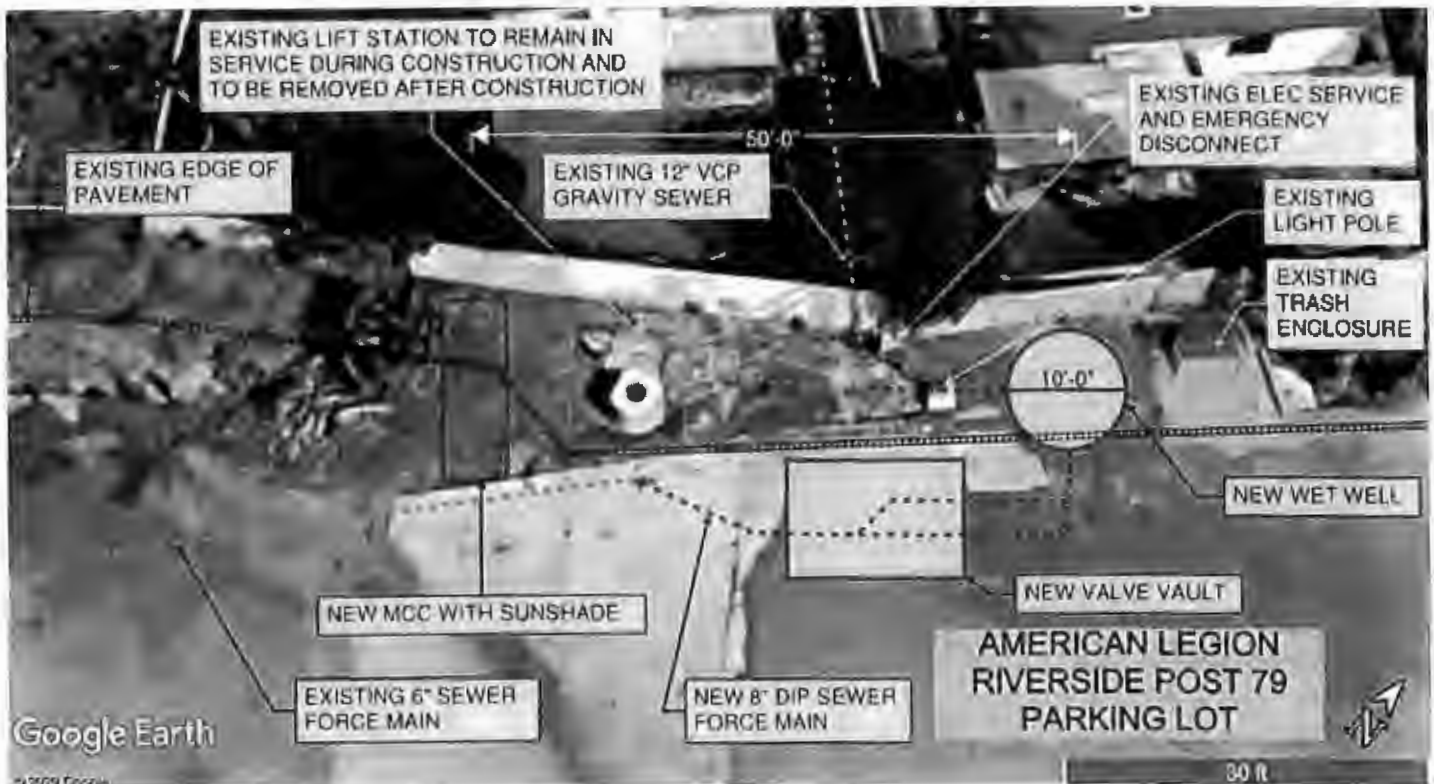
vault at all times. The new 8-inch DIP force main is then routed from the valve vault to connect to the existing 6-inch diameter force main. Option 2 new valve vault is located further away from the new wet well alongside the block wall. For both options, the new facilities are located as to not interfere with the existing station during construction and to minimize bypass pumping.

Odor control facilities can be added if required by the City. Odor control may be an issue in the mostly residential neighborhood. Conversations with an American Legion member during site visit revealed odor issues. There is a trash enclosure to the east of the existing station which could also be a source of odor.

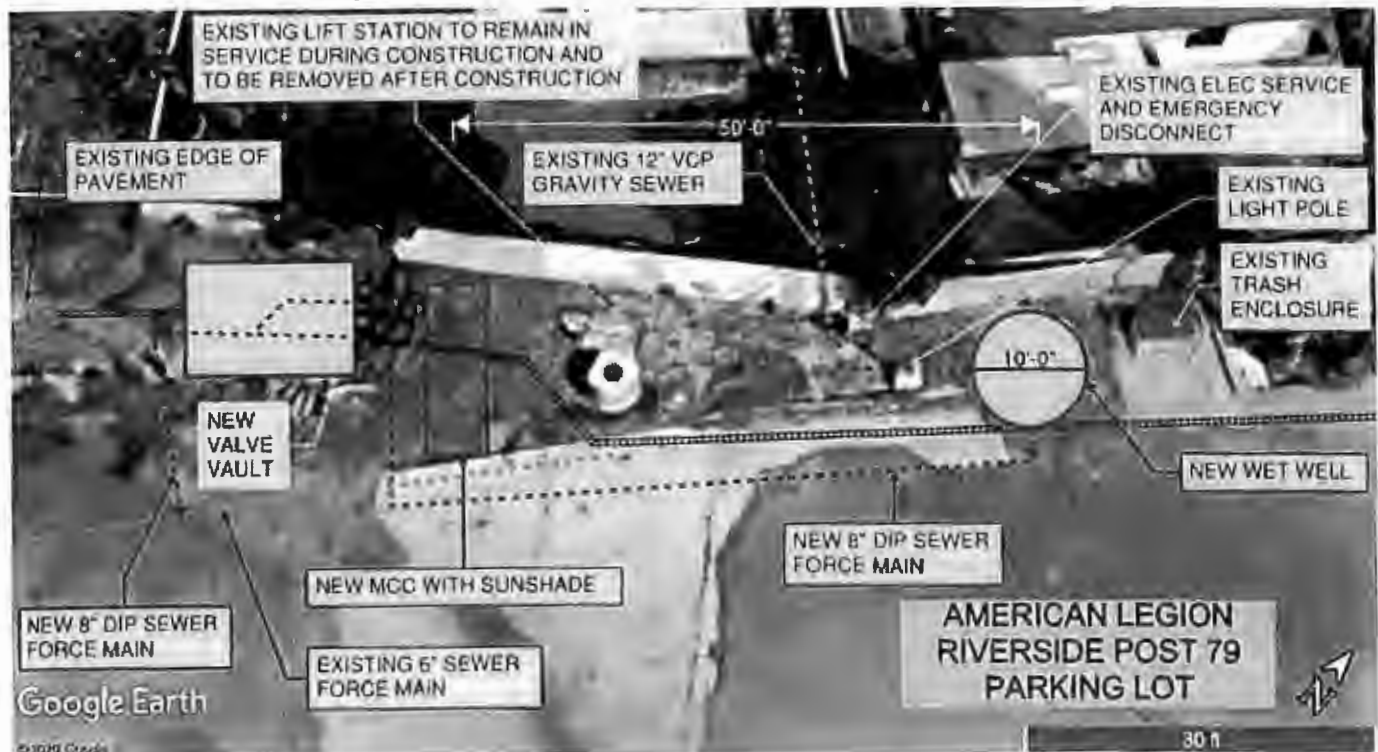
The existing 230V electric service connection will need to be upgraded to 480V, 3-phase connection per design guidelines. The new MCC with sunshade is located west of the existing station.

For emergency storage, the design guidelines require 60 minutes plus travel time from RWQCP, which is approximately 30 minutes away. However, the 10-ft diameter wet well is capable of meeting this requirement, so a new emergency storage structure is not proposed.

## Dexter Dr LS Conceptual Site Layout Option 1

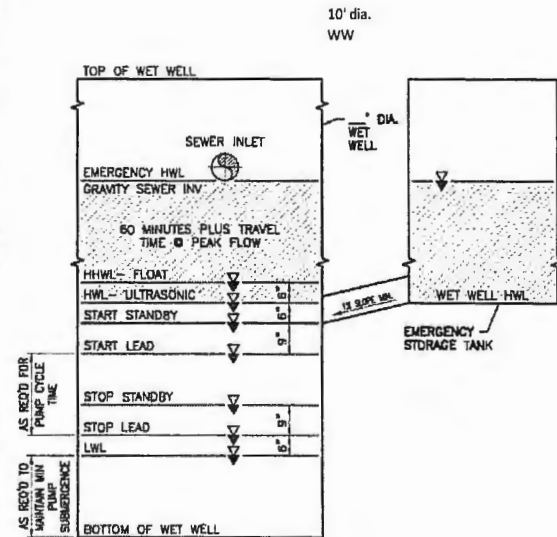


## Dexter Dr LS Conceptual Site Layout Option 2



## Dexter Dr LS Wet Well Schematic

Dexter Dr LS	Record Elevation	Record Depth	Conceptual New WW Levels
Wet Well Rim	792		792
		0.89'	WW Top
Pump Chamber Top	791.11		786.00
		0.00'	Emergency HWL
			HHWL Float
Pump Chamber Top	791.11		782.50
		3.11'	HWL Ultrasonic
			782
Pump Chamber 6" Discharge Inv	788		Start Standby
		6.39'	781.25
			Start Lead
Pump Chamber 4" CI Suction Inv	781.61		780.25
		0.61'	Stop Standby
			779.50
Pump Chamber Inv	781		Stop Lead
		1.59'	779
			LWL
Wet Well 8" VCP Influent Inv	779.41		778
		1.50'	WW Bot
Wet Well Inv	777.91		



## 5. Electrical and Instrumentation & Control Work

LEE + RO utilizes in-house staff for Electrical, Instrumentation and Control (I&C) design. Our electrical and I&C engineers will work closely with our civil and mechanical team to develop the necessary controls to integrate the new improvements with the City's existing system.

Based on the selected pump sizes and motor control, the electrical service will be evaluated. The Team's design will ensure the new submersible motors are compatible with the electrical service. The existing pump control panels will be replaced with new panels in the Motor Control Center (MCC). Our in-house staff will ensure the new improvements interface with the City's existing Supervisory Control and Data Acquisition (SCADA) system and programmable logic control (PLC). All work will be coordinated with the City as needed to facilitate the installation of the new equipment.

**Electrical Documentation:** Every year LEE + RO's Electrical and I&C Department produces hundreds of drawings encompassing many different types of electrical and I&C

work. Typical project technical documentation includes specification writing, development of control strategies, input/output PLC or Remote I/O lists, instrumentation set points and requirements, and HMI documentation. Our staff is familiar with relevant industry standards for electrical design including IEC, IEEE, NEMA, and ANSI.

**Site Power Analysis:** Our in-house electrical staff will perform the necessary analysis including load calculations and short-circuit/coordination study as part of LEE + RO's due diligence and safe design. LEE + RO will conduct a detailed assessment of power requirements for the proposed upgrades along with review of the existing power availability at the site. Based on the phased approach, the City of Riverside Public Utilities (RPU) will be continuously updated and included in discussions throughout the project's life.

LEE + RO routinely works with RPU on a regular basis to support our City's needs. This familiarity and experience will assist in reducing design time spent in coordination efforts and preparation of service request forms and will ensure a successful project.

## 6. Anticipated List of Drawings

LEE + RO anticipates the following drawings as part of the package for each lift station site:

ITEM	DESCRIPTION	SHEET NO.
1	Title Sheet	G-1
2	General Notes	G-2
3	Project Map & List of Drawings	G-3
4	Construction Notes	G-4
5	Boring Logs	G-5
6	Demolition Plans	C-1
7	Civil Site Plan	C-2
8	Civil Details 1	C-3
9	Civil Details 2	C-4
10	Sequence of Construction 1	C-5
11	Sequence of Construction 2	C-6
12	Mechanical Notes	M-1
13	Mechanical Site Plan	M-2
14	Mechanical Improvements	M-3
15	Mechanical Details	M-4
16	Electrical Notes	E-1
17	Electrical Site Plan	E-2
18	Electrical Improvements	E-3
19	Electrical Details	E-4
20	Instrumentation Notes	I-1
21	Single Line Diagram	I-2
22	Process and Instrumentation Diagram	I-3

## SCOPE

EXHIBIT A of the RFP has been used as the basis of this Proposal's project scope of services. Additions and deletions have been made to show LEE + RO's recommended approach to the work.

### Task No. 1: Project Management and Kickoff Meeting

LEE + RO will provide overall project management throughout the duration of the project. This includes contract administration with the Town, general administration of the project, attendance at meetings, monitoring schedules and budgets, and timely and regular reporting of project status.

#### 1.1 Project Work Plan

Once the notice-to-proceed is issued, the LEE + RO Project Manager will develop the project Work Plan. The Work Plan is a formal document that defines how the project is to be 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 detailed project schedule identifying significant milestones and deliverables that are complimentary to the established project goals and execution strategy. The Work Plan will also include a QA/QC Plan. 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. The QA/QC Plan will provide the following:

- Incorporate the Town's 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.
- Seamless Coordination of Design Disciplines.
- 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 reviews before each milestone deliverable is

submitted to the Town. Unless the QC review is completed, the Principal-in-Charge will not authorize the Project Manager to submit milestone deliverables. Our QC reviews will include checks of relevant calculations, memoranda, drawings, specifications, and the engineer's estimate of probable construction costs.

The complete Work Plan will be made available for review at the kickoff meeting.

#### 1.2 Project Kick-Off Meeting

Once the Work Plan is developed, the Project Manager will schedule a project kick-off meeting with the Town staff to discuss the scope and parameters of the project. LEE + RO will prepare the meeting agenda and 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 Review 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 The Town staff, after each submittal to discuss the comments and ensure that the Town's objectives are met. LEE + RO will prepare the agenda, as well as record and distribute the minutes, for each meeting.

### Task No. 2: Design

#### 2.1 Field Data Review

- 2.1.1 LEE + RO will collect and review applicable as-built plans, specifications, inspection reports, CCTV data, master plans, study reports and related documents available at the Town. LEE + RO will also perform site visits to review and confirm existing site conditions.

#### 2.2 Specialized Studies

##### A. Utility Potholing

LEE + RO subconsultant, Bess Testlab will provide pothole investigation. We have assumed 5 pothole locations within the project site to obtain confirmation of the utilities at the intersections and other key locations.

**B. Surveying**

LEE + RO will provide field surveys for the preparation of the construction drawings and specifications. LEE + RO's subconsultant will set horizontal and vertical controls per NAVD 88 or City approved datum and established local benchmarks and locate existing right-of-way and critical property and easement lines within the Project area.

**C. Geotechnical Investigation (Optional)**

LEE + RO subconsultant team member, Associated Soils Engineers, Inc. (ASE), will provide geotechnical engineering services to include performing field, laboratory, and office services required to prepare a Geotechnical Investigation Report that addresses the Geotechnical conditions at the site. We have assumed that any permits required to drill the proposed borings will be provided at no cost to LEE + RO and ASE. If additional testing of soils for contaminants is necessary or desired, the City would notify LEE + RO and a revised cost estimate will be provided.

LEE + RO will provide a geotechnical report interpreting the data on the exploratory work and testing and determining the site conditions that are anticipated from the initial exploratory work. The final report will indicate the anticipated performance of the subsurface material to be encountered on the project both during and after construction, under loading conditions, use and types of excavation anticipated.

- a) Proposed lift station improvements including impacts to the service area
- b) Methods and materials of construction
- c) Construction schedule and phasing recommendations
- d) Construction cost estimate for the recommended improvements
- e) Utility conflicts
- f) Identification of areas where construction is limited or controlled
- g) Impacts to immediate area
- h) Permit requirements
- i) Pothole investigation data

**2.6 Final Design**

LEE + RO will prepare the final design (95% Submittal) of the alley improvements. The designs shall provide for maintaining continual operation of the existing sewer systems during the construction of the project. LEE + RO will prepare two (2) separate bid packages, one each for Fairgrounds LS and for Dexter LS, of detailed drawings and specifications for competitive bidding for the proposed construction work.

Drawings will be prepared AutoCAD utilizing the City's Standard symbols set and text standards. LEE + RO and/or the City standard construction details that are applicable to the project will be used. Final project drawings will be signed and sealed by a CA registered professional engineer in the appropriate discipline. Plans will be drawn to a horizontal scale of 1" = 40' and vertical scale of 1" = 4'. Specifications and contract documents will be based on the City standard documents edited for application to this project. Additional specification sections as required will be prepared and coordinated with project drawings to produce a complete set of construction documents.

**2.3 Verify Existing Utilities**

LEE + RO will 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. The location of these utilities will be shown on the base maps.

**2.4 Evaluate Hydraulic Data**

LEE + RO will evaluate hydraulic data and run hydraulic analyses to select the pumps and motors and size the wetwell.

**2.5 Preliminary Design**

LEE + RO will prepare preliminary drawings as required to establish agreement on scope, alignment, design parameters, operations and maintenance concerns, constructability and construction phasing, traffic impacts, and general disruption to the area. The preferred alignments chosen during the PDR will be the basis of this design. As a minimum, the following will be included or addressed in the preliminary design (65%) submittal:

**2.7 Bid Documents**

Following completion of the 95% design review meeting, LEE + RO will incorporate the City's comments and prepare bid ready 100% final plans and specifications, along with cost estimate. LEE + RO will provide reproducible mylars of the project plans, signed and sealed. LEE + RO will also provide a full set of biddable plans, one (1) unbound signed and sealed copy of the Special Provisions, and one (1) copy of the final "Engineer's Estimate of Probable Costs". In addition, LEE + RO will provide an electronic copy on USB of all deliverables to the City at the completion of final design.

**EXHIBIT “B”**  
**COMPENSATION**

# H. PRICING

## Exhibit 1: Fee Proposal

Phase	Labor Category: E8 Managing Engr, E7 Supervising Engr, E5 Senior Engineer, E4 Engineer, E3 Associate Engineer, A2 Senior Word Processor										Total Hours	Total Labor	Subs	ODCs	TOTAL FEES
	E8	E7	E5	E4	E3	A2									
Task No. 1	Project Tasks						\$250	\$225	\$185	\$172	\$155	\$118			
	Project Management and Kickoff Meeting														
	Work Plan, Schedule and QA/QC Plan														
		4	4			4					12	\$2,112		\$2,112	
	Kick-Off Meeting														
		4	8			2					14	\$2,616	\$200	\$2,816	
	Monthly Project Status Reporting and Review Meetings														
	2	8	8	8		2					28	\$5,392	\$200	\$5,592	
	Coordination and Preparation of Permits														
		2	4	8							14	\$2,566		\$2,566	
	Subtotal - Project and Contract Management														
	2	18	24	16	0	8					68	\$12,686	\$0	\$13,086	
Task No. 2	Pre-Design														
	Site Visit and Field Data Review														
			8	8							16	\$2,856	\$200	\$3,056	
	Utility Research & Potholing														
			4	4	16						24	\$3,908	\$9,350	\$13,458	
	Surveying, Base Map and Easements														
			4		16						20	\$3,220	\$11,286	\$14,506	
	Geotechnical Investigation														
			4	4							8	\$1,428	\$15,807	\$17,235	
	Alternatives Analyses														
	8	32	40	24		4					108	\$18,792	\$200	\$18,992	
	Subtotal - Pre-Design Services														
	0	8	52	56	56	4					176	\$30,204	\$36,443	\$67,247	
Task No. 3	Final Design (PS&E)														
	Preliminary 30% Design and Estimates														
		4	24	48	48	4					128	\$21,508	\$100	\$21,608	
	Submit 65% Plans, Specs, and Estimates														
		8	16	48	48	4					124	\$20,928	\$100	\$21,028	
	Submit 95% Plans, Specs, and Estimates														
		8	8	32	32	4					84	\$14,216	\$100	\$14,316	
	Final 100% Plans, Specs, and Estimates														
	2	8	8	24	24	2					68	\$11,864	\$300	\$12,164	
	Subtotal - Final Design Services														
	2	28	56	152	152	14					404	\$68,516	\$0	\$69,116	
	TOTAL NOT TO EXCEED														
	4	54	132	224	208	26					648	\$111,406	\$36,443	\$149,449	

**Exhibit 2: FY 2020-2021 Hourly Billing Rate Schedule**

(Effective from November 1, 2020 to October 31, 2021)

PERSONNEL CLASSIFICATION			BILLING RATES (\$/HOUR)
<b>ENGINEERS</b>			
Engineer 8	E8	Managing Engineer	\$250
Engineer 7	E7	Supervising Engineer	\$225
Engineer 6	E6	Principal Engineer	\$208
Engineer 5	E5	Senior Engineer	\$185
Engineer 4	E4	Engineer	\$172
Engineer 3	E3	Associate Engineer	\$155
Engineer 2	E2	Assistant Engineer	\$138
Engineer 1	E1	Junior Engineer	\$118
<b>CAD / DESIGNERS</b>			
Designer 6	T6	Principal Designer	\$172
Designer 5	T5	Senior Designer	\$155
Designer 4	T4	Designer	\$138
Designer 3	T3	Associate Designer	\$118
Designer 2	T2	Assistant Designer	\$103
Designer 1	T1	Junior Designer	\$86
<b>FIELD PROFESSIONALS</b>			
Field Professional 5	F5	Senior Resident Engineer	\$185
Field Professional 4	F4	Resident Engineer	\$172
Field Professional 3	F3	Senior Inspector	\$155
Field Professional 2	F2	Inspector	\$138
Field Professional 1	F1	Assistant Inspector	\$118
<b>ADMINISTRATIVE</b>			
Administrative 4	A4	Senior Contract Manager	\$138
Administrative 3	A3	Contract Manager	\$127
Administrative 2	A2	Senior Word Processor	\$118
Administrative 1	A1	Word Processor / Admin. Assistant	\$109

**FY 2019-2020 Other Direct Costs Billing Rate Schedule**

(Effective from November 1, 2020 to October 31, 2021)

**Automobile Mileage**

IRS Published Rate

**In-house Reproduction**

\$0.08 / sheet (8.5 x 11 Bond B &amp; W)

\$0.20 / sheet (8.5 x 11 Bond Color)

\$0.15 / sheet (11 x 17 Bond B &amp; W)

\$0.50 / sheet (11 x 17 Color)

\$1.25 / sheet (24 x 36 Bond)

**Mylar Original Drawing**

\$8.00 / sheet (24 x 36 or 22 x 34)

**Computers & Workstations**

No Charge

**Subconsultant Mark-up**

Subconsultant Invoice Amount Plus 5%, Unless Client Specifies Otherwise

**Bulk Reproduction by Outside Printing Firm**

Invoice amount plus 10% Handling Charge

**Overnight Mailing, Air Fare, Project-Specific Software, Equipment Rental, etc.**

At Cost

**EXHIBIT “C”**

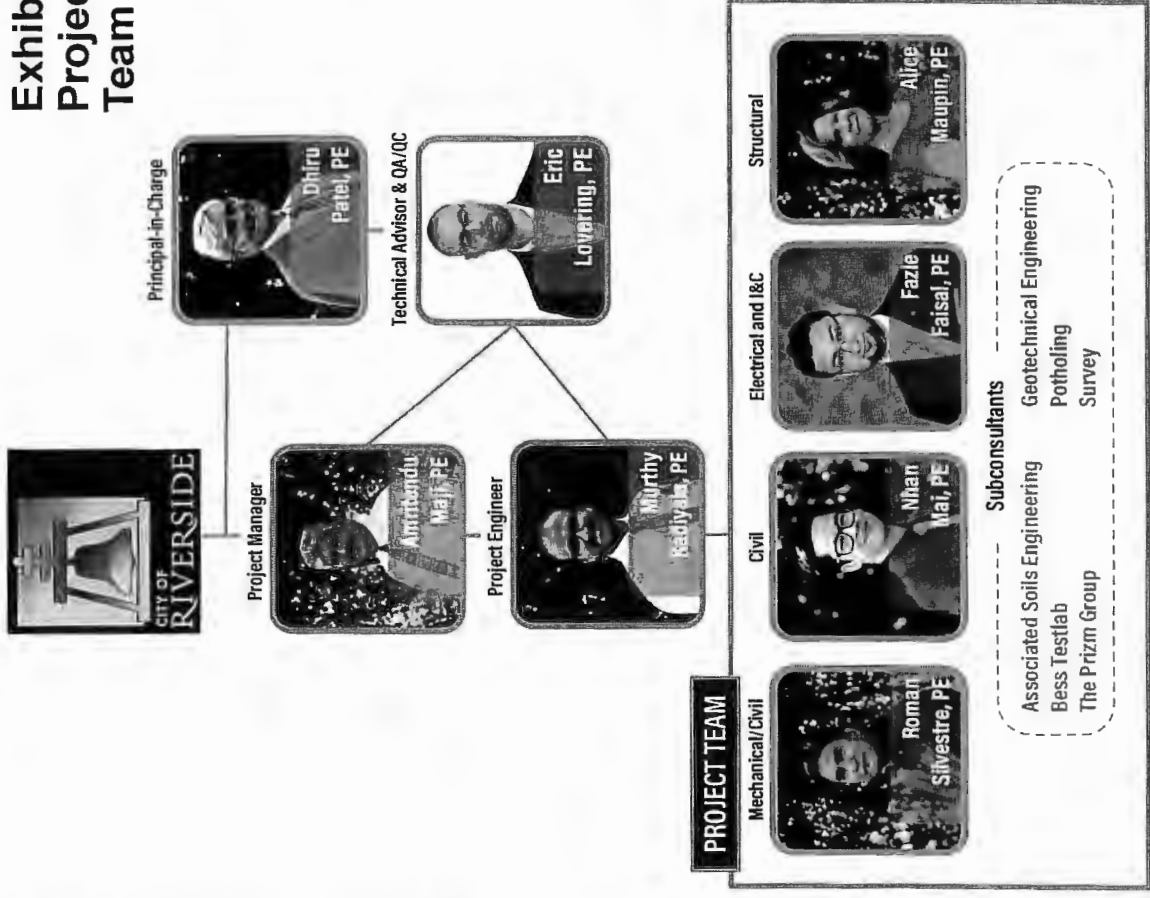
**KEY PERSONNEL**

# D. COMPANY PERSONNEL

LEE + RO personnel proposed for this project have managed and engineered many projects with very similar design elements as the Fairgrounds Street and Dexter Drive Wastewater Lift Station project. The LEE + RO team organization, identifying the roles and responsibilities of proposed key personnel and specialty subconsultants, is shown in **Exhibit D.1**. Brief information for key team member staff are included below. Detailed resumes are included in **Appendix A**.

The current workload for the proposed team members is such that all are immediately available to commence work on the project. The project team is sufficiently staffed so all necessary work tasks can be completed on schedule and in a timely manner.

## Exhibit D.1 - Project Team



Civil Engineer, CA #87036	University of Arizona, MS Engineering Mechanics  University of Southern Illinois, MS Civil Engineering  Jadavpur University, BS Civil Engineering	Amritendu Maji is a Civil Engineer and Project Manager with over 23 years of progressive experience in the planning of public works projects. He has been responsible for preparing plans and specifications, construction cost estimates for pump stations and reservoirs, site development, roadways, water & wastewater conveyance and distribution facilities, flood control facilities. He has designed pump stations with capacities ranging from 100 gpm to 1,000,000 gpm & in hydraulics and hydraulic modeling, as well as preparation of feasibility studies and technical reports. He has prepared technical reports, plans & specifications, construction cost estimates, and other bid documents. He has provided services including construction site visits, conducting progress meetings, review of shop drawings, responding to RFIs, start-up & commissioning and review & approval of contractors' pay requests and project closeout. He also has permits including the Federal Section 404 (Clean Water Act) for work in wetlands, Section 408 (Rivers and Harbors Act) for levees and floodwalls, and permits from the State Transportation and Development offices for work in and around State parks.
Civil Engineer, California #C73472  Professional Land Surveyor, L9180	BE Civil Engineering, Osmania University, Hyderabad, India  MS Civil Engineering, Michigan State University, East Lansing, Michigan	As a licensed professional engineer and professional land surveyor, Murthy Kadiyala has over 15 years of municipal and construction experience in water and wastewater conveyance systems including water transmission mains, lift stations, and pump stations. Murthy has extensive experience with hydraulics and hydrology and modeling expertise with H2C ArcGIS. He also has high-level skills in AutoCAD Civil 3D, TerraModel and MicroStation applications. Murthy is a licensed boundary legal analyst and land surveying both field and office. He has also served in the responsible role of a water utility for over 10 years. His knowledge of the service connections to private developments including land title and encumbrances early in the design process. Murthy has engineered water and wastewater conveyance projects which require extensive analysis, traffic & noise mitigation, and public relations. Murthy has engineering experience with trenchless construction bore.
Civil Engineer, CA #C70807   Professional Electric Engineer, CA #E18727	BS, Aeronautical Engineering, University of California Davis	Eric Lovering has 20 years of process mechanical/electrical/ instrumentation & controls (I&C) system engineering in water and wastewater treatment plants, pump stations, industrial facilities, and standby power generation. He curates a "Civil" and "Electrical" Eric's core competencies include pump station hydraulics, mechanical equipment, piping engineering. His project experience includes system analysis, alternative studies, vendor selection, engineering, design, up & commissioning, troubleshooting, and O&M consultation. Eric has hands-on experience with pumping equipment frequency drives (VFDs), motor control centers, low voltage and medium voltage power distribution, and I&C system integration. He is an effective project manager and multidiscipline engineering team leader. His communication skills keep clients informed and critical path items that are required to drive the projects to successful completion. As a senior level engineer, Eric has managed those projects where he is not directly involved in the day to day execution of the project.
Registered Civil Engineer (Arizona 53214)	Bachelor's Degree in Civil Engineering  University of Santo Tomas, Manila, Philippines - March 1987	Roman Silvestre has extensive engineering and management experience in municipal government and public works. He has 15 years of project management, design, preparation of construction plans and specifications, preliminary engineering reports, improvement plans and budgets, project cost development, infrastructure assessment studies and administration, construction management, water distribution lines, reclaimed water systems, transmission mains, pump stations, water storage tanks, reservoirs, and water distribution lines.
Civil Engineer CA #C86519	B.S. Civil Engineering, California State Polytechnic University, Pomona	Nhan Mai has 8 years of engineering, design, and construction support experience with land development projects including lift stations and large diameter pipelines. Nhan is a proficient Civil 3D user with real-world experience with utility research, permitting and agency coordination. His project responsibilities include condition assessments, drawings, technical specifications, and cost estimates, construction support services including contractor's shop drawings and assisting with contractor's change order requests.
Electrical Engineer, APEGA 92580  Project Management Professional (PMP), PMI 1681176  Certified Reliability And Maintenance Professional (CMRP), SMRP 220301	MS, Engineering, Pace University, New York  BS, Engineering, Ghulam Ishaq Khan Institute of Engineering Sciences And Technology, Topi, Pakistan  O & A Level, Cambridge University, United Kingdom	Fazle is an accomplished Professional Engineer with 16 years of experience in Engineering, Fieldwork, Reliability, and design. As a senior leader working across multiple industries Fazle has skills in team management, execution and detailed Design, Construction, Asset, Integrity, Energy, Electrical & Instrumentation, Maintenance & Operations, Reliability, Site Engineering, Commissioning, Oil & Gas, Pipelines, Transmission & Distribution, Substations striving for excellence in all aspects of the engineering profession.
Civil Engineer, CA #C51691; Structural Engineer, NV #S020877; Structural Engineer, AZ # S50525	BS, Civil Engineering (Structural Option), California State University, Los Angeles; MS, Civil Engineering with emphasis on Water and Wastewater Treatment; Graduate courses in structural design, University of Southern California	Alice Maupin is a California registered civil engineer with more than 20 years of seismic structural analysis, field investigation, and project management experience. In her work with Metropolitan Water District of Southern California (MWD), she has produced numerous foundation designs with seismic anchorage for large diameter water pipelines. She has also worked on her graduate work at USC dealt with seismic sloshing effects on tank foundations. In addition to Alice's design experience in the rehabilitation of existing structures.
California Chemical Engineer	M.S. Chemical Engineering, University of Southern California	Dhiru Patel has over 32 years of water and wastewater facilities engineering, project management and business management experience.

**EXHIBIT "B"**  
**COMPENSATION**

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# H. PRICING

## Exhibit 1: Fee Proposal

Phase	Task No. 1	Labor Category: E8 Managing Engr, E7 Supervising Engr, E5 Senior Engineer, E4 Engineer, E3 Associate Engineer, A2 Senior Word Processor	E8	E7	E5	E4	E3	A2	Total Hours	Total Labor	Subs	ODCs	TOTAL FEES
Task No. 1	Project Tasks		\$250	\$225	\$185	\$172	\$155	\$118					
	Project Management and Kickoff Meeting												
	Work Plan, Schedule and QA/QC Plan			4	4			4	12	\$2,112			\$2,112
	Kick-Off Meeting			4	8			2	14	\$2,616		\$200	\$2,816
	Monthly Project Status Reporting and Review Meetings	2	2	8	8	8		2	28	\$5,392		\$200	\$5,592
Task No. 2	Coordination and Preparation of Permits			2	4	8			14	\$2,566			\$2,566
	Subtotal - Project and Contract Management	2	2	18	24	16	0	8	68	\$12,686	\$0	\$400	\$13,086
	Pre-Design												
	Site Visit and Field Data Review				8	8			16	\$2,856		\$200	\$3,056
	Utility Research & Potholing				4	4	16		24	\$3,908	\$9,350	\$200	\$13,458
Task No. 3	Surveying, Base Map and Easements				4		16		20	\$3,220	\$11,286		\$14,506
	Geotechnical Investigation				4	4			8	\$1,428	\$15,807		\$17,235
	Alternatives Analyses			8	32	40	24	4	108	\$18,792		\$200	\$18,992
	Subtotal - Pre-Design Services	0	0	8	52	56	56	4	176	\$30,204	\$36,443	\$600	\$67,247
	Final Design (PS&E)												
Task No. 3	Preliminary 30% Design and Estimates			4	24	48	48	4	128	\$21,508		\$100	\$21,608
	Submit 65% Plans, Specs, and Estimates			8	16	48	48	4	124	\$20,928		\$100	\$21,028
	Submit 95% Plans, Specs, and Estimates			8	8	32	32	4	84	\$14,216		\$100	\$14,316
	Final 100% Plans, Specs, and Estimates	2	2	8	8	24	24	2	68	\$11,864		\$300	\$12,164
	Subtotal - Final Design Services	2	2	28	56	152	152	14	404	\$68,516	\$0	\$600	\$69,116
TOTAL NOT TO EXCEED			4	64	102	324	208	26	648	\$111,406	\$36,443	\$1,600	\$149,449

**Exhibit 2: FY 2020-2021 Hourly Billing Rate Schedule**

(Effective from November 1, 2020 to October 31, 2021)

PERSONNEL CLASSIFICATION			BILLING RATES (\$/HOUR)
<b>ENGINEERS</b>			
Engineer 8	E8	Managing Engineer	\$250
Engineer 7	E7	Supervising Engineer	\$225
Engineer 6	E6	Principal Engineer	\$208
Engineer 5	E5	Senior Engineer	\$185
Engineer 4	E4	Engineer	\$172
Engineer 3	E3	Associate Engineer	\$155
Engineer 2	E2	Assistant Engineer	\$138
Engineer 1	E1	Junior Engineer	\$118
<b>CAD / DESIGNERS</b>			
Designer 6	T6	Principal Designer	\$172
Designer 5	T5	Senior Designer	\$155
Designer 4	T4	Designer	\$138
Designer 3	T3	Associate Designer	\$118
Designer 2	T2	Assistant Designer	\$103
Designer 1	T1	Junior Designer	\$86
<b>FIELD PROFESSIONALS</b>			
Field Professional 5	F5	Senior Resident Engineer	\$185
Field Professional 4	F4	Resident Engineer	\$172
Field Professional 3	F3	Senior Inspector	\$155
Field Professional 2	F2	Inspector	\$138
Field Professional 1	F1	Assistant Inspector	\$118
<b>ADMINISTRATIVE</b>			
Administrative 4	A4	Senior Contract Manager	\$138
Administrative 3	A3	Contract Manager	\$127
Administrative 2	A2	Senior Word Processor	\$118
Administrative 1	A1	Word Processor / Admin. Assistant	\$109

**FY 2019-2020 Other Direct Costs Billing Rate Schedule**

(Effective from November 1, 2020 to October 31, 2021)

<b>Automobile Mileage</b>	IRS Published Rate
	\$0.08 / sheet (8.5 x 11 Bond B & W)
	\$0.20 / sheet (8.5 x 11 Bond Color)
<b>In-house Reproduction</b>	\$0.15 / sheet (11 x 17 Bond B & W)
	\$0.50 / sheet (11 x 17 Color)
	\$1.25 / sheet (24 x 36 Bond)
<b>Mylar Original Drawing</b>	\$8.00 / sheet (24 x 36 or 22 x 34)
<b>Computers &amp; Workstations</b>	No Charge
<b>Subconsultant Mark-up</b>	Subconsultant Invoice Amount Plus 5%, Unless Client Specifies Otherwise
<b>Bulk Reproduction by Outside Printing Firm</b>	Invoice amount plus 10% Handling Charge
<b>Overnight Mailing, Air Fare, Project-Specific Software, Equipment Rental, etc.</b>	At Cost

**EXHIBIT "C"**

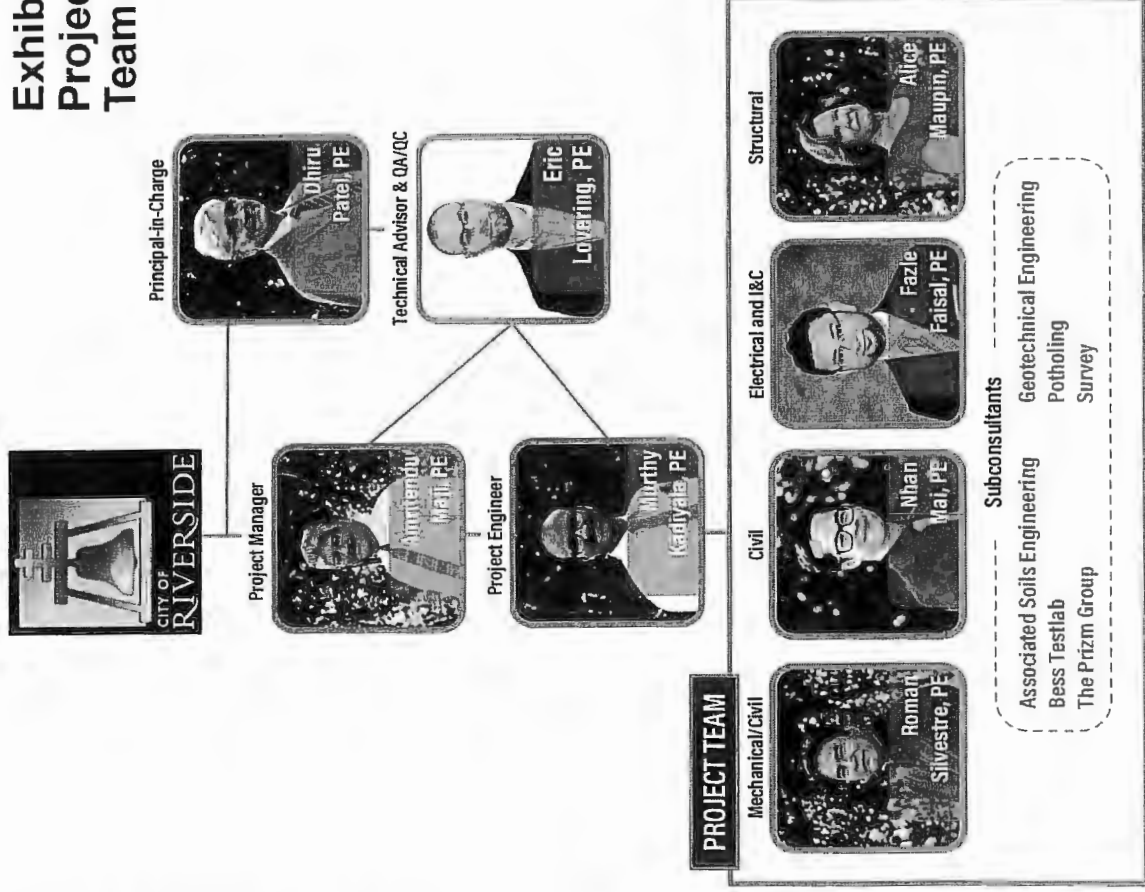
**KEY PERSONNEL**

# D. COMPANY PERSONNEL

LEE + RO personnel proposed for this project have managed and engineered many projects with very similar design elements as the Fairgrounds Street and Dexter Drive Wastewater Lift Station project. The LEE + RO team organization, identifying the roles and responsibilities of proposed key personnel and specialty subconsultants, is shown in **Exhibit D.1**. Brief information for key team member staff are included below. Detailed resumes are included in **Appendix A**.

The current workload for the proposed team members is such that all are immediately available to commence work on the project. The project team is sufficiently staffed so all necessary work tasks can be completed on schedule and in a timely manner.

## Exhibit D.1 - Project Team



# PROJECT TEAM MATRIX

Name	Key Role	Licensal	Education	Experience
Amritendu Maji, PE	Project Manager	Civil Engineer, CA #87036	University of Arizona, MS Engineering Mechanics University of Southern Illinois, MS Civil Engineering Jadavpur University, BS Civil Engineering	Amritendu Maji is a Civil Engineer and Project Manager with over 23 years of progressive experience in the planning, design, construction, and administration of public works projects. He has been responsible for preparing plans and specifications, construction cost estimates, bid documents, and permit applications for pump stations and reservoirs, design development, roadways, water & wastewater conveyance and distribution facilities including pipelines and stormwater and flood control facilities. He has designed pump stations with capacities ranging from 100 gpm to 1,000,000 gpm and larger. He has considerable experience in hydraulics and hydraulic modeling, as well as preparation of feasibility studies and technical reports. He has provided construction administration and QA/QC of technical reports, plans & specifications, construction cost estimates, and other bid documents. He has provided construction administration and support services including construction site visits, conducting progress meetings, review of shop drawings, responding to RFIs, analysis & preparation of change orders, start-up & commissioning and review & approval of contractors' pay requests and project closeout. He also has considerable experience in the preparation of permits including the Federal Section 404 (Clean Water Act) for work in wetlands, Section 408 (Rivers and Harbors Act) for federally constructed structures like levees and floodwalls, and permits from the State Transportation and Development offices for work in and around State and Federal Highways etc.
Murthy Kadiyala, PE, PLS	Project Engineer	Civil Engineer, California #C73472 Professional Land Surveyor, L9180	BE Civil Engineering, Osmania University, Hyderabad, India MS Civil Engineering, Michigan State University, East Lansing, Michigan	As a licensed professional engineer and professional land surveyor, Murthy Kadiyala has over 15 years of municipal civil and infrastructure engineering, design, and construction experience in water and wastewater conveyance systems including water transmission mains, trunk sewers, and force mains, storage tanks, and pump stations. Murthy has extensive experience with hydraulics and hydrology and modeling expertise with H2ONet, InfoWater, WaterCAD, SewerCAD, and ArcGIS. He also has high-level skills in AutoCAD Civil 3D, TerraModel and MicroStation applications. Murthy is a licensed surveyor with experience in property boundary legal analysis and land surveying both field and office. He has also served in the responsible role of a water and wastewater plan checker for many years. His knowledge of the service connections to private developments including land title and encumbrances has enabled him to resolve potential issues early in the design process. Murthy has engineered water and wastewater conveyance projects which require extensive permitting, right-of-way acquisition and analysis, traffic & noise mitigation, and public relations. Murthy has engineering experience with trenchless construction including micro-tunneling and jack and bore.
Eric Lovering, PE	Technical Advisor & QA/QC Engineer	Civil Engineer, CA #270807   Professional Electric Engineer, CA #E16727	BS, Aeronautical Engineering, University of California Davis	Eric Lovering has 20 years of process mechanical/electrical instrumentation & controls (I&C) system engineering and project management experience with water and wastewater treatment plants, pump stations, industrial facilities, and standby power generation. He currently maintains two California PE licenses - Civil and Electrical. Eric's core competencies include pump station hydraulics, mechanical equipment, piping systems, and electrical & control systems engineering. His project experience includes system analysis, alternative studies, vendor selection, engineering, design, construction, PLC programming, start-up & commissioning, troubleshooting, and O&M consultation. Eric has hands-on experience with pumping equipment, diesel and gas driven generators, variable frequency drives (VFDs), motor control centers, low voltage and medium voltage power distribution, and I&C systems. Eric's multidisciplinary experience makes him an effective project manager and multidisciplinary engineering team leader. His communication skills keep clients well informed and he effectively identifies critical path items that are required to drive the projects to successful completion. As a senior level engineer, Eric frequently provides QA/QC review services on those projects where he is not directly involved in the day to day execution of the project.
Roman Silvestre, PE	Mechanical/Civil Engineer	Registered Civil Engineer (Arizona 53214)	Bachelor's Degree in Civil Engineering University of Santo Tomas, Manila, Philippines - March 1987	Roman Silvestre has extensive engineering and management experience in municipal government and public work projects. His experience includes over 20 years of project management, design, preparation of construction plans and specifications, preliminary engineering reports and studies, hydraulic analysis, capital improvement plans and budgets, project cost development, infrastructure assessment studies and administration, construction management and inspections for water distribution lines, reclaimed water systems, transmission mains, pump stations, water storage tanks, reservoirs, wells, and water treatment plants.
Nhan Q. Mai, PE	Civil Engineer	Civil Engineer CA #C86519	B.S. Civil Engineering, California State Polytechnic Pomona	Nhan Mai has 8 years of engineering, design, and construction support experience with land development projects, as well as municipal water and wastewater facilities, including lift stations and large diameter pipelines. Nhan is a proficient Civil 3D user with real-world experience in pipeline design. Nhan is experienced with utility research, permitting and agency coordination. His project responsibilities include condition assessments, engineering survey, development of design drawings, technical specifications, and cost estimates, construction support services including contractor's shop drawing submittal reviews, responding to RFIs and assisting with contractor's change order requests.
Fazle Faisal, PE	Electrical & I&C Engineer	Electrical Engineer, APEGA 92580 Project Management Professional (PMP), PMI 1681176 Certified Reliability And Maintenance Professional (CMRP), SMRP 220301	MS, Engineering, Pace University, New York BS, Engineering, Ghulam Ishaq Khan Institute of Engineering Sciences And Technology, Topi, Pakistan O & A Level, Cambridge University, United Kingdom	Fazle is an accomplished Professional Engineer with 16 years of experience in Engineering, Fieldwork, Reliability, Estimation, Management, and EPC/EPCM design. As a senior leader working across multiple industries Fazle has skills in team management, execution and timely implementation of projects in Feed, Detailed Design, Construction, Asset, Integrity, Energy, Electrical & Instrumentation, Maintenance & Operations, Reliability, Sustainability, Railways, Field & Site Engineering, Commissioning, Oil & Gas, Pipelines, Transmission & Distribution. Substations serving for excellence and brilliance in all dimensions.
Alice Maupin, PE	Structural Engineer	Civil Engineer, CA #C51691; Structural Engineer, NV #SD20877; Structural Engineer, AZ #SS0525	BS, Civil Engineering (Structural Option), California State University Los Angeles; MS, Civil Engineering with emphasis on Water and Wastewater treatment, Graduate courses in structural design, University of Southern California	Alice Maupin is a California registered civil engineer with more than 20 years of seismic structural analysis, field investigation, design, constructability assessment, and project management experience. In her work with Metropolitan Water District of Southern California (MWD) and CalPortland Cement Company (CPC) she has produced numerous foundation designs with seismic anchorage for large diameter water tanks and concrete cement silos. Part of her graduate work at USC dealt with seismic sloshing effects on tank foundations. In addition to Alice's design experience with new structures, she is also experienced in the rehabilitation of existing structures.
Dhiru Patel, PE	Principal-in-Charge	California Chemical Engineer #CH4264 Certified Permitting Professional, SCAQMD	M.S. Chemical Engineering, University of Southern California, Los Angeles, CA B.S. Chemical Engineering, Indian Institute of Technology, Bombay, India	Dhiru Patel has over 32 years of water and wastewater facilities engineering, project management and business management experience. He has managed and overseen projects involving study, PDR, final design and construction support phases for distribution, conveyance, treatment and supporting facilities for wastewater/water reclamation projects. He has extensive experience with project management, plant and process engineering studies, preliminary engineering, final design, construction engineering support, troubleshooting, and operations and maintenance (O&M) support for water and wastewater treatment facilities. He has extensive knowledge of current environmental and safety regulations pertaining to water treatment facilities.