

PROFESSIONAL CONSULTANT SERVICES AGREEMENT

PARSONS BRINCKERHOFF, INC.

Engineering Design and Construction Management Services for the Phase 1 and Phase 2 – Recycled Site Retrofit Project

THIS PROFESSIONAL CONSULTANT SERVICES AGREEMENT ("Agreement") is made and entered into this _____ day of _____, 2017 ("Effective Date"), by and between the CITY OF RIVERSIDE ("City"), a California charter city and municipal corporation and PARSONS BRINCKERHOFF, INC., a New York corporation authorized to do business in California ("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 the Engineering Design and Construction Management Services for the Phase 1 and Phase 2 – Recycled Water Site Retrofit Project ("Project").

2. **Term.** This Agreement shall be effective on the date first written above and shall remain in effect until March 7, 2022, unless otherwise terminated pursuant to the provisions herein.

3. **Compensation/Payment.** Consultant shall perform the Services under this Agreement for the total sum of Four Hundred Thirty-Four Thousand Three Hundred Seventy Dollars (\$434,370), 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

Public Utilities Department
City of Riverside
Attn: Matthew Bates, P.E.
3750 University Avenue, 3rd Floor
Riverside, CA 92501

To Consultant

Parsons Brinckerhoff, Inc.
Attn: Basem Muallen, P.E.
451 E. Vanderbilt Way, Suite 200
San Bernardino, CA 92408

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 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. 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 a court of competent jurisdiction in the 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. This agreement shall be governed, construed, and enforced in accordance with the laws of the State of California, without regard to its conflict of laws rules.

29. **Attorneys' Fees.** 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.

30. **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, 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.

31. **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.

32. **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.

33. **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.

34. **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.

34.1 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.

34.2 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.

34.3 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.

35. This AGREEMENT may be executed in one or more counterparts, each of which shall constitute an original and all of which shall be one and the same agreement.

36. **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

PARSONS BRINCKERHOFF, INC.,
a New York corporation authorized to do
business in California

By: _____
City Manager

By: _____
[Signature]

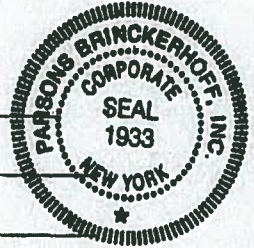
Attest: _____
City Clerk

Suad Cistic
[Printed Name]
Vice President
[Title] Business Development Director

Certified as to Availability of Funds:

By: _____
Finance Director

By: _____
[Signature]
Hillary Jassey
[Printed Name]
Secretary
[Title]



Approved as to Form:

By: _____
Assistant City Attorney

EXHIBIT “A”

SCOPE OF SERVICES



PROPOSAL FOR PHASES 1 AND 2 – RECYCLED WATER RETROFIT PROJECT

RFP #DSM0001 | DECEMBER 23, 2016

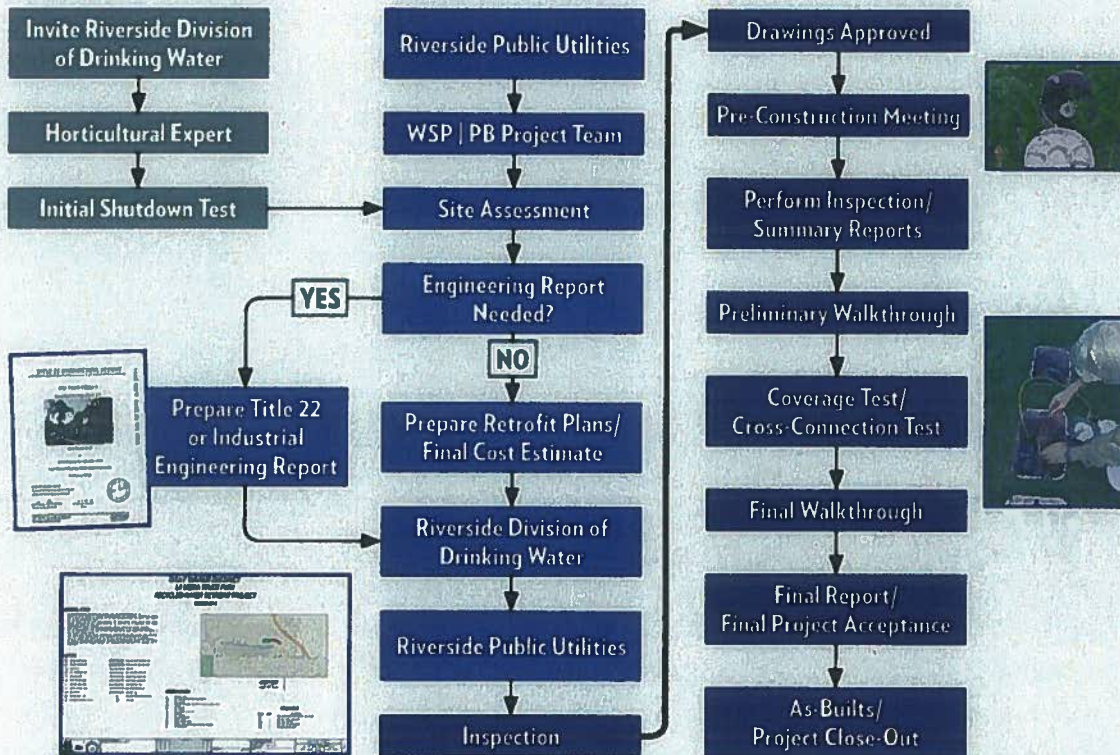


CRITERION A

SCOPE OF WORK

In preparing our proposal, our team thoroughly reviewed available documents and visited all 17 sites in Phases 1 and 2. Based on this preliminary work, we've identified challenges and proposed solutions for each. Our evaluation has provided us with a clear understanding of the work to be performed. The scope in the RFP is fairly comprehensive, and we will comply with the scope items as listed in the Request for Proposals (RFP). In an effort to not repeat the scope items from the RFP we focused on highlighting only the specific tasks that we feel require additional discussion or clarity with regard to our team's approach.

Exhibit 2: While each site has unique characteristics and challenges, a general process can facilitate the conversion process for all of them.



Tasks 3.2 and 4.2: Initial Site Assessment

Our team will gather the information needed to produce the retrofit design, which will include, but not be limited to, locations of existing meters, domestic and fire services, type of backflow prevention used on the site, quick coupler valves, valves and irrigation controllers.

WSP | Parsons Brinckerhoff has internally developed an iPad application that provides GPS interface for the locations of pictures taken during site visits, as shown in Exhibit 3. At the completion of this task, these photographs will provide a site assessment report to RPU.

Upon RPU's approval of the site assessment report, our team will prepare site conversion drawings and provide them,

along with the application form, to DDW for regulatory approval.

Based on our site visits it does not appear that plant tolerance to recycled water will be an issue. However, we have included Kelly Parkins, a horticulture expert, on our team to conduct a brief overview of all sites to determine if any specific sites have plants or other issues that would pose a risk

Exhibit 3: We use our own GPS-based iPad application for surveys.



and require further evaluation or soil tests. If individual site assessment is required, an additional six hours per site at a rate of \$195 will be added to the fee for each site for plant evaluation, soil tests by type and a report to address water quality and plant production.

Tasks 3.4 and 4.4 – Final Construction Plans and Cost Estimates

The key to a retrofit plan is that it must be simple enough so that it can be easily understood by a user or contractor, but at the same time it must provide all the information required to comply with Title 22, Riverside County Department of Public Health Division of Drinking Water (DDW) and RPU requirements. The construction plans should refer to AWWA California-Nevada Section's Guidelines for the On-site Retrofit of Facilities Using Disinfected Tertiary Recycled Water.

Our designs will be based on information gathered during the site visit, information provided by RPU and other data that RPU or the site owner might provide. "Do Not Drink" signs and recycled water appurtenances will also be included on the retrofit plans. Because we are experienced with the requirements of the Riverside County DDW, we will be able to prepare cost-effective plans and supplement reports that will meet DDW approval with the first submission.

On complex sites such as the Parkway Community Hospital where shutdown testing with potable water disconnection to the 24-hour emergency room could be problematic, our team will prepare specific protocol for the shutdown test. The protocol will be reviewed and approved by DDW, the hospital and RPU prior to commencing shutdown tests.

Tasks 3.5 and 4.5 – Construction Oversight and Inspection

Field Work: We understand that RPU will require the selected consultant to oversee the retrofit construction work so that the site is in compliance with recycled water regulations. Our inspection team members are certified cross-connection control specialists by the American Water Work Association (AWWA) and by the American Backflow Prevention Association (ABPA). They have inspected and tested over 1,000 recycled water sites. During the pre-construction meeting, we will support RPU in providing the contractor with the requirements associated with the conversion process, such as

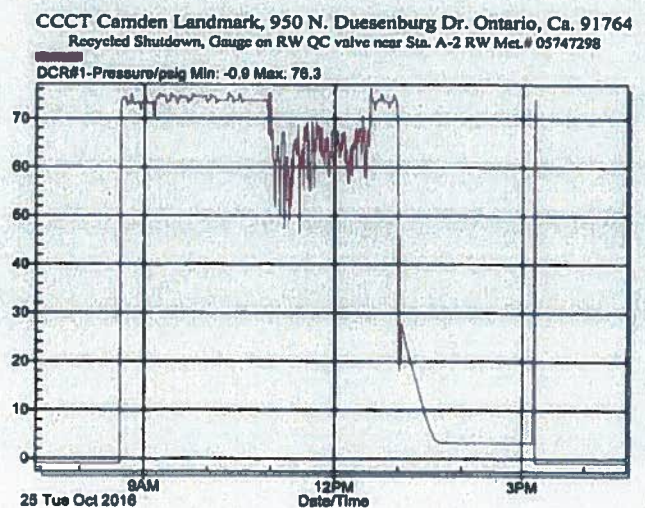
color coding requirements, signage, trenching, materials and testing requirements.

During the site visits, we will verify potable and recycled water facilities, document site conditions via observation and photos and fill out inspection reports.

Shutdown Tests: Please note that shutdown tests will be required for all sites. The following is a summary of the typical steps involved during the shutdown test.

- The potable system is shut down at the backflow/meter and building threshold valves while leaving the irrigation system energized. Gauges are installed on the backflow to record pressure changes in the domestic service. A pressure increase indicates a potential cross-connection between the potable and irrigation system.
- Once the potable phase of the shutdown is successfully completed, we will re-establish domestic service and shut down the irrigation system for few hours. Gauges are installed on quick couplers to record pressure changes in the system.
- Our team will provide the necessary equipment for the cross connection testing.

Exhibit 4: A pressure recording chart shows the results of a two-hour shutdown test on an irrigation system for the City of Ontario. The existing irrigation system did not repressurize during the test, indicating that the test was successful.



Overspray Testing and Final Inspection: Our team will conduct the final overspray testing and site inspection with the contractor, review the punch list and furnish final punch list to RPU. A final inspection will be performed, if required, to verify that the punch list has been addressed. In addition, we also conduct a final total dissolved solids (TDS) reading on the recycled system to document that the site is connected to the recycled water source.

Tasks 3.6 and 4.6 – Final Regulatory Approval

Please note that through the process of developing designs and Construction Plans, the connection of additional users may or may not require the preparation of a Title 22 Engineering Report addendum. Based on Title 22, Articles 5 and 7, this will only be required for dual-plumbed sites, for sites with front and backyard irrigation and direct reuse of recycled water. We will work with RPU identify sites and prepare an estimate for the additional scope for RPU approval prior to starting the additional work.

Task 8 – Unidentified Scope Items (Optional Award): Based on the wide range of experience with site retrofit, our team has identified the following items that we believe will be required by DDW for successful completion of the project:

- **Tasks 8.1 and 8.2 - Initial Shutdown Tests for Phases 1 and 2:** Prior to retrofit work or before construction activities commence, an initial cross-connection inspection and test must be conducted in coordination with all parties (site representative, RPU and DDW). The purpose of this test is to determine if there are any connections between the existing irrigation system and the portable water system prior to construction. We have included a line item under Task 8 to cover the initial shutdown tests
- **Task 8.3 – Additional Payments for DDW Fees and Charges:** Based on recent working experience with DDW, we believe that the lump sum amount of \$15,000 specified in Task 5 is not adequate. We contacted DDW to verify their cost for attending the cross-connection tests, and DDW indicated that the charge to attend cross-connection testing is based upon an hourly rate of \$160 and typically entails a 10-hour duration for shutdown tests per site. Therefore, we estimate that the total cost for the 17 sites is \$45,000. We included a line item under Task 8 (item 8.3)

for an additional \$30,000 to cover the difference in cost between the Task 5 and this estimate.

- **Task 8.4 – Plant Material Acceptability:** On recent projects, site owners questioned the use of recycled water and impacts to their plants. On one occasion, an owner claimed that the use of recycled water on his property attracted flies to it. On these occasions, we have contracted with Kelly Parkins to meet with the owners to complete the necessary tests and determine the cause of specific problems. She has had good success identifying the causes and using science and her knowledge of plant materials to efficiently resolve the site-specific issues. The cost estimated in our fee proposal as an optional award would cover her efforts on an as-needed basis.

Site-Specific Challenges and Approaches

The project team visited all 17 sites included in Phases 1 and 2 of the project to identify the challenges that will be associated with each of them. On the following table we propose solutions to mitigate each site-specific issue (Exhibit 5). For this exercise, we have identified the sites having no issues and that will entail a straightforward approach as Group 1 (simple). Sites with issues that will require some consideration are noted as Group 2 (standard), and sites requiring more complex approaches are designated under Group 3.

Exhibit 5: Our approach mitigates site-specific issues for each site, all of which have their own complexities and challenges.

Ph	Site	Group	Challenge	Approach
1	1. Metal Container Corporation	1	• None.	• Mostly drip irrigation. No overspray issues.
1	2. Flexsteel Industries	1	• None.	• Regular irrigation.
1	3. Charter Communication	1	• None.	• Regular irrigation.
1	4. Rutland Park	2	• Combined system (domestic/irrigation). • Playground, picnic tables, drinking fountains.	• Install new potable meter for drinking fountains. • Run irrigation system during site assessment to verify overspray. Change nozzle or heads to minimize overspray.
1	5. Jackson Elementary School	2	• Restrictions for shutdown testing. • Vegetable garden to remain on potable water.	• Shutdown test during school holidays, nighttime or weekends. • Run new potable line from restroom feed along property fence line.
1	6. Don Lorenzi Park	2	• Combined system (domestic/irrigation). • Picnic tables. • Baseball field.	• Install new potable meter for restrooms and drinking fountain. • Run irrigation system during site assessment to verify overspray. Change nozzle or heads to minimize overspray. • Verify with DDW that QCV in mounter pitch is acceptable (sometimes those are used by Little League teams to fill water bottles).
1	7. Riverside Christian School	2	• Baseball field. • Multiple picnic areas and drinking fountains.	• Verify with DDW that QCV in mounter pitch is acceptable. • Run irrigation system during site assessment to verify overspray. Change nozzle or heads to minimize overspray.
1	8. Hunt Park	2	• Playground, picnic tables, drinking fountains • Irrigation system and domestic system at the meters do not meet minimum separation requirement.	• Run irrigation system during site assessment to verify overspray. Change nozzle or heads to minimize overspray. • Relocate irrigation system near meter to maintain min. separation requirement
1	9. Sherman Indian High School	2	• Restrictions for shutdown testing. • Large site. • Combined system (domestic/irrigation).	• Shutdown test during school holidays, nighttime or weekends. • Provide adequate hours and experienced staff to survey the site. • Install new meter to serve irrigation system.
1	10. Chemawa Middle School	2	• Restrictions for shutdown testing.	• Shutdown test during school holidays, nighttime or weekends.

Ph.	Site	Group	Challenge	Approach
2	11. Don Derr Park	2	<ul style="list-style-type: none"> • Playground. • Combined system (domestic/irrigation). • Irrigation system and domestic system at the meters do not meet minimum separation requirement. 	<ul style="list-style-type: none"> • Run irrigation system during site assessment to verify overspray. Change nozzle or heads to minimize overspray. • Install new meter for the drinking fountains. • Relocate irrigation system at the meters to meet separation requirements.
2	12. Bethel Christian Center	2	<ul style="list-style-type: none"> • Combined system (domestic/irrigation). • Baseball field. 	<ul style="list-style-type: none"> • No apparent irrigation backflow. Will need another source of water for the test or new backflow to be installed. • Verify with DDW that QCV in mounter pitch is acceptable.
1	13. Parkview Community Hospital	3	<ul style="list-style-type: none"> • Site has emergency care open on a 24-hour basis. Will not allow potable water interruption. 	<ul style="list-style-type: none"> • Assess if site has emergency backup contingency plan such as on-site storage. May need to install PRV on potable backflow to maintain minimum potable pressure. Will require special testing protocol for DDW approval.
1	14. Cal Baptist University	3	<ul style="list-style-type: none"> • Restrictions for shutdown testing. • 15+ water services. • Baseball field. • Multiple picnic areas and drinking fountains. • Decorative fountain. 	<ul style="list-style-type: none"> • Shutdown test during school holidays, nighttime, or weekends. • Conduct shutdown test over a 4-day period. • Verify with DDW that QCV in mounter pitch is acceptable. • Run irrigation system during site assessment to verify overspray. Change nozzle or heads to minimize overspray. • Verify that decorative fountain is acceptable or leave this area on potable water.
2	15. Victoria Village HOA	3	<ul style="list-style-type: none"> • Multiple irrigation meters. • Irrigation near private properties. • Large complex. 	<ul style="list-style-type: none"> • Coordinate with RPU for proposed meter locations. May need to install new irrigation mainlines to serve each meter. • DDW may attend initial site assessment to verify approval of the irrigation facilities near private homes. • Provide adequate hours and experienced staff to survey the site.
2	16. Arlington Heights Sports Park	3	<ul style="list-style-type: none"> • Large site. • Baseball fields and other sports. • Water feature. • Multiple picnic areas and drinking fountains. 	<ul style="list-style-type: none"> • Provide adequate hours and experienced staff to survey the site. • Verify with DDW that QCV in mounter pitch is acceptable. • Verify source of water and acceptable use to DDW. • Run irrigation system during site assessment to verify overspray. Change nozzle or heads to minimize overspray.
2	17. Arlington High School	3	<ul style="list-style-type: none"> • Restrictions for shutdown testing. • Baseball field. • Combined system (domestic/irrigation). 	<ul style="list-style-type: none"> • Shutdown test during school holidays, nighttime or weekends. • Verify with DDW that QCV in mounter pitch is acceptable. • No apparent irrigation backflow. Will need another source of water for the test or new backflow to be installed.

Level of Complexity Key:

- 1: Simple
- 2: Standard
- 3: Complex

Issues at Challenging Sites

Site 4 Rutland Park: May require a new 1-inch meter to serve existing drinking fountains.

Site 6 Don Lorenzi Park: May require a new $\frac{3}{4}$ -inch water meter and an RP to be installed for the bathrooms. It appears that this is connected to the irrigation mainline.

Sites 10, 12 & 17 Chemawa Middle School, Bethel Christian Center and Arlington High School: These facilities will require new irrigation mainlines, as their systems are currently served by a compound meter. For the final test, we will need to get a temporary source of water to serve these systems. This is usually done with a highline from a fire hydrant.

Site 13 Parkview Community Hospital: This hospital has a 24-hour emergency department services. It will be important to investigate if the potable water distribution is a loop system and if there is an isolation valve on the potable system. The testing of this site will be quite complex, as most of the time the 24-hour emergency department cannot be without water. We will investigate if there is an on-site storage facility. (Sometimes there is for potential water breaks.) The team will propose a testing protocol for approval by DDW and RPU for this site that takes into account the critical nature of it.

Site 14 California Baptist University: Source of irrigation water at this site is groundwater (a well). There are requirements associated with a well located on a recycled site which usually involves a setback distance between the well and recycled water facilities. Best approach is to abandon the well since we will use recycled water for irrigation purposes.

This site has also many potable services that will require multiple shutdowns.

Site 15 Victoria Village Home Owners Association (HOA): Irrigation meters are currently located along the HOA main street. This site may require installing new irrigation mainlines between the proposed recycled water meter(s) and the current irrigation main point of connections.

DDW may require a reduced pressure backflow assembly (RP) to be installed on the main potable distribution mainline.



Facilities at Bethel Christian Center will require new irrigation mainlines. (site 12)



A shutdown test at Parkview Community Hospital (site 13) will be problematic due to the 24-hour emergency department.



An estimated 15 service connections may require multi-day testing at California Baptist University (site 14)

Recommended Quality Control Improvements to the Proposed Testing:

- Record TDS of both domestic and irrigation water before the site is converted and once the site is on recycled system. TDS value shall increase when the site is on recycled water. These values shall also be recorded as part of the annual inspections.
- Description of quick coupler valves in the proposed irrigation user manual shall include the wording "acme thread" and "locking purple cover".
- Pressure testing of the sites: When the potable domestic system is tested, the recycled water irrigation system must be operated and each irrigation valve shall be operated for a period of two minutes. If there is a cross-connection, then we will see a spike in the gauges.

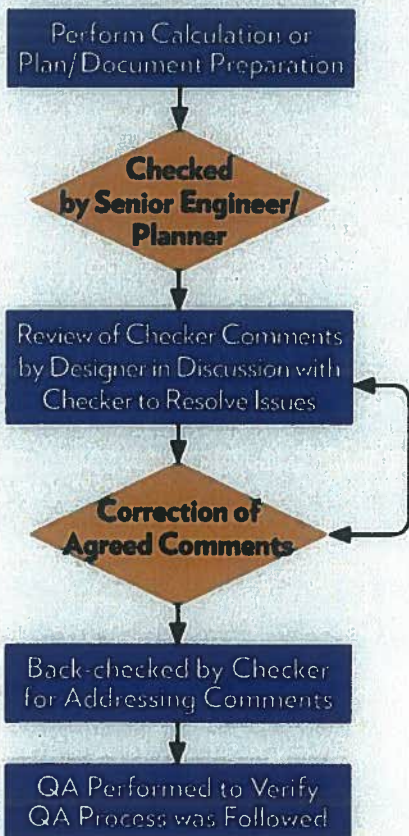
Quality at WSP | Parsons Brinckerhoff

WSP | Parsons Brinckerhoff has a long-standing commitment to producing a quality product exhibited by a company-wide quality system and ISO certification. Our dedication to quality is a major contributing factor to our success and, more importantly, to our clients' successes. Our quality control (QC) and quality assurance (QA) processes are described below and illustrated in Exhibit 6.

Quality assurance self-imposed requirements for ISO certification include:

- Regular internal project audits
- Regular external project audits
- Peer review during early design phase
- Independent client feedback
- Subconsultants are required to follow the plan

Exhibit 6: QA/QC processes



- Confirm qualified staff are preparing all documents

Retrofit Plans

- Use check list
- Same staff throughout the process
- Over-the-shoulder reviews by Project Manager
- Final review by QA/QC staff
- Verify that all comments are addressed
- Document everything
- Conduct initial shutdown test

Inspection / Testing

- Use inspection check list
- Final walkthrough
- Use accepted testing procedures and follow them to the letter
- Use properly calibrated instruments
- Document everything

ADDENDUM No. 1

To the Scope of Work of

PHASE 1 AND 2 RECYCLED WATER SITE RETROFIT PROJECT

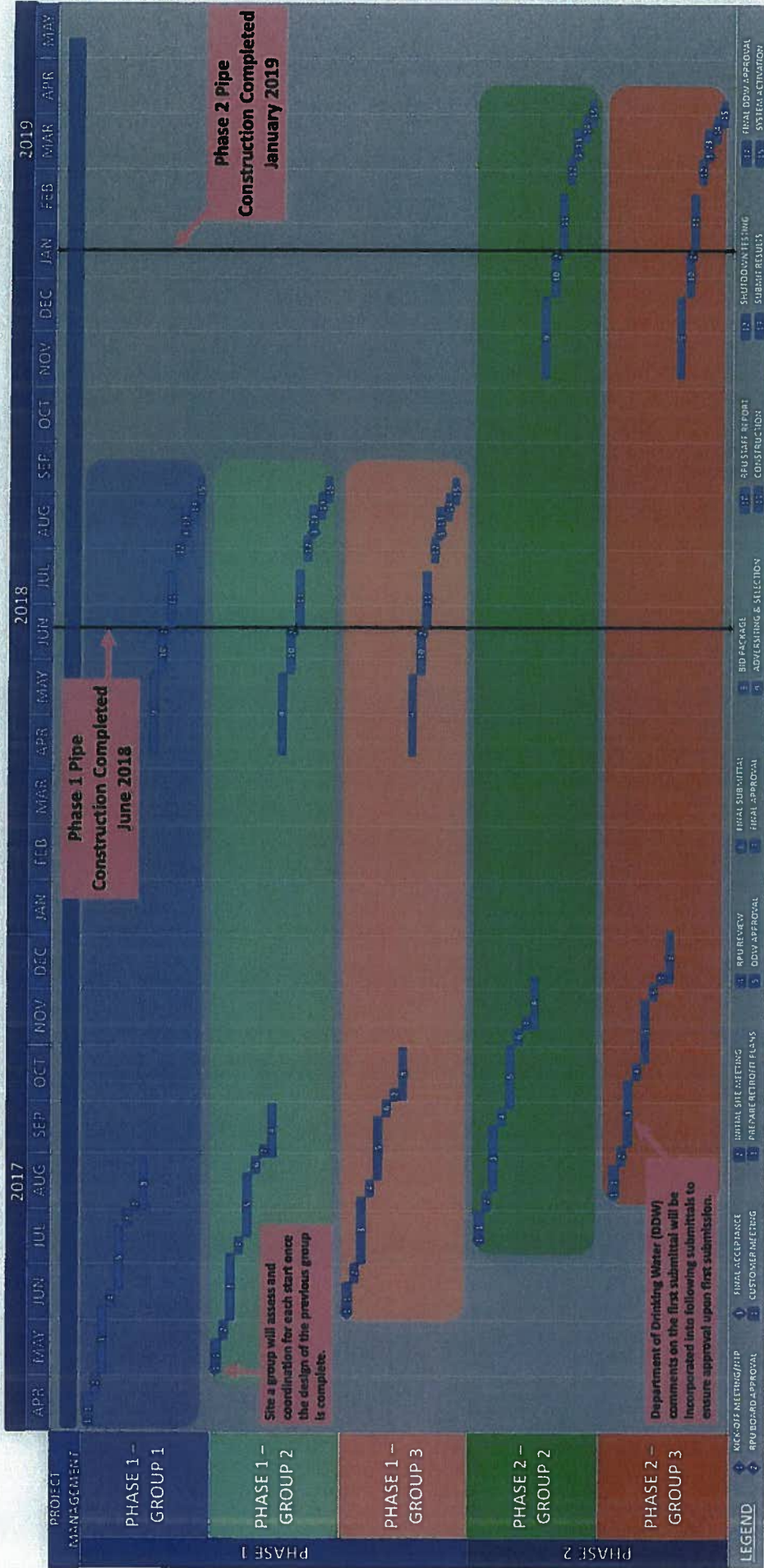
The following items describe modifications to the scope of work presented by The City of Riverside- Public Utilities Department RFP # DSM0001 and submitted in the proposal from WSP I Parsons Brinkerhoff (WSP I PB) dated December 23, 2016.

- 1- During the presentation of the proposal to City by WSP I PB, Initial Shutdown Tests were recommended by WSP I PB and was accepted by RPU staff. The budget for the initial shutdown tests included in the cost proposal (Tasks 8.1 and 8.2) has been added to the retrofit budget for each site in Tasks 3.0 and 4.0 on the revised cost proposal.
- 2- Additional budget for Department of Drinking Water (DDW) permit fee and site inspection as recommended in WSP I PB cost proposal on item 8.3 has been accepted by RPU. The budget of \$15,000 allocated in the RFP has been increased to \$45,000 in the revised cost proposal on Task 5.0.
- 3- The budget allocated for Task 7 on the cost proposal has been increased to \$50,000 to cover additional design and/or inspection services for additional sites not currently identified that may be suitable for recycled water use during the duration of the contract.
- 4- The City of Riverside, through the development review process, has identified additional sites suitable for Recycled Water use. Task 8.0 was incorporated into the cost proposal for on-call plan check services whereby, WSP I PB will review project design plan prepared by the Developer for compliance with RPU Rules and Regulations. A budgetary amount of \$20,000 is incorporated in the revised cost proposal under Task 8.0.



PARSONS
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PHASE 1 AND 2 RECYCLED WATER RETROFIT PROJECT PRELIMINARY PROJECT SCHEDULE



*The Project Schedule is preliminary and subject to changes based on directions from Riverside Public Utilities.

Friday, February 3, 2017

Page 1 of 1

Riverside Project Schedule

EXHIBIT "B"
COMPENSATION

**PHASE I AND II RECYCLED WATER SITE RETROFIT PROJECT
RIVERSIDE PUBLIC UTILITIES DEPARTMENT - WATER DIVISION**

		WSP Parson Brinckerhoff					AEGIS				HOURS TOTAL	Other Subs	TOTAL COST
Responsibility	QA/QC Manager	Project Manager	Assistant Engineer	Assistant Engineer	Project Admin	Technical QC/QA	Technical Lead	Assistant Engineer II	Inspector & Cross Connection Tests				
Name	Jeremy Dye	Zack Ierselour*	Alex Mascorinas	Jing Yang	Cynthia Cavazos	Dick Carlson*	Alex Bucher*	Tranh Huynh	Jeremy Lee*				
Multiplier	2.83	2.83	2.83	2.83	2.83	1.47	2.38	2.89	3.06				
Billing Rates	\$290.88	\$292.15	\$84.04	\$180.79	\$128.89	\$139.85	\$148.94	\$130.05	\$119.00				
Task #	Task Description												
Task Group 1													
1.0	Task Group 1 - Finalize RPU's Recycled Water User Manual												
1.0	Review Draft RW User Manual				2	12	4	8			26		\$3,569
1.1	Provide Comments and Suggestions to RPU					2	2				8		\$1,043
1.2	Update RW User Manual	2	4	40	12		4	1	4		67		\$7,230
1.3	Obtain CDW approval		4	4				0			8		\$1,268
	TOTAL TASK 1	2	10	44	12	2	18	7	12	0	107	\$ -	\$13,168
TASK GROUP 2													
2.0	Task Group 2 - Operations, Maintenance, and Testing Manual												
2.0	Prepare Manual	4	8	48	8	2	8	4	8		88		\$10,482
2.1	Review Meeting to Discuss RPU Comments		2	2		2	2				8		\$1,212
2.2	Prepare Power Point Presentations		4	18	4		4				28		\$3,275
	TOTAL TASK 2	4	14	68	12	2	10	10	8	0	124	\$ -	\$14,940
TASK GROUP 3													
3.0	Task Group 3 - Project Management (Phase 1, 12 sites)												
3.0	Project Management including weekly progress reports, kickoff meeting, and monthly reports	4	32		2	8		2	2		60		\$10,307
3.1	Initial Customer Meetings										0		\$0
3.1.1	Commercial and Educational		8				8				16		\$3,067
3.1.2	Park Facilities		4	4	4		4				18		\$3,258
3.1.3	Brief Review of Plant Material Acceptability by Horticulture Expert (Total 18 hours), see Optional Item B.4.		2								2	\$3,120	\$3,694
3.2	Initial Site Assessment										0		\$0
3.2.1	Ruffalo Park (drawings available)										0		\$0
	Data Collection				2			2			4		\$462
	Field Investigation (obtain locations of existing fac., serial numbers, GCYS, RCYs, etc.)			4			2		4	10	\$1,098		
	Initial Shutdown Tests	3	2						8	11	\$1,555		
	RW Demand and Assessment		2							2	\$168		
	Preliminary Site Drawings and Recommendations		2	2	18	4	2	2	4	32	\$3,651		
	SUBTOTAL	0	8	10	18	4	2	4	6	10	60	\$0	\$7,132
3.2.2	Metrol Container Corporation										0		\$0
	Data Collection			4						4	\$338		
	Field Investigation (obtain locations of existing fac., serial numbers, GCYS, RCYs, etc.)						2		8	8	\$800		
	Initial Shutdown Tests	3	2	2					8	11	\$1,555		
	RW Demand and Assessment		2					4		2	\$168		
	Preliminary Site Drawings and Recommendations		2	18	2	2	2	4		30	\$3,275		
	SUBTOTAL	0	8	24	4	8	2	4	4	12	55	\$0	\$8,589
3.2.3	Fluorid Industries										0		\$0
	Data Collection			2				2		4	\$428		
	Field Investigation (obtain locations of existing fac., serial numbers, GCYS, RCYs, etc.)		2	4			1		4	11	\$1,410		
	Initial Shutdown Tests	3	2						8	11	\$1,555		
	RW Demand and Assessment							2		2	\$280		
	Preliminary Site Drawings and Recommendations			18	4	2	4	4		32	\$3,316		
	SUBTOTAL	0	5	28	4	0	2	6	8	10	60	\$0	\$8,988
3.2.4	Jackson Elementary School										0		\$0
	Data Collection			2				2		4	\$428		
	Field Investigation (obtain locations of existing fac., serial numbers, GCYS, RCYs, etc.)						2		8	10	\$1,220		
	Initial Shutdown Tests	3	2						8	11	\$1,555		
	RW Demand and Assessment			2						2	\$202		
	Preliminary Site Drawings and Recommendations			14		2	4	8		28	\$3,331		
	SUBTOTAL	0	3	4	18	0	2	6	10	14	58	\$0	\$8,188
3.2.5	Don Lorand Park (drawings available)										0		\$0
	Data Collection			2				2		4	\$428		
	Field Investigation (obtain locations of existing fac., serial numbers, GCYS, RCYs, etc.)			2	2		2		4	10	\$1,130		
	Initial Shutdown Tests	3	2						8	11	\$1,655		
	RW Demand and Assessment			2						2	\$202		
	Preliminary Site Drawings and Recommendations			22		2	4	4		32	\$3,248		
	SUBTOTAL	0	3	28	4	0	2	6	8	10	60	\$0	\$8,882
3.2.6	Hunt Park (drawings available)										0		\$0
	Data Collection			2				2		4	\$462		
	Field Investigation (obtain locations of existing fac., serial numbers, GCYS, RCYs, etc.)		2	2			2		4	10	\$1,382		
	Initial Shutdown Tests	3		2					8	11	\$1,555		
	RW Demand and Assessment			2						2	\$168		
	Preliminary Site Drawings and Recommendations			10	10	2	4	8		34	\$3,758		
	SUBTOTAL	0	5	14	14	0	2	6	10	10	61	\$0	\$7,378
3.2.7	Perthshire Community Hospital										0		\$0
	Data Collection			4						4	\$338		
	Field Investigation (obtain locations of existing fac., serial numbers, GCYS, RCYs, etc.)						2		12	14	\$1,680		
	Initial Shutdown Tests	3		2					8	11	\$1,555		
	RW Demand and Assessment							2		2	\$280		
	Preliminary Site Drawings and Recommendations			24	18	2	4	2		50	\$4,971		
	SUBTOTAL	0	3	28	20	0	2	6	4	18	81	\$0	\$8,838
3.2.8	Sherman Indian HS										0		\$0
	Data Collection			4						4	\$338		
	Field Investigation (obtain locations of existing fac., serial numbers, GCYS, RCYs, etc.)		2				2		16	20	\$2,604		
	Initial Shutdown Tests	3			2				8	11	\$1,558		
	RW Demand and Assessment							2		2	\$260		
	Preliminary Site Drawings and Recommendations				28	2	4	12		48	\$5,262		
	SUBTOTAL	0	5	4	30	0	2	6	14	22	83	\$0	\$18,689
3.2.9	Cal Baptist University										0		\$0
	Data Collection			2				2		4	\$428		
	Field Investigation (obtain locations of existing fac., serial numbers, GCYS, RCYs, etc.)		2				2		16	20	\$2,604		
	Initial Shutdown Tests	3			2				8	11	\$1,558		
	RW Demand and Assessment							2		2	\$260		
	Preliminary Site Drawings and Recommendations			36		2	4	12		54	\$5,455		
	SUBTOTAL	0	5	38	2	0	2	6	18	22	91	\$0	\$18,348

**PHASE I AND II RECYCLED WATER SITE RETROFIT PROJECT
RIVERSIDE PUBLIC UTILITIES DEPARTMENT - WATER DIVISION**

WSP Person Brinckhoff											ASQS				HOURS TOTAL	Other Sube	TOTAL COST					
Responsibility	QA/QC Manager	Project Manager	Assistant Engineer	Assistant Engineer	Project Admin	Technical QC/QA	Technical Lead	Assistant Engineer II	Inspector & Cross Connection Tests													
Name	Jeremy Dye	Zack Iwaszkow*	Alejo Mascorinas	Jing Yang	Cynthia Cavazos	Dick Carlson*	Alex Bucher*	Trish Huynh	Jeremy Lee*													
Multiplier	2.53	2.53	2.53	2.53	2.53	1.47	2.35	2.53	3.05													
Billing Rate	\$250.00	\$252.15	\$24.04	\$100.79	\$125.59	\$135.85	\$149.94	\$130.00	\$115.00													
Task #	Task Description																					
3.2.10	Cherokee Middle School										0											
	Data Collection										4		\$336									
	Field Investigation (obtain locations of existing fac., serial numbers, QCVS, RCVs, etc.)										2	12	\$2,144									
	RW Demand and Assessment										2		\$109									
	Initial Shutdown tests										3	11	\$1,588									
	Preliminary Site Drawings and Recommendations										28	48	\$4,105									
	SUBTOTAL										0	6	34	0	0	2	8	8	15	73	\$0	\$8,308
3.2.11	Riverside Christian School (New Owner)										0											
	Data Collection										4		\$520									
	Field Investigation (obtain locations of existing fac., serial numbers, QCVS, RCVs, etc.)										2		\$260									
	RW Demand and Assessment										2		\$260									
	Initial Shutdown tests										2	6	10	\$1,322								
	Preliminary Site Drawings and Recommendations										2	38	55,041									
	SUBTOTAL										0	2	2	0	0	2	4	38	12	62	\$0	\$5,130
3.2.12	Charter Communications										0											
	Data Collection										2		\$428									
	Field Investigation (obtain locations of existing fac., serial numbers, QCVS, RCVs, etc.)										2	4	11	\$1,410								
	Initial Shutdown tests										3	2	17	\$1,655								
	RW Demand and Assessment										2		\$260									
	Preliminary Site Drawings and Recommendations										18	4	2	\$3,315								
	SUBTOTAL										0	5	25	4	0	2	5	8	10	50	\$0	\$5,555
	SUBTOTAL FOR 12 SITES IN PHASE 1										9	91	235	118	4	24	68	132	168	799	\$0	\$93,778
3.3	Preliminary Regulatory Approval																					
3.3.1	Incorporate comments from RPU and Customer and Apply for all DDW required materials										12		0	6	18		\$1,906					
3.3.2	Submit final application package with necessary site conversion materials (see individual tasks under 3.2 for more detail)										8				6		\$604.77					
3.3.3	Incorporate comments from DDW and obtain DDW approval (See task 5 for DDW fee)										6		1		7		\$654.21					
3.4	Final Construction Plans and Cost Estimate																					
3.4.1	Utilize RPU standard specification for bid package										2				2		\$484					
3.4.2	Prepare site technical specifications bid package										6	120	0	6	12	144	\$13,938					
3.4.3	Prepare site specific bid construction plans										8	60	0	6	24	98	\$11,925.73					
3.4.4	Detailed retrofit cost estimate										4	8		2	4	18	\$2,421.03					
3.4.5	Compile complete bid package										1	6				7	\$736.42					
3.5	Construction Oversight															0	\$0					
3.5.1	Review Construction submittals										6	18		4		28	\$3,891.50					
3.5.2	Resolve field issues										4		2		36	42	\$5,365					
3.5.3	Accompany DDW during site inspections/participate 1 per site										2				24	25	\$3,234					
3.5.4	Contractor compliance										4			2		24	\$3,088					
3.5.5	Submit all required forms to DDW										3	8		3	4	18	\$2,472.83					
3.5.6	As-built plans per RPU notes										2	36		1		39	\$3,839.83					
3.6	Final Regulatory Approval																					
3.6.1	Cross-Connection Test per San Diego DEH Method 1																					
	Ruffard Park														12	12	\$1,380					
	Metal Container Corporation														12	12	\$1,380					
	Fluorol Industries														12	12	\$1,380					
	Jackson ES														12	12	\$1,380					
	Don Leland Park														12	12	\$1,380					
	Hunt Park														12	12	\$1,380					
	Parkview Community Hospital														12	12	\$1,380					
	Sherman Indian HS														12	12	\$1,380					
	Cherokee MS														12	12	\$1,380					
	Riverside Christian (new owner)														12	12	\$1,380					
	Cal Baptist University														48	48	\$5,820					
	Charter Communications														12	12	\$1,380					
3.6.2	Schedule Shutdown Test														12	12	\$1,380					
3.6.3	Submit Test Results to DDW														12	12	\$1,380					
3.6.4	Obtain DDW approval and Coordinate meter set														2	20	\$2,480.38					
3.6.5	Coordinate final customer irrigation system activation with RPU and customer once approved by DDW														12	12	\$1,380					
3.6.6	Provide required materials to customer														4	8	\$1,069.07					
	TOTAL TASK 3										4	145	455	202	12	24	115	152	458	1510	\$3,129	\$196,342
TASK GROUP 4																						
4.0	Task Group 4 - Project Management (Phase 2, 5 sites)																					
4.0.	Project Management including weekly progress reports, kickoff meeting, and monthly reports										4	6		6		2	18		\$2,453			
4.1	Initial Customer Meetings																					
4.1.1	Private Accounts										2				2		4		\$784			
4.1.2	Parks										3				3		6		\$1,148			
4.2	Initial Site Assessment																					
4.2.1	Don Derr Park																0		\$0			
	Data Collection														4		4		\$520			
	Initial Shutdown test										2	2			6	10	\$1,322					
	Field Investigation (obtain locations of existing fac., serial numbers, QCVS, RCVs, etc.)													2		12	14	\$1,680				
	RW Demand and Assessment														2		2		\$260			
	Preliminary Site Drawings and Recommendations										0	2	28	0	0	2	8	14	18	68	\$0	\$7,718
4.2.2	Arlington High School																					
	Data Collection												4				4		\$336			
	Field Investigation (obtain locations of existing fac., serial numbers, QCVS, RCVs, etc.)												1			1	12	14	\$1,614			
	RW Demand and Assessment													2			2		\$260			
	Initial Shutdown tests										2	2		24		2	4	8	10	\$1,322		
	Preliminary Site Drawings and Recommendations										0	2	7	25	0	2	5	8	18	68	\$0	\$7,813
4.2.3	Victorie Village HOA																					
	Data Collection												6	2				10		\$874		
	Field Investigation (obtain locations of existing fac., serial numbers, QCVS, RCVs, etc.)														2		40	42	\$4,900			
	Initial Shutdown tests										2			2			6	10	\$1,356			
	RW Demand and Assessment															4		4		\$520		
	Preliminary Site Drawings and Recommendations										0	2	44	40	0	2	6	25	48	168	\$0	\$18,304

**PHASE I AND II RECYCLED WATER SITE RETROFIT PROJECT
RIVERSIDE PUBLIC UTILITIES DEPARTMENT - WATER DIVISION**

		WSP Person Brickerhoff					AEGS				HOURS TOTAL	Other Subs	TOTAL COST											
Responsibility		QA/QC Manager	Project Manager	Assistant Engineer	Assistant Engineer	Project Admin	Technical QC/QA	Technical Lead	Assistant Engineer II	Inspector & Cross Connection Tests														
Name		Jeremy Dye	Zack Ienastous*	Alexis Mascorras	Jing Yang	Cynthia Cavazos	Dick Carlson*	Alex Bucher*	Tranh Huynh	Jeremy Lee*														
Multiplier		2.83	2.83	2.83	2.83	2.83	1.47	2.38	2.89	3.06														
Billing Rate		\$280.89	\$282.15	\$84.04	\$100.79	\$128.69	\$138.85	\$149.94	\$130.05	\$115.00														
Task #	Task Description																							
4.2.4	Arlington Heights Sports Park (drawings available)																							
	Data Collection											2		\$168										
	Field Investigation (obtain locations of existing fac., serial numbers, GCYS, RCYS, etc.)											1	8	10	\$1,302									
	Review RW Demand and Assessment													2	\$168									
	Initial Shutdown tests											2		8	10	\$1,358								
	Review and update Preliminary Site Drawings and Recommendations													10	24	\$2,760								
	SUBTOTAL											0	3	14	2	0	2	5	8	14	48	80	\$5,784	
4.2.5	Bethel Christian Center																							
	Data Collection																			4		\$403		
	Field Investigation (obtain locations of existing fac., serial numbers, GCYS, RCYS, etc.)																	2		8	8	\$960		
	RW Demand and Assessment																				4	\$336		
	Initial Shutdown tests																			8	10	\$1,358		
	Preliminary Site Drawings and Recommendations																			28	32	\$3,094		
	SUBTOTAL											0	2	30	8	0	2	6	0	12	58	\$8,148		
	SUBTOTAL FOR 5 SITES IN PHASE 2											0	11	121	74	8	10	28	68	188	410	\$45,740		
4.3	Preliminary Regulatory Approval																							
4.3.1	Incorporate comments from RPU and Customer and Apply for all DDW required materials																				2		\$1,571	
4.3.2	Obtain final regulatory pre-approval necessary for conversion materials (see individual tasks under 3.2 for more details)																				2	\$188		
4.3.3	Incorporate comments from DDW and obtain DDW approval (See task 5 for DDW fee)																				2	\$950		
4.4	Final Construction Plans and Cost Estimate																				0			
4.4.1	Utilize RPU standard specification for bid package																				2		\$1,059	
4.4.2	Prepare site specific technical bid package													24	24		2	4	12		88		\$6,876	
4.4.3	Prepare site specific bid construction plans													24			2	4	18		48		\$5,237	
4.4.4	Detailed retrofit cost estimate														4			2		8		\$958		
4.4.5	Complete complete bid package													2				1		7		\$1,017		
4.6	Construction Oversight																				0			
4.6.1	Review Construction submittals																				8		\$1,236	
4.6.2	Resolve field issues																			2	18	\$2,140		
4.6.3	Accompany DDW during site inspections (anticipated 1 per site)																				8	\$920		
4.6.4	Contractor compliance													2							8	10	\$1,384	
4.6.5	Submit all required forms to DDW														4			2			8		\$920	
4.6.6	As-built plans per RPU notes															12			1		19		\$1,389	
4.8	Final Regulatory Approval																							
4.8.1	Cross-Connection Test per San Diego DEH Method 1																							
	Don Dem Park																					12	12	\$1,380
	Arlington HS																					12	12	\$1,380
	Victoria Village HOA																					18	18	\$2,070
	Arlington Heights Sports Park																					12	12	\$1,380
	Bethel Christian Center																					12	12	\$1,380
4.8.2	Schedule Shutdown Test																					8	8	\$920
4.8.3	Submit Test Results to DDW														2							4	8	\$1,224
4.8.4	Obtain DDW approval and Coordinate meter set																					8	8	\$920
4.8.5	Coordinate final customer irrigation system activation with RPU and customer once approved by DDW																					2	8	\$969
4.8.6	Provide required materials to customer																					1	4	\$718
	TOTAL TASK 4:											0	35	199	134	8	14	89	80	226	783	8	\$87,613	
5.0	TASK GROUP 5																							
	Task Group 5 - Payment to DDW Fee and Charges (Lump Sum) - Also see Item 6.3 below.																							\$48,000
	TOTAL TASK 5:											0	0	0	0	0	0	0	0	0	0	0	0	\$48,000
6.0	TASK GROUP 6																							
	Task Group 6 - Knowledge Transfer Sessions																					8	28	\$3,897
	TOTAL TASK 6:											0	8	10	0	0	0	8	0	0	0	28	0	\$3,897
7.0	TASK GROUP 7																							
	Task Group 7 - Additional Site Designs and Inspections																							\$90,000
	TOTAL TASK 7:											0	0	0	0	0	0	0	0	0	0	0	0	\$90,000
8.0	TASK GROUP 8																							
	On-call Plan Check Services																							\$20,000
	TOTAL TASK 8:											0	0	0	0	0	0	0	0	0	0	0	0	\$20,000
	Total Hours											10	212	777	380	22	88	189	290	884	2830			
	Total Costs for Scope Items (Task 1 through Task 8)											\$2,508	\$48,216	\$85,302	\$38,286	\$2,787	\$9,217	\$29,538	\$37,715	\$78,810	\$3,120	\$430,800		

Other Direct Costs (ODC):

Printing and Reproduction							\$2,800
Mileage	2,000	miles				0.535	\$1,070
Total ODC							\$3,870

TOTAL FOR SCOPE ITEMS (Task 1 through Task 8) with ODC

\$434,370

EXHIBIT “C”

KEY PERSONNEL

Basem Muallem, P.E., Principal-in-Charge

Zack Isnasious, P.E., Project Manager