#### PROFESSIONAL CONSULTANT SERVICES AGREEMENT

# **KEWO** Engineering Corporation

# Electrical Studies at Various Water Utility Facilities

THIS PROFESSIONAL	CONSULTANT	SERVICES AGREEM	ENT ("Agreement") is
made and entered into this	day of	, 20	("Effective Date"), by
and between the CITY OF RIV	VERSIDE, a Cal	fornia charter city and	municipal corporation
("City"), and KEWO Engineering	g Corporation, 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 RFP NO. 2434 Electrical Studies at Various Water Utility Facilities ("Project").
- 2. **Term**. This Agreement shall be effective on the date first written above and shall remain in effect for five years until *December 31, 2030* 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 Fifty Thousand Dollars (\$150,000) annually, for a contract total of Seven Hundred Fifty Thousand Dollars (\$750,000), 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

### To Consultant

Public Utilities Department City of Riverside Attn: Principal Engineer 3750 University Avenue, 3<sup>rd</sup> Floor Riverside, CA 92501 Kewo Engineering Corporation Attn: Brian Bosco Kewo, President 1370 Valley Vista Drive, Suite 200#2114 Diamond Bar, CA 91765

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

<u>www.dir.ca.gov/dlsr/DPreWageDetermination.htm</u> 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.

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.

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.
- 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.
- 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. **Digital and Counterpart Signatures**. Each party to this Agreement intends and agrees to the use of digital signatures that meet the requirements of the California Uniform Electronic Transactions Act (Civil Code §§ 1633.1, et seq.), California Government Code § 16.5, and California Code of Regulations Title 2 Division 7 Chapter 10, to execute this Agreement. The parties further agree that the digital signatures of the parties included in this Agreement are intended to authenticate this writing and to have the same force and effect as manual signatures for purposes of validity, enforceability, and admissibility. For purposes of this section, a "digital signature" is defined in subdivision (d) of Section 16.5 of the Government Code and is a type of "electronic signature" as defined in subdivision (h) of Section 1633.2 of the Civil Code. This Agreement may be executed in any number of counterparts, each of which will be an original, but all of which together will constitute one instrument. Each certified or authenticated electronic copy of an encrypted digital signature shall be deemed a duplicate original, constituting one and the same instrument and shall be binding on the parties hereto.
- 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. **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

[SIGNATURES ON THE FOLLOWING PAGE]

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	KEWO ENGINEERING CORPORATION,
charter city and municipal corporation	a California corporation
By:City Manager	By: Brian Kewo Brian Kewo (Jul 9, 2025 12:07 PDT) Print Name: Brian Kewo Title: President
Δttest.	and
Attest:City Clerk	
City Clerk	By: Anh Minh Doan (Jul 9, 2025 12:13 PDT)
	Print Name: Anh Minh Doan
	Title: CFO
Certified as to Availability of Funds:	
D. Sergio Aquilar	
By: Sergio Aguilar Chief Financial Officer	
Chief Financial Officer	
Approved as to Form:	
By: A	
Deputy City Attorney	

# EXHIBIT "A" SCOPE OF SERVICES

#### **EXHIBIT A**

# SCOPE OF SERVICES

# 1100-1.1 **General**

# 1100-1.1.1 **Summary**

- a) Section includes:
  - 1) Short-circuit fault analysis study.
  - 2) Protective device coordination study.
  - 3) Arc-flash hazard study.

# **1100-1.1.2** References

- a) List and validation of assumptions.
- b) Institute of Electrical and Electronics Engineers (IEEE):
  - 1) 1584 IEEE Guide for Performing Arc Flash Hazard Calculations.
- c) National Fire Protection Association (NFPA).

### 1100-1.1.3 Water Facilities

a) It is anticipated that the consultant will perform the electrical system studies at approximately 60 facilities [50 groundwater wells and 10 booster pump stations] over a five-year period. RPU selected these facilities for the first year:

RPU selected the first set of facilities [consisting of 12 water wells] for the first year of the agreement, as follows:

Facility	Address	<b>Electrical Components</b>
Cooley H	305 N. Waterman Ave.	xfm+swb+nts+ss+150Hp
Cooley J	24277 E. Fourth St.	xfm+swb+nts+ss+300Hp
Scheuer 2	23444 E. Sixth St.	xfm+swb+nts+vfd+ss+300Hp
Raub 4R	595 E. Orange Show Rd.	xfm+swb+swb2+ats+ss+250Hp
Raub 5R	595 E. Orange Show Rd.	swb2+ats+ss+250Hp
Raub 7	595 E. Orange Show Rd.	swb2+nts+vfd+ss+200Hp
Raub 8	1295 S Waterman Ave.	swb+ss+200Hp
Thorn 12	23843 Dumas St.	xfm+swb+nts+ss+200Hp
Warren 4R	1416 S. Waterman Ave.	xfm+swb+swb2+nts+ss+300Hp
Twin Spring	Chase x Orange St.	xfm+swb+ss+300Hp
Brunton R	Near Columbia x Orange	xfm+swb+swb2+nts+vdf+ss+350Hp

Moore Griffith	1123 Orange St	xfm+swb+ss+150Hp
Widore Offiffin	1125 Orange St.	Allii   SWU   SS   13011p

Note: xfm = transformer; swb = main switchboard; swb2 = switchboard #2; ata = automatic transfer switch, nts = non-automatic transfer switch; vfd = variable frequency drive; ss = reduced voltage soft-start; ##3HP = motor horsepower.

The Raub Water Wells share the main switchboard, and the water wells are equipped with generator ready connections.

The Cooley, Scheuer, Raub, Thorn, and Warren Water Wells are in the City of San Bernardino. The Twin Spring, Brunton, and Moore Griffith are in the City of Riverside.

RPU may add additional water wells to the above listed set of facilities depending on the budget and unit cost to perform the electrical studies at each facility to match the allocated budget.

The electrical system at the booster pump stations is similar to the electrical equipment at the water wells, except that the booster stations are equipped with multiple motors and pump starter panels.

b) RPU will pick the facilities for the subsequent years of the agreement.

# 1100-1.1.4 System Description

- a) General study requirements:
  - 1) Scope:
    - (a) The short-circuit fault analysis, protective device coordination, and arcflash hazard studies shall include all equipment in the power distribution system including, but not limited to:
      - (i) Utility equipment.
      - (ii) Switchboards.
      - (iii) Generators.
      - (iv) Transformers:
      - (v) Including all dry-type transformers.
      - (vi) Motor control centers.
      - (vii) Freestanding variable frequency drives and starters.
      - (viii) Disconnect switches.
      - (ix) Motors.
      - (x) Panelboards:
      - (xi) Including all 240- and 208-volt systems.
      - (xii) Vendor control panels.
      - (xiii) HVAC equipment.
    - (b) Study scenarios:
      - (i) The studies shall include all possible electrical system configurations, for example:
        - a. Operation on normal (utility) source.

- b. Operation on generator source.
- 2) Obtain, for all equipment, the required data for preparation of the study including, but not limited to:
  - (a) Transformer kilovolt-ampere (kVA) and impedances.
  - (b) Generator impedances.
  - (c) Generator decrement curves.
  - (d) Bus withstand ratings.
  - (e) Cable and bus data.
  - (f) Protective device taps, time dials, instantaneous pickups, and time-delay settings.
- 3) Obtain the Electric Utility information on the minimum and maximum available fault current, minimum and maximum utility impedances, utility protective device settings including manufacturer and model number, interrupting ratings, X/R ratios, and model information one level above the point of connection:
  - (a) Utility tolerances and voltage variations.
- 4) The individual performing the studies shall visit the site and collect all necessary field data to perform and complete comprehensive electrical system studies.
- 5) Obtain equipment layouts and configurations from the manufacturer's final submittal requirements and project layout drawings as required.
- 6) Bus and conductor data:
  - (a) Use impedances of the actual installed or specified conductors, unless otherwise indicated.
  - (b) Use cable and bus impedances calculated at 25 degrees Celsius, unless otherwise indicated.
  - (c) Use 600-volt cable reactance based on typical dimensions of actual installed or specified conductors, unless otherwise indicated.
  - (d) Use bus withstand values for all equipment having buses.
  - (e) Use medium-voltage cable reactance's based on typical dimensions of shielded cables with 133-percent insulation levels, unless otherwise indicated.
- 7) Motors:
  - (a) Each motor shall be individually modeled:
    - (i) Grouping of motors for fault contribution current is not acceptable.
  - (b) Motors with variable frequency drives may be assumed to have no contribution to fault current.
- 8) Use the equipment, bus, and device designations as indicated on the Drawings for all studies.

### NOTE TO THE CONSULTANT:

1. Use the following if the short-circuit duty is from the 480-volt side of a utility transformer.

- b) Short-circuit fault analysis study additional requirements:
  - 1) The short-circuit fault analysis shall be performed and submitted in 2 phases:
    - (a) Initial short-circuit fault analysis:
      - (i) Based on the Contract Documents and Electric Utility information.
      - (ii) The initial short-circuit fault analysis study shall indicate the estimated available short-circuit current at the line side terminals of each piece of equipment covered by the scope of the study.
      - (iii) Provide a list of assumptions used in the initial study.
    - (b) Final short-circuit fault analysis:
    - (c) The final short-circuit fault analysis shall modify the initial analysis as follows:
      - (i) Utilize the actual equipment provided on the project.
      - (ii) Utilize conductor lengths based on installation.

#### NOTE TO THE CONSULTANT:

- 1. Include this with systems that have medium voltage distribution.
  - 2) Evaluate bus bracing, short-circuit ratings, fuse interrupting capacity and circuit-breaker-adjusted interrupting capacities against the fault currents, and calculate X/R values:
    - (a) Identify and document all devices and equipment as either inadequate or acceptable.
  - 3) Calculate line-to-ground and double line-to-ground momentary short-circuit values at all buses having ground-fault devices.
  - 4) Provide calculation methods, assumptions, one-line diagrams, and source impedance data, including utility X/R ratios, typical values, recommendations, and areas of concern.
  - c) Protective device coordination study additional requirements:
    - 1) Furnish protective device settings for all functions indicated on the Drawings including, but not limited to:
      - (a) Current.
      - (b) Voltage:
        - (i) Provide settings for all voltage relays based upon actual utility and generator tolerances and specifications.
      - (c) Frequency:
        - (i) Provide settings for all frequency relays based upon actual utility and generator tolerances and specifications.
      - (d) Negative sequence.
      - (e) Reverse power.
      - (f) Machine protection functions:
        - (i) Provide settings for all motor and generator protective relays based on the manufacturer's recommended protection requirements.

- 2) Provide log-log form time-current curves (TCCs) graphically indicating the coordination proposed for the system:
  - (a) Include with each TCC a complete title and one-line diagram with legend identifying the specific portion of the system covered by the particular TCC:
    - (i) Typical TCCs for identical portions of the system, such as motor circuits, are acceptable as allowed by the Engineer.
  - (b) Include a detailed description of each protective device identifying its type, function, manufacturer, and time-current characteristics:
    - (i) These details can be included on the TCC.
  - (c) Include a detailed description of each protective device tap, time dial, pickup, instantaneous, and time delay settings:
    - (i) These details can be included on the TCC.
- 3) TCCs shall include all equipment in the power distribution system where required to demonstrate coordination. Include utility relay and fuse characteristics, medium-voltage equipment protective relay and fuse characteristics, low-voltage equipment circuit breaker trip device characteristics, transformer characteristics, motor and generator characteristics, and characteristics of other system load protective devices:
  - (a) Include all devices down to the largest branch circuit and largest feeder circuit breaker in each motor control center, main breaker in branch panelboards, and fused disconnect switches.
  - (b) Provide ground fault TCCs with all adjustable settings for ground fault protective devices.
  - (c) Include manufacturing tolerances and damage bands in plotted fuse and circuit breaker characteristics.
  - (d) On the TCCs, show transformer full load currents, transformer magnetizing inrush, ANSI transformer withstand parameters, and transformer damage curves.
  - (e) Cable damage curves.
  - (f) Terminate device characteristic curves at a point reflecting the maximum symmetrical or asymmetrical fault current to which the device is exposed based on the short-circuit fault analysis study.
  - (g) Coordinate time interval medium-voltage relay characteristics with upstream and downstream devices to avoid nuisance tripping.
- 4) Site generation: When site generation (including cogeneration, standby, and emergency generators) is part of the electrical system, include phase and ground coordination of the generator protective devices:
  - (a) Show the generator decrement curve and damage curve along with the operating characteristic of the protective devices.
- 5) Suggest modifications or additions to equipment rating or settings in a tabulated form.
- d) Arc-flash hazard study additional requirements:

- 1) Include the calculated arc-flash boundary and incident energy (calories/square centimeter) at each piece of equipment in the distribution system:
  - (a) Perform study with 15 percent arcing fault variation as defined by IEEE 1584.
  - (b) Perform arc-flash calculations at minimum and maximum utility [and generator] fault contributions.
  - (c) Perform arc-flash calculations for both the line side and load side of the switchgear, switchboard, motor control center, and panelboard main breakers.
  - (d) Perform arc-flash calculations for all short-circuit scenarios with all motors on for 3 to 5 cycles and with all motors off.
  - (e) Protective device clearing time shall be limited to 2 seconds, maximum.
- 2) Provide executive summary of the study results:
  - (a) Provide summary based upon worst case results.
- 3) Provide a detailed written discussion and explanation of the tabulated outputs:
  - (a) Include all scenarios.
- 4) Provide alternative device settings to allow the Owner to select the desired functionality of the system:
  - (a) Minimize the arc-flash energy by selective trip and time settings for equipment maintenance purposes.
  - (b) Identify the arc-flash energy based upon the criteria of maintaining coordination and selectivity of the protective devices.
- e) Electrical system study meetings:
  - 1) The individual conducting the short-circuit fault analysis, protective device coordination, and the arc-flash hazard studies shall meet with the Owner and Engineer 3 times.
  - 2) The purpose of the 3 meetings is as follows:
    - (a) Initial meeting:
      - (i) Meet with the Owner and Engineer to discuss the scope of the studies.
      - (ii) Discuss the Owner's operational requirements for both normal operation and maintenance.
    - (b) Preliminary results meeting:
      - (i) This meeting will be held after the studies have been completed, reviewed, and accepted by the Engineer.
      - (ii) The purpose of this meeting is to inform the Owner of the results of the study and impacts on normal operation and maintenance including:
        - a. Protective device coordination problems and recommended solutions.
        - b. Explanation of the arc-flash hazard study results and its potential impact on operations.

- c. Recommendations for reduction of arc-flash category levels including reduction of protective device settings or changes in operational practices.
- (c) Final meeting:
  - (i) Discuss changes to the studies based on the previous meeting.
  - (ii) Discuss with the Owner how changes to the electrical system may change the arc-flash hazard category.
  - (iii) Deliver the final electrical system studies report.
- 3) The meetings will be at the Owner's facility:
  - (a) Provide a minimum of 3-week-notice to the Owner and Engineer in advance of the projected meeting date.
  - (b) Submit a draft of the meeting agenda when each meeting is requested.
- 4) Meeting materials:
  - (a) Prepare and provide the following materials:
    - (i) Meeting agenda. Include, at a minimum, the scope of the meeting, estimated time length for the meeting, and meeting goals.
    - (ii) 6 copies of the project one-line diagrams for the initial meeting.
    - (iii) 6 copies of the submitted studies.
- f) By virtue of the fact that this is a professional study, the Owner reserves the right to modify the requirements of the study to comply with its operational requirements. The protective device coordination study and the arc-flash hazard study shall be modified based on the results of the meetings with the Owner.

# 1100-1.1.5 **Submittals**

- a) Initial Meeting prepare the meeting agenda and minutes in electronic format and distribute the agenda and minutes to RPU within 48 hours prior to the meeting and after the meeting accordingly.
- b) Initial studies and reports:
  - 1) Include the following in the initial short-circuit current report:
    - (a) List of all devices included in the studies.
    - (b) A description of all operating scenarios.
    - (c) Form and format of arc-flash labels.
- c) Final studies and reports:
  - 1) Format and quantity:
    - (a) Provide 6 bound copies of all final reports.
    - (b) Provide 3 complete sets of electronic files on CD or DVD media, including the electrical system model(s), configuration files, custom libraries, and any other files used to perform the studies and produce the reports. Also provide an electronic version of the bound reports in PDF format.
  - 2) Include the sections below in the final report:
    - (a) Copies of correspondence and data obtained from the electric utility company.

- (b) Letter certifying the inspection and verification of existing equipment.
- (c) One-line diagrams:
  - (i) The following information shall be included at a minimum:
    - a. Motor horsepower.
    - b. Transformer data:
      - 1. kVA.
      - 2. Configuration.
    - c. Cable data:
      - 1. Insulation.
      - 2. Size.
      - 3. Length.
  - (ii) One-line diagrams shall be fully legible at 11-inch by 17-inch size.
- (d) Include in the short-circuit fault analysis study:
  - (i) Descriptions, purpose, basis, assumptions, recommendations, and scope of the study.
  - (ii) Normal system connections and those that result in maximum fault conditions.
  - (iii) Tabulation of circuit breaker, fuse, and other protective device ratings compared to maximum calculated short-circuit duties.
  - (iv) Fault current calculations for the cases run including a definition of terms and guide for interpretation of computer software printouts.
- (e) Protective device coordination study shall include:
  - (i) Descriptions, purpose, basis, assumptions, recommendations, and scope of the study.
  - (ii) List all requirements used in the selection and setting criteria for any protective devices.
  - (iii) Manufacturer's time-current curves for circuit breakers, fuses, motor circuit protectors, and other protective devices for all new equipment.
  - (iv) TCCs graphically indicating the coordination proposed for the system on log-log graphs. At least 3 of the copies shall be in color.
  - (v) Tabulation of relay, fuse, circuit breaker, and other protective devices in graphical form with a one-line diagram to display area coordination.
  - (vi) Where coordination could not be achieved, an explanation shall be included in the report to support the statement along with recommendations to improve coordination. Recommended equipment modifications or settings shall be in a tabulated form.
- (f) Include in the arc-flash hazard study:
  - (i) Descriptions, purpose, basis, assumptions, recommendations, and scope of the study.
  - (ii) Normal system connections and those that result in maximum arc flash conditions.
  - (iii) Arc-flash raw data, calculations, and assumptions.
  - (iv) Arc-flash label data:
    - a. Identifying the content of each label.

b. Identifying the location of each label.

# d) Certification:

- 1) Submit written certification, sealed and signed by the professional engineer conducting the study, equipment supplier, and electrical subcontractor stating that the data used in the study is correct.
- e) Submit the credentials of the individual(s) performing the study and the individual in responsible charge of the study.
- f) The Engineer will review all studies and reports. After review, the Engineer will make recommendations and/or require changes to be made to the short-circuit fault analysis, protective device coordination, or arc-flash hazard studies. These changes shall be provided as part of the scope of work.
- g) Submit course outline for Owner's training.

# 1100-1.1.6 Quality Assurance

- a) Identify the individual(s) responsible for the development and implementation of the quality assurance and quality control plan to ensure the validity of the data and delivery of accurate and concise labels and reports.
- b) Qualifications of the entity responsible for electrical system studies:
  - 1) The studies shall be performed, stamped, and signed by a professional engineer registered in the state where the project is located.
  - 2) A minimum of 5 years of experience in power system analysis is required for the individual in responsible charge of the studies.
  - 3) The short-circuit fault analysis, protective device coordination, and arc-flash hazard studies shall be performed with the aid of a digital computer program:
    - (a) Point-to-point calculations are not acceptable.
- c) The study shall be performed under the direct supervision of a qualified individual of the firm.

# **1100-1.1.7** Sequencing

- a) Submit the initial short-circuit fault analysis study.
- b) Initial electrical system study meeting.
- c) Submit the preliminary short-circuit fault analysis, protective device coordination, and arc-flash hazard studies.
- d) Second electrical system study meeting for preliminary results.
- e) Final arc-flash meeting and final short-circuit fault analysis, protective device coordination, and arc-flash hazard studies.
- f) Label equipment with approved arc-flash labels.
- g) Owner's training.

#### 1100-1.2 **Products**

#### NOTE TO THE CONSULTANT:

1. The Consultant should coordinate with the Owner in specifying the software package that is consistent with the Owner's standard or previous database.

#### 1100-1.2.1 Manufacturers

- a) Electrical system study software: One of the following:
  - 1) Operation Technology, Inc., ETAP.
  - 2) [SKM Systems Analysis, Powertools.]
  - 3) [Power Analytics Corp., Paladin DesignBase.]
  - 4) [No equal]

# 1100-1.2.2 **Components**

- a) Arc-flash hazard labels:
  - 1) Dimensions:
    - (a) Minimum 5 inches by 3.5 inches.
  - 2) Materials:
    - (a) Polyester with polyvinyl polymer over-laminate.
    - (b) Self-adhesive.
    - (c) Resistant to:
      - (i) UV.
      - (ii) Chemicals and common cleaning solvents.
      - (iii) Scuffing.
      - (iv) Wide temperature changes.
  - 3) Contents:
    - (a) Short-circuit bus identification.
    - (b) Calculated incident energy (calories/square centimeter) range:
      - (i) Based on worst-case study results.
    - (c) Arc-flash protection boundary.
    - (d) Shock hazard boundary:
      - (i) The Contractor may provide separate labels for indication of the shock hazard boundary.
    - (e) Description of the combined level of personnel protective equipment.
  - 4) Color scheme:
    - (a) For locations above 40 calories/square centimeter:
      - (i) White label with red "DANGER" strip across the top.
      - (ii) Black lettering.
    - (b) For locations below 40 calories/square centimeter:
      - (i) White label with orange "WARNING" strip across the top.
      - (ii) Black lettering.

#### 1100-1.3 **Execution**

# **1100-1.3.1** Installation

- a) Deliver a draft version of the labels to RPU for review and approval.
- b) After review and acceptance of the arc-flash hazard study by the Engineer, install all arc-flash hazard labels:
  - 1) Install labels at all locations required by NFPA, ANSI, or IEEE standards.
  - 2) At a minimum, install labels in the following locations:
    - (a) The front of each main or incoming service compartment.
    - (b) The front of each low-voltage switchgear section.
    - (c) The front of each medium-voltage circuit breaker door.
    - (d) The front of each accessible auxiliary or conductor compartment.
    - (e) Each accessible rear or side vertical section.
    - (f) Each motor control center vertical section.
    - (g) Each panelboard covered by the study.
    - (h) Each control panel, individual starter or VFD, or other equipment covered by the scope of the study.
  - 3) Install labels prior to equipment energization.
- c) After review and acceptance of the arc-flash hazard study and protective device coordination study by the Engineer, adjust protective device settings per final study prior to equipment energization.
  - 1) Devices that require power for configuration may be set during energization, but before any subfed loads are energized.
  - 2) Ensure that settings for upstream equipment are set prior to energizing downstream devices.

# 1100-1.3.2 Field Quality Control

- a) Coordinate the installation of the labels with RPU staff.
- b) The individual performing the arc-flash hazard study shall direct the installation of the arc-flash hazard labels:
  - 1) Remove and replace any improperly applied labels.
  - 2) Repair the equipment finish if damaged by the removal of any label.
  - 3) Install labels level or plumb across the entire dimension of the label.

# EXHIBIT "B" COMPENSATION

# **EXHIBIT "B"**

# **COMPENSATION**

# **PROJECT COST ESTIMATE**

Task No.	Cost Category	Estimated Cost
1	Complete electrical study for one (1) water well facility	\$8,500
2	Complete electrical study for one (1) booster pump station facility	\$8,500

The pricing above includes all costs associated with this proposal, based on an estimated 12 to 15 facilities per year, or as many facilities as the allocated budget allows.

# EXHIBIT "C" KEY PERSONNEL

# EXHIBIT "C"

# **KEY PERSONNEL**

