

PROFESSIONAL CONSULTANT SERVICES AGREEMENT

ERAMOSA INTERNATIONAL, INC.

[Owner's Representative Services for the Water SCADA
Technology Upgrade Project RFP No. 2109]

THIS PROFESSIONAL CONSULTANT SERVICES AGREEMENT ("Agreement") is made and entered into this _____ day of _____, 2022 ("Effective Date"), by and between the CITY OF RIVERSIDE, a California charter city and municipal corporation ("City"), and ERAMOSA INTERNATIONAL, INC., a Delaware 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 Owner's Representative Services for the Water SCADA Technology Upgrade Project RFP No. 2109 ("Project").

2. **Term.** This Agreement shall be effective on the date first written above and shall remain in effect until December 31, 2028, 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 Million Three Hundred Three Thousand Two Hundred Eighty-Six Dollars (\$1,303,286.) 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 – Water Division
City of Riverside
Attn: Mera Chaney
3900 Main Street
Riverside, CA 92522

To Consultant

Eramosa International, Inc.
Attn: Jeff Burton
9393 W. 110th Street, Suite 500 PMB #5605
Overland Park, Kansas 66210

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. Consultant will reimburse City for reasonable defense costs for claims arising out of Consultant’s professional negligence based on the percentage of Consultant’s liability. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant’s Services under this Agreement.

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

liabilities or losses of any kind or nature whatsoever to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services and whether or not caused in part by the negligence of an Indemnified Party.

11.4 Defense Obligation For Other Than Design Professional Liability.

Consultant agrees, at its cost and expense, to promptly defend the City, and the City's employees, officers, managers, agents and council members (collectively the "Parties to be Defended") from and against any and all claims, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings which arise out of, or relate to, or are in any way connected with: 1) the Services, work, activities, operations, or duties of the Consultant, or of anyone employed by or working under the Consultant, or 2) any breach of the Agreement by the Consultant. This duty to defend shall apply whether or not such claims, allegations, lawsuits or proceedings have merit or are meritless, or which involve claims or allegations that any or all of the Parties to be Defended were actively, passively, or concurrently negligent, or which otherwise assert that the Parties to be Defended are responsible, in whole or in part, for any loss, damage or injury. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel acceptable to City. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant's Services under this Agreement.

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

12. Insurance.

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

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

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

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

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

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

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

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

12.3.2 Consultant's automobile liability policy shall cover both bodily injury and property damage in an amount not less than \$1,000,000 per occurrence and an aggregate limit of not less than \$1,000,000. All of Consultant's automobile and/or commercial general liability

insurance policies shall cover all vehicles used in connection with Consultant's performance of this Agreement, which vehicles shall include, but are not limited to, Consultant owned vehicles, Consultant leased vehicles, Consultant's employee vehicles, non-Consultant owned vehicles and hired vehicles.

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

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

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

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

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

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

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

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

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

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

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

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

19. **Copyrights.** Consultant agrees that any work prepared for City which is eligible for copyright protection in the United States or elsewhere shall be a work made for hire. If any such work is deemed for any reason not to be a work made for hire, Consultant assigns all right, title and interest in the copyright in such work, and all extensions and renewals thereof, to City, and agrees to provide all assistance reasonably requested by City in the establishment, preservation and enforcement of its copyright in such work, such assistance to be provided at City's expense but without any additional compensation to Consultant. Consultant agrees to waive all moral rights relating to the work developed or produced, including without limitation any and all rights of identification of authorship and any and all rights of approval, restriction or limitation on use or subsequent modifications.

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

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

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

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

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

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

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

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

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

25.2.2 City decides to abandon or postpone the Project.

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

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

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

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

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

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

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

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

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

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

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

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

Exhibit "A" - Scope of Services

Exhibit "B" - Compensation

Exhibit "C" - Key Personnel

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

CITY OF RIVERSIDE, a California
charter city and municipal corporation

ERAMOSA INTERNATIONAL, INC., a
Delaware corporation authorized to do business
in California

By: _____
City Manager

By: Jeff Burton
Jeff Burton
[Printed Name]
Vice President
[Title]

Attest: _____
City Clerk

Certified as to Availability of Funds:

By: [Signature]
Chief Financial Officer

By: D. Nick Hallas
D. Nick Hallas
[Printed Name]
President
[Title]

Approved as to Form:

By: Ruthann M. Salera for
Ruthann M. Salera
Deputy City Attorney

EXHIBIT "A"

SCOPE OF SERVICES

RFP No. 2109 – Owner’s Representative Professional Consultant Services
for Water SCADA Technology Upgrade Project

EXHIBIT B
Scope of Services

This section describes the expectations for all the tasks listed in the Proposal Price Sheet (Exhibit H).

The Consultant agrees to furnish general professional engineering and technical consultant services for the work related to the WATER SCADA TECHNOLOGY UPGRADE PROJECT as requested by the City’s Project Manager. The services that the Consultant agrees to furnish as part of this Scope of Services include the following tasks:

- 1. Project Management.** The Consultant will coordinate communications between various parties including its own work force, City staff and the Design-Build company. Throughout this project the Consultant will advise the City’s Project Manager and assist with overseeing the Design and Build Project; co-facilitate kick-off meeting, status meetings and City leadership meetings as needed; administrative and contracting issues; input into the project status updates and meeting reporting; identify issues and risks; schedule monitoring and updates. Associated meetings will be via Microsoft Teams with in-person meetings scheduled periodically with the Lead/Principal Consultant.

In addition, the Consultant will submit monthly invoices to the city for timely payments in accordance with the City requirements and provide the necessary support documentation.

- 2. Support Data Collection and System Requirements Elicitation.** Following contract award to the Design-Build team, the Consultant will advise City representatives and oversee the data collection and system requirements elicitation project phase. The Consultant will ensure data is managed appropriately by the Design-Build team; attend all requirements elicitation meetings; review related documentation for accuracy. Associated meetings will be via Microsoft Teams with in-person meetings scheduled periodically when needed with the appropriate Consultant’s team member(s).
- 3. Review of Design Plans.** The Consultant will advise City representatives and assist with overseeing the Design for the Water SCADA Technology System and associated

components. The Consultant will represent the City in the Design-Build phase to review design packages of the Design-Build team to ensure that the Project is constructed in accordance with the plans and specifications and to further protect the City's interest in the final deliverable. Associated meetings will be via Microsoft Teams with in-person meetings scheduled periodically when needed with the appropriate Consultant's team member(s).

4. **Project Assistance During Construction.** The Consultant will advise City representatives and assist with overseeing the Procurement and delivery of all the necessary equipment and material for this project. The Consultant will participate during the construction phase to respond to information requests, evaluate proposed design changes, review pay requests, attend progress meetings, review all Design-Build Business Requirements documentation, monitor as-built drawing status, conduct site visits, and pre/post inspections as authorized by the City Project Manager. In-person pre/post inspections should be conducted by a local staff team member to minimize project cost. Associated meetings will be co-facilitated as needed via Microsoft Teams, with in-person meetings scheduled periodically with the appropriate Consultant's team member(s).
5. **Project Assistance During Testing, Tuning and Commissioning.** The Consultant will advise City representatives and assist with overseeing the Construction, Testing, Tuning, and Commissioning for the project's installations. The Consultant will provide necessary resources to support the on-schedule completion of the project. The Consultant shall coordinate with the City, construction teams, equipment suppliers, utilities, software application, and regulatory agencies to provide technical assistance during the system startup and performance testing phase as authorized by the City Project Manager. In-person pre/post inspections should be conducted by a local staff team member to minimize project cost. Associated meetings will be co-facilitated as needed via Microsoft Teams, with in-person meetings scheduled periodically with the appropriate Consultant's team member(s).
6. **Project Closeout.** The Consultant will conduct a Cyber Audit for the entire Water SCADA system before project closeout. A report of audit findings and resolutions will be prepared for the City's review and discussion. The Consultant will advise City representatives and assist with overseeing the construction/project closeout activities with construction teams, equipment suppliers, and regulatory agencies. The Consultant will advise on software licensing transferred to the City at the close of the

project. A final Scope of Work and Business Requirements review session to ensure the Design-Build team completed all defined tasks. Associated meetings will be co-facilitated as needed via Microsoft Teams, with in-person meetings scheduled with the appropriate Consultant's team member(s).

7. **Optional Work.** At the request of the City, the Consultant may provide additional in-person field inspections and/or site visits during the project's life cycle as authorized by the Project Manager. A local staff team member should conduct visits to minimize project cost.

The Consultant Team may also provide additional research on best practices for Water SCADA Technology integrations to advise the City and Design-Build teams appropriately as authorized by the Project Manager. Additional research will not exhaust more than 40 hours.

1.0 COVER LETTER

Dear Mr. Cortez:

Eramosa International Inc. is pleased to respond to the City of Riverside Public Utilities Department – Water Division's (City) Request for Proposals for services of a qualified company to provide Owner's Representative Professional Consultant Services for the Water SCADA Technology Upgrade Design-Build Project, RFP No. 2109.

Eramosa has been providing professional SCADA assessment, planning, design, construction, and integration services to municipalities in the water and wastewater industry for over 20 years. We have strengthened our team by partnering with AESI, an industry-leading provider of cyber security consulting and engineering services since 1984.

Our team of SCADA experts are proven leaders, facilitators, contributors, and SCADA focused people, who understand how to be an effective part of a team. Unlike our competition, we have unique expertise in implementing, programming, and integrating SCADA systems in addition to our deep engineering experience. This provides additional resources with experience in areas where the "rubber meets the road" which can be focused on specific tasks and activities to avoid known problems or issues. We are confident the strength of our team is demonstrated in the following sections, and this strength will be the best, most cost-effective solution to the City's needs.

We have reviewed and understand all elements of the RFP and the two (2) addenda, and believe that our submission is complete, accurate and addresses the required elements of this project. We also confirm that Eramosa has sufficient resources, equipment, and time to support this project, and are willing to abide by the terms and conditions of the RFP and Sample Agreement. Jeff Burton will be our Project Manager and am the single point of contact for the RFP review process. We would be pleased to discuss any aspect of our submittal with you and look forward to working with the City on this important project.

Yours truly,
ERAMOSA INTERNATIONAL INC.

Jeff Burton, PE
Vice President/Project Manager
jeff.burton@eramosa.com
(913) 308-2133 (Direct)

2.0 STATEMENT OF UNDERSTANDING AND APPROACH

2.1 Overview

Through our previous experience with the City and our review of the RFP documents, the RPU is set to embark upon a significant upgrade to their Water and Energy management SCADA system. The project is anticipated to be a four (4) year journey whereby a Design-Build team will be responsible for the overall development of standards, the design, construction, and implementation including programming for the new system consisting of 124 facilities. The intent of this RFP is to solicit the services of a consultant to provide overview, coordination, and support as a representative of the City through an Owner's Engineer role. The Supervisory Control and Data Acquisition (SCADA) system architecture will be built around the Inductive Automation Ignition SCADA Platform and Schneider Electric's Modicon Programmable Logic Controller (PLC) hardware platform. We are very familiar with both platforms from both a design and integration perspective and intend to deploy staff with hands-on experience to support the OE role requested.

The City requires the services of a consultant to assist with overseeing the design-build process, coordination of the data collection, review of submissions for compliance to standards, and assistance during construction with inspections and witness testing. Addenda 1 and 2 clarified the scope further such that proponents are to define tasks and durations based upon the requirements of the project and previous experience. Through our long-standing history of design, integration, and management of construction projects we have identified an approach that we feel is cost effective yet provides significant value to the City through leveraging the skillsets of our professionals. Key elements of our overall approach are fundamentally rooted in the following:

- We specialize in the water/wastewater and energy sector
- We focus on providing instrumentation and controls design and standards development
- We have a strong system integration background with hands on development and deployment in mission critical SCADA applications
- We are well versed in the requirements of managing contractors through the specific requirements of the municipal sector including change over planning, documentation, and close out processes

We have identified these important elements and services we offer because they are foundational for the success of the design-build contractor and how we defined our approach to the required tasks. We have completed large scale projects in the past successfully, thus we know what is necessary for defining success, engaging multiple stakeholders, and monitoring progress of others to complete large scale SCADA upgrades.

2.2 Project Management

Strong leadership is essential to the success of any project. Eramosa has assigned a proven leader to show that the City has the support needed for the duration of this 4-year project and beyond. Our Project Manager will work in tandem with the City and the Design-Build (D-B) contractor to drive for continuous, coordinated, and documented communication. He will be fully available to the City's Project Manager,

participate in and provide input to status update meetings and reports, help identify issues and risks, and monitor schedule progress. Monthly invoices with appropriate backup will also be submitted to the City in accordance with their requirements.

Our proposed management plan includes a single day, in-person Kickoff Meeting at the City's facilities, attended by our Project Manager and Engineering Manager. In advance of this meeting, we will review the D-B's Project Execution Plan and Schedule of Submittals to ensure all parties' expectations are aligned. During the meeting, we anticipate the discussing the following, at a minimum:

- Project scope and D-B Project Execution Plan
- Overall schedule
- Roles and responsibilities
- Communication protocols
- Data and document transmittal, logging, and storage procedures

We have proposed monthly meetings during project execution to review the D-B Status Report, which will include an updated schedule and completed, on-going, and upcoming activities. These meetings are expected to be conducted via Microsoft Teams. Our proposal also includes the Eramosa Project Manager's attendance at quarterly, in-person meetings at the City's facilities.

As part of this process, we propose to develop a communication plan that identifies key stakeholders at the City, their role, and what they need to be kept informed of. This will be expanded further to identify when stakeholders require action. We will document the communication plan using a RACI chart such that key stakeholders know when they are Responsible, Accountable, Consulted, or Informed on key decisions or deliverables. We will also make use of our decision tracking log to track important decisions as well as track issues. This document is built into our in-house project management toolset.

2.3 Data Collection and System Requirements Elicitation Support

Eramosa will help coordinate and oversee the data collection and system requirements elicitation phase, advising the City of progress and issues. We will track the documentation produced and submitted by the D-B (which is expected to include P&IDs, Wiring Diagrams/Loop Drawings, Schematics, Cabinet Layouts, I/O and Equipment Lists, Logic and Graphics), reviewing the redlines and other information to verify that the effort is comprehensive and that correct protocols are being followed. To confirm the City's expectations are understood and aligned with the D-B's process, our Engineering Manager will participate in the site activities for the first week of this phase. We will then participate in weekly status update and coordination meetings with the D-B via Teams. They will then return to Riverside for the final week of site activities to meet with the D-B and verify all sites have been completed, and any outstanding punchlist or action items have been resolved.

We have proposed this approach with a focus on reducing costs to the City. An alternative approach would be for Eramosa to actively participate in all site activities, overseeing the D-B for the entire phase of this project. We can fully support this approach and will revise our proposal upon request.

2.4 Design Plan Review

Eramosa has a long history planning and designing SCADA system upgrades. We have used that experience to develop a bottoms-up estimate of the level of effort to assist the City with developing the necessary standards and templates, then reviewing the various deliverables produced by the D-B contractor to confirm the design conforms to these standards.

This phase will begin with multiple workshops between the City, the D-B, and Eramosa to define the requirements, content, and formats for the deliverables. We have proposed 3 professionals to virtually attend 12, 4-hour workshops via Teams, with the attendees selected based on the specific subject matter of each. This will allow our expertise in not only designing but integrating SCADA systems, and the best practices knowledge that results, to be best leveraged. The workshops are expected to cover Process Control Narratives (PCNs), Point Tagging, Logic, Graphics, Standard Operating Procedures, and Cutover Plans and Other Documentation, but we will work with the City and the D-B according to their selected execution strategy. After the workshop is completed, Eramosa will review the standards and templates produced and provide comments. We have included a bank of 120 hours for this review in our proposal.



The D-B will then implement the standards and replicate the templates during their detailed design to produce the various construction and programming documents. We have used the site type breakdowns and I/O quantities from Exhibit K of the RFP to estimate the quantity of documents that will be produced, then estimated the time that could be required for review on a per document basis, which factors in two (2) revisions (Draft and Final). Table 1 below summarizes the results, broken down by deliverable for estimated quantities and effort at this stage.

Table 1 – Design Deliverables Level of Effort Estimate

Type	Quantity	Review Time (min/doc)	Total Review Time (hrs)
P&ID	120	30	60
Wiring/Loop Diagram	256	30	128
Schematic Diagram	273	30	140
Panel Layout Drawing	37	45	28
Demolition Sketch	120	15	30
PCN & I/O List	120	180	360
Logic Package	174	210	610

Type	Quantity	Review Time (min/doc)	Total Review Time (hrs)
HMI Graphics Package	422	45	316
TOTAL	1522		1672

In addition to the above deliverables, Eramosa will assist the City with reviewing the Network Design and Configuration, Tag Database, Historian Data Migration, Standard Operating Procedures, and site-specific Cutover Plans, as well as support Control Panel Factory Acceptance Testing (FAT) and Software Factory Acceptance Testing (SWAT). While the ultimate design and construction is the responsibility of the D-B, our reviews will focus on standards adherence and where we can add value to support technical requirements.

The foundational network is already in place and the communication backbone of redundant fiber and radio networks will be completed prior to the start of construction for this project. Eramosa will support detailed design of the new SCADA system network by drawing from a bank of 120 hours of internal staff and 80 hours from AESI staff. We expect there will be a need to review the deliverables from a site of each type, with some sites requiring more effort and some requiring less. Once these "typicals" have been completed, they can be used for replication with little variation and reduced risk.

Eramosa believes point-by-point checking of the Tag Database (25,000 points) and existing Historian Database (10,000 points) should be left to the D-B and is not a prudent use of the City's budget. We will, however, support this effort by performing a spot-check of both sets of data, drawing from the bank of 280 hours included in this proposal for that purpose. Initial findings and results will allow the City to better determine if this process should be continued. Depending on the selected tagging scheme and implementation plan of the D-B, it may be possible to automate a check of the entire data set through a custom software or script. Eramosa has experience in performing this type of software development, but it has not been included in this proposal. A tangible benefit of adding in this scope of the project would be a long-term tool that the City can use in support of the system to perform tag name compliance checks.

The quantity of Standard Operating Procedures being developed by the D-B is not entirely known, but Eramosa has estimated the need to review and comment on up to 10 such documents and have included 40 hours for this task in our proposal.

Site-specific Cutover Plans will also vary by site type but should also have a relatively consistent content for all similar sites. We have included 108 hours to review and comment on 9 Cutover Plans, representing a typical approach for typical sites, based on Exhibit K.

Eramosa has assumed the City personnel will attend all FAT's and SWAT's. We have proposed our local engineer to attend the Control Panel FAT for 1 of each site type based on Exhibit K and have included 72 hours for this activity. The remainder of the panels are expected to have very similar layouts and hardware, and Eramosa's presence was assumed to be redundant.

In the same fashion, we are expecting the SWAT's to be performed virtually over Teams and within the Development Server environment. Eramosa will participate in 9 SWAT's for the similar site types, plus all Miscellaneous sites, for a total of 22 SWAT's. We have included a total of 264 hours for attendance of these tests by our engineers and subject matter experts via Teams and/or remote access to the system.

2.5 Construction Support

Eramosa will be fully engaged during the Construction phase of this project, assisting the City to ensure timely completion. Some of the activities Eramosa will perform include:

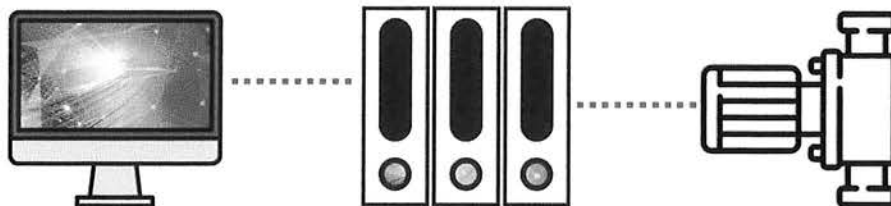
- Track and coordinate responses to Requests for Information (RFIs) and Design Change Requests (DCRs)
- Review pay requests relative to progress. This will be tracked against design stage submission milestones, FATS and SWATs, deliveries to site, and commissioning in lieu of full-time site inspection visits
- Review D-B Business Requirements documentation
- Monitor as-built drawing status

We have also included virtual attendance at weekly Progress Meetings with the D-B via Teams, estimated to require 1 hour per week for 60 weeks.

Pre-construction and post-construction site inspections will be performed by our local engineer. During the pre-construction visits, they will review the redlines from the data collection effort versus current conditions to verify their accuracy and review the construction and cutover plan with the D-B to confirm it aligns with the City's expectations. The post-construction inspections will consist of reviewing as-built status, any open punchlist items and their prosed resolution, and confirmation that the site is ready to turnover to commissioning activities. These site visits will have varying levels of effort required, depending on size and complexity, but we believe the overall effort will be covered by an average of 4 hours per visit per site. We have included 992 hours in our proposal for this on-site effort.

2.6 Testing, Tuning and Commissioning Support

Following turnover of the site from construction to commissioning, Eramosa will continue supporting the timely completion of the project by coordinating



with all parties and witnessing and participating in the Site Acceptance Tests (SATs). There will again be varying levels of effort required to demonstrate the site is ready for transition to full operation by the City with the new SCADA system. Table 2 below provides a breakdown of the estimated effort by site type Eramosa's local engineer will provide.

Table 2 – SAT Level of Effort Estimate

Site Type	Quantity	SAT Duration (hrs)	Total SAT Time (hrs)
Reservoir	7	8	56
Reservoir & Booster	11	16	176
Dead-End Booster	11	16	176
Booster	13	16	208
Chlorine	5	8	40
Gas Well Site	9	8	72
Electric Well Site	45	8	360
Miscellaneous Site	15	6	90
Treatment Plant	8	40	320
TOTAL	124		1498

We have assumed the 60-week duration cited in the Construction phase above will be inclusive of the Testing, Tuning, and Commissioning phase, therefore we have not included any additional hours for weekly progress meetings.

2.7 Project Closeout

Following turnover of all sites to Operations but prior to complete acceptance by the City, Eramosa will oversee and participate in a cyber audit of the entire Water SCADA system by AESI.

AESI will evaluate the security of the newly implemented SCADA system via the following activities:

1. Security Control Review – assessment of the implemented security controls against industry standards and best practices such as NIST CSF, AWWA, IEC 62443, etc.
2. Head End Vulnerability Assessment / Penetration Test – use a combination of automated tools and manual testing to evaluate the security configuration of the SCADA head end and attempt to access it from the external networks (e.g., IT)
3. Vulnerability Assessment / Penetration Test of Sample Remote Stations - use a combination of automated tools and manual testing to evaluate the security configuration of a sample of five remote stations which provide a representative sample of field devices.
4. Comprehensive assessment report which will combine the outcome of the three tests and provide a list of identified vulnerabilities organized by the risk they pose to the City along with both tactical recommendations for correcting the current vulnerabilities and strategic recommendations for minimizing the likelihood of recurrence.

AESI anticipates the project will take approximately seven weeks. Most of the work will be completed off-site, except for the on-site vulnerability testing. AESI will work with the City to develop a schedule that will meet their requirements and AESI's resource availability. From our experience, the onsite penetration testing can result in adverse conditions and behaviour of the SCADA system. It is highly recommended for the City to have a SCADA technician available and operations present onsite to respond to the facility for control and monitoring locally, up to and including restoration of the SCADA system upon completion. Our team has worked side by side with AESI in the past to complete these assignments and while not factored into our efforts, we could provide the SCADA system integrator expertise to support if required.

Based on a typical schedule for a similar sized project, the anticipated schedule is outlined in Table 3 below:

Table 3 – Cyber Audit Schedule

Week #	Duration (Days)	Activity
1	1	Pre-On-site activities, Kick-off Meeting
2	2	Security controls review
3	5	On-site penetration testing and vulnerability assessment
4-5	10	Draft Report
6	5	Report Issued to ShareFile for Review and Comment
7	5	Final Report

Eramosa will advise the City during project closeout and assist with overseeing the activities of the D-B, equipment and software suppliers, and regulatory agencies. We will review and confirm all as-builts and other documents have been submitted and stored in the correct location. We will also support confirmation that all licenses and warranties have been transferred to the City.

We have proposed a two-day Project Closeout Meeting be held at the City's facilities, attended by our Project Manager and Engineering Manager in person. This meeting will review the Scope of Work and Business Requirements to verify all D-B activities and deliverables have been provided. This will complete the project, pending a City request for additional support as indicated in the RFP.

2.8 Optional Work

Eramosa has included the optional work of additional site visits and best practices research in our proposal. The additional, in-person site visits consist of twenty (20), single-day trips by our local engineer. The best practices research includes the prescribed 40 hours of effort.

EXHIBIT "B"
COMPENSATION

EXHIBIT "C"

KEY PERSONNEL

RESOLUTION OF THE BOARD OF DIRECTORS

OF

ERAMOSA INTERNATIONAL INC.
(the "Corporation")

AUTHORATION TO EXECUTE CONTRACTS

RESOLVED that D. Nick Hallas, Jonathan Watson, and Jeff Burton are officers of the corporation and are hereby authorized to execute contracts on behalf of Eramosa International Inc., and that the execution thereof by said officer, attested by the Secretary of the corporation, shall be the official act and deed of this corporation.

This resolution may be executed in any number of counterparts (including by electronic copy) and all counterparts so executed shall for all purposes constitute one and the same resolution.

THE UNDERSIGNED, being all the directors of the Corporation have executed this written action intended to be effective on September 27, 2022.

DIRECTORS



D. Nick Hallas



Jonathan Watson


Jeff Burton

Table 4 – Key Personnel

Name / Title / Phone Number	Description of Experience
Jeff Burton, PE Project Manager (913) 308-2133	As Vice President of Eramosa International, Inc., Jeff has responsibility for all aspects of Eramosa Engineering's U.S. business, including operations and team management, strategic growth, business development, project execution and performance, and conformance to quality standards. He has a total of 30 years' experience and spent most of his 22 years at Black & Veatch leading controls system design and construction projects. Jeff will be fully engaged as the hands-on project manager for this project.
Jui Ghate, PE Engineering Manager (913) 308-2583	Jui Ghate is a motivated engineer with more than fifteen years of experience in Electrical and Control System Design on Power Plants and Water and Wastewater industry projects. Over ten years of experience in leading projects from concept through construction, coordinating diverse teams and resources to complete objectives. Jui is organized and detail- orientated with a proactive and hardworking nature. Jui is excellent at breaking down tasks, delegating to team members, and guiding and mentoring them during their work to provide a quality product.
Jeffrey Montano, PE QA/QC Engineer (916) 524-9007	Jeffrey is a seasoned Professional Engineer with 20+ years experience and is the Team Lead of the Eramosa International western region. He specializes in condition assessment, planning, design, and project management for SCADA, DCS, electrical power, process, I&C, and communications. Jeffrey has extensive experience in design, construction, system integration, instrumentation & control, process systems, power systems, water, food & beverage, mining & material handling. He has experience in master planning, business systems, integration, configuration, and training. Jeffrey's experience across all aspects of SCADA design and implementation will be used in multiple areas of this project to generate quality results from all team members.
Darrell Zion Senior Operations/PLC SME (615) 418-3599	Darrell Zion joined Eramosa in 2020 bringing with him over thirty years of experience, twenty of those years were spent working in the water/wastewater industry in many different roles, including electrician, operator, maintenance manager, bio-solids supervisor, Management of Information Systems Manager. Darrell has been involved in all aspects of the project lifecycle from Instrumentation and Controls design to project management. Darrell's expertise extends to multiple PLC and HMI platforms, networking, and communications, as well as instrumentation and controls. Darrell's process knowledge and programming expertise will be used to help develop and review standards and PCNs, and confirm they are implemented correctly.
Brittany Moore, FE I&C/HMI Engineer (760) 644-8854	Brittany joined Eramosa in 2020 bringing with her more than nine years of experience. Prior to joining Eramosa Brittany was involved in the design of instrumentation and controls and process automation systems for a variety of different industries. She has experience with the design of electrical control panels, instrumentation selection, development of P&IDs and control narratives. Throughout Brittany's career she has also developed an interest and aptitude for programming and has experience working with Ignition SCADA and Allen Bradley among other PLC/HMI platforms. Brittany received Ignition SCADA/HMI 7.7 Certification in 2015.

Name / Title / Phone Number	Description of Experience
Max Sverdlov Senior Network Design SME (416) 400-3680	Max is a SCADA and Communications Systems Specialist in the field of water filtration, wastewater treatment, natural gas pipelines and vehicular tunnels. He has technical knowledge and experience programming and configuring GE, AB, Omron, and other Programmable Logic Controllers (PLCs). Maxim has a vast understanding of the GE Proficy iFix platform, Rockwell RSView32, FactoryTalk and RSLinx software, as well as experience in server infrastructure design, installation and upgrades utilizing several communication protocols. Maxim has a vast knowledge and experience working with Cisco network equipment designing implanting and programming equipment utilizing Fiber optic and copper media infrastructure. Maxim also has a considerable knowledge of AC & DC electrical components, schematics and several control panel design standards effectively creating enclosure design utilizing tools such as AutoCAD, MicroStation, Visio and others industry tools. Max previously held a CCNA in 2014.
Quinton Bonnett, CET Schneider Electric SME (519) 495-1995	Quinton has a strong comprehension of PLC and HMI programming and is the Eramosa Schneider Electric SME. Quinton has expertise with multiple PLC and HMI platforms as well as experience in the design of instrumentation and control and SCADA systems. His most recent engagement has been the upgrade of a large water pollution control center's ABB Infi90 DCS to a new Schneider M580 PLC platform, a capital project valued at over \$6M.
Daniel "DJ" Thomson IA Ignition SME (226) 780-2396	DJ is the Eramosa Inductive Automation Subject Matter Expert, with Ignition Core 8 Certification having been received in April 2020. He is applying his mixture of experiences to help facilitate solutions to the company's and client's needs. Additionally, he has worked within the e.RIS development team where he debugged, tested, and developed features of the e.RIS platform. He has experience in several programming languages from C and Java to Python and SQL. DJ was Inductive Automation Ignition 8 Core Certified in April 2020.
Edvard Lauman, P.Eng. AESI - Relationship Manager (770) 870-1630 Ext. 235	Edvard (Ed) has more than 17 years of experience working as a Cyber Security Specialist, including hands-on operation and management of SCADA systems, security and network operations for a large electric transmission and distribution utility. He is a system integration expert, specializing in SCADA, Data Historians, Distributed Control Systems, related network, and security infrastructure, as well as custom software development. His experience incorporates requirements and technology assessments with the design and development of IT/Control solutions, as well as identifying and resolving network, telecommunications, and application-level issues. Ed will have the overall responsibility for the quality and timeliness of AESI's services. He will monitor the overall progress and communicate with our project team to provide satisfaction with our process and deliverables. In addition, Ed will provide support as the SCADA/OT SME for system administration, networks, physical and cyber security, system configuration and operational technology.

Name / Title / Phone Number	Description of Experience
Ivan Wong, CCNA AESI -Project Manager (770) 870-1630 Ext. 261	Ivan is a goal-oriented and collaborative IT professional with more than 10 years of proven experience analysing and troubleshooting large corporate networks. He has conducted multiple cyber security vulnerability assessments, including paper assessments, for power generation utilities, distribution utilities, water treatment plants, and corporate environments through preliminary document review, on-site vulnerability scan, analysis, and reporting, while meeting NERC CIP v3 and v5 requirements. His strong technical knowledge, coupled with the ability to quickly learn new systems, allows him to provide practical solutions. He is comfortable supporting both technical and non-technical audiences. Ivan will be the Project Manager for AESI and will assist Edvard Lauman, the Project Director, with the overall responsibility for the quality and timeliness of our services. He will monitor the overall progress and communicate with our project team to provide satisfaction with our process and deliverables. In addition, Ivan will be the Cyber Security SME and Tester. Ivan will be engaged in all phases of the project through completion, with active participation in the assessment and testing phases. He will assist with analysis and documentation development.
James Chacko, CISSP AESI - Cybersecurity SME (770) 870-1630 Ext. 256	James Chacko is a Senior Security Specialist with over 11 years of progressive experience with emphasis on projects related to infrastructure, systems, and application deployment. He has proven experience in operations and technical support, systems/network administration, business technical analysis and project management. His experience is comprised of security policy and procedures for networking (LAN/WAN), software evaluations, network security assessments and recommendations for improvements. James will provide support as an SME for cyber security standards, baselines, policies, procedures, and guidelines. James will perform most of the CVA and penetration testing related work on the external/internet facing nodes.

We are committed to providing this proposed team for the duration of the project. To minimize page count, we are only able to provide the resumes of some of the Key Personnel on the following pages. Resumes for the additional staff named above are available upon request.