

CITY OF MERCED
CONSULTING AND PROFESSIONAL SERVICES CONTRACT

THIS CONTRACT is made at Merced, California, by and between the City of Merced ("City"), a California Charter Municipal Corporation, and Controlpoint Engineering, Inc., a California Corporation, whose address of record is, 4354 Town Center Blvd, Suite 114, El Dorado Hills, California 95762 ("Consultant") for the purpose of providing full service consulting and electrical engineering services for City of Merced Municipal Well Sites.

WHEREAS, City does not have sufficient personnel to perform full service consulting and electrical engineering services and thereby necessitating this Contract for professional services.

NOW, THEREFORE, the Parties covenant and agree, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged and agreed, as follows:

SECTION 1. CONSULTANT SERVICES

- A. Subject to the terms and conditions set forth in this Contract, Consultant shall provide to City the services described in Exhibit "A," attached and incorporated herein. City and Consultant shall enter into an "Authorization of Service Agreement," substantially in the form of Exhibit "B" attached hereto and incorporated herein by this reference, for each project. City's City Manager shall have the authority to execute on City's behalf the Authorization of Service Agreement without additional approval by the City Council so long as the funding is available within the project budget. In the event additional funding is required, such Authorization of Service Agreement will require prior City Council approval. In the event of a conflict between the term of this Contract and the terms of the Authorization of Service Agreement, the terms and conditions set forth herein shall prevail over those set forth in the Authorization of Service Agreement.
- B. Pursuant to Government Code § 7550, if the compensation set forth in Section 2 exceeds the sum of five thousand dollars (\$5,000), each document or report prepared by Consultant for City pursuant to this Contract shall, in a separate section of the document or report, contain the numbers and dollar amount of the Contract and all subcontracts

under the Contract relating to the preparation of the document or written report. If multiple documents or written reports are the subject of the Contract or subcontracts, the disclosure section may also contain a statement indicating that the total contract amount represents compensation for multiple documents or written reports.

SECTION 2. COMPENSATION AND REIMBURSEMENT OF COSTS

- A. City shall pay Consultant for services rendered pursuant to this Contract, at the times and in the manner set forth in each Authorization of Service Agreement. The payments specified in the Authorization of Service Agreement shall be the only payments to be made to Consultant for services rendered pursuant to this Contract.

SECTION 3. TERM AND TERMINATION

- A. The term of this Contract shall be for three (3) years commencing on the date of this Contract. The City shall have the option to extend this Contract for a single one (1) year term. Time is of the essence.
- B. If Consultant fails to perform its duties to the satisfaction of City, or if Consultant fails to fulfill in a timely and professional manner its obligations under this Contract, then City shall have the right to terminate this Contract effective immediately upon City giving written notice thereof to Consultant.
- C. Either Party may terminate this Contract without cause on thirty (30) calendar days' written notice.
- D. City may terminate this Contract immediately upon written notice to Consultant if funding ceases or is materially decreased during the term of this Contract.
- E. In the event that City gives notice of termination, Consultant shall promptly provide to City any and all finished and unfinished reports, data, studies, photographs, charts, or other work product prepared by Consultant pursuant to this Contract. City shall have full ownership, including, but not limited to, intellectual property rights, and control of all such finished and unfinished reports, data, studies, photographs, charts, or other work product.

- F. In the event that City terminates the Contract, City shall pay Consultant the reasonable value of services rendered by Consultant pursuant to this Contract; provided, however, that City shall not in any manner be liable for lost profits which might have been made by Consultant had Consultant completed the services required by this Contract. Consultant shall, not later than ten (10) calendar days after termination of this Contract by City, furnish to City such financial information as in the judgment of the City's representative is necessary to determine the reasonable value of the services rendered by Consultant.
- G. In no event shall the termination of this Contract be construed as a waiver of any right to seek remedies in law, equity, or otherwise for a Party's failure to perform each obligation required by this Contract.

SECTION 4. MISCELLANEOUS TERMS AND CONDITIONS OF CONTRACT

- A. City shall make its facilities accessible to Consultant as required for Consultant's performance of its services under this Contract, and, upon request of Consultant at times convenient to City, provide labor and safety equipment as required by Consultant for such access.
- B. Unless otherwise agreed to in the Authorization of Services Agreement, City shall obtain, arrange, and pay for all advertisements for bids, permits, and licenses required by local, state, or federal authorities.
- C. Pursuant to the City's business license ordinance, Consultant shall obtain a City business license prior to commencing work.
- D. Consultant represents and warrants to City that it has all licenses, permits, qualifications, and approvals of any nature whatsoever that are legally required for Consultant to practice its profession. Consultant represents and warrants to City that Consultant shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Contract any licenses, permits, and approvals that are legally required for Consultant to practice its profession.
- E. Consultant shall, during the entire term of this Contract, be construed to be an independent contractor and nothing in this Contract is intended, nor shall it be construed, to create an employer/employee relationship,

association, joint venture relationship, trust, or partnership or to allow City to exercise discretion or control over the professional manner in which Consultant performs under this Contract; provided, however, that the services to be provided by Consultant shall be provided in a manner consistent with the professional standards applicable to such services. The sole interest of City is to insure that services are rendered and performed in a competent, efficient, and satisfactory manner. Consultant shall be fully responsible for payment of all taxes due to state and federal governments which would be withheld from compensation if Consultant were a City employee. City shall not be liable for deductions for any amount for any purpose relating to Consultant's compensation. Consultant shall not be eligible for coverage under City's workers' compensation insurance plan, benefits under the City's retirement plan, or be eligible for any other City benefit. No party shall be the agent of, or have a right or power to bind, the other Party without its express written consent.

In the event Consultant or any employee, agent, or subcontractor of Consultant providing services under this Contract is determined by a court of competent jurisdiction or the California Public Employees Retirement System (PERS) to be eligible for enrollment in PERS as an employee of the City, Consultant shall indemnify, protect, defend, and hold harmless the City for the payment of any employee and/or employer contributions for PERS benefits on behalf of Consultant or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of City.

- F. No provision of this Contract is intended to, or shall be for the benefit of, or construed to create rights in, or grant remedies to, any person or entity not a party hereto, including any third-party beneficiary.
- G. No portion of the work or services to be performed under this Contract shall be assigned, transferred, conveyed, or subcontracted without the prior written approval of City. Consultant may use the services of independent contractors and subcontractors to perform a portion of its obligations under this Contract with the prior written approval of City. Independent contractors and subcontractors shall be provided with a copy of this Contract and Consultant shall have an affirmative duty to assure that said independent contractors and subcontractors comply

with the same and agree to be bound by its terms. Consultant shall be the responsible party with respect to all actions of its independent contractors and subcontractors, and shall obtain such insurance and indemnity provisions from its contractors and subcontractors as City's Risk Manager shall determine to be necessary in his/her sole discretion.

- H. Consultant, at such times and in such form as City may require, shall furnish City with such periodic reports as it may request pertaining to the work or services undertaken pursuant to this Contract, the costs or obligations incurred or to be incurred in connection therewith, and any other matters covered by this Contract.
- I. Consultant shall maintain accounts and records, including personnel, property, and financial records, adequate to identify and account for all costs pertaining to this Contract and such other records as may be deemed necessary by City to assure proper accounting for all project funds. These records shall be made available for audit purposes to state and federal authorities, or any authorized representative of City. Consultant shall retain such records for three (3) years after the expiration of this Contract, unless prior permission to destroy them is granted by City or unless a longer retention period is required by a funding source for this Contract.
- J. Consultant shall perform all services required pursuant to this Contract in the manner and according to the standards observed by a competent practitioner of Consultant's profession. All products of whatsoever nature, which Consultant delivers to City pursuant to this Contract, shall be prepared in a professional manner and conform to the standards of quality normally observed by a person practicing the profession of Consultant and its agents, employees, and subcontractors assigned to perform the services contemplated by this Contract.
- K. Unless Consultant is specifically advised in writing by City to verify data, Consultant shall be entitled to rely upon the accuracy and completeness of all data furnished by City to Consultant that is used by Consultant in providing its services under this Contract. Consultant may retain and use all data furnished to it, except such data which may be marked "confidential" and required to be returned, and may use all plans, designs, specifications, and other work product created by Consultant in providing services hereunder. Any use of such work product that includes proprietary information shall not identify City; nor

shall the manner of such use have the effect of identifying City. In any reuse by Consultant for any non-City purpose of any data, drawings, plans, etc., prepared for City, Consultant shall fully release, protect, defend, indemnify, and hold harmless City, its officials, officers, employees, and agents from all claims, costs, expenses, damage, or liability arising out of or resulting from the reuse or modification of any reports, data, documents, drawings, specifications, or other work product prepared by Consultant for City for any entity or purpose other than for City's benefit.

- L. All completed reports and other data or documents, or computer media including diskettes, and other materials provided or prepared by Consultant in accordance with this Contract are the property of City, and may be used by City. City shall have all intellectual property rights including, but not limited to, copyright and patent rights, in said documents, computer media, and other materials provided by Consultant. City shall release, defend, indemnify, and hold harmless Consultant from all claims, costs, expenses, damage, or liability arising out of or resulting from the use or modification of any reports, data, documents, drawings, specifications, or other work product prepared by Consultant, except use by City on those portions of the project for which such items were prepared.
- M. Consultant, including its employees, agents, and subconsultants, shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Contract. Consultant shall comply with all requirements of the Political Reform Act (Government Code § 81000 *et seq.*), Government Code Section 1090 *et seq.*, and other laws relating to conflicts of interest, including the following: 1) Consultant shall not make or participate in a decision made by City if it is reasonably foreseeable that the decision may have a material effect on Consultant's economic interest, and 2) if required by City Clerk, Consultant shall file financial disclosure forms with the City Clerk.

SECTION 5. INSURANCE

- A. As a separate and independent covenant from any indemnity obligation hereunder, during the term of this Contract, Consultant shall maintain in full force and effect at its own cost and expense, the following insurance coverage:

1. **Workers' Compensation Insurance.** Full workers' compensation insurance shall be provided with a limit of at least One Hundred Thousand Dollars (\$100,000) for any one person and as required by law, including Employer's Liability limits of \$1,000,000.00 per accident. The policy shall be endorsed to waive the insurer's subrogation rights against the City.
2. **General Liability.**
 - (a) Consultant shall obtain and keep in full force and effect general liability coverage at least as broad as ISO commercial general liability coverage occurrence Form CG 0001.
 - (b) Consultant shall maintain limits of no less than One Million Dollars (\$1,000,000) per occurrence for bodily injury, personal injury, and property damage.
 - (c) The City, its officers, employees, and agents are to be named as additional insureds under the policy, as respects liability arising out of work or operations performed by or on behalf of the Consultant.
 - (d) The policy shall stipulate that this insurance will operate as primary insurance for work performed by Consultant and its sub-contractors, and that any other insurance or self insurance maintained by City or other named insureds shall be excess and non-contributory.
 - (e) Consultant shall maintain its commercial general liability coverage for three (3) years after completion of the work and shall add an additional insured endorsement form acceptable to the City naming the City of Merced, its officers, employees, and agents for each year thereafter for at least three (3) years after completion of the work. Copies of the annual renewal and additional insured endorsement form shall be sent to the City within thirty (30) days of the annual renewal.

3. Automobile Insurance.

- (a) Consultant shall obtain and keep in full force and effect an automobile policy of at least One Million Dollars (\$1,000,000) per accident for bodily injury and property damage.
- (b) The City, its officers, employees, and agents are to be named as additional insureds under the policy, as respects automobiles owned, leased, hired, or borrowed by the Consultant.
- (c) The policy shall stipulate that this insurance will operate as primary insurance for work performed by Consultant and its sub-contractors, and that any other insurance or self insurance maintained by City or other named insureds shall be excess and non-contributory.

4. Professional Liability Insurance. Consultant shall carry professional liability insurance appropriate to Consultant's profession in the minimum amount of One Million Dollars (\$1,000,000). Architects and engineers' coverage is to be endorsed to include contractual liability.

B. Qualifications of Insurer. The insurance shall be provided by an acceptable insurance provider, as determined by City, which satisfies all of the following minimum requirements:

- 1. An insurance carrier admitted to do business in California and maintaining an agent for service of process within this State; and,
- 2. An insurance carrier with a current A.M. Best Rating of A:VII or better (except for workers' compensation provided through the California State Compensation Fund).

C. Certificate of Insurance. Consultant shall complete and file with the City prior to engaging in any operation or activity set forth in this Contract, certificates of insurance evidencing coverage as set forth above and which shall provide that no cancellation or expiration by the insurance company will be made during the term of this Contract,

without thirty (30) days written notice to City prior to the effective date of such cancellation—including cancellation for nonpayment of premium. In addition to any other remedies City may have, City reserves the right to withhold payment if Consultant's insurance policies are not current.

SECTION 6. INDEMNIFICATION AND HOLD HARMLESS

- A. As a separate and independent covenant and irrespective of any insurance policy or policies or limitations thereof and to the fullest extent permitted by law (including, without limitation, California Civil Code Sections 2782 and 2782.6), Consultant shall indemnify, protect, defend (with legal counsel selected by the City), save, and hold City, its officers and employees, harmless from any and all claims or causes of action for death or injury to persons, or damage to property, or expense and liability of every kind, nature and description (including, without limitation, incidental and consequential damages, court costs, attorneys' fees, litigation expenses and fees of expert consultants or expert witnesses incurred in connection therewith and costs of investigation), that arise out of, pertain to, or relate to, the negligence, recklessness, willful misconduct of Consultant or its employees, subcontractors, or agents in the performance of this Contract. It is understood that the duty of Consultant to indemnify and hold harmless includes the duty to defend as set forth in Section 2778 of the California Civil Code. This indemnification and hold harmless clause shall survive the termination of this Contract and shall apply to any damages or claims for damages whether or not such insurance policies shall have been determined to apply. By execution of this Contract, Consultant acknowledges and agrees to the provisions of this Section and that it is a material element of consideration.

SECTION 7. CONTRACT INTERPRETATION, VENUE AND ATTORNEY FEES

- A. This Contract shall be deemed to have been entered into in Merced, California. All questions regarding the validity, interpretation, or performance of any of its terms or of any rights or obligations of the parties to this Contract shall be governed by California law, and any action brought by either party to enforce any of the terms of this Contract shall be filed in the Merced County Superior Court. If any

claim, at law or otherwise, is made by either party to this Contract, the prevailing party shall be entitled to its costs and reasonable attorneys' fees.

- B. This document, including all exhibits, contains the entire agreement between the parties and supersedes whatever oral or written understanding each may have had prior to the execution of this Contract. This Contract shall not be altered, amended, or modified except by a writing signed by City and Consultant. No verbal agreement or conversation with any official, officer, agent, or employee of City, either before, during, or after the execution of this Contract, shall affect or modify any of the terms or conditions contained in this Contract, nor shall any such verbal agreement or conversation entitle Consultant to any additional payment whatsoever under the terms of this Contract.
- C. If any portion of this Contract or the application thereof to any person or circumstance shall be invalid or unenforceable to any extent, the remainder of this Contract shall not be affected thereby and shall be enforced to the greatest extent permitted by law.
- D. The headings in this Contract are inserted for convenience only and shall not constitute a part hereof. A waiver of any party of any provision or a breach of this Contract must be provided in writing, and shall not be construed as a waiver of any other provision or any succeeding breach of the same or any other provisions herein.
- E. Each Party hereto declares and represents that in entering into this Contract, it has relied and is relying solely upon its own judgment, belief, and knowledge of the nature, extent, effect, and consequence relating thereto. Each Party further declares and represents that this Contract is made without reliance upon any statement or representation not contained herein of any other Party or any representative, agent, or attorney of the other Party. The Parties agree that they are aware that they have the right to be advised by counsel with respect to the negotiations, terms, and conditions of this Contract and that the decision of whether or not to seek the advice of counsel with respect to this Contract is a decision which is the sole responsibility of each of the Parties. Accordingly, no party shall be deemed to have been the drafter

hereof, and the principle of law set forth in Civil Code § 1654 that contracts are construed against the drafter shall not apply.

- F. In the event of a conflict between the term and conditions of the body of this Contract and those of any exhibit or attachment hereto, the terms and conditions set forth in the body of this Contract proper shall prevail. In the event of a conflict between the terms and conditions of any two or more exhibits or attachments hereto, those prepared by City shall prevail over those prepared by Consultant.

SECTION 8. SURVIVAL

The provisions set forth in Sections 5 and 6 of this Contract shall survive termination of the Contract.

SECTION 9. COMPLIANCE WITH LAWS - NONDISCRIMINATION

- A. Consultant shall comply with all applicable laws, ordinances, and codes of federal, state, and local governments.
- B. In the performance of this Contract, Consultant shall not discriminate against any employee or applicant for employment because of race, color, ancestry, national origin, religious creed, sex, sexual orientation, disability, age, marital status, political affiliation, or membership or nonmembership in any organization. Consultant shall take affirmative action to ensure applicants are employed and that employees are treated during their employment without regard to their race, color, ancestry, national origin, religious creed, sex, sexual orientation, disability, age, marital status, political affiliation, or membership or nonmembership in any organization. Such actions shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff, or termination, rates of pay, or other forms of compensation and selection for training.

SECTION 10. FEDERAL REQUIREMENTS

- A. During the performance of this Contract, Consultant, for itself, its assignees, and successors in interest agrees as follows:

1. Compliance with Regulations. Consultant shall comply with the regulations relative to nondiscrimination in Federally-assigned programs of the Department of Transportation (hereinafter called "DOT") Title 49, Code of Federal Regulations, PART 21, as they may be amended from time to time (hereinafter referred to as the "Regulations") which are herein incorporated by reference and made a part of this Contract.
2. Nondiscrimination. Consultant, with regard to the work performed by it in the Contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. Consultant shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
3. Solicitations for Subcontracts, Including Procurement of Materials and Equipment. In all solicitations either by competitive bidding or negotiation made by Consultant for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by Consultant of Consultant's obligations under this Contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

SECTION 11. REPRESENTATIVES

- A. City's representative for this Contract is Johnnie Baptista, telephone number (209) 384-4180. All of Consultant's questions pertaining to this Contract shall be referred to the above-named person, or to the representative's designee.
- B. Consultant's representative for this Contract is Jeremy Pollet telephone number (916) 817-1376 fax number (916) 760-1378. All of City's questions pertaining to this Contract shall be referred to the above-named person.

- C. The representatives set forth herein shall have authority to give all notices required herein. City's City Manager is authorized to execute any amendment to this Contract, which does not increase the amount of compensation allowable to Consultant.

SECTION 12. NOTICES

- A. All notices, requests, demands, and other communications hereunder shall be deemed given only if in writing signed by an authorized representative of the sender (may be other than the representatives referred to in Section 11) and delivered by facsimile, with a hard copy mailed first class, postage prepaid; or when sent by a courier or an express service guaranteeing overnight delivery to the receiving party, addressed to the respective parties as follows:

To City: City of Merced Johnnie Baptista 1776 Grogan Avenue Merced, CA 95341 City Clerk City of Merced 678 West 18th Street Merced, CA 95340	To Consultant: Controlpoint Engineering, Inc. Jeremy Pollet 4354 Town Center Blvd, Suite 114 El Dorado Hills, CA 95762
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- B. Either party may change its address for the purposes of this Section by giving written notice of such change to the other party in the manner provided in this Section.
- C. Notice shall be deemed effective upon: 1) personal service; 2) two days after mailing or transmission by facsimile, whichever is earlier.

SECTION 13. AUTHORITY TO CONTRACT

Each of the undersigned signatories hereby represents and warrants that they are authorized to execute this Contract on behalf of the respective parties to this Contract; that they have full right, power, and lawful authority to undertake all obligations as provided in this Contract; and that the execution,

performance, and delivery of this Contract by said signatories has been fully authorized by all requisite actions on the part of the respective parties to this Contract.

SECTION 14. CONFORMANCE TO APPLICABLE LAWS

Consultant hereby promises and agrees to comply with all of the provisions of the Federal Immigration and Nationality Act (8 U.S.C.A. 1101 *et seq.*), as amended; and in connection therewith, shall not employ unauthorized aliens as defined therein. Should Consultant so employ such unauthorized aliens for the performance of work and/or services covered by this Contract, and should any agency or instrumentality of the federal or state government, including the courts, impose sanctions against the City for such use of unauthorized aliens, Consultant hereby agrees to, and shall, reimburse City for the cost of all such sanctions imposed, together with any and all costs, including attorneys' fees, incurred by the City in connection therewith.

SECTION 15. WAIVER

In the event that either City or Consultant shall at any time or times waive any breach of this Contract by the other, such waiver shall not constitute a waiver of any other or succeeding breach of this Contract, whether of the same or any other covenant, condition or obligation. Waiver shall not be deemed effective until and unless signed by the waiving party.

SECTION 16. AMENDMENT

This Contract shall not be amended, modified, or otherwise changed unless in writing and signed by both parties hereto by the authorized representative thereof.

SECTION 17. COUNTERPARTS

This Contract may be executed in one or more counterparts with each counterpart being deemed an original. No counterpart shall be deemed to be an original or presumed delivered unless and until the counterparts executed by the other parties hereto are in the physical possession of the party or parties seeking enforcement thereof.

SECTION 18. DATE OF CONTRACT

The date of this Contract shall be the date it is signed by City.

IN WITNESS WHEREOF, City and Consultant have executed this Contract on the days and year set forth below:

Dated: _____, 2017

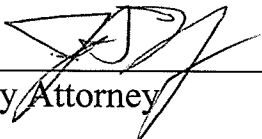
CITY OF MERCED,
A California Charter-law Municipal
Corporation

By: City Manager

ATTEST:
STEVE CARRIGAN, CITY CLERK

By: Assistant/Deputy City Clerk

APPROVED AS TO FORM:

 9-20-2017

City Attorney Date

Dated: _____, 2017

CONSULTANT
CONTROLPOINT ENGINEERING,
INC., a California Corporation

BY: Jeremy Pollet
(Signature)

Jeremy Pollet
(Typed Name)

Its: PRESIDENT
(Title)

BY: _____
(Signature)

(Typed Name)

Its: _____
(Title)

Taxpayer I.D. No. 20-8137692

ADDRESS: 4354 Town Center Blvd.
Suite 114
El Dorado Hills, CA 95762

TELEPHONE: (916) 817-1376

FAX: (916) 760-1378

E-MAIL:

Jeremy.pollet@controlpointeng.com

Attachments:

Exhibit A (Scope of Work)

Exhibit B (Authorization for Service Agreement)

To demonstrate our understanding of the scope of work listed in the RFQ, we have provided our written understanding of each task. We understand that many of these tasks will require an immediate response and expedited preparation and also understand that close coordination with the City will be required.

Supervisory Control & Data Acquisition Systems (SCADA) Development & Related Services

In response to the City's requests, we will participate in the design, development, installation, modification, troubleshooting and maintenance of City's SCADA system. This requires a thorough understanding of the Ignition® software from Inductive Automation. Our principal engineer, Jeremy J. Pollet, and our Lead SCADA Developer, Jason Foster, are both Certified Ignition® Developers. To acquire these certifications, Jeremy and Jason were required to document their Ignition® experience, attend multiple training classes, and pass a series of rigorous certifications exams. Jeremy and Jason have designed and integrated several large-scale Ignition® SCADA systems and have helped clients develop their own internal Ignition® standards.

The City's local operator interface terminal (OIT) panels from Automation Direct provide local visualization and control of the water wells. We have plenty of experience with these panels and have developed the application presently in place at the City's new pretreatment facility at Well 3C.

Programming Services

Programming services include writing, simulating, troubleshooting and maintaining PLC and OIT programs. The Programmable Logic Controllers (PLCs) integrated throughout the City's Water System are the devices that are most critical to the City's operations. Whereas the SCADA systems provide process visualization, alarm annunciation, and the means to store historical data, the PLC actually controls the process.

PLCs automatically control the processes within predefined (or operator adjustable) limits. An error in a PLC's code (ladder logic) can result in serious safety and environmental hazards. Maintaining well written, thoroughly documented PLC code is important because the PLCs are essentially the brains of the City's wells. Without thorough documentation, even a well written PLC program can be tough for an engineer or technician to follow.

Developing PLC code for a specific PLC will involve several steps. First, the latest documented copy of the PLC program from the City will be requested. This step essentially "checks out" the program, much like one would check out a book at the library.

Then, the PLC program is loaded into a portable laptop computer that has the appropriate PLC programming software installed on it. To connect to the PLC with the portable notebook, one uses an appropriate PLC programming cable. This programming cable can either be an Ethernet cable, a serial data cable, or a custom communications cable purchased directly from the PLC manufacturer.

After the program modifications are made and the code is fully tested with operations, the program is then returned to the same individual at the City with which it was checked out (ensuring safe housekeeping of the program).



August 21, 2017

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EXHIBIT A

Start Up and Field Services

We support startup activities and field services with a portable laptop computer that has the appropriate PLC programming software installed on it. We use sign-off sheets to document any changes made and insist on thorough operational testing.

Troubleshooting

PLC Troubleshooting

The first step in PLC troubleshooting is to decide if the problem is internal to the processor or in the I/O system. Experience has shown that more than 80% of all PLC malfunctions can be traced to problems with I/O modules or field equipment. Furthermore, it's relatively easy to determine whether a problem is located in the processor or in the I/O system because each type of problem has a unique signature.

Problems that can be localized to a specific I/O module or even a specific input or output device are usually external, while internal problems normally result in large groups of failures, globally erratic behavior, or even total failure of the PLC system.

Power, grounding, and interference problems all can cause the corruption of the PLC memory, so the next step is to verify that the program is still correct. All PLCs have some method for doing this, most of which involve comparing the program in the PLC with a backup copy. The next step would be to verify the program with the backup, and reload the program if problems are encountered.

SCADA System Troubleshooting

SCADA Software troubleshooting is generally more complex than PLC troubleshooting. Issues with SCADA software typically occur when changes are made to the host computer's operating system (i.e. Windows updates). We are usually able to help with these sort of issues over the phone or by securely remoting into the SCADA system.

On-Call Consultation Services

We will advise the City on advances in technology and potential upgrades to the existing systems. If we do not stay on the forefront of technology, we would not be able to justify our existence as consultants. The industry trade shows we attend, certifications we maintain, and the dozens of other Cities, Counties, and Water Agencies we work for keep us at the forefront of technology and help us maintain our status as subject matter experts for industrial control systems.

Training and Support

We can provide training and support for operations staff in the use of City's SCADA and PLC systems. We take pride in our ability to communicate effectively with our clients. We are of the opinion that the more knowledge we share with our clients, the more value we are bringing for our services.



**CITY OF MERCED
AUTHORIZATION OF SERVICE AGREEMENT**

Description of Services to be Provided:	<i>Official Use Only</i>
Consultant:	
Scope of Services	
1. _____	
2. _____	
3. _____	
Total Amount \$ _____	
(a) By completing and executing this document, Consultant agrees to be bound to the Terms and Conditions in the Consulting and Professional Services Contract dated _____, to the Terms and Conditions attached hereto and incorporated by reference, and any other terms and conditions imposed by the City and attached hereto or in the Merced Municipal Code, and makes the City an offer for the above-mentioned services at the above-mentioned price. This agreement is not binding on the City until executed by the City Manager, or his/her designee, and a Purchase Order is issued to Consultant. Any terms and conditions proposed by Consultant shall not be binding upon the City unless expressly agreed to in writing by the designated representative of the City.	
The individuals executing this contract represent and warrant that they have the legal capacity and authority to do so on behalf of their respective legal entities.	
Consultant	
Print Name _____	Name of Business Entity _____
Signature _____	Date _____
Position/Title _____	Contractor's License No.: _____ (If Applicable)
Accepted by City of Merced	
<i>Official Use Only</i>	
_____ City Manager or Designee	Date _____

EXHIBIT B

TERMS AND CONDITIONS FOR SERVICES CONTRACTS

THESE TERMS AND CONDITIONS, ("Terms and Conditions") are made and entered into on the date shown on the attached Statement of Services, by and between the City of Merced, a California Charter Municipal Corporation, ("City") and the Consultant, Vendor, Contractor, or Person, ("Contractor") shown on the Authorization for Service Agreement. These Terms and Conditions, Authorization for Service Agreement, and the Consulting and Professional Services Contract shall herein be collectively referred to as the "Agreement." Any words that Consultant adds to the Agreement or any form that Consultant uses in the course of business will not change or supersede these Terms and Conditions. The City must agree, in writing, to any change in terms and conditions. The City's acceptance of any work or services is not an acceptance of Consultant's conflicting terms and conditions should such exist.

1. **CONTRACTOR'S SERVICES.** Contractor shall, at its own cost and expense and as authorized and directed by the City, provide the personnel, supervision, equipment, supplies, services, administration, transportation, and other needs to complete the work described in the Authorization for Service Agreement and the City's Purchase Order, which is hereby incorporated and made a part of these Terms and Conditions, within the agreed upon time schedule and budget. The Contractor is responsible for obtaining and administering the employment of personnel having the training, experience, licenses, and other qualifications necessary for the work assigned. All project-related costs shall be assumed and paid by the Contractor. These Terms and Conditions and Purchase Order provide the exclusive means of payment and reimbursement of costs to the Contractor by the City.

Such work shall include the following:

a. The Contractor shall perform the services as described in the Statement of Services and Purchase Order in full compliance with these Terms and Conditions and adopted City policies and guidelines as provided to the Contractor, and in compliance with all other applicable laws and regulations.

b. The Contractor shall perform all services and prepare all documents in professional form, exercising the special experience, skill, and education required for such service.

c. The Contractor shall provide finished documents of presentation quality that evidence the highest standards of investigation, professional review, public participation, and presentation.

2. SCHEDULE OF PERFORMANCE AND BUDGET. The Contractor shall satisfactorily perform the services described in the Statement of Services and Purchase Order within the Time Schedule stated or agreed to between the Contractor and the City. The Contractor shall review the remaining work and remaining budget at least monthly (or at such other interval as directed by City staff) and shall confirm that completion may be expected within the budget approved or, in the alternative, give immediate notice when it shall first appear that the approved budget will not be sufficient, together with an explanation for any projected insufficiency.

The Contractor shall immediately inform the City of any problems, obstructions, or deviations of which the Contractor becomes aware affecting Contractor's ability to complete the project in a timely, efficient, and competent manner.

3. RISK OF LOSS PRIOR TO FINAL ACCEPTANCE. Risk of loss from total or partial destruction of the work, prior to final acceptance, shall be borne by Contractor regardless of the cause. Contractor shall repair or replace such damages or destroyed work to its prior undamaged condition before being entitled to additional progress payments or final payment. Total or partial destruction or damage shall not excuse Contractor from completion of work.

4. COMPENSATION. Payment by the City to the Consultant for actual services rendered shall be made upon presentation of an invoice detailing services performed and authorized.

5. PERMITS AND LICENSES.

a. Contractor shall apply for and procure permits and licenses necessary for the work.

b. Contractor shall give notices necessary and incidental to the due and lawful prosecution of the work and shall comply duly with the terms and conditions of permits and licenses.

c. Contractor shall pay charges and fees in connection with permits and licenses.