



**PURCHASING ITEM
FOR
COUNCIL AGENDA**

1. Agenda Item Number:

38

2. Council Meeting Date:
September 11, 2014

TO: MAYOR & COUNCIL

3. Date Prepared: August 25, 2014

THROUGH: CITY MANAGER

4. Requesting Department: Municipal Utilities

5. SUBJECT: Purchase of water and wastewater instrumentation/control system equipment and services from Invensys.

6. RECOMMENDATION: Staff recommends City Council approve Agreement No. MU4-918-3402, to Invensys, for the purchase of water and wastewater instrumentation/control system equipment and services, in an amount not to exceed \$698,718.

7. HISTORICAL BACKGROUND/DISCUSSION: The Pecos Surface Water Treatment Plant, located at 1475 East Pecos Road, and the Airport Water Reclamation Facility, located at 905 East Queen Creek Road, utilize a Distributed Control System (DCS) consisting of components only manufactured and serviced by Invensys. Both facilities' processes communicate through fiber optic cables to the plants' control systems. The existing equipment used for this communication is obsolete and will no longer be supported by Invensys.

This purchase is for the Invensys DCS modules, which includes instrumentation/control system equipment and services.

8. EVALUATION PROCESS: Invensys is the sole manufacturer and distributor of the instrumentation/control equipment, and is the only firm able to perform the upgrade services.

9. FINANCIAL IMPLICATIONS:

Cost: \$698,718
Savings: N/A
Long Term Costs: N/A

Fund Source:

<u>Acct. No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
601.3820.6718.6WA210	Water Bonds	Water Treatment Plant Improvements	Yes	\$373,762
611.3910.6817.6WW621	Wastewater Bonds	Water Reclamation Facility Improvements	Yes	\$324,956
Total:				\$698,718

10. PROPOSED MOTION: Move City Council approve Agreement No. MU4-918-3402, to Invensys, for the purchase of water and wastewater instrumentation/control system equipment and services, in an amount not to exceed \$698,718.

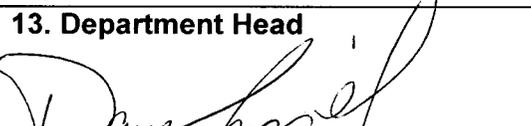
ATTACHMENTS: Agreement

APPROVALS

11. Requesting Department

13. Department Head


John Knudson, Utilities Engineering Manager


Dave Siegel, Municipal Utilities Director

12. Procurement Officer

14. City Manager


Carolee Stees, CPPB


Rich Dlugas

**CITY OF CHANDLER SERVICES AGREEMENT
INVENSYS EQUIPMENT UPGRADE
AGREEMENT NO.: MU4-918-3402**

This AGREEMENT is made and entered into this ____ day of July, 2014, by and between the City of Chandler, a Municipal Corporation of the State of Arizona, hereinafter referred to as "CITY", and Invensys Systems, Inc., a corporation of the State of Massachusetts, hereinafter referred to as "CONTRACTOR".

WHEREAS, CONTRACTOR represents that CONTRACTOR has the expertise and is qualified to perform the services described in the AGREEMENT.

NOW THEREFORE, in consideration of the mutual promises and obligations set forth herein, the parties hereto agree as follows:

1. CONTRACT ADMINISTRATOR:

- 1.1. Contract Administrator.** CONTRACTOR shall act under the authority and approval of the Project Manager/designee (Contract Administrator), to provide the services required by this AGREEMENT.
- 1.2. Key Staff.** This AGREEMENT has been awarded to CONTRACTOR based partially on the key personnel proposed to perform the services required herein. CONTRACTOR shall not change nor substitute any of these key staff for work on this AGREEMENT without prior written approval by CITY.
- 1.3. Subcontractors.** During the performance of the AGREEMENT, CONTRACTOR may engage such additional SUBCONTRACTORS as may be required for the timely completion of this AGREEMENT. In the event of subcontracting, the sole responsibility for fulfillment of all terms and conditions of this AGREEMENT rests with CONTRACTOR.
- 1.4. Subcontracts.** CONTRACTOR shall not enter into any Subcontract under this AGREEMENT for the performance of this AGREEMENT without the advance written approval of CITY. The subcontract shall incorporate by reference the terms and conditions of this AGREEMENT.

2. SCOPE OF WORK: CONTRACTOR shall provide and install Invensys equipment as more specifically set forth in the Scope of Work, labeled Exhibit B, attached hereto and made a part hereof by reference and as set forth in the Specifications and details included therein.

- 2.1. Non-Discrimination.** The CONTRACTOR shall comply with State Executive Order No. 99-4 and all other applicable City, State and Federal laws, rules and regulations, including the Americans with Disabilities Act.
- 2.2. Licenses.** CONTRACTOR shall maintain in current status all Federal, State and local licenses and permits required for the operation of the business conducted by the CONTRACTOR as applicable to this AGREEMENT.
- 2.3. Advertising, Publishing and Promotion of Contract.** The CONTRACTOR shall not use, advertise or promote information for benefit concerning this AGREEMENT without the prior written approval of the CITY.
- 2.4. Compliance with Applicable Laws.** CONTRACTOR shall comply with all applicable Federal, state and local laws, and with all applicable licenses and permit requirements.
 - 2.4.1** Pursuant to the provisions of A.R.S. § 41-4401, the CONTRACTOR hereby warrants to the CITY that the CONTRACTOR and each of its subcontractors ("Subcontractors") will comply with all Federal Immigration laws and regulations that relate to the immigration status of their employees and the requirement to use E-Verify set forth in A.R.S. §23-214(A) (hereinafter "Contractor Immigration Warranty").

- 2.4.2 A breach of the Contractor Immigration Warranty (Exhibit A) shall constitute a material breach of this AGREEMENT that is subject to penalties up to and including termination of the AGREEMENT.
- 2.4.3 The CITY retains the legal right to inspect the papers of any CONTRACTOR or Subcontractor employee who works on this AGREEMENT to ensure that the CONTRACTOR or Subcontractor is complying with the Contractor Immigration Warranty. The CONTRACTOR agrees to assist the CITY in the conduct of any such inspections.
- 2.4.4 The CITY may, at its sole discretion, conduct random verifications of the employment records of the CONTRACTOR and any Subcontractors to ensure compliance with Contractors Immigration Warranty. The CONTRACTOR agrees to assist the CITY in performing any such random verifications.
- 2.4.5 The provisions of this Article must be included in any contract the CONTRACTOR enters into with any and all of its subcontractors who provide services under this AGREEMENT or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.
- 2.4.6 In accordance with A.R.S. §35-393.06, the CONTRACTOR hereby certifies that the CONTRACTOR does not have scrutinized business operations in Iran.
- 2.4.7 In accordance with A.R.S. §35-391.06, the CONTRACTOR hereby certifies that the CONTRACTOR does not have scrutinized business operations in Sudan.
- 2.5. **One-Year Warranty.** CONTRACTOR must provide a one-year warranty on all work performed pursuant to this AGREEMENT. CONTRACTOR warrants that Services shall be performed with reasonable skill and care and that CONTRACTOR is properly licensed and qualified to perform the Services hereunder, and shall provide experienced personnel to perform Services that are materially in conformity with the Specifications of the Purchase Order.
- 2.6. **Warranty (Equipment).** All equipment supplied under this AGREEMENT shall, at time of delivery, materially conform to the Specifications agreed between the Parties, including drawings or descriptions, specification sheets, drawings, notes and technical data for such Goods and Software and the description of the Services. CONTRACTOR further warrants that Goods, at the time of their delivery, and the media on which the licensed Software is provided will be free from defects in material and workmanship for a period of one year from the date of installation or twenty four (24) months following the date of shipment, whichever occurs first. Any defects of workmanship or materials that would result in non-compliance with the AGREEMENT specifications shall be fully corrected by CONTRACTOR (including parts and labor) without cost to CITY. The written warranty shall be included with the delivered products to the using Department.
- 2.6.1 If, any time prior to the end of the applicable Warranty Period, the Goods, Software or Services, or any part thereof, do not conform to applicable warranties or Specifications, CITY shall notify CONTRACTOR within a reasonable time after its discovery and shall provide written particulars of the non-conformity and all information and assistance necessary to enable CONTRACTOR to verify the nature and cause of the non-conformity and carry out its warranty obligations hereunder.
- a. Non-conforming Goods and Software subject to a warranty claim shall be returned to the nearest CONTRACTOR's repair facility, transportation charges prepaid for the account of the CITY, after a return authorization number is received from CONTRACTOR. The costs to diagnose any non-conformity on CITY's site, if required, shall be for the account of the CONTRACTOR. Goods returned by CITY to the CONTRACTOR and found upon CONTRACTOR's inspection to be non-conforming and Software found non-conforming upon CONTRACTOR's inspection shall be repaired, replaced or corrected, at CONTRACTOR's sole option and return-shipped by CONTRACTOR to CITY with transportation prepaid by CONTRACTOR.

b. Services subject to a warranty claims shall be re-performed, corrected, or the portion of the Services that cannot be re-performed or corrected, shall be refunded to CITY.

c. Repaired or replaced Goods and Software shall be warranted by CONTRACTOR for the remainder of the original Warranty Period or for three (3) months, whichever is longer, free of charge and return-shipped to CITY with transportation prepaid by CONTRACTOR. All Services corrected or re-performed shall be warranted only for the unexpired portion of the original Warranty Period applicable to Services.

d. Goods, software and labor used, as well as any and all Expenses reasonably incurred, by CONTRACTOR for the diagnosis, repair, replacement or correction of any Goods, Software or Services subject to a warranty claim that are found in whole to be non-conforming for reasons listed under Article 2.6.2 or that were found upon investigation to comply with Specifications or other contractual requirements shall be for CITY's account.

e. CONTRACTOR's obligation and CITY's sole remedy under this Article is, at CITY's option the repair or replacement, correction, for any non-conforming Goods, Software or part thereof.

2.6.2 The foregoing warranties do not apply to non-conformities caused by (i) CITY's design or installation of the Goods and/or Software, (ii) modification or repair to the Goods and/or Software otherwise than as authorized in writing by CONTRACTOR; (iii) handling, storage, use or maintenance of the Goods and/or Software in a manner or an environment inconsistent with the Specifications and/or instructions or recommendations of CONTRACTOR; (iv) CITY's failure to observe the payment terms under this AGREEMENT or any other of its obligations under this AGREEMENT; (v) normal wear and tear; (vi) installation or wiring of the Goods and/or Software other than in accordance with CONTRACTOR's instructions; (vii) transfer of the Software from the device on which it was originally installed; and/or (viii) any fault of the CITY or its agents. Goods subject to wear or burnout through usage such as lamps, fuses, paper media, filters, trim, packing and the like shall not be deemed not in conformity by reason of such wear or burnout.

2.6.3 The foregoing warranties do not apply to Third Party Products. Third Party Products shall be warranted only in accordance with the warranties given to CONTRACTOR in respect thereof by the relevant third party vendor and to the extent that CONTRACTOR has the right to assign or transfer such warranties. In addition, CITY shall look solely to third party vendor for all remedies and support with regard to such Third Party Products. CONTRACTOR shall bear no responsibility for the performance, repair or warranty of any of CITY's Third Party Products.

2.6.4 Except as set forth herein and in the warranties provisions contained in separate software license(s), if any, these warranties are exclusive and in lieu of all other warranties, representations, conditions, express or implied, including the implied warranties of merchantability, and fitness for a particular purpose. CONTRACTOR does not warrant that operation of any such separate software will be uninterrupted and/or error-free.

2.6.5 All warranties provided here are personal to the CITY and intended solely for the benefit of CITY and do not extend to any third party.

3. ACCEPTANCE AND DOCUMENTATION: Each task shall be reviewed and approved by the Contract Administrator to determine acceptable completion.

3.1. Records. The CONTRACTOR shall retain and shall contractually require each SUBCONTRACTOR to retain all data and other "records" relating to the acquisition and performance of the AGREEMENT for a period of five (5) years after the completion of the AGREEMENT.

3.2. Audit. At any time during the term of this AGREEMENT and five (5) years thereafter, the CONTRACTOR'S or any SUBCONTRACTOR'S books and records shall be subject to audit by the CITY to the extent that the books and records relate to the performance of the AGREEMENT or Subcontract. Upon request, the CONTRACTOR shall produce a legible copy of any or all such records.

- 3.3. New/Current Products.** All equipment, materials, parts and other components incorporated in the work or services performed pursuant to this AGREEMENT shall be new, or the latest model and of the most suitable grade for the purpose intended. All work shall be performed in a skilled and workmanlike manner.
- 3.4. Property of CITY.** CONTRACTOR or the applicable third party owner shall retain at all times the ownership of its Software, firmware and Third Party Products, regardless of the media upon which the original or copy may be recorded or fixed. Without prejudice to the license(s) expressly granted hereunder and under a Purchase Order, no right, title or interest in or to the Software, firmware, CONTRACTOR's Information, any copies thereof and any Intellectual Property Rights residing in the Goods, Software or result of Services is transferred to CITY. CITY acknowledges that the prices for Services and Software charged by CONTRACTOR under this AGREEMENT are predicated in part on CONTRACTOR's retention of ownership over such Software and any results of the Services, none of which shall be considered "work for hire." Materials, including reports and other deliverables, created under this AGREEMENT are the sole property of CITY. CONTRACTOR is not entitled to a patent or copyright on those materials and may not transfer the patent or copyright to anyone else. CONTRACTOR shall not use or release these materials without the prior written consent of CITY.
- 3.5. Delivery, Title and Risk of Loss.**
- 3.5.1** Title to all Goods sold hereunder, except for Software whose title remains at all times with CONTRACTOR, shall pass to CITY upon full payment of the Purchase Order.
- 3.5.2** Upon CITY's acceptance of delivery, risk of loss or damage shall pass to CITY unless delivery has been delayed because of CITY in which event risk of loss shall pass to CITY upon the originally scheduled delivery acceptance date.
- 3.5.3** Delivery, unless otherwise agreed upon in a Purchase Order, shall be FOB; CONTRACTOR's dock (Incoterms 2010).
- 3.5.4** If, as part of a Purchase Order, CONTRACTOR is responsible for packing any Goods for shipment, CONTRACTOR shall pack, mark and label such Goods in accordance with its usual packing procedures.
- 4. PRICE:**
- 4.1.** CITY shall pay to CONTRACTOR an amount not to exceed Six Hundred Ninety-Eight Thousand Seven Hundred Eighteen Dollars (\$698,718) for the completion of all the work and services described herein, which sum shall include all costs or expenses incurred by CONTRACTOR, payable as set forth in Exhibit C, attached hereto and made a part hereof by reference.
- 4.2. Taxes.** CONTRACTOR shall be solely legally responsible for any and all tax obligations, which may result out of CONTRACTOR'S performance of this AGREEMENT. CITY shall have no legal obligation to pay any amounts for taxes, of any type, incurred by CONTRACTOR. CITY agrees that CONTRACTOR may bill the CITY for applicable privilege license taxes which are paid for by CONTRACTOR and that the CITY will reimburse CONTRACTOR for privilege license taxes actually paid by CONTRACTOR. If CONTRACTOR obtains any refund of privilege license taxes paid, CITY will be entitled to a refund of such amounts.
- 4.3.** CONTRACTOR shall be solely responsible for any and all tax obligations, which may result out of the CONTRACTOR'S performance of this AGREEMENT. The CITY shall have no obligation to pay any amounts for taxes, of any type, incurred by the CONTRACTOR.
- 4.4. Payment.** A separate invoice shall be issued for each shipment of material or service performed, and no payment will be issued prior to receipt of material and/or completion of specified services and receipt

of a correct invoice. Full payments of all invoiced Goods, Software, Services, and Expenses are due within thirty (30) calendar days from the invoice date.

- 4.5. **IRS W9 Form.** In order to receive payment CONTRACTOR shall have a current I.R.S. W9 Form on file with CITY, unless not required by law.
5. **TERM:** Following execution of this AGREEMENT by CITY, CONTRACTOR shall commence work upon receipt of the Notice to Proceed and shall complete all services described herein within seven (7) months from the Notice to Proceed date.
6. **USE OF THIS AGREEMENT:** The AGREEMENT is for the sole convenience of the City of Chandler.
- 6.2. **Emergency Purchases:** CITY reserves the rights to purchase from other sources those items, which are required on an emergency basis and cannot be supplied immediately by the CONTRACTOR.
7. **CITY'S CONTRACTUAL REMEDIES:**
 - 7.1. **Right to Assurance.** If the CITY in good faith has reason to believe that the CONTRACTOR does not intend to, or is unable to perform or continue performing under this AGREEMENT, the Contract Administrator may demand in writing that the CONTRACTOR give a written assurance of intent to perform. Failure by the CONTRACTOR to provide written assurance within the number of Days specified in the demand may, at the CITY's option, be the basis for terminating the AGREEMENT in addition to any other rights and remedies provided by law or this AGREEMENT.
 - 7.2. **Stop Work Order.** The CITY may, at any time, by written order to the CONTRACTOR, require the CONTRACTOR to stop all or any part, of the work called for by this AGREEMENT for period(s) of days indicated by the CITY after the order is delivered to the CONTRACTOR. The order shall be specifically identified as a stop work order issued under this clause. Upon receipt of the order, the CONTRACTOR shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. In the event that the stop work order to CONTRACTOR was issued for some reason not related to CONTRACTOR's performance of its obligations under this AGREEMENT, and the stop work order continues for greater than ninety (90) days, CONTRACTOR, at its sole option, may terminate the AGREEMENT and the stop work order shall be treated as a Termination for Convenience pursuant to Article 8.1.
 - 7.3. If a stop work order issued under this clause is canceled or the period of the order or any extension expires, the CONTRACTOR shall resume work. The Contract Administrator shall make an equitable adjustment in the delivery schedule or AGREEMENT price, or both, and the AGREEMENT shall be amended in writing accordingly. In the event of a stop work order, CITY acknowledges the following: a) all Milestones and/or delivery dates that have been agreed to, will be postponed, and such Milestones and/or delivery dates will be mutually agreed to upon the cancellation or expiration of the stop work order, b) if the stop work order continues for more than thirty (30) days that the CONTRACTOR's personnel assigned to the AGREEMENT or Purchase Order may not be available and any cost required to attain the knowledge required to continue the performance of the AGREEMENT or Purchase Order upon lifting the stop work order will be for the account of the CITY, c) when the performance is re-commenced, CITY shall pay costs associated with extending performance, such as, but not limited to, increased costs for Services, Goods, or Software, or the extension of warranties, and d) the suspended AGREEMENT and/or Purchase Order shall be recommenced upon a date mutually agreed to between the Parties..
 - 7.4. **Non-exclusive Remedies.** The rights and the remedies of the CITY under this AGREEMENT are not exclusive.
 - 7.5. **Nonconforming Tender.** Services and materials supplied under this AGREEMENT shall comply with AGREEMENT requirements and specifications. Services or materials that do not comply constitute a breach of contract.

7.6. **Right of Offset.** The CITY shall be entitled to offset against any sums due CONTRACTOR, any expenses or costs incurred by the CITY, or damages assessed by the CITY concerning the CONTRACTOR'S non-conforming performance or failure to perform the AGREEMENT, including expenses to complete the work and other costs and damages incurred by CITY.

8. **TERMINATION:**

8.1. **Termination for Convenience:** CITY reserves the right to terminate this AGREEMENT or any part thereof for its sole convenience with thirty (30) days written notice. Any such termination shall take place by delivery to the CONTRACTOR of a Notice of Termination specifying the extent to which performance of work under the AGREEMENT or Purchase Order is terminated, and the date upon which termination becomes effective. In the event of such termination, CONTRACTOR shall immediately stop all work hereunder, and shall immediately cause any of its suppliers and subcontractors to cease such work. As compensation in full for services performed to the date of such termination, the CONTRACTOR shall receive a fee for the percentage of services actually performed and any and all reasonable costs directly related such as restocking charges to CITY's termination pursuant to this provision, including costs in an amount not to exceed one (1) percent of the AGREEMENT price listed in Section 4.1 of this AGREEMENT associated with personnel reassignment, travel, and other administrative requirements. This fee shall be in the amount to be mutually agreed upon by the CONTRACTOR and CITY, based on the agreed Scope of Work. If there is no mutual AGREEMENT, the Management Services Director shall determine the percentage of work performed under each task detailed in the Scope of Work and the CONTRACTOR'S compensation shall be based upon such determination and CONTRACTOR'S fee schedule included herein.

8.2. **Termination for Cause:** CITY may terminate this AGREEMENT for Cause upon the occurrence of any one or more of the following events:

- 1) If CONTRACTOR fails to perform pursuant to the terms of this AGREEMENT and has not cured the breach within ten (10) days of receipt of a notice from CITY.
- 2) If CONTRACTOR is adjudged a bankrupt or insolvent;
- 3) If CONTRACTOR makes a general assignment for the benefit of creditors;
- 4) If a trustee or receiver is appointed for CONTRACTOR or for any of CONTRACTOR'S property;
- 5) If CONTRACTOR files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws;
- 6) If CONTRACTOR disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction;
- 7) Where AGREEMENT has been so terminated by CITY, the termination shall not affect any rights of CITY against CONTRACTOR then existing or which may thereafter accrue.

CONTRACTOR may terminate this AGREEMENT or any outstanding Purchase Order for default if the CITY has materially breached any of its obligations under the relevant Purchase Order and has not cured the breach within ten (10) days of receipt of a notice from the CONTRACTOR.

8.3. **Cancellation for Conflict of Interest.** Pursuant to A.R.S. § 38-511, CITY may cancel this AGREEMENT after AGREEMENT execution without penalty or further obligation if any person significantly involved in initiating, negotiating, securing, drafting or creating the AGREEMENT on behalf of the CITY is or becomes at any time while this AGREEMENT or an extension of this AGREEMENT is in effect, an employee of or a consultant to any other party to this AGREEMENT. The cancellation shall be effective when the CONTRACTOR receives written notice of the cancellation unless the notice specifies a later time.

8.4. **Gratuities.** CITY may, by written notice, terminate this AGREEMENT, in whole or in part, if CITY determines that employment or a Gratuity was offered or made by CONTRACTOR or a representative of CONTRACTOR to any officer or employee of CITY for the purpose of influencing the outcome of the procurement or securing this AGREEMENT, an amendment to this AGREEMENT, or favorable treatment concerning this AGREEMENT, including the making of any determination or decision about

contract performance. The CITY, in addition to any other rights or remedies, shall be entitled to recover exemplary damages in the amount of three times the value of the Gratuity offered by CONTRACTOR.

- 8.5. **Suspension or Debarment.** CITY may, by written notice to the CONTRACTOR, immediately terminate this AGREEMENT if CITY determines that CONTRACTOR has been debarred, suspended or otherwise lawfully prohibited from participating in any public procurement activity, including but not limited to, being disapproved as a SUBCONTRACTOR of any public procurement unit or other governmental body. Submittal of an offer or execution of a contract shall attest that the CONTRACTOR is not currently suspended or debarred. If CONTRACTOR becomes suspended or debarred, CONTRACTOR shall immediately notify CITY.
- 8.6. **Continuation of Performance Through Termination.** The CONTRACTOR shall continue to perform, in accordance with the requirements of the AGREEMENT, up to the date of termination, as directed in the termination notice.
- 8.7. **No Waiver.** Either party's failure to insist on strict performance of any term or condition of the AGREEMENT shall not be deemed a waiver of that term or condition even if the party accepting or acquiescing in the nonconforming performance knows of the nature of the performance and fails to object to it.
- 8.8. **Availability of Funds for the next Fiscal Year.** Funds may not presently be available under this AGREEMENT beyond the current fiscal year. No legal liability on the part of the CITY for services may arise under this AGREEMENT beyond the current fiscal year until funds are made available for performance of this AGREEMENT. The CITY may reduce services or terminate this AGREEMENT without further recourse, obligation, or penalty in the event that insufficient funds are appropriated. The City Manager shall have the sole and unfettered discretion in determining the availability of funds.
9. **FORCE MAJEURE:** Except for CITY's payment obligations, neither party shall be responsible for delays or failures in performance resulting from acts beyond their control. Such acts shall include, but not be limited to, acts of God, riots, acts of war, epidemics, governmental regulations imposed after the fact, fire, communication line failures, power failures, or earthquakes. All such Force Majeure conditions preventing performance shall entitle the Party hindered in the performance of its obligations hereunder to an extension of the date of delivery of the Goods and Software or completion of the Services by a period of time equal to the period of delay incurred as a result of the Force Majeure or to any other period as the Parties may agree in writing.
10. **DISPUTE RESOLUTION:**
 - 10.1. **Arizona Law.** This AGREEMENT shall be governed and interpreted according to the laws of the State of Arizona.
 - 10.2. **Jurisdiction and Venue.** The parties agree that this AGREEMENT is made in and shall be performed in Maricopa County. Any lawsuits between the Parties arising out of this AGREEMENT shall be brought and concluded in the courts of Maricopa County in the State of Arizona, which shall have exclusive jurisdiction over such lawsuits.
 - 10.3. **Fees and Costs.** Except as otherwise agreed by the parties, the prevailing party in any adjudicated dispute relating to this AGREEMENT is entitled to an award of reasonable attorney's fees, expert witness fees and costs including, as applicable, arbitrator fees; provided, however, that no award of attorney's fees shall exceed ten percent (10%) of the damages awarded the prevailing party unless the non-prevailing party has been determined to have acted in bad faith or in a frivolous manner during the adjudication.
11. **INDEMNIFICATION:** To the fullest extent permitted by law, CONTRACTOR, its successors, assigns and guarantors, shall defend, indemnify and hold harmless CITY and any of its elected or appointed officials, officers, directors, commissioners, board members, agents or employees from and against any

and all allegations, demands, claims, proceedings, suits, actions, damages, including, without limitation, property damage, personal injury and wrongful death claims, losses, expenses (including claim adjusting and handling expenses), penalties and fines (including, but not limited to, attorney fees, court costs, and the cost of appellate proceedings), judgments or obligations, which may be imposed upon or incurred by or asserted against the CITY by reason of this AGREEMENT or the services performed or permissions granted under it, or related to, due to and to the extent of any negligent actions, acts, errors, mistakes or omissions caused in whole or part by CONTRACTOR, or any of its subcontractors, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, relating to the discharge of any duties or the exercise of any rights or privileges arising from or incidental to this AGREEMENT, including but not limited to, any injury or damages claimed by any of CONTRACTOR's and subcontractor's employees, provided (i) CONTRACTOR is entitled to exclusively control the defense against the claim; (ii) CONTRACTOR is immediately notified of such claim and (iii) CITY provides reasonable cooperation in the defense of the claim and does not enter into any settlement or make any concession without the CONTRACTOR's prior written approval.

12. INSURANCE:

12.1. General

a. At the same time as execution of this AGREEMENT, the CONTRACTOR shall furnish the City of Chandler a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to CITY. Provided, however, the A.M. Best rating requirement shall not be deemed to apply to required Workers' Compensation coverage.

b. The CONTRACTOR and any of its subcontractors, sub-consultants or sub-licensees shall procure and maintain, until all of their obligations have been discharged, including any warranty periods under this AGREEMENT are satisfied, the insurances set forth below.

c. The insurance requirements set forth below are minimum requirements for this AGREEMENT and in no way limit the indemnity covenants contained in this AGREEMENT.

d. The CITY in no way warrants that the minimum insurance limits contained in this AGREEMENT are sufficient to protect CONTRACTOR from liabilities that might arise out of the performance of the AGREEMENT services under this AGREEMENT by CONTRACTOR, its agents, representatives, employees, subcontractors, sub-licensees or sub-consultants and the CONTRACTOR is free to purchase any additional insurance as may be determined necessary.

e. Failure to demand evidence of full compliance with the insurance requirements in this AGREEMENT or failure to identify any insurance deficiency will not relieve the CONTRACTOR from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this AGREEMENT.

f. Use of Subcontractors: If any work is subcontracted in any way, the CONTRACTOR shall execute a written AGREEMENT with Subcontractor containing the same Indemnification Clause and Insurance Requirements as the CITY requires of the CONTRACTOR in this AGREEMENT. The CONTRACTOR is responsible for executing the AGREEMENT with the Subcontractor and obtaining Certificates of Insurance and verifying the insurance requirements.

12.2. Scope and Limits of Insurance. The CONTRACTOR shall provide coverage with limits of liability not less than those stated below.

a. *Commercial General Liability-Occurrence Form.* CONTRACTOR must maintain "occurrence" form Commercial General Liability insurance with a limit of \$2,000,000 for each occurrence, \$4,000,000 aggregate. Said insurance must also include coverage for products and completed operations,

independent contractors, personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

b. Automobile Liability-Any Auto or Owned, Hired and Non-Owned Vehicles

Vehicle Liability: CONTRACTOR must maintain Business/Automobile Liability insurance with a limit of \$1,000,000 each accident on CONTRACTOR owned, hired, and non-owned vehicles assigned to or used in the performance of the CONTRACTOR's work or services under this AGREEMENT. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

c. Workers Compensation and Employers Liability Insurance: CONTRACTOR must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of CONTRACTOR employees engaged in the performance of work or services under this AGREEMENT and must also maintain Employers' Liability insurance of \$1,000,000 for each accident and \$1,000,000 disease for each employee.

d. Professional Liability. If the AGREEMENT is the subject of any professional services or work performed by the CONTRACTOR, or if the CONTRACTOR engages in any professional services or work adjunct or residual to performing the work under this AGREEMENT, the CONTRACTOR must maintain Professional Liability insurance covering errors and omissions arising out of the work or services performed by the CONTRACTOR, or anyone employed by the CONTRACTOR, or anyone whose acts, mistakes, errors and omissions the CONTRACTOR is legally liable, with a liability limit of \$1,000,000 each claim and \$2,000,000 all claims. In the event the Professional Liability insurance policy is written on a "claims made" basis, coverage must extend for 3 years past completion and acceptance of the work or services, and the CONTRACTOR, or its selected Design Professional will submit Certificates of Insurance as evidence the required coverage is in effect. The Design Professional must annually submit Certificates of Insurance citing that the applicable coverage is in force and contains the required provisions for a 3 year period.

12.3. Additional Policy Provisions Required

a. Self-Insured Retentions Or Deductibles. Any self-insured retentions and deductibles must be declared and approved by the CITY. If not approved, the CITY may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to the CITY, its officers, officials, agents, employees, and volunteers.

b. CITY as Additional Insured. The policies are to contain, or be endorsed to contain, the following provisions:

- 1) The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: The CITY, its officers, officials, agents, and employees are additional insured with respect to liability arising out of activities performed by, or on behalf of, the CONTRACTOR including the CITY's general supervision of the CONTRACTOR; Products and Completed operations of the CONTRACTOR; and automobiles owned, leased, hired, or borrowed by the CONTRACTOR.
- 2) The CONTRACTOR's insurance must contain broad form contractual liability coverage and must not exclude liability arising out of explosion, collapse, or underground property damage hazards ("XCU") coverage.
- 3) The CITY, its officers, officials, agents, and employees must be additional insured to the full limits of liability purchased by the CONTRACTOR even if those limits of liability are in excess of those required by this AGREEMENT.

- 4) The CONTRACTOR's insurance coverage must be primary insurance with respect to the CITY, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by the CITY, its officers, officials, agents, and employees shall be in excess of the coverage provided by the CONTRACTOR and must not contribute to it.
 - 5) The CONTRACTOR's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
 - 6) Coverage provided by the CONTRACTOR must not be limited to the liability assumed under the indemnification provisions of this AGREEMENT.
 - 7) The policies must contain a severability of interest clause and waiver of subrogation against the CITY, its officers, officials, agents, and employees, for losses arising from Work performed by the CONTRACTOR for the CITY.
 - 8) The CONTRACTOR, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this AGREEMENT for a minimum period of 3 years following completion and acceptance of the Work. The CONTRACTOR must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this 3 year period containing all the AGREEMENT insurance requirements, including naming the City of Chandler, its agents, representatives, officers, directors, officials and employees as Additional Insured as required.
 - 9) If a Certificate of Insurance is submitted as verification of coverage, the CITY will reasonably rely upon the Certificate of Insurance as evidence of coverage but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this AGREEMENT. If any of the required policies expire during the life of this AGREEMENT, the CONTRACTOR must forward renewal or replacement Certificates to the CITY within 10 days after the renewal date containing all the necessary insurance provisions.
13. **NOTICES:** All notices or demands required to be given pursuant to the terms of this AGREEMENT shall be given to the other party in writing, delivered by hand or registered or certified mail, at the addresses set forth below, or to such other address as the parties may substitute by written notice given in the manner prescribed in this paragraph.

In the case of the CITY

Contract Administrator: Purchasing
 Contact: Carolee Stees
 Mailing Address: PO Box 4008 MS 901
 Physical Address: 175 S. Arizona
Avenue
 City, State, Zip Chandler, AZ 85225
 Phone: 480-782-2405
 FAX: 480-782-2410

In the case of the CONTRACTOR

Firm Name: Invensys Systems, Inc.
 Contact: Terry Manns
 Address: 15 Pond Avenue
 City, State, Zip Foxboro, MA 02035
 Phone: 720-218-4763
 FAX: Terry.manns@invensys.com

Notices shall be deemed received on date delivered, if delivered by hand, and on the delivery date indicated on receipt if delivered by certified or registered mail.

14. CONFLICT OF INTEREST:

- 14.1. **No Kickback.** CONTRACTOR warrants that no person has been employed or retained to solicit or secure this AGREEMENT upon an AGREEMENT or understanding for a commission, percentage, brokerage or contingent fee; and that no member of the City Council or any employee of the CITY has any interest, financially or otherwise, in the firm unless this interest has been declared pursuant to the provisions of A.R.S. Section 38-501. Any such interests were disclosed in CONTRACTOR'S proposal to the CITY.

- 14.2. Kickback Termination.** CITY may cancel any contract or AGREEMENT, without penalty or obligation, if any person significantly involved in initiating, negotiating, securing, drafting or creating the AGREEMENT on behalf of the CITY is, at any time while the AGREEMENT or any extension of the AGREEMENT is in effect, an employee of any other party to the AGREEMENT in any capacity or a CONTRACTOR to any other party to the AGREEMENT with respect to the subject matter of the AGREEMENT. The cancellation shall be effective when written notice from CITY is received by all other parties, unless the notice specifies a later time (A.R.S. §38-511).
- 14.3. No Conflict:** CONTRACTOR stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this project.
- 15. GENERAL TERMS:**
- 15.1. Ownership.** All deliverables and/or other products of the AGREEMENT (including but not limited to all software documentation, reports, records, summaries and other matter and materials prepared or developed by CONTRACTOR in performance of the AGREEMENT) shall be the sole, absolute and exclusive property of CITY, free from any claim or retention of right on the part of CONTRACTOR, its agents, sub-contractors, officers or employees. CONTRACTOR may utilize proprietary works of authorship, pre-existing or otherwise, including without limitation software, computer programs, methodologies, templates, flowcharts, architecture designs, tools, specifications, drawings, sketches, models, samples, records and documentation, as well as Intellectual Property Rights and any derivatives thereof, which have been originated, developed or purchased by CONTRACTOR, a parent or affiliated Buyer of CONTRACTOR, or by third parties under contract to CONTRACTOR or to a parent or affiliated company of CONTRACTOR (all of the foregoing, collectively, "Seller's Information"). CONTRACTOR shall retain at all times ownership of the Seller's Information.
- 15.2. Entire AGREEMENT.** This AGREEMENT, including all Exhibits attached hereto, constitutes the entire understanding of the parties and supersedes all previous representations, written or oral, with respect to the services specified herein. This AGREEMENT may not be modified or amended except by a written document, signed by authorized representatives of each party.
- 15.3. Arizona Law.** This AGREEMENT shall be governed and interpreted according to the laws of the State of Arizona.
- 15.4. Assignment:** Services covered by this AGREEMENT shall not be assigned in whole or in part without the prior written consent of the CITY. Notwithstanding the foregoing, CONTRACTOR shall have the right to assign this AGREEMENT or any Purchase Order hereunder to any of its parent or affiliates without prior written consent of CITY.
- 15.5. Amendments.** The AGREEMENT may be modified only through a written AGREEMENT Amendment executed by authorized persons for both parties. Changes to the AGREEMENT, including the addition of work or materials, the revision of payment terms, or the substitution of work or materials, directed by a person who is not specifically authorized by the CITY in writing or made unilaterally by the CONTRACTOR are violations of the AGREEMENT. Any such changes, including unauthorized written AGREEMENT Amendments shall be void and without effect, and the CONTRACTOR shall not be entitled to any claim under this AGREEMENT based on such changes. Any alteration, deletion or addition to the Work ordered in the Purchase Order or a change in any provision of the Purchase Order shall be effective only if made in a change order and executed by CITY and CONTRACTOR. A change order, however, shall not modify any provisions of the AGREEMENT unless the parties agree in writing to do so.

15.6. Independent CONTRACTOR. The CONTRACTOR under this AGREEMENT is an independent CONTRACTOR. Neither party to this AGREEMENT shall be deemed to be the employee or agent of the other party to the AGREEMENT.

15.7. No Parole Evidence. This AGREEMENT is intended by the parties as a final and complete expression of their AGREEMENT. No course of prior dealings between the parties and no usage of the trade shall supplement or explain any terms used in this document and no other understanding either oral or in writing shall be binding.

15.8. Authority: Each party hereby warrants and represents that it has full power and authority to enter into and perform this AGREEMENT, and that the person signing on behalf of each has been properly authorized and empowered to enter this AGREEMENT. Each party further acknowledges that it has read this AGREEMENT, understands it, and agrees to be bound by it.

15.9 Limitation of Liability:

15.9.1 In no event shall CONTRACTOR or CITY have liability under this AGREEMENT or any purchase order for any special, incidental, punitive, exemplary, indirect or consequential damages, including but not limited to loss of profits, loss of production, loss of revenues, interest, capital, financing, good will, use, business reputation, opportunity or productivity, howsoever arising, even if CITY has been advised of the possibility of such damages.

15.9.2 CONTRACTOR's liability under this AGREEMENT for any direct damages arising out of or in any way related to this AGREEMENT (whether arising under tort, negligence, contract, warranty, strict liability or other cause or combination of causes) shall in no event exceed the specific price of the goods, software and/or services provided under the purchase order giving rise to liability. With respect to site based services, the maximum aggregate liability of CONTRACTOR for direct damages under the purchase order giving rise to liability shall not exceed the amount equivalent to one Professional Service Laborer's work day.

15.10 Software License:

a. In consideration of the receipt of full payment of the Software license fee applicable as part of the price under a purchase order, and subject to CITY's compliance with its obligations under this AGREEMENT and/or the purchase order, CONTRACTOR shall provide to CITY a personal, non-transferable, non-exclusive limited license to use the Software described in the relevant purchase order and the CONTRACTOR Information incorporated into any deliverables, if any, for purpose of CITY's ordinary business as defined in a statement of work and in the particular location(s) and/or on the particular systems for which CITY licensed such Software, as those locations and/or systems are identified in the purchase order.

b. CONTRACTOR's Software licensed to CITY may contain components that are owned by third parties. The third party owner shall retain exclusive right to its firmware and software. Use of such third party components may be subject to restrictions contained in the third party's end-user license AGREEMENT in addition to the conditions set forth herein. CONTRACTOR shall make available to CITY upon request the third party's end-user license AGREEMENT applicable. Copyright and other proprietary rights notices of CONTRACTOR and third parties are contained in the Software and CITY shall not modify, delete or obfuscate such notices.

c. CITY may not without CONTRACTOR's prior written express consent (i) copy, modify, sublicense, loan or transfer in any manner the Software licensed herein; (ii) create derivative works based on the Software licensed herein; (iii) translate, decompile, disassemble, reverse assemble, reverse engineer, emulate or perform any other operation on the Software, unless the operation is specifically authorized by law. CITY shall hold the Software licensed herein in strict confidence and will not allow third parties, other than its employees with a need to use the Software and who have agreed to comply with the terms of this Software License article, to access or use the Software without CONTRACTOR's prior

written consent. CITY agrees to defend, indemnify and hold harmless CONTRACTOR from all damages and third party claims arising from unauthorized use or transfer of the Software.

d. Notwithstanding the foregoing restrictions but subject to all restrictions applicable to Third Party Products as set forth herein CITY shall be entitled to make one (1) copy of the Software for backup or archival purposes and may make a limited reasonable number of copies of the instruction manuals and documentation related to the Software for purpose of their use by CITY in connection with the authorized use of the Software. All titles, trademarks and copyrights and restricted rights notices shall be reproduced in such copies.

e. CITY shall maintain complete and accurate records documenting the location and use of the licensed Software in CITY's possession. No later than thirty (30) days upon receipt of CONTRACTOR's written request, CITY shall provide CONTRACTOR with a signed certification of compliance with the Software licensing conditions. CONTRACTOR has the right to conduct an audit of CITY's use of the Software. Any such audit shall be conducted during regular business hours at CITY's facilities. If an audit reveals any underpayment of license fees, CITY shall be invoiced for additional license fees consistent with CONTRACTOR's then price list for the Software at the time of its use, without any discount being applicable in that instance. CITY shall then immediately pay the underpaid amount, but not to exceed this AGREEMENT's Price. The assessment of additional license fee is without prejudice to CONTRACTOR's other remedies in the event of breach by CITY of other licensing conditions.

f. CITY may not transfer its license to use the Software and related documentation and written materials to a third party without the CONTRACTOR's prior written consent. In case of CONTRACTOR approval of such transfer, CITY shall be responsible to ensure that the recipient agrees to the terms of this Software License article.

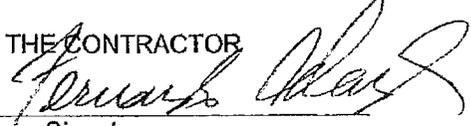
g. If the Software is licensed for use in the performance of a U.S. Government prime contract or subcontract, CITY agrees that, consistent with FAR 12.211 and 12.212, commercial computer Software, computer Software documentation and technical data for commercial items are licensed under CONTRACTOR's standard commercial license.

IN WITNESS WHEREOF, the parties have hereunto subscribed their names to this ____ day of September, 2014.

FOR THE CITY OF CHANDLER

FOR THE CONTRACTOR

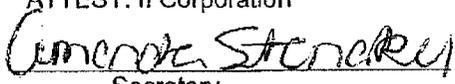
Mayor

By: 
Signature

ATTEST:

SEAL ATTEST: If Corporation

City Clerk


Secretary

Approved as to form:

City Attorney *KSM*

EXHIBIT A
CONTRACTOR IMMIGRATION WARRANTY
To Be Completed by Contractor Prior to Execution of AGREEMENT

A.R.S. § 41-4401 requires as a condition of your contract verification of compliance by the contractor and subcontractors with the Federal Immigration and Nationality Act (FINA), all other Federal immigration laws and regulations, and A.R.S. § 23-214 related to the Immigration status of its employees.

By completing and signing this form the contractor shall attest that it and all subcontractors performing work under the cited contract meet all conditions contained herein.

Contract Number: MU4-918-3402		
Name (as listed in the contract): Invensys		
Street Name and Number: 15 Pond Avenue		
City: Foxboro	State: MA	Zip Code: 02035

I hereby attest that:

1. The contractor complies with the Federal Immigration and Nationality Act (FINA), all other Federal immigration laws and regulations, and A.R.S. § 23-214 related to the immigration status of those employees performing work under this contract;
2. All subcontractors performing work under this contract comply with the Federal Immigration and Nationality Act (FINA), all other Federal immigration laws and regulations, and A.R.S. § 23-214 related to the immigration status of their employees.

Signature of Contractor (Employer) or Authorized Designee:



Printed Name: FERNANDO ALANOIA

Title: VP-FINANCE

Date (month/day/year): 8/20/2014

**EXHIBIT B
SCOPE OF WORK**

Contractor shall provide all equipment and perform all services per the schedule as shown in the attached Invensys proposal No. FPC-1213-29119-R1 and No. FPC-1012-22192-R0.

**EXHIBIT C
FEE SCHEDULE**

City shall pay Contractor for all equipment provided and work completed upon receipt of each approved invoice, in an amount not to exceed \$688,718, not including travel and expenses.

AWRF (Wastewater) 100 Series I/O Advantage Upgrade	\$209,589.00
SWTP (Water) 100 Series I/O Advantage Upgrade	\$214,729.00
Wastewater Plant I/A 8.8 Secure Upgrade	\$110,367.00
Fresh Water Plant I/A 8.8 Secure Upgrade	\$154,033.00
Travel, Lodging, and Per Diem Allowance	\$10,000.00
TOTAL	\$698,718.00

Travel Related Expenses:

Contractor shall invoice the City for travel expenses, providing a summary of such expenses with the invoice and copies of individual receipts upon request. All travel and living expenses (with the exception of per diem meal allowances) are billed with 5% markup of the actual costs incurred, with receipts for such costs retained by Contractor in accordance with IRS guidelines. Reimbursable expenses include travel cost for airfare (coach), car rental (economy), taxis, shuttles, trains, parking, tolls and fees, lodging, and a per diem to cover meals, meal tips, and incidental expenses.

Lodging:

Contractor employees will acquire lodging consistent with business travel rates for the area of City's offices. Contractor employees will use the lower of Contractor's corporate rate or the rate available to the City, if the same rate may be obtained by Contractor, at designated national brand hotels whenever possible. Expenses shall be billed with 5% markup of actual costs incurred.

Per Diem:

Meal expenses are calculated on a per diem basis using the allowed rate for the specific local or metropolitan area under the General Service Administration ("GSA) tables applicable to Federal employees traveling at government expense. GSA publishes Continental US (CONUS) per diem tables for each local or metropolitan area annually on October 1. The per diem rate includes all meals, meal tips, and incidental expenses. The per diem rate is prorated for partial days of travel away from home according to the GSA guidelines.



i n v e n s y s TM

i n v e n s y s
Avantis

i n v e n s y s
Foxboro

i n v e n s y s
InFusion

i n v e n s y s
SimSci-Esscor

i n v e n s y s
Triconex

i n v e n s y s
Eurotherm

i n v e n s y s
Wonderware.

City of Chandler Chandler, Arizona

I/A Series Advantage Upgrade AWRF & SWTP 100 Series I/O Subsystems

Binding Firm Price Proposal

Rust Automation & Controls, Inc.
Contact:

Name Art Olson
Title Sales Account Manger
Phone 801-566-7878
Mobile 928-830-7963
Email art@rustco.com

Invensys Contact:

Name Terry Manns
Title Regional Channel Manager
Phone 720-218-4763
Email terry.manns@invensys.com

Proposal No.: FPC-1012-22192-R0

May 28, 2014

This proposal contains technical and business information that is confidential and proprietary to Invensys. It is provided to the City of Chandler solely for internal review and evaluation. The information contained herein may not be shown or disclosed in any form to third parties without the express consent of Invensys.

2.3.1 AWRF (Wastewater Treatment) Bill of Material

Item	Qty	Model	Description
1.00	18	P0997UQ	UpgDoc-8VertBplatTstro 8FBM Adv100-200 P0926JM
		P0997UQ	FUNCTION: UpgDoc-8VertBplatTstro 8FBM Adv100-200 P0926JM Must be returned within 3 months in refurbishable condition. Reference documentation for return of 100 series FBMs as replaced by 200 series FBMs. Return to Foxboro, MA, USA within 3 months of shipment of 200 Series. Advantage discount is provided on 200 Series FBMs and identified peripherals connected to CP270s in exchange for the return of 100 Series I/O, power supplies and associated peripherals.

Item	Qty	Model	Description
1.01	18	P0926JM	8 Slots Vert. Baseplate, Time Strobe, 8 FBM
		P0926JM	FUNCTION: 8 Slots Vert. Baseplate, Time Strobe, 8 FBM Vertical Baseplate With 8 FBMs' Slots, With Time Strobe And Local Fieldbus Connectors.

Item	Qty	Model	Description
1.02	36	P0926KM	Power Supply Output Cable - 121 cm (48 in)
		P0926KM	FUNCTION: Power Supply Output Cable - 121 cm (48 in) Cable To Connect P0917LY Power Supply To Modular Baseplate. One Cable Per Baseplate Required For Non-Redundant Power, Two Cables For Redundant Cable. Length 48 Inches / 121 cm.

Item	Qty	Model	Description
2.00	1	P0926KH	2 FCM Slots Vert. Baseplate, Time Strobe
		P0926KH	FUNCTION: 2 FCM Slots Vert. Baseplate, Time Strobe Vertical Baseplate For 2 FCM With Time Strobe And Local Fieldbus Connectors.

Item	Qty	Model	Description
2.01	2	P0972ZA	FCM100E, Field Comm Mod w/Fiber Optic
		P0972ZA	FUNCTION: FCM100E, Field Comm Mod w/Fiber Optic FCM100E Field Communication Module for connecting The Mesh Network to Series 100 or Series 200 field bus modules. Uses one fiber optic 100 Mbps Ethernet Mesh connection. Two modules required for redundant Mesh installations. Does not support TDR (Transient Data Recorder) functions. Operates up to 70° C (158° F).

Item	Qty	Model	Description
2.02	2	P0926KM	Power Supply Output Cable - 121 cm (48 in)
		P0926KM	FUNCTION: Power Supply Output Cable - 121 cm (48 in) Cable To Connect P0917LY Power Supply To Modular Baseplate. One Cable Per Baseplate Required For Non-Redundant Power, Two Cables For Redundant Cable. Length 48 Inches / 121 cm.

Item	Qty	Model	Description
2.03	2	P0972TS	15 m MMF, Fiber, MT-RJ To LC Adapter Cable
		P0972TS	FUNCTION: 15 m MMF, Fiber, MT-RJ To LC Adapter Cable 15 Meter Fiber, MMF, 62.5/125 um, Plenum, MT-RJ To LC Adapter Cable Used To Connect FCP/ZCPs To MT-RJ Fiber Switches. Has PVC Content.

Item	Qty	Model	Description
3.00	2	P0924RT	FBI200 Base Plate
		P0924RT	FUNCTION: FBI200 Base Plate This Baseplate accepts a pair of FBI200 isolators. The Baseplate has a DIN-rail clamp for affixing the assembly to a DIN-rail.

Item	Qty	Model	Description
3.01	2	P0927AP	FBI200 module
		P0927AP	FUNCTION: FBI200 module The FBI200 (Fieldbus Isolator) provides HDLC message isolation, galvanic isolation, filtering, and repeating functionality at both 268 Kb/s and 2 Mb/s. May operate in a 268 Kb-only mode, a 2 Mb-only mode, or in a mixed mode.

Item	Qty	Model	Description
3.02	2	P0926LC	Splitter/Terminator 268Kbps Fieldbus
		P0926LC	FUNCTION: Splitter/Terminator 268Kbps Fieldbus Baseplate Adapter/Terminator for connecting 268kbps fieldbus for use with FCP270 and FCM100 baseplates.

Item	Qty	Model	Description
3.03	4	P0903VY	Termination Cable Assembly
		P0903VY	FUNCTION: Termination Cable Assembly Integrator Used With P0913SA Or P0913SB I/A Series Migration Kits For Honeywell DCS Systems. Replaces PXID11, 21, 31, 41.

Item	Qty	Model	Description
3.04	4	P0926KM	Power Supply Output Cable - 121 cm (48 in)
		P0926KM	FUNCTION: Power Supply Output Cable - 121 cm (48 in) Cable To Connect P0917LY Power Supply To Modular Baseplate. One Cable Per Baseplate Required For Non-Redundant Power, Two Cables For Redundant Cable. Length 48 Inches / 121 cm.

Item	Qty	Model	Description
4.00	10	P0916RB	Fieldbus Baseplate Terminator
		P0916RB	FUNCTION: Fieldbus Baseplate Terminator Connector With Termination Resistors. Plugs Into A Connector On The Baseplate. Two Are Required For Each Module Fieldbus Branch Consisting Of 1 To 4 Baseplates.

Item	Qty	Model	Description
5.00	16	P0997TM	UpgDoc-Pwr Supply FPS400-24 Adv100-200Mesh P0922YU

P0997TM FUNCTION: UpgDoc-Pwr Supply FPS400-24 Adv100-200Mesh P0922YU Must be returned within 3 months in refurbishable condition. Reference documentation for return of 100 series FBMs as replaced by 200 series FBMs. Return to Foxboro, MA, USA within 3 months of shipment of 200 Series. Advantage discount is provided on 200 Series FBMs and identified peripherals connected to CP270s in exchange for the return of 100 Series I/O, power supplies and associated peripherals.

Item	Qty	Model	Description
5.01	16	P0922YU	Power Supply, FPS 400-24

P0922YU FUNCTION: Power Supply, FPS 400-24 Power Supply With Universal ac/dc Mains @ 85/265 Vac 47/63 Cycles Or 125 Vdc; Output 24 Vdc. UL And UL-C Listed For Class I, Division 2, Groups A, B, C, D And CENELEC Certified For Zone 2 Group IIC. For G3 Environmental Locations. Rated Output 400 Watts.

Item	Qty	Model	Description
5.02	16	P0926TM	110/240V FPS Power Cable, 4 Ft

P0926TM FUNCTION: 110/240V FPS Power Cable, 4 Ft Cable to connect input power connection kit to P0922YU power supply. One cable per power supply required. Length 4 feet.

Item	Qty	Model	Description
6.00	21	P0997NB	Upg Doc FBM217 Adv 100-200 P0914TR

P0997NB FUNCTION: Upg Doc FBM217 Adv 100-200 P0914TR Must be returned within 3 months in refurbishable conditions. Reference documentation for return of 100 series FBMs as replaced by 200 series FBMs. Return to Foxboro, MA, USA within 3 months of shipment of 200 Series. Advantage discount is provided on 200 Series FBMs and identified peripherals connected to CP270s in exchange for the return of 100 Series I/O, power supplies and associated peripherals.

Item	Qty	Model	Description
6.01	21	P0916CA	Compression Term Assy, FBM217, 15-30 Vdc Vmon

P0916CA FUNCTION: Compression Term Assy, FBM217, 15-30 Vdc Vmon Two Tier Compression Style Term Block For Connection Of 32 DI Circuits In Voltage Monitor Configuration.

Item	Qty	Model	Description
6.02	21	P0916FH	FBM2xx Type 4 Term Cable, 1 Meter

P0916FH FUNCTION: FBM2xx Type 4 Term Cable, 1 Meter 18 Twisted Pair 26 AWG Termination Cable, 37Dsub To 37Dsub For Use On 16 Channel Differential Input FBMs, Discrete FBMs, And 32 Channel Group Discrete Types 207, 207b, 207c, 211, 212, 217, 219, 241, 241b, 241c, 241d, 242. Shielded Cable, Polyurethane Outer Jacket, PVC Insulation On Inner Wires.

Item	Qty	Model	Description
6.03	21	P0914TR	FBM217, Discrete Inputs, 32 Channels
		P0914TR	FUNCTION: FBM217, Discrete Inputs, 32 Channels FBM217 Provides 32 Two Wire Channels For Monitoring On/ Off Voltage Levels. Termination Assemblies Are Available To Support 15-60 Vdc, 120 Vac/115 Vdc, And 240 Vac.

Item	Qty	Model	Description
7.00	37	P0997MY	Upg Doc FBM241 Adv 100-200 P0914TG
		P0997MY	FUNCTION: Upg Doc FBM241 Adv 100-200 P0914TG Must be returned within 3 months in refurbishable conditions. Reference documentation for return of 100 series FBMs as replaced by 200 series FBMs. Return to Foxboro, MA, USA within 3 months of shipment of 200 Series. Advantage discount is provided on 200 Series FBMs and identified peripherals connected to CP270s in exchange for the return of 100 Series I/O, power supplies and associated peripherals.

Item	Qty	Model	Description
7.01	37	P0916AS	Compression TA FBM241 125V Vmon + 5A Relay Out
		P0916AS	FUNCTION: Compression TA FBM241 125V Vmon + 5A Relay Out Two Tier Compression Style Term Block For Connection Of 8 DI Circuits In 120 Vac/125 Vdc Monitor Configuration, Plus 8 DO Circuits Using 5A Form C Relay For Applications With External Fusing And Power Distribution.

Item	Qty	Model	Description
7.02	37	P0916FH	FBM2xx Type 4 Term Cable, 1 Meter
		P0916FH	FUNCTION: FBM2xx Type 4 Term Cable, 1 Meter 18 Twisted Pair 26 AWG Termination Cable, 37Dsub To 37Dsub For Use On 16 Channel Differential Input FBMs, Discrete FBMs, And 32 Channel Group Discrete Types 207, 207b, 207c, 211, 212, 217, 219, 241, 241b, 241c, 241d, 242. Shielded Cable, Polyurethane Outer Jacket, PVC Insulation On Inner Wires.

Item	Qty	Model	Description
7.03	37	P0914TG	FBM241 Ch Isolated Vmon DI + External Source DO
		P0914TG	FUNCTION: FBM241 Ch Isolated Vmon DI + External Source DO FBM Module For Mounting On DIN Rail Baseplate. Provides 8 Vmon DINs And 8 External Sourced DO Rated Up To 2A @ 60 Vdc. Term Assemblies Are Available For Vmon Inputs Of 15-60 Vdc, 120 Vac/ 125 Vdc, Or 240 Vac; And Switch Inputs With 120 Vac/125 Vdc Or 240 Vac Excitation; 2A 60 Vdc Outputs, Relay Outputs, Or Relay Outputs With Power Distribution And Fusing.

Item	Qty	Model	Description
8.00	11	P0998DQ	UgdDoc P0927AH FBM214b HART Ins 8 Ch's from FBM243
		P0998DQ	FUNCTION: UgdDoc P0927AH FBM214b HART Ins 8 Ch's from FBM243 FoxCom to 4-20mA / Hart. Must be returned within 3 months in refurbishable condition. Advantage Upgrade Document that provides discounts for P0927AH: FBM214b, HART Inputs, 8 Channels FBM Module Providing 8 Channel-Isolation HART Inputs

Item	Qty	Model	Description
8.01	11	P0924JH	FBM214b/216b Compression Term Assembly, Poly Amide
		P0924JH	FUNCTION: FBM214b/216b Compression Term Assembly, Poly Amide Compression style termination assembly for FBM214b HART module or FBM216b redundant ready HART module. Constructed of poly amide.

Item	Qty	Model	Description
8.02	11	P0916DB	FBM2xx Type 1 Term Cable, 1 Meter
		P0916DB	FUNCTION: FBM2xx Type 1 Term Cable, 1 Meter 8 Channel Triad Termination Cable, 37Dsub to 25Dsub for use on Channel Isolated FBMs Type 201, 203, 204, 205, 206, 237. Shielded cable polyurethane outer jacket, PVC insulation on inner wires.

Item	Qty	Model	Description
8.03	11	P0927AH	FBM214b, HART Inputs, 8 Channels
		P0927AH	FUNCTION: FBM214b, HART Inputs, 8 Channels FBM Module Providing 8 Channel-Isolated HART Inputs

Item	Qty	Model	Description
9.00	17	P0998EB	UgdDoc P0927AK FBM244 HART 4in/4o from FBM243/243b
		P0998EB	FUNCTION: UgdDoc P0927AK FBM244 HART 4in/4o from FBM243/243b FoxCom to 4-20mA / Hart. Must be returned within 3 months in refurbishable condition.

Item	Qty	Model	Description
9.01	17	P0924QU	FBM244/245 T/A
		P0924QU	FUNCTION: FBM244/245 T/A FBM244/245 T/A

Item	Qty	Model	Description
9.02	17	P0916DB	FBM2xx Type 1 Term Cable, 1 Meter
		P0916DB	FUNCTION: FBM2xx Type 1 Term Cable, 1 Meter 8 Channel Triad Termination Cable, 37Dsub to 25Dsub for use on Channel Isolated FBMs Type 201, 203, 204, 205, 206, 237. Shielded cable polyurethane outer jacket, PVC insulation on inner wires.

Item	Qty	Model	Description
9.03	17	P0927AK	FBM244, HART 4 Input + 4 Output Channels
		P0927AK	FUNCTION: FBM244, HART 4 Input + 4 Output Channels The FBM244 provides four HART inputs and four HART outputs with A/D conversion and per-channel HART modems.

Item	Qty	Model	Description
10.00	3	P0916NB	2 Mbps Base To Base Cable, 5m
		P0916NB	FUNCTION: 2 Mbps Base To Base Cable, 5m Cable To Connect 2 Mbps Module Fieldbus Between P0940XA Or P0940XB Baseplates. One Cable Provides Bus Redundancy.

Item	Qty	Model	Description
11.00	1	P0916UH	2 Mbps Base To Base Cable 20 m
		P0916UH	FUNCTION: 2 Mbps Base To Base Cable 20 m Cable To Connect 2 Mbps Module Fieldbus Between P0940XA Or

P0940XB Baseplates. One Cable Provides Bus Redundancy.

Item	Qty	Model	Description
12.00	12	P0916NC	2 Mbps Base To Base Cable, 3m
		P0916NC	FUNCTION: 2 Mbps Base To Base Cable, 3m Cable To Connect 2 Mbps Module Fieldbus Between P0940XA Or P0940XB Baseplates. One Cable Provides Bus Redundancy.

Item	Qty	Model	Description
13.00	2	P0917JJ	2 Mbps Base To Base Cable 0.5m
		P0917JJ	FUNCTION: 2 Mbps Base To Base Cable 0.5m Cable To Connect 2 Mbps Module Fieldbus Between P0940XA Or P0940XB Baseplates. One Cable Provides Bus Redundancy.

Item	Qty	Model	Description
14.00	1	P0916UJ	2 Mbps Base To Base Cable 30 m
		P0916UJ	FUNCTION: 2 Mbps Base To Base Cable 30 m Cable To Connect 2 Mbps Module Fieldbus Between P0940XA Or P0940XB Baseplates. One Cable Provides Bus Redundancy.

NOTE: This bill of materials is based on input from the City of Chandler. Additional equipment if required will be available for purchase on request at current published pricing.

--- END AWRF Advantage Upgrade Bill of Material ---

2.3.2 SWTP (Water Treatment) Bill of Material

Item	Qty	Model	Description
1.00	12	P0997UK	UpgDoc-8HorBplateTStrobe 8FBMAAdv100-200 P0926HT
		P0997UK	FUNCTION: UpgDoc-8HorBplateTStrobe 8FBMAAdv100-200 P0926HT Must be returned within 3 months in refurbishable condition. Reference documentation for return of 100 series FBMs as replaced by 200 series FBMs. Return to Foxboro, MA, USA within 3 months of shipment of 200 Series. Advantage discount is provided on 200 Series FBMs and identified peripherals connected to CP270s in exchange for the return of 100 Series I/O, power supplies and associated peripherals.

Item	Qty	Model	Description
1.01	12	P0926HT	8 Slots Hor. Baseplate, Time Strobe, 8FBM
		P0926HT	FUNCTION: 8 Slots Hor. Baseplate, Time Strobe, 8FBM Horizontal Baseplate With 8 FBMs' Slots, With Time Strobe And Local Fieldbus Connectors.

Item	Qty	Model	Description
1.02	24	P0926KM	Power Supply Output Cable - 121 cm (48 in)
		P0926KM	FUNCTION: Power Supply Output Cable - 121 cm (48 in) Cable To Connect P0917LY Power Supply To Modular Baseplate. One Cable Per Baseplate Required For Non-Redundant Power, Two Cables For Redundant Cable. Length 48 Inches / 121 cm.

Item	Qty	Model	Description
2.00	4	P0997UQ	UpgDoc-8VertBplatTStro 8FBM Adv100-200 P0926JM
		P0997UQ	FUNCTION: UpgDoc-8VertBplatTStro 8FBM Adv100-200 P0926JM Must be returned within 3 months in refurbishable condition. Reference documentation for return of 100 series FBMs as replaced by 200 series FBMs. Return to Foxboro, MA, USA within 3 months of shipment of 200 Series. Advantage discount is provided on 200 Series FBMs and identified peripherals connected to CP270s in exchange for the return of 100 Series I/O, power supplies and associated peripherals.

Item	Qty	Model	Description
2.01	4	P0926JM	8 Slots Vert. Baseplate, Time Strobe, 8FBM
		P0926JM	FUNCTION: 8 Slots Vert. Baseplate, Time Strobe, 8FBM Vertical Baseplate With 8 FBMs' Slots, With Time Strobe And Local Fieldbus Connectors.

Item	Qty	Model	Description
2.02	8	P0926KM	Power Supply Output Cable - 121 cm (48 in)
		P0926KM	FUNCTION: Power Supply Output Cable - 121 cm (48 in) Cable To Connect P0917LY Power Supply To Modular Baseplate. One Cable Per Baseplate Required For Non-Redundant Power, Two Cables For Redundant Cable. Length 48 Inches / 121 cm.

Item	Qty	Model	Description
3.00	14	P0924RT	FBI200 Base Plate
		P0924RT	FUNCTION: FBI200 Base Plate This Baseplate accepts a pair of FBI200 isolators. The Baseplate has a DIN-rail clamp for affixing the assembly to a DIN-rail.

Item	Qty	Model	Description
3.01	14	P0927AP	FBI200 module
		P0927AP	FUNCTION: FBI200 module The FBI200 (Fieldbus Isolator) provides HDLC message isolation, galvanic isolation, filtering, and repeating functionality at both 268 Kb/s and 2 Mb/s. May operate in a 268 Kb-only mode, a 2 Mb-only mode, or in a mixed mode.

Item	Qty	Model	Description
3.02	14	P0926LC	Splitter/Terminator 268Kbps Fieldbus
		P0926LC	FUNCTION: Splitter/Terminator 268Kbps Fieldbus Baseplate Adapter/Terminator for connecting 268kbps fieldbus for use with FCP270 and FCM100 baseplates.

Item	Qty	Model	Description
3.03	28	P0903VY	Termination Cable Assembly
		P0903VY	FUNCTION: Termination Cable Assembly Integrator Used With P0913SA Or P0913SB I/A Series Migration Kits For Honeywell DCS Systems. Replaces PXID11, 21, 31, 41.

Item	Qty	Model	Description
3.04	28	P0926KM	Power Supply Output Cable - 121 cm (48 in)
		P0926KM	FUNCTION: Power Supply Output Cable - 121 cm (48 in) Cable To Connect P0917LY Power Supply To Modular Baseplate. One Cable Per Baseplate Required For Non-Redundant Power, Two Cables For Redundant Cable. Length 48 Inches / 121 cm.

Item	Qty	Model	Description
4.00	28	P0916RB	Fieldbus Baseplate Terminator
		P0916RB	FUNCTION: Fieldbus Baseplate Terminator Connector With Termination Resistors. Plugs Into A Connector On The Baseplate. Two Are Required For Each Module Fieldbus Branch Consisting Of 1 To 4 Baseplates.

Item	Qty	Model	Description
5.00	28	P0997TM	UpgDoc-Pwr Supply FPS400-24 Adv100-200Mesh
		P0997TM	FUNCTION: UpgDoc-Pwr Supply FPS400-24 Adv100-200Mesh P0922YU Must be returned within 3 months in refurbishable condition. Reference documentation for return of 100 series FBMs as replaced by 200 series FBMs. Return to Foxboro, MA, USA within 3 months of shipment of 200 Series. Advantage discount is provided on 200 Series FBMs and identified peripherals connected to CP270s in exchange for the return of 100 Series I/O, power supplies and associated peripherals.

Item	Qty	Model	Description
5.01	28	P0922YU	Power Supply, FPS 400-24
		P0922YU	FUNCTION: Power Supply, FPS 400-24 Power Supply With Universal ac/dc Mains @ 85/265 Vac 47/63 Cycles Or 125 Vdc; Output 24 Vdc. UL And UL-C Listed For Class I, Division 2, Groups A, B, C, D And CENELEC Certified For Zone 2 Group IIC. For G3 Environmental Locations. Rated Output 400 Watts.

Item	Qty	Model	Description
5.02	28	P0926TM	110/240V FPS Power Cable, 4 Ft
		P0926TM	FUNCTION: 110/240V FPS Power Cable, 4 Ft Cable to connect input power connection kit to P0922YU power supply. One cable per power supply required. Length 4 feet.

Item	Qty	Model	Description
6.00	4	P0997NB	Upg Doc FBM217 Adv 100-200 P0914TR
		P0997NB	FUNCTION: Upg Doc FBM217 Adv 100-200 P0914TR Must be returned within 3 months in refurbishable conditions. Reference documentation for return of 100 series FBMs as replaced by 200 series FBMs. Return to Foxboro, MA, USA within 3 months of shipment of 200 Series. Advantage discount is provided on 200 Series FBMs and identified peripherals connected to CP270s in exchange for the return of 100 Series I/O, power supplies and associated peripherals.

Item	Qty	Model	Description
6.01	4	P0916CA	Compression Term Assy, FBM217, 15-30 Vdc Vmon
		P0916CA	FUNCTION: Compression Term Assy, FBM217, 15-30 Vdc Vmon Two Tier Compression Style Term Block For Connection Of 32 DI Circuits In Voltage Monitor Configuration.

Item	Qty	Model	Description
6.02	4	P0916FH	FBM2xx Type 4 Term Cable, 1 Meter
		P0916FH	FUNCTION: FBM2xx Type 4 Term Cable, 1 Meter 18 Twisted Pair 26 AWG Termination Cable, 37Dsub To 37Dsub For Use On 16 Channel Differential Input FBMs, Discrete FBMs, And 32 Channel Group Discrete Types 207, 207b, 207c, 211, 212, 217, 219, 241, 241b, 241c, 241d, 242. Shielded Cable, Polyurethane Outer Jacket, PVC Insulation On Inner Wires.

Item	Qty	Model	Description
6.03	4	P0914TR	FBM217, Discrete Inputs, 32 Channels
		P0914TR	FUNCTION: FBM217, Discrete Inputs, 32 Channels FBM217 Provides 32 Two Wire Channels For Monitoring On/ Off Voltage Levels. Termination Assemblies Are Available To Support 15-60 Vdc, 120 Vac/115 Vdc, And 240 Vac.

Item	Qty	Model	Description
7.00	15	P0998DQ	UgdDoc P0927AH FBM214b HART Ins 8 Ch's from FBM243
		P0998DQ	FUNCTION: UgdDoc P0927AH FBM214b HART Ins 8 Ch's from FBM243 FoxCom to 4-20mA / Hart. Must be returned within 3 months in refurbishable condition. Advantage Upgrade Document that provides

discounts for P0927AH: FBM214b, HART Inputs, 8 Channels FBM Module Providing 8 Channel-Isolation HART Inputs

Item	Qty	Model	Description
7.01	15	P0924JH	FBM214b/216b Compression Term Assembly, Poly Amide
		P0924JH	FUNCTION: FBM214b/216b Compression Term Assembly, Poly Amide Compression style termination assembly for FBM214b HART module or FBM216b redundant ready HART module. Constructed of poly amide.

Item	Qty	Model	Description
7.02	15	P0916DB	FBM2xx Type 1 Term Cable, 1 Meter
		P0916DB	FUNCTION: FBM2xx Type 1 Term Cable, 1 Meter 8 Channel Triad Termination Cable, 37Dsub to 25Dsub for use on Channel Isolated FBMs Type 201, 203, 204, 205, 206, 237. Shielded cable polyurethane outer jacket, PVC insulation on inner wires.

Item	Qty	Model	Description
7.03	15	P0927AH	FBM214b, HART Inputs, 8 Channels
		P0927AH	FUNCTION: FBM214b, HART Inputs, 8 Channels FBM Module Providing 8 Channel-Isolated HART Inputs

Item	Qty	Model	Description
8.00	26	P0998EA	UgdDoc P0927AG FBM239 Discrete 8in/8out/8In/8Out
		P0998EA	FUNCTION: UgdDoc P0927AG FBM239 Discrete 8in/8out/8In/8Out Must be returned within 3 months in refurbishable condition.

Item	Qty	Model	Description
8.01	26	P0924VM	FBM239 TA. 16 dc In: 16 Contact Sense; Out:16 DO
		P0924VM	FUNCTION: FBM239 TA. 16 dc In: 16 Contact Sense; Out: 16 DO Termination Assembly for FBM239. 16 Digital Input Contact Sense and 16 Digital outputs (all signals pass through the TA)

Item	Qty	Model	Description
8.02	26	P0916FH	FBM2xx Type 4 Term Cable, 1 Meter
		P0916FH	FUNCTION: FBM2xx Type 4 Term Cable, 1 Meter 18 Twisted Pair 26 AWG Termination Cable, 37Dsub To 37Dsub For Use On 16 Channel Differential Input FBMs, Discrete FBMs, And 32 Channel Group Discrete Types 207, 207b, 207c, 211, 212, 217, 219, 241, 241b, 241c, 241d, 242. Shielded Cable, Polyurethane Outer Jacket, PVC Insulation On Inner Wires.

Item	Qty	Model	Description
8.03	26	P0927AG	FBM239, Discrete I/O 32 Channels, 8 In-8 Out-8 In-
		P0927AG	FUNCTION: FBM239, Discrete I/O 32 Channels, 8 In-8 Out-8 In-8 Out The FBM239 discrete I/O interface module provides 32 channels of I/O in the pattern 8 In, 8 Out, 8 In, 8 Out. This module is typically used when migrating 100-Series fieldbus modules.

Item	Qty	Model	Description
9.00	24	P0998EB	UgdDoc P0927AK FBM244 HART 4in/4o from FBM243/243b
		P0998EB	FUNCTION: UgdDoc P0927AK FBM244 HART 4in/4o from

FBM243/243b FoxCom to 4-20mA / Hart. Must be returned within 3 months in refurbishable condition.

Item	Qty	Model	Description
9.01	24	P0924QU	FBM244/245 T/A
		P0924QU	FUNCTION: FBM244/245 T/A FBM244/245 T/A

Item	Qty	Model	Description
9.02	24	P0916DB	FBM2xx Type 1 Term Cable, 1 Meter
		P0916DB	FUNCTION: FBM2xx Type 1 Term Cable, 1 Meter 8 Channel Triad Termination Cable, 37Dsub to 25Dsub for use on Channel Isolated FBMs Type 201, 203, 204, 205, 206, 237. Shielded cable polyurethane outer jacket, PVC insulation on inner wires.

Item	Qty	Model	Description
9.03	24	P0927AK	FBM244, HART 4 Input + 4 Output Channels
		P0927AK	FUNCTION: FBM244, HART 4 Input + 4 Output Channels The FBM244 provides four HART inputs and four HART outputs with A/D conversion and per-channel HART modems.

Item	Qty	Model	Description
10.00	2	P0916NC	2 Mbps Base To Base Cable, 3m
		P0916NC	FUNCTION: 2 Mbps Base To Base Cable, 3m Cable To Connect 2 Mbps Module Fieldbus Between P0940XA Or P0940XB Baseplates. One Cable Provides Bus Redundancy.

Item	Qty	Model	Description
11.00	14	P0917JJ	2 Mbps Base To Base Cable 0.5m
		P0917JJ	FUNCTION: 2 Mbps Base To Base Cable 0.5m Cable To Connect 2 Mbps Module Fieldbus Between P0940XA Or P0940XB Baseplates. One Cable Provides Bus Redundancy.

NOTE: This bill of materials is based on input from the City of Chandler. Additional equipment if required will be available for purchase on request at current published pricing.

--- END SWTP Advantage Upgrade Bill of Material ---

4. Services Scope of Supply

The equipment and software proposed herein to upgrade your system is detailed in Section 2.3, Bill of Material (BOM). In addition to the hardware and software upgrade, this section describes the services proposed to manage, execute, install and startup the upgrade to your system.

This proposal includes for Order Administration & Management, System Reconfiguration, and Supervisory Installation & Start-up of the proposed I/O Subsystem upgrade.

It is important to Invensys to foster a close working relationship throughout the project, more in the form of an integrated team than as purchaser and supplier. In this way Invensys can ensure that the City of Chandler expectations are met and that you play an active part in decisions taken at all stages throughout the project.

The Administrator provides a single point of contact to manage all Invensys activities required to implement the project scope as defined in this document. Activities include planning, monitoring and reporting on the status of all hardware and services included in the order or contract.

This proposal outlines a strategy, equipment and services to update the Foxboro I/A Series 100 Series subsystems currently installed at the City of Chandler Wastewater and Water treatment plants. The intent of the strategy is to complete the Advantage Upgrade during a period of time still to be determined bas on production requirements. This update process will be completed through a joint effort by Invensys personnel and the City of Chandler personnel.

Invensys Planning and Upgrade Services:

An important factor considered in Invensys Systems product development is the backwards compatibility concept. Through this concept, Invensys insures that new equipment remains compatible. The 100 Series FBM upgrade will take advantage of this concept through the use of preferred lifecycle phase 200 Series Fieldbus modules, utilizing previously purchased Version 8.8 I/A System software and ZCP270 Control Processors to support updates of the existing I/O.

The following tasks will be accomplished by Invensys in order to complete the upgrade successfully:

➤ Upfront Engineering, Design:

✓ 100 to 200 Series Fieldbus Module Upgrade Planning

Invensys will in advance of outages identify and document a strategy to update the currently installed 100 Series FBM's I/O modules with 200 Series Fieldbus modules (FBM) utilizing installed FCP270(FT) Fieldbus communications with modifications to FBM mounted on new conversion mounting structures to replace existing 100 Series FBM mounting racks. This upfront design phase will include typical documentation showing FBM placement.

✓ **I/A System Pre-Upgrade Planning Services**

Invensys will in advance of the scheduled outage verify that the installed I/A Series System is at a software and hardware version that will support the 100 to 200 Series FBM upgrade. Through this advanced planning concept, Invensys insures compatibility, allowing the installation of new components, minimizing risk and ensuring a timely system upgrade. The following tasks will be accomplished as part of the advance system software upgrade services:

- Conduct Risk Assessment and Planning.
- Review System Definition.
- Upload and Save alls for all Control Processors.
- Identify all reusable customer files.
- Identify any system issues that may require correction.
- Verify any special or custom applications.
- Develop Upgrade Plan & review the plan with the City of Chandler personnel.

➤ **Upfront Engineering, Integrated Control Configuration (ICC):**

Invensys will in advance of the outage, review and update as required the current ICC configuration, to support the 200 Series FBM Letterbug conventions, per Invensys published guidelines.

➤ **Integrated Control Configuration (ICC) Implementation and Testing:**

Once the process operation is in an outage phase and the proposed updated I/A System equipment is installed the revised ICC configuration will be loaded into ZCP270FT using standard I/A System and ICC procedures. Once the configuration is loaded using standard I/A System communication the ICC database validation will be completed; verifying communication to each 200 Series FBM I/O units.

I/A Series System Equipment Installation Supervision & Start-Up Services

This activity consists of the necessary steps to verify that the I/A Series System upgrade equipment in preparation for implementation 200 Series FBM units upgrade. Invensys will provide installation supervision services and placement of the upgrade conversion equipment. The following list of tasks will be accomplished to ensure the least impact and risk:

- Inspect I/A Series equipment for shipping damage and check inventory of actual quantity against shipping documents
- Unpack and inventory individual modules and sub-modules for type and quantity against your configuration documentation.
- Verify the hookup of power, including appropriate voltage testing.
- Confirm that automatic individual diagnostics are performing as designed.
- Verify processor modules are installed to meet documented system configuration.
- Verify I/O and peripheral adapters per system configuration.
- Verify operability of I/O subsystem communications, system redundancies, and any other features provided by Invensys as an integral part of the system.
- Submit a checklist documenting any corrective action taken or recommended.

Supervision and Overview of 200 Series FBM Mounting Structure Placement:

Invensys will support supervision and overview of 1X8 rack replacement with new ME 1X8 mounting structures, per Invensys published guidelines.

NOTE: The service listed above require timely support from The City of Chandler personnel and/or a City of Chandler identified contractor personnel (Refer to the City of Chandler Tasks and Responsibilities outlined below.)

City of Chandler Project, Tasks and Responsibilities:

To insure successful implementation this update process requires a coordinated effort by Invensys service personnel and City of Chandler personnel. To achieve this outcome the items listed below are depicted as City of Chandler responsibilities.

- **Removal of existing hardware:**
The City of Chandler will be responsible for removal of the existing 100 Series Rack I/O equipment (IE32, IE16, etc.) and associated wiring. Removal of this equipment will be scheduled to start after the scheduled outage is in process and prior to installation of the 200 Series FBM's as listed within this proposal. Equipment removal will be based on direction from the Invensys assigned lead.
- **Installation of Din Mounting Rail and I/A Equipment existing enclosures:**
The City of Chandler will be responsible for installation of the new Enclosures and Mounting Structures, Invensys supplied baseplates and power supplies in the existing enclosures currently housing the 100 Series FBM components. This installation includes installation and termination of 120 volt AC power for the identified 200 Series power supplies.
- **Installation of Control Processor communication Cables:**
The City of Chandler, where applicable will be responsible for proper installation of the control processor communication cables (Fiber Optic and copper wire) between the identified I/A System MESH switches, the CP270 and associated 200 Series ME mounting structures and baseplates.
- **Loop Testing:**
The City of Chandler will be solely responsible to provide technically skilled personnel, required field equipment and communication tools to support individual point testing of the 200 Series I/O modules.

5. Assumptions

- A. The City of Chandler will provide equipment mounting space and will be responsible for equipment mounting and cable installation / termination, per Invensys published guidelines.
- B. The City of Chandler will be responsible for removal of existing I/A System 100 Series FBM racks and mounting and powering the new 200 Series mounting structures, per Invensys published guidelines.
- C. It will be The City of Chandler's responsibility to provide unimpeded system access, system resources, and adequate workspace during all onsite programming and startup activities.
- D. Delays due to scheduling, coordination and field support, which results in on-site standby time or rescheduled on-site support for Invensys personnel may result in additional support cost at Invensys current hourly rates above those quoted.
- E. Proposed equipment to be mounted in existing enclosures by The City of Chandler personnel or their representative.
- F. All Field support (hardware / software), field installation, field verification and field startup support including 3rd party device programming to be provided by others and coordinated by The City of Chandler or their representatives.
- G. Interconnecting Field Fiber Optic cables and Fiber Optic Patch Panel's other than those listed within the Bill of Material to be supplied by the City of Chandler. Installation and testing of such, to meet Invensys Fiber Optic cable specifications will be provided by The City of Chandler.
- H. The City of Chandler will be fully responsible for implementation and upgrade of any and all third-party applications and/or software.
- I. Upgrade of custom Invensys applications, have not been included in this proposal. Upgrade pricing for custom applications will be provided upon request.
- J. ICC to FCS conversion services are not included in this proposal. These services are available and can be quoted upon The City of Chandlers request.
- K. This proposal does not include V8.8 upgrade software, hardware or secure configuration services. It is assumed that the V8.8 upgrade will be purchased and implemented in advance of the 100 to 200 Service FBM upgrade.
- L. Training - This proposal assumes that The City of Chandler is responsible to determine if and to provide Operator Training and/or Technical Training as required.
- M. This proposal does not include configuration of HART capable Fieldbus Modules to support HART communication.

Assumptions continued:

- N.** Bill of materials derived from information provided by the City of Chandler, additional equipment and/or software if required will be available upon request at Invensys published prices.
- O.** Note: Specs for Fiber. Please refer to Invensys document B0700AZ.
- P.** Drawing or CAD work (new or updates) have not been included in this proposal. These service are available for purchase upon request at currently published Invensys rates.
- Q.** Factory Acceptance Testing (FAT) and/or Site Acceptance Testing (SAT) services are not included in this proposal. These services can be proposed upon request.

6. Schedule

Upon acceptance of this proposal and direction to proceed, please allow for up to an eight-week period for material delivery and an additional twelve - weeks for preparatory engineering and startup up preparation.

Material Delivery: 6 to 8 weeks

Preparatory Engineering: 8 to 12 weeks

The project schedule will be predicated on receipt of purchase order and will be agreed upon at the project kick off meeting, which will be held after receipt of PO.

4. Scope of supply

Our proposed solution to update the I/A Systems currently installed at the City of Chandler Fresh Water and Waste Water. This proposal includes the IA System hardware / Software and Engineering Services to complete the described Version 8.8 Secure-Ready update. Additional Engineering services can be quoted upon request and other Site Services are available on a time and expense basis.

The proposal outlines equipment and service to complete the following:

- For the Waste Water Plant:
 - Upgrade 1 x P91 to H90 server w/ Raid 1 and new dual LCD's.
 - Upgrade 2 x P81's to H92 workstations and reuse of existing LCD's.
 - Replace old switches as an Option.
 - Upgrading IA Version 8.4.2 to Version 8.8 Secure- Ready

- For the Fresh Water Plant
 - Upgrade 1 x P91 to H90 server w/ RAID 1 and new dual LCD's.
 - Upgrade 1 x P79's to H92 workstations and re-use LCD's and Annun. Kyb's.
 - Upgrade 1 x AW51A to H92 workstation w/ Quad-Head and 4 new LCD's
 - Replace old switches as an Option.
 - Adding one set of PDC and SDC to Fresh Water Plant to cover both plants.
 - Upgrading IA Version 8.4.2 to Version 8.8 Secure-Ready

4.1 Services Deliverable

This proposal outlines a strategy, equipment and services to update the Foxboro I/A System currently installed at the Fresh Water and Waste Water Plants located in Chandler, AZ. Proposed are updates of existing System Workstations to our newest H90 Servers and H92 Workstation processors. These new stations are intended to connect to the existing MESH switch infrastructure currently installed at each plant. These updates at the Waste Water Plant will result in decommissioning any remaining Nodbus components, while at the Fresh Water Plant the of Address Translation Stations (ATS) and currently installed COM30B Gateway will remain in place but hosted by the newly updated MESH stations.

This update process will be completed through a joint effort by Invensys personnel and City of Chandler personnel.

4.1.1 Project Management:

Invensys will provide the City of Chandler. with the following services:

- Management of all activities required to implement the project scope.
- Plan, monitor, and control the project, and report on its status.
- Periodical progress report including, where applicable, the following - Project schedule, Shipment status, Invensys action items.

A kick-off meeting and periodic progress updates will be via conference call. For meetings held at locations other than the Invensys office, per diem travel time, travel costs and living expenses will be billed separately.

A dedicated Invensys lead service specialist will be assigned for the duration of the project. Other team members will be added as required to ensure schedule integrity and deliverables are achieved.

4.1.2 Invensys Planning and Upgrade Services:

An important factor considered in Invensys Systems product development is the backwards compatibility concept. Through this concept, Invensys insures that new equipment remains compatible. The proposed I/A System upgrades will take advantage of this concept through the use of preferred lifecycle phase servers and workstations; along with currently released Version 8.8 Secure-Ready I/A System software.

The following tasks will be accomplished by Invensys in order to complete the upgrade successfully:

Upfront Engineering, Design:

- I/A System Software Pre-Upgrade Planning Services
 - Invensys will in advance of the start of the upgrade process, identify and document a strategy to implement the ATS stations and startup the new V8.x MESH I/A System. Through this advanced planning concept, Invensys insures compatibility, allowing the installation of new components, minimizing risk and ensuring a timely system upgrade. The following tasks will be accomplished as part of the advance system software upgrade services:
 - Conduct Risk Assessment and Planning
 - Review System Definition
 - Identify all reusable customer files
 - Identify any system issues that may require correction.
 - Verify any special or custom applications
 - Develop detailed Upgrade Plan and review the plan with City of Chandler personnel.

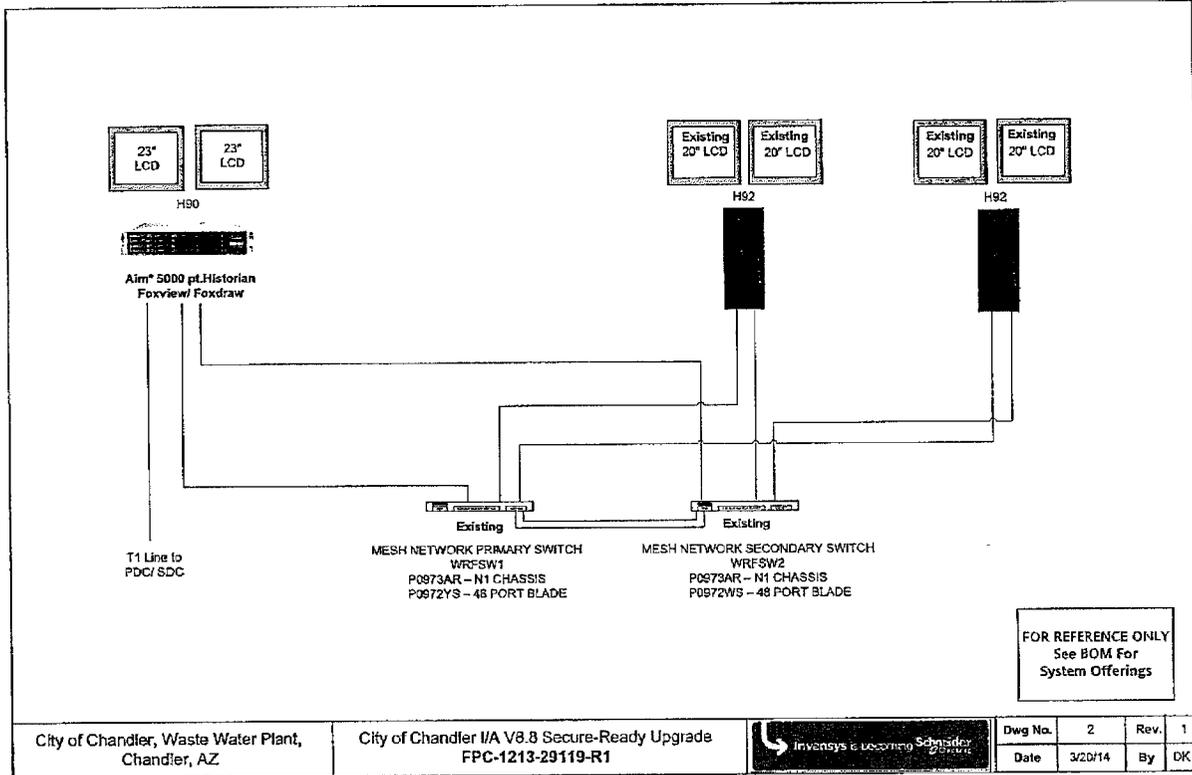
4.1.3 I/A System Equipment Installation Supervision and Start-up Services:

This activity consists of the necessary steps to assemble and initialize your I/A Series System equipment and software in preparation for application implementation. Invensys Systems will assist with the installation supervision and startup of the I/A System hardware as listed in the included BOM along with loading software and updates to standard I/A System software. The following list of tasks will be accomplished to ensure the least impact and risk:

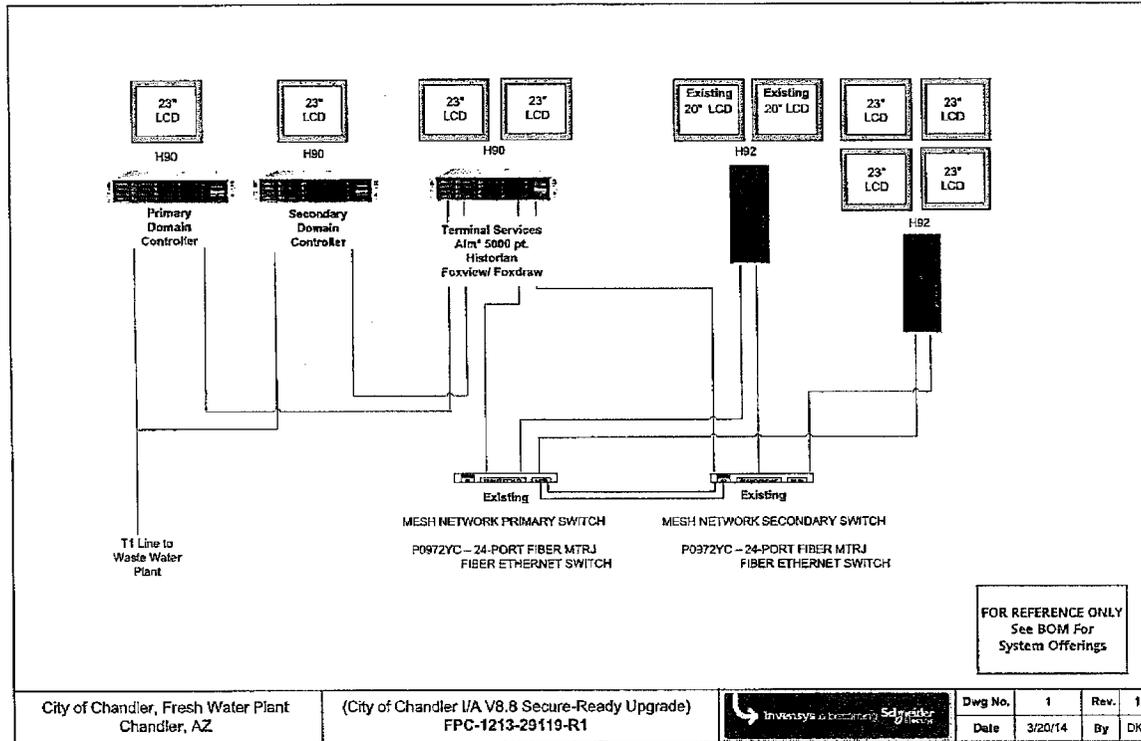
- Inspect shipment and check inventory of actual quantity against shipping documents
- Unpack and inventory individual modules and sub-modules for type and quantity against your configuration documentation.
- Verify the hookup of power.
- Verify all system bus, peripheral, network and module cables are properly installed.
- Verify operability of MESH system communications, system redundancies, and any other standard or custom features provided by Invensys as an integral part of the system.
- Confirm that automatic individual diagnostics are performing as designed.
- Submit a checklist documenting any corrective action taken or recommended.

4.2 Proposed System Upgrade Architecture

4.2.1 Proposed Waste Water Plant Upgrade



4.2.2 Proposed Fresh Water Plant Upgrade



4.3 Bill of Materials

4.3.1 IA Version 8.8 Secure Upgrade

Process Area: City of Chandler

Process Level: Waste Water Plant Upgrade

Item	Qty	Model	Description
10.00	1	H9039AA0118S	Workstation Server Model H90 For Windows®
		H90	FUNCTION: Workstation Server Model H90 For Windows® Server Class Xeon processor, with pre-configured and installed Microsoft® Windows Server® 2008 64 bit operating system, in a rack mounted package. The base unit includes 4 Gb RAM, one 300 Gb SAS hard drive, DVD/CDRW, mouse, keyboard, graphics interface, and redundant Hot-Swap power supplies. The Model H90 can be connected to an I/A Series V8.x Mesh Control Network via required fiber optic or copper Ethernet adapter cards for MESH connectivity. Additional options include support for internal RAID 1 or RAID 5, up to 8 internal hard drives, multiport serial/parallel card and USB speakers.
		3	POINTING DEVICE/VIDEO HEADS: Mouse and Dual Head Analog/DVI-I interface (Matrox M9120)
		9	RAM: 8GB Unbuffered UDIMMs
		A	INTERNAL HARD DRIVES: PC with two 300 Gb internal disks
		A	ETHERNET INTERFACES: Two Single Port Fiber MT-RJ PCIe NICs + Four RJ-45 Integrated NICs
		0	I/O CARDS: None
		1	HIGH AVAILABILITY OPTIONS: Internal RAID 1
		1	PROCESSOR OPTIONS: 1 processor (i.e. six cores)
		8	SYSTEM VERSION/O.S. LICENSES: I/A Series Software Version 8.8 (and later): Microsoft Server 2008 Server
		S	HARDWARE TRADE-IN UPGRADE CREDIT: Advantage Discount for return of P91

Item	Qty	Model	Description
20.00	2	P0928JH	Flat Screen 23" LCD w LED backlight
		P0928JH	FUNCTION: Flat Screen 23" LCD w LED backlight Flat Screen, 23" LCD with LED backlight

Item	Qty	Model	Description
30.00	1	P0928GG	2 TB External USB Backup Hard Drive
		P0928GG	FUNCTION: 2 TB External USB Backup Hard Drive 2 TB External USB Backup Hard Drive for Windows - USB 3.0 (USB 2.0 compatible), eSATA, Firewire (1394b), 800 x 2 ports. 2 TB capacity. 7200 RPM. Replaced 1TB drive P0923GZ, however please note that P0928GG does not work with Solaris Backup and Restore (SBAR).

Item	Qty	Model	Description
40.00	2	P0972KW	Fiber Optic Multimode Cable, MT-RJ/MT-RJ, 15 m
		P0972KW	FUNCTION: Fiber Optic Multimode Cable, MT-RJ/MT-RJ, 15 m Length: 15 Meters. MMF 62.5/125 µm Fiber Optic Plenum Cable. Connectors: MT-RJ On Each End. Wiring: 1 To 1 (i.e. No Crossover).

Item	Qty	Model	Description
50.00	1	S10D4625011F	I/A Series Windows W'kstation SW Lic (Certificate)
		S10	FUNCTION: Software Suite License for I/A Series Windows Based Workstations, Servers,
		D	VERSION: For I/A Series V8x with H90 Server or Virtual Machine
		4	ANALOG I/O QTY: Up to 1,000 Analog I/O Points
		6	DIGITAL I/O QTY: Up to 5,000 Digital I/O Points
		2	NETWORKING: Redundant Ethernet
		5	OPERATOR DISPLAY MANAGERS: Five
		0	VIEW ONLY DISPLAY MANAGERS: None
		1	HOSTING SUPPORT: Control Services
		1	ENGINEERING TOOLS: FoxDraw
		F	UPGRADES: SvcAgmt Adv Discount for return of V8.x SW Advantage Discount for customer sites covered by a Customer First Service Agreement

Item	Qty	Model	Description
60.00	1	J0201FP	MS Windows 2008 Remote Desktop Services CAL,5 Pack
		J0201FP	FUNCTION: MS Windows 2008 Remote Desktop Services CAL,5 Pack This is a Windows Server 2008 Remote Desktop Services (RDS) CAL for Embedded Systems, 5 pack. A Windows Server 2008 RDS CAL is required for licensing a server (H90/H91) to allow users/devices to access data from the server (H90/H91) via a plant network, Internet, or intranet. A server (H90/H91) needs a RDS CAL for each user/client device accessing it. In addition to a RDS CAL license, a Microsoft Server 2008 User/Device-CAL (J0201FN) is needed for licensing each user/device connecting to the server (H90/H91) regardless of if the user/device is running software from Invensys, Microsoft, or any third party. This part, J0201FP is superseding J0201CF (MS Windows Terminal Server CAL 2003, 5 Client Pack). Please note that J0201FP can be used in place of J0201CF on a Windows Server 2003 system, however J0201CF will not work on a MS Windows Server 2008 system.

Item	Qty	Model	Description
70.00	1	J0201FN	Windows Remote Desktop CAL 2008 - 5 Client Devices
		J0201FN	FUNCTION: Windows Remote Desktop CAL 2008 - 5 Client Devices This is a Windows Remote Desktop Device Access License for 5 Client Devices. A Windows Remote Desktop Device License is required for licensing each device connecting to a Remote Desktop Services Server (H90/H91) via a plant network, Internet, or intranet regardless of if the device is running software from Invensys, Microsoft, or any third party. In addition to Device-CAL licenses, the server (H90/91) running Remote Desktop Services requires a RDS CAL (J0201FP) for each user/device that is accessing data from it. Note 1: The Windows Server 2008 Operating System provided by Invensys comes default with 5 User/Device-CALs, therefore you only need to purchase additional User/Device-CALs if you have more than 5 users/devices accessing the server (H90/H91). Note 2: J0201FN can be used in place of a MS Windows Server 2003 User/Device CAL on a Windows Server 2003 system, however a MS Windows Server 2003 User/Device CAL will not work on a MS Windows Server 2008 system.

Item	Qty	Model	Description
80.00	1	K0201GA	V8.x Windows 7 & Windows Server 2008 CD Media Kit
		K0201GA	FUNCTION: V8.x Windows 7 & Windows Server 2008 CD Media Kit Includes base I/A Series 8.x software media for Windows 7 and Windows Server 2008 platforms, release notes and electronic documentation. Requires S10 software license.

Item	Qty	Model	Description
90.00	2	H9260G6B078R	Model H92 Workstation For Windows
		H92	FUNCTION: Model H92 Workstation for Windows® Workstation Class Xeon processor, with pre-configured and installed Microsoft® Windows®7 64 bit operating system, in a Mini-Tower package. The base unit consists of an Internal SATA Hard Drive, 4 Gb of ECC RAM, Internal DVD/CDRW Drive, Mouse, Keyboard and PCIe Dual Head Digital Video Interface. The Workstation Model H92 for Windows can be connected to the I/A Series V8.x Mesh Control Network via required fiber optic or copper ethernet adapter cards for MESH connectivity.
			6 SYSTEM VERSION/O.S. LICENSES: I/A Series® Software Version 8.8 (and later) with Windows 7
			0 FUTURE OPTION: Not used
			G POINTING DEVICE & VIDEO CARD: Mouse + Dual Head video Analog/DVI-I interface (Matrox M9120)
			6 RAM: 4GB of DDR3 ECC RAM
			B INTERNAL SYSTEM DISK: One 500 GB Serial ATA hard drive
			0 BACKUP DEVICE: None
			7 ETHERNET CARD: Two Single Port Fiber MT-RJ PCIe card NICs + One Integrated RJ-45 NIC

- 8 I/O CARDS: One Serial port attached to motherboard with Adapter
 R HARDWARE TRADE-IN UPGRADE CREDIT: Advantage Discount for return of P81

Item	Qty	Model	Description
100.00	4	P0972KW	Fiber Optic Multimode Cable, MT-RJ/MT-RJ, 15 m
		P0972KW	FUNCTION: Fiber Optic Multimode Cable, MT-RJ/MT-RJ, 15 m Length: 15 Meters. MMF 62.5/125 µm Fiber Optic Plenum Cable. Connectors: MT-RJ On Each End. Wiring: 1 To 1 (i.e. No Crossover).

Item	Qty	Model	Description
110.00	2	S10B4622000F	I/A Series Windows W'kstation SW Lic (Certificate)
		S10	FUNCTION: Software Suite License for I/A Series Windows Based Workstations, Servers, B VERSION: For I/A Series V8x with H92 Workstation 4 ANALOG I/O QTY: Up to 1,000 Analog I/O Points 6 DIGITAL I/O QTY: Up to 5,000 Digital I/O Points 2 NETWORKING: Redundant Ethernet 2 OPERATOR DISPLAY MANAGERS: Two 0 VIEW ONLY DISPLAY MANAGERS: None 0 HOSTING SUPPORT: None 0 ENGINEERING TOOLS: None F UPGRADES: SvcAgmt Adv Discount for return of V8.x SW Advantage Discount for customer sites covered by a Customer First Service Agreement

Item	Qty	Model	Description
120.00	1	P0924SJ	USB External Floppy Drive for P90/91/92
		P0924SJ	FUNCTION: USB External Floppy Drive for P90/91/92 External, USB, 3.5", 1.44MB floppy driver for P92*K (and later) workstations and P90*D/P91*G (and later) servers.

Item	Qty	Model	Description
130.00	1	K0173XC	Media: MODBUS Driver For FDSI
		K0173XC	FUNCTION: Media: MODBUS Driver For FDSI Media for MODBUS driver for FDSI (TCP/IP & Ser) and driver configurator. Requires purchase of S61 code license for operation.

Item	Qty	Model	Description
140.00	1	Q0301JJ	Event Driven Scripts for Windows Software
		Q0301JJ	FUNCTION: Event Driven Scripts for Windows Software The Core Technology For FoxPage Is Now Available Separately To Allow Users To Invoke Scripts And Programs Of Their Choice Based On I/A Series Events. Supported Events Include Process Alarms, SysMon Alarms, And OAJ Messages.

Item	Qty	Model	Description
150.00	1	K0201CT	System Manager Software and Sitewide License
		K0201CT	FUNCTION: System Manager Software and Sitewide License I/A Series System Manager Server and Client Software and sitewide license for I/A Series MESH Network

Item	Qty	Model	Description
160.00	1	K0201GD	FoxView/FoxDraw V10.x For Win7/S2008 Media Kit
		K0201GD	FUNCTION: FoxView/FoxDraw V10.x For Win7/S2008 Media Kit FoxView/FoxDraw V10.x for Windows 7 and Windows Server 2008. Installation CD and instructions. Requires S-Code license for use.

Item	Qty	Model	Description
170.00	1	VAS-S-IA-AP	Advantage Program Services-IA
		VAS-S-IA-AP	FUNCTION: Advantage Program Services-IA Field Service technical review of Advantage quotation and site survey to ensure consistency with customer requirements. Includes installation and startup services.

Item	Qty	Model	Description
180.00	1	VAS-S-IA-SS	Site Services - IA
		VAS-S-IA-SS	FUNCTION: Site Services - IA Services provided to supplement customer process control and application engineers. Majority of work is performed at site. Specifics defined in proposal/contract.

Process Area: City of Chandler

Process Level: Fresh Water Plant Upgrade

Item	Qty	Model	Description
190.00	1	H9039AA0118S	Workstation Server Model H90 For Windows®
		H90	FUNCTION: Workstation Server Model H90 For Windows® Server Class Xeon processor, with pre-configured and installed Microsoft® Windows Server® 2008 64 bit operating system, in a rack mounted package. The base unit includes 4 Gb RAM, one 300 Gb SAS hard drive, DVD/CDRW, mouse, keyboard, graphics interface, and redundant Hot-Swap power supplies. The Model H90 can be connected to an I/A Series V8.x Mesh Control Network via required fiber optic or copper Ethernet adapter cards for MESH connectivity. Additional options include support for internal RAID 1 or RAID 5, up to 8 internal hard drives, multiport serial/parallel card and USB speakers.
		3	POINTING DEVICE/VIDEO HEADS: Mouse and Dual Head Analog/DVI-I interface (Matrox M9120)
		9	RAM: 8GB Unbuffered UDIMMs
		A	INTERNAL HARD DRIVES: PC with two 300 Gb internal disks
		A	ETHERNET INTERFACES: Two Single Port Fiber MT-RJ PCIe

- NICs + Four RJ-45 Integrated NICs
- 0 I/O CARDS: None
- 1 HIGH AVAILABILITY OPTIONS: Internal RAID 1
- 1 PROCESSOR OPTIONS: 1 processor (i.e. six cores)
- 8 SYSTEM VERSION/O.S. LICENSES: I/A Series Software Version 8.8 (and later): Microsoft Server 2008 Server
- 5 HARDWARE TRADE-IN UPGRADE CREDIT: Advantage Discount for return of P91

Item	Qty	Model	Description
200.00	2	P0928JH	Flat Screen 23" LCD w LED backlight
		P0928JH	FUNCTION: Flat Screen 23" LCD w LED backlight Flat Screen, 23" LCD with LED backlight

Item	Qty	Model	Description
210.00	1	P0928GG	2 TB External USB Backup Hard Drive
		P0928GG	FUNCTION: 2 TB External USB Backup Hard Drive 2 TB External USB Backup Hard Drive for Windows - USB 3.0 (USB 2.0 compatible), eSATA, Firewire (1394b), 800 x 2 ports. 2 TB capacity. 7200 RPM. Replaced 1TB drive P0923GZ, however please note that P0928GG does not work with Solaris Backup and Restore (SBAR).

Item	Qty	Model	Description
220.00	2	P0972KW	Fiber Optic Multimode Cable, MT-RJ/MT-RJ, 15 m
		P0972KW	FUNCTION: Fiber Optic Multimode Cable, MT-RJ/MT-RJ, 15 m Length: 15 Meters. MMF 62.5/125 µm Fiber Optic Plenum Cable. Connectors: MT-RJ On Each End. Wiring: 1 To 1 (i.e. No Crossover).

Item	Qty	Model	Description
230.00	1	J0177AX	INFORMIX V10 for Windows SW License
		J0177AX	FUNCTION: INFORMIX V10 for Windows SW License Includes INFORMIX Workgroup Server software for Windows XP or Server 2003 License, and INFORMIX 5-user client SDK for Windows License.

Item	Qty	Model	Description
240.00	1	J0201FP	MS Windows 2008 Remote Desktop Services CAL,5 Pack
		J0201FP	FUNCTION: MS Windows 2008 Remote Desktop Services CAL,5 Pack This is a Windows Server 2008 Remote Desktop Services (RDS) CAL for Embedded Systems, 5 pack. A Windows Server 2008 RDS CAL is required for licensing a server (H90/H91) to allow users/devices to access data from the server (H90/H91) via a plant network, Internet, or intranet. A server (H90/H91) needs a RDS CAL for each user/client device accessing it. In addition to a RDS CAL license, a Microsoft Server 2008 User/Device-CAL (J0201FN) is needed for licensing each user/device connecting to the server (H90/H91) regardless of if the user/device is running software from Invensys, Microsoft, or any third party. This part, J0201FP is superseding J0201CF (MS Windows Terminal Server CAL 2003, 5 Client Pack). Please note that J0201FP can be used in place of J0201CF on a Windows Server 2003 system, however J0201CF will not work on a MS Windows Server 2008 system.

Item	Qty	Model	Description
250.00	1	J0201FN	Windows Remote Desktop CAL 2008 - 5 Client Devices
		J0201FN	FUNCTION: Windows Remote Desktop CAL 2008 - 5 Client Devices This is a Windows Remote Desktop Device Access License for 5 Client Devices. A Windows Remote Desktop Device License is required for licensing each device connecting to a Remote Desktop Services Server (H90/H91) via a plant network, Internet, or intranet regardless of if the device is running software from Invensys, Microsoft, or any third party. In addition to Device-CAL licenses, the server (H90/91) running Remote Desktop Services requires a RDS CAL (J0201FP) for each user/device that is accessing data from it. Note 1: The Windows Server 2008 Operating System provided by Invensys comes default with 5 User/Device-CALs, therefore you only need to purchase additional User/Device-CALs if you have more than 5 users/devices accessing the server (H90/H91). Note 2: J0201FN can be used in place of a MS Windows Server 2003 User/Device CAL on a Windows Server 2003 system, however a MS Windows Server 2003 User/Device CAL will not work on a MS Windows Server 2008 system.

Item	Qty	Model	Description
260.00	1	K0201GA	V8.x Windows 7 & Windows Server 2008 CD Media Kit
		K0201GA	FUNCTION: V8.x Windows 7 & Windows Server 2008 CD Media Kit Includes base I/A Series 8.x software media for Windows 7 and Windows Server 2008 platforms, release notes and electronic documentation. Requires S10 software license.

Item	Qty	Model	Description
270.00	1	K0201GD	FoxView/FoxDraw V10.x For Win7/S2008 Media Kit
		K0201GD	FUNCTION: FoxView/FoxDraw V10.x For Win7/S2008 Media Kit FoxView/FoxDraw V10.x for Windows 7 and Windows Server 2008. Installation CD and instructions. Requires S-Code license for use.

Item	Qty	Model	Description
280.00	1	S10D4525011F	I/A Series Windows W'kstation SW Lic (Certificate)
		S10	FUNCTION: Software Suite License for I/A Series Windows Based Workstations, Servers,
		D	VERSION: For I/A Series V8x with H90 Server or Virtual Machine
		4	ANALOG I/O QTY: Up to 1,000 Analog I/O Points
		5	DIGITAL I/O QTY: Up to 2,500 Digital I/O Points
		2	NETWORKING: Redundant Ethernet
		5	OPERATOR DISPLAY MANAGERS: Five
		0	VIEW ONLY DISPLAY MANAGERS: None
		1	HOSTING SUPPORT: Control Services
		1	ENGINEERING TOOLS: FoxDraw
		F	UPGRADES: SvcAgmt Adv Discount for return of V8.x SW Advantage Discount for customer sites covered by a Customer First Service Agreement

Item	Qty	Model	Description
290.00	1	H926046B078P	Model H92 Workstation For Windows
		H92	FUNCTION: Model H92 Workstation for Windows® Workstation Class Xeon processor, with pre-configured and installed Microsoft® Windows®7 64 bit operating system, in a Mini-Tower package. The base unit consists of an Internal SATA Hard Drive, 4 Gb of ECC RAM, Internal DVD/CDRW Drive, Mouse, Keyboard and PCIe Dual Head Digital Video Interface. The Workstation Model H92 for Windows can be connected to the I/A Series V8.x Mesh Control Network via required fiber optic or copper ethernet adapter cards for MESH connectivity.
		6	SYSTEM VERSION/O.S. LICENSES: I/A Series® Software Version 8.8 (and later) with Windows 7
		0	FUTURE OPTION: Not used
		4	POINTING DEVICE & VIDEO CARD: Mouse + Dual Head Digital DisplayPort/DVI-D interface (Nvidia NVS 295)
		6	RAM: 4GB of DDR3 ECC RAM
		B	INTERNAL SYSTEM DISK: One 500 GB Serial ATA hard drive
		0	BACKUP DEVICE: None
		7	ETHERNET CARD: Two Single Port Fiber MT-RJ PCIe card NICs + One Integrated RJ-45 NIC
		8	I/O CARDS: One Serial port attached to motherboard with Adapter
		P	HARDWARE TRADE-IN UPGRADE CREDIT: Advantage Discount for return of P79

Item	Qty	Model	Description
300.00	1	H926076B078G	Model H92 Workstation For Windows H92 FUNCTION: Model H92 Workstation for Windows® Workstation Class Xeon processor, with pre-configured and installed Microsoft® Windows® 7 64 bit operating system, in a Mini-Tower package. The base unit consists of an Internal SATA Hard Drive, 4 Gb of ECC RAM, Internal DVD/CDRW Drive, Mouse, Keyboard and PCIe Dual Head Digital Video Interface. The Workstation Model H92 for Windows can be connected to the I/A Series V8.x Mesh Control Network via required fiber optic or copper ethernet adapter cards for MESH connectivity.
	6		SYSTEM VERSION/O.S. LICENSES: I/A Series® Software Version 8.8 (and later) with Windows 7
	0		FUTURE OPTION: Not used
	7		POINTING DEVICE & VIDEO CARD: Mouse + Quad Head video analog interface (Matrox M9120)
	6		RAM: 4GB of DDR3 ECC RAM
	8		INTERNAL SYSTEM DISK: One 500 GB Serial ATA hard drive
	0		BACKUP DEVICE: None
	7		ETHERNET CARD: Two Single Port Fiber MT-RJ PCIe card NICs + One Integrated RJ-45 NIC
	8		I/O CARDS: One Serial port attached to motherboard with Adapter
	G		HARDWARE TRADE-IN UPGRADE CREDIT: Advantage Discount for return of 51A

Item	Qty	Model	Description
310.00	4	P0928JH	Flat Screen 23" LCD w LED backlight P0928JH FUNCTION: Flat Screen 23" LCD w LED backlight Flat Screen, 23" LCD with LED backlight

Item	Qty	Model	Description
320.00	4	P0972KW	Fiber Optic Multimode Cable, MT-RJ/MT-RJ, 15 m P0972KW FUNCTION: Fiber Optic Multimode Cable, MT-RJ/MT-RJ, 15 m Length: 15 Meters. MMF 62.5/125 µm Fiber Optic Plenum Cable. Connectors: MT-RJ On Each End. Wiring: 1 To 1 (i.e. No Crossover).

Item	Qty	Model	Description
330.00	2	S10B4522100F	I/A Series Windows W'kstation SW Lic (Certificate)
	S10		FUNCTION: Software Suite License for I/A Series Windows Based Workstations, Servers, B VERSION: For I/A Series V8x with H92 Workstation 4 ANALOG I/O QTY: Up to 1,000 Analog I/O Points 5 DIGITAL I/O QTY: Up to 2,500 Digital I/O Points 2 NETWORKING: Redundant Ethernet 2 OPERATOR DISPLAY MANAGERS: Two 1 VIEW ONLY DISPLAY MANAGERS: One 0 HOSTING SUPPORT: None 0 ENGINEERING TOOLS: None F UPGRADES: SvcAgmt Adv Discount for return of V8.x SW Advantage Disount for customer sites covered by a Customer First Service Agreement

Item	Qty	Model	Description
340.00	1	P0924SJ	USB External Floppy Drive for P90/91/92
	P0924SJ		FUNCTION: USB External Floppy Drive for P90/91/92 External, USB, 3.5", 1.44MB floppy driver for P92*K (and later) workstations and P90*D/P91*G (and later) servers.

Item	Qty	Model	Description
350.00	1	K0173XC	Media: MODBUS Driver For FDSI
	K0173XC		FUNCTION: Media: MODBUS Driver For FDSI Media for MODBUS driver for FDSI (TCP/IP & Ser) and driver configurator. Requires purchase of S61 code license for operation.

Item	Qty	Model	Description
360.00	2	P0971SU	70 Series WS Cable Interface, 10 Ft
	P0971SU		FUNCTION: 70 Series WS Cable Interface, 10 Ft RS-423 Cable Interface For 70 Series Workstation To DNB/DNBX.

Item	Qty	Model	Description
370.00	1	H903AA901290	Workstation Server Model H90 For Windows®
	H90		FUNCTION: Workstation Server Model H90 For Windows® Server Class Xeon processor, with pre-configured and installed Microsoft® Windows Server® 2008 64 bit operating system, in a rack mounted package. The base unit includes 4 Gb RAM, one 300 Gb SAS hard drive, DVD/CDRW, mouse, keyboard, graphics interface, and redundant Hot-Swap power supplies. The Model H90 can be connected to an I/A Series V8.x Mesh Control Network via required fiber optic or copper Ethernet adapter cards for MESH connectivity. Additional options include support for internal RAID 1 or RAID 5, up to 8 internal hard drives, multiport serial/parallel card and USB speakers.
	3		POINTING DEVICE/VIDEO HEADS: Mouse and Dual Head Analog/DVI-I interface (Matrox M9120)
	A		RAM: 12GB Unbuffered UDIMMs
	A		INTERNAL HARD DRIVES: PC with two 300 Gb internal disks
	9		ETHERNET INTERFACES: Four RJ-45 Integrated Network Interface Ports (NIC)
	0		I/O CARDS: None
	1		HIGH AVAILABILITY OPTIONS: Internal RAID 1
	2		PROCESSOR OPTIONS: 2 processors (i.e., twelve cores, Foxboro Control Software Galaxy and Histo
	9		SYSTEM VERSION/O.S. LICENSES: I/A Series Software Version 8.8 (and later): Microsoft Server 2008 Server
	0		HARDWARE TRADE-IN UPGRADE CREDIT: No trade-in

Item	Qty	Model	Description
370.01	1	K0201FV	McAfee Kit for Domain Controllers (w/ ePO 4.6)
	K0201FV		FUNCTION: McAfee Kit for Domain Controllers (w/ ePO 4.6) The I/A Series® System McAfee® Products Media Kit contains the following versions of McAfee software: ePolicy Orchestrator 4.6 P1, Host Intrusion Prevention 8.0 P1, Device Control 9.2, Integrity Control 6.0 and Installation & Configuration Guide for I/A Series Systems with install media & documentation. Uses license J0201FL. This part supersedes K0201CJ.

Item	Qty	Model	Description
370.02	1	J0201FL	McAfee HIP License w/Device Control for Clients
	J0201FL		FUNCTION: McAfee HIP License w/Device Control for Clients McAfee Host Intrusion Protection and Device Control License for Workstations or Server Clients on a Secure I/A Series 8.5 or greater Domain. For use with McAfee Security Package K0201FV.

Item	Qty	Model	Description
380.00	1	P0928JH	Flat Screen 23" LCD w LED backlight
	P0928JH		FUNCTION: Flat Screen 23" LCD w LED backlight Flat Screen, 23" LCD with LED backlight

Item	Qty	Model	Description
390.00	2	S10E00200000	I/A Series Windows W'kstation SW Lic (Certificate)
	S10		FUNCTION: Software Suite License for I/A Series Windows Based Workstations, Servers,
	E		VERSION: For I/A Series V8.x for Domain & ePO Security Server H90 or Virtual Machine
	0		ANALOG I/O QTY: None
	0		DIGITAL I/O QTY: None
	2		NETWORKING: Redundant Ethernet
	0		OPERATOR DISPLAY MANAGERS: None
	0		VIEW ONLY DISPLAY MANAGERS: None
	0		HOSTING SUPPORT: None
	0		ENGINEERING TOOLS: None
	0		UPGRADES: None

Item	Qty	Model	Description
400.00	1	H903AA9012A0	Workstation Server Model H90 For Windows®
	H90		FUNCTION: Workstation Server Model H90 For Windows® Server Class Xeon processor, with pre-configured and installed Microsoft® Windows Server® 2008 64 bit operating system, in a rack mounted package. The base unit includes 4 Gb RAM, one 300 Gb SAS hard drive, DVD/CDRW, mouse, keyboard, graphics interface, and redundant Hot-Swap power supplies. The Model H90 can be connected to an I/A Series V8.x Mesh Control Network via required fiber optic or copper Ethernet adapter cards for MESH connectivity. Additional options include support for internal RAID 1 or RAID 5, up to 8 internal hard drives, multiport serial/parallel card and USB speakers.
	3		POINTING DEVICE/VIDEO HEADS: Mouse and Dual Head Analog/DVI-I interface (Matrox M9120)
	A		RAM: 12GB Unbuffered UDIMMs
	A		INTERNAL HARD DRIVES: PC with two 300 Gb internal disks
	9		ETHERNET INTERFACES: Four RJ-45 Integrated Network Interface Ports (NIC)
	0		I/O CARDS: None
	1		HIGH AVAILABILITY OPTIONS: Internal RAID 1
	2		PROCESSOR OPTIONS: 2 processors (i.e., twelve cores, Foxboro Control Software Galaxy and Histo
	A		SYSTEM VERSION/O.S. LICENSES: I/A Series Software Version 8.8 (and later): Microsoft Server 2008 Server
	0		HARDWARE TRADE-IN UPGRADE CREDIT: No trade-in

Item	Qty	Model	Description
400.01	1	K0201FV	McAfee Kit for Domain Controllers (w/ ePO 4.6)
		K0201FV	FUNCTION: McAfee Kit for Domain Controllers (w/ ePO 4.6) The I/A Series® System McAfee® Products Media Kit contains the following versions of McAfee software: ePolicy Orchestrator 4.6 P1, Host Intrusion Prevention 8.0 P1, Device Control 9.2, Integrity Control 6.0 and Installation & Configuration Guide for I/A Series Systems with install media & documentation. Uses license J0201FL. This part supersedes K0201CJ.

Item	Qty	Model	Description
400.02	6	J0201FL	McAfee HIP License w/Device Control for Clients
		J0201FL	FUNCTION: McAfee HIP License w/Device Control for Clients McAfee Host Intrusion Protection and Device Control License for Workstations or Server Clients on a Secure I/A Series 8.5 or greater Domain. For use with McAfee Security Package K0201FV.

Item	Qty	Model	Description
410.00	1	P0928JH	Flat Screen 23" LCD w LED backlight
		P0928JH	FUNCTION: Flat Screen 23" LCD w LED backlight Flat Screen, 23" LCD with LED backlight

Item	Qty	Model	Description
420.00	1	VAS-S-IA-AP	Advantage Program Services-IA
		VAS-S-IA-AP	FUNCTION: Advantage Program Services-IA Field Service technical review of Advantage quotation and site survey to ensure consistency with customer requirements. Includes installation and startup services.

Item	Qty	Model	Description
430.00	1	VAS-S-IA-SS	Site Services - IA
		VAS-S-IA-SS	FUNCTION: Site Services - IA Services provided to supplement customer process control and application engineers. Majority of work is performed at site. Specifics defined in proposal/contract.

Process Area: City of Chandler

Process Level: Waste Water Switch Upgrade Option

Item	Qty	Model	Description
480.00	2	P0973KK	S-Series Stand Alone (SSA), Needs PS P0973KL
		P0973KK	FUNCTION: S-Series Stand Alone (SSA), Needs PS P0973KL (S-Series) SSA Chassis managed switch (P0973KK) with 48-port 1000Base-T 1 Gb SFP uplink ports and 4-port 10G SFP uplink ports configurable as 1 Gb uplink ports or alternatively, a combination of Gigabit and 100Mb ports with up to forty-eight 100Mb end device fiber connections using the 100Base-FX Mini-GBIC (P0973JE). Can be used with MGBICs P0972WT/WU/YL/YQ and P0973FT/JD/JE/KP/KS. One (Minimum) Or Two (For Redundancy) P0973KL Power Supplies Are Required. One K0173ZU CDROM is needed per MESH network. This CDROM contains the Mesh Configuration Tool (K0173XS), which is needed to properly configure this switch, plus all network and switch documentation.

Item	Qty	Model	Description
490.00	4	P0973KL	S-Series Stand Alone (SSA) Power Supply
		P0973KL	FUNCTION: S-Series Stand Alone (SSA) Power Supply (S-Series) Power Supply Module For SSA, P0973KK. 15A, 100-240VAC input, (625W). Note: Two separate branch circuits are required for the redundant power supply. Requires two 15 AC outlets independently fused within 182 cm (6 ft) of power supply, each outlet uses a separate 15 A power circuit per power supply.

Item	Qty	Model	Description
500.00	60	P0973JE	MGBIC module, 100Base-FX, LC port, 2km w/ MMF
		P0973JE	FUNCTION: MGBIC module, 100Base-FX, LC port, 2km w/ MMF A Mini Gigabit Ethernet (MGBIC) Fiber plug-in module for switch with SFP ports. 100Base-FX with LC connector. 2km w/MMF.

Item	Qty	Model	Description
510.00	1	VAS-S-IA-SS	Site Services - IA
		VAS-S-IA-SS	FUNCTION: Site Services - IA Services provided to supplement customer process control and application engineers. Majority of work is performed at site. Specifics defined in proposal/contract.

Process Area: City of Chandler

Process Level: Fresh Water Switch Upgrade Option

Item	Qty	Model	Description
440.00	2	P0973JN	24-Port Fiber Managed Switch
		P0973JN	FUNCTION: 24-Port Fiber Managed Switch The 24-Port Fiber managed switch (P0973JN) provides twenty-four 100Base-FX ports with MTRJ connectors, two fixed 10/100/1000 stacking / uplink (ISL) ports and two 1000Base-X uplink (ISL) Gigabit (SFP) ports. The two 1000Base-X uplink (ISL) Gigabit (SFP) ports can be populated with Mini-GBIC uplink (ISL) connector modules (P0972WT, P0972WU, P0972YQ, P0972YL, P0973JD or P0973FT). The switch allows high-performance, full-featured layer-2 Ethernet switching in small to medium-sized network applications, as well as high-performance direct end-station connectivity.

Item	Qty	Model	Description
450.00	2	P0971XK	10 Ft (3 m) CAT 5, 10/100BaseT Shielded Cable
		P0971XK	FUNCTION: 10 Ft (3 m) CAT 5, 10/100BaseT Shielded Cable Used With Copper Ethernet Networks And DNBT. Riser Grade Cable. Note: Has PVC Content.

Item	Qty	Model	Description
460.00	1	K0173ZU	Mesh Configuration Tool & Switch/Network Documents
		K0173ZU	FUNCTION: Mesh Configuration Tool & Switch/Network Documents One K0173ZU CDROM is needed per MESH network. This CDROM contains the Mesh Configuration Tool (K0173XS), which is needed to properly configure network Ethernet switches. It also contains all network and switch documentation.

Item	Qty	Model	Description
470.00	1	VAS-S-IA-SS	Site Services - IA
		VAS-S-IA-SS	FUNCTION: Site Services - IA Services provided to supplement customer process control and application engineers. Majority of work is performed at site. Specifics defined in proposal/contract.

5. Schedule

Upon acceptance of this proposal and direction to proceed, please allow for up to an eight week period for materials delivery and eight-weeks for installation and startup.

Material Delivery: 8 weeks

Installation and Startup: 8 weeks

The project schedule will be predicated on receipt of purchase order and will be agreed upon at the project kick off meeting, which will be held after receipt of PO.

6. Technical Comments and Assumptions

1. The City of Chandler will be responsible for any field or power wiring changes required including wiring for AC power to the new power supplies
2. No wiring or mechanical drawings are provided.
3. The City of Chandler to re-use existing LCD's and keyboards on workstations.
4. The City of Chandler to re-use existing Aim* 5000 point Historian.
5. The City of Chandler to provide network infrastructure and IT support to facilitate the use of Primary & Secondary Domain Controller, and more specifically to secure functional Domain Controller connections to both the Waste Water Plant and the Fresh Water Plant.
6. The City of Chandler will continue to use the ICC Control Configurator.
7. This proposal does not include services to convert or reengineer existing IA Series reports.
8. It will be City of Chandler's responsibility to provide unimpeded system access, system resources, and adequate workspace during all onsite programming and startup activities.
9. Delays due to scheduling, coordination and City of Chandler provided support, which result in on-site standby time or rescheduled on-site support for Invensys personnel may result in additional support cost at Invensys current hourly rates above those quoted
10. All Field support (hardware/ software), field installation, field verification and field startup support including 3rd party device programming will be provided by others and coordinated by City of Chandler or their representatives.
11. Interconnecting Field Fiber Optic Cables and Field Fiber Optic Patch Panels other than those listed within the Bill of Material will be supplied by City of Chandler Installation and testing of such, to meet Invensys Fiber Optic Cable specifications, will be provided by City of Chandler.
12. City of Chandler will be fully responsible for implementation and upgrade of any and all third party applications and/or software.
13. Upgrade of custom Invensys application has not been included in this proposal. Upgrade pricing for custom applications will be provided upon request.
14. Upgrade of existing Comm30 gateways to FDSI's has not been included in this proposal. Upgrade pricing for custom application will be provided upon request.
15. Training – This proposal assumes that the City of Chandler is responsible to determine if and provide Operator Training and/or Technical Training is required.
16. Note: Specifications for Fiber. Please refer to Invensys document B0700AZ.
17. This proposal includes the Version 8.8 Secure Ready configuration

18. This proposal includes an Invensys I/A System Version 8.8. Secure-Ready software installation. The Version 8.8 software will be installed Secure-Ready, with standard Invensys profiles implemented as load from the version 8.8 software media. Additional security configuration and profiled customization services are available upon request at currently published Invensys rates.