



**PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CA09-096**

1. Agenda Item Number:

20

2. Council Meeting Date:
November 20, 2008

TO: MAYOR & COUNCIL
THROUGH: CITY MANAGER

3. Date Prepared: September 17, 2008

4. Requesting Department: Municipal Utilities

5. SUBJECT: Award a project agreement to Tetra Tech RTW for Rural Road Water Production Facility Modifications Construction Management Services, Project No. WA0802-451, in an amount not to exceed \$119,094.

6. RECOMMENDATION: Staff recommends that Council award a project agreement to Tetra Tech RTW for Rural Road Water Production Facility Modifications Construction Management Services, Project No. WA0802-451, in an amount not to exceed \$119,094.

7. BACKGROUND/DISCUSSION: The Rural Road Water Production facility was constructed in the mid 1980's. In accordance with the recommendation made in the 2008 Water Master Plan, Municipal Utilities Department will update Rural Road Water Production facility's pumps, motors, electrical equipment and chlorination system and install variable drives on the booster pumps to allow automated operation of the booster station. This project also includes cleaning and painting of the site's reservoir, walls and piping.

This project agreement provides construction management and engineering services related to the construction, start-up, and post construction warranty phases.

Construction of this project is scheduled to begin in early 2009, with a construction duration of approximately 180 days. A construction contract will be awarded separately.

8. EVALUATION: On September 11, 2008, Council approved a one-year extension to Tetra Tech RTW annual contract for permitting, study, and design for water and wastewater facilities, EN0720-101, with the option of three remaining one-year extensions. Staff has reviewed the scope of work, billing rates, and total fee for this project, compared them to historical costs, and has determined that they are acceptable.

9. FINANCIAL IMPLICATIONS:

Cost: \$119,094
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>
605.3820.0000.6210.5WA230	Water Operating	WPF Improvements	FY 05/06	\$119,094

10. PROPOSED MOTION: Move that Council award a project agreement to Tetra Tech RTW for Rural Road Water Production Facility Modifications Construction Management Services, Project No. WA0802-451, in an amount not to exceed \$119,094, and authorize the Mayor to sign the contract documents.

ATTACHMENTS: Location Map, Project Agreement

APPROVALS

11. Requesting Department



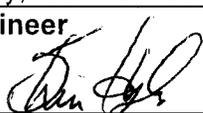
Robert Mulvey, Assistant Municipal Utilities Director

13. Department Head



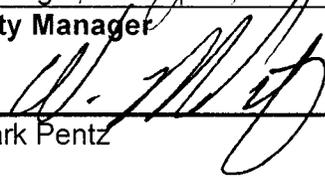
Dave Siegel, Municipal Utilities Director

12. City Engineer



Sheina Hughes, Assistant Public Works Director/City Engineer

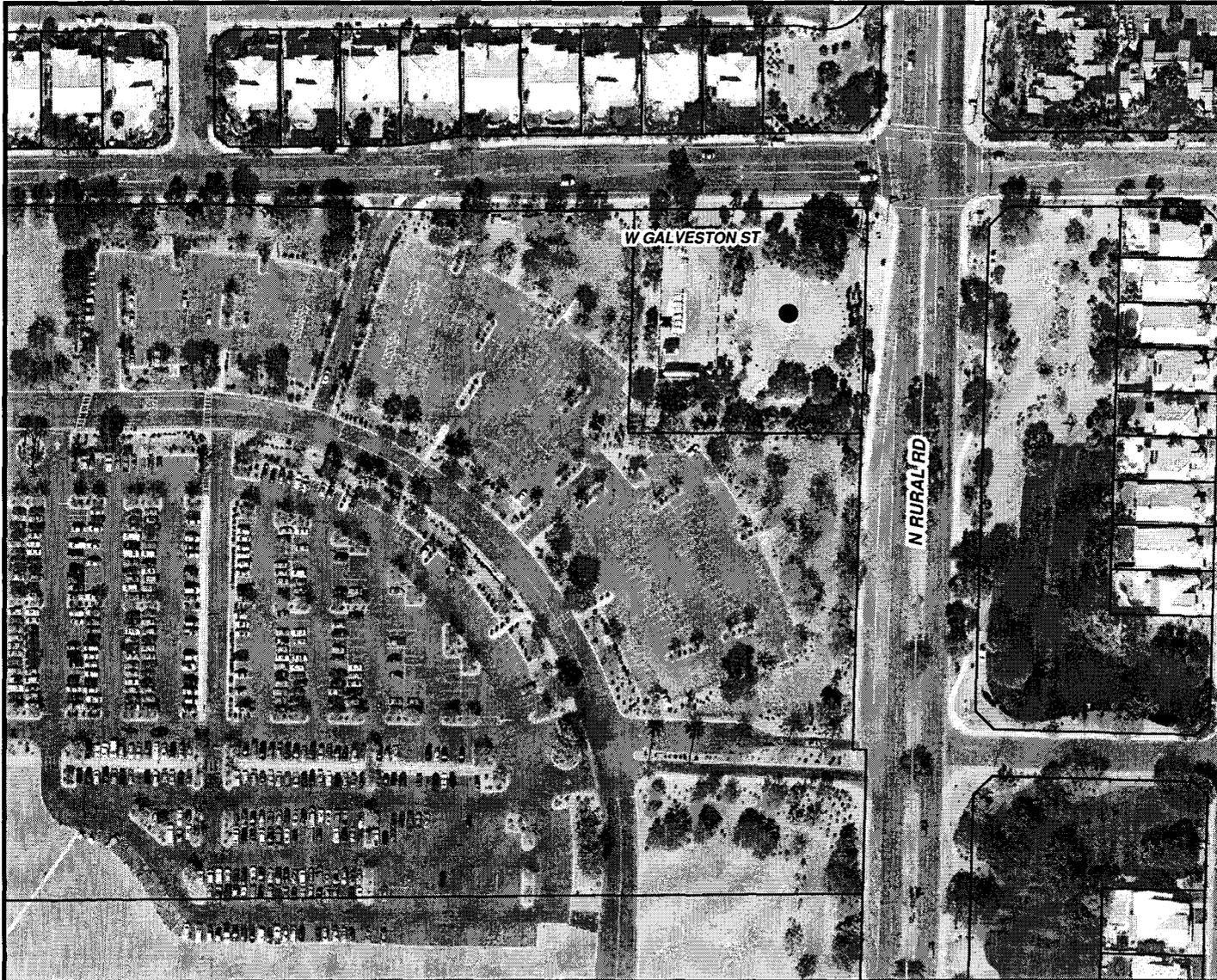
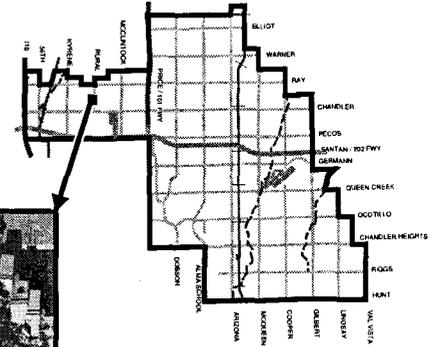
14. City Manager



W. Mark Pentz



RURAL WPF MODIFICATIONS PROJECT NO. WA0802-451



MEMO NO. CA09-096

- RURAL WPF



**PROJECT AGREEMENT
PURSUANT TO ANNUAL CONTRACT NO. EN0720-101**

AGREEMENT NO: WA0802-451

This AGREEMENT is made this _____ day of _____ 2008, by and between the City of Chandler, a municipal corporation (hereinafter referred to as "CITY") and Tetra Tech RTW, registered in the state of Colorado, licensed to do business as Tetra Tech RTW in the state of Arizona (hereinafter referred to as "Annual Consultant") and is a project agreement entered into pursuant to Annual Contract No. EN0720-101.

CITY and Tetra Tech International, in consideration of the mutual covenants herein set forth, agree as follows:

ARTICLE 1. DESCRIPTION OF WORK

This project is Rural Road Water Production Facility Modifications – Construction Management Services, Project Number WA0802-451. The scope of work consists of construction management services for Rural Road Water Production Facility Modifications, all as more particularly set forth in Exhibit A attached hereto and incorporated herein by reference.

The Annual Consultant shall not accept any change of scope, or change in contract provisions, unless issued in writing, as a contract amendment and signed by the Contract Administrator.

ARTICLE 2. CONTRACT PRICE

CITY shall pay Annual Consultant for completion of the Work in accordance with the Contract Documents a fee not to exceed One Hundred Fifty Nine Thousand Seven Hundred Twenty Dollars (\$159,720) determined and payable as set forth in Annual Contract EN0720-101 and Exhibit B attached hereto and made a part hereof by reference.

ARTICLE 3. CONTRACT TIME

The contract time is One Hundred Eighty days and Annual Consultant agrees to complete all work within One Hundred Eighty (180) days of the date CITY issues a Notice to Proceed.

ARTICLE 4. GENERAL

This Project Agreement is entered into pursuant to Annual Contract No. EN0720-101 and the terms and conditions contained therein are incorporated herein by reference as if set forth in full.

ARTICLE 5. ARIZONA PROCUREMENT LAW

Compliance with A.R.S. § 41-4401. Pursuant to the provisions of A.R.S. § 41-4401, the Consultant hereby warrants to the City that the Consultant and each of its subcontractors ("Subconsultants") 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 "Consultant Immigration Warranty").

A breach of the Consultant Immigration Warranty (Exhibit C) shall constitute a material breach of this Contract that is subject to penalties up to and including termination of the contract.

The City retains the legal right to inspect the papers of any Consultant or Subconsultant employee who works on this Contract to ensure that the Consultant or Subconsultant is complying with the Contractor Immigration Warranty. The Consultant agrees to assist the City in the conduct of any such inspections.

The City may, at its sole discretion, conduct random verifications of the employment records of the Consultant and any Subconsultant to ensure compliance with Contractors Immigration Warranty. The Consultant agrees to assist the City in performing any such random verifications.

The provisions of this Article must be included in any contract the Consultant enters into with any and all of its subcontractors who provide services under this Contract or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a consultant or subconsultant. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

In accordance with A.R.S. §35-397, the Consultant hereby certifies that the offeror does not have scrutinized business operations in Iran.

In accordance with A.R.S. §35-397, the Consultant hereby certifies that the offeror does not have scrutinized business operations in Sudan.

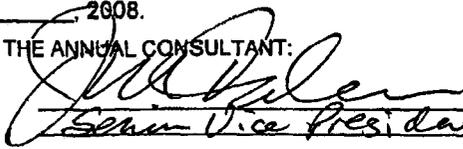
IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first written above.

This Agreement will be effective on this _____ day of _____, 2008.

CITY OF CHANDLER

FOR THE ANNUAL CONSULTANT:

MAYOR DATE:

By: 
Title: Senior Vice President

ADDRESS FOR NOTICE
City of Chandler
P.O. Box 4008, Mail Stop 407
Chandler, AZ 85244-4008
480-782-3307

ADDRESS FOR NOTICE
Mr. Joseph Tamburini
Tetra Tech RTW
2999 N. 44th St., Ste. 330
Phoenix, AZ 85018

APPROVED AS TO FORM:

Phone: 602-954-2387
Fax: 602-954-8213

ATTEST: City Attorney By 

City Clerk

**EXHIBIT A
SCOPE OF WORK**

During construction, Annual Consultant shall provide the following construction management services:

1. Construction Office Engineering

- **Construction Contract Preparation.** Annual Consultant shall assist the City in reviewing executed contracts, bonds and insurance; and issue a Notice to Proceed.
- **Preconstruction Meeting.** Annual Consultant shall conduct a preconstruction meeting with the City and Contractor to review conditions of the construction contract, communication procedures, construction schedule, team member responsibilities and expectations.
- **Respond to RFI's/Contractor Coordination/Office Engineering.** Annual Consultant shall issue instructions of the City to Contractor; issue necessary interpretations and clarifications of the Contract Documents and prepare change orders as required. Annual Consultant shall consult with and advise the City and act as its representative as administrator of the construction contract as provided in the General Conditions of the Construction Contract.
- **Shop Drawing/Submittal Reviews.** Annual Consultant shall review and take action as stated in the Construction Contract Documents with respect to shop drawings, the results of tests and inspections and other data that the Contractor is required to submit. Annual Consultant shall review schedules, warranties, bonds and other documents submitted by the Contractor.
- **Contractor Pay Application Reviews.** Based on site observations and review of applications for payment and the accompanying data, Annual Consultant shall determine the amounts owing to Contractor and recommend in writing payments to Contractor.
- **Construction Meetings.** Annual Consultant representative will attend bi-weekly meetings at the site during construction.
- **Substantial/Final Completion Inspections.** Annual Consultant shall conduct an inspection to determine if the Project is substantially complete and a final inspection to determine if the work has been completed in accordance with the Contract Documents.
- **Project Closeout.** Annual Consultant shall provide a project closeout binder that includes project paperwork. Annual Consultant shall prepare an application for "Approval of Construction" for submittal to the Maricopa County Department of Environmental Services.
- **Construction Record Drawings.** Annual Consultant shall collect and review construction record drawings provided by the Contractor, incorporate construction record information documented by the resident representative and produce construction drawings that have been conformed to the construction record. Annual Consultant shall provide the City with one reproducible copy and one electronic copy in AutoCAD 2004 on CD.

2. Construction Field Engineering

- **Periodic On-Site Observation Services during Construction.** A Resident Project Representative from Annual Consultant will be furnished on a part time basis, up to 12 hours per week, for the anticipated construction period duration of 6 months and will act as liaison between Annual Consultant, the City and the Contractor in observing performance of the work of Contractor.
- **Start up and Training.** Annual Consultant shall provide start up and training services in accordance with the hours projected on the fee estimate.

**EXHIBIT B
FEE SCHEDULE**

Work Breakdown Structure		Labor Hours Plan						Price Breakdown					
		170.00	115.00	90.00	87.00	52.00							
Task #	Task Name	Senior Project Manager II	Senior Engineer VI	Senior Engineer III	Senior Designer III	Senior Computer Word Processor	Total Labor Hours	Labor	Subs / Contract Labor	ODCs	Travel	Matls & Equip	Price
1.0	Construction Office Eng	251	177	121	45	60	654	80,950	11,220		550	1,540	94,260
1.1	Contract Preparation	5	5				10	1,425					
1.2	Pre-Construction Conf	5	5				10	1,425					
1.3	RFI/Contr Coord/Off Eng	45	50	45			140	17,450	11,220			110	
1.4	Submittal Review	28	45	45		60	178	17,105				220	
1.5	Contr Pay Ap Reviews	24					24	4,080					
1.6	Change Orders	29	13	5	5		52	7,310					
1.7	Construction meetings	80	20				100	15,900			550	110	
1.8	Subst Comp/Final Compl	20	20				40	5,700					
1.9	Project Closeout	9	11				20	2,795					
1.1	Record Drawings	6	8	26	40		80	7,760				1,100	
2.0	Constr Field Engineering	88	288				376	48,080	15,180		2,200		65,460
2.1	Periodic Inspection	40	248				288	35,320	15,180		1,980		
2.2	Startup and Training	48	40				88	12,760			220		
	Totals	339	465	121	45	60	1,030	129,030	28,400		2,750	1,540	159,720

EXHIBIT C

**Consultant Immigration Warranty
To Be Completed by Consultant Prior to Execution of Contract**

A.R.S. § 41-4401 requires as a condition of your contract verification of compliance by the consultant and subconsultants 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 and attached Employee Verification Worksheet the Engineer/Annual Consultant shall attest that it and all subconsultants performing work under the cited State contract meet all conditions contained herein.

Project Number: WA0802-451		
Project Name: Rural Road Water Production Facility Modifications – Construction Management Services		
Street Name and Number:		
City: Chandler	State: AZ	Zip Code:

I hereby attest that:

1. The Engineer/Annual Consultant 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 subconsultants 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; and
3. The Engineer/Annual Consultant has identified all consultant and subconsultant employees who perform work under the contract and has verified compliance with Federal Immigration and Nationality Act (FINA), all other Federal immigration laws and regulations, and A.R.S. § 23-214.

Signature of Engineer/Annual Consultant (Employer) or Authorized Designee:



Printed Name: Joseph A. Tambornino

Title: Senior Vice President

Date (month/day/year): 10/17/08

**PROJECT AGREEMENT
PURSUANT TO ANNUAL CONTRACT NO. EN0717-101**

AGREEMENT NO: WA0801-451

This AGREEMENT is made this day of 2008, by and between the City of Chandler, a municipal corporation (hereinafter referred to as "CITY") and **Brown and Caldwell, a corporation licensed to do business in the State of Arizona** (hereinafter referred to as "Annual Consultant") and is a project agreement entered into pursuant to Annual Contract No. EN0717-101.

CITY and Brown and Caldwell, in consideration of the mutual covenants herein set forth, agree as follows:

ARTICLE 1. DESCRIPTION OF WORK

This project is Basha Wells 1, 2, & 3 Construction Management Services, Project Number WA0801-451. The scope of work consists of construction management services for Basha Wells 1, 2, & 3, all as more particularly set forth in Exhibit A attached hereto and incorporated herein by reference.

The Annual Consultant shall not accept any change of scope, or change in contract provisions, unless issued in writing, as a contract amendment and signed by the Contract Administrator.

ARTICLE 2. CONTRACT PRICE

CITY shall pay Annual Consultant for completion of the Work in accordance with the Contract Documents a fee not to exceed Two Hundred Nineteen Thousand Forty One Dollars (\$219,041) determined and payable as set forth in Annual Contract EN0717-101 and Exhibit B attached hereto and made a part hereof by reference.

ARTICLE 3. CONTRACT TIME

The contract time is Two Hundred Ten days and Annual Consultant agrees to complete all work within Two Hundred Ten (210) days of the date CITY issues a Notice to Proceed.

ARTICLE 4. GENERAL

This Project Agreement is entered into pursuant to Annual Contract No. EN0717-101 and the terms and conditions contained therein are incorporated herein by reference as if set forth in full.

ARTICLE 5. ARIZONA PROCURMENT LAW

Compliance with A.R.S. § 41-4401. Pursuant to the provisions of A.R.S. § 41-4401, the Consultant hereby warrants to the City that the Consultant and each of its subcontractors ("Subconsultants") 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 "Consultant Immigration Warranty").

A breach of the Consultant Immigration Warranty (Exhibit C) shall constitute a material breach of this Contract that is subject to penalties up to and including termination of the contract.

The City retains the legal right to inspect the papers of any Consultant or Subconsultant employee who works on this Contract to ensure that the Consultant or Subconsultant is complying with the Contractor Immigration Warranty. The Consultant agrees to assist the City in the conduct of any such inspections.

The City may, at its sole discretion, conduct random verifications of the employment records of the Consultant and any Subconsultant to ensure compliance with Contractors Immigration Warranty. The Consultant agrees to assist the City in performing any such random verifications.

The provisions of this Article must be included in any contract the Consultant enters into with any and all of its subcontractors who provide services under this Contract or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a consultant or subconsultant. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

In accordance with A.R.S. §35-397, the Consultant hereby certifies that the offeror does not have scrutinized business operations in Iran.

In accordance with A.R.S. §35-397, the Consultant hereby certifies that the offeror does not have scrutinized business operations in Sudan.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first written above.

This Agreement will be effective on this _____ day of _____, 2008.

CITY OF CHANDLER

FOR THE ANNUAL CONSULTANT:

MAYOR DATE:

By: [Signature]
Title: Vice President

ADDRESS FOR NOTICE
City of Chandler
P.O. Box 4008, Mail Stop 407
Chandler, AZ 85244-4008
480-782-3307

ADDRESS FOR NOTICE
Ms. Tracy Moraco
Brown & Caldwell
201 E. Washington St., Ste. 500
Phoenix, AZ 85004

APPROVED AS TO FORM:

Phone: 602-567-4000
Fax: 602-567-4001

ATTEST: City Attorney By: [Signature]

City Clerk

EXHIBIT A SCOPE OF WORK

Project Description

The City of Chandler (COC) is equipping three potable water wells with pumps, motors and related electrical and site improvements. These three wells, Basha Wells 1, 2 and 3 are located in the area south of Ocotillo Avenue between Basha Road and Arizona Avenue. Basha Well No. 1 is located at the Basha Reservoir site on Basha Road. Improvements associated with Basha Well No. 1 include a reclaimed water storage tank and horizontal split case pump to deliver water to the city's pressurized reclaimed water system.

Assumptions

This scope describes construction management and inspection services to be provided for construction management and inspection during the equipping of the three well sites.

The services to be provided assume a construction schedule of eight months duration. ANNUAL CONSULTANT staff will provide inspection services throughout the duration of the project to verify that the work is completed in accordance with the contract documents. ANNUAL CONSULTANT staff will coordinate site visits to observe various stages of construction and hold progress meetings throughout the project.

It is assumed that the COC will have a project manager overseeing this project through the duration of construction, and that ANNUAL CONSULTANT will assist this person with day-to-day oversight of the construction for the duration of the project.

Approach

ANNUAL CONSULTANT shall issue COC instructions to CONTRACTOR; issue necessary interpretations and clarifications of the Construction Contract Documents; have authority, as COC's representative, to require special inspection or testing of the work; act as initial interpreter of the requirements of the Construction Contract Documents; and judge of the acceptability of the work hereunder. ANNUAL CONSULTANT will make decisions relating to the acceptability of the work or the interpretation of the requirements of the Construction Contract Documents pertaining to the execution and progress of the work. ANNUAL CONSULTANT shall render interpretations or decisions in good faith and in accordance with the requirements of the Construction Contract Documents. ANNUAL CONSULTANT shall respond to COC representative and/or CONTRACTOR to clarify and/or interpret technical, design related questions. ANNUAL CONSULTANT will assist COC, as required, in resolution of these issues. ANNUAL CONSULTANT shall respond to issues raised during construction regarding interpretation and clarification of the contractual administrative and technical requirements of the Construction Contract Documents.

ANNUAL CONSULTANT shall consult with and advise COC, as its representative, during construction. COC instructions to CONTRACTOR (s) will be issued through ANNUAL CONSULTANT who will have authority to act on behalf of COC to the extent provided in this Scope of Services except as otherwise provided in writing.

ANNUAL CONSULTANT shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by CONTRACTOR(s), unless otherwise specified in the Construction Contract Documents or the safety precautions and programs incident to the work of CONTRACTOR.

ANNUAL CONSULTANT's efforts shall be directed toward providing a greater degree of confidence for COC that the completed work by CONTRACTOR will conform to the Construction Contract Documents, but ANNUAL CONSULTANT shall not be responsible for the failure of CONTRACTOR to perform the work in accordance with the Construction Contract Documents.

On the basis of onsite examination of materials, equipment, and workmanship, ANNUAL CONSULTANT shall keep COC informed of the progress of work. This shall include the following items:

Task 1 – Project Management

This task includes preparation of monthly invoices, project progress review, the pre-construction conference, and monthly progress meetings.

ANNUAL CONSULTANT shall conduct a pre-construction conference identifying field services to be provided by ANNUAL CONSULTANT and discuss appropriate coordination procedures. ANNUAL CONSULTANT will provide an agenda and pre-construction meeting minutes. This pre-construction conference will be held after Notice to Proceed, and prior to the start of construction.

ANNUAL CONSULTANT will conduct monthly coordination meetings with ENGINEER, COC, and CONTRACTOR. Meeting minutes will be provided.

Task 2 – Provide Construction Administration, Quality Assurance and Coordination.

ANNUAL CONSULTANT shall provide construction administration and quality assurance services during the course of the project to assure that specified procedures are being followed and the construction conforms to the Construction Contract Documents. ANNUAL CONSULTANT shall provide coordination functions during the construction phase as follows:

- Coordinate with regulatory and approving agencies and utilities as required.
- Coordinate the work of specialty subconsultants assigned to the project.
- Coordinate staffing needs such as, inspectors, ENGINEER, and COC.

ANNUAL CONSULTANT will review and critique CONTRACTOR's preliminary progress schedule and examine the work sequence, durations, interim milestones, and other appropriate scheduling features in accordance with the requirements of the Contract Documents, prepare a letter report summarizing the review comments and meet and discuss the schedule comments with CONTRACTOR and COC's representative.

The ANNUAL CONSULTANT will perform a review of progress accomplished during the past month and compare to planned schedule and discuss significant discrepancies at construction progress meeting.

The ANNUAL CONSULTANT will perform a review of the schedule of Shop Drawing submissions and schedule of values prepared by CONTRACTOR, and discuss status at construction progress meeting

Task 3 – Review Shop Drawings and Test Results

The ANNUAL CONSULTANT shall receive shop drawings, samples, test results, and other data, which CONTRACTOR is required to submit, and transmit to ENGINEER for review and comment. The ENGINEER's review shall only be for conformance with the design concept of the project and compliance with the information given in the construction documents. Such review or other action shall not extend to means, methods, sequences, techniques or procedures of construction selected by CONTRACTOR, or to safety precautions and programs incident thereto. The ENGINEER shall receive and review (for general contents as required by the construction documents) maintenance and operating schedules and instructions, operation and maintenance manuals, guarantees, bonds and certificates of inspection which are to be assembled by CONTRACTOR in accordance with the construction documents.

ANNUAL CONSULTANT will develop a deliverables list prior to the pre-construction meeting. This list will identify all of the specified submittals that the CONTRACTOR will be responsible for throughout the project, including, but not limited to, shop drawings, test results, operation and maintenance manuals, spare parts, and test results. The deliverable list will be distributed to COC and CONTRACTOR for review and reference.

As part of this task, the ANNUAL CONSULTANT shall also maintain a submittal log showing dates of submittal, transmittal action to other subconsultants, dates of return and review action. Copies of the log shall be furnished to the CITY and the CONTRACTOR monthly. The ANNUAL CONSULTANT shall also evaluate the CONTRACTOR's request for substitutions. Submittal review efforts are based upon a maximum of two reviews per submittal and assume that no more than 50 percent of the total number of first submittals will require two reviews. The level of effort for this task is based upon receiving 80 shop-drawing submittals.

Task 4 – Document Control and Filing System

ANNUAL CONSULTANT shall maintain and provide the following detailed project records and documentation during the construction phase:

- The project records shall include correspondence, logs, schedules, submittals, test data, project data, payments, change orders, meeting minutes, clarifications, progress photos, markups of drawings and specifications, digital control system documentation and other such documentation as required for the administration and inspection of the construction contract. Project records shall be delivered to COC's representative upon completion of the construction contract. There will be one set of project records for the entire construction project.

Task 5 – Payment Application and Change Order Review and Recommendations

Review and recommend COC action on CONTRACTOR progress payments. Monthly, meet with CONTRACTOR to review and update actual status of cost and time. Recommend to COC the progress payment amount due to CONTRACTOR.

Based on ANNUAL CONSULTANT's onsite observations, and on review of applications for payment and the accompanying data and schedules, ANNUAL CONSULTANT shall determine the amounts owing to CONTRACTOR and recommend in writing payments to CONTRACTOR in such amounts. The recommendations of payment will constitute a representation to COC, based on such observations and review, that the work has progressed to the point indicated, that, to the best of ANNUAL CONSULTANT's knowledge, information and belief, the quality of such work is in accordance with the Construction Contract Documents (subject to an evaluation of such work as a functioning project upon Substantial Completion, to the results of subsequent tests called for in the Construction Contract Documents, and to qualifications stated in the recommendation), and that payment of the amount recommended is due CONTRACTOR.

ANNUAL CONSULTANT shall perform services in connection with change orders to reflect changes requested by COC or CONTRACTOR, for evaluating substitutions proposed by CONTRACTOR, and in making revisions to drawings and specifications occasioned thereby, and resulting from significant delays, changes or price increases occurring as a direct or indirect result of material or equipment shortages. Changes and substitutions shall be limited to the scope of the project as defined by the Construction Contract Documents or additional work as may be requested by COC.

Task 6 – Issue Interpretations and Clarifications

ANNUAL CONSULTANT shall issue COC's instructions to CONTRACTOR; issue necessary interpretations and clarifications of the Construction Contract Documents; have authority, as COC's representative, to require special inspection or testing of the work; act as initial interpreter of the requirements of the Construction Contract Documents; and judge of the acceptability of the work hereunder. ANNUAL CONSULTANT will make decisions on issues of COC and CONTRACTOR relating to the acceptability of the work or the interpretation of the requirements of the Construction Contract Documents pertaining to the execution and progress of the work. ANNUAL CONSULTANT shall render interpretations or decisions in good faith and in accordance with the requirements of the Construction Contract Documents. ANNUAL CONSULTANT shall respond to COC's representative and/or CONTRACTOR to clarify and/or interpret technical, design related questions. ANNUAL CONSULTANT will assist COC, as required, in resolution of these issues. ANNUAL CONSULTANT shall respond to issues raised during construction regarding interpretation and clarification of the contractual administrative and technical requirements of the Construction Contract Documents. ANNUAL CONSULTANT's cost for this task is based on 60 total clarifications for the entire construction project.

Task 7 – Mechanical, Electrical, and Structural Onsite Inspections

Onsite inspectors will be furnished on a 24 hour per week basis from the start of construction through substantial completion and will act as directed by ANNUAL CONSULTANT, in order to assist in observing performance of the work of CONTRACTOR. Onsite inspection will include:

- Conduct onsite observations of the work in progress to assist ENGINEER in determining if the work is progressing in accordance with the Construction Contract Documents and that completed work conforms to the Construction Contract Documents.
- Report to ENGINEER whenever it is believed that work is unsatisfactory, faulty or defective or does not conform to the Construction Contract Documents, or does not meet the requirements of inspections, tests or approval required to be made, or has been damaged prior to final payment; and advise ENGINEER when it is believed work should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

- Verify that tests, equipment and systems startup, and operating and maintenance instructions are conducted as required by the Construction Contract Documents and in presence of the required personnel, and that CONTRACTOR maintains required records thereof; observe, record and report to ENGINEER appropriate details relative to the test procedures and startups.

Task 8 – Review of Operation and Maintenance Manuals (Manufacturer's Equipment).

During the course of the work, review and determine that certificates, operation and maintenance manuals, and other data required to be assembled and furnished by CONTRACTOR are applicable to the items actually installed; and deliver this material to design for review and forwarding to COC prior to final acceptance of the work. ENGINEER shall check each manual submitted for completeness.

Task 9 – Substantial Completion and Final Acceptance Inspections

Following notice from CONTRACTOR, ANNUAL CONSULTANT and COC shall conduct an inspection to determine if the project is substantially complete in accordance with the Construction Contract Documents. If COC considers the work substantially complete, COC shall provide CONTRACTOR the Certificate of Substantial Completion.

ANNUAL CONSULTANT shall, upon completion, inspect, develop and deliver the punch list to the CONTRACTOR. Upon the completion of the punch list, ANNUAL CONSULTANT will make final inspection to determine if the finished work has been completed to the standard required by the Construction Contract Documents, and CONTRACTOR has fulfilled the obligations hereunder so that ANNUAL CONSULTANT may recommend, in writing, final payment to CONTRACTOR and may give written notice to COC and CONTRACTOR that the work is acceptable, subject to conditions therein expressed.

Task 10 – Record Drawings

ANNUAL CONSULTANT shall update the most current set of record drawings for the PROJECT using the drawings and other data furnished by CONTRACTOR to ANNUAL CONSULTANT. There will be one updated record drawing set included in this project.

ENGINEER shall prepare:

- One set of updated record drawings acceptable to COC. Record drawing information may be reproduced by computer-aided methods.
- Mylar originals of record drawings.

Onsite inspectors shall review and coordinate the record documents. One full size copy, the reproducible set plus an electronic copy in AutoCAD format, will be provided to COC.

ANNUAL CONSULTANT will prepare applications for Approval of Construction upon completion of applicable testing and record drawings. One copy of the signed cover sheet for the installation will be provided to Maricopa County.

Task 11 – Special Services; Testing and Startup Assistance

Testing and startup services shall be sufficient to transfer finished work from a construction status to operating, functional system(s). ANNUAL CONSULTANT will provide the following:

- Conduct startup meeting with COC and CONTRACTOR.
- Review startup and testing plan prepared by CONTRACTOR.
- Coordinate discharge of testing water.
- Monitor functional testing.
- Coordinate system tests.
- Provide instrument calibration verification.

Task 12 – Programming

The ANNUAL CONSULTANT will provide a Programmer, PLC codes, and witness point-to-point field-testing to program the Remote Terminal Units (RTU) to meet the requirements of the Supervisory Control and Data Acquisition (SCADA).

Programming responsibilities are as follows:

- RTU Programming will be by the ANNUAL CONSULTANT and use Modicon Unity Pro software per the City requirements.
- Central Control Center Master SCADA configuration and programming modifications shall be done by the City of Chandler.
- The RTU programs interface with the City SCADA. City programmer to provide the interface addresses for the RTU I/O, set points, On/Off commands and alarms. ANNUAL CONSULTANT shall provide assistance to verify that the SCADA works with the new RTUs.

RTU Programming and Documentation:

- Unity Pro software is to be used for the programming of the RTUs.
- RTU program will control the well site per the Control Description as approved by the City.
- Final submittal of the program will be on CD and program listing (two copies) as provided by the programming software.
- Finalized Control Description will be provided on the CD with the RTU Program.

Testing:

- RTU factory/functional acceptance testing (FAT) is to be done and documented by the contractor/RTU supplier.
- After installation of the RTUs, ANNUAL CONSULTANT to assist contractor with verification that RTU I/O points are working properly.
- ANNUAL CONSULTANT to verify the RTU programs operates the wells per the Control Description.
- After the completion of field-testing of the RTUs, ANNUAL CONSULTANT to verify that the City's SCADA operates the wells per the Control Description.

Training:

- ANNUAL CONSULTANT to provide training on the RTU's software for two 90-minute training sessions.

**EXHIBIT B
FEE SCHEDULE**

	Managing Engineer	Construction Manager	Project Engineer	QA/QC Inspector	Shop Drawing Checker	Project Coordinator	
Project Management	8	24	6				\$ 5,708
QA/QC Coordination		10				20	\$ 3,260
Review Shop Drawings			140				\$ 20,440
Document Control and Filing						278	\$ 25,020
Pay Application and Change Order Review				12			\$ 1,548
Interpretations/Clarifications			96				\$ 14,016
Mechanical/Electrical/Structural Onsite Inspection				540			\$ 69,660
Review O&M's		40					\$ 5,840
Substantial/Final Acceptance	4	16		16			\$ 5,064
Record Drawings		10	16	4	40		\$ 8,632
Testing/Startup Assistance		60					\$ 8,760
Programming				32			\$ 4,128
Subtotal - Construction Management	12	160	258	604	40	298	\$ 172,076
Vehicle / Mileage							\$ 5,500
Reproduction							\$ 500
Jensen Systems							\$ 34,815
Geotechnical Materials Testing							\$ 6,150
Subtotal - Other Direct Costs							\$ 46,965
							\$ 219,041

EXHIBIT C

**Consultant Immigration Warranty
To Be Completed by Consultant Prior to Execution of Contract**

A.R.S. § 41-4401 requires as a condition of your contract verification of compliance by the consultant and subconsultants 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 and attached Employee Verification Worksheet the Engineer/Annual Consultant shall attest that it and all subconsultants performing work under the cited State contract meet all conditions contained herein.

Project Number: WA0801-451		
Project Name: Basha Wells 1, 2, & 3 Construction Management Services		
Street Name and Number:		
City: Chandler	State: AZ	Zip Code:

I hereby attest that:

1. The Engineer/Annual Consultant 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 subconsultants 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; and
3. The Engineer/Annual Consultant has identified all consultant and subconsultant employees who perform work under the contract and has verified compliance with Federal Immigration and Nationality Act (FINA), all other Federal immigration laws and regulations, and A.R.S. § 23-214.

Signature of Engineer/ Annual Consultant (Employer) or Authorized Designee:



Printed Name: Kerry J. Brough

Title: Vice President

Date (month/day/year): 11/4/08