



**PURCHASING ITEM  
FOR  
COUNCIL AGENDA  
Memo No. CA09-075**

**1. Agenda Item Number:** 25  
**2. Council Meeting Date:** September 25, 2008

**TO: MAYOR & COUNCIL**  
**THROUGH: CITY MANAGER**

**3. Date Prepared:** September 8, 2008  
**4. Requesting Department:** Municipal Utilities

**5. SUBJECT:** Approval of Contract Amendment No. 1 to Wilson Engineers LLC for design of the equipping of Ocotillo Aquifer Storage and Recovery (ASR) Wells 5 & 6, Project No. WW0807-201, in an amount not to exceed \$102,220, for a revised contract total of \$386,765.

**6. RECOMMENDATION:** Staff recommends Council approve Contract Amendment No. 1 to Wilson Engineers LLC for design of the equipping of Ocotillo Aquifer Storage and Recovery (ASR) Wells 5 & 6, Project No. WW0807-201, in an amount not to exceed \$102,220, for a revised contract total of \$386,765.

**7. BACKGROUND/DISCUSSION:** This amendment will add the design work necessary to upgrade infrastructure at the Ocotillo Water Reclamation facility to meet reclaimed water delivery obligations with both the Ocotillo Management Group (OMG) and the Gila River Indian Community (GRIC). The design will include upgrading pumps at the Effluent Pump Station from 5 million gallons per day (mgd) to 10 mgd. In addition, 800 feet of 24" diameter pipe and valves will be included to allow recovered water from the facility's ASR wells to be delivered to OMG when needed. This work will be included with the equipping construction project for ASR Wells 5 and 6.

**8. EVALUATION PROCESS:** On September 6, 2007, Council approved an annual contract, EN0712-101, to Wilson Engineers LLC for permitting, study, construction management services, and design of water and wastewater facilities. The Project Agreement for this project was awarded to the annual consultant on January 17, 2008.

This contract amendment will allow for the design and preparation of contract documents to include incorporation of additional valves, a recovery pipeline, and replacement of two existing pumps at the Ocotillo Water Reclamation Facility.

**9. FINANCIAL IMPLICATIONS:**

Cost: \$102,220  
Savings: None  
Long Term Costs: None

**Fund Source:**

<u>Acct. No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
615.3910.0000.6817.8WW189	WW Operating	Effluent Reuse Storage & Recovery Wells	FY 07/08	\$102,220

**10. PROPOSED MOTION:** Move that Council approve Contract Amendment No. 1 to Wilson Engineers LLC for design of the equipping of Ocotillo Aquifer Storage and Recovery (ASR) Wells 5 & 6, Project No. WW0807-201, in an amount not to exceed \$102,220, for a revised contract total of \$386,765, and authorize the Mayor to sign the contract documents.

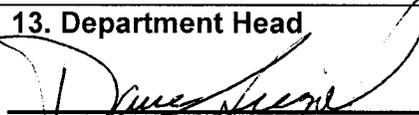
**ATTACHMENTS:** Location Map, Contract Amendment No. 1

**APPROVALS**

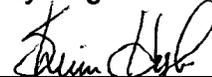
**11. Requesting Department**

  
Robert Mulvey, Assistant Municipal Utilities Director

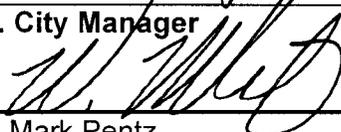
**13. Department Head**

  
Dave Siegel, Municipal Utilities Director

**12. City Engineer**

  
Sheina Hughes, Assistant Public Works Director/  
City Engineer

**14. City Manager**

  
W. Mark Pentz





Chandler Arizona

AMENDMENT NUMBER 1  
TO PROJECT AGREEMENT NO.: WW0807-201  
PURSUANT TO ANNUAL CONTRACT NO.: EN0712-101

Project Name: Ocotillo ASR Wells 5 & 6 Equipping Design  
Project No.: WW0807-201

The City of Chandler (CITY) and Wilson Engineers LLC, entered into an Annual Contract (EN0712-101) dated September 11, 2007. Pursuant to this Annual Contract the parties entered into a Project Agreement dated February 20, 2008. This Amendment No. 1 to that certain Project Agreement between the City Of Chandler (CITY) and Wilson Engineers LLC, for Ocotillo ASR Wells 5 & 6 Equipping Design is entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2008.

WHEREAS the parties have determined that it is necessary and desirable for ANNUAL CONSULTANT to perform additional services for CITY;

NOW THEREFORE, the parties agree as follows:

1. Section 1, of the above referenced Agreement, is hereby; amended by adding additional scope of work described in more detail in Exhibit A attached hereto and incorporated herein by reference.
2. Section 2, of the above referenced Agreement, is hereby; amended by increasing the total contract price by an amount not to exceed the sum of One Hundred Two Thousand Two Hundred Twenty dollars, (\$102,220) all payable in accordance with Exhibit B, for a total contract price not to exceed the sum of Three Hundred Eighty Six Thousand Seven Hundred Sixty Five dollars, (\$386,765).
3. Section 3 of the above referenced Agreement is hereby amended by increasing the Contract Time by One Hundred Ninety Seven (197) days for a total Contract Time of Three Hundred Seventy Seven (377) days from the original Notice to Proceed date to the anticipated end of construction.
4. All other terms and conditions of the above referenced Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties have hereunto subscribed their names this \_\_\_\_\_ day of \_\_\_\_\_, 2008.

CITY OF CHANDLER:

By: \_\_\_\_\_  
MAYOR Date

APPROVED AS TO FORM:

City Attorney by: \_\_\_\_\_  
ATTEST:

\_\_\_\_\_  
City Clerk

ANNUAL CONSULTANT:

By: \_\_\_\_\_ (UDAY KUMAR GANDHE)  
Title: Principal

ATTEST: (If corporation)  
\_\_\_\_\_  
Secretary

WITNESS: (If Individual or Partnership)

\_\_\_\_\_  
SEAL

Amendment No. 1 cont.

Project No. WW0807-201

**THESE CHANGES RESULT IN THE FOLLOWING ADJUSTMENTS OF CONTRACT PRICE AND TIME**

<b>ORIGINAL CONTRACT AMOUNT</b>	<b>\$ 284,545</b>
<b>CURRENT CONTRACT PRICE PRIOR TO THIS AMENDMENT</b> (Including previous amendments)	<b>\$ 284,545</b>
<b>NET INCREASE / DECREASE</b> (Resulting from this amendment)	<b>\$ 102,220</b>
<b>REVISED CONTRACT PRICE</b> (Including this amendment)	<b>\$ 386,765</b>
<b>AMENDMENT PERCENTAGE</b> (Of original contract price)	<b>35.9%</b>
<b>CONTRACT TIME PRIOR TO THIS AMENDMENT</b> (Including previous amendments)	<b>180 days</b> (Days or Date)
<b>NET INCREASE/DECREASE</b> (Resulting from this amendment)	<b>197 days</b> (Days or Date)
<b>REVISED CONTRACT TIME</b> (Including this amendment)	<b>377 days</b> (Days or Date)
THIS AMENDMENT No. _____	Does not Require Council Approval: Less than \$30,000* _____
	More than \$30,000 but less than 10% of Contract* _____
THIS AMENDMENT No. <u>1</u>	Requires Council Approval Greater than \$30,000* <u>X</u>
	Greater than 10% of Contract * <u>X</u>
*Including City Manager approved Amendments	
<b>ORIGINAL CONTRACT COUNCIL DATE:</b> January 17, 2008 <b>ITEM NO.:</b> 28, if applicable	
<b>COUNCIL APPROVAL:</b> ITEM NO: <u>  </u> if applicable	

CC: City Clerk    User Dept    Project Mgr    Consultant    Project Analyst    File

## EXHIBIT A SCOPE OF WORK

This project consists of design services for drilling and equipping two new (2) aquifer, storage, and recovery (ASR) wells at the City's Ocotillo Recharge Facility (adjacent to Old Price Road, south of the Ocotillo Water Reclamation Facility) and installing additional piping and equipment at the recently completed Ocotillo Recharge Pump Station. The new wells are to be connected to the existing SCADA communication system. The primary power feeding the facility shall be relocated from power poles located on the west side of Old Price Road to a recently installed switching cabinet on the east side of Old Price Road. In addition, the existing motor control center at ASR Well No. 1 shall be expanded to incorporate the two additional well sites.

The Ocotillo ASR Wells 5 & 6 Scope of Services Change Proposal No. 1 shall consist of design and preparation of contract documents. No post design services are included at this time. The following major facility components shall be added to the project:

- Provide one (1) additional motorized butterfly valve, one (1) above ground pressure reducing valve, four (4) additional isolation butterfly and/or gate valves, approximately 800-feet of 24-inch recovery water piping, 150-feet of 16-inch recovery water piping, connections to the existing Recharge Facility recovery piping loop and the discharge pipeline downstream of the Ocotillo WRF effluent pipeline connection to the Intel Facility.
- Provide electrical and instrumentation wiring connected from the electrical actuator to the Recharge Facility control system at ASR Well No. 2. Modify the existing electrical power and instrumentation system at ASR Well No. 2 to incorporate the electrical actuator.
- Replace two existing Effluent Pump Station vertical turbine pumps at the Ocotillo WRF serving the San Tan Canal. The new pumps shall increase the pump stations capacity from 5 MGD to 10 MGD. The pumps shall include variable frequency drives and upsize the pump discharge piping to 16-inches in diameter.
- The power feeding the two new pumps shall be provided by the recently completed power service serving the Ocotillo Recharge Pump Station. All of the controls for each of the pumps shall remain within the existing PLC.

The engineering services to be provided under this Project are as follows:

### **TASK 1.0 PRELIMINARY DESIGN**

ANNUAL CONSULTANT shall incorporate the proposed recovery pipeline additions within the Final Design Report submittal to the City. The proposed changes shall be incorporated and five (5) copies of the final design report shall be submitted.

### **TASK 2.0 FINAL DESIGN**

The following subtasks are based on preparing the detailed design documents for Ocotillo Recharge Facility ASR Wells 5 & 6. The following subtasks have been estimated based on the anticipated drawing list.

**Subtask 2.1 Preparation of 60% Plans.** Prepare preliminary (60%) construction documents (plans only) for the ASR well sites incorporating the recovery piping addition. The 60% plans shall include the following detailed design areas for the ASR Well Sites and Recharge Pump Station:

- Mechanical: Two Effluent Pump Station vertical turbine pumps, Pump discharge piping, Discharge recovery piping, valves, and piping appurtenances.
- Electrical and Instrumentation: Preliminary Process & Instrumentation Diagrams.

Five copies of the preliminary, 60 percent, plans shall be submitted for review to the City's Engineering and Operations Departments incorporating the addition.

**Subtask 2.2 Preparation of 90% Plans and Specifications.** Prepare preliminary (90%) construction documents including plans, specifications, and a construction cost estimate for the well sites incorporating the recovery piping addition. City comments received on the 60% plans shall be incorporated in the 90% submittal. The plans shall include the following detailed design areas for the ASR Well Sites:

- Mechanical: Two Effluent Pump Station vertical turbine pumps, Pump discharge piping, Discharge recovery piping, valves, and piping appurtenances.
- Electrical and Instrumentation: Power supply requirements, motor control center modification, control descriptions, remote telemetry system, and instrumentation.

Five copies of the preliminary, 90 percent, plans and specifications shall be submitted for review to the City's Engineering and Operations Departments incorporating the addition.

**Subtask 2.4 Preparation of 100% Plans and Specifications.** The final 100% plans and specifications shall be prepared including incorporation of the City and County comments. One (1) reproducible set of plans and specifications shall be submitted to the City for preparation of bid sets.

EXHIBIT B  
FEE SCHEDULE

Task	Task Description	Principal \$195.00	Project Manager \$175.00	Project Engineer \$145.00	Technician \$95.00	Admin. \$70.00	Total Hours	Total Fee
<b>Task 2.0 - Preliminary Design</b>								
2.1	Preliminary Design Report		16	24	8		48	\$7,040.00
<b>Subtotal - Preliminary Design</b>		<b>0</b>	<b>16</b>	<b>24</b>	<b>8</b>	<b>0</b>	<b>48</b>	<b>\$7,040.00</b>
<b>Task 3.0 - Final Design</b>								
3.1	60% Construction Documents	4	40	96	80		220	\$29,300.00
3.2	90% Construction Documents	8	56	128	104	32	328	\$42,040.00
3.4	Final Submittal	4	32	64	48	16	164	\$21,340.00
<b>Subtotal - Final Design</b>		<b>16</b>	<b>128</b>	<b>288</b>	<b>232</b>	<b>48</b>	<b>712</b>	<b>\$92,680.00</b>
<b>Subtotal - Wilson Labor Summary</b>		<b>16</b>	<b>144</b>	<b>312</b>	<b>240</b>	<b>48</b>	<b>760</b>	<b>\$99,720.00</b>

**II. OTHER DIRECT COSTS**

Task No(s)	Expense Description	Unit	Total Units	Cost / Unit	Total
3.2	Saf-r-Dig - Utility Locate Sub	LS	1	\$ 2,500	\$ 2,500
<b>Subtotal - Other Direct Costs</b>					<b>\$ 2,500</b>

**III. TOTAL FEE PROPOSAL**

I	LABOR SUMMARY	\$ 99,720
II	OTHER DIRECT COSTS	\$ 2,500
III	TOTAL FEE	\$ 102,220