



**PURCHASING ITEM
FOR
COUNCIL AGENDA
CP15-101**

1. Agenda Item Number:

21

2. Council Meeting Date:
October 23, 2014

TO: MAYOR & COUNCIL

3. Date Prepared: October 8, 2014

THROUGH: CITY MANAGER

4. Requesting Department: Municipal Utilities

5. SUBJECT: Amendment No. 1 to Contract No. WA1302.201 with CH2M Hill, Inc., for additional professional design services associated with the Railroad Well and Iris Well Equipping Design.

6. RECOMMENDATION: Staff recommends City Council approve Amendment No. 1 to Contract No. WA1302.201 with CH2M Hill, Inc., for additional professional design services associated with the Railroad Well and Iris Well Equipping Design, in an amount not to exceed \$42,896, for a total revised contract amount of \$267,608.

7. BACKGROUND/DISCUSSION: On June 13, 2013, City Council approved Contract No. WA1302.201 for well equipping design of the Railroad Well and Iris Well with CH2M Hill, Inc. The design for the two separate wells is in progress. Construction will be implemented as a single project to achieve cost savings due to implementation efficiencies. The Railroad Well site fronts on Ocotillo Road just east of Arizona Avenue, and its design must closely coordinate with the Ocotillo Roadway Improvement Project (ST0808). The coordination between these two projects has resulted in some scope items being added to the Railroad Well design that will require the need for additional work and time. The three items that this Amendment addresses are: additional drainage design along the frontage of the Railroad Well site facing Ocotillo Road, a new driveway entrance to the Railroad Well site, and design of a new pump-to-waste pipeline.

The scope of work includes: project management and coordination, preliminary design, modifications to existing drainage design, report updates, engineering design, and cost estimating.

The Iris Well site is situated within an existing subdivision, and its design has proceeded independently.

8. EVALUATION PROCESS: City Staff reviewed the scope of work, billing rates, and total fee for the project and determined them to be reasonable.

This Amendment will increase the contract completion time by 381 calendar days, for a total contract completion time of 621 calendar days following the original Notice to Proceed.

9. FINANCIAL IMPLICATIONS:

Cost:

Original Contract:	\$ 224,712
Amendment No. 1:	\$ 42,896
Adjusted Contract Price:	\$ 267,608

Savings: N/A

Long Term Costs: N/A

Fund Source:

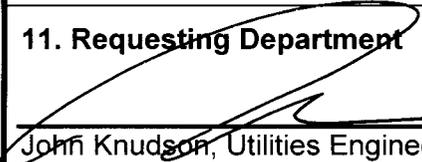
<u>Account No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
601.3820.6713.6WA034	Water Bonds	Well Construction/Rehab	Yes	\$42,896

10. PROPOSED MOTION: Move City Council approve Amendment No. 1 to Contract No. WA1302.201 with CH2M Hill, Inc., for additional professional design services associated with the Railroad Well and Iris Well Equipping Design, in an amount not to exceed \$42,896, for a total revised contract amount of \$267,608.

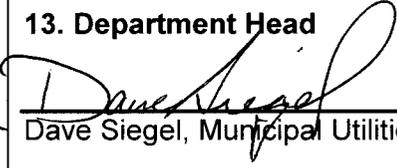
ATTACHMENTS: Amendment No. 1, Location Map

APPROVALS

11. Requesting Department


John Knudson, Utilities Engineering Manager

13. Department Head


Dave Siegel, Municipal Utilities Director

12. Transportation & Development


Bob Fortier, Capital Projects Manager

14. City Manager


Rich Dlugas



Chandler Arizona

AMENDMENT NUMBER 1

Project Name: Railroad Well and Iris Well Equipping
Project No.: WA1302.201

This Amendment No. 1 to that certain Agreement between the City of Chandler (CITY) and CH2M HILL Engineers, Inc. dated June 17, 2013 for Railroad Well and Iris Well Equipping Design is entered into this ____ day of October, 2014.

WHEREAS the parties have determined that it is necessary and desirable for 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 Forty Two Thousand Eight Hundred Ninety Six Dollars, (\$42,896.00) for a total Contract Price not to exceed the sum of Two Hundred Sixty Seven Thousand Six Hundred Eight Dollars (\$267,608) of all payable in accordance with Exhibit B, attached hereto and incorporated herein by reference.
3. Section 3, of the above referenced Agreement is hereby amended by increasing the Contract Time by Three Hundred Eighty One (381) days for a total Contract Time of Six Hundred Twenty One (621) days from the original Notice to Proceed.
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 _____, 2014.

CITY OF CHANDLER:

By: _____
MAYOR Date

APPROVED AS TO FORM: _____
City Attorney by: _____

ATTEST: _____
City Clerk

CONSULTANT:

By: Thomas McLean
Title: VICE PRESIDENT

ATTEST: (If corporation)
[Signature]
Secretary Project Delivery Manager

WITNESS: (If Individual or Partnership)

SEAL

Amendment No. 1 (cont.)

Project No. WA1302.201

These changes result in the following adjustments of contract amount and time:

Original Contract amount:		\$ 224,712
Current Contract amount, prior to this Amendment: (including previous amendments)		\$ 224,712
Net change resulting from this Amendment: (if over \$50,000 from Contract amount previously approved by Council, Council action is required)		\$ 42,896
Revised Contract amount, including this amendment:		\$ 267,608
Last Contract amount approved by Council:		\$ 224,712
Amendment % of last Contract amount approved by Council: (if over 10% of previous amount approved by Council, Council action is required)		<u>19%</u>
Contract time or completion date prior to this Amendment: (including previous amendments)	<u>240</u> Days	or _____ Date
Net change resulting from this Amendment:	<u>381</u> Days	or _____ Date
Revised Contract time or completion date: (including this amendment)	<u>621</u> Days	or _____ Date
<p>THIS AMENDMENT No. _____ does <u>NOT</u> require Council approval: _____</p> <p>Amendment is less than 10% of Contract amount last approved by Council <u>Or</u> revised Contract amount is less than \$30,000* (*including City Manager approved Amendments)</p>		
<p>THIS AMENDMENT No. <u>1</u> does require Council approval: <u>X</u></p> <p>Amendment causes the Contract amount to exceed \$30,000* Or Amendment is greater than 10% of Contract amount approved by Council (*including City Manager approved Amendments)</p>		
<p>Amendment No. _____ Council approval: _____ Item No.: _____, if applicable</p> <p>City of Chandler (Date & Name of Owner Dept. verbal approval): <u>9/29/2014 John Knudson</u></p>		

E-copy: Project Analyst Project Support Asst. Project Mgr Consultant Owner File

EXHIBIT A SCOPE OF WORK

Introduction

The well equipping design is in progress for the City of Chandler's McDermott and Iris Well Sites. The two wells were combined into a single construction project in order to achieve certain implementation efficiencies and cost savings for the City although they are located on separate sites. The Iris Well site is situated within an existing subdivision and its design has proceeded independently. However, the McDermott Well site fronts on Ocotillo Road and its design must closely coordinate with the ongoing Ocotillo Roadway Improvement Project. The coordination between these two projects has resulted in some decisions that will require the need for some additional work and time in order to complete certain design features related to the McDermott Well Equipping Project.

Essentially, it was decided that it would be more cost effective and efficient for both projects if the design of three items are transferred from the roadway project to the well equipping project. These items include: additional drainage design along the frontage of the well site facing Ocotillo Road; a new driveway entrance to the well site which will accommodate future truck traffic into the site for maintenance; and, a new pump-to-waste (PTW) pipeline that will connect the well to an existing private irrigation line that discharges to the Salt River Project (SRP) system located north of Ocotillo Road.

The Ocotillo Road Improvements Project included upgrades to a private irrigation system located within the right-of-way (ROW) along the south side of Ocotillo Road. The PTW line from the McDermott Well was originally designed to discharge into this private irrigation system. During a Design Review Meeting for both projects, it was determined that the private irrigation system in the vicinity of the McDermott Well Site should be eliminated from the Ocotillo Road Improvements Project. It was also decided that it was in the best interest of both projects that in order to support the needed PTW well discharge to the SRP system, the McDermott Well Site design will need to add the necessary provisions to convey the PTW discharge across Ocotillo Road to a point of connection with the SRP system on the north side of the road. The design will include: a discharge structure to be located within the McDermott Well Site wall; a gravity pipeline that will cross Ocotillo Road; and, connection details to an existing 24-inch reinforced concrete pipe which connects to the SRP system.

Secondly, the drainage provisions within the right-of-way frontage along the north side of the McDermott Well Site between the property line and the planned new curb line were further evaluated by both projects. It was determined that it would be best for the roadway project to include only the drainage design considerations for the runoff that occurs within the new roadway up to the limit of the new curb fronting the well site. Therefore, it would be necessary for the McDermott Well Site drainage design plan to be modified to include any necessary drainage considerations within the Ocotillo Roadway between the curb and the well site property line.

Thirdly, during a coordination meeting for both projects, it was also decided that the driveway entrance into the McDermott Well Site should be incorporated into the McDermott and Iris Wells Equipping Project and removed from the design plans for the roadway project. In view of the fact that the finished grade of the new roadway will be elevated to accommodate a more gradual slope up to the nearby railroad crossing, the resulting slope from the new Ocotillo Road down to the final grade of the well site property will require a rather steep transition for the entrance into the well site. The City would like this driveway to be transferred to the Well Equipping Project so that this transition can be evaluated more closely with respect to its compatibility with standard well site equipment and vehicle uses. The final grades for the driveway will be set to provide a smooth transition from the back of sidewalk (Ocotillo Road Improvements Project) to the driveway's point of connection to the well site entrance. The driveway design will be evaluated to determine if a more gradual slope into the well site is feasible.

In order to incorporate these additional objectives, the following tasks will need to be incorporated into the existing scope.

Project Tasks

Task 1: Project Management/Coordination

The ANNUAL CONSULTANT will hold two coordination meetings with the City staff and the road improvement project Engineer. The purpose of the meeting will be to obtain information pertaining to the design changes, review changes and obtain comments, and discuss the construction schedule.

The ANNUAL CONSULTANT will hold one additional meeting with City staff to review the changes to the plans and obtain any final comments prior to making a final submittal.

Task 2: Preliminary Design

Task 2.1: Pump to Waste Line

The ANNUAL CONSULTANT will obtain current plans for the Ocotillo Road Improvements Project from the Engineer. The ANNUAL CONSULTANT shall obtain drawings from SRP that detail the SRP system to which the PTW line will be discharged. The road improvements and SRP drawings will also be used to complete the following tasks:

- Define new PTW alignment from the McDermott Well Site to the point of connection with the SRP system
- Complete hydraulic analysis
- Size PTW line
- Design new discharge structure
- Set invert elevations

The Road Improvements Project's Engineer will incorporate the alignment and any pertinent invert elevations into the road improvements plans. The Road Improvements Project's Engineer will be responsible for providing the construction details for the PTW line's connection to the existing 24-inch irrigation line.

Task 2.2: Modifications to Existing Drainage Design and Report Update

The ANNUAL CONSULTANT will determine the area of the site located north of the McDermott Well Site wall and within the right-of-way. The area will be used to calculate the storm water runoff generated in this area and assess the impact on the existing proposed drainage plan for the McDermott Well Site. Runoff will be directed to the planned storm water retention basin within the site wall. The final grade elevations will be set from the back of the sidewalk (Ocotillo Road Improvements Project) to the McDermott Well Site wall and site entrance.

The ANNUAL CONSULTANT will update the current McDermott Well site plan, drainage calculations and drainage report to account for the additional storm water runoff generated in the area to the north of the site wall located within the right-of-way.

- Determine area in right-of-way to the north of the McDermott Site wall and contribution of flow from this area to overall site runoff
- Update McDermott Well Site Drainage Report to reflect additional runoff generated within the right-of-way at the north side of the site
- Take off the finished grade elevations from Ocotillo Road Improvements Project plans to set finished grade elevations at north side of the McDermott Well Site within right of way
- Modify drawings to include finished grade elevations at north portion of site within ROW and any adjustments required to planned onsite retention basin
- Coordinate finished grade elevations with Ocotillo Road Improvements Project Engineer

Task 2.3: Addition of Driveway Design

The ANNUAL CONSULTANT will use the current plans for the Ocotillo Road Improvements Project to determine the proposed finished grade elevations planned for the sidewalk and driveway along the northern boundary of the McDermott Well Site. These elevations will be developed in conjunction with Task 2.2. These elevations will be used to adjust/confirm the current planned elevations for the McDermott Well Site entrance. The purpose of this effort is to determine the most appropriate driveway slope transition that can be accommodated considering the needed access by standard water utility vehicles and equipment.

Task 3: Engineering Design

The purpose of this task is to modify the existing McDermott Well Site design plans and specifications to incorporate the pump-to-waste system, the additional drainage requirements and the addition of the driveway.

Task 3.1: Mechanical Design

ANNUAL CONSULTANT shall prepare or modify required technical specifications and design drawings necessary to incorporate the pump-to-waste system. The design will include mechanical piping and discharge structure required to connect the pump-to-waste discharge to the existing SRP system.

Task 3.2: Civil Design

ANNUAL CONSULTANT shall prepare or modify required technical specifications and design drawings for civil improvements at the McDermott Well Site including the additional retention requirements, grading and the driveway.

Task 3.5: Structural Design

ANNUAL CONSULTANT shall evaluate the discharge structure, driveway and any changes to the wall or other structural components impacted by the resulting changes to the McDermott Well Site plans.

Task 3.6: Cost Estimating

ANNUAL CONSULTANT shall update the cost estimate to support the addition of the discharge structure, additional grading required to the north of the site wall and at the retention basin and the driveway.

Amendment Cost

The costs associated with this change order are \$42,856.00 and are detailed in the attached budget spreadsheet.

Responsibilities of City

The following are responsibilities of the City staff during the project:

- Make available pertinent data affecting design including but not limited to drawings for the Ocotillo Road expansion project.

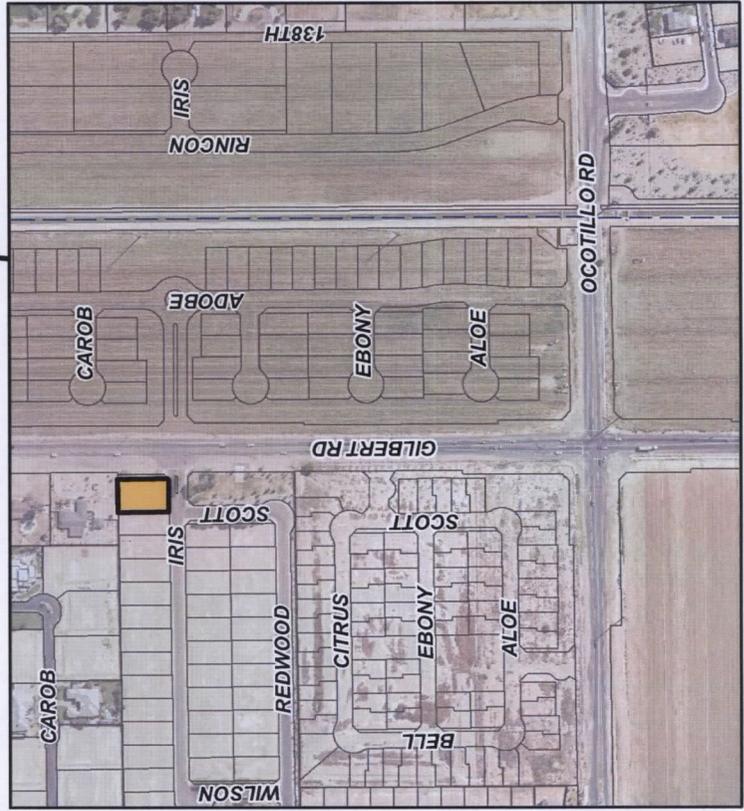
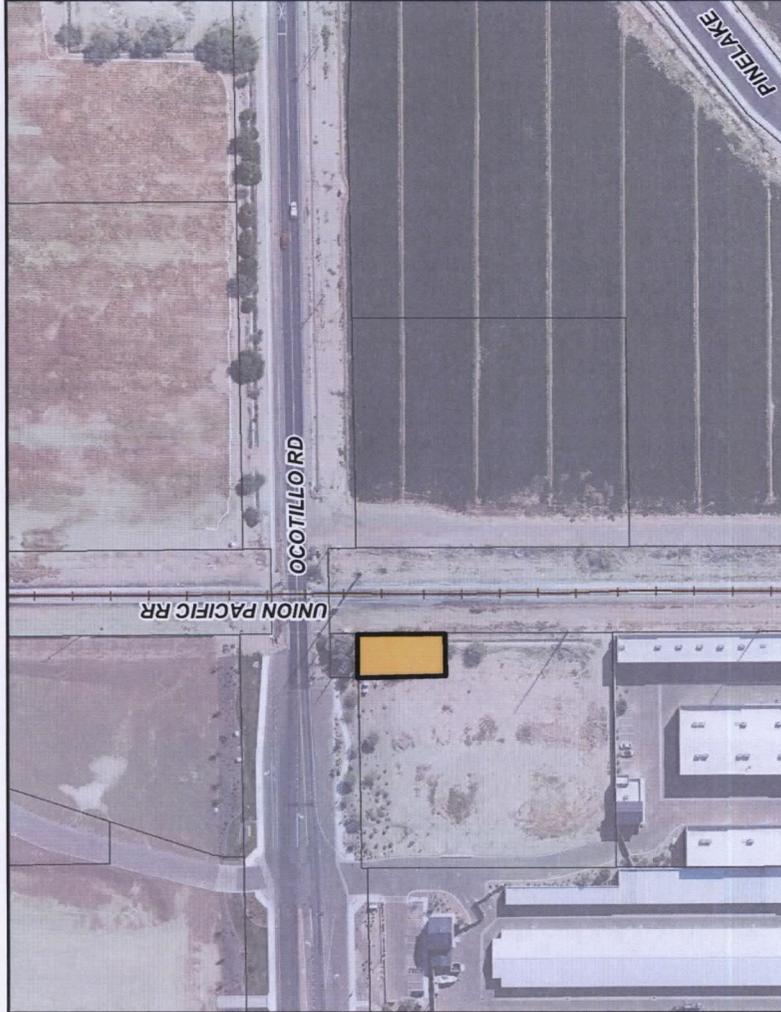
**EXHIBIT B
FEE SCHEDULE**

Task	Total Hours	Cost
Task 1 - Project Administration	79	\$ 12,176.00
1.1 - Project Management	18	\$ 2,760.00
1.2 - Project Meetings/Coordination	48	\$ 7,220.00
1.3 - Provide Quality Assurance	13	\$ 2,196.00
Task 2.0 - Preliminary Design	50	\$ 7,320.00
2.1 Driveway	20	\$ 2,860.00
2.2 Drainage	11	\$ 1,680.00
2.3 Pump-to-Waste	19	\$ 2,780.00
Task 3.0 - Engineering Design	192	\$ 23,400.00
3.1 Mechanical Design	96	\$ 10,200.00
3.2 Civil Design	40	\$ 6,000.00
3.3 - Electrical Design	0	\$ -
3.4 - I&C	0	\$ -
3.5 - Structural Design	48	\$ 6,000.00
3.6 Cost Estimating	8	\$ 1,200.00
3.7 Permitting	0	\$ -
Total Hours	321	\$ 42,896.00



RAILROAD AND IRIS WELL EQUIPPING DESIGN PROJECT NO. WA1302.201

MEMO NO. CP15-101



 WELL SITE