



**PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CA09-107**

1. Agenda Item Number:
44
2. Council Meeting Date:
October 30, 2008

TO: MAYOR & COUNCIL
THROUGH: CITY MANAGER

3. Date Prepared: October 7, 2008
4. Requesting Department: Municipal Utilities

5. SUBJECT: Award a project agreement to Brown and Caldwell for Ocotillo Water Reclamation Facility O&M Electrical / Mechanical Construction Management Services, Project No. WW0906-451, in an amount not to exceed \$229,898.

6. RECOMMENDATION: Staff recommends that Council award a project agreement to Brown and Caldwell for Ocotillo Water Reclamation Facility O&M Electrical / Mechanical Construction Management Services, Project No. WW0906-451, in an amount not to exceed \$229,898.

7. BACKGROUND/DISCUSSION: The Ocotillo Water Reclamation Facility (OWRF) is owned by the City of Chandler but privately operated by Severn Trent Environmental Services. The OWRF was constructed in 1985, with much of the equipment in the facility nearing the end of its projected life and potentially in need of rehabilitation or replacement. In September 2005, Brown and Caldwell performed an asset management evaluation to identify the condition of the equipment and infrastructure and to formulate a capital maintenance and replacement plan. The objective of this evaluation was to identify necessary activities to maintain the reliability and sustainability of the reclamation facility assets in order to continuously achieve the expected treatment performance.

This project agreement provides construction management and engineering services related to the construction, start-up, and post construction warranty phases for replacing an existing blower with new blower assemblies; upgrading related blower assembly components; installing additional diffusers in Basins 1A and 2A; replacing the existing membrane discs in Basins 1A and 2A; removing and replacing the existing Ocotillo Plant switchgear; upgrade controls on two backup generators; electrical conduit installation; temporary installation of rental generators during construction; and acceptance testing of new electrical systems

Construction of this project is slated to begin in winter 2008. Council awarded a construction contract to SDB, Inc. on September 11, 2008.

8. EVALUATION: On September 11, 2008, Council approved a one-year extension to Brown and Caldwell's annual contract for permitting, study, and design for water and wastewater facilities, EN0717-101, 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: \$229,898
Savings: N/A
Long Term Costs: N/A
Fund Source:

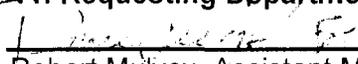
| <u>Acct. No.:</u> | <u>Fund Name:</u> | <u>Program Name:</u> | <u>CIP Funded:</u> | <u>Amount:</u> |
|---------------------------|----------------------|--|--------------------|----------------|
| 611.3910.0000.6814.8WW621 | Wastewater Bond Fund | Ocotillo Water Reclamation Facility Rehabilitation | FY 07/08 | \$229,898 |

10. PROPOSED MOTION: Move that Council award a project agreement to Brown and Caldwell for Ocotillo Water Reclamation Facility O&M Electrical / Mechanical Construction Management Services, Project No. WW0906-451, in an amount not to exceed \$229,898, and authorize the Mayor to sign the contract documents.

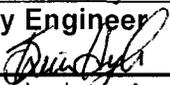
ATTACHMENTS: Location Map, Project Agreement

APPROVALS

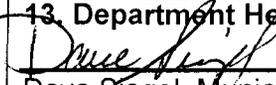
11. Requesting Department


Robert Mulvey, Assistant Municipal Utilities Director

12. City Engineer


Sheina Hughes, Assistant Public Works
Director/City Engineer

13. Department Head

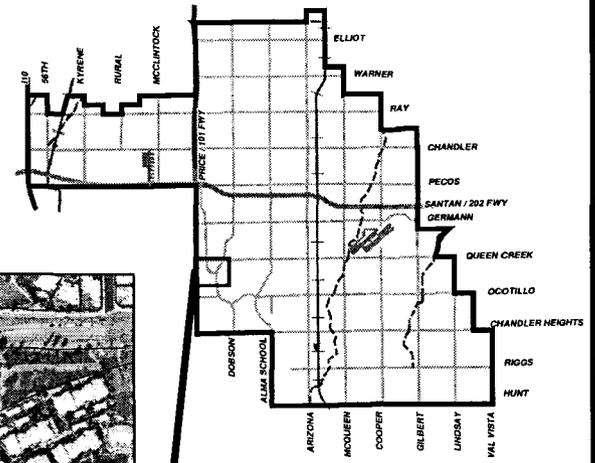
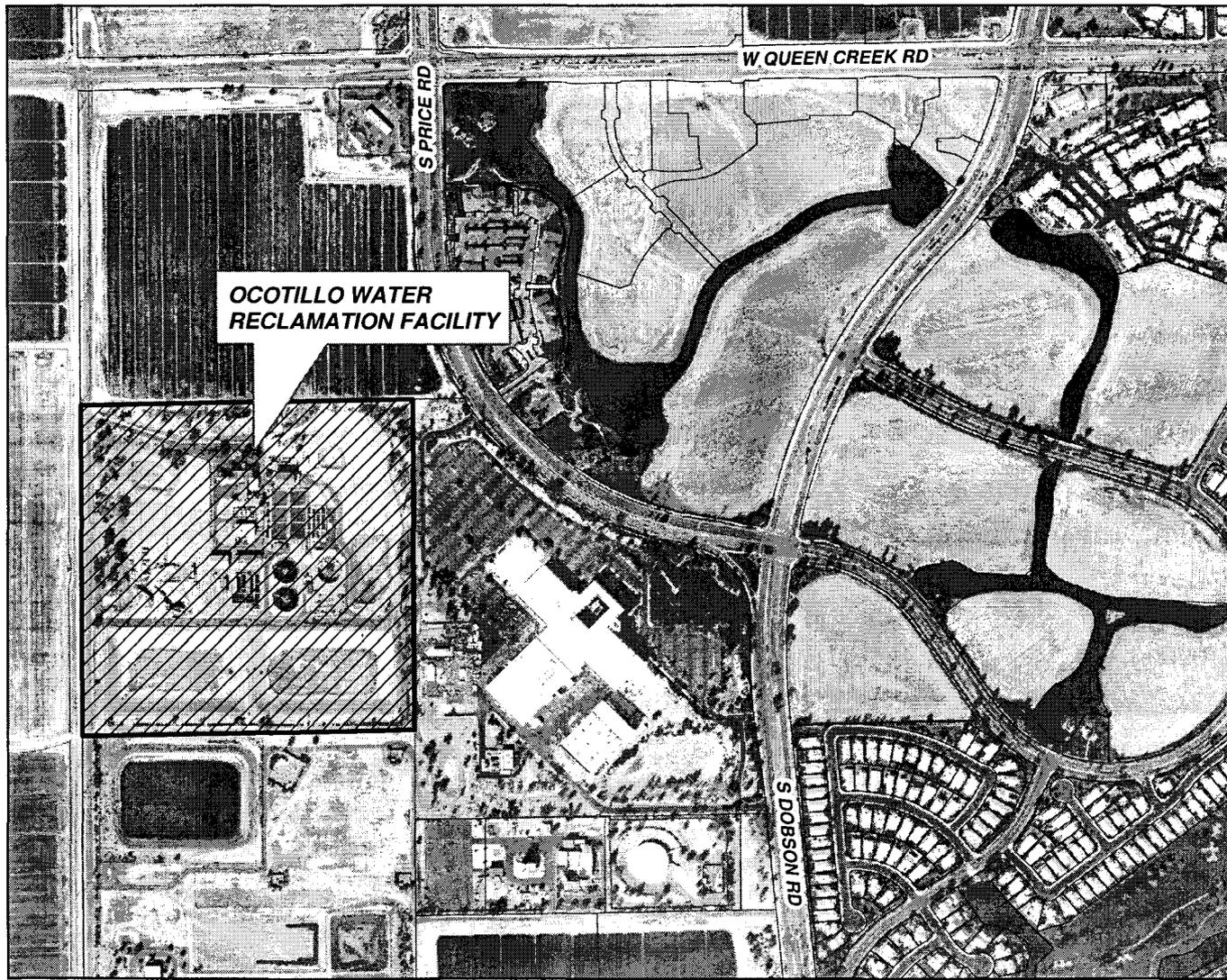

Dave Siegel, Municipal Utilities Director

14. City Manager


W. Mark Peritz



OCOTILLO WATER RECLAMATION FACILITY O & M ELECTRICAL/MECHANICAL CONSTRUCTION MANAGEMENT SERVICES PROJECT NO. WW0906-451



MEMO NO. CA09-107

 PROJECT AREA



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

AGREEMENT NO: WW0906-451

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 Ocotillo Water Reclamation Facility Operation and Maintenance Electrical/Mechanical Construction Management Services, Project Number WW0906-451. The scope of work consists of construction management of operation and maintenance services at the Ocotillo Water Reclamation Facility, 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 Twenty Nine Thousand Eight Hundred Ninety Eight Dollars (\$229,898) 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 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. 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.

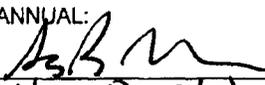
IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first written above.

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

CITY OF CHANDLER

FOR THE ANNUAL:

MAYOR DATE:

By: 
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: 

City Clerk

EXHIBIT A SCOPE OF WORK

The scope of engineering and construction services described in Exhibit A are associated with findings of the Chandler Ocotillo Water Reclamation Facility (OWRF) Asset Management project. From the asset management project the following facility upgrades were recommended and have been approved by the City of Chandler (City):

1. Replacement of the existing electrical service entrance along with upgrades to the existing blower building electrical service
2. Replacement of one of the existing Turblex-Cordt blowers
3. Replacement of the existing diffuser membranes in aeration basins 1A and 2A
4. Increasing the number of diffusers in the existing aeration grids for 1A and 2A from 540 to 1,075

Annual Consultant has already produced design drawings as well as equipment specifications for the electrical service main upgrades. However for the aeration system grid upgrade and blower replacement, the existing contract scope only called for an evaluation and technical report. The City has requested construction phase services as well as providing plans and specifications for the recommended aeration system upgrades. The City has also requested the Annual Consultant provide inspection services for the construction activities involved in the facility upgrades. Annual Consultant's estimated costs are based on a four-month schedule.

Task 1.0 – Project Management

Annual Consultant shall observe construction activities and facilitate communications with the City, Severn Trent and Contractor. Annual Consultant shall maintain an advanced schedule of activities involving City staff and identify project issues requiring the attention of the City. The Project Manager will provide the City with an invoice monthly and a status report on a biweekly basis. The project manager will also provide the City of Chandler with a final report on the acceptance of the general contractor's installation of the mentioned upgrades to the facility.

Task 1 Deliverables:

- Biweekly progress report
- Final Report

Task 2.0 – Aeration Upgrades

Annual Consultant shall produce the design drawings and specifications for the upgrade activities pertaining to the aeration system. The existing diffuser membranes will be replaced in basins 1A and 2A and the number of diffusers will be increased from 540 to 1,075. One of the existing Turblex-Cordt aeration blowers will be replaced "in kind" with a newer model Turblex unit. Annual Consultant shall provide inspection services to validate the proper installation of the new diffusers as well as the proper replacement of the old diffuser membranes. Annual Consultant shall also validate commissioning testing and work directly with the City, the Contractor, and Severn Trent to ensure that all parties are aware of the methodology of plant operations during the construction activities. The following items are the subtasks associated with the aeration upgrades:

- 2.1 Preparation of design drawings – Annual Consultant shall provide design drawings for the installation, general electrical, and EI&C regarding the new blower. Annual Consultant shall correspond with manufacturers to arrange a site visit with an Annual Consultant's engineer to ensure that the manufacturer and Annual Consultant agree on design and specifications. The cost estimate is based on 10 drawing sheets.
- 2.2 Develop Specifications - Annual Consultant shall provide project specifications for the equipment required to replace existing diffuser membranes, install new diffusers, and replace one of the Turblex-Cordt blowers.

- 2.3 Construction Inspection - Annual Consultant shall visually observe and record findings during the installation of items discussed in this task. Annual Consultant shall verify that the installation of the equipment meets the required specifications. Annual Consultant shall budget an average time of one inspector for 4 hours, twice per week. Annual Consultant shall also witness functionality/commissioning testing by the contractor and record the results.
- 2.4 Request for Information (RFI) Responses - Annual Consultant shall respond to RFI's within three-days (on average) and maintain an RFI log.
- 2.5 Submittal Review - Annual Consultant shall provide a list of the required submittals to the Owner and Contractor at the start of the project. Annual Consultant shall review and comment on the project schedule submitted by the Contractor. Annual Consultant will provide submittal review comments which will include a limit of one resubmittal per submittal. Additional reviews will be at the Contractor's expense and responses will be within two weeks of receipt of the submittal.
- 2.6 Start-Up Services - During the initial start-up of the upgraded components, Annual Consultant shall provide support to commission the new equipment and place previously offline process units back into service. The start-up plan, submitted by the Contractor, will be reviewed by the Annual Consultant and will be discussed with the City, Contractor and Severn Trent to get consensus on a final plan.

Task 2 Deliverables:

- Monthly progress meeting minutes
- Submittal review comments
- Weekly inspection reports
- Schedule review comments
- Start-up related meeting comments
- 1 CD in CADD format
- 2 sets of drawings sealed by Annual Consultant

Task 3.0 – Electrical Upgrades

Annual Consultant has provided construction plans and specifications for the upgrade of the main electrical distribution system at the OWRF. The City has retained a general contractor who in turn has subcontracted Corbin Electric as the electrical contractor. The City of Chandler has requested the Annual Consultant to provide additional construction services for the electrical upgrades. The services requested include routine inspection of equipment installation, testing and start-up. Other services include response to RFIs, submittal review and working with the City, Contractor and Severn Trent on creation and coordination of Maintenance of Plant Operations (MOPO).

- 3.1 Construction Inspection – Annual Consultant shall provide onsite inspection of construction activities 1 day per week and attend onsite construction meetings with Contractor, except as specifically noted herein. A Weekly Field Inspection Report will be submitted to the Owner. During the switchgear removal and replacement, Annual Consultant shall have an electrical inspector and electrical engineer onsite for an average of four hours per day.
- 3.2 Request for Information (RFI) Responses – Annual Consultant shall respond to RFI's within three-days (on average) and maintain an RFI log.
- 3.3 Submittal Review – Annual Consultant shall provide a list of the required submittals to the Owner and Contractor at the start of the project. Annual Consultant shall review and comment on the project schedule submitted by the Contractor. Annual Consultant shall provide submittal review comments which will include a limit of one resubmittal per submittal. Additional reviews will be at the Contractor's expense and responses will be within two weeks of receipt of the submittal.
- 3.4 Start-Up Services – Annual Consultant shall attend (a total of) four MOPO and start-up/commissioning workshops related to the electrical construction activities. Annual Consultant shall witness functionality and operational testing of all equipment and processes based on advanced notice. The Contractor's

punch list will be reviewed by the City, Annual Consultant and Contractor to verify completion. Record drawings will be provided in CADD format, and will be developed from redlines maintained by the Contractor.

Task 3 Deliverables:

- Submittal review comments
- Weekly inspection reports
- Schedule review comments
- Start-up related meeting comments
- 1 CD in CADD format
- 2 sets of drawings sealed by Annual Consultant

**EXHIBIT B
FEE SCHEDULE**

| Task | Principal in Charge \$201 | Project Manager \$154 | Supervising Engineer \$180 | Senior Engineer \$154 | Senior Drafter \$98 | Inspector III \$137 | Sr. Project Coordinator \$116 | Total |
|-------------------------------------|--|--------------------------------------|---|--------------------------------------|------------------------------------|------------------------------------|--|-------------------|
| Task 1.0 Project Management | | | | | | | | |
| 1.1 Progress Meetings/Reports | 8 | 20 | | | | | 10 | \$ 5,848 |
| 1.2 Schedule Review | | 10 | | | | 8 | 10 | \$ 3,796 |
| 1.3 Project Coordination | 0 | 80 | 12 | 20 | | 8 | 22 | \$ 21,208 |
| 1.4 Final Report | 8 | 8 | | | | | 8 | \$ 3,768 |
| Task 2.0 Aeration Upgrades | | | | | | | | |
| 2.1 Design Drawings | 12 | | 94 | 144 | 100 | | | \$ 51,308 |
| 2.2 Develop Specifications | 8 | | 24 | 32 | | | | \$ 10,856 |
| 2.3 Construction Inspection | 8 | | 16 | 40 | | 160 | | \$ 32,568 |
| 2.4 RFI Responses | 4 | | 16 | 16 | | | | \$ 6,148 |
| 2.5 Submittal Review | 8 | | 32 | 40 | | | | \$ 13,528 |
| 2.6 Start-Up Services | | | 16 | 20 | | 20 | | \$ 8,700 |
| Task 3.0 Electrical Upgrades | | | | | | | | |
| 3.1 Construction Inspection | 8 | 2 | 12 | 40 | | 80 | 4 | \$ 21,660 |
| 3.2 RFI Responses | 8 | 2 | 20 | 20 | | | 4 | \$ 9,060 |
| 3.3 Submittal Review | 8 | 2 | 12 | 8 | | 40 | 4 | \$ 11,252 |
| 3.4 Start-Up Services | 2 | 2 | 4 | 30 | | 60 | 8 | \$ 15,198 |
| Project Expense | | | | | | | | \$ 5,000 |
| Allowance | 0 | 65 | | | | | | \$ 10,000 |
| Total | 82 | 191 | 258 | 410 | 100 | 376 | 70 | \$ 229,898 |

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.

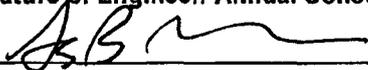
By completing and signing this form and attached Employee Verification Worksheet the Engineer/Annual Consultant shall attest that it and all subconsultants performing work under the cited State contract meet all conditions contained herein.

| | | |
|--|-----------|-----------|
| Project Number: WW0906-451 | | |
| Project Name: Ocotillo Water Reclamation Facility Operation and Maintenance Electrical/Mechanical 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: Gary R. Newman

Title: Vice President

Date (month/day/year): 10/20/08