

**Public Works
CITY OF AUSTIN**

AGENDA
DATE: 4/20/2006

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**RECOMMENDATION FOR
COUNCIL ACTION**

Subject: Authorize negotiation and execution of an amendment to the professional services agreement with TURNER, COLLIE AND BRADEN, INC., Austin, TX, for engineering services for the Davis Water Treatment Plant Process Improvement and Equipment Rehabilitation/Replacement Project in the amount of \$2,922,805 for a total contract amount not to exceed \$3,739,816.

Amount and Source of Funding: Funding in the amount of \$2,922,805 is included in the Fiscal Year 2005-2006 Capital Budget of the Austin Water Utility.

Fiscal Note: A fiscal note is attached.

Requesting Department:

For More Information:

Prior Council Action: A Professional Services Agreement with Turner, Collie and Braden, Inc. for the Davis Water Treatment Plant Process Improvement and Equipment Rehabilitation/Replacement Project in an amount not to exceed \$800,000 was approved on February 10, 2005.

Boards and Commission Action: Recommended by the Water and Wastewater Commission.

MBE/WBE: 9.87 % MBE and 25.75 % WBE subcontractor participation to date.

The Davis Water Treatment Plant (WTP) has a design treatment capacity of 120 million gallons per day (MGD). The plant is a conventional lime softening design, with rapid mix basins, flocculation basins, sedimentation basins, gravity filters, clearwell storage, and raw water and finished-water pumping stations. Powdered activated carbon (PAC) is fed for taste and odor control and settled water pH is adjusted with carbon dioxide. This plant was constructed in 1954 and expanded in 1961 and 1973, with additional improvements in 1986, 1993, 1997, 2000, 2002 and 2003.

Due to the age of the Davis WTP, a series of projects are required to retrofit and upgrade the Plant to replace or rehabilitate failing equipment and provide process improvements to ensure continued firm treatment capacity and regulatory compliance. These types of facility retrofit projects require detailed preliminary engineering that evaluates existing conditions, considers available options, develops detailed cost estimates and recommends the most feasible and cost-effective improvements for construction. Especially for these type projects, the final design scope and the design and construction costs cannot be accurately determined until the preliminary engineering is complete.

The original Request For Qualifications (RFQ) for this project was issued requesting preliminary, design, construction and warranty phase services to result in a complete project. Turner, Collie and Braden, Inc. was selected to provide all engineering services to evaluate current processes and the condition of existing equipment, and recommend improvements and equipment replacements and / or rehabilitations for six main areas of the Plant. These areas include 1) raw water valves replacements / rehabilitations and modifications to the raw water header to improve reliability and flexibility, 2) rapid mix and distribution channel improvements to allow treatment flexibility and improved mixing, 3) sludge pumping modifications and sludge system improvements including improved flow and density / flow monitoring, 4) modifications to the Chemical Building area including to chemical feed systems and corrosion control, 5) improved recarbonation efficiency and 6) various process control modifications and numerous equipment replacements or rehabilitation items. The Preliminary Engineering Report specifically recommends necessary

improvements and modifications consistent with these six Plant areas.

The original Council authorization for this work provided for funding of services related to preliminary engineering and design services in the amount of \$800,000, with an anticipation to return to Council for additional funding to the selected firm for construction phase services in an estimated amount of \$400,000. However, the consultant has prepared a Preliminary Engineering Report (PER), which has been reviewed and approved by the Austin Water Utility, consistent with the scope of the originally issued RFQ that confirms significant process improvements and equipment replacements / rehabilitations required for the above-listed six identified areas. All of the recommended improvements are critical to maintain the Plant's reliability. The Austin Water Utility has prioritized the recommended improvements, replacements and rehabilitations into two categories: regulatory-driven and operationally most critical and 2) other critical improvements. In order to expedite completion of this work, Turner, Collie and Braden, Inc. has been authorized to proceed with design for the regulatory-driven and most critical components within the previously Council-authorized \$800,000 to be included in an initial construction contract. The construction and warranty phase engineering services requested herein for this initial construction contract totals approximately \$550,000.

However, because of the critical need to complete all improvements recommended in the approved PER, this request also seeks Council approval for additional design, construction and warranty phase services to complete a second construction contract through this authorization. Once approved, this request will allow for the negotiation and execution of a supplemental amendment to the Professional Services Agreement for the construction and warranty phase engineering services for an initial construction contract, and the design, construction and warranty phase engineering services to complete a second construction contract to result in a completed project for the improvements recommended in the PER. All services requested herein are within the scope of the original RFQ issued for the project.

CIP FISCAL NOTE

DATE OF COUNCIL CONSIDERATION:
WHERE ON AGENDA:
DEPARTMENT:

04/20/06
Resolution
Austin Water Utility

DESCRIPTION:

Authorize negotiation and execution of an amendment to the professional services agreement with TURNER, COLLIE AND BRADEN, INC., Austin, TX, for engineering services for the Davis Water Treatment Plant Process Improvement and Equipment Rehabilitation/Replacement Project in the amount of \$2,922,805 for a total contract amount not to exceed \$3,739,816.

FINANCIAL INFORMATION:

Parent Project Name:	Water Unfunded Future
Project Authorization:	2005-06 Approved Capital Budget
Funding Source:	Commercial Paper
Number:	3980 227 1019

Current Appropriation	\$ 352,445,739.00
Unencumbered Balance	132,560,747.58 *
Amount of This Action	<u>(2,922,805.00)</u>
Remaining Balance	<u>\$ 129,637,942.58</u>
Current Available Balance	\$ 136,654,348.79
Less Outstanding Commitments	<u>(4,093,599.21)</u>
Estimated Unencumbered Balance	<u>\$ 132,560,747.58 *</u>

Utility Finance:



David Anders, Utilities Finance Manager

Date:

3/28/06

REF. # 3960 227 7143

No. 040506-E

**RECOMMEND AUTHORIZATION FOR NEGOTIATION AND EXECUTION OF AN
AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH TURNER,
COLLIE AND BRADEN, INC., (NON 60.12%), AUSTIN, TEXAS FOR ENGINEERING
SERVICES FOR THE DAVIS WATER TREATMENT PLANT PROCESS
IMPROVEMENT AND EQUIPMENT REHABILITATION/REPLACEMENT PROJECT
IN THE AMOUNT OF \$2,922,805.00 FOR A TOTAL AMOUNT NOT TO EXCEED
\$3,739,816.00.**

**April 5, 2006
REGULAR MEETING
VOTE: 6-0-2-1**

Motion made by: Warner
Commissioners Consenting: Coleman, Lee, Gonzalez, Chan, Scott-Ryan
Commissioners Dissenting:
Commissioners Abstaining: Friese, and Raun
Commissioners Absent: Pool

The Water and Wastewater Commission recommends authorization for negotiation and execution of an amendment to the professional services agreement with Turner, Collie and Braden, Inc., (NON 60.12%), Austin, Texas for engineering services for the Davis Water Treatment Plant Process Improvement and Equipment Rehabilitation/Replacement Project in the amount of \$2,922,805 for a total contract amount not to exceed \$3,739,816.00.



Michael Warner, Chairperson
Water and Wastewater Commission



Date

AUTHORIZATION HISTORY

MOUNT	DATE	DESCRIPTION
\$800,000.00	2/10/05 (Council)	-- Preliminary Engineering and Design Phase Services
\$17,011.00	2/13/06 (Administrative Authority)	-- Amendment for Design Phase Services
\$2,922,805.00	Proposed (Council)	-- Amendment for Additional Design and Bid Document Preparation, Bid, and Construction Phase Services
\$3,739,816.00		Total Contract Authorization

CONTRACT HISTORY

MOUNT	DATE	DESCRIPTION
\$327,430.00	5/31/05	-- Original Professional Services Agreement for Preliminary Design Service
\$489,581.00	2/13/06	-- SA #1 -- Amendment for Design Services
\$2,922,805.00	Proposed	-- SA #2 -- Amendment for Additional Design and Bid Document Preparation, Bid, and Construction Phase Services
\$3,739,816.00		Total Contract Expenditures

Participation goals stated in the original approved compliance plan for the agreement were 1.7 % African American (MB); 9.5 % Hispanic (MH); 0 % Native American (MN); 4.7 % Asian American (MA); and 17.2 % WBE. Participation for this amendment:

NON M/WBE TOTAL - PRIME	\$1,757,273.00	60.12%
Turner, Collie and Braden, Inc., Austin, Texas	\$1,757,273.00	60.12%
MBE TOTAL - SUBCONSULTANTS	\$290,445.00	9.94%
African American Subtotal	\$98,400.00	3.37%
Group Solutions RJW, Austin, TX (On site admin. assistance)	\$98,400.00	3.37%
Hispanic Subtotal	\$147,310.00	5.04%
Jose I. Guerra, Inc., Austin, TX (Structural engineering)	\$130,810.00	4.48%
Macias & Associates, Inc., Austin, TX (Surveying)	\$16,500.00	0.56%
Asian American Subtotal	\$44,735.00	1.53%
Incotech Eng., Inc., Austin, TX (Mechanical engineering)	\$44,735.00	1.53%
WBE TOTAL - SUBCONTRACTORS	\$609,382.00	20.85%
Marutunian Engineering, Inc., Austin, TX (Electrical engineering)	\$587,382.00	20.10%
Insan K. Booth, Consulting Eng., Austin, TX (Civil engineering)	\$22,000.00	0.75%
NON M/WBE TOTAL - SUBCONTRACTORS	\$265,705.00	9.09%
Carollo Engineers, P.C., Austin, TX (Civil engineering)	\$223,705.00	7.65%
CO2 Plant Maintenance, Dripping Springs, TX (Mechanical engineering)	\$42,000.00	1.44%

Overall participation for the entire project, including this amendment:

PRIME:

59.48% Non M/WBE.

SUBCONSULTANTS:

63% MB; 5.05% MH; 2.24% MA; 21.92% WBE; and 8.68% Non M/WBE.

TOTAL:

63% MB; 5.05% MH; 2.24% MA; 21.92% WBE; and 68.16% Non M/WBE.