

ACTION FORM BRYAN CITY COUNCIL

DATE OF COUNCIL MEETING: May 27, 2014		DATE SUBMITTED: May 9, 2014	
DEPARTMENT OF ORIGIN: Water Services		SUBMITTED BY: Jayson Barfknecht	
MEETING TYPE:	CLASSIFICATION:	ORDINANCE:	STRATEGIC INITIATIVE:
<input type="checkbox"/> BCD	<input type="checkbox"/> PUBLIC HEARING	<input type="checkbox"/> 1ST READING	<input type="checkbox"/> PUBLIC SAFETY
<input type="checkbox"/> SPECIAL	<input type="checkbox"/> CONSENT	<input type="checkbox"/> 2ND READING	<input checked="" type="checkbox"/> SERVICE
<input checked="" type="checkbox"/> REGULAR	<input checked="" type="checkbox"/> STATUTORY		<input type="checkbox"/> ECONOMIC DEVELOP.
<input type="checkbox"/> WORKSHOP	<input type="checkbox"/> REGULAR		<input checked="" type="checkbox"/> INFRASTRUCTURE
			<input checked="" type="checkbox"/> QUALITY OF LIFE
AGENDA ITEM DESCRIPTION: Consider approving a construction contract in the not-to-exceed amount of \$1,852,100.00 to Bryan Construction Company to expand the City of Bryan's treatment capacity of water with the addition of a new cooling tower.			
SUMMARY STATEMENT: With a natural temperature of 116° Fahrenheit, our drinking water must be passed through cooling towers to adjust the temperature to a more palatable level before consumption. Water flows through the towers continuously throughout the year. However, the fans are typically only energized May through October. With the fans on, the towers have the ability to lower the water temperature to 88° Fahrenheit (with a wet bulb temperature of 79° Fahrenheit).			
<p>On November 27, 2012, Council approved a Professional Services Contract with CDM Smith, Inc., for \$208,078.00 to provide the City of Bryan with engineering services for design and construction phase services for a new three-cell cooling tower located at the Well Field Pump Station. This project is necessary because the City of Bryan currently has designed capacity to cool 16,100 gallons of water per minute (gpm) or 23,184,000 gallons per day (gpd). With historical peak summer usage in excess of 25,000,000 gpd, peak hourly usage in excess of 38,000,000 gpd, and projects with Wickson and Wellborn that further increase water demand, existing designed cooling capacity is inadequate. To offset our shortfall in existing cooling capacity, the addition of a new three-cell cooling tower is necessary. The new cooling tower will be designed to treat 9,000 gpm. When combined with our existing designed cooling capacity of 16,100 gpm, this provides the City of Bryan with the design capacity to cool 25,100 gpm or 36,144,000 gpd.</p> <p>Since being awarded the Professional Services contract, CDM Smith, Inc. has designed the cooling tower, obtained Texas Commission on Environmental Quality (TCEQ) authorization to construct the tower based on stated design, and put the project out for bid. On May 7, 2014, at 2:00 PM, four sealed bids were opened at the City of Bryan's Purchasing Department. The base bids for each vendor are as follows: Kilgore Industries - \$3,435,000.00; Garrett Mechanical - \$2,049,479.50; REC Industries - \$2,149,000.00; Bryan Construction Company - \$1,852,100.00. In anticipation of the project cost, Water Services had \$1,500,000.00 allocated for this project. The difference will be drawn from the water services fund balance.</p> <p>Although the cost is significant, it is important the City of Bryan has the designed cooling capacity to meet current and future water demands. The addition of the new three-cell cooling tower provides excess daily capacity and offers operational flexibility in the event of equipment failure associated with the cooling system. While 36,144,000 gpd does not match our current peak hourly demand, it does bridge the gap between production and demand, while allowing storage to offset the balance.</p>			
Bryan Construction Company submitted their Bidder's Qualification Information along with their bid. Based on the			

information provided and our previous knowledge of the work performed by Bryan Construction Company, it has been determined that Bryan Construction Company is qualified to build the new three-cell cooling tower. Staff recommends approval of this construction contract with Bryan Construction Company in an amount not-to-exceed \$1,852,100.00.

STAFF ANALYSIS AND RECOMMENDATION: Approving this contract will allow the City of Bryan to proceed with construction of a new three-cell cooling tower to help meet current and future water demands with respect to designed cooling capacity. While the project is necessary, it does constitute the expenditure of public funds. The expenditure of these funds is essential for supplying palatable water during peak demand periods. With peak historical summer usage in excess of 25,000,000 gpd, peak hourly usage in excess of 38,000,000 gpd, and collaborations with Wickson and Wellborn that further increase water demand, existing designed cooling capacity is inadequate. To offset our shortfall in designed cooling capacity, the addition of a new three-cell cooling tower is essential. The new 9,000 gpm unit, when combined with our existing designed cooling capacity of 16,100 gpm, provides the City of Bryan with the design capacity to cool 25,100 gpm or 36,144,000 gpd. Without the new three-cell cooling tower in place, existing towers will be overloaded or bypassed during peak production periods, which will result in water temperatures over 100° Fahrenheit entering the distribution system. Water that hot can be detrimental to our younger and older residents, as well as to vegetation. Therefore, staff recommends awarding this construction contract to Bryan Construction Company.

OPTIONS (In Suggested Order of Staff Preference):

1. Award the contract.
2. Do not award the contract to Bryan Construction; award to another vendor.
3. Do not approve the construction of the new facility and continue operating the existing units.

ATTACHMENTS: Bid Tab (pdf)

FUNDING SOURCE: Water Fund

APPROVALS: Jayson E. Barfknecht 5/11/14, sj 5/14/14

APPROVED FOR SUBMITTAL: CITY MANAGER Kean Register, 12May2014

APPROVED FOR SUBMITTAL: CITY ATTORNEY Janis K. Hampton, 05/19/2014