



CITY OF HOUSTON - CITY COUNCIL

Meeting Date:
District E
Item Creation Date:

20EPR06 - Early Work Package 2A - West Filters and Transfer Pump Station

Agenda Item#:

Background:

Subject: Sixth Amendment to the Design-Build Services Contract between the City and Houston Waterworks Team, a joint venture between CH2M Hill Engineers, Inc. and CDM Contractors Inc. for the Northeast Water Purification Plant (NEWPP) Expansion Project, Early Work Package 2A Construction (EWP2A); WBS No. S-000065-0005-3 and S-000065-0005-4.

Recommendation: Adopt an ordinance approving the Sixth Amendment to Ordinance No. 2015-1260, dated December 9, 2015, for the Design-Build Services Contract between the City and Houston Waterworks Team, a joint venture between CH2M Hill Engineers, Inc. and CDM Contractors, Inc. for the Northeast Water Purification Plant (NEWPP) Expansion Project and appropriate funds.

Project Notice/Justification: This project is required to meet regulatory mandates of the Texas Commission on Environmental Quality and the Harris-Galveston Subsidence District Groundwater Reduction Plan.

Under the second supplements, approved on February 18, 2015, under Ordinances No. 2015-137, 2015-138, 2015-139, and 2015-140, between the City and Authorities, the City will be responsible for approximately 16% of the total cost for the NEWPP expansion, and the Authorities will be responsible for the remainder. It is intended that the NEWPP expansion be completed in two phases. The first phase of 80 million gallons of water per day will be substantially complete no later than August 31, 2021 and the second phase of 240 million gallons of water per day to be substantially complete no later than June 30, 2024 for a total of 320 million gallons of water per day. This project was described and briefed to the Transportation, Technology, and Infrastructure (TTI) Committee on December 11, 2017.

Description/Scope: The planning and design phase determined that some of the construction work would be completed as Early Work Packages to meet project milestones. EWP2A consists of the construction of the West Filter Module 1 structure, the 84-inch combined filter effluent piping from the filter module structure to the Transfer Pump Station 1 (TPS1), and the TPS1 structure.

Location: This project is located at 12121 North Sam Houston Parkway East, in Humble, Key Map Grids 376 Z & 377 W.

Project History and Scope: City Council approved the Design-Build Services Contract between the City and Houston Waterworks Team (HWT) on December 9, 2015 under Ordinance No. 2015-1260 appropriating \$3,288,000.00 to the expansion project.

Amendment No. 1 to the Design-Build Agreement was approved on November 16, 2016 under Ordinance No. 2016-875 appropriating additional funds in the amount of \$14,950,000.00 to the expansion project.

Amendment No. 2 to the Design-Build Agreement was approved on March 29, 2017 under Ordinance No. 2017-231 appropriating additional funds in the amount of \$3,000,000.00 to the expansion project.

Amendment No. 3 to the Design-Build Agreement was approved on May 24, 2017 under Ordinance No. 2017-378 appropriating additional funds in the amount of \$66,300,000.00 to the expansion project.

Amendment No. 4 to the Design-Build Agreement was approved on December 19, 2017 under the Ordinance No. 2017-1017 appropriating additional funds in the amount of \$37,339,594.00 to the expansion project.

Amendment No. 6 to the Design-Build Agreement was initiated in July 2017 when the HWT requested interested construction companies to complete a prequalification package for Early Work Package 2A (EWP2A). HWT reviewed those qualifications and sent a Request for Proposal to three major subcontractors including Alberici Constructors, Kiewit Water Facilities South, and McCarthy Building Companies. Competitive Sealed Proposal method was used to procure the contractor for EWP2A. HWT evaluated each proposal independently. Each contractor was then interviewed by HWT with the City and an Authority representative as observers. Following the interviews, HWT and the City convened for a final evaluation and scoring of the proposals on a consensus basis. McCarthy Building Companies, Inc. (McCarthy) was chosen as the major subcontractor to perform the work for EWP2A.

Project Cost: The total Guaranteed Maximum Price (GMP) of \$45,515,774.00 includes the direct construction cost of \$34,137,536.00 for EWP2, the indirect construction cost of \$9,671,361.00, and a management reserve of \$1,706,877.00. The major items for indirect construction costs include the cost of \$887,156.00 for the performance and payment bonds, the cost of \$861,304.00 for the engineering services during construction, and the cost of \$3,948,000.00 for the construction allowances for items currently under design.

The City of Houston's total contribution is \$5,052,646.32. The Water Authorities will contribute \$40,463,127.68.

Pay or Play Program: The proposed contract requires compliance with the City's 'Pay or Play' ordinance regarding health benefits for employees of City contractors. In this case, the consultant provides health benefits to eligible employees in compliance with City policy.

M/WBE Information:

a. **M/WBE-Construction:** The Capacity Study performed for EWP2 showed an 8% capacity for M/WBE participation for direct construction costs. Currently, the proposed amount of participation from the Design-Builder (Houston Waterworks Team) is 11.55%.

b. Included in the indirect costs is the construction allowance of \$3,948,000.00 for items that are in the design phase such as the expansion of Waterworks Way Boulevard, the purchase of additional lime treated soils, additional flowable concrete, additional rebar, and the purchase of Permeability Reducing Admixture Hydrostatic (PRAH). When the design is complete, the Project Director will authorize the use of these funds for construction. However, although the final amount for construction is not yet determined, it is anticipated that the construction and purchase of the allowance items will increase the M/WBE participation for direct construction costs.

Houston Waterworks Team has proposed the following plan for M/WBE participation for EWP2A Construction.

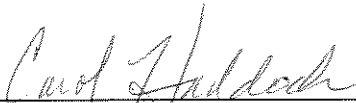
| <u>Firm</u> | <u>Scope of Work</u> | <u>Amount</u> | <u>% of Direct Construction Cost</u> |
|---------------------------------|-------------------------------------|----------------|--------------------------------------|
| C&B Waterworks, Inc | Rebar Construction Work | \$830,000.00 | 2.43% |
| Cohen Industrial Supply Co. | Pipe, Valve, and Plumbing Wholesale | \$308,000.00 | 0.90% |
| Rebar Reinforcement Placers LLC | Installation of Reinforced Steel | \$2,806,229.00 | 8.22% |
| | Total M/WBE Participation | \$3,944,229.00 | 11.55% |

c. Early Work Package 1 (EWP1) was approved on December 19, 2017 under Ordinance No. 2017-1017 with an M/WBE goal of 80.45% of the direct construction costs. Construction has recently commenced and M/WBE data is not available yet.

d. Early Work Package 4 (EWP4) is scheduled to be on Council Agenda on February 21, 2018 and has an M/WBE goal of 15% of the direct construction costs. Construction has not commenced and M/WBE data is not available yet.

e. **M/WBE-Design:** The status of the design for this project is 30% complete. The original contract amount previously appropriated to design this project totals \$85,134,000.00. The consultant has been paid \$23,835,693.60(28%) to date. Of this amount, \$7,829,584.77 (32.85%) has been paid to M/WBE sub-consultants to date. The design goal for this project is 24%. Currently, this project is exceeding the design goal.

Estimated Fiscal Operating Impact: No significant Fiscal Operating impact is anticipated because of this project.



Carol Ellinger Haddock, P.E.
Director
Houston Public Works

WBS No. S-000065-0005-3 and S-000065-0005-4

Prior Council Action:

Ordinance No. 2015-1260, December 9, 2015

Ordinance No. 2016-875, November 16, 2016

Ordinance No. 2017-231, March 29, 2017

Ordinance No. 2017-378, May 24, 2017

Ordinance No. 2017-1017, December 19, 2017

Amount of Funding:

The total cost is \$45,515,774.00

\$91,871.00 (S-000065-0005-3) from Fund 8434 – NEWPP Expansion – SWIFT into Fund 8506 – PWE NEWPP Construction Fund and appropriate from Fund 8506 – PWE-NEWPP Construction Fund.

\$4,960,775.32 (S-000065-0005-4) from Fund 8434 – NEWPP Expansion – SWIFT into Fund 8506 – PWE NEWPP Construction Fund and appropriate from Fund 8506 – PWE-NEWPP Construction Fund.

\$769,433.00 (S-000065-0005-3) from Fund 8505 – Water Authorities Capital Contrib-NEWPP Fund.

\$39,693,694.68 (S-000065-0005-4) from Fund 8505 – Water Authorities Capital Contrib-NEWPP.

Contact Information:

Rajinder Singh - 713-725-9759

ATTACHMENTS:

| Description | Type |
|------------------------------|-----------------------|
| Project Map | Backup Material |
| TTI | Backup Material |
| Form B | Backup Material |
| Form 1295 | Backup Material |
| Pay or Play | Backup Material |
| Design Build Contract Part 1 | Backup Material |
| Design Build Contract Part 2 | Backup Material |
| Prior Council Action 1 | Backup Material |
| Prior Council Action 2 | Backup Material |
| Prior Council Action 3 | Backup Material |
| Prior Council Action 4 | Backup Material |
| Prior Council Action 5 | Backup Material |
| Letters of Intent | Backup Material |
| Vendor Information | Backup Material |
| Form A | Financial Information |
| SAP Documents | Financial Information |
| Tax Form 1 | Financial Information |
| Tax Form 2 | Financial Information |
| Owner Affidavit 1 | Backup Material |
| Owner Affidavit 2 | Backup Material |