



CITY OF HOUSTON - CITY COUNCIL

Meeting Date: 12/18/2018

District E

Item Creation Date: 11/5/2018

HPW - 20EPR07 - Early Work Package 6

Agenda Item#: 52.

Summary:

ORDINANCE authorizing the transfer of \$55,955,588.60 from the NEWPP Expansion--Swift Fund into the HPW-NEWPP construction fund, appropriating \$55,955,588.60 from the HPW-NEWPP Construction Fund, and approving the expenditure of said sum from the HPW-NEWPP Construction Fund for services associated with the Northeast Water Purification Plant ("NEWPP") Expansion Project ("Project"); appropriating \$174,532,051.90 from the Water Authorities Capital Contrib-NEWPP Fund and approving the expenditure of said sum from the Water Authorities Capital Contrib-NEWPP Fund for the Northeast Water Purification Plant Expansion Project; approving and authorizing a seventh amendment to the design-build agreement between the City of Houston and **HOUSTON WATERWORKS TEAM**, a joint venture between CH2M Hill Engineers, Inc. and CDM Constructors Inc. (approved by Ordinance No. 2015-1260, as amended) for the Project; AMENDING Ordinance No. 2015-1260 to increase the maximum project amount; containing provisions relating to the subject; and declaring an emergency.

Background:

Subject: Seventh Amendment to the Design-Build Services Contract between the City and Houston Waterworks Team, a joint venture between CH2M Hill Engineers, Inc. and CDM Constructors Inc. for the Northeast Water Purification Plant (NEWPP) Expansion Project, Early Work Package 6 Construction (EWP6).

Recommendation: Adopt an ordinance approving the Seventh Amendment to the Design-Build Services Contract between the City and Houston Waterworks Team, a joint venture between CH2M Hill Engineers, Inc. and CDM Constructors, 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.

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 October 17, 2018.

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. EWP6 consists of the construction of the Intake Pump Station, the construction of the North Plant cast-in-place concrete structures, the allowance to procure essential equipment requiring twelve to eighteen months delivery time such as large diameter valves, pipes, pumps, motors, disinfection equipment, and the concrete batch plant.

Amendment No. 7 to the Design-Build Agreement was initiated in December 2017 when Houston Waterworks Team (HWT) requested qualified parties to submit a request for proposal for the Intake Pump Station (IPS) and the North Plant. Proposals for the IPS were submitted and received from Bamard Construction, McCarthy Building Companies, Inc., and Southland Holdings on February 21, 2018. Proposals for the North Plant were submitted and received from Balfour Beatty Infrastructure, Inc., Pepper-Lawson Waterworks LLC, and Sundt Construction on March 20, 2018. Competitive Sealed Proposal method was used for each portion of the EWP6 procurement. 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 the IPS, and Balfour Beatty Infrastructure, Inc. was chosen as the major subcontractor to perform the work for the North Plant.

Location: This project is located at 12630 Water Works Way, Humble, Texas 77396. Key Map Grids 377 U & 377W.

Project Cost: The total Guaranteed Maximum Price (GMP) of \$230,487,640.50 for EWP6 includes the direct construction cost of \$90,445,230.00, the allowance of \$96,650,600.00, the indirect construction cost of \$38,869,549.00, and a management reserve of \$4,522,261.50.

The major items for direct construction cost include the cost of \$69,986,646.00 for the Intake Pump Station (IPS) and the cost of \$20,458,584.00 for the North Plant Structures. The allowance cost of \$96,650,600.00 is for the procurement of items currently in design such as major equipment, large diameter piping materials, and the concrete batch plant.

The major items for indirect construction costs include the cost of \$11,000,000.00 for design services, the design-builder's fee of \$8,491,205.00, the cost of \$6,000,000.00 for design-builder contingency and risk, the cost of \$5,816,795.00 for general conditions, the cost of \$3,927,044.00 for the performance and payment bonds, the cost of \$1,867,326.00 for the quality control and material testing program, and the cost of \$1,285,179.00 for the engineering services during construction.

The City of Houston's total contribution is \$55,955,588.60. The Water Authorities will contribute \$174,532,051.90.

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.

MWSBE Information:

a. EWP6 Construction Intake Pump Station: The Market Study performed for the Intake Pump Station showed a 12% capacity for MWSBE participation for the direct construction cost of \$69,986,646.00.

McCarthy Building Companies, Inc., the subcontractor for the Intake Pump Station (IPS) to Houston Waterworks Team has proposed the following plan for MWSBE participation for the IPS Early Work Package 6 (EWP6) construction.

Firm	Scope of Work	Amount	% of Direct Construction Cost
Omni Pipe Solutions	Supply of steel pipe materials	\$2,978,848.00	4.26%
Competitive Choice, Inc.	Supply of electrical materials	\$2,108,768.00	3.01%
Empire Acero, LLC	Fabricated steel erection & installation	\$1,493,994.00	2.13%
Gutier LLC	Roofing contractor	\$902,778.00	1.29%
Rustbusters Industrial Painting, Inc.	Coating and painting services	\$855,110.00	1.22%
Locke Investments, LLC	Precast concrete products	\$568,891.00	0.81%
FABco LLC	Supply of reinforcing steel materials	\$250,516.00	0.36%
Pyramid Masonry & Construction, Inc.	Masonry	\$111,846.00	0.16%
Rebar Reinforcement Placers LLC	Reinforcing steel contractor	\$86,130.00	0.12%
Total MWSBE Participation for IPS:		\$9,356,881.00	13.36%

b. EWP6 Construction North Plant Structures: The Market Study performed for the North Plant showed an 18% capacity for MWSBE participation for the direct construction cost of \$20,458,584.00.

Balfour Beatty Infrastructure, Inc., the subcontractor for the North Plant to Houston Waterworks Team has proposed the following plan for MWSBE participation for the North Plant for EWP6 construction.

Firm	Scope of Work	Amount	% of Direct Construction Cost
Spartan Reinforcing, LLC	Rebar supply and installation	\$2,620,844.00	12.81%
Medcalf Fabrication, Inc.	Metal fabrication	\$535,592.00	2.62%
Hallmark Hose Organization, Inc.	Pipe supply	\$265,207.00	1.30%
A&A Trucking LLC	Freight hauling/deliveries	\$260,000.00	1.27%
Total MWSBE Participation for North Plant:		\$3,681,643.00	18.00%

c. EWP6 Construction Allowance: Included in the direct costs is the construction allowance of \$96,650,600.00 for the procurement of equipment items in the design phase; creating cost certainty for those items. When the design is complete, the Project Director will authorize the use of these funds for the procurement of equipment items. Funds from the Allowance cannot be allocated without the approval of the Project Director, City of Houston. Equipment will be purchased directly from the manufacturer, and as approved by OBO, there is no MWSBE participation.

d. Professional Services: HWT has been given authorization to proceed from the 60% design to completion. Early Work Package 6 will increase the appropriated amount for professional services by \$14,634,505.00. Houston Waterworks Team has proposed the following plan for M/WBE participation for professional services work.

Firm	Scope of Work	Amount	% of Direct Construction Cost
KIT Professionals, Inc.	Engineering Design Services & ESDC	\$1,047,404.08	7.16%
Isani Consultants, L.P.	Engineering Design Services & ESDC	\$721,724.86	4.93%
Mbroh Engineering, Inc.	Engineering Design Services & ESDC	\$328,794.87	2.25%
Kalluri Group, Inc.	Engineering Design Services & ESDC	\$343,022.09	2.34%
IMS Engineers, Inc.	Engineering Design Services & ESDC	\$325,756.27	2.23%
Geotest Engineering, Inc.	Quality Program and Material Testing	\$611,568.00	4.18%
TLC Engineering, Inc.	Quality Program and Material Testing	\$641,395.00	4.38%
Total M/WBE Participation for Professional Services:		\$4,019,665.17	27.47%

FISCAL NOTE: No significant Fiscal Operating impact is anticipated as a result of this project.

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

WBS No. S-000065-0002-3, S-000065-0003-3, S-000065-0003-4, and S-000065-0010-4

Prior Council Action:

Request for Council Action Item	Ordinance No.	Date	Appropriated Amount
Original Appropriation	2015-1260	12/9/2015	\$3,288,000.00
Amendment 1	2016-875	11/16/2016	\$14,950,000.00
Amendment 2	2017-231	3/29/2017	\$3,000,000.00
Amendment 3	2017-378	5/24/2017	\$66,300,000.00
Amendment 4	2017-1017	12/19/2017	\$37,339,594.00
Amendment 5	2018-165	2/19/2018	\$57,957,252.00
Amendment 6	2018-335	4/18/2018	\$45,515,774.00

Amount of Funding:

The total cost is \$230,487,640.50

\$55,955,588.60 from Fund 8434 – NEWPP Expansion – SWIFT into Fund 8506 – HPW NEWPP Construction Fund and appropriate from Fund 8506 – HPW-NEWPP Construction Fund.

\$174,532,051.90 from Fund 8505 – Water Authorities Capital Contrib-NEWPP Fund.

Contact Information:

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ATTACHMENTS:

Description	Type
TTI	Backup Material
Project Map	Backup Material
Form B	Backup Material
Form 1295	Backup Material
Pay or Play (POP 1-3)	Backup Material
Design Build Contract	Backup Material
Prior Council Action 1 thru 7	Backup Material
Affidavit of Ownership	Backup Material
OBO Memo	Backup Material
Tax Forms	Backup Material
Amendment Participation (All Subs)	Backup Material
Letters of Intent	Backup Material
Vendor Information	Backup Material
Form A	Financial Information
sap docs	Financial Information
Ordinance	Ordinance/Resolution/Motion
Exhibit B Part 1	Contract/Exhibit
Exhibit B Part 2	Contract/Exhibit
Exhibit B Part 3	Contract/Exhibit
Exhibit B Part 4	Contract/Exhibit
Exhibit B Part 5	Contract/Exhibit
Exhibit B Part 6	Contract/Exhibit
Exhibit B Part 7	Contract/Exhibit
7th Amendment -NEWPP	Contract/Exhibit