



## CITY OF HOUSTON - CITY COUNCIL

Meeting Date: 11/30/2021

District E

Item Creation Date:

HPW - 20EPR13 Northeast Water Purification Plant Expansion Project 2nd Scheduled  
Additional Appropriation to the Eight Amendment/Houston Waterworks Team

Agenda Item#: 76.

### **Background:**

**Subject:** Second scheduled additional appropriation to the Eighth Amendment to the Amended and Restated Design-Build Agreement between the City and Houston Waterworks Team (HWT), a joint venture between CH2M Hill Engineers., Inc. and CDM Constructors Inc. for the Northeast Water Purification Plant (NEWPP) Expansion Project Balance of Plant; Balance of Plant (BOP) Facilities.

**Recommendation:** Adopt an ordinance to amend Ordinance 2019-529 (passed on July 10, 2019) approving a second additional appropriation to the Eighth Amendment to the Amended and Restated Design-Build Agreement between the City and HWT for the Northeast Water Purification Plant (NEWPP) Expansion Project to appropriate phased funding as required by the Agreement.

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

This project will be completed in two phases. The first phase of 80 million gallons of water per day will be substantially complete no later than February 12, 2023 and the second phase of 240 million gallons of water per day will be substantially complete no later than July 15, 2025 for a total of 320 million gallons of water per day.

The Eighth Amendment approved by Council in July 2019 established the Guaranteed Maximum Price and scheduled three appropriations with fixed dollar amounts. The first appropriation was part of the Eighth Amendment. The remaining two additional appropriations were scheduled for December 2020 and December 2021. This project was described and briefed to the Transportation, Technology, and Infrastructure (TTI) Committee on November 4, 2021.

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

**Description/Scope:** The planning and final design of the expansion facilities are complete. HWT is now working to complete the Balance of Plant (BOP) construction for the NEWPP Expansion Project by furnishing equipment, labor, and materials necessary to complete the scope of work in accordance with City requirements and terms of the Agreement. The scope of work consists of eleven remaining construction packages that were not fully funded by the prior appropriation along with permitting, construction supervision, material testing/quality control package, inspection, integration, commissioning building and system components, meeting regulatory requirements, professional services during construction, project closeout, and all general conditions. Details can be found in Exhibit A.

**Procurement:** Competitive Sealed Proposal Method was used for the procurement packages; except for the Central Plant. HWT evaluated each proposal independently. Each prospective 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. Procurement details can be found in Exhibit B.

**Project Cost:** The total project cost is \$1,936,644,764.50 which includes the contract Guaranteed Maximum Price of \$1,765,532,834.00, Management Reserve of \$161,111,930.50, and CIP Cost Recovery of \$10,000,000.00. Funding for this project will be appropriated in phases through 2021, as described in the table below, for ongoing expenditures through 2025.

Date	HWT Amount	Management Reserve	CIP Cost Recovery	Total
Previously Appropriated Amount	\$1,481,787,235.00	\$46,285,670.50	\$7,435,980.00	\$1,535,508,885.50
Current Request– December 2021	\$283,745,599.00	\$114,826,260.00	\$2,564,020.00	\$401,135,879.00
Total Project Appropriations	\$1,765,532,834.00	\$161,111,930.50	\$10,000,000.00	\$1,936,644,764.50

The contract Guaranteed Maximum Price of \$1,765,532,834.00 includes the contract amount of \$449,726,330.00 for Early Work Packages (preconstruction services, preliminary services through final design, clearing of site, and early construction work packages) and \$1,315,806,504.00 for the construction of the Balance of Plant. The Balance of Plant cost includes \$876,940,751.00 for direct construction costs, \$338,165,753.00 for indirect construction costs, \$60,000,000.00 for the Design-Builder contingency and risk, and \$40,700,000.00 for construction allowances.

The indirect construction cost of \$338,165,753.00 includes the cost of \$191,026,304.00 for professional services during construction, the cost of \$32,650,000.00 for insurance and performance bonds, the cost of \$92,591,949.00 for Design-Builder fee, the cost of \$18,100,000.00 for the Start-up Commissioning & Acceptance Testing of the facility, and the cost of \$3,797,500.00 for transition services.

**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:** The proposed MWSBE participation is for the entire project activities through June 2025. The overall MWSBE goal for the entire GMP (\$1,765,532,834.00) is anticipated to be 13.5%. (Memo from Office of Business Opportunity is attached.)

**a. Direct Construction Cost:** MWSBE participation for direct construction is based on Market Studies for each specific construction work package. The Market Studies identified divisible work and evaluated the capacity available within the MWSBE contracting community. For direct construction costs HWT has been authorized \$1,120,022,291.00 and has been paid \$663,628,011.00(59.25%) to date. Of this amount \$115,942,165.00(17.47%) has been paid to MWSBE subcontractors. The Design-Builder proposes a MWSBE plan of \$167,667,337.00(14.97%) as described in Exhibit C.

**b. Construction Allowance:** Included in the direct construction cost is the construction allowance of \$40,700,000.00 for items that are in the design phase such as site civil work, the construction of an off-site sanitary force main, the storage of major equipment, the cost of permits, and the import of suitable soils for construction. This Construction Allowance cannot be allocated without the approval of the Project Director, City of Houston. For allowance costs HWT has been paid \$10,840,006.00(26.63%) to date. Of this amount \$372,099.00(3.43%) has been paid to MWSBE subcontractors as shown in Exhibit E.

**c. Professional Services:** The MWSBE participation goal for Professional Services is 24%. HWT has been authorized \$293,819,013.00 for professional services. HWT has been paid \$177,674,775.00(60.47%) to date. Of this amount, \$45,843,963.00(25.8%) has been paid to MWSBE subconsultants. The Design-Builder proposes an MWSBE participation of \$71,136,983.00 as described in Exhibit D.

**d. Indirect Construction:** The indirect construction costs for insurance and performance bonds, Design-Builder fee, the Start-up Commissioning & Acceptance Testing of the facility, and the cost for transition services have no divisible components and therefore have no MWSBE goal as approved by the Office of Business Opportunity.

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

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

WBS No. S-000065-0003-3, S-000065-0003-4, S-000065-0010-4, S-000065-0011-4

**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	2/28/2018	\$ 57,957,252.00
Amendment 6	2018-335	4/18/2018	\$ 45,515,774.00
Amendment 7	2018-1029	12/19/2018	\$ 230,487,640.50
Amendment 8	2019-529	07/10/2019	\$ 925,795,100.00
1st Additional Appropriation	2020-1023	12/02/2020	\$150,875,525.00
Total Appropriated to Date			\$1,535,508,885.50

**Amount and Source of Funding:**

Amount of Funding: The City of Houston's contribution is \$81,532,642.69 and the Water Authorities contribute \$319,603,236.31.

The total cost for the December 2021 appropriation is \$401,135,879.00

\$6,366,053.00 (S-000065-0003-4) from Fund 8500 – Water and Sewer System Consolidated Construction Fund into Fund 8506 - HPW NEWPP Construction Fund and appropriate from Fund 8506 - HPW -NEWPP Construction Fund.

\$75,000,000.00 (S-000065-0011-4) from Fund 8500 – Water and Sewer System Consolidated Construction Fund into Fund 8506 - HPW NEWPP Construction Fund and appropriate from Fund 8506 - HPW -NEWPP Construction Fund.

\$166,589.69 (S-000065-0010-4) from Fund 8500 – Water and Sewer System Consolidated Construction Fund into Fund 8506 - HPW NEWPP Construction Fund and appropriate from Fund 8506 - HPW -NEWPP Construction Fund.

\$19,670,228.52 (S-000065-0003-3) from Fund 8505 – Water Authorities Capital Contrib-NEWPP Fund.

\$299,933,007.79 (S-000065-0003-4) from Fund 8505 – Water Authorities Capital Contrib-NEWPP Fund.

**Contact Information:**

Rajinder Singh - 713-725-9759

**ATTACHMENTS:**

<b>Description</b>	<b>Type</b>
SAP Documents	Financial Information
Project Map	Backup Material
Form B	Backup Material
Form 1295	Backup Material
Pay or Play	Backup Material
Contract 1 of 5	Backup Material
Contract 2 of 5	Backup Material
Contract 3 of 5	Backup Material
Contract 4 of 5	Backup Material
Contract 5 of 5	Backup Material
TTI	Backup Material
OBO Information	Backup Material
Prior council action	Backup Material
Ownership and Tax Forms	Backup Material
Exhibits A-E	Backup Material