



CITY OF HOUSTON - CITY COUNCIL

Meeting Date:

District E

Item Creation Date: 6/27/2019

HPW - 20EPR09 - Additional Approp/Carollo Engineers, Inc.

Agenda Item#:

Background:

Subject: Seventh Additional Appropriation to Professional Engineering Services Contract between the City and Carollo Engineers, Inc. (Carollo) for Project Advisor/Technical Consultant (PATC) services for the Northeast Water Purification Plant (NEWPP) Expansion Project.

Recommendation: Adopt an ordinance approving the Seventh Additional Appropriation to Ordinance No. 2012-0121, Professional Engineering Services Contract between the City and Carollo Engineers, Inc. for PATC services to the 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 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 December 31, 2022 and the second phase of 240 million gallons of water per day will be substantially complete no later than June 30, 2025 for a total of 320 million gallons of water per day. This project was described and briefed to the Transportation, Technology, and Infrastructure Committee on June 24, 2019.

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

Previous Project History and Scope: The original contract, approved by Ordinance No. 2012-0121, supports HPW in planning, coordination, execution, and delivery of the NEWPP Expansion Project. The First Amendment and additional appropriation, approved by Ordinance No. 2013-155, authorized additional services to perform a process evaluation, facility audit, facility re-rating evaluation, ultraviolet disinfection audit & validation, and interim expansion planning. The Second Amendment and additional appropriation, approved by Ordinance No. 2014-160, authorized legal and contracting support and development of project staffing and control plans. The Third Additional Appropriation, approved by Ordinance No. 2014-962, authorized supplemental funding to continue pilot investigation, raw water planning and permitting, and development of Request for Qualification and Request for Proposal for Design-Build procurement. The Fourth Additional Appropriation, approved by Ordinance No. 2016-342, authorized supplemental funding to continue support management and quality assurance of the Preliminary Services Component to develop the basis of design for the expansion. The Fifth Additional Appropriation, approved by Ordinance No. 2017-459, authorized supplemental funding to continue support management and quality assurance of Preliminary Service Components 1 and 2 through final design and to provide field engineering services for Early Work Packages (EWPs). The Sixth Additional Appropriation, approved by Ordinance No. 2018-835, authorized supplemental funding to perform a risk-based assessment of assets and cost projections for replacement/rehabilitation of equipment at the existing NEWPP.

Under this contract the PATC has accomplished:

A. NEWPP Existing Plant: technical support to maintain operations following storm events in February and July of 2012, facility audit, re-rating evaluation, ultraviolet disinfection audit, raw water cleaning and restoration evaluation, mitigation assessment, and asset assessment and cost projections for CIP budget.

B. NEWPP Expansion Project: project framework development, water treatment concept development, alternative project delivery development, conceptual project schedule, interim expansion planning, water authority engagement, fact finding archaeological study for permitting, mitigation assessment and environmental permitting, pilot testing, project website, videography and groundbreaking event, quality assurance and review of Preliminary Services Component 1 and 2 design, support for validating construction project pricing and negotiations, Traffic Impact Analysis, Request for Information responses and reviews to design, support for distributed generation solution and procurement, and ongoing quality assurance for EWPs.

Description/Scope of Additional Appropriation: The PATC will support and augment HPW in planning, coordination, oversight and facilitation of the delivery for the NEWPP Expansion Project. The work shall consist of the following general activities to assist and support HPW with the Construction Phase Services of the NEWPP Expansion Project, as authorized by the Project Director:

- Provide technical oversight including shop drawing and submittal reviews, request for information review, design team coordination, witness testing, and permit oversight
- Provide project management advisory services
- Public engagement including meetings, website, and written communications
- Quality Assurance
- Provide construction auditing and oversight including coordination with design-builder, quality assurance and control personnel,

independent oversight of construction activities, progress payment validation, specialty inspections, independent materials testing, and safety oversight

- Perform start-up, commissioning, and operations/maintenance support including support and coordination with operations staff, start-up & commissioning oversight and support, process and transition services support, and warranty support

The total cost of this additional appropriation is \$72,000,000.00 to be appropriated as follows: \$61,087,795.00 for contract services, \$6,866,624.00 for allowance items, \$2,045,581.00 for management reserve, and \$2,000,000.00 for CIP Cost recovery.

- Allowance Items: When the design is complete, the Project Director will authorize use of funds for support services related to start-up and commissioning, Operations and Maintenance Manual development, asset management development, operator training and support, and process and transition services. Although the final scope and level of effort is not yet fully determined, it is anticipated that the use of the Allowance funds will proportionally increase the M/WBE participation.
- Management Reserve is the Houston Public Works controlled contingency.
- CIP Cost Recovery is the cost for City of Houston time and resources to manage the project.

The City of Houston's total contribution is \$11,520,000.00. The Water Authorities will contribute \$60,480,000.00 for this appropriation.

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: The M/WBE goal for this project is 24.0% participation. The authorized amount to Carollo for this contract is \$31,460,156.00. The consultant has been paid \$26,579,168.00 (84.49%) to date, of which \$7,569,695.29 (28.48%) has been paid to M/WBE subcontractors. Assuming approval of this additional appropriation, the authorized amount will increase to \$92,547,951.00.

The Consultant has proposed the following firms to achieve this goal:

Firm	Scope of Work	Amount	% of Total
Paid Prior Commitment	Various	\$ 7,569,695.29	8.18%
Unpaid Prior Commitment	Various	\$ 608,016.71	0.66%
Aviles Engineering Corporation	Geotechnical Testing & Laboratory Services	\$ 1,554,600.00	1.68%
EJES Incorporated	Engineering & Construction Management Services	\$ 2,687,400.00	2.90%
Gunda Corporation, LLC	Engineering Services	\$ 1,786,500.00	1.93%
Gupta & Associates, Inc.	Engineering Services	\$ 1,625,600.00	1.76%
Hunt & Hunt Engineering Corporation	Engineering Services	\$ 399,600.00	0.43%
HVJ Associates, Inc.	Geotechnical Testing & Laboratory Services	\$ 1,554,600.00	1.68%
Kuo & Associates, Inc.	Surveying & Support Services	\$ 143,100.00	0.15%
Lavaller Professional Services, LLC	Project Management Services	\$ 1,511,000.00	1.63%
RPH Consulting Group, LLC DBA RPH	Project & Construction Management Services	\$ 3,395,600.00	3.67%
SES Horizon Consulting Engineers, Inc.	Engineering & Support Services	\$ 1,078,600.00	1.17%
Strong Strategies, L.L.C.	Community Outreach & Government Relations	\$ 1,071,700.00	1.16%
United Engineers, Inc.	Engineering Services	\$ 1,593,100.00	1.72%
Total M/WBE Participation for Professional Services		\$ 26,579,112.00	28.72%

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-000065-0001-3

Prior Council Action:

Ordinance No. 2012-0121, February 8, 2012
Ordinance No. 2013-0155, February 20, 2013
Ordinance No. 2014-0160, February 26, 2014
Ordinance No. 2014-0962, October 22, 2014
Ordinance No. 2016-0342, April 27, 2016
Ordinance No. 2017-0459, June 21, 2017
Ordinance No. 2018-0835, October 17, 2018

Amount of Funding:

Total cost is \$72,000,000.00.

\$11,520,000.00 Transfer from Fund 8434 – NEWPP Expansion – SWIFT into Fund 8506 – HPW – NEWPP Construction Fund and appropriate from Fund 8506 – HPW – NEWPP Construction Fund.

\$60,480,000.00 Appropriate from Fund 8505 – Water Authorities Capital Contribution-NEWPP Fund.

(Previous appropriations in the amount of \$10,463,413.75 from Water and Sewer System Consolidated Construction Fund No. 8500; previous appropriations in the amount of \$19,990,466.16 from the Water Authorities Capital Contribution-NEWPP Fund No. 8505; previous appropriations in the amount of \$3,807,707.84 from Fund No. 8506 – HPW NEWPP Construction Fund.)

Contact Information:

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ATTACHMENTS:

Description	Type
funding docs	Financial Information
Project Map	Backup Material
Form B	Backup Material
Affidavit of Ownership	Backup Material
Tax Report	Backup Material
Form 1295	Backup Material
MWDBE Summary Worksheet	Backup Material
POP Forms 1-3	Backup Material
Letters of Intent	Backup Material
Vendor Information	Backup Material
Prior Council Actions	Backup Material
Original Contract Agreement	Backup Material