

AGENDA MEMORANDUM

Future Item for the City Council Meeting of April 12, 2016 Action Item for the City Council Meeting of April 19, 2016

DATE: March 23, 2016

TO: Ronald L. Olson, City Manager

THRU: Mark Van Vleck, P.E., Assistant City Manager

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Engineering Design Contract

O.N. Stevens Facilities Feed Optimization Improvements

CAPTION:

Motion authorizing the City Manager, or designee, to execute an Engineering Design contract with LNV, Inc. of Corpus Christi, Texas in the amount of \$1,091,812 for O.N. Stevens Facilities Feed Optimization Improvements for design, bid and construction phase services.

PURPOSE:

The purpose of this agenda item is to obtain authority to execute an engineering design contract needed for the O.N. Stevens Facilities Feed Optimization Improvements.

BACKGROUND AND FINDINGS:

This is an approved Capital Improvement Plan (CIP) project to modernize the chemical storage and chemical feed systems at the O.N. Stevens Water Treatment Plant (ONSWTP) that optimizes the dosage, reliability, monitoring and control of water treatment chemicals. These improvements are also needed to meet requirements of Texas Commission on Environmental Quality (TCEQ) Rules and Regulations 30 TAC 290.42., and support future plans to increase water treatment capacity at ONSWTP. The existing chemical feed equipment is beyond its useful service life resulting in costly maintenance with obsolete technology.

CIP Description: O.N. Stevens Chemical Facilities (Alum, Fluoride, Polymer and LAS)

Existing chemical storage and feed facilities (Alum, Fluoride, Polymer, and Liquid Ammonium Sulfate) at ONSWTP require upgrades in order to meet minimum TCEQ requirement and to optimize system performance. In addition, the existing Fluoride facilities require rehabilitation to increase safety in storage, handling and feed. These feed system components require replacement for optimal dosage and reliable monitoring control of water treatment chemicals.

This project includes the following major elements:

- Replaces the chemical feed systems for alum, polymer and liquid ammonium sulfate with the associated instrumentation, electrical, and structural improvements
- Improves the sedimentation basin hydraulics
- Replaces the caustic pumps
- Relocates the existing chlorine delivery system to new chemical feed structure
- Provides a feasibility study for alkalinity adjustment to address high turbidity and low alkalinity conditions during storm water events

To minimize the impacts to operations and achieve cost efficiencies, the construction will be combined with ONSWTP Raw Water Influent Improvements project and awarded as one construction contract. The combined construction is anticipated to be complete at the end of 2019.

A previous project for the Fluoride is already under construction to address safety concerns with that chemical feed process.

LNV, Inc. was selected for this project through Request for Qualifications No. 2007-05 Capital Improvement Plan Projects FY 2008-2009 Scoping, Estimating, Design Services.

ALTERNATIVES:

- 1. Authorize the execution of the engineering design contract.
- 2. Do not authorize the execution of the engineering design contract. (Not Recommended)

OTHER CONSIDERATIONS:

None

CONFORMITY TO CITY POLICY:

Conforms to City Fiscal Policy

EMERGENCY / NON-EMERGENCY:

Non-Emergency

DEPARTMENTAL CLEARANCES:

Utilities Department

FINANCIAL IMPACT:

Operating

Revenue X Capital

Not applicable

Fiscal Year 2015-2016	Project to Date Expenditures	Current Year	Future Years	TOTALS
Line Item Budget	\$2,705,000	\$3,770,000	\$7,240,000	\$13,715,000
Encumbered / Expended Amount	\$26,300			\$26,300
This Item		\$1,091,812.00		\$1,091,812
Future Anticipated Expenditures This Project			\$10,837,425	\$10,837,425
BALANCE	\$2,678,700	\$2,678,188	(\$3,597,425)	\$1,759,463

Fund(s): Water CIP #4

Comments: This project requires approximately 1,290 calendar days with anticipated completion in December 2019. The contract will result in the expenditure of an amount not to exceed \$1,091,812.

RECOMMENDATION:

City Staff recommends approval of an Engineering Design contract with LNV, Inc. of Corpus Christi, Texas in the amount of \$1,091,812 for O.N. Stevens Facilities Feed Optimization Improvements for design, bid and construction phase services.

LIST OF SUPPORTING DOCUMENTS:

Project Budget Location Map Contract Presentation Form 1295