

MEMORANDUM

Date: February 8, 2024

To: Honorable Mayor and Commissioners

Via: Albert P. Childress

City Manager

From: Kelly M. Crowe, P.E.

Utilities Director

Subject: 24-5370- Approving the Additional Effort Proposal From Black & Veatch for

the Replacement and Upgrade Of The Polymer Feed System at The Richard A.

Heyman Environmental Pollution Control Facility

Introduction

Authorizing the City Manager to approve the proposal from Black & Veatch for the additional design effort with the Richard A. Heyman Environmental Protection Facility Dewatering Systems Upgrades. The added scope involves extra engineering and design services to include the upgrade and replacement of the polymer feed system for an amount not to exceed \$98,720.00.

Background

The City of Key West (CITY) has decided to replace their existing belt filter press, dewatering system at the Richard A. Heyman Environmental Protection Facility (RAHEPF). The process takes the waste sludge material and removes the water content to reduce the weight and volume of the dewatered cake being transported from the facility. This process improves efficiency and reduces transportation costs.

Black & Veatch was tasked with engineering and design service for equipment replacement and upgrades to the existing system (Resolution 22-063). During the design phase it was determined that the existing polymer feed system, which was not included in the original task order scope, should also be replaced. Further investigation by City staff and Jacobs plant staff resulted in a consensus that the polymer feed system should be replaced along with the equipment and added to the scope of design.

The dewatering system is a critical component of the overall wastewater treatment process. City staff will initiate a study this year to evaluate the feasibility of using the waste sludge as a fuel through the

anaerobic digestion process. The process would create methane gas which would be converted to electricity to be used at the treatment plant. If the anaerobic digestion process is implemented in the future, the refurbished belt presses would continue to serve as a redundant measure.

Procurement

City staff has studied the trend evaluation from Black & Veatch and verified that the costs match the rates per the General Engineering Services agreement made per Resolution #17-207 and extended per Resolution #20-142 and the rates at the time of the original task order. The original task order and purchase order are still active.

City staff further agrees for the need of the polymer feed system upgrade is necessary. Funds for the additional design effort proposed by Black & Veatch are available in account 401-3504-535-6500 / SE35042006.

Recommendation

The City Manager's Office recommends the Mayor and City Commission approve the resolution and authorize the City Manager to execute the proposal from Black & Veatch for the additional design effort with the Richard A. Heyman Environmental Protection Facility Dewatering Systems Upgrades in an amount not to exceed \$98,720.00.

Exhibits:

Exhibit A - Trend Number 1 Evaluation from Black & Veatch - Additional Effort Evaluation Sheet

Exhibit B – Black & Veatch General Engineering Services Contract

Exhibit C – Black & Veatch Contract Extension

Exhibit D – Black 7 Veatch Contract rates as of July 30, 2020

Exhibit E – Resolution 17-207

Exhibit F – Resolution 22-142

Exhibit G – Resolution 22-063