

RESOLUTION NO. 24-027

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, APPROVING AMENDMENT #1 TO TASK ORDER #10 FOR BLACK AND VEATCH IN AN AMOUNT NOT TO EXCEED \$98,720.00 TO PROVIDE ADDITIONAL SERVICES TO DESIGN THE POLYMER SYSTEM ASSOCIATED WITH THE DEWATERING SYSTEM UPGRADE PROJECT ; AUTHORIZING ANY NECESSARY BUDGET TRANSFERS AND ADJUSTMENTS; AUTHORIZING THE CITY MANAGER TO EXECUTE ANY NECESSARY DOCUMENTS UPON CONSENT OF THE CITY ATTORNEY; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, in Resolution No. 17-207, the City Commission approved a contract Black and Veatch for General Engineering Services on a task-order basis; and

WHEREAS, in Resolution No. 20-142, the City Commission approved an extension to Black and Veatch's General Engineering Services contract for a period of two years; and

WHEREAS, in Resolution No. 22-063, the City Commission approved a task order to Black and Veatch for the design of the dewatering system upgrades under the General Engineering Services contract; and

WHEREAS, City staff and Black and Veatch have determined that the polymer system requires upgrades and desire to amend the task order for design services; and

WHEREAS, Black and Veatch remains under contract to

complete the design; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That Task Order Amendment #1 from Black and Veatch for the design of the polymer system is hereby approved in an amount not to exceed \$98,720.00.

Section 2: That this project is budgeted in Sewer/Renewal and Replacement Account No. 401-3504-535-6500, Project # SE35042006 and any necessary budget transfers or adjustments are hereby authorized.

Section 3: That the City Manager is authorized to execute any necessary documents, upon consent of the City Attorney.

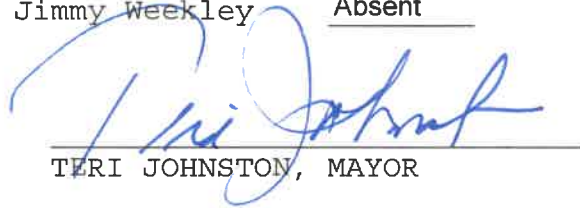
Section 4: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the Presiding Officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 8th day of February, 2024.

Authenticated by the Presiding Officer and Clerk of the Commission on 8th day of February, 2024.

Filed with the Clerk on February 8, 2024.

Mayor Teri Johnston	<u>Yes</u>
Vice Mayor Sam Kaufman	<u>Yes</u>
Commissioner Lissette Carey	<u>Yes</u>
Commissioner Mary Lou Hoover	<u>Yes</u>
Commissioner Clayton Lopez	<u>Absent</u>
Commissioner Billy Wardlow	<u>Yes</u>
Commissioner Jimmy Weekley	<u>Absent</u>


TERI JOHNSTON, MAYOR

ATTEST:



KERI O'BRIEN, CITY CLERK



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



THE CITY OF KEY WEST
1300 White Street Key West, FL 33041-1409 (305) 809-3700

Sept 25, 2020

Isabel C Botero P.E
Black & Veatch Corporation
2855 N University Drive
Suite 210
Coral Springs, FL 33065

RE: Amendment to Resolution 20-142 – Engineering Services Agreement

Mrs. Botero,

Upon both parties fully executing this Amendment, the enclosed City Commission Resolution 20-142 exercises the option to renew current professional services contracts per agreed terms for a period of two (2) additional years through August 1, 2022.

Black & Veatch Corporation

By:

Signature

10-05-2020

Date

City of Key West

By:

Gregory W. Veliz, City Manager

Date

Exhibit A
Hourly Fee Schedule

Company Name:

Black & Veatch

Date:

July 30, 2020

POSITION TITLE	HOURLY BILLING RATE
Project Director	\$295.00
Senior Project Manager	\$240.00
Project Manager	\$230.00
Senior Technical Specialist	\$275.00
Technical Specialist	\$238.00
Senior Engineering Manager	\$215.00
Engineering Manager	\$197.00
Senior Engineer	\$185.00
Project Engineer	\$165.00
Staff Engineer III	\$145.00
Staff Engineer II	\$133.00
Staff Engineer	\$115.00
Senior Engineering Technician	\$150.00
Engineering Technician	\$115.00
Technical Aid	\$94.00
Senior Cost Estimator	\$186.00
Cost Estimator	\$124.00
Professional Architect	\$185.00
Architect	\$140.00
Professional Geologist	\$270.00
Geologist	\$130.00
Project Accountant	\$135.00
Senior Administrator	\$100.00
Administrative Assistant	\$90.00

City of Key West

Change Order Request No.	01	Date:	1/10/2024
Key West Project No.:	SE35042006	BV Project Number:	411829
Project Name:	Richard A. Heyman Environmental Protection Facility – Dewatering System Upgrade		
Amount:	\$ 98,720		

Technical Background

Based on direction of the City of Key West, the scope of Task Order 10 was limited to the design of the replacement belt filter presses. During the project kick off meeting held on March 29, 2022, and the confirmation email received from the City on April 5, 2022, Black & Veatch was requested to estimate the additional effort required to include the design for a replacement polymer feed system and a replacement belt filter press sludge feed pumps system.

Additionally, as part of Richard A. Heyman Environmental Protection Facility Aeration Upgrades in 2019, design of a replacement belt conveyor was already performed up to a 90% level (Black & Veatch project 199322). As part of this amendment, Black & Veatch will include the update and final design of the replacement belt conveyor to be incorporated as part of the bid package.

During a conference call with the City on January 4, 2024, Black & Veatch was requested to include the design a potable water connection for the dewatering rinse water.

Scope of Work

As part of Task 103 – Detailed Design – Construction Documents Level 3 and Level 4 under the current scope of work, Black & Veatch will incorporate the design of a replacement polymer feed system, replacement sludge feed pump system, and replacement belt conveyor system. As part of the design effort, Black & Veatch will contact equipment manufacturers for updated design information and cost quotations. Specifications for the potable water plumbing materials, polymer feed system, sludge feed pump system, and belt conveyor system will be included in the design.

The additional design will require the following new drawings:

1. Solids Building Demo Plan – Belt Conveyor
2. Solids Building Demo Plan – Polymer Feed System
3. Solids Building Demo Plan – Sludge Feed Pump System
4. Solids Building – Belt Conveyor
5. Solids Building – Belt Conveyor
6. Solids Building – Belt Conveyor
7. Solids Building Enlarged Plans & Sections – Sludge Feed Pump System and Polymer Feed System
8. Solids Building Enlarged Plans & Sections – Belt Conveyor
9. Solids Building – Plumbing Plan & Section

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10. Electrical One Line Diagram
 11. Solids Building Power Plan – Belt Conveyor
 12. Solids Building Power Plan – Sludge Feed Pumps and Polymer Feed System
 13. P&ID – Polymer Feed System
 14. P&ID – BFP Sludge Feed and Water Booster Pumps
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Deliverables

These additional design from this amendment will be incorporated in the overall project design and included as part of the deliverables for Task 103.

Schedule

An updated schedule is included as Attachment 1.

Compensation

As detailed in Attachment 2 “Level of Effort Estimate,” compensation for the scope of services described herein will be for the lump sum fee of \$98,720. Monthly invoices will be submitted to the City based on project progress.

Respectfully submitted,

Isabel Botero, P.E.
Client Director
Black & Veatch

Attachment 1
Schedule

Task Order No.10 - Design Services
 Richard H. Heyman Environmental Protection Facility Dewatering System Upgrade
 City of Key West

ID	Task Name	Duration	Start	Finish	2024	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Key Milestones	558 days	Thu 3/10/22	Mon 10/14/24														
2	Notice to Proceed	0 days	Thu 3/10/22	Thu 3/10/22														
3	Draft Level 2 Submittal	0 days	Fri 7/15/22	Fri 7/15/22														
4	Level 2 Workshop	0 days	Thu 7/21/22	Thu 7/21/22														
5	Draft Level 3/4 Design Submittal	0 days	Fri 5/31/24	Fri 5/31/24														
6	Level 3/4 Workshop	0 days	Fri 6/7/24	Fri 6/7/24														
7	Final Level 4 Design Submittal	0 days	Mon 7/15/24	Mon 7/15/24														
8	Pre-Bid Conference	0 days	Tue 8/13/24	Tue 8/13/24														
9	Addenda Submittal	0 days	Wed 9/11/24	Wed 9/11/24														
10	Bid Opening	0 days	Mon 10/14/24	Mon 10/14/24														
11	Task 101 - Project Coordination	668 days	Thu 3/10/22	Mon 10/28/24														
12	Task 102 - Detailed Design - Construction Documents Level 2	109 days	Thu 3/17/22	Thu 8/18/22														
28	Task 103 - Detailed Design - Construction Documents Level 3 and Level 4	89 days	Mon 3/11/24	Mon 7/15/24														
29	Technical Drawings Preparation	42 days	Mon 3/11/24	Tue 5/7/24														
30	Technical Specifications Preparation	42 days	Mon 3/11/24	Tue 5/7/24														
31	Prepare Project Documents submittal for QC Review	1 day	Wed 5/8/24	Wed 5/8/24														
32	Update Project Construction Schedule	5 days	Thu 5/9/24	Wed 5/15/24														
33	Update OPCC	10 days	Thu 5/9/24	Wed 5/22/24														
34	Project Documents QC Review	7 days	Thu 5/9/24	Fri 5/17/24														
35	Project Documents Revisions	7 days	Mon 5/20/24	Wed 5/29/24														
36	Prepare submittal package	1 day	Thu 5/30/24	Thu 5/30/24														
37	Draft Project Documents Submittal to City	1 day	Fri 5/31/24	Fri 5/31/24														
38	Project Documents Workshop	1 day	Fri 6/7/24	Fri 6/7/24														
39	Project Documents Review by City	10 days	Mon 6/3/24	Fri 6/14/24														
40	BV Response to Comments	5 days	Mon 6/17/24	Fri 6/21/24														
41	Client Accepts Responses	5 days	Mon 6/24/24	Fri 6/28/24														
42	Final Level 4 Project Documents Submittal to City	10 days	Mon 7/1/24	Mon 7/15/24														
43	Task 201 - Bid and Pre-Award Services	44 days	Tue 8/13/24	Mon 10/14/24														
44	Pre-Bid Conference	1 day	Tue 8/13/24	Tue 8/13/24														
45	Interpretation of Bidding Requirements	20 days	Wed 8/14/24	Wed 9/11/24														
46	Bid Opening	18 days	Thu 9/19/24	Mon 10/14/24														
47	Task 202 - As-Bid Documents Preparation	10 days	Thu 10/15/24	Mon 10/28/24														
48	As-Bid Contract Documents Preparation	10 days	Tue 10/15/24	Mon 10/28/24														

Project: 411829 - City of Key West
 Date: Mon 1/8/24

Task: Manual Task
 Split: Duration-only
 Milestone: Manual Summary Rollup
 Summary: Manual Summary

Start-only: Manual Task
 Finish-only: Duration-only
 External Tasks: Manual Summary Rollup
 External Milestone: Manual Summary

Deadline: Manual Task
 Progress: Duration-only
 Manual Progress: Manual Summary Rollup
 As-Bid Contract Document: Manual Summary

Attachment 2
Level of Effort

City of Key West
 Task Order No. 10 - Richard A. Heyman Environmental
 Protection Facility Dewatering System Upgrade
 Amendment No. 1

Work Breakdown Structure	Project Director	Senior Project Manager	Engineering Manager	Sr Technical Specialist - WW Process	Sr. Engineer - Structural	Sr. Engineer - Process Mechanical	Sr. Engineer - Chem Feed	Project Engineer - Electrical	Senior Engineering Technician - Electrical	Sr. Engineer - I&C	Engineering Technician - I&C	Engineering Technician - Struct and Process	Senior Engineer - Cost Estimating	Staff Engineer 11 - Civil	Total Hours	Labor Cost
Task Series 100 - DESIGN SERVICES	4	20	24	20	68	26	88	64	32	41	20	98	35	44	584	\$98,720
Percent of Total - Task 103	1%	3%	4%	3%	12%	4%	15%	11%	5%	7%	3%	17%	0%	8%	100%	
103 Detailed Design - Construction Documents Level 3 and Level 4	4	20	24	20	68	26	88	64	32	41	20	98	35	44	584	\$98,720
Percent of Total	1%	3%	4%	3%	12%	4%	15%	11%	5%	7%	3%	17%	6%	8%	100%	
Total Hours Estimated	4	20	24	20	68	26	88	64	32	41	20	98	35	44	584	
Total Salary (Labor B&V)	\$1,180	\$4,800	\$4,728	\$5,500	\$12,580	\$4,810	\$16,280	\$10,560	\$4,800	\$7,585	\$2,300	\$11,270	\$6,475	\$5,852		\$98,720
TOTAL FEE																\$98,720

NEGOTIATED RATES USED TO DEVELOP THIS FEE \$295.00 \$240.00 \$197.00 \$275.00 \$185.00 \$185.00 \$185.00 \$185.00 \$150.00 \$185.00 \$115.00 \$185.00 \$133.00



THE CITY OF KEY WEST

Post Office Box 1409 Key West, FL 33041-1409 (305) 809-3883

CHANGE ORDER

CHANGE ORDER NO. 1
CHANGE ORDER DESCRIPTION Additional effort for engineering and design for new polymer feed system
PROJECT NAME: RAHEPF Dewatering System Upgrade
PROJECT CODE: SE35042006
CONTRACTOR NAME: Black & Veatch - General Engineering Services Contract

THE FOLLOWING MODIFICATIONS TO THE CONTRACT ARE HEREBY ORDERED:
(Detail provided on additional page(s). Yes [checked] or No [])

Table with 2 main columns: CONTRACT VALUE and CONTRACT TIME (CALENDAR DAYS). Rows include ORIGINAL CONTRACT, PREVIOUS CHANGE ORDERS, THIS CHANGE ORDER, and REVISED CONTRACT VALUE/TIME.

REVISED CONTRACT COMPLETION DATE: N/A

By: City of Key West
Authorized Signature: [Signature]
City Manager
Printed Name: Albert P. Childress
Title
Date: Feb. 9, 2024

By: Black & Veatch Corporation
Contractor Name
Authorized Signature: [Signature]
Printed Name: Rafael E. Frias III, PE
Vice President
Title
Date: 1/16/2024

