RESOLUTION NO. 24-127

A RESOLUTION OF THE CITY OF PANAMA CITY BEACH, FLORIDA, APPROVING A TASK ORDER WITH MCKIM & CREED, INC. FOR ENGINEERING SERVICES REQUIRED FOR THE PREPARATION OF AN ASSET MANAGEMENT PLAN FOR THE CITY'S WASTEWATER TREATMENT FACILITY IN THE AMOUNT OF \$181,588.00.

BE IT RESOLVED by the City Council of the City of Panama City Beach that the appropriate officers of the City are authorized to execute and deliver on behalf of the City that certain Task Order No. 2022-05 to the Master Services Agreement dated August 17, 2022, in the amount of One Hundred Eighty-One Thousand Five Hundred Eighty-Eight Dollars and No Cents (\$181,588.00), in substantially the form attached as Exhibit A and presented to the Council today, with such changes, insertions, or omissions as may be approved by the City Manager.

THIS RESOLUTION shall be effective immediately upon passage.

PASSED in regular session this 94b day of May, 2024.

CITY OF PANAMA CITY BEACH

Stuart Tettemer, Mayor

ATTEST:

Lydne Fasone, City Clerk



M&C No. 240122

April 17, 2024

Mr. Mark Shaeffer, PE Utilities Director City of Panama City Beach 116 South Arnold Road Panama City Beach, FL 32413

RE: Wastewater Treatment Plant Asset Management Program Support

Scope of Services and Fee

Dear Mark,

Attached is McKim & Creed's revised scope of services and fee proposal for assisting Panama City Beach with their wastewater treatment plant asset management program as outlined.

If you have any questions, or require additional information, please give me a call.

Sincerely,

David M. Eike, PE Senior Project Manager

Attachment

cc:

Glenn Halstead, PE D. Patrick Jehle, Jr., PE Nicholas Dierkes, PE



McKim & Creed, Inc.

Exhibit A – Scope of Services

Project: Wastewater Treatment Plant Asset Management Program Support
Panama City Beach, FL
April 17, 2024

Project Background

Panama City Beach (PCB) is currently required by Consent Order (OGC No. 22-1926) to develop a Capacity, Management, Operations and Maintenance (CMOM) and Asset Management (AM) Program designed to maintain the continued operation of the wastewater collection and treatment system. The PCB treatment system consists of a 14-mgd advanced wastewater treatment plant (WWTP) that provides reclaimed water and, when necessary, discharges to wetlands. To support the AM Program, PCB will develop an Asset Replacement Plan (ARP) to identify future Rehabilitation and Replacement (R&R) activities and associated funding requirements for the continued operation of the WWTP in the future.

Project Objectives

This scope of work is intended to meet PCB's regulatory requirements of maintaining operation at the WWTP through the generation of an ARP. The ARP will document the current operating conditions, provide recommendations for R&R, and forecast funding needs for future budget planning.

Project Scope

- 1. Project Administration
- A. Coordination and completion of a project kickoff meeting with PCB staff.
- B. Correspondence with PCB for coordination of schedules, work products, and activities of the project team.
- C. Preparation of monthly invoices for services in a format acceptable to PCB.
- D. Monthly progress meetings for status updates and coordination of project activities.

2. Data Collection

- A. Existing Data Review. A request for available historical data will be submitted to PCB and will include the following:
 - 1) Existing asset inventory including spreadsheets, and databases, as available.
 - As-built drawings for original construction and relevant upgrades or modifications.

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- 3) Operations and maintenance (O&M) manuals and standard operating procedures (SOPs). This should include any general practices and procedures related to repairs or regular maintenance.
- 4) Historical financial data including past project budgets and depreciated values of capitalized assets. Unit costs for equipment and typical refurbishment activities (e.g. bearing replacements on disc filter shafts) will be useful as well.
- 5) Work order histories, as available.
- B. Create Asset Hierarchy. An asset hierarchy will be created to organize WWTP assets into appropriate categories for development of an asset inventory. This hierarchy will be designed to be imported into the CityWorks CMMS at a later date.
- C. Populate Asset Inventory. A preliminary asset inventory will be developed based on the provided asset information and hierarchy. The inventory will be populated with available attribute information and any relevant operations and condition data. The asset inventory will be used as the basis for future asset inventory and condition information gathering.

3. Facility Inspection

- A. R&R Workshop. A workshop will be held with PCB staff to gather input on typical operations and known issues. McKim & Creed will provide a team of electrical, process, and structural engineers to attend the meeting and document relevant information. Data collected during this workshop will be used to inform R&R schedules and identify areas of focus for the condition assessment.
- B. Visual condition assessment. Following the staff interview workshop, McKim & Creed staff will conduct visual condition assessments of the WWTP assets.

 Conditions for the following asset types will be captured for each process area of the WWTP during this assessment:
 - Pumps/Motors
 - Mechanical components
 - Valving/Piping
 - Electrical/Instrumentation
 - Structural

For pumps and motors, asset specific information collected from nameplate data will be documented as well.

Tablet-based survey forms will be used to collect all observation data and store the information in a centralized location. McKim & Creed will develop this form with the intent that it may be transferred to PCB staff for future asset data collection. Assets will be photographed and given a condition rating (1-5 scale) consistent with the International Infrastructure Management Manual (IIMM).

4. Rehabilitation and Replacement Planning

A. Useful life estimates and replacement costs. Planning level estimates of expected useful lives and replacement costs will be developed by McKim & Creed for asset types described in Task 3. Useful life estimates will be based on guidance provided by American Water Works Association (AWWA) and the Institute of Asset Management (IAM).

Future funding estimates will incorporate feedback from the staff interview and historical costs from financial data. Where gaps in financial data exist, McKim & Creed staff will provide planning level costs for replacement in-kind of equipment. The output of this task will be a table documenting the cost and timing for all major significant R&R activities associated with the WWTP. Incidental R&R activities may be captured as a small percentage of the overall asset replacement value.

Costs will be provided in current dollars and are intended to represent the total cost of a replacement project, including indirect costs. McKim & Creed will coordinate with PCB staff to determine how escalating costs should be incorporated into the future funding evaluation.

- B. Backup Power Generation Evaluation. PCB is currently in the process of upgrading the existing backup power infrastructure at the WWTP to be better able to reliably go on an interruptible rate. Additionally, the current diesel-powered generators may be nearing the end of their useful lives due to age. This evaluation will review the existing backup power configuration and provide recommendations for replacement strategies that are intended to optimize synchronization and simplify maintenance. This may include the use of natural gas generators and a reduction in the number of generators or going on FPL's power as a service rpgram. Replacement strategies, costs and schedules developed in this task will be used as the basis for future funding forecasts for the generator system.
- C. Provide R&R needs funding forecasts. Future R&R funding forecasts will be provided for a 40-year planning horizon. Future funding forecasts will be developed based on the asset useful lives and the application of relevant rehabilitation and replacement costs for each asset. Needs will be prioritized based on industry standard asset management principle that consider vulnerability, criticality, and overall risk with presentation of the asset database in a spreadsheet format.
- D. Review potential funding scenarios. McKim & Creed will review up to three potential funding scenarios to address needs during the 40-year planning horizon. This will include a combination of funding sources such as PAYGO, bond issuances, and grant funding.
- 5. Asset Replacement Plan (ARP) Documentation
- A. ARP and Workshop. An ARP will be developed to capture the conditions, useful life calculations, R&R costs, and improvements recommendations for the WWTP. Future funding needs and financing scenarios to meet those needs will

1206 North Palafox Street Pensacola, FL 32501 850.994.9503 be provided for budget planning. Following the draft submittal of the ARP, a workshop will be conducted with PCB staff to review the recommendations and financing scenarios.

B. **Data deliverable.** Asset data collected during this project will be provided to PCB in an acceptable format for import into CityWorks CMMS (or other if desired).

PCB Responsibilities

It is agreed that PCB will have the following responsibilities under this project:

PCB to provide access to WWTP facilities for condition assessments. Attendance by
Operations and Maintenance staff during condition assessments will be needed to better
understand how equipment is typically operated.

Project Schedule

Task	Task Duration (Calendar Days)	Total Contract (Calendar Days)
Notice to Proceed	1	1
Project Administration	Ongoing	Ongoing
Data Collection	60	61
Facility Inspection	15	76
Rehabilitation and Replacement Planning	90	166
Asset Replacement Plan Documentation	60	226

Assumptions/Exclusions

- Field condition assessments are limited to the WWTP. No collection system elements outside of the WWTP grounds are to be reviewed under this proposal.
- Inspections of assets are expected to be performed without the need of special equipment or confined space permits.
- PCB staff are to operate the assets as needed; McKim & Creed will not operate any PCB assets.
- PCB will provide access to the assets to be evaluated.
- In cases where original installation attributes (such as install year) are not available, assumed values will be developed based on consultation with PCB.
- Deliverable review comments to be provided by PCB within 2 weeks of submittal. Two rounds of comment review are assumed for scope.
- Schedule assumes availability of applicable PCB staff.
- Design services are not included in scope.

Budget

A breakdown of fees is provided in Attachment A.

Attachment A - Project Cost Summary:

Phase 1 – Project Administration		\$19,494
Phase 2 – Data Collection		\$22,128
Phase 3 – Facility Inspection		\$55,848
Phase 4 – Rehabilitation & Replacement Planning		\$51,000
Phase 5 – Asset Replacement Plan Documentation		<u>\$33,118</u>
-	Project Total	\$181,588

COMBINED TASK ORDER AND NOTICE TO PROCEED

TASK ORDER NO. 2022-05

DATE May 77., 2024

Reference is made to that certain MASTER SERVICES AGREEMENT BETWEEN CITY OF PANAMA CITY BEACH AND MCKIM & CREED, RELATING TO PROFESSIONAL ENGINEERING SERVICES FOR PROFESSIONAL ENGINEERING SERVICES FOR WASTEWATER TREATMENT FACILITIES, RECLAIMED WATER STORAGE AND PUMPING FACILITIES; RECEIVING WETLAND FACILITIES; REGIONAL WASTEWATER PUMPING STATIONS (>300,000 GPD ADF); WASTEWATER AND RECLAIMED WATER TRANSMISSION MAINS OVER 12" IN DIAMETER, dated August 17., 2022, (the "Agreement"), the terms, conditions and definitions of which are incorporated herein as if set forth in full. Neither party is in breach of the Agreement.

Pursuant to the Agreement, Engineer agrees to perform the specific professional engineering tasks set forth upon incorporated <u>Attachment A</u>, Scope of Services, relating to <u>an Asset Management Plan for the City's Wastewater Treatment Facility 1</u>.

Engineer's compensation shall be paid in monthly installments as specified in the Agreement. Engineer's total compensation for the services to be provided under this Task Order shall be determined as follows: Pursuant to the Agreement, Engineer agrees to perform the specific tasks set forth upon incorporated Attachment A, Scope of Services, relating to Engineer's total compensation shall be (check one): X a stipulated sum of \$181,588.00; or a stipulated sum of \$_____ plus one or more specified listed below which may be authorized in writing by the City Manager or his designee, ___ plus one or more specified allowances Allowance of \$____for Geotechnical Engineering, and Allowance of \$_____ for Land Surveying; or a fee determined on a time-involved basis with a maximum cost of \$____ As set forth upon incorporated Attachment B, Fee Breakdown. If reimbursable expenses are to be paid hereunder, such expenses must be specifically AUTHORIZED AND IDENTIFIED in this section. The parties agree that reimbursable expenses shall not exceed \$ N/a Work shall begin on May 9, 2024, and shall be substantially completed by October 1, 2024. There are no additional rights and obligations related to this Task Order other than as specified in the Agreement. Upon execution of this Task Order by both Engineer and City, Engineer is directed to proceed. IN WITNESS WHEREOF the parties have caused these presents to be executed in their names on the date shown. Witness: MCKIM & CREED, Date: 6 MAY 2024 CITY OF PANAMA CITY BEACH, FL