#### **TASK ORDER TO-01-24**

#### **CITY OF KEY WEST**

## SEWER CAPACITY, MANAGEMENT, OPERATION, AND MAINTENANCE PROGRAM GAP ANALYSIS STUDY

This TASK ORDER TO-01-24 is issued under the terms and conditions of the MASTER AGREEMENT TO PROVIDE GENERAL ENGINEERING SERVICES TO THE CITY OF KEY WEST ("AGREEMENT") between the City of Key West ("CITY") and Jacobs Engineering Group Inc. ("CONSULTANT") executed on March 29, 2023, which are incorporated herein by this reference.

#### A. SCOPE OF SERVICES

Specific services which the CONSULTANT agrees to furnish are summarized on the "Scope of Services". This Task Order, when executed, shall be incorporated in and shall become an integral part of the AGREEMENT.

#### B. TIME OF COMPLETION

Start date for this project will be no later than ten days after execution of this authorization. The duration of TO-01-24 is estimated in twelve weeks.

#### C. COMPENSATION

Compensation for labor portion of Tasks 1 to 2 of TASK ORDER TO-01-24 STM, will be on a lump sum fee basis as stipulated in Article 5, Paragraph 5.1.1 of the AGREEMENT. Compensation for other direct charges will be on Cost Reimbursable-Per Diem basis as stipulated in Article 5, Paragraph 5.1.2 of the AGREEMENT. The estimated compensation is shown as Attachment A.

#### D. ACCEPTANCE

By signature, the parties each accept the provisions of this TASK ORDER TO-01-24 SWR, and authorize the CONSULTANT to proceed at the direction of the CITY's representative in accordance with the "SCOPE OF SERVICES."

For J	acobs Engineering Group Inc.	For CITY OF KEY WEST
Ву:	Oil Ofac.	By:
	Jill J. Rankin	Albert P. Childress
	Manager of Projects	City Manager
	Erîk Lorgende	Dated the day of, 2024
	Erik Jorgensen, P.E.	
	Senior Project Manager	ATTEST:

RR

CMOM PROGRAM GAP ANALYSIS TO-01-24

# TASK ORDER TO-01-24 CITY OF KEY WEST

## SEWER CAPACITY, MANAGEMENT, OPERATION, AND MAINTENANCE PROGRAM GAP ANALYSIS STUDY

#### **Background**

The CITY operates and maintains a sewer collection system consisting of over 330,000 linear feet (LF) of gravity sewers, 85,000 LF of force mains, 1,388 manholes, and 26 sewage lift stations. Much of the CITY's sewer collection infrastructure has been in service for over 30 years. In-flow and infiltration (I/I) into the sewers of runoff from rainfall, groundwater, and sea water is evident and Sanitary Sewer Overflows (SSOs) have been reported in the sewer collection system.

The Florida Department of Environmental Protection (FDEP) issued Consent Order 21-0581 (CO) to the CITY with an Action Item (G) requiring full implementation of a Capacity, Management, Operation, and Maintenance (CMOM) Program by September 1, 2024 in accordance with US EPA document 305-B-05-002 dated January 2005 "Guide for Evaluating Capacity, Management, Operation, and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems".

The City requested assistance with a gap-analysis comparing the City's current management program for the sewer collection system with a fully implemented CMOM program as required under the CO. The CONSULTANT proposes to perform the following scope of services requested by the CITY.

## **SCOPE OF SERVICES**

### Task 1: Project Kick-off Meeting, Data Collection and Site Visit

Under this task, CONSULTANT will perform the following:

An in-person kickoff meeting will be held to review information and data needs with the CITY as well as to coordinate planned activities. CONSULTANT attendees participating in the kickoff meeting will include a Project Manager and a technical lead staff person.

**Deliverables** (electronically, in pdf format)

- Kickoff Meeting Agenda and Minutes
- Information/Data Request Memorandum to the CITY
- Site visit to key locations including the Richard A Heyman Environmental Protection Facility and an overview of the CITY's sewer collection system.

### **Task 2: CMOM Program Gap Analysis**

Under this task, CONSULTANT will perform the following:

- 1. Conduct an in-person two-day workshop to collect input from the CMOM Program gap analysis of the existing sewer collection system management program including:
  - a) Review of applicable information including system data, surveys, reports, and existing drawings related to the City's sewer collection system.
  - b) Review organizational structure, job descriptions, and staffing plans for the wastewater treatment plants and collection system staff to document the following:
    - Organizational chart/Staffing levels,
    - ii. Current vacancies, and timeframes positions remain vacant, staff training needs,
    - iii. Current use of contract services for Operations & Maintenance tasks,
    - iv. Need for additional staff and/or contract operations in meeting future demands, and
  - c) Review maintenance records, including preventive maintenance, corrective maintenance, and reactive maintenance records for the collection system and wastewater treatment plants.
  - d) Review City's capacity management processes and procedures, including system mapping (as-builts, GIS), hydraulic capacity modeling, flow monitoring, satellite community agreements and enforcement, and I&I source identification and remediation.
  - e) Review City's sanitary sewer overflow emergency response plans, processes, tracking, reporting, and corrective action plans.
  - f) Review City's collection system operation, maintenance, and repair standard operating procedures (SOPs), including sewer cleaning, smoke testing, CCTV, pump station maintenance, manhole and air release valve inspections, response to SCADA alerts, corrosion control processes, Sewer and Fats, Oils and Grease (FOG) ordinances and inspection records.
  - g) Review the Richard A Heyman Environmental Pollution Control operation, maintenance, and repair SOPs, including treatment operations, adherence to permitted effluent limitations, remediation plans.
  - h) Review of City's annual budgets for the last 3 complete fiscal years, current year and CIP.
  - i) Review of established key performance measures related to CMOM activities.
  - j) Review of safety plans and infrastructure security for CMOM related activities and systems.
  - k) Review of related training plans/programs.
  - I) Review of public relations plan and customer service request processes.
  - m) Review of new construction standards and requirements for wastewater collection system components.
- 2. Prepare a draft summary report of the CMOM gap analysis effort.
- 3. Conduct a virtual meeting to collect the City's comments on the draft CMOM gap analysis summary report.
- 4. Prepare a final CMOM gap analysis Summary Report

#### Meetings

- Workshop to facilitate and coordinate the CMOM gap analysis effort.
- Virtual review meeting to collect the City's comments on the draft CMOM gap analysis summary report.

#### **Deliverables** (electronically, in pdf format)

- Draft CMOM gap analysis summary report.
- Final CMOM gap analysis summary report.

#### **Assumptions**

- 1. CITY will be Furnishing Data/Information CONSULTANT will reasonably rely upon the accuracy, timeliness, and completeness of the information/data provided by the CITY or other third parties without independent verification. Additional effort by CONSULTANT due to invalid data or information provided by the CITY or others, may entitle CONSULTANT to additional Compensation.
- 2. CITY will provide comments on each deliverable within 10 calendar days of receipt.
- 3. CITY will be responsible for coordination and communication with FDEP, if needed. Input and/or direction provided by FDEP that alters or modifies the proposed scope of services could affect the level of effort required. CONSULTANT will confer with the CITY should increase effort likely be incurred as a result of scope modifications caused by FDEP input and/or direction.
- 4. The purpose of this authorization is limited to identifying activities and/or action needed to comply with the requirements for the City to implement a CMOM program as required under Consent Order 21-0581 (CO).

#### **Exclusions**

The following items are not included in this scope of work:

- 1. The CONSULTANT will perform work in a diligent manner and will deliver work product based on the schedule herein. CONSULTANT will not be responsible for delays out of the control of CONSULTANT.
- 2. A CMOM Program Plan document is not part of the scope of work included within this proposal. Services offered in this proposal provides an assessment of gaps in the current CMOM management system used by the City to maintain and operate the City's sewer and wastewater treatment plant. A CMOM Program Plan document can be prepared under a separate scope of services.
- 3. Cost estimation services have not been included within this proposal.

## **Estimated Project Budget and Duration**

CONSULTANT proposes a total fee of \$63,633 to be billed on a Lump Sum basis for Tasks 1 to 2 for labor. Compensation for direct charges up to an amount of \$7,375 for travel related expenses will be invoiced on a Cost Reimbursable-Per Diem basis as stipulated in Article 5, Paragraph 5.1.2 of the AGREEMENT.

The total project duration is estimated at 12 weeks. A proposed schedule is provided in Table 1 below. CONSULTANT will complete the proposed scope of work within 12 weeks.

We are available to begin work on this effort immediately upon a CITY issued Notice-to-Proceed.

4

Table 1 Level of Effort – CMOM Program Gap Analysis

	Senior Project Manager	Senior Technologist	Technologist	Administrative Assistant	Hours	Fee
	Eng 7	Eng 6	Eng 4	Administrative Assistant		
Tasks \ Rates	\$267.00	\$247.00	\$188.00	\$113.00		
Task 1 - Project Kickoff	20	0	30	0	50	\$ 10,980
Task 2 – CMOM Program Gap Analysis	14	56	180	11	261	\$ 52,653
Total Hours LS	34	56	210	11	311	
Fee Lump Sum Labor   \$	9,078	\$ 13,832	\$ 39,480	\$ 1,243		
			Labor:			\$ 63,633
			Other Direct Expenses:	enses:		\$ 7,375
			F	Subcontractors \$ Travel Allowance \$	\$ - \$	
				Total Fee		\$ 71,008

TO-01-24

CMOM PROGRAM GAP ANALYSIS

Table 1 - Schedule

Activities	Duration	Time from NTP
Task 1.1 - Kickoff Meetings, Data Collection, Site Visit	2 weeks	2 weeks
Task 1.2 – Data Collection and Review	2 weeks	4 weeks
Task 2.1 - CMOM Workshop	1-week <sup>(3)</sup>	5-weeks
Task 2.2 – Draft CMOM Gap Analysis Summary TM	5-weeks	9-weeks
City Review Time for Draft CMOM Gap Analysis Summary TM	1-weeks	10-weeks
Task 2.3 – Virtual meeting to review draft CMOM TM	1-week	11-weeks
Task 2.4 – Final CMOM Gap Analysis Review TM	1-weeks	12-weeks

CMOM PROGRAM GAP ANALYSIS TO-01-24