

City of Cocoa Task Order 2022-20

FY 2022 Engineering Services for the Water System – Program Management Services for Cocoa Utilities Operating Revenue Funded CIP Projects

Objective

The purpose of this task order is to provide program management services, including program management/administration, design management and construction project support services in support of Operating Revenue (OR) funded Cocoa Utilities Capital Improvement Plan (CIP) program projects listed in Attachment A which are funded by the City's Fiscal Year 2022 (FY 2022) budget. This task order is intended to include the estimated level of effort to provide the above described services on a time and materials basis compensation method for the period from October 1, 2021 through September 30, 2022. Services proposed by JACOBS Engineering Group (JACOBS) in this Task Order will be performed in accordance with the Agreement for Continuing Engineering Services for Water System awarded by the City of Cocoa on February 5, 2020.

Scope of Services

Task 1 – Program Management & Administration

Task 1.1 Program Management and Administration

1.1.1 Program Management and Oversight

Day-to-day activities, processes and procedures of JACOBS' Program Management Team (PMT) staff will be the responsibility of JACOBS' Program Manager, who will receive input from the Cocoa Utilities Director and Deputy Director. The following tasks, services, meetings and deliverables will be provided under this task:

- **Program Coordination Meeting** - The PMT will prepare for and attend a monthly coordination meeting with Cocoa Utilities to review program progress and discuss issues impacting program delivery.
- **Finance and Purchasing Coordination Meeting** - The PMT will coordinate a monthly meeting with Cocoa Utilities, City Finance, and City Purchasing Departments to address the status of pending CIP contract actions as well as any contracting issues impacting program delivery.
- **Monthly Progress Report (MPR)** - The PMT will produce a general CIP progress report each month suitable for an audience both internal and external to Cocoa Utilities to address Program progress and key issues.
- **Program Review/Update Meetings** - The PMT will coordinate with Cocoa Utilities to develop and schedule program update meetings as needed to periodically review

and/or update City staff stakeholders on CIP delivery status and progress. The PMT will provide briefing material and presentations (up to 4 anticipated) as needed.

1.1.2 FY2022 Validation and FY2023-2027 Capital Improvement Plan Update

As part of the 2018 Water Capital Plan Update, an annual process was developed that revalidated carry forward and new capital project costs and scope for the new fiscal year, and the current year projects are inputted into a cost-loaded schedule database for day to day management over the course of the new fiscal year. The second effort of this task is the re-validation of the following year's 5-year CIP, new project development, cost estimating, prioritization, funding analysis, and CIP database population/quality control. It is anticipated that the existing 2018 Capital Plan prioritization processes and weighting will be used for this FY2023 CIP update between January 2022 and March 2022. The outcome of the annual validation and CIP update tasks will include several deliverables as follows:

1. FY2021 budget adjustment based on re-validation results and FY2021 budget closeout activities. Execution will include close coordination with Utility and Finance Department in the development and processing of budget adjustments.
2. Updated program management plan focusing on execution requirements for FY2022 which includes a re-baselined CIP schedule.
3. Allocation of FY2021 program costs to individual projects for archival of the prior year's costs.
4. Updated capital plan database for the FY2023-2027 time period, coordinated through City's Utility Department.
5. Summary report for the FY2023 updated CIP.

Task 1.2 Program Controls

General

The Program Control System (PCS) consists of schedule and cost control tools and processes integrated in a system that maintains current scope, cost and schedule status of the CIP projects.

1.2.1 Scheduling

The PCS will include a Master Program Schedule (MPS) developed, maintained and updated through the Project Manager Schedule Update Meetings. The initial MPS was prepared by JACOBS which included the validated capital projects and was expanded as part of the program management services task orders to include selected operating revenue funded projects.

The MPS will be re-baselined at the beginning of each new fiscal year as part of the annual validation process as described in Section 1.1.2 above. The MPS will be a cost-loaded schedule containing the CIP projects maintained at a level of detail sufficient for the PMT and Cocoa Utilities to track and manage CIP progress. The following meetings and deliverable will be provided under this task:

- MPS Report – Each month the PMT will distribute to each Cocoa Utilities Project Managers and Utilities Director and Deputy Director the MPS for the projects listed in Attachment A for review.
- Project Manager (PM) Schedule Update Meeting - The schedule for each project in Attachment A will be updated monthly in the MPS during PM Schedule Update Meetings to show actual schedule progress as percent complete.

1.2.2 Cost Control

The PCS will include a CIP projects data base used by the PMT to manage key program data (e.g. scope, cost, contracts, changes, etc.), especially as it relates to project and program costs.

1.2.2.1 Cost Control Activities

The PMT will coordinate the monthly cost data transfer from the City's financial system into the CIP database, conduct quality control review of the data, resolve any discrepancies, and obtain any missing information. The financial details of project progress will be updated and available for review in the PCS. The PCS will also access relevant information to produce reports and other data essential to the management of the overall program. The PMT will maintain and report on key performance indicators (KPIs) as needed to monitor and manage CIP program delivery progress, and to aid the City and PMT in measuring delivery and financial performance. The PMT will produce KPI reports using the same methodology as previously developed and approved by Cocoa Utilities.

1.2.2.2 Change Management

The City of Cocoa prefers to not have a formalized change management process; therefore, the City and PMT will discuss potential or upcoming changes in capital projects in program status meetings and City project managers will alert JACOBS Program or Deputy Program Managers of scope, cost and schedule changes, so impacts can be thoroughly analyzed and documented.

1.2.3 Document Controls

Cocoa has selected to operate and maintain their own document control process by implementing a directory of capital projects on their server. The PMT will mimic this directory structure on JACOBS servers and will turn any pertinent documents over to Cocoa's document manager on a periodic basis. Each individual project manager will be responsible for tracking status of documents and utilizing document control procedures described in the program management plan.

Task 1 Deliverables

- Program Coordination Meeting (Monthly, or as otherwise directed by Cocoa Utilities)
- Purchasing Coordination Meeting (Monthly, or as otherwise directed by Cocoa Utilities)
- Project Manager Schedule Update Meeting (Monthly)
- Monthly CIP Financial Report (Monthly, or as otherwise directed by Cocoa Utilities)
- Master Program Schedule Update (Monthly)
- FY2022 budget adjustment recommendation

- Updated capital plan database, re-baselined schedule

Task 2 – Program Design Management and Project Support

This task is for overall management of the program design requirements and activities that correspond to the scope and time period of the projects being designed via this task order. This task includes day-to-day planning, project coordination, technical assistance and general consultant / contractor coordination and will be led by the Program Manager. Specific responsibilities include the following:

- **Program Planning** – Track status of design performance on CIP projects, assist with change management to design projects, analyze work distribution among the design consultants, and oversee assignment of design projects to consultants.
- **Design Consultant Team Oversight** – Monitor the performance of the design consulting firms under contract for the Program, review and provide feedback on their performance, assist with development of recovery plans to correct performance deficiencies.
- **Program Design Coordination & Administration** – Coordinate the efforts of the design management team with the City, program management and project controls, and participate in regular coordination meetings for individual projects and those identified in Attachment A, prepare analysis and documentation needed for the CIP, and assist with preparation of supporting materials for requests for financial grants/funding.
- **Meeting Participation** - Participation in Program Management meetings as described in 1.1.1.

The Program Design Management Team (DM-T) will provide design project management and technical assistance for the specific projects shown in Attachment B, or as otherwise directed by Cocoa Utilities. Cocoa Utilities staff and JACOBS will act together as the DM-T to deliver these projects. As discussed with Cocoa Utilities, responsibilities for these projects have been assigned to either Utilities staff or JACOBS. These assignments are identified in Attachment B and were utilized in estimating JACOBS' level of effort for this Task specifically.

As described below, activities are aligned with general program level design management services and coordination as well as management of individual projects performed by engineering consultants or general contractors contracted with Cocoa.

Project Design Management

Design Contract Management

The DM-T will administer the design task order for each project or group of projects on behalf of the City and function as a liaison between the design consultant and the PMT, monitor progress and schedule, monitor change and, in general, assess if the project is proceeding according to plan. The DM-T will coordinate closely with the City Project Manager during the execution of each project.

Project Definition

The DM-T will develop a Project Definition Memorandum containing the design criteria and requirements for the projects to be completed under a Task Order. The Project Definition Memorandum will be provided to the project design team. A Project Definition Memorandum will be prepared for each project or group of projects to be executed by the selected design consultant.

The DM-T will coordinate with the Cocoa Utilities staff to collect existing information on each project.

Task Order Review and Negotiation

The DM-T will work with the City to develop, and review consultant planning and design task orders for the projects identified under the program. Meetings will be held with the design consultants to discuss the project scope and purpose. The task order scope submitted by design consultants will be reviewed for compatibility with the design intent.

The task order scope negotiated with each design consultant will be submitted and reviewed by Cocoa Utilities and the DM-T. Upon DM-T acceptance of final task order scope, City staff will review and provide final approval before processing the Task Order.

Project Execution

The DM-T will work with the City during execution of the project to include progress and performance monitoring, communications with the design consultant, conduct kick-off meetings and engineering document review meetings, and progress status reporting. The DM-T will review meeting minutes and invoices submitted by the design consultants. The DM-T will provide limited assistance (e.g. routine coordination with surveyor contracted by City or design consultant for legal description, review of easement documentation for accuracy of project-related information only, etc.) with property acquisition tasks.

Quality Control

The DM-T will conduct quality control project reviews for the program projects. Reviews will be performed for design projects at 30, 60, 90 and 100% levels of completion and review meetings held with the design consultants. For reports and permit applications, reviews will be performed on the draft submittal. The technical responsibility of the design professional, to include ensuring the design performs as intended, will remain with the design consultants. The quality reviews will be for the purpose of compliance with design intent of the City and the Task Orders under which the designs were prepared.

Cost Estimating

Cost estimating support will be provided by the design consultants for DM-T review. The PMT will provide additional cost estimating services for capital projects when requested by City.

Project Management during Bidding Phase

This task includes DM-T responsibilities related to program bidding activities including, but not limited to:

- Coordination with Utilities Engineering and Purchasing Department regarding preparation of bid packages and addendum coordination.

- Review and evaluation of bids. The City shall make final selection of successful bidder. Scope does not include attendance by the DM-T at pre-bid, pre-award, or pre-construction meetings.

Technical Assistance

JACOBS will provide technical assistance as identified in Attachment B when requested by the City to address any project issues.

Deliverables

The documents listed below will be reviewed and approved by Cocoa Utilities staff and stored in the document control system:

- Project definition memoranda
- Review comments of 30%, 60%, 90% and 100% design documents and draft reports and permit applications from design consultants
- Bid package preparation assistance including review of addenda
- Review of consultant invoices

Task 3-Technical and Regulatory Support

JACOBS will provide engineering and operational assistance in support of various technical and regulatory issues. Updates will be coordinated with Cocoa Utilities when regulatory issues/impacts to the CIP arise on topics including water resources, well field operations and performance evaluation, drinking water treatment, water quality in the treatment and distribution systems, wastewater collection/treatment, water treatment/distribution, effluent management, permitting and numerical nutrient criteria. JACOBS will also attend regulatory meetings conducted by regulatory agencies, professional societies and Central Florida utilities when requested by Cocoa Utilities. Jacobs will provide engineering support related to the assessment, testing and optimization of water supply, treatment and distribution operations.

When the City requests technical or regulatory support, JACOBS will provide a scope and estimated level of effort for City review. The City will provide written authorization to proceed to JACOBS.

Task 4 – Construction Inspection Services

Cocoa has requested construction inspection services on an as-need basis for capital and treatment/storage/pumping related projects. When the City requests construction inspection services, JACOBS will provide a scope and estimated level of effort for City review. The City will provide written authorization to proceed to JACOBS.

As described below, activities are aligned with general construction management services and coordination as well as management of general contractors contracted with Cocoa. This task includes DM-T responsibilities related to program construction activities including, but not limited to:

- Assistance in resolving issues with the design consultant's services during construction for submittal reviews, processing of requests for information, processing of change requests, and design of necessary changes during construction.
- Review progress on submittal review by the design consultant and contractor
- Review of construction pay applications and schedule updates
- Attendance at monthly construction meetings
- Assistance with certification of completion for permits.
- Assistance with review of the as built drawings between the design consultant and Contractor.

The presence or duties of JACOBS' personnel at a construction site, whether as onsite representatives or otherwise, do not make JACOBS or JACOBS' personnel in any way responsible for those duties that belong to City and/or the construction contractor or other entities, and do not relieve the construction contractor or any other entity of their obligations, duties, and responsibilities, including, but not limited to, all construction methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of the construction work in accordance with the construction Contract Documents and any health or safety precautions required by such construction work.

JACOBS and JACOBS' personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions and have no duty for inspecting, noting, observing, correcting, or reporting on health or safety deficiencies of the construction contractor(s) or other entity or any other persons at the site except JACOBS' own personnel.

The presence of JACOBS' personnel at a construction site is for the purpose of providing to City a greater degree of confidence that the completed construction work will conform generally to the construction documents and that the integrity of the design concept as reflected in the construction documents has been implemented and preserved by the construction contractor(s). JACOBS neither guarantees the performance of the construction contractor(s) nor assumes responsibility for construction contractor's failure to perform work in accordance with the construction documents.

Assumptions

The following assumptions were used to develop Task 4:

- No field office will be required for PMT construction inspectors. Staff will be housed in offices provided by the City. If field offices are required due to nature or location of project, this will be provided by contractor as part of their bid.

- Record drawings, based on as-builts from the Contractor, will be prepared by the design consultant.
- Any required certifications for completion will be prepared by the designated engineer of record which will be the firm or entity who prepared the design.

Deliverables

Construction inspection related deliverables associated with this task may include, but are not limited to;

- Daily inspection reports
- Materials testing reports and logs
- Pressure/bacteriological testing reports and logs
- Conversation records
- Review comments for contractor pay requests
- Review comments for contractor red-lined as-built drawings

The documents listed above will be reviewed and approved by Cocoa Utilities staff and stored in the document control system.

Task 5 Utility Information Management Systems Support

JACOBS will provide as-needed GIS and information management support services to the Utility. Types of support activities may include but is not be limited to; further development and implementation of best management practices, development of a GIS strategic plan, support to field operations with implementation of InfoWater and transfer of data to GIS, as well as development of communication tools and processes for use by the Utility.

Task 6 Program Website

Task 6.1 Baseline and Monthly Website Updates

Based on the validation results of Subtask 1.1.2, the existing Program Website will be updated with the new FY2022 baseline information and new projects added to the capital plan for FY2022. The site will be updated on a monthly basis based on the monthly schedule and cost data revisions, and updated key performance indicators (KPIs).

Task 6.2 As-Needed Maintenance and Enhancement Support

Typically websites like these will require additional programming support for enhancements and changes based on public feedback. An allowance of \$3,000 has been allocated to provide on-call troubleshooting or enhancement services upon request.

JACOBS will provide the hosting of the program website through a 3rd party hosting service.

Deliverables

- Updated project information for current website

Additional Services

The following additional services may be provided by JACOBS upon authorization through an amendment to this Task Order by the City and agreement on compensation to JACOBS.

- Services related to development of the City's project financing and/or budget.
- Services related to disputes over pre-qualification, bid protests, bid rejection and re-bidding of the contract for construction.
- Services related to provision of support related to City furnished equipment, materials, and supplies.
- Performance of materials testing, specialty testing and surveying services.
- Services necessary due to the default of the Contractor.
- Services related to damages caused by fire, flood, earthquake or other Acts of God.
- Services related to the City's operation and use of the completed project other than as specifically provided in the above scope of work.
- Services related to warranty claims, enforcement and inspection after final completion.
- Services for the investigation and analysis of contractor claims; preparation of reports on contractor claims.
- Development, coordination or participation in partnering programs.
- Value engineering or similar value analysis studies.
- Performing periodic labor evaluations and processing prevailing wage documentation.
- Construction Management and Inspection services required due to an increase to the number of construction days of the contract for construction on which services are provided.
- Any other services designated in this scope of services as additional services.
- The additional services task will only be utilized upon written authorization by the City of Cocoa.

Safety

JACOBS will manage the health, safety and environmental activities of its staff and the staff of its subcontractors to achieve compliance with applicable health and safety laws and regulations.

JACOBS will notify affected personnel of any site conditions posing an imminent danger to them which JACOBS observes.

Task Order Assumptions:

Assumption - Jacobs will reasonably rely upon the accuracy, and completeness of the information/ data provided by the Client or other third parties.

Any review by JACOBS of design prepared by a third- party shall be for general conformance with the design intent, drawings and specifications but not a complete review of all design details and calculations. The Designer and their design professionals shall remain responsible for the accuracy and completeness of their design and construction documents. JACOBS does not assume any liability for work product(s) prepared by third parties, including but not limited to design and related work and makes no representation or warranty regarding same.

Schedule

This Task Order covers the period from date of October 1, 2021 through September 30, 2022.

Subconsultants

Should the need arise to perform website maintenance or upgrades, JACOBS may contract with a qualified web development subconsultant to have the services performed on a time and materials basis, as discussed in Task 6.2 above.

Reiss Engineering is a subconsultant to JACOBS and may be available for assistance on Design Management support as needed.

Compensation

Compensation for the services authorized under this task order will be provided using the time and materials basis method with budgets between the tasks and expenses being interchangeable as needed. Costs are summarized below by task.

Task	Hours	Fee
TASK 1 Program Management and Administration	937	\$155,843
TASK 2 Program Design Management and Construction Support	336	\$52,216
TASK 3 Technical and Regulatory Support	1,278	\$198,600
TASK 4 Construction Inspection Support	200	\$28,400
TASK 5 Utility Information Management Systems Support	626	\$122,500
TASK 6 Program Website	84	\$13,490
EXPENSES & SUBCONSULTANTS	N/ A	\$24,000
Grand Total	3,461	\$597,069

Levels of effort for tasks are estimates based on the best information available at the time of task order development. As projects scopes are better defined, actual levels of effort

required and associated fees might differ and require coordination between the PMT and the City.

Attachments

Attachment A -Operating Revenue Funded Projects List for Program Management Services

Attachment B - Operating Revenue Funded Project List with Assignment of Responsibilities

Attachment C - Per Diem Rates Schedule

Acceptance

This Task Order shall become part of the Agreement upon execution by both parties.

Approved for City of Cocoa

By _____

Title _____

Date _____

Accepted for JACOBS Engineering Group

By  _____
Francois Didier Menard, PE

Title Vice President

Date August 3, 2021

**City of Cocoa FY2022 Program Management for OR Funded Projects
Task Order 2022-XX Labor Hour Breakdown - 07/09/2021**

TASK #	TASK NAME	Principal/Senior Reviewer/Consultant/Senior Project Manager	Senior Professional Engineer/Scientist/Consultant	Mid-Level Professional Engineer/Scientist/Consultant/Pro ject Manager	Professional Engineer/Scientist/Consultant/Pro ject Manager	Junior Professional Engineer/Scientist/Consultant	Project Engineer/Scientist/Consultant	Office/Project Administration	Labor Hours	Labor Fee
		\$235.00	\$218.00	\$199.00	\$169.00	\$142.00	\$120.00	\$85.00		
1	PROGRAM MANAGEMENT & ADMINISTRATION									
1.1	Program Management and Administration									
1.1.1	Program Management & Oversight	24	24	225	40	40	40		393	\$72,887
1.1.2	FY2022 Validation & CIP Update	8		40		40	100		188	\$27,520
1.2	Program Controls									
1.2.1	Scheduling			32	40	100			172	\$27,328
1.2.2	Cost Control			16	16	100			132	\$20,088
1.2.3	Document Controls							28	28	\$2,380
	QA / QC	24							24	\$5,640
								Task Subtotals	937	\$155,843
2	PROGRAM DESIGN MANAGEMENT & PROJECT SUPPORT									
	FY22 Support	8	24	40	120	72	72		336	\$54,216
								Task Subtotals	336	\$54,216
3	TECHNICAL & REGULATORY SUPPORT									
	FY22 Support	48	100	100	180	600	250		1,278	\$198,600
								Task Subtotals	1,278	\$198,600
4	CONSTRUCTION INSPECTION SUPPORT									
	FY22 Support					200			200	\$28,400
								Task Subtotals	200	\$28,400
5	UTILITY INFORMATION MANAGEMENT SYSTEMS SUPPORT									
5.1	GIS Support & Training			600			26		626	\$122,520
								Task Subtotals	626	\$122,520
6	PROGRAM WEBSITE									
	Website Updates		8	6	4	48			66	\$10,430
	As-Needed Maintenance & Enhancement Support			6	6	6			18	\$3,060
								Task Subtotals	84	\$13,490
									Labor Total	3,461
									Expenses	\$4,000
									Subcontracts	\$20,000
									Task Order Total	\$597,069

Attachment A

CIP/Utility Projects List for FY22 Program Management Services - July 9, 2021

PN	FY2022 Operating Revenue Funded Projects
WS1106	Raw Water Well Rehabilitation (WS-19)
To Be Assigned	Dyal CO2 Bulk Tank Replacements
WS18SC	Dyal SCADA Server
WS19GF	GW Flume Coating Repairs
WS1201	Pipe Infrastructure Assessment & Repair
WS21VP	Viera Ammonia Addition
WS21BL	Replace Beach Tanks at Wewahootee
WS21OZ	Assessment and Lining Ozone at Dyal

Attachment B

CIP/Utility OR Funded Projects List for FY22 Program Management Services - July 9, 2021

PN	FY2022 Operating Revenue Funded Projects	Phases for FY2022	Design Management	Bid/Construction Project Support	Construction Management/ Inspection	Technical Assistance
WS1106	WS1106 Raw Water Well Rehabilitation (WS-19)	Design and Construction	City of Cocoa	City of Cocoa	City of Cocoa	Jacobs
To Be Assigned	Dyal CO2 Bulk Tank Replacements	Construction	City of Cocoa	City of Cocoa	City of Cocoa	Jacobs
WS18SC	Dyal SCADA Server, OS and Server Software Upgrade	Design and Construction	City of Cocoa	City of Cocoa	City of Cocoa	Jacobs
WS19GF	GW Flume Coating Repairs	Planning	City of Cocoa	Not Applicable	Not Applicable	Jacobs
WS1201	Pipe Infrastructure Assessment & Repair	Construction	City of Cocoa	City of Cocoa	City of Cocoa	Jacobs
WS21VP	Viera Ammonia Addition	Design and Construction	City of Cocoa	City of Cocoa	City of Cocoa	Jacobs
WS21BL	Replace Beach Tanks at Wewahootee	Construction	City of Cocoa	City of Cocoa	City of Cocoa	Jacobs
WS21OZ	Assessment and Lining Ozone at Dyal	Planning	City of Cocoa	Not Applicable	Not Applicable	Jacobs

Attachment C

EXHIBIT "A"

Jacobs Engineering Group Rate Schedule

Classification	Description	Rate
Engineer 9	Principal	\$235
Engineer 8	Senior Reviewer/Consultant	\$235
Engineer 7	Senior Project Manager	\$235
Engineer 6	Senior Professional Engineer/Scientist/Consultant	\$218
Engineer 5	Mid-Level Professional Engineer/Scientist/Consultant/Project Manager	\$199
Engineer 4	Professional Engineer/Scientist/Consultant/Project Manager	\$169
Engineer 3	Junior Professional Engineer/Scientist/Consultant	\$142
Engineer 2	Project Engineer/Scientist/Consultant	\$120
Engineer 1	Junior Project Engineer/Scientist/Consultant	\$110
Engineer 0	Engineering Intern	\$95
Technician 5	Senior Construction Manager/Senior Designer	\$169
Technician 4	Construction Manager/Senior Technician	\$142
Technician 3	Senior Construction Inspector	\$120
Technician 2	Construction Inspector/Technician	\$110
Technician 1	Junior Construction Inspector/Junior Technician	\$85
Technician Aide	Technical Aide	\$80
Office	Office/Project Administration	\$85

Notes:

1. Billing rates for the City of Cocoa are designated for the length of this Agreement from February 2020 through January 2023.
2. These rates do not include other direct expense cost. Reimbursable other direct expenses shall be billed in accordance with the terms of the contract.
3. Billing rate schedule is for time basis work order and the City will be billed based on actual hours by category designated for an individual employee.
4. Jacobs reserves the right to request rate modifications for any future extensions to this agreement. Rate modifications must be established and agreed upon by both parties.
5. All copies, reproduction, subconsultant work, materials or equipment purchased or other direct costs shall be pass-thru cost without any mark-up.
6. Travel is reimbursable at the IRS rate for employees and specialists outside the Orlando office only.