

**Construction Phase Services
For Marco Shores Alt. Water and Sewer Improvements Project
Scope of Services
AECOM Technical Services, Inc.
July 23, 2018**

A. BACKGROUND

The City of Marco Island (OWNER) retained AECOM Technical Services, Inc. (CONSULTANT) to provide engineering services for the design, permitting and bidding of the Marco Shores Alternative Water and Sewer Improvements Project. The Project includes potable water; and wastewater collection, conveyance and treatment improvements. The potable water improvements will allow OWNER to supply potable water to the Marco Shores area with potable water produced on Marco Island rather than with potable water now supplied by Collier County. The Marco Island North Water Treatment Plant (NWTP) and South Water Treatment Plant (SWTP) have sufficient capacity to serve Marco Shores. The wastewater improvements will allow the Marco Shores WWTP to be decommissioned and demolished, and the wastewater from Marco Shores' service area will be conveyed to the Marco Island Reclaimed Water Production Facility on Marco Island for treatment.

CONSULTANT completed the design and permitting services for the Marco Shores Alternative Water and Sewer Improvements Project. OWNER recently received bids for construction of this project, which includes the following water and sewer system improvements:

- Construction of a new wastewater Master Pump Station (MPS) adjacent to the Collier Boulevard ROW approximately 700 feet north of Isles of Capri Boulevard.
- Directionally drill a new HDPE sanitary force main sub-aqueously under the Marco River near the Jolley Bridge.
- Construct a new HDPE/PVC sanitary force main from the new Master Pump Station and connect to the Marco Island wastewater collection system located at the intersection of East Elcam Circle and Collier Boulevard.
- Construct a new sanitary force main between the existing Isles of Capri wastewater pump station and the new wastewater Master Pump Station.
- Decommission and demolish the existing treatment plant improvements located at 1955 Mainsail Drive, including the removal of tanks, vessels, fences, exotic vegetation, pumps, buildings and all above-ground and underground infrastructure.
- Decommission and demolish the existing Isles of Capri wastewater Pump Station.

- Directionally drill a new HDPE potable water main sub-aqueously under the Marco River near the Jolley Bridge. (Bid Add Alternate 1).
- Construct a new HDPE/PVC potable water main from Collier Boulevard at North Barfield Drive to the South landing of the Jolley Bridge (Bid Add Alternate 2).
- Pig, flush, pressure test and repair the existing 16-inch dry potable water main (Bid Add Alternate 2).
- Connect the existing 16- inch potable water main that is currently not in use (which is located on Collier Boulevard from the north landing of the Jolley Bridge to Mainsail Drive) to the Marco Shores potable water main on Mainsail Drive and place it in service (Bid Add Alternate 2).

The OWNER has approved award of the construction project, including Bid Alternates 1 and 2. The OWNER has requested that CONSULTANT provide Construction Phase services for the Marco Shores Alternative Water and Sewer Project.

B. DESCRIPTION OF ASSIGNMENT

CONSULTANT will provide Construction Phase Services for implementation of the recommended alternative water and sewer improvements, including Bid Alternates 1 & 2. The services will be completed under Task 7: Construction Phase Basic Services.

A detailed description of the scope of services for each of these tasks is provided below.

C. SCOPE OF SERVICES

TASK 7 – CONSTRUCTION PHASE BASIC SERVICES

During construction of the projects, CONSULTANT will provide construction phase basic services. The construction phase basic services will include the following:

1. Project Management activities comprise CONSULTANT contract administration, coordination of CONSULTANT project staff, monitoring of progress and project costs, and maintaining a project Quality Management System and internal safety plan during the construction services phase of the project.
2. Attend pre-construction meeting and assist the OWNER with the preparation of the meeting minutes.
3. Prepare conformed set of original signed and sealed construction documents. Furnish 5 copies of conformed documents to the OWNER.

4. Conduct biweekly construction progress meetings and prepare and distribute the meeting minutes. The estimated quantity of meetings is identified in the Project Budget. The construction schedule will be reviewed during the progress meetings, and recommendations required to maintain/improve the schedule will be made to the contractor. Bi-weekly progress meetings will be attended by the Project Engineer or designated representative. Technical leaders for supporting disciplines will also participate in project meetings via conference call, as needed. The Project Manager will attend meetings via conference call.
5. Visit the site of the proposed improvements periodically to observe the construction areas designated on the construction plans in cooperation with the OWNER's staff. Site visits will be conducted in conjunction with progress meetings, or as requested by the OWNER. CONSULTANT shall have no responsibility for construction means, methods, techniques, sequences or procedures or site safety and safety precautions and programs in connection with the construction work, all of which are solely the Contractor's responsibility. CONSULTANT shall not have control over or charge of acts or omissions of the Contractor or subcontractors, or their agents or employees, or of any other persons performing portions of the construction work. The Project Budget is based on the quantity of supplemental site visits identified in the Project Budget. These visits will include the necessary visits needed for regulatory certifications as stipulated in the permits obtained for this project.
6. CONSULTANT will receive submittals of others, including shop drawings, product data and samples from Contractor, and shall promptly review and take other appropriate action on them, but shall only review same for general conformity with the design concept of the Project and the general intent of the contract documents. Shop drawings, samples, and other submission reviews by CONSULTANT shall not include checking of specifics, dimensions or openings for potential conflict. CONSULTANT's review of a specific item shall not indicate approval of an assembly of which the item is a component. CONSULTANT will prepare and maintain a log of submittals to include submittal number, subject, and date received, reviewer, action taken and date returned. The estimated number of shop drawings to be reviewed by CONSULTANT is presented in the Project Budget.
7. CONSULTANT will review results of specified field testing and provide OWNER and CONSTRUCTION CONTRACTOR notice when testing has not met contractual requirements.
8. Prepare responses to Contractor's Requests-for-Information (RFIs). CONSULTANT will provide interpretations of the contract documents and will provide clarifications or explanations of the design intent and requirements. CONSULTANT will also prepare and maintain a log of such received requests, noting the date received, subject, resolution and date response was returned to the Contractor. It is assumed that CONTRACTOR and Owner's Representative will be able to adequately describe the construction issues with photographs, drawings and narrative descriptions. Site visits are not included in this work item. Should the number of RFIs be exceeded, the CONSULTANT reserves the right to request a budget adjustment. It is difficult to anticipate the level of effort that will be required to respond to each RFI. Therefore, CONSULTANT will notify the OWNER when 80% of the cost budget for this work is reached so

CONSULTANT and OWNER can discuss a mutually agreeable budget adjustment. The estimated number of RFIs for construction phase basic services is presented in the Project Budget.

9. Assist OWNER with management of proposed Changes to the Work by preparing Requests-for-Proposed-Change (RPCs) Quotation, evaluating RPC quotes, evaluating and responding to Contractor claims for time extension or additional compensation, and preparing contract change orders for approval by OWNER. The estimated quantity of RPCs for the construction phase basic services is presented in the Project Budget.
10. Provide consultation and communication with the OWNER's Project Manager during construction. Prepare and submit construction closeout documents required by regulatory agencies to close out permits, which include: USACOE, FDEP – General Permits Potable Water and Wastewater, FDEP – 10-2 Certification, FDEP- ERP, FDOT, and Collier County Growth Management.
11. Assist the OWNER with review of progress payments for duration of the contract. After receipt and review of each application for payment from the Contractor, provide written notice to the OWNER recommending payment to the Contractor, or return the request to the Contractor providing written notice of CONSULTANT's reason for disapproval. Such recommendations of payment will constitute CONSULTANT's representation to OWNER, based on such observations and review that, to the best of CONSULTANT's knowledge, information and belief, Contractor's work has progressed to the point indicated. The estimated quantity of review of progress payments is detailed in the Project Budget.
12. Assist OWNER with the following services related to each Contract Closeout:
 - a. Perform a Substantial Completion walk through and develop final punch list in conjunction with OWNER's staff.
 - b. Prepare a "Certification of Substantial Completion and Final Completion".
 - c. Subsequent to the completion of all punch list items, CONSULTANT will perform a Final Completion walk through in conjunction with OWNER's staff.
 - d. CONSULTANT will submit record drawings to the appropriate regulatory agencies and provide the OWNER with an electronic copy on a CD. Upon completion of the work, CONSULTANT shall compile for and deliver to OWNER a set of record documents conforming to information furnished to CONSULTANT by the Contractor. Since record drawings are based on information provided by others, CONSULTANT shall have no responsibility for the accuracy of the information contained in such record documents. CONSULTANT assumes that no record drawings are required for the demolition work. CONSULTANT assumes record documentation from Contractor shall be submitted in an AUTOCAD version compatible with CONSULTANT's construction drawings as required in contract documents.
13. CONSULTANT will provide startup assistance to coordinate with equipment manufacturers for training and startup services that will be provided by contractor to the OWNER's staff.
 - a. Start-up services will be attended by members of the design team (Project Manager or designated representative) to ensure that items of equipment operate in accordance with specified design parameters.

- b. Contractor will prepare a start-up plan and will submit the information to the CONSULTANT and OWNER for review and modification prior to actual startup.
14. CONSULTANT will assemble O&M manuals from the contractor into one binder and submit to the OWNER. The manual will be prepared in sufficient time to accommodate staff training to be done by equipment vendors prior to equipment startup. O&M Manual will include:
- a. Original manufacturer's literature and prints of shop drawings in each copy of the manual. Manufacturer's literature and shop drawings are to be organized and filed by equipment identification number. Each piece of equipment discussed in the manual will have a reference section that will include, at a minimum, reference to the project specifications by specification number and drawing by number. The O&M manual will also include preventative maintenance requirements, spare part lists, and startup/shut down requirements from the manufacturer.
 - b. O&M Submittal log
 - c. Two copies of the draft manual are to be furnished for OWNER review. After addressing comments from the OWNER, five copies of the final manual and one electronic copy will be delivered to the OWNER on a CD.

DELIVERABLES – Construction Phase

The CONSULTANT will provide the following deliverables:

- 1. Five copies of Conformed Drawings (each task)
- 2. Electronic copy of the Record Drawings
- 3. O&M Manuals in hard and electronic copy

All text-oriented deliverables will be provided in electronic format using Microsoft WORD (version 2000 or higher) and all drawings will be provided in AutoCAD (version 2006 or newer).

CONSULTANT is not responsible for integrity of electronic files with compatibility of future software versions.

E. TIME OF PERFORMANCE

CONSULTANT will complete the Construction Phase Services over a 14 month period, from the date of issuance of construction NTP. It is anticipated that active construction will be completed over a 40 week construction period.

CONSULTANT will observe the time limitations. However, should there be delays in receiving information from others and in obtaining subsequent authorization, approvals, and review comments from the OWNER, and other governmental agencies, the schedule will be updated and adjusted as mutually agreed upon by CONSULTANT and the OWNER. CONSULTANT shall not be responsible for delays that occur as the result of action or inaction of others.

F. OWNER RESPONSIBILITIES

The OWNER will be responsible for the following:

1. Provide Resident Inspection Services and Construction Management of the project and will enter into an agreement with the construction contractor. The OWNER shall provide full time observations of construction whenever the contractor is working. The OWNER will forward to CONSULTANT daily observation reports with photographs within 24 hours of the work. The OWNER will witness all pressure tests of water mains and force mains and final connections. The OWNER will document these pressure tests and connections in the daily observation reports.
2. Review all documents presented by CONSULTANT; obtain advice of an attorney, insurance counselor, and other as the OWNER deems appropriate for such review and render decisions pertaining thereto within reasonable time so as not to delay the services of CONSULTANT.

G. EXCLUSIONS AND ADDITIONAL PROVISIONS

1. CONSULTANT shall be entitled to rely upon the accuracy of data and information collected and provided by OWNER and others without independent review or verification, and CONSULTANT shall not be responsible for defects in its services attributable to its reliance upon or use of such information. However, any discrepancies discovered by the CONSULTANT will be brought to the immediate attention of the OWNER.
2. Notwithstanding any provision to the contrary in the Agreement or otherwise, any cost opinions, estimates, or projections provided by CONSULTANT will be on a basis of experience and judgment, but since CONSULTANT has no control over market conditions or bidding procedures, CONSULTANT cannot and does not warrant that bids, ultimate construction cost, or project economics will not vary from such opinions, estimates, or projections.
3. Site Visits are not included as a part of the RFI process. It is assumed that CONTRACTOR and OWNER's Representative will be able to adequately describe the construction issues with photographs, drawings and narrative descriptions.
4. The estimated number of RFIs is presented in the Project Budget. Should the number of RFIs be exceeded, the CONSULTANT reserves the right to request a budget adjustment.
5. It is difficult to anticipate the level of effort that will be required to respond to each RFI. CONSULTANT will notify the OWNER when 80% of the cost budget for this work is reached so CONSULTANT and OWNER can discuss a mutually agreeable budget adjustment.
6. During the course of the Project, the OWNER may request additional services from the CONSULTANT. Additional services shall be provided as mutually agreed between the OWNER and CONSULTANT.
7. It is assumed that the CONSTRUCTION CONTRACTOR will prepare a Stormwater Pollution Prevention Plan when applying for the NPDES Permit.
8. Notwithstanding any other provision to the contrary in the Agreement or otherwise, CONSULTANT shall perform its services consistent with the professional skill and care ordinarily provided by members of CONSULTANT's profession practicing in the same or similar locality under the same or similar circumstances. CONSULTANT shall perform its services as expeditiously as is consistent with the professional skill and care and the orderly progress of the Project. No warranty or guarantee, express or implied, is made or intended by the Agreement. Nothing in the Agreement,

including, but not limited to, Section 16.1 or otherwise, shall be construed to establish a fiduciary relationship between the parties.

9. Nothing in the Agreement, including, but not limited to, Section 8.3.2 or otherwise shall be construed or interpreted as requiring CONSULTANT to assume the status of, and OWNER acknowledges that CONSULTANT does not act in the capacity nor assume the status of, OWNER or others as a “generator, “operator”, “transporter”, or “arranger” in the treatment, storage, disposal, or transportation of any hazardous substance or waste as those terms are understood within the meaning of the Resource Conservation and Recovery Act (RCRA). Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or any other similar federal, state, or local law, regulation or ordinance. OWNER acknowledges further that CONSULTANT has played no part in and assumes no responsibility for generation or creation of any hazardous waste, pollution condition, nuisance, or chemical or industrial disposal problem, if any, which may exist at any site that may be the subject matter of this Agreement.

H. COMPENSATION

For the professional services set forth in this contract, OWNER shall pay the CONSULTANT using a billing rate method of compensation Agreement using CONSULTANT’s Employee Hourly Rate Schedule as noted in Attachment A. The maximum fee for the services described in the Scope of Services shall not exceed \$319,994 unless authorized by OWNER in writing.

Attachment A to this Scope of Services provides details of the proposed Project Budget and is provided for estimating purposes only. Actual time and materials for each subtask may vary based on conditions encountered.

Certain assumptions have been made in developing the fee for services. To the extent possible, they are stated in this Scope of Services. The proposed fee for this Scope of Services is based on an estimated construction cost of up to \$9.2 million. If changes to the work result in changes in the level of effort presented in this Scope of Services, the scope of services and professional fees will be revised by mutual agreement.