

**053-19 Appendix A - Scope of Services**  
**Construction Management at Risk (CMAR) Services for the Bartram/US1 and Cecil Field Water Main Project**

JEA requests Proposals from interested and qualified Proposers to provide Construction Manager at Risk (CMAR) services during design and construction of two substantially similar projects: the Bartram/US1 and Cecil Field Water Main projects (collectively, the “Project” or the “Work”). The Work generally includes installation of water main in these two different service areas within JEA, to be constructed at two separate times as set forth below.

For each area/project, the initial scope of work will consist of pre-construction phase services such as design and constructability reviews, construction phase sequencing, coordination, maintenance of traffic, and maintenance of utility operations pre-planning, alternatives evaluations, cost estimating and cost control (value engineering) services, project schedule development, and preparation and submission of an “open-book” Guaranteed Maximum Price (GMP) proposal for construction phase services.

For each area/project, the contract shall be amended to include construction phase services following negotiation of a mutually acceptable GMP. The contract may be amended to include construction phase services in multiple phases. During the construction phase, the CMAR shall serve as the single point of responsibility for construction of the work in strict accordance with the contract documents.

The Bartram/US 1 scope of work is expected to generally include the following:

- 200 linear feet of 16-inch water transmission piping and fittings (Bartram to US 1)
- 17,500 linear feet of 24-inch water transmission piping and fittings (Bartram to US 1)
- Multiple trenchless crossings involving horizontal directional drill and auger jack and bore crossings of US Route 1 (Philips Highway), Florida East Coast Railway, Old St. Augustine Road, I-95 and access ramps, Bartram Park Boulevard and the Durbin Creek corridor highways, railroads and major intersections

The Cecil Field scope of work is expected to generally include the following:

- 11,050 linear feet of 24-inch water transmission piping and fittings

The total cost for CMAR services (pre-construction and construction phase services) is budgeted at approximately \$11,800,000.

The anticipated Project schedule major milestones are the following:

Bartram/US 1:

- Project design: January 2019 to October 2019
- CMAR pre-construction Services: May 2019 to October 2019
- Construction: January 2020 to January 2022

Cecil Field:

- Project design: October 2019 to July 2020
- CMAR pre-construction services: April 2020 to July 2020
- Construction: May 2021 to June 2022

The services which the CMAR shall provide include, but are not limited to, those described or specified herein. The services described or specified shall not be deemed to constitute a comprehensive specification having the effect of excluding services not specifically mentioned.

The CMAR is expected to actively engage and collaborate with JEA and its Engineer, Mott MacDonald, during design development and construction, and assist the construction team in meeting the project goals and objectives. These goals and objectives include:

- optimizing the design based on anticipated site conditions,
- producing a complete and accurate set of design documents,
- meeting the project budget and completion deadline,
- facilitating the safe and efficient execution of the work by qualified contractors,
- ensuring the work conforms fully to contract requirements,
- identifying and mitigating project risks,
- and minimizing project impacts to JEA operations, other project stakeholders, and the public.

The CMAR will provide all services listed below for each project outlined below.

#### Pre-Construction Phase

Specific duties of the CMAR include, but are not limited to, the following:

1. Attend a project kick-off meeting.
2. Attend design review meetings at 30, 60, and 90 percent design.
3. Participate in conference calls with the Engineer throughout the design phase to discuss design development issues.
4. Attend up to two community outreach meetings.
5. Attend a GMP development meeting to confirm GMP guidelines and format.
6. Review the 30 percent design deliverable and identify constructability, coordination, and scope concerns.
7. Evaluate feasibility, cost and schedule impact of design alternatives under consideration.
8. Attend a MOT/Maintenance of Utility Operations Planning workshop.
9. Develop and maintain a preliminary project schedule for design and construction.
10. Prepare a preliminary GMP based on the 30 percent design deliverable.
11. Lead a preliminary GMP review workshop.
12. Identify value engineering opportunities (including HDD/trenchless design) based on the 30 percent design deliverable.
13. Identify Owner direct purchase, long-lead, and sole source procurement items.
14. Identify potential early start work packages.
15. Develop GMP subcontractor and vendor scopes and bid packages.
16. Conduct bidder outreach and pre-qualification.
17. Review the 60 percent design deliverable and identify constructability, coordination, budget, or scope concerns.
18. Update the project schedule to reflect the 60 percent design.
19. Solicit competitive bids for subcontractor and vendor bid packages.
20. Prepare and submit an open-book GMP proposal based on the final 60 percent design deliverable.
21. Identify value engineering opportunities based on the 60 percent design deliverable.
22. Lead 60 percent GMP review workshop.
23. Negotiate the GMP.

24. Review the 90 percent design deliverable and identify constructability, coordination, or scope concerns.
25. Update the GMP based on the 90 percent design deliverable identifying any changes in scope and price.
26. Review the 100 percent design deliverable and identify constructability, coordination, budget, or scope concerns.
27. Update the GMP based on the 100 percent design deliverable identifying any changes in scope and price.
28. Any other duties as negotiated.

The above scope of work shall apply for each section of the project and will be conducted separately and at different times.

#### *GMP Development Process*

1. At the specified stage of design development, the CMAR shall be responsible for providing an open-book GMP proposal for construction of the work. The GMP shall conform to the contract requirements and represent the total cost of constructing, commissioning, and warranting the work as specified. The GMP shall consist of the CMAR's fee, project indirect costs ("General Conditions"), the direct cost of the work, insurance, bonds, contingencies, allowances, and related costs. The CMAR's fee shall be expressed as a percentage of the cost of the Work. The fee shall include overhead, profit, and other allowable expenses as set forth in the CMAR Agreement.
2. The GMP proposal shall include cost summaries by division of work, trade, and work area, supported by a detailed line-item breakdown for all individual work activities. Subcontractor and vendor bid items which may be shown as lump sum line items subject to JEA approval. Each line item breakdown shall include the estimated quantity, man-hours and labor rates, materials and material unit costs, owned and rented equipment and associated rates, other incidental costs and sales tax. The CMAR shall provide JEA with copies of all bid packages, scope sheets, takeoffs, quotes, and supporting documentation used to prepare the GMP for review prior to GMP negotiations.
3. The CMAR shall pre-qualify vendors and subcontractors and provide a list of pre-qualified bidders for JEA approval prior to soliciting competitive bids for individual work packages. The CMAR may self-perform individual work packages included in the GMP subject to JEA approval. JEA may require that the CMAR submit competitive sealed bids for such work with the bids to be opened by JEA.

#### *Construction Phase*

Specific duties of the CMAR during the construction phase include all duties and obligations typically carried out by the General Contractor including, but not limited to, the following:

1. Obtain all required construction permits and approvals.
2. Prepare and submit the baseline project schedule submittal.
3. Upon issuance of notice to proceed, commence and complete construction.
4. Attend the pre-construction meeting.
5. Attend bi-weekly progress meetings.
6. Submit monthly project schedule updates, or schedule updates as needed should issues arise which impact the schedule.

7. Attend up to two community outreach meetings as requested by JEA.
8. Monitor and report JSEB participation.
9. Manage the project sites.
10. Supervise, coordinate, and execute the Work in strict accordance with the contract requirements.
11. Ensure that appropriate programs and measures are in place at all times to protect the safety and health of construction personnel, JEA personnel, and the general public during performance of the work.
12. Maintain traffic flows and JEA operations throughout construction.
13. Coordinate all shutdowns and outages.
14. Coordinate all testing and inspections with local authorities and JEA's testing agencies.
15. Commission and close out the Project.
16. Any other duties as negotiated.

Additional duties of the CMAR during construction include, but are not limited to, the following:

1. Provide monthly actual cost reports and updated GMP cost projections including authorized use of contingencies and allowances.
2. Continue collaborating with JEA and Mott MacDonald to mitigate the cost and impact of any issues arising during construction.
3. Key CMAR team members including the CMAR Project Manager, CMAR Project Superintendent, and representatives of key subcontractors and suppliers (the horizontal directional drilling and/or auger jack and bore subcontractor for example) shall attend meetings and workshops as appropriate to support the objectives of these events.

*CPM Requirements*

Develop and maintain an overall CPM schedule for the project as outlined in Exhibit D.