

DRAFT August 16, 2019

171024

Mr. Craig Wilson, PMP, DBIA
Engineering Manager
Cape Fear Public Utility Authority
235 Government Center Drive
Wilmington, NC 28403

**Re: Proposal for Professional Consulting Engineering Services
Kings Bluff Raw Parallel Raw Water Transmission Main Project
CFPUA Project No. 17-C1124
Amendment No. 1**

Dear Mr. Wilson,

McKim & Creed is pleased to present this Amendment No. 1 to our Agreement, dated June 15, 2017, for the Kings Bluff Parallel Raw Water Transmission Main. This scope of services includes Construction Administration and Resident Project Representative services for construction of the proposed project. Our scope of services is detailed as follows:

I. PROJECT UNDERSTANDING

The proposed Kings Bluff Parallel Raw Water Transmission Main Project will entail construction of a 14-mile 54-inch raw water main to increase the capacity and reliability of raw water supply to southeast NC. The new main will be constructed within an existing 75-foot easement and will parallel an existing 48-inch raw water main owned and maintained by the Lower Cape Fear Water & Sewer Authority (LCFWSA). CFPUA is providing manage and coordination for the project partners, which include both Brunswick County and the LCFWSA.

This Amendment No. 1 to the referenced Agreement (17-C1124), will entail Construction Administration and Construction Observation Services to assist CFPUA with construction of the proposed pipeline. Our team will work directly with CFPUA for project implementation and coordinate with Brunswick County and the LCFWSA as appropriate for the identified project duration. Our detailed scope of services is provided as follows:

II. SCOPE OF SERVICES

Task 1 Construction Administration

McKim & Creed will provide *Construction Administration* for the referenced project based on one single prime contract. The scope of work presented in this task is based on a total construction duration of 33 months (144 weeks).

1) Construction Administration – Construction Administration services will include the following primary tasks:

- Schedule and conduct pre-construction conference. Prepare and distribute minutes.
- Schedule and conduct progress meetings on a monthly basis. Prepare and distribute minutes.
- Review of contractor project completion schedule
- Review of contractor submittal schedule
- Review of contractor schedule of values
- Review and approve shop drawings from contractor.
- Review of contractor questions for clarification and issuance of RFI.
- Endeavor to resolve problems in a timely manner as work proceeds and involve appropriate parties in resolving disputes and problems associated with the project.
- Pay request review and recommendation for payment to Owner with respect to format, required support documentation, and review and verification of quantities for pay requests.
- Change Order review and recommendation to Owner.

2) Project Closeout – At the completion of the project, McKim & Creed will prepare the appropriate close-out documentation. Primary tasks for the Project Closeout phase are as follows:

- Prepare construction record drawings from red-line information provided by the Contractor (field surveys will be provided by the contractor) in AutoCAD Format. Provide construction record drawings on mylar media and electronic files on CD (AutoCAD format) to owner.
- Provide Certification of Substantial Completion and Certification of Final Completion.
- Provide engineer dependent close-out documents to owner.
- Provide certifications to NCDEQ Public Water Supply or other regulatory agencies as required.

Task 2 Resident Project Representative

McKim & Creed will provide a Resident Project Representative (RPR) for the project based on the following anticipated schedule:

Task	Estimated Duration (Weeks)	Hours Per Week	Total Hours
Mobilization & Staging	13	20	260
Schedule I – 54" Pipe Construction	99	60	5,940
Schedule II – System Interconnections	19	20	760
Completion & Project Closeout	13	20	260
Total Estimate RPR Hours			7,720

Primary RPR task will be provided as follows:

- Verify that the construction of the proposed transmission main is performed in general accordance with the plans and specifications.
- Field verify quantities prior to pay application processing
- Field observations of project at substantial and final completion
- Preparation of punch-list at both substantial and final
- Coordinate completion of punch list items with contractor
- Prepare daily field inspection reports
- Note that Special Inspections are not anticipated for this project and are not included in this scope of work.
- The RPR will be invoiced at a rate of \$120 per hour.
- Mileage will be reimbursed at the current IRS rate.

III. ANTICIPATED SCHEDULE

The scope of services outlined in this proposal is based on a continuous construction schedule of 33 calendar months (144 weeks). If the project is delayed or extended beyond this timeline, the Engineer shall be entitled to additional compensation if required to complete the services detailed in this proposal.

IV. OWNER RESPONSIBILITIES AND PROJECT PROVISIONS

The Authority will be responsible for the following:

- All communication and correspondence for this project will be through the CFPUA, who may be referred to in this proposal as "Owner."
- Owner shall attend project meetings and provide timely review of submittals, pay requests, change order requests, requests for clarification,

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or requests for interpretation as it pertains to Owner-related items in the design documents.

V. ADDITIONAL SERVICES

Additional services as identified in the original agreement shall remain in effect for this Amendment No. 1. Additional services requested by CFPUA shall be performed at an agreed upon scope and fee commensurate with the required tasks.

VI. BASIS FOR COMPENSATION

McKim & Creed, Inc. will perform the services outlined in the Scope of Work detailed above for the fixed fee amounts as indicated below. Note that the credit for unused fees from the original agreement are incorporated as indicated.

Description	Fee
Task 1: Construction Administration	\$460,000
Task 2: Resident Project Representative	\$888,000
<i>Deduct: Geotechnical Investigations</i>	<i>(\$8,000)</i>
<i>Deduct: Easement Surveys</i>	<i>(\$6,300)</i>
<i>Deduct: Unallocated Budget</i>	<i>(\$35,300)</i>
Estimated Fee (Tasks 1-2)	\$1,297,700

We appreciate the opportunity to provide these services and look forward to our continuing work with the CFPUA. If you have any questions, please do not hesitate to contact me.

Sincerely,
McKIM & CREED, INC.



Tony Boahn, PE
Vice-President