



October 19, 2018

Mr. Kyle Manning, P.E.
Senior Project Manager
Durham County Engineering and Environmental Services
5926 Highway 55 East
Durham, North Carolina 27713

**Re: Professional Engineering Services Proposal
Triangle WWTP – Chemical Feed System Improvements**

Dear Mr. Manning:

Pursuant to Durham County's request, Black and Veatch is pleased to offer this proposal for design, permitting, and bidding services for the sodium hypochlorite chemical feed system improvements at the Triangle WWTP.

Scope of Work

In general, the work encompasses larger diaphragm pumps that can be controlled remotely from the administration building along with a conveyance piping system that is easily accessible for maintenance and eliminates past issues associated with off-gas buildup. Additional improvements include replacement of the existing electric actuators that serve drain lines for the above ground storage tank and new chemical feed analyzers to improve the overall reliability of the system.

Scope of Services

The scope of services, as described in Exhibit A, includes the following:

1. **Design** – Prepare drawings and specifications to convey the project scope of work to prospective bidders. The design phase will include three submittal milestones (50%, 90%, and 100%) and meetings to review and address comments by Durham County related to the project.
2. **Permitting** – Prepare and submit Authorization-to-Construct (ATC) permit to NC Division of Water Quality. Engineer will be responsible for addressing and responding to questions issued by NC DWQ.

3. **Bidding** – Assist Durham County with preparing and issuing project for advertisement. Prepare required number of plans and specifications to issue to prospective bidders. Address questions and clarifications by prospective bidders. Conduct bid opening followed by bid evaluation and recommendation of award to Durham County for the lowest responsible bidder.

Schedule

Engineer will prepare a detailed project schedule following a written notice-to-proceed by Durham County. It is anticipated that 5 months will be required for design, 3 months for permitting, and 2 months for bidding and award, as described in Exhibit C.

Compensation

Black & Veatch proposes to complete this work for a not to exceed amount of \$126,000.00, according to the bill rate schedule described in Exhibit B.

Attached to this proposal are Exhibits A through C, which are made apart of this proposal. Given the limited scope and nature of this work, B&V intends to self-perform this work. We appreciate the opportunity to submit this proposal and look forward to working with Durham County on this project. If you have any questions, please do not hesitate to contact me at (919) 463-3047 or brinkleyjw@bv.com

Very truly yours,

BLACK & VEATCH INTERNATIONAL COMPANY



John Brinkley, P.E., BCEE, D.WRE

Project Manager