

**Request for Qualifications
Professional Engineering Consulting Services
Water Storage Tank Condition Assessment Program
Cape Fear Public Utility Authority
Wilmington, North Carolina
June 23, 2026**

General Information

The Cape Fear Public Utility Authority (CFPUA) requests statement of qualification from an engineering firm experienced with water storage tank condition assessment services.

CFPUA owns, operates, and maintains twelve (12) elevated, two (2) prestressed concrete clearwells and three (3) prestressed ground storage water tanks at their water treatment facilities and throughout the water distribution system. Tanks include both ground storage and elevated storage tanks and consist of both concrete and steel. The goal of this service is to perform water storage tank condition assessment biennially, develop comprehensive list of asset deficiencies, categorize them based on risk, and provide budgetary opinions of probable cost for capital planning. The project may include telecommunication lessee/contractor equipment structural analysis reviews ensuring asset integrity and telecom support. These efforts are intended to extend the life of CFPUA's existing tank assets, prioritize improvement activities, and protect water quality and public health.

Tank assessment work generally fits into one of the following two categories:

- Level 1 Assessment: Level 1 includes visual assessment of exterior surfaces and interior surfaces that are visible without draining and cleaning the tank. It also includes exterior coating thickness and adhesion testing and documentation of tank material loss, if any is noted. This assessment is conducted annually for each tank that is not undergoing Level 2 Assessment.
- Level 2 Assessment: Typically conducted every three years, in accordance with AWWA recommendations, this assessment requires draining of the tank and cleaning of the tank interior. Level 2 includes visual assessment, coating thickness, and coating adhesion testing of interior surfaces. This assessment also includes documentation of tank material loss, if any is noted.

The work will also include revision of the CFPUA Elevated Tank Structural Analysis Guidance Letter (2021) which provides a minimum set of structural guidelines for all future on-call Structural Analysis (SA) reviews for telecommunication equipment modifications on the water storage tanks.

Submission of a Statement of Qualification (SOQ)

Firms are invited to submit a Statement of Qualification to the CFPUA to be received no later than **2:00 PM on July 28, 2026**. Submittals received after this deadline will not be considered.

CFPUA will address questions regarding the RFQ until 2:00 PM on July 16, 2026. Questions concerning this advertisement should be directed to Ben Guerrieri, Procurement Manager, Cape Fear Public Utility Authority, at bids@cfpua.org.

SOQ's shall be limited to 20-pages or less, excluding cover page, table of contents, tabs, resumes and appendices.

Firms shall submit their statement of qualifications for consideration in .pdf format to bids@cfpua.org. Maximum file size for .pdf submission is 25MB. A reply will be sent to the email address submitting the statement of qualifications to confirm receipt. It is the submitting firms' responsibility to confirm that CFPUA has received statement of qualifications via email. If email reply is not received from bids@cfpua.org, please call 910-332-6472 or 910-332-6651 before deadline for submission.

Submitted information shall comply with N.C.G.S. 143-64.31 through 64.34 (aka Mini Brooks Act).

Firms submitting Qualifications are encouraged to carefully check them for conformance to the requirements stated herein. Qualifications that do not meet ALL of the below listed requirements, or are sent to any address other than shown above, will be disqualified. No exception will be granted.

Description of Services

The scope of work is expected to include the services specified below. No guarantee is expressed or implied by the CFPUA that all services will be performed or that the selected consultant will perform all services associated with the project. The CFPUA may terminate work or pursue other consultant selections at any phase of the project.

Services are expected to include:

1. Data Collection and Condition Assessment - Work includes collecting and reviewing all existing data available and performing interior and exterior condition assessments for each tank identified by CFPUA. A comprehensive technical report shall be prepared that lists and prioritizes the recommended improvements at each tank. The report shall provide sufficient information, including cost estimates, construction schedules and criticality. Information will help support future funding allocation for CFPUA's Capital Improvement Program (CIP).
2. Revise and Update CFPUA Elevated Tank Structural Analysis Guidance Letter (2021) – Provides a minimum set of structural guidelines for all future Structural Analysis (SA) on water tanks and needs include:
 - a. Update the minimum guidelines that are to be met for SA of water tanks managed by CFPUA.
 - b. Establish an updated Structural Analysis Fee to be assessed in Authority Rate and Fee Schedule.

Schedule

It is anticipated that the services conducted under this contract will occur over an initial 12 month contract period with up to two additional 12 month renewals possible. Work shall begin immediately following notice-to-proceed.

Consultant Selection

CFPUA will follow a qualifications-based selection process. Consultants must demonstrate their level of competence and qualification, and each sub-consultant's level of competence and qualification, with respect to the listed evaluation factors for the needed services.

SOQ's will be evaluated based on the following four (4) considerations and the level of importance for each consideration. The SOQ shall be formatted consistent with the evaluation consideration. Criteria shown under each of the four (4) considerations are to be addressed in the SOQ. Consultant's may provide additional information as necessary.

Item	Evaluation Criteria	Maximum Points
1	Project understanding and approach	20
2	Relevant firm experience	35
3	Overall staff experience	25
4	Record of success by the consultant	20
Total Possible Points		100

1. Project understanding and approach (20%)
 - a. Understanding of projects overall program and objectives.
2. Relevant firm experience (35%)
 - a. Experience with condition assessments for both ground and elevated water storage tanks.
 - b. Projects of similar complexity and scope.
 - c. Experience with developing rehabilitation design documents for elevation and ground water tanks.
 - d. Developing similar rehabilitation program(s) with other water agencies.
3. Overall staff experience proposed for this project (25%)
 - a. Adequate staffing/resources to perform the work.
 - b. Personnel certified by the National Association of Corrosion Engineers.
 - c. Organization Chart.
4. Record of success by the consultant (20%)
 - a. Managing Projects costs within project budgets.
 - b. Record of project success, demonstrated by work previously performed for CFPUA or similar work performed for others.
 - c. Ability to complete projects on-time and within budget.

A more detailed scope of work and fee schedule will be negotiated with the best qualified firm. If negotiations are not successful with any selected firm, CFPUA will terminate negotiations with that firm and initiate negotiations with the next best qualified firm.

Insurance Requirements

The following criteria will be deemed necessary for selection:

- The firm must meet the following insurance requirements. Workers Compensation may be waived if firm has no employees.
- General Liability \$1,000,000 per occurrence/\$2,000,000 aggregate. Authority must be additional insured and endorsement required.
- Workers Compensation \$500,000/\$500,000/\$500,000. Waiver of Subrogation against the Authority and endorsement required.
- Auto Liability Insurance \$1,000,000 per occurrence combined single limits applicable to claims due to bodily injury and/or property damage. Authority must be additional insured and endorsement required.
- Professional Liability not less than \$2,000,000 per loss.
- Any firm wishing to be considered must be properly registered with the Office of the Secretary of State.

Notification:

The selected firms will be notified by telephone and/or email.

The CFPUA reserves the right to reject any and all submissions.

Any questions concerning this advertisement should be directed to Ben Guerrieri, Procurement Manager, Cape Fear Public Utility Authority, at bids@cfpua.org no later than 2:00PM July 16, 2026.

RFQ Attachments:

Cape Fear Utilities Water Tank Assessment Program (Anticipated)
(Fiscal Year)

CFPUA Elevated Tank Structural Analysis Guidance Letter

END

Cape Fear Utilities Water Tank Assessment Program (Anticipated)
(Fiscal Year)

	FY2027			FY2028		
	Visual & Exterior	Washout & Interior	Rehabilitation	Visual & Exterior	Washout & Interior	Rehabilitation
Porters Neck	✓				✓	
Wrightsboro			✓	✓		
North Chase	✓					
Dawson Street	✓				✓	
Shipyard (17th Street)	✓				✓	
Westbrook	✓			✓		
Castle Hayne (Jail Tank)		✓		✓		
Holly Shelter	✓				✓	
Ogden Park	✓				✓	
Veterans Park	✓			✓		
Wild Dunes Ground Tank	✓			✓		
Nano Ground Tank #1	✓					✓
Nano Ground Tank #2	✓					✓
N. Lumina Tank (WB #1)		✓		✓		
S. Lumina Tank (WB #2)	✓				✓	
WB WTC-1 Ground Tank	✓					✓
WB WTC-2 Ground Tank	✓			✓		

Date: **January 22, 2021**

Paul R. Shivers, P.E.
Highfill Infrastructure Engineering, P.C.
3804 Park Avenue, Suite A
Wilmington, NC 28403
(910) 313-1516



Tower Engineering Professionals
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351
watkinson@tepgroup.net

Subject: Structural Analysis Guidelines Letter

Dear Mr. Shivers,

Tower Engineering Professionals is pleased to submit this “**Structural Analysis Guidelines Letter**” to provide a minimum set of structural guidelines for all future structural analysis on water tanks.

The purpose of this letter is to establish a set of minimum guidelines that are to be met for structural analyses of water tanks managed by the Cape Fear Public Utility Authority. The guidelines listed below are considered minimum requirements when analyzing one of these water tanks:

- All structural analyses in this area should be analyzed for the 2018 North Carolina State Building Code and ASCE 7-10 Minimum Design Loads for Buildings and Other Structures.
- All wind speeds should be taken from the wind speed maps in ASCE 7-10 Minimum Design Loads for Buildings and Other Structures.
- The overall tank supporting structure should be considered Risk Category III with an importance factor of 1.15 for wind loading per Chapter 1 of the ASCE 7 standard.
- Exposure Category and Topographic Category are site specific analysis parameters that should be researched and determined by a competent engineer per the appropriate standard.
- A full 3D analysis of the overall tank supporting structure is required with consideration of both vertical and lateral loading from wind forces.
- A force comparison of the ultimate forces created from the analysis and the allowable forces that a member can withstand should be done for every structural member of the overall tank supporting structure to determine if any of the structural members are overstressed. Structural component capacities should be clearly reported in the structural analysis.
- All telecommunications equipment, water tank accessories, and any other appurtenances that would be considered a significant weight or wind area on the water tank should be considered in the structural analysis.
- The water tank should be analyzed for both a full and empty tank load case. Any deviations from this should be clearly stated in the structural analysis report.
- When adequate foundation and geotechnical information are provided, a foundation analysis should be considered as part of the structural analysis. When adequate information is not provided, a competent engineer should determine if a foundation analysis is necessary.
- When adequate antenna mount information is provided, a mount analysis should be considered as part of the structural analysis. When adequate information is not provided, a competent engineer should determine if a mount analysis is necessary.

The guidelines listed above are merely a minimum set of requirements for a structural analysis of a water tank. It is up to a competent structural engineer to ensure that each water tank is analyzed correctly and that all site specific considerations or structure specific considerations are taken into account based on the information provided to the engineer.

We at *Tower Engineering Professionals* appreciate the opportunity of providing our continuing professional services to you and Highfill Infrastructure Engineering, P.C. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted by:

Warren Atkinson, P.E.



1/22/2021