

REQUEST FOR QUALIFICATIONS Engineering SERVICES



Hydrogeologic/Groundwater Study Kingsboro Industrial Site

Submit to:

Eric Evans, County Manager
Edgecombe County
PO Box 10 – 201 St. Andrew St.
Tarboro, NC 27886

(v) 252-641-7834

REQUEST FOR QUALIFICATIONS

EDGECOMBE COUNTY HYDROGEOLOGIC / GROUNDWATER STUDY

A. GENERAL

Edgecombe County has need for the engineering services listed below. The listed project is projected to being funded with grants from the North Carolina Golden LEAF Foundation as part of those agencies participation in the Major Site Development Initiative (MSDI). Edgecombe County intends to select a qualified firm to determine an alternative or supplemental source of water supply for the for the Kingsboro Mega-Site Infrastructure Project. To do so, a hydrogeologic evaluation is required to determine the groundwater resource potential beneath the property. The target area being within the CCPCUA but outside the areas where withdrawals from the CSA are restricted.

B. SCOPE OF SERVICES

1. The engineering services will include:
 - a. Exploratory drilling
 - b. Test well construction
 - c. Aquifer testing
 - d. Water quality characterization.

C. CONTENTS OF QUALIFICATIONS

1. Name of firm
2. Location of offices
3. Brief history of firm
4. Firm employment profile
5. Recent project experience by individual projects, and include types of engineering services performed, and the contact person. Indicate how the project was funded

(grant, local, loan, etc.) and include the name of applicable funding agencies

6. List of personnel to be involved in the project, as well as a brief description of their responsibilities
7. Brief project approach, including the effects of the project on the existing County Water and Sewer System operations.
8. Hourly rate schedule, including travel, overhead and miscellaneous expenses. In accordance with NCGS 143-64.31, DO NOT INCLUDE Lump Sum or Not-to-Exceed price for services.
9. The hydrogeologic firm must be licensed as a geological corporation in North Carolina, and the firm must employ NC-licensed geologists.
10. The hydrogeologic firm must have experience exploring and developing groundwater supplies using the Coastal Plain sedimentary aquifers, as well as crystalline-rock aquifers of the Piedmont terrain in North Carolina.
11. The hydrogeologic firm must demonstrate prior experience with Central Coastal Plain Capacity Use Area permitting and compliance.
12. The hydrogeological firm must be experienced at performing field geological logging during mud-rotary and air hammer drilling processes.
13. The hydrogeological firm must be experienced at analyzing geophysical logs to determine water-producing strata and selecting appropriate aquifer zones to be tested for yield potential and water quality.
14. The hydrogeological firm must demonstrate experience with conducting and analyzing aquifer pumping tests, selecting appropriate construction parameters for future production well construction, well field spacing evaluations, and estimations of sustainable yield of future water-supply wells that may be installed.
15. The hydrogeological firm must have experience with successful permitting and construction of public water-supply wells in the Coastal Plain of North Carolina.
16. Provide a list of at least 5 example projects with client references to demonstrate experience listed above.
17. The hydrogeological firm must hire an experienced NC Certified Well Contractor to perform exploratory drilling and testing at the site. Submit name and license number of proposed certified well driller.
18. Samples to be taken and submitted for laboratory analysis which shall include, but are not necessarily limited to, New Well Series Inorganics, VOC's, Pesticides and Synthetic Organic Chemicals (SOC's), Total Organic Carbon, Coliform Bacteria, and Radiological analysis.

19. Collect field water quality information which shall include, but is not necessarily to, pH, conductivity, dissolved oxygen, and ORP, test for iron, chloride, and hydrogen sulfide.
20. The hydrogeological firm w will hire an experienced North Carolina Certified Well Contractor to perform exploratory drilling and testing at the site.

The Certified Well Contractor will perform the following services:

1. Drill a single well.
2. Drill a pilot hole to 250 feet depth (or until bedrock) using mud-rotary drilling techniques.
3. Run Natural Gamma, Self Potential and Resistivity geophysical logs in the pilot hole.
4. Install a 4-inch diameter temporary well with stainless steel screen and gravel pack from approximately 180 to 220 feet depth. Develop the temporary well until the well is sand free and produces water with lo turbidity.
5. Install a test pump and perform a constant-rate aquifer-pumping test at about 50 gpm flow rate for a 6-hour period.
6. Pull up screen to approximately 70 to 110 feet depth.
7. Develop the 70 to 100 feet depth zone until the well sand is free and produces water with low turbidity.
8. Install a test pump in the well and perform another 6-hour constant rate pumping test at a rate of approximately 50 gpm.
9. Remove all well materials, clear hole to bottom and install a 6-inch diameter steel casing seated into top of bedrock (about 225 feet depth).
10. Use an air hammer drill rig to drill an open-end well into the bedrock to a total depth of 450 feet. The well will be constructed in accordance with North Carolina Well Construction Standards.
11. Perform a video inspection of the bedrock well to identify the depth and nature of fractures intersected by the well.
12. Develop the bedrock well until it is sand-free and produces low turbidity water.
13. Install a test pump and perform a 6-hour constant-rate aquifer test.
14. Finish the wellhead with a steel locking above-ground cover.
15. Remove the test pump, clean up the site and demobilize all drilling equipment after successful completion of the 6-hour pumping test.
16. Submit all pertinent well construction records to the hydrogeologic firm and the North Carolina Division of Water Quality.

D. EVALUATION CRITERIA

1. Consultant selection shall be conducted in accordance with 15 CFR Part 24.36 (Competitive Proposals) and NCGS 143-64.31. Qualifications received by the deadline and prepared in accordance with RFQ instructions will be reviewed to determine the level of service considered most advantageous to Edgecombe County (County). The County will select the Consultant considered most qualified to provide the desired level of service, with consideration for the long- term interest of the County's efforts.
2. The County will select the best qualified firm based on demonstrated competence and qualifications without regard to fee other than unit price information.
3. After selection of the best qualified firm to meet the County's needs, the County shall negotiate a fair and reasonable fee with the firm for the desired level of service.
4. Proposals will be reviewed and evaluated by County staff familiar with the existing facilities, in accordance with the following criteria:
 - a. General Qualifications, Competence & Reputation of Firm *(40 points)*
 - Age, size, staff qualifications and stability of firm
 - Projects to illustrate competence in applicable municipal water and wastewater engineering
 - Understanding and execution of grant requirements
 - Availability of staff to handle the project
 - Reputation with previous clients
 - b. Experience of Involved Staff *(20 points)*
 - Experience with similar type improvements
 - Key personnel – roles and experience
 - Subconsultants, if any
 - c. Ability to Address Local Needs *(20 points)*
 - Grasp of project requirements
 - Design approach/methodology
 - Familiarity with Edgecombe County's existing water and wastewater systems, other utilities, soil conditions, etc.
 - Completed similar projects in the local area
 - d. Availability *(10 points)*
 - Ability to provide access to qualified project team members on a continual basis
 - Ability to commit available resources (current workload) to the project
 - e. Hourly Rate Schedule *(10 points)*
 - Do not include a lump sum or not-to-exceed price
 - Rates indicative of experience and capabilities

E. SUBMISSION INFORMATION

Three (3) copies of the proposal must be received by 5:00 PM, March 24, 2017 in the County Manager's Office. Facsimile and electronic submissions are not acceptable.

Proposals need to be in sealed envelope marked "Statement of Qualifications for Kingsboro Hydrogeologic / Groundwater Study".

Proposals may be mailed or hand delivered to:

Eric Evans
Edgecombe County Manager
201 Saint Andrew Street
Tarboro NC 27886

Questions should be addressed to:

Mike Matthews
Edgecombe County Utilities Director
201 Saint Andrew Street
Tarboro NC 27886
252-823-7387

SMALL AND/OR MINORITY FIRMS ARE ENCOURAGED TO SUBMIT QUALIFICATIONS.

ALL AWARDS PURSUANT TO THIS PROCUREMENT MAY BE CONTINGENT UPON FUNDING AND APPROVAL. NO FUNDS WILL BE OBLIGATED UNTIL APPROPRIATE DOCUMENTS ARE EXECUTED AND APPROPRIATE CONDITIONS ARE SATISFIED.