# **REQUEST FOR QUALIFICATIONS**



# PROFESSIONAL ENGINEERING CONSULTING SERVICES

# REVERSE OSMOSIS WATER TREATMENT PLANT AND ASSOCIATED IMPROVEMENTS

For Rocky Point/Topsail Water & Sewer District - Burgaw, NC

RFQ # 200807-108 Date of Issue: August 7, 2020 Statements of Qualifications Due: August 21, 2020 Time: 3:00 PM (EST)

## **Issued for:**



PENDER COUNTY UTILITIES Kenneth Keel, PE, Director 605 E. Fremont Street P.O. Box 995 Burgaw, NC 28425 Phone - 910.259.1570 Fax - 910.259.1579 Email – kkeel@pendercountync.gov

## **Issued By:**

Trisha Newton, Purchasing Agent Pender County Finance • 805 S. Walker St. #1578 • Burgaw, NC 28425 Phone: 910.259.1281 • Email: <u>tnewton@pendercountync.gov</u>

RFQ for RO Water Plant Project, RPTWSD

#### **REQUEST FOR QUALIFICATIONS (RFQ) PROFESSIONAL ENGINEERING CONSULTING SERVICES**

#### REVERSE OSMOSIS WATER TREATMENT PLANT AND ASSOCIATED IMPROVEMENTS

### For ROCKY POINT/TOPSAIL WATER & SEWER DISTRICT Burgaw, NC August 7, 2020

#### GENERAL

The Rocky Point/Topsail Water & Sewer District (RPTWSD) and Pender County Utilities (PCU) are seeking Statements of Qualifications (SOQ) from consulting engineering firms experienced with reverse osmosis (RO) water treatment plant and well design. The engineering firm will provide complete design, permitting, and construction administration/observation of a proposed 3 MGD RO water plant, wellfield, and related water utilities improvements planned for the US 17 corridor in Eastern Pender County.

#### SUBMISSION OF SOQ

Firms are invited to submit a SOQ to the RPTWSD by no later than <u>3:00 PM on August 21,</u> <u>2020</u>. Submittals received after this deadline will not be considered. Firms shall submit an electronic document in .pdf format. Reference RFQ # 200807-108.

SOQ's shall be limited to 25 pages or less, excluding cover page and tabs.

A reply will be sent to the email address submitting the statement of qualifications to confirm receipt. It is the submitting firm's responsibility to confirm that RPTWSD has received the statement of qualifications via email. If email reply is not received, please call 910-259-0212 before deadline for submission.

Submitted information shall comply with NCGS 143-64.31 through 64.34 (aka Mini Brooks Act).

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

Any questions concerning this RFQ should be directed to Kenny Keel, Director, Pender County Utilities, at <u>kkeel@pendercountync.gov</u> or (910) 259-0212 no later than August 14, 2020 at 10:00am. Questions will be answered in the form of an Addendum on August 17. 2020.

Statements of Qualifications shall be submitted to:

Kenny Keel, Director Pender County Utilities / RPTWSD kkeel@pendercountync.gov

#### **BACKGROUND & SCOPE OF WORK**

The existing Pender County surface water treatment plant (SWTP) is located on the western side of the county service area. The eastern portion of the service area (including the Rocky Point Topsail Water and Sewer District) currently receives all of its water supply from the Pender County SWTP via a booster pump station and single 12-inch diameter transmission main that extends approximately 19 miles. The capacity of the transmission main is inadequate for existing peak demands (as exhibited in May 2019 when a boil water advisory and water shortage emergency notice were issued). In addition, the existing transmission main provides no redundancy and is vulnerable during flooding (as experienced during Hurricane Florence).

The proposed RO Water Treatment Plant and Associated Improvements project will expand the water supply/transmission capacity of the system while also adding redundancy and resiliency to the system and improving water quality. The project includes:

- 1) Approximately 27,700 linear feet of 20-inch diameter waterline to provide increased capacity to the Rocky Point elevated water tank during existing peak demands.
- 2) A new 3-MGD Reverse Osmosis WTP located in the eastern portion of the service area to provide water supply and redundancy to the Rocky Point Topsail Water and Sewer District and eastern portions of the service area. The RO WTP is anticipated to include the following:
  - a) Groundwater wellfield with conveyance to the WTP
  - b) Pretreatment
  - c) Reverse osmosis feed pumping, skids, bypass & blending controls
  - d) Permeate collection piping and storage tank for flushing
  - e) Chemical dosing systems (alkalinity, hardness, sodium hypochlorite, corrosion inhibitor)
  - f) Ground storage tank for chlorine contact and clearwell
  - g) High service pumping
  - h) Concentrate discharge pump station & pipeline
  - i) Piping from WTP to existing distribution system
  - j) Other distribution improvements as required due to selected WTP location

ASADRA funding for a portion of the project cost was approved in July 2020 by the NCDEQ-Division of Water Infrastructure. The remainder of the funding has not yet been secured or applied for but is anticipated to be further ASADRA/SRF funding and/or USDA-RD funding. The approved ASADRA funding includes the following deadlines, which must be met by the selected consultant:

Engineering Report Submittal	December 1, 2020
Engineering Report Approval	May 3, 2021
Bid and Design Package Submittal	November 1, 2021
Bid and Design Package Approval	March 1, 2022
Advertise Project, Receive Bids, Submit Bid	July 1, 2022
Information, and Receive Authority To Award	
Execute Construction Contract(s)	August 1, 2022

An engineering report on the proposed project was completed by CDM Smith in December 2019, entitled "Eastern Pender Service Area Water System Improvements." The report is available for review at

https://pendercountync.civicweb.net/document/25193/Presentation%20of%20Eastern%20Pender%20Service%20Area%20Wat.pdf?handle=54879721412F4CDE980EEDFD01DAA4B1

It is anticipated that the information in this report can be used by the selected consultant in the preparation of the Engineering Report required by NCDWI for project funding.

Engineering services shall include, but not be limited to, the following:

- Engineering Report/Environmental Information Document
- Design phase services
- Funding applications (USDA, follow-up on ASADRA/SRF application for consideration in Spring 2021, etc.)
- Water system modeling
- Surveying
- Easement Mapping (if required)
- Subsurface Utility Engineering
- Permitting Phase Services
- Bid & Award Phase Services
- Construction Administration
- Construction Observation

#### **EVALUATION**

Firms submitting Qualifications to perform the work noted will be evaluated based upon the firm's experience, personnel knowledge & experience with similar projects, references, accurate response to criteria in the RFQ, and other criteria. Consultants must demonstrate their level of competence and qualification to complete the services noted in the scope of work.

Sub-consultants to be utilized for geotechnical, hydrogeology, electrical, mechanical, and/or other relevant work must be listed in the Statement of Qualifications.

Criteria that may be used to select an engineer includes the following:

- 1. Design experience for RO plants, wells & wellfields, and water distribution systems.
- 2. Experience with water utilities and environmental permitting.
- 3. Accuracy on project cost estimates by the project team.
- 4. Ability to deliver projects on-time within a tight schedule, and commitment to meet the project schedule. This project has a somewhat aggressive schedule, and thus the consultant shall have personnel and resources available to meet that schedule.
- 5. Experience working with Hydrogeologists for well design, construction, performance, and data interpretation.
- 6. Understanding of the scope of work, along with water system and project challenges.
- 7. Water pipeline modeling for the design of raw and potable water transmission mains, proven history of pipeline design, sizing, and routing.
- 8. State & local regulatory experience.
- 9. Experience with SRF and USDA-RD funding, including funding applications, project design, and construction administration of projects with these funding sources.

#### SCHEDULE

- 1. Questions about this RFQ submitted by 10am August 14, 2020.
- 2. Addendum with Answers issued August 17, 2020.
- 3. SOQs due by 3pm August 21, 2020.
- 4. Decision on selection by September 8, 2020.
- 5. Engineering contract negotiations and finalization by September 18, 2020.
- 6. Engineering contract consideration by RPTWSD Board on October 5, 2020.
- 7. Project schedule to follow dates noted in Scope of Work.

### REQUIREMENTS

Qualifying Statements shall include:

- 1. Firm name, address, telephone number, fax number, email address, web address, and contact person(s).
- 2. Year in which the firm was established and any former names under which the firm operated.

- 3. Qualifications and experience of personnel who would be performing design services for the project(s) by providing:
  - a. A list of design projects demonstrating experience/understanding of the experience described in this RFQ. Project information shall include:
    - i. a summary of the scope of work and deliverables,
    - ii. the owner of the project, and
    - iii. the name, number and email of a reference for the project.
- 4. References for similar projects completed, including owner contact information.
- 5. Information related to items noted in the Evaluations section of this RFQ.
- 6. Fee schedule for firm's staff and services.
- 7. <u>SOQ submittal is limited to 25 printed pages maximum, excluding cover page & tabs</u>.

The following criteria will be deemed necessary for approval of a contract with the selected firm and can be submitted after selection:

- The firm must meet the following insurance requirements.
  - General Liability \$1,000,000 per occurrence/\$2,000,000 aggregate. RPTWSD & PCU must be additional insured
  - Workers Compensation \$500,000/\$500,000/\$500,000
  - Auto Liability Insurance \$1,000,000 per occurrence combined single limits applicable to claims due to bodily injury and/or property damage
  - Professional Liability not less than \$1,000,000 per loss.
- Any firm wishing to be considered must be properly registered with the Office of the Secretary of State of NC and the NC Board of Examiners for Engineers & Surveyors.

### NOTIFICATION

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

The RPTWSD reserves the right to reject any and all submissions, decline to proceed with selection of any firm, to request additional qualifications, and to make inquiries as may be necessary to verify qualifications. Nothing in this document shall require RPTWSD & PCU to proceed with design and/or construction.