

**REQUEST FOR STATEMENT OF QUALIFICATIONS**  
**ENGINEERING CONSULTING SERVICES**  
**WATER TREATMENT PLANT IMPROVEMENTS**  
**TOWN OF DEBEQUE, COLORADO**

February 10, 2021

**Introduction**

The Town of DeBeque is requesting Statements of Qualifications (SOQs) from Professional Engineering firms to prepare a Preliminary Engineering Report (PER) to evaluate possible improvements to the Town's existing water treatment plant (WTP). The Town is in the process of securing financial assistance for an unspecified number of improvements/upgrades to its WTP through several different funding agencies, but more particular, the State of Colorado's Drinking Water Revolving Fund (DWRF). As part of this process, the Town is soliciting the services of Professional Engineering firms to prepare a Preliminary Engineering Report to identify and recommend improvements to the WTP, and to develop a cost estimate for each of the suggested improvements.

**Background Information**

The Town's original WTP was constructed in 1978 and consisted of a conventional flocculation-sedimentation (floc-sed) prefabricated water treatment "skid" with a multi-media granular filter basin. In the mid 1990's the Town changed the treatment process by adding a micro-filtration skid in the existing treatment plant building, while leaving the former conventional floc-sed skid in place as a backup treatment option. The facility currently only operates the single micro-filtration skid to treat its Colorado River water supply.

The Town's raw water supply is taken from an intake structure on the Colorado River that is located northeast of the current treatment plant building. The intake structure was constructed during the same time frame as the original water treatment plant. A submersible pump capable of pumping the often highly turbid (i.e, muddy) Colorado River water, pumps water from the intake structure to a pre-settling tank (when used) for settling of suspended solids, or pumps water directly to the micro-filtration treatment skid.

Finished water from the micro-filtration process is conditioned with chlorine to provide disinfection of any micro-organisms (i.e, E coli and other viruses). Finished water is then pumped to the Town's water distribution system and two different finished water storage tanks. Because the treatment plant failed to meet adequate Chlorine Contact Time (CT) prior to the first tap location and the storage tank(s), the Town added a concrete clear well at the treatment plant building in 2000 to meet the CT requirements.

The Town has consistently met all requirements of the Colorado Primary Drinking Water Regulations (Regulation 11) until a recent Total Trihalomethane (TTHM) exceedance. The Town received a Notice of Violation for the most recent alleged exceedance that occurred in the furthest most reaches of its water distribution system. This exceedance was mostly due to the

lack of flushing of the water distribution system in the Bluestone Valley (the furthest most dead-end portions of the distribution system in the Bluestone Valley extend almost 2 miles from the water treatment plant).

Identified improvements to the WTP will address deficiencies in the treatment plant operation in hopes of making it more efficient, including resolving the most recent problem with TTHM alleged exceedances. At a minimum, the Town would like to explore the possibility of eliminating the use of chlorine as its disinfectant agent to prevent the formation of the TTHMs.

Supplemental materials to assist in preparing the SOQ, including previous Plans of the WTP and previous sanitary surveys conducted by the Colorado Department of Public Health and Environment's (CDPHE) Water Quality Control Division (Division) are available upon request. Materials and information can be obtained by contacting Care' McInnis, Town Manager, Telephone: (970) 283-5475.

### **Scope of Services**

The Town intends to retain a Professional Engineering firm to provide engineering services to identify possible improvements/alterations to the Town's existing WTP with associated cost estimates for each of the identified improvements. The Scope of Services listed in this Request for Qualifications (RFQ) is meant to serve as a general description of anticipated project tasks.

#### **Project Initiation**

Upon award and execution of a contract for Professional Engineering Services, and having received the "Notice to Proceed" from the Town, the Engineering Consultant will:

1. Meet with representatives of the Town to review the Scope of Services, design criteria, and expectations of the project.
2. Obtain background information from the Town in order to establish the project goals and improvements to the WTP.
3. Participate in any Pre-Application Meetings with funding agencies in order to qualify for financial assistance to partially fund any improvements the Town decides to implement.

#### **Project Schedule**

All firms submitting proposals must be prepared to immediately initiate work on this project. The Town wishes to complete the PER that will be used in part to prepare an associated Project Needs Assessment (PNA) to qualify for funding through the DWRF State Revolving Fund (SRF) Loan program.

Based on the level of improvements and associated costs that the Town feels it can economically afford, the PNA would be prepared and submitted to CDPHE for review and approval by no later than May 1, 2021. This would allow the Town to submit a DWRF loan application to meet the June 15 application cycle set forth by the Colorado Water Resource and Power Development Authority (Authority). Only those firms able to perform the necessary work activities within this accelerated schedule should respond to this RFQ.

## Purpose of Preliminary Engineering Report

The purpose of the PER is to identify possible alternatives/improvements to the Town's WTP that could be implemented in a staged approach with a cost estimate developed for each improvement. This will allow the Town to rank the identified improvements to determine what, if any, improvements are economically feasible for the Town to implement.

Improvements the Town has identified include, but are not limited to:

1. Identify other possible disinfection processes (e.g., UV disinfection system) to reduce/eliminate chlorine as a disinfecting agent to prevent the formation of TTHMs in the distribution system.
2. Possible chlorine booster stations within the furthest reaches of the distribution system to maintain required chlorine residuals.
3. Addition of a second micro-filtration skid of the same capacity as the existing skid to provide redundancy and a backup filtration treatment "train".
4. Install Supervisory Control and Data Acquisition System (SCADA) to allow the Town's operating personnel to monitor and control the water treatment plant and water distribution system components remotely (e.g., finished water storage tank levels).

Information from the PER will be used to prepare a Project Needs Assessment (PNA) that is a document the Authority and Division use in evaluating DWRf loan applications. The PNA would be used to determine the required funding needed to complete the prioritized improvements the Town feels it can economically afford. This includes possible design grants and low interest loans/grants available through the SRF program to be used for design and construction of the improvements.

The PER will need to include the following major tasks:

1. Prepare a preliminary design memorandum which defines the Consulting Engineer's and Town's mutually agreed understanding of the project scope, objectives and schedule, including budgetary information.
2. Meet with the Town's operating and management staff to discuss the memorandum to formulate a contract for engineering services in a form acceptable to the Town.
3. Review related and pertinent funding agency guidelines and requirements for possible funding through, 1) the DWRf loan program as administered by CDPHE; 2) through the Energy Impact Assistance Fund (EIAF) program as administered by the Colorado Department of Local Affairs (DOLA); and 3) through Rural Development as administered by the US Department of Agriculture.
4. Complete and present the findings of the Preliminary Engineering Report including cost estimates for each staged improvement. At a minimum, the PER should include information detailing, 1) existing conditions; 2) site features and limits of construction; 3) proposed staged improvements; and 4) improvements necessary to consistently comply with the Colorado Primary Drinking Water Regulations (Regulation 11).
5. Conduct project meetings as necessary with the Town staff and Council.

6. Assist in preparing a Project Needs Assessment (PNA) from information developed in the PER necessary to apply for funding through the DWRF loan program including obtaining required approval of the PNA through CDPHE.
7. Assist the Town as necessary in preparing any funding applications to provide financial assistance needed to construct the suggested improvements identified in the PER and PNA.

### **General Requirements**

In order to facilitate review of the SOQ, the following information must be included in the SOQ in the order listed:

1. A list of the key members of the Project Team with a brief description of their qualifications and related experience. This section should include an outline of responsibilities referenced to each member based on the proposed project approach. All analysis, schematic plans, and cost estimates for each staged improvement shall be completed and supervised as appropriate by a Professional Engineer registered and licensed to practice in the State of Colorado.
2. The name, qualifications, experience, and availability of the Project Manager. This section should include a discussion of similar projects the Project Manager has completed, with an emphasis on projects of similar nature and funding sources.
3. A brief discussion of project understanding and proposed approach to the project.
4. A Project Schedule outlining the time frame with an estimated completion date of the PER.
5. A discussion of previous experience and knowledge of the Town's existing infrastructure.
6. A discussion of similar projects the members of the Project Team have completed. This listing should be limited to the three most recent applicable projects and should include for whom the project was completed and a reference contact.
7. Estimated fee to complete and prepare the PER.

SOQ's (including a fee estimate) shall be limited to ten (10) pages in length. Pre-printed firm dossiers, resumes of key team members, and descriptions of similar projects may be included in a referenced Appendix beyond the ten (10) page limitation.

Submittals must include a letter of interest, resumes of key personnel, and all required information as listed above.

### **Criteria for Evaluating SOQs**

The SOQs will be reviewed, evaluated, and ranked (e.g.: 1, 2, 3) in accordance with the Town's selection process. The estimated fee to complete the PER is not a considered factor in the selection process, however, is being requested for informational purposes only to determine if the cost is within any Planning and Administrative Grants the Town may receive for funding the PER.

Selection of the Engineering Consultant will be based on the following criteria and qualifications.

1. Qualifications of key personnel.
2. Past performance on similar projects.
3. Familiarity and past experience with the Town of DeBeque's infrastructure.
4. Clarity, conciseness, and organization of proposal.
5. Approach to project.
6. Resources of the firm to conduct and complete this project in the timeline requested.

**SOQ Submittal**

SOQ's must be received at the DeBeque Town Hall by no later than 4:00 PM, MST, on March 7, 2021. SOQs received after this specified time and date will be considered null and void, will not be accepted, and will be returned to sender. All submissions and work products shall be submitted in both hard copy (paper) and electronic format for review and approval. Three (3) hard copies of the SOQ are to be submitted in a sealed envelope clearly marked on the exterior as containing “Statement of Qualifications for Preparing Preliminary Engineering Report for Water Treatment Plant Improvements”

SOQs should be addressed to the attention of:

Care' McInnis, Town Manager

Town of DeBeque

381 Minter Avenue

P.O. Box 60

DeBeque, Colorado 81630

The Town of DeBeque reserves the right to refuse any or all SOQs and to waive technicalities in order to accept an SOQ that may be in the best interest of the Town at its sole discretion. The successful firm shall obtain insurance as required and approved by the Town's Attorney, and will be required to follow all applicable Federal, State and Local requirements, regulations, and procedures.

Further information regarding questions relating to submission of the SOQ, or information contained in this RFQ can be submitted to the attention of:

Care' McInnis, Town Manager

Telephone: (970) 283-5475

[cmcinnis@debeque.org](mailto:cmcinnis@debeque.org)

\*End\*