

West Boylston Water District

**Request for Qualifications**

**Professional Engineering Services for  
Oakdale Well Water Treatment Facility**

February 2020

Contact:  
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West Boylston, MA 01583  
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## 1.0 Introduction

The West Boylston Water District (District) invites proposals from qualified firms for professional engineering services associated with design through construction phases of Oakdale Well Water Treatment Facility (Project). Qualified firms are requested to submit their proposals to the West Boylston Water District, 183 Worcester St, West Boylston, MA 01583, in accordance with the instructions contained within this Request for Qualifications (RFQ).

The following dates have been established for the procurement:

- RFQ release date: 02/19/2020
- Pre-proposal meeting and site visit: 02/27/2020 at 10:00 a.m.
- Questions due: 03/04/2020
- Proposals due: 03/11/2020 at 2:00 p.m.
- Interviews: Week of March 16<sup>th</sup> or 23<sup>rd</sup>
- Anticipated selection of firm: March 31, 2020

## 2.0 Submission Deadline and Instructions

The District will accept proposals delivered in person or by mail. All proposals must be received by the date and time stated in Section 1.0 to be considered. Proposals submitted by fax or by electronic mail will not be considered. All proposals must be submitted to:

Board of Water Commissioners  
West Boylston Water District  
183 Worcester Street  
West Boylston, MA 01583

Qualified persons or firms are requested to submit proposals in sealed envelopes marked as shown below with the applicant's name and address on the front. Applicants should provide one (1) signed original proposal and eight (8) copies and a flash drive with a PDF copy.

Qualification submittals shall be labeled with the project information:

Qualifications  
Professional Engineering Services for  
Oakdale Well Water Treatment Facility

There is a price component to this proposal. Price proposals are to be submitted in a separate sealed and marked envelope:

Price Proposal  
Professional Engineering Services for  
Oakdale Well Water Treatment Facility

The District may cancel this RFQ or reject in whole or in part any and all proposals, if they determine that cancellation or rejection serves the best interest of the District.

Proposals must be signed as follows: a) if the bidder is an individual, by her/him personally; b) if the bidder is a partnership, by the name of the partnership, followed by the signature of each general partner; and c) if the bidder is a corporation, by the authorized officer, whose signature must be attested to by the Clerk/Secretary of the corporation and the corporate seal affixed.

No proposals will be accepted after the time and date noted. Late delivery of materials due to any type of delivery system shall be cause for rejection. If on the date and time of the submittal deadline the District is closed due to an uncontrolled event such as fire, snow, ice, wind or building evacuation, the submittal deadline will be postponed until 2:00 p.m. on the next normal business day.

### **3.0 Questions, Addenda or Proposal Modifications**

Questions concerning this RFQ must be submitted in writing to Mr. Michael Coveney at [mcoveney@westboylstonwater.org](mailto:mcoveney@westboylstonwater.org). All questions/ inquiries must be received by close of business on the date noted in Section 1.0, in order to be considered. Written responses will be emailed to those firms who have requested copies of this RFQ.

If any changes are made to this RFQ, an addendum will be emailed to those firms who have requested copies of this RFQ. It is the sole responsibility of the bidder to ascertain the existence of any addenda and/or modifications issued by the District.

The District accepts no liability for and will provide no accommodations to bidders who fail to check for amendments and/or modifications to this RFQ and subsequently submit inadequate or incorrect responses. Bidders may not alter (manually or electronically) the RFQ language or any RFQ component files. Modifications to the body of the RFQ, Scope of Work, terms and conditions, or which change the intent of this RFQ are prohibited and may disqualify a response.

All proposals submitted in response to this RFQ shall remain firm for sixty (60) days following the submittal deadline. It is anticipated that the contract will be awarded within thirty (30) days after the submittal deadline.

Bidders are not to communicate directly with any employee of the District, except as specified in this RFQ, and no other individual employee or representative is authorized to provide any information or respond to any question or inquiry concerning this RFQ.

### **4.0 Pre-Proposal Meeting and Site Visit**

There will be a pre-proposal meeting and site visit on the date stated in Section 1.0. The meeting will be held at the West Boylston Water District, 183 Worcester St, West Boylston, MA 01583 and be followed by the opportunity to visit the existing Oakdale Well Pump Station.

## **5.0 General Project Description and Background**

The Oakdale Well is currently pumped and treated for corrosion control at the Oakdale Well Pump Station and Treatment Facility. The well is typically pumped at a rate of 400 to 450 gallons per minute (gpm). The facility houses the pumping and chemical feed treatment systems. The gravel packed well is pumped using a Goulds 10RJLO model pump with 50 HP motor. Chemical injection includes blended phosphate for sequestering, sodium hypochlorite (NaOCl) for disinfection and potassium hydroxide (KOH) for pH adjustment and corrosion control.

Elevated levels of manganese in the water from the Oakdale Well prompted MassDEP to issue an Administrative Consent Order (ACO) requiring the District implement manganese removal treatment.

The proposed iron and manganese removal water treatment facility is intended to be constructed behind/adjacent to the existing facility and to have a maximum capacity of 1 MGD. Water treatment pilot testing was conducted by Blueleaf, Inc. A copy of the pilot report will be provided upon request. Based on the results of the pilot testing, the District has selected pressure filtration with GreensandPlus media for the iron and manganese removal process to be used in the full-scale treatment facility. The preliminary design was completed by Comprehensive Environmental Inc. A copy of the preliminary design report will be provided upon request.

A Project Evaluation Form (PEF) was submitted in August 2019 to the MassDEP and the Trust for consideration to receive funding through the state revolving fund (SRF) program. The District anticipates that this project will receive funding through the SRF program. The District is under an Administrative Consent Order (ACO) with the MassDEP to implement this treatment facility. The Engineer must provide the District with final draft design documents for review by September 1, 2020. The Engineer must submit permit applications with the final design documents and SRF application to applicable regulatory agencies by October 15, 2020.

## **6.0 Project Approach**

The Respondent shall provide a detailed description of their Project Approach and Scope of Work to be provided for the fee included in the separate Price Proposal. The District encourages Respondents to offer services that have added value to the completion of the Project beyond the minimum effort needed to complete the work and to include those services as separate tasks within the price proposal. Respondents shall include engineering services for design, permitting, bid and construction phases.

The Project design components shall include but not be limited to the following:

- A. New iron and manganese Water Treatment Facility with primary process using pressure filtration with GreensandPlus media.
- B. The selected engineering firm shall work with the District's SCADA programmer, Northeast System Controls, to incorporate the proposal facility with the existing SCADA system. Northeast System Controls will be retained by the District to complete the

programming for the overall Water Treatment Facility and integration with the system wide SCADA. The Respondent shall include design of Water Treatment Facility operations, loop descriptions, in their scope. Control panels and instrumentation are also to be included in the facility design.

The District will have wetlands flagging and site survey completed by others. Topographical and planimetric survey and develop base plans of the affected area will be provided to the Engineer and will include 2 foot contours, existing structures and utilities, existing utility easements, limits of rights-of-way, location of wetlands and other features of the work area.

Soil exploration of the existing site are not available and shall be the responsibility of the Engineer.

The following is a general outline of the required basic services. The District encourages Respondents to offer services that have added value to the completion of the Project beyond the basic services listed below. The added value services should be shown as separate tasks in the price proposal.

## **1) Design and Permitting Services**

1.1 Conduct initial kick-off meeting with District staff to review the project scope, establish operational and design criteria, discuss project concerns, clarify specific standards and requirements of District, and to ensure that particular issues are properly addressed during the project.

1.2. Based on the preliminary design already completed, prepare draft (75%) design documents, in accordance with applicable American Water Works Association (AWWA) standards and MassDEP requirements. The draft specifications shall be prepared in CSI format and shall include boiler plate requirement, bid sections and technical specifications as required for public bidding. Plans shall be prepared in AutoCAD format. Specifications shall include the requirements of the DWSRF Program. Work shall include geotechnical investigations as required by the Designer to complete the design.

1.3. Prepare a construction cost estimate for the project including contingencies based on the design documents and the construction costs anticipated at the time the design is completed.

1.4. Coordinate with local officials, public and private utilities, and state and local agencies as necessary. Submit permit applications along with applicable design documents to the affected utilities and agencies for their review and comment. Meet with utility representatives, if necessary, to ensure a coordinated construction process. Conduct a meeting with representatives of the Drinking Water Program of the MassDEP Central Region Office to review the design prior to permit application submittal. Permit applications required for completion of the Project shall include at a minimum the MassDEP Approval to Construct a Water Treatment Facility, Notice of Intent, submittal to DCR and permit notifications with respect to SRF program requirements.

1.5. Provide two (2) sets of draft design documents and PDF copy, with construction cost estimate, for District's review at the 75-percent completion point.

1.6. Attend design meeting with District staff for review and comment of the 75% design submittal.

1.7. Prepare final (100%) design documents including drawings and specifications in accordance with current applicable standards and District requirements. Drawings including plans, sections and details shall be prepared at appropriate scales in AutoCAD format with the technical specifications in CSI format.

1.8. Prepare a final construction cost estimate for the project including contingencies based on the design documents and construction costs anticipated at the time the design is completed.

1.9. Provide two (2) sets of final design documents and PDF copy, with construction cost estimates, to District for final review.

1.10. Upon final review and approval of the final design documents, incorporate District comments and prepare final "ready-for-bid" contract documents, fully suitable for construction. The completed documents shall bear the signatures and stamps of Massachusetts Registered Professional Engineers and Architect.

1.11. Prepare and submit the DWSRF Construction Application including Plans and Specifications Checklist and request approval to bid the documents.

## **2) Bid Phase Services**

2.1. Provide two (2) paper sets of contract documents to the District. Distribute electronic sets and/or paper sets (at the request of bidders) of contract bid documents to sub-bidders and general bidders and maintain list of plan holders. Additionally, provide electronic sets (PDF) of the contract bid documents and drawings to District on flash drive.

2.2. Prepare text and advertise the contract for public bidding. Submit advertisement to the Central Register. Provide advertisement language for the District to submit to the local newspaper and COMMBUYS.

2.3. Address questions from prospective bidders, and prepare addenda to the bid documents, as required.

2.4. Conduct pre-bid conference and record minutes and questions.

2.5. Attend the bid openings (sub-bid and general bid) and assist the District with the bid opening process.

2.6. Tabulate bids, provide review and analysis of the bid results, review contractor qualifications and financial ability, and provide a written recommendation for the award of the contract.

2.7. Prepare and submit the DWSRF Part B package to request approval to award the contract.

2.8. Prepare and facilitate contracts for execution by District and selected contractor.

### **3) Construction Phase Services**

3.1. Prepare conformed set (posted set) of contract documents and provide 2 sets to District along with PDF copy.

3.2. Conduct Pre-Construction Meeting and record meeting minutes.

3.3. Provide on-site inspection services. Include in the price proposal, the number of hours, hourly rate and expenses proposed for the on-site resident. The intent is to have the resident on-site part-time during key points as required by the Engineer to ensure the work is conducted in accordance with the design documents and regulatory requirements. Key points include but are not limited to observation of subgrade and reinforcing and conduits/pipes below or within floors, concrete placements, portions of the work that will be concealed at the end of the day, select points during construction of the building structure, installation of filters and filter internals, installation of process and mechanical/electrical equipment and components. Engineer shall coordinate with the Contractor to keep informed of the progression of work to be on-site at the times that the Engineer requires. Provide inspection reports for days the resident engineer is on-site. Respondents shall include an estimate of the minimum number of on-site hours required to provide the required assurances. Respondents shall identify the individual to provide the on-site inspection services and include resume. Price proposal shall include the hourly rate along with the estimated number of on-site hours.

3.4. Maintain project files of submittals.

3.5. Review construction shop drawings, equipment O&M manuals and other information submitted by the Contractor for compliance with the design concept and the requirements of the Contract Documents, such data to be recommended for approval, returned for revision, rejected or distributed for information.

3.6. Attend monthly formal progress meetings, weekly project status meetings, and other on-site coordination conferences and record meeting minutes.

3.7. Prepare a monthly project summary detailing the following items:

3.7.1. A listing of work performed during the month and a listing of anticipated work during the next two months. Information shall be broken down by Tasks and Subtasks.

- 3.7.2. Provide cash flow projections (baseline vs. actual and projected). Invoices for the period covered in the report, will not be paid until the monthly report is delivered to and approved by District.
- 3.8. Review Contractor's monthly payment requests and provide recommendations for payment based on work progress.
- 3.9 Prepare and submit monthly DWSRF drawdown requests.
- 3.10. Provide interpretation of Contract Documents.
- 3.11. Prepare responses to Requests for Information (RFIs).
- 3.12. Consider and evaluate the Contractor's suggestions for modifications to the Contract Documents and report recommendations to District.
- 3.13. Review Contractor's as-built red line drawings for accuracy and completeness. Provide stamped record drawings in hard copy/electronic format.
- 3.14. Electronic documents shall be submitted to the District in native format (AutoCAD, Word, Excel, etc.) and PDF format.
- 3.15. Assist in the review, preparation and administration of change orders and claims.
- 3.16. Prepare and provide 2 hard copies and PDF copy of an overall Facility Operation & Maintenance Manual. The O&M Manual shall address, but not be limited to, safety aspects during operation, maintenance, and cleaning; suggested sequence of operation; operational strategies of chemical feed and associated control equipment; truck unloading, pump and equipment maintenance and operations and meet compliance with MassDEP requirements. O&M manual shall include forms recommended by the Engineer for operation of the facility.
- 3.17. Develop and maintain punch-list and assist with closeout documentation.
- 3.18. Contract documents shall include provisions for the Contractor to complete a startup and demonstration to test all equipment and to prove that the facility successfully treats the water. Engineer shall be involved during this process. Engineer shall be responsible for certification to the District and MassDEP that the facility was constructed in accordance with the design documents and MassDEP requirements; certification shall include a summary of startup, checklist showing equipment, alarm and operations testing. Testing shall include both normal operation and how the facility responds to equipment malfunctions and/or failures. Contractor shall provide training on individual pieces of equipment and Engineer shall provide training on the overall operation of the facility.

3.19. Prepare and provide Massachusetts State Building Code Construction Control Documents (initial, periodic and final).

3.20. Provide the services of a materials testing company for soils and concrete testing during construction. In the price proposal, identify these services as a separate task. Estimate test quantities based on the preliminary design and list all assumptions.

## **7.0 Minimum Qualifications**

Each applicant must demonstrate that it meets the following minimum qualifications:

- A. Minimum of five years' experience in public projects of a similar nature for the principals assigned, specifically including work with water treatment facilities having iron and manganese removal using pressure filtration. In documenting this qualification, the applicant should describe the professional background of the firm and the extent of previous experience of firm personnel or consultants to be assigned to the project and identify the anticipated role that each will play in the project.
- B. Possess all necessary current licenses and registrations, either within the firm or through independent consultants, to qualify to perform the function of the engineer designer of the projects.
- C. Provide evidence of insurance for general liability, automobile, worker's compensation (statutory) and professional services liability, as required.
- D. Response to the proposal sections identified in the following Section.

## **8.0 Proposal Requirements**

Qualification packages must contain the following information:

- A. Description of the Firm
  - Description of the primary firm including subconsultants and experience working together as a team.
- B. Project Approach
  - Describe the firms approach to completion of this Project.
  - Provide proposed schedule for completion. The District is under an Administrative Consent Order (ACO) with the MassDEP to implement this treatment facility. The Engineer must provide the District with final draft design documents for review by September 1, 2020. The Engineer must submit permit applications with the final design documents and SRF application to applicable regulatory agencies by October 15, 2020.

C. Project Team and Key Staff

- Description of project team and key staff to include previous experience of team members, role on this project and organizational chart. Resumes for each member of the project team are to be provided.
- On-site inspector shall be identified in the proposal and resume provided. On-site inspector shall have a minimum of 3-years experience with the construction of water treatment facilities, fulfilling the role of on-site inspector for the construction of at least one water treatment facility.

D. Location of Where the Work will be Completed

- Identify the location where the work will be completed and proximity to the District. Include the primary office location(s) of all project team members.

E. Team Availability and Commitment to Project

- Estimate the percentage of time of key project team members dedicated to this project and their commitment/workload dedicated to other projects.

F. Similar Project Experience

- Descriptions of similar project experience (iron and/or manganese removal using pressure filtration); include project name, name of the organization for whom the work was performed, size of facility, primary treatment process utilized.
- For each project identify the engineer's fee at start of project and final fee at end of project. Provide explanation for cost increases.
- For each project, identify the project start date and completion date and state if the project was completed on schedule or required additional time. Provide explanation for time extensions.
- For each project, identify the construction cost estimate used for project appropriation prior to bid, bid cost, final cost, change order percentage. Provide explanation for change order costs.

G. References

- Provide contact information (name, address, telephone number) for three (3) references. Include project name, name of the organization for whom the work was performed, contract fee, date of completion, description of services performed and identify the project team members involved.
- References shall be provided for projects on which the project team members were involved including the on-site inspector.

H. Attachments

- Include copy of insurance certificate.
- Certificate of Non-Collusion
- Tax Certification
- Designer Selection Board Application Form:  
<https://www.mass.gov/service-details/dsb-forms>

Price Proposal packages must contain the following information:

- A. Identify proposed price for each key task/phase along with the total project fee. Include separate task for on-site inspection services and provide billing rate along with realistic estimated number of hours required for this task as specified.
- B. Provide rate schedule for project team members.
- C. Price proposal shall include all labor, materials, travel and deliverables.

## **9.0 Review of Proposals and Selection**

The District reserves the right to reject any and all proposals or parts of proposals; to waive any defects, information, and minor irregularities; to accept exceptions to these specifications; and to award contracts or to cancel this Request for Qualifications if it is in the District's best interest to do so. The District will review proposals and may elect to shortlist firms for interviews. Responding firms will be notified of the results of the initial screening process.

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

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Signature of individual submitting bid or proposal

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Name of Business

TAX CERTIFICATION

Pursuant to M.G.L. Chapter 62C, Sec. 49A, and M.G.L. Ch. 151A, Section 19A, the undersigned acting on behalf of the Contractor, certifies under the penalty of perjury that, to the best of the under sign’s knowledge and belief, the Contractor is in compliance with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support\*.

\_\_\_\_\_  
\*\*Signature of Individual

\*\*\*Contractor’s Social Security Number  
Or Corporate Contractor Federal Identification Number \_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Corporate Officer  
(Mandatory, if applicable)

\*The provision in the Attestation of relating to child support applies only when the Contractor is an individual.

\*\*Approval of a contract or other agreement will not be granted unless the applicant signs this certification clause.

\*\*Your social security number will be furnished to the Massachusetts Department of Revenue to determine whether you have met tax filing or tax payment obligations. Providers who fail to correct their non-filing or delinquency will not have a contract or other agreement issued, renewed or extended. This request is made under the authority of Massachusetts General Laws, Chapter 62C, section 49A.