

Notice of Request for Qualifications

For Engineering Services

WASTEWATER TREATMENT 20+ YEAR PLANT EVALUATION

CITY OF BARRE, VT

The City of Barre's Wastewater Treatment Plant was last upgraded in 1991. Having surpassed the 25 year mark, it is time to conduct an evaluation of the physical plant and treatment processes at the plant to meet tomorrow's expected standards. The Treatment Plant is located at 69 Treatment Plant Drive in Barre's North End. This evaluation will result in the identification of a specific strategy of process changes including revised tankage, processes, operating procedures and control strategies that may be developed through final design efforts into constructible improvements.

The plant is a 3.8 mgd facility with limited headworks, dual primary clarifiers, dual oxidation ditches and three secondary clarifiers. The plant completes reduction in oxygen demand, phosphorus removal, disinfection and dechlorination. The facility discharges to the Stevens Branch in the Lake Champlain Basin. Ongoing basin planning efforts are focused on improving the water quality of the Lake including TMDLs for some discharges and communities.

The City of Barre is seeking Statements of Qualifications from qualified engineering firms for a thorough assessment of the plant, equipment, control systems and process review resulting in a report with recommendations and written description of necessary subsequent design and construction engineering services. The Statement of Qualification must detail the firm's qualifications, professional and technical expertise, management and staffing capabilities, prior experience and references. The evaluation requires professional services in assessment of wastewater treatment processes, wastewater, recommendations, design and construction for necessary improvements at the facility including but not limited to:

- Treatment plant processes for reliability to meet current and projected effluent standards, efficiency, resilience and adequacy including control systems notably total ammonia nitrogen
- Treatment plant loadings (actual and potential) including future load capacity based on community growth and heightened water quality standards
- Building and structures-review of interior and exterior condition, functionality and serviceability for current and projected conditions
- Mechanical, electrical, plumbing, security, emergency operations and fire protection systems
- Energy efficiencies, renewable energy opportunities and techniques to reduce operating costs /carbon footprint of the facility
- Grounds, fences, underground structures, pavements and workflow for operations

- Mitigation strategies for neighborhood effects including transient events predicted to occur seasonally or under unique events

Recommendations stemming from the assessment shall include or be supported by cost-benefit analyses, cost estimates and schedule to allow a phased approach to improvements. The engineering firm should consider the use of other disciplines in providing a thorough evaluation. Design services and construction engineering may be required to effect the recommendation of the evaluation. Qualification must include previous experience in design and control of relevant processes or facilities.

Submittal Requirements

Statement of Qualification are due for submission by **1:00 PM on November 19, 2021** at the

Barre City Manager's Office
6 North Main St., Suite 2
Barre, VT 05641

The Statement of Qualification is limited to no more than 10 single-sided pages plus appendices for resumes of personnel. The SOQ shall be single spaced, no smaller than a number 11 font with normal margins.

Selection is anticipated to be completed by November 24, 2021. All submitters will receive a written response to their submission. Any questions regarding the Request for Qualification should be provided in writing no later November 12, 2021. Any clarifications provided will be supplied to all engineering firms with demonstrated interest. Questions should be referred to:

William Ahearn PE,
Director of Public Works and Engineering pwdirector@barrecity.org
6 North Main St. Suite 1
Barre VT 05641
Tel (802) 476-0250

Basis of selection

The criteria for evaluation include: capacity of firm, capability of assigned team, responsiveness, experience with oxidation canal treatment plants and capacity to expedite final engineering