



BARRINGTON

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REQUEST FOR QUALIFICATIONS
CIVIL ENGINEERING PROFESSIONAL SERVICES

VILLAGE OF BARRINGTON, IL

WASTEWATER FACILITY UNIT PROCESS
EVALUATION AND PROJECT PLAN

JANUARY 2020

**REQUEST FOR QUALIFICATIONS
CIVIL ENGINEERING PROFESSIONAL SERVICES**

**VILLAGE OF BARRINGTON
WWTF UNIT PROCESS
EVALUATION AND PROJECT
PLAN**

1. Introduction.

The Village of Barrington (the "Village") is seeking qualifications from professional engineering firms with experience in planning and design services for projects involving wastewater treatment to provide engineering services in connection with the Village's Wastewater Treatment Facility as described in greater detail below. Professional Engineering Firms will be evaluated based on demonstrated competence and qualifications for the type of engineering services required. The most qualified firm will be selected, subject to negotiation of fair and reasonable compensation in a final written Engineering Services Agreement.

2. Background and Components of the Project.

The Village's existing wastewater treatment plant was last fully upgraded in 1972 with multiple minor upgrades over the last 40 plus years. The current plant is rated at a design average flow (DAF) of 3.68 million gallons per day (MGD) with a design maximum flow (DMF) of 10.2 mgd. The current peak hourly flow is 12.0 mgd. The facility consists of mechanical screening, influent pumping, aerated grit removal, primary clarification, three activated sludge tanks operating in plug flow (can operate in series), four final clarifiers, traveling bridge sand filters, and chlorination/dechlorination. Return activated sludge is returned back to the activated sludge process via two screw pumps. Waste activated sludge is aerobically digested and then dewatered using a belt filter press. Dewatered sludge is stored onsite on covered sludge storage pads. The Village's latest National Pollutant Discharge Elimination System (NPDES) permit includes an annual total phosphorus effluent limit of 1.0 mg/L. The Village recently constructed chemical phosphorus removal (CPR) facilities to meet its new total phosphorus limit.

We believe several pieces of equipment, structures, and unit processes have either passed or are approaching the end of their useful life. The purpose of this project is to perform a full evaluation of each unit process and associated equipment and develop a project plan identifying necessary upgrades and maintenance plans at the Village's WWTF.

A site visit of the wastewater treatment facility is scheduled for **January 22, 2020, at 9:00 a.m.** The treatment facility is located at 302 Raymond Avenue, Barrington, IL 60010. No other site visits will be scheduled.

3. Description of the Project.

Prepare a wastewater treatment facility project plan at a minimum meeting the requirements of the Illinois Environmental Protection Agency (IEPA) for low-interest loan assistance.

4. General Scope of Work

- 4.1 Review Village-provided existing documentation and site conditions. Identify future permit requirements and NPDES permit discharge limits.
- 4.2 Attend a kickoff meeting with the Village and prepare a preliminary list of alternatives for plant upgrades.
- 4.3 Summarize Project background information including the total current population served, customer base, and project location.
- 4.4 Summarize the existing collection system and treatment facilities.
- 4.5 Work with Village staff to develop waste load and flow forecasts based on existing data, planning agency population projections, and the Village's Comprehensive Plan (expected to be completed in early 2020) to determine if a capacity increase is required.
- 4.6 Evaluate existing wastewater treatment unit processes and facilities. The evaluations should include the following:
 - a. Determination of appropriate sizing for each unit process to meet future waste loads and flows.
 - b. Process equipment evaluation to determine how much useful life each piece of equipment has and identify when each piece of equipment needs to be replaced.
 - c. A structural evaluation of all tanks and structures at the facility. The structural evaluations shall be done by a registered Structural Engineer in the State of Illinois. The structural evaluations will be done over multiple visits to allow the Village to empty and clean tanks sequentially. The structural evaluations will consist of readily visible and accessible structural elements and confined space entry permit and safety procedures will be required. It should be expected that while empty, the tanks may still have up to six inches (6") of material remaining.

- d. An evaluation of existing heating, ventilation, and air conditioning (HVAC) equipment to determine if/when equipment needs to be replaced.
 - e. An evaluation of all existing electrical and controls equipment to determine if/when equipment needs to be replaced. This evaluation needs to be done by an electrical engineer registered as a Professional Engineer in the State of Illinois.
 - f. Analyze the feasibility and necessity of a backup generator and power source. Also included in this would be the determination of which processes would be powered by the backup generator.
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- 4.7 Identify and perform cost-effective analysis of alternative wastewater treatment schemes. Analysis should consider capital costs as well as long-term operation, maintenance, and replacement costs. Other issues such as reliability, flexibility, constructability and phasing construction should be considered.
 - 4.8 Hold interim meetings (at least three) as necessary to inform and involve Village in the decision-making process.
 - 4.9 Develop a Capital Improvement Plan (CIP) for implementing the recommended alternatives and equipment replacements. The Capital Improvement Plan should include a phased approach to equipment replacement with priority given to equipment that is undersized or beyond/approaching the end of its useful life.
 - 4.10 Develop a site plan and design criteria for the recommended improvements identified in the CIP.
 - 4.11 Prepare opinion of probable construction cost (including design and construction engineering cost), operational costs, and develop a schedule for the implementation of the recommended alternatives and equipment replacements.
 - 4.12 Develop financial information, preliminary cost allocations and potential user fee impacts for the recommended plan. This should include a summary of potential funding sources such as low-interest loans and grants with identifying grant opportunities and schedules for a grant application.
 - 4.13 Prepare environmental impact summary and prepare the documentation necessary to obtain environmental sign-offs.
 - 4.14 Prepare an antidegradation analysis of the recommended improvements.
 - 4.15 Present results of the project plan to the Village Board at a Village Board meeting, incorporate any comments and submit the plan to IEPA for review and approval.
 - 4.16 Respond to IEPA comments and assist with public hearing if necessary, to obtain IEPA approval of the plan.

5. RFQ/RFP Instructions.

5.1 Minimum Proposer Qualifications.

Proposers must meet all of the following minimum qualifications to be eligible to respond to this RFQ/RFP and enter into a contract with the Village:

- a. Be duly licensed in the State of Illinois and certified to perform the engineering and surveying services required hereunder.
- b. Have a sufficient number of on-staff professional engineers experienced in wastewater treatment projects of the same size, scope and complexity of the Project described herein.

5.2 General Requirements.

- a. Each Statement of Qualification (SOQ) must be typewritten and printed single-sided on an 8.5" x 11" format. SOQs with 11" by 17" pages are allowed but must be folded into an 8.5" x 11" format. A minimum of 10-point font size should be used.
- b. No facsimile SOQs will be accepted.
- c. The firm may propose a consultant team. If a consultant team is proposed, resume information must be provided for each key team member from each sub-consultant.
- d. An authorized representative of the Proposer must sign the SOQ and his/her name and title must appear below the person's signature. The signing of the SOQ certifies:
 - (1) The person signing the SOQ has the legal authority to do so on behalf of the Proposer;
 - (2) The Proposer has not made and will not make any attempt to induce any other person or firm to submit or not submit an SOQ;
 - (3) That to the best of Proposer's knowledge, no employee of the Village, or any partnership or corporation in which a Village employee has an interest, will or has received any remuneration of any description from proposer, either directly or indirectly, in connection with the letting or performance of any contract resulting from this RFQ;
 - (4) If awarded the contract for engineering services, Proposer will strictly comply with all applicable terms and conditions of the IEPA; and
 - (5) The statements contained in the SOQ are true and complete.

5.3 Submission Requirements.

Submit four (4) complete paper copies, and one electronic copy on a thumb drive of the statement of qualifications in an envelope marked "QUALIFICATIONS - VILLAGE OF BARRINGTON WASTEWATER FACILITY UNIT PROCESS EVALUATION AND PROJECT PLAN" to:

Jeremie Lukowicz, P.E.
Director of Public Works
Village of Barrington
300 Raymond Avenue
Barrington, IL 60010
Phone: 847-381-7903
E-Mail: jlukowicz@barrington-il.gov

All submittals must be received no later than **11:00 a.m. on February 11, 2020.**

There will be no formal opening of the SOQ.

Postmarks and late submittals will not be considered. Facsimiles will not be accepted. If the submittal is forwarded by mail or messenger service, it is the responsibility of the Proposer to get the SOQ to the above location by said date and time.

5.4 Interpretation and Addenda.

All questions regarding this RFQ shall be directed to Jeremie Lukowicz, Director of Public Works, at 847-381-7903 or email jlukowicz@barrington-il.gov. If necessary, interpretations or clarifications in response to such questions will be made by the issuance of an "Addendum" to all prospective proposers. **Only questions answered by formal written addenda will be binding.** Oral and other interpretations or clarifications will be without legal effect. Any Addendum issued, as a result of any change in the RFQ, must be acknowledged by the Proposer in its SOQ submittal. The deadline for questions will be February 4th.

5.5 SOQ Contents

Firms will be evaluated taking into account qualifications, ability of professional personnel, past record and experience, performance data on file, willingness to meet time requirements, location, workload of firm, expertise in the specific areas described within the scope of work; depth, number and qualifications of staff which the firm will assign to the Project; and demonstrated experience dealing with other governmental agencies and meeting permit requirements, including the IEPA, USACE, Fox River Study Group, and IDNR; experience in providing engineering services in connection with wastewater treatment.

Qualified firms interested in performing the work described in this Request For Qualifications shall provide the following information presented in a clear, comprehensive, and concise manner, illustrating the firm's capabilities and technical expertise:

- a. Introductory Letter (2-page maximum) - Content at discretion of Proposer.
- b. General Firm Qualifications (5 pages maximum) - Provide a statement that portrays the firm's qualifications as related to its experience in relation to the described work. The response should include the following:
 - (1) Summary of the consultant's general qualifications, specific disciplines that are applicable to the proposed work, background, number of employees, office locations, etc. Please limit employee information to that which is specific to the local office.
 - (2) Outline the consultant's capacity to carry out the scope and the extent of the work required. State disciplines where any sub-consultants will be

utilized.

- (3) Describe the consultant's quality assurance and control program and discuss how the work will be monitored with respect to both budget and time.
 - (4) Number of personnel (by specialty) and identify key personnel who will be providing services to the Village relative to the Village's project.
 - (5) Perspective on why the firm is distinctive.
 - (6) Description of any litigation in which the firm is or was a party within the last ten (10) years.
 - (7) Any previous contracts that the firm defaulted on and/or was terminated and reasons for the default(s) and/or termination(s).
 - (8) Detail the firm's capacity to carry out the scope and extent of the work required as follows: Professional Engineering Services between March 2020 and December 2020.
 - (9) Specific expertise relative to the engineering services required hereunder, including, but not limited to wastewater treatment project work, and familiarity with IEPA, USACE, and IDNR regulations.
- c. References - Provide five (5) recent/current professional references, including detailed contact information.
 - d. Project Experience (5-page maximum) - Provide details for a minimum of five (5) recent major successfully completed municipal wastewater planning projects similar in size, scope, and complexity to the Village's project, as well as reference contact information for those projects. The examples must be projects in which your firm was a primary consultant (maximum 1 page per project). (Note: The references required may overlap and include the reference/contract information in this subsection d.)
 - e. Project Team (1-page maximum per team member) - Provide qualifications of each key staff member identified above, including the area of expertise/title, years of experience (total), education and other relevant information regarding the staff member's qualifications to perform the required services.
 - f. Project Approach (5-page maximum) - Provide your firm's approach to the facilities planning project.
 - g. Certificate of Insurance - Include a copy of Proposer's Certificate(s) of Insurance indicating the types and amounts of insurance coverages maintained by the Proposer.

6. Evaluation and Selection of Consultants.

6.1 Evaluation Criteria and Agreement.

The Village will rank all engineering firms based on their qualifications. Firms

will be ranked on the basis of evaluations of their project approach, expertise and quality of previous engineering services relative to wastewater treatment projects similar in size, scope and complexity to the Village's project; depth, number, and qualifications of available staff; demonstrated experience and quality of performance dealing with governmental agencies such as IEPA among others, and ability to provide the engineering services required for the Village's improvements in wastewater treatment; adequate financial resources and insurance; and ability to meet the Village's required time of completion for the engineering work required for its project.

Written Qualifications submitted in response to the RFQ will be reviewed by a four (4) member committee according to the following criteria:

- | | | |
|----|-----------------------|-----|
| 1. | Technical Approach | 10% |
| 2. | Firm Experience | 10% |
| 3. | Specialized Expertise | 40% |
| 4. | Staff Capabilities | 20% |
| 5. | Workload Capacity | 10% |
| 6. | Past Performance | 10% |

These six (6) categories will be given a score based upon the above percentages by each of the four committee members for each submitted proposal for a maximum of 100 points per proposal per committee member. The four scores will be totaled for a maximum possible score of 400.

The top three firms will be asked to interview with the Village. From there the Village will select a single most qualified firm.

The Village will contact the firm deemed most qualified and attempt to negotiate an Agreement at a fair and reasonable compensation, taking into account the estimated scope, complexity, and professional nature of the services to be rendered, and negotiate the other terms of an Agreement. If the Village is unable to negotiate a satisfactory agreement with the firm which is most preferred, negotiations with that firm shall be terminated and the Village shall begin negotiations with the firm which is next preferred. Assuming agreement on the terms of compensation and terms of the Agreement among Village staff and the engineering firm, it shall be presented to the Village corporate authorities for approval. The Village's minimum insurance and indemnification requirements permitted limitations on Engineer's liability and other required terms and conditions that will be incorporated in a written Agreement and presented to the Village corporate authorities for approval. Notwithstanding the foregoing, the contract as modified by the final terms of the "Agreement" between the Village and Engineer will be subject to approval by the Village corporate authorities in their sole and absolute discretion. Compensation will either be an hourly cost-reimbursement type contract with a not to exceed the cap amount.

6.2 Village May Request More Information.

It is the intent of the Village to make evaluations and ranking of engineering firms based on the Statement of Qualifications submitted. However, more information may be requested to fully and accurately evaluate SOQs. The Village reserves the right to obtain clarification on any point in a firm's SOQ or to obtain additional information necessary to properly evaluate a particular submittal. Failure to respond to such a request for additional information or clarification could result in rejection of the Proposer's SOQ. The engineering firm rated the most qualified will be so notified and the engineering firm and the Village will attempt to negotiate a fair and reasonable compensation as well as the final terms of the Agreement.

6.3 Interviews.

Prior to making a determination of the most qualified engineering firm for the Project, interviews of selected firms will be held. The top three most qualified firms based upon their qualifications will be interviewed. Interviews will be one hour in length with the engineering firm allowed to present for up to 30 minutes. Following the presentation, there will be up to 30 minutes of questions and answers. Interviews will be held at the Barrington Public Works, 300 Raymond Avenue, Barrington, IL 60010.

6.4 Terms and Conditions.

The following terms and conditions also apply:

- a. The Village reserves the right to accept or reject any submittals and to waive any minor irregularity, informality, or non-conformity with the provision of procedures of this RFQ/RFP.
- b. The Village reserves the right to request clarification of information contained in qualification statements and to request additional information from any proposing firm.
- c. A firm may withdraw its qualifications and proposal any time prior to the submission deadline.
- d. The professional services Agreement shall be subject to approval by the Village corporate authorities.
- e. The contracted firm shall not assign any interest in the contract and shall not transfer any interest without the prior express written consent of the Village.
- f. The Village understands that certain engineering services may not be performed by in house engineers, but may be contracted out, for example,

geotechnical services. Any such anticipated subcontract services shall be identified by the proposer and the subcontracted services shall be subject to the Village's approval.

- g. The Village considers engineering services to be a professional service and exempt from standard bidding requirements. The Village reserves the right to select or reject engineering firms based on evaluation of the criteria described above in full compliance with applicable law, regulations and the requirements imposed by IEPA.
- h. The Village reserves the right to investigate the references and past performance of any Proposer with respect to its successful performance of similar services, compliance with contractual obligations, and other factors as may be relevant to the ranking of the Proposer.

7. Disclaimer.

- a. The Village makes no representation regarding the information herein provided. The proposer is solely responsible to establish, verify, and ensure that any and all information is correct, complete and necessary to provide a complete and informed submittal.
- b. Neither this Request for Qualifications nor selection of a proposing firm by the Village will commit the Village to award the project, to pay any costs incurred in the preparation of a response to this request, and/or to procure or contract for services or supplies.

Facility Assessment RFQ Questions
Posted: January 27, 2020

The Plant Drawings have been sent out to be scanned. Once they return, they will be added to the facility assessment shared folder.

Three (3) years of plant operating data have been added to the facility assessment shared folder.

Barrington has not received the Phosphorus Removal Study yet.

Barrington does not track the air flows to aeration basins and aerobic digesters.

Both primary clarifiers can be put into service and all flow can go to the aeration basins up to 10.2 MGD. Normally flows are only about 2 to 2.5 MGD and one clarifier is usually "off" to accept the surge from high flows.

An additional 1.8 MGD can go through the primary tanks, bypass the aeration basin and final clarifiers the flow is then chlorinated and discharged for a total "peak" flow of 12 MGD?

The blowers for both the aeration basins and aerobic digesters are manually controlled.

Barrington's electrical rate per kWh is 3.353 cents with a transmission charge of 0.554 cents and a capacity charge of 1.274 cents. These rates are bid through NIMEC.