SOUTHINGTON WATER DEPARTMENT SOUTHINGTON, CONNECTICUT

REQUEST FOR QUALIFICATIONS (RFQ) FOR CONSULTANT SERVICES FOR DESIGN OF A NEW PRESSURE ZONE TO INCLUDE – CONCRETE TANK, PUMP STATION, WATER MAINS; AND WELL#2 BACK-UP WELL – (WELL#2A)

The Southington Water Department (SWD) is soliciting qualifications to design and prepare construction documents for East Side Pressure Zone to include, pre-stressed concrete tank, pump station, water mains; and, Installation of Well#2 back-up well – (WELL#2A)

The detailed requirements for submittal of qualifications are available at the office of the Southington Water Department, 605 West Queen Street, Southington, Connecticut, between the hours of 8:30 AM and 4:30 PM, Monday through Friday. Inquiries relating to this request for qualifications should be directed to Frederick W. Rogers, Superintendent at (860) 628-5593.

FIVE (5) sets of the Qualifications package, clearly marked "REQUEST FOR QUALIFICATIONS FOR PROFESSIONAL CONSULTANT SERVICES FOR DESIGN OF A PRE-STRESSED CONCRETE TANK, PUMP STATION, AND WATER MAINS FOR THE "EAST SIDE TANK PROJECT" AND INSTALLATION OF WELL#2 BACK-UP WELL (WELL#2A) will be accepted no later than October 18, 2013; 4:30 PM, local time in the Office of The Southington Water Department, 605 West Queen Street, Southington, CT 06489; Attention: Frederick W. Rogers, Superintendent.

NO QUALIFICATIONS WILL BE ACCEPTED AFTER THE 4:30 P.M. DEADLINE.

As needed, the work shall be awarded to the most responsive, qualified firm in accordance with Regulations of Connecticut State Agencies Section 22a-482-4 (i) ARCHITECTURAL/ ENGINEERING PROCUREMENT REQUIREMENTS.

SWD reserves the right to reject any or all proposals or parts thereof, to waive any informality in same, or accept any proposal deemed to be in the best interest of the Town.

REQUEST FOR QUALIFICATIONS

FOR CONSULTANT SERVICES FOR DESIGN A CONCRETE TANK, PUMP STATION, WATER MAINS, AND INSTALLATION OF WELL#2 BACK-UP WELL (WELL#2A)

The Southington Water Department (SWD) requests statements of qualifications, experience, and availability from firms with expertise in in the study and design of water system hydraulics (pressure zone creation), concrete tank design/construction, pump station design/construction, water main design/installation. And the installation of Well#2 back-up well (WELL#2A)

SWD seeks to hire a qualified professional Consultant to evaluate, design, prepare construction documents, and provide all documentation necessary for project permitting on the local, state and federal levels in accordance with the requirements of the Drinking Water State Revolving Fund and SWD.

After the RFQs are received, they will be reviewed, and those firms determined to have the best qualifications will be asked to appear before the selection committee for a formal interview.

1.0 PROJECT BACKGROUND

The project includes design and construction of a storage tank, pump station, water mains, and appurtenances that will serve a new pressure zone. The new pressure zone will comprise part of the existing distribution system that is currently part of the West Queen Street high pressure zone. The project consists of the following elements:

Water Storage Tank - The new water storage tank will be a 1.0 million gallon capacity wirewound pre'-stressed concrete tank located on a parcel near the end of Smith Street. The tank will be equipped with tank level sensors and overflow alarms. A mixing system will be included in the tank.

Pump Station – The new booster pump station will have a capacity of approximately 800 gpm at 115 feet TDH, and will be located at or near the intersection of Flanders and Pleasant Streets. A diesel generator will be installed for backup power for the site.

Water Main Improvements – Approximately 4,800 feet of new water main will be included in the project to connect the distribution system to the proposed tank and pump station.

2.0 PROJECT BACKGROUND

This important ground water source development project will provide a back-up well to (SWD) Well #2 and includes proactive improvements at Well #2 and the proposed well # 2A complex. This well is critically important to maintaining adequate supply to SWD customers. Well #2 currently pumps at full pump capacity (500 gpm) directly to the SWD distribution system, 24 hours per day, 7 days per week. As currently operated, Well #2 provides approximately 18% of the SWD's daily demand. SWD Well #2 is currently maintained as a

registered ground water withdrawal with the CT Department of Energy and Environmental Protection (CTDEEP). Developed as a ground water supply in 1953, there are indications that Well #2, at 60 years old is approaching the end of its useful service life. The new back-up well will be registered under the same CTDEEP registration as is Well #2. In accordance with that registration, the wells will not pump simultaneously, however both will be available to SWD individually.

A 2011 video inspection, performed by SB Church, prior to planned maintenance and cleaning, revealed the bronze well screen's condition to be in question. As such, the planned maintenance on Well #2 was not performed. SB Church was concerned with the possibility of a well screen collapse and total loss of the source of supply. SWD proposes to construct a backup supply to Well #2, designated as Well #2A. SWD has completed a hydro geologic investigation in the area of Well #2, including test well drilling and aquifer permeability testing. Based upon the results of these analyses, SWD anticipates the backup supply will be capable of producing in excess of Well #2's registered capacity. The well will be located within approximately 50 feet of Well #2; where a pair of test wells were drilled in the summer of 2012.

This project includes designing, constructing, yield testing, water quality testing, installing a permanent pump, necessary water treatment and piping, an emergency power generator, and obtaining all necessary state agency approvals. A new well building with associated chemical treatment will also be constructed for the back-up well. The proposed project will also include replacing aeration tower media; making necessary upgrades to pumping and treatment equipment to accommodate the new well's capacity; making necessary upgrades to the SCADA system; installing additional and improving security measures (e.g. intrusion alarms, fencing, lighting); evaluating the feasibility and associated cost of making improvements to the well casing at Well#2 to enable the well to be properly cleaned and surged, and improving source protection within the sanitary radius of Well #2. To improve source protection, the current water treatment wastewater disposal system (currently receiving wastewater from analyzers, pump packing, and the water sampling sink) will be abandoned and replaced by a connection to the sanitary sewer. This deficiency was noted in CTDPH's sanitary survey; furthermore, the proposed location of Well #2A will secure the full 200 foot sanitary radius of the new well. This well construction project incorporates two important water supply infrastructure concepts. These are, redundancy of supply; SWD's ability to withdraw ground water from this aquifer will be maintained, even if Well # 2 is out of service, and it also incorporates, long term planning for infrastructure replacement; when Well # 2 completes its useful service life, Well 2A will have been fully developed and will be capable of providing the same registered volume of supply as was originally registered.

It is anticipated, that constructing Well #2A will enable SWD to improve delivery of peak day and peak hour demands through proper pump sizing and therefore, reduce anticipated deficits in SWD's projected 5 and 20 year water system margins of safety (MOS) associated with each of these peaking factors.

The SWD encourages respondents to this RFQ to put forth ideas and approaches that in your experience you believe will be beneficial to the SWD operation and maintenance of this portion of our source of supply.

This Work will be subject to the State of Connecticut Department of Health Code, AWWA Standards and all other applicable water system standards and specifications. All work shall be performed to the satisfaction of SWD.

2.0 STATEMENT OF PROPOSAL

SWD is soliciting qualifications for a professional Consultant to design, and prepare construction documents, for a new pressure zone which will include a new prestressed concrete tank, pump station, water mains, and the installation of Well#2 back-up well (WELL#2A)

3.0 DETAILED DESCRIPTION OF WORK:

Upon selection of the design firm a scope of work will be developed. It is anticipated that the scope of work for new tank, pump station, and water mains will include but not necessarily be limited to the following:

- 1. Field Survey
- 2. Soil Boring Program
 - a. Subsurface soil borings, probes, and test pits to evaluate subsurface conditions along the piping routes and all other project improvement locations.
- 3. Permitting
 - a. Determine the permits or other authorizations that are required
 - b. Assist the owner in obtaining the permits
- 4. Preliminary Engineering
 - a. Conduct preliminary evaluations and/or studies to determine the following:
 - Evaluate boundaries and system demands of proposed new pressure zone and develop design criteria for tank, pump station and connecting water mains
 - ii. Evaluate selected water storage tank and booster pumping station sites and water main routes and alternate sites/routes as necessary. Identify any special requirements or conditions such as ledge, endangered species habitat, etc.
 - iii. Prepare and submit a Technical Memorandum for review and approval prior to design

5. Final Design

- a. Prepare complete contract documents, consisting of construction drawings, technical specifications, bidding forms, and contracts for up to three publicly bid construction projects.
- 6. Bidding Services
 - a. Prepare public bid advertisements, issue additional information to bidders as required, conduct pre-bid conferences, review bids, and provide recommendation of award for each contract.

- 7. Construction Engineering Services
 - a. Provide general construction administration, review shop drawings, test reports, monthly application for payment requests, and change orders as required.
 - b. Prepare record drawings and provide assistance with initial start-up of equipment.
 - c. Provide construction observation services

The SWD has outlined the following steps that we anticipate will be necessary to successful complete Well#2A project. Upon selection of the design firm a scope of work will be developed. It is anticipated that the scope of work for Well#2A will include but not necessarily be limited to the following:

- 1. Field Survey and assessment of existing equipment
- 2. Review of existing data (hydro-geologic, operational, etc.)
- 3. Permitting
 - a. Determine the permits or other authorizations that are required
 - b. Assist the owner in obtaining the permits
- 4. Preliminary Engineering
- 5. Final Design
 - a. Prepare complete contract documents, consisting of construction drawings, technical specifications, bidding forms, and contracts for up to three publicly bid construction projects.
- 6. Bidding Services
 - a. Prepare public bid advertisements, issue additional information to bidders as required, conduct pre-bid conferences, review bids, and provide recommendation of award for each contract.
- 7. Construction Engineering Services
 - a. Provide general construction administration, review shop drawings, test reports, monthly application for payment requests, and change orders as required.
 - b. Prepare record drawings and provide assistance with initial start-up of equipment.
 - c. Provide construction observation services

Contract Documents

- Provide documents suitable for bidding project.
- Submit 50 percent and 90 percent documents to SWD for review and comment
- Submit updated construction cost estimate at 50, 90 and 100 percent submissions
- Prepare and submit all permit applications
- Submit Plans and Specification to Ct DPH for review and Approval.

Southington Water Department anticipates receiving funding assistance for this
project from the State of Connecticut – Department of Public Health Drinking
Water State Revolving Fund (DWSRF). Bidding documents shall comply with
DWSRF program requirements.

Coordination

All aspects of the system design are to be done in conjunction with local, state and federal health rules and regulations. It is the responsibility of the Contractor to ensure all aspects of the system design, anticipated performance and process functions are fully in compliance with local, state and federal department of health requirements.

The Consultant shall assist in Drinking Water State Revolving Fund coordination with DPH for reporting, and proceeding from design loan into construction loan.

4.0 RFQ SUBMITTAL REQUIREMENTS

The RFQ shall include the following:

- Corporate Organization Describe the firm structure, ownership, size, licensure, and history of your firm, including the location of the office where the majority of work will be performed, the location of corporate headquarters, number of years in business
- 2. Identification of Subconsultants (if any) Include the name, address, and nature of any proposed subconsultants, including a description of any prior affiliation.
- 3. Project Organization Chart
- 4. Resumes of Project Team Members Please include only those resumes of staff that are likely to work on this project. The Project Manager shall have a minimum of ten years of experience with the evaluation, design, and construction of drinking water treatment facilities and distribution systems.
- 5. Demonstration of Ability to Complete the Project Describe the firm's ability to perform the services as reflected by current workload and the availability of adequate personnel, equipment and facilities to perform the service expeditiously.
- 6. Detailed project approach and proposed scope of services sufficient to demonstrate a sound understanding of the project and required elements for its successful completion.
- 7. Demonstration of Ability to Meet WBE/MBE Requirements
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- 8. Description of Relevant Experience Include a minimum of three projects that are similar to that being requested. For each project, include the name of the organization for whom the work was performed; contact name, address, and telephone number; contract fee; date the project was completed; and a description of the services performed.
- 9. A listing of standard hourly rates by employee category along with a preliminary cost range for completion of the various phases of analysis, preliminary design, final design and regulatory permitting for a sample project selected as described within the Capital Efficiency Study document.
- 10. Other information that the Consultant believes conveys their qualifications and experience.

Interested firms are requested to submit five (5) copies of the qualifications statement that will demonstrate the extent to which all of the requirements of this request will be accomplished, including but not limited to staff experience, recent project experiences, the firm's role relative to the various project requirements, previous work that demonstrates an understanding of the evaluation, design and construction of a concrete storage tank, pump station, water mains, and appurtenances that will serve a new pressure zone, and the installation of a backup well, plus, previous experience related to Drinking Water State Revolving Fund monies. Selection of the firms is to be based on selection criteria, as listed in this RFQ.

5.0 CONSULTANT'S DUTIES AND RESPONSIBLITIES

The Consultant's duties and responsibilities consist of those services performed by the Consultant, the Consultant's employees, and the Consultant's professional associates. The Consultant's responsibilities shall be performed as expeditiously as is consistent with professional skill and care and the orderly progress of the work. Upon request of SWD, the Consultant shall submit for SWD's and CT DPH's approval a schedule for the performance of the Consultant's services which may be adjusted, and shall include allowances for periods of time required for SWD's review.

6.0 GENERAL REQUIREMENTS

- 1. All requirements identified in the Selection Criteria must be enclosed to be considered.
- 2. The firm selected from this request for qualifications will herein be referred to as the "Consultant".
- 3. The selected Consultant will work at the direction of the SWD's Superintendent.

4. The Consultant will be required to meet with SWD, or other boards or commission, as warranted.

7.0 MINIMUM REQUIREMENTS FOR CONSULTANT FIRM AND STAFF

Each proposing firm must clearly demonstrate that it and its staff meets or exceeds the following minimum requirements.

- 1. The Firm's Project Manager must be a professional engineer licensed to practice in Connecticut.
- 2. The Firm shall have demonstrated experience in water system hydraulics, (pressure zone creation) concrete tank design, pump station design, water main design and installation.
- 3. The Firm shall have the ability to meet the contract WBE and MBE requirements.
- 4. The Firm must have provided services, similar to those being requested for at least three projects. Specific contact references, including scope of project and staff member in charge, must be included in the proposal.
- 5. The Firm must assign a principal person to SWD from among its senior staff. Proposals must include resumes of all professional staff members who might be assigned to the project.

8.0 ADDITIONAL REQUIREMENTS

Each proposal should state, and demonstrate where possible, that the Firm and its staff meet, or will meet, the following additional requirements.

- The staff assigned to serve SWD must have demonstrable expertise in the study and design of water system hydraulics (pressure zone creation), concrete tank design/construction, pump station design/construction, water main design and installation.
- 2. The Firm must assign a principal person to SWD from among its senior staff. Proposals must include resumes of all professional staff members who might be assigned to this project. Only those staff members specifically assigned to the project should be listed. No substitutions will be allowed without the permission, in writing, of SWD.

- The senior staff assigned to serve SWD must be available on short notice to respond
 to specific requests and for meetings with SWD officials days or nights as required,
 and must be experienced in oral presentations to boards, commissions and public
 meetings.
- 4. The staff assigned to serve SWD must provide assurance that any person(s), officer(s) and/or official(s) employed by or associated with SWD has not been employed, retained, induced or directed to solicit or secure the Contract. In the event of any allegation of substance (as determined by SWD) is substantiated, the Contractor shall cooperate fully with SWD in establishing whether or not the allegation is true.
- 5. The staff assigned to serve SWD should be familiar with the applicable provisions of the Connecticut General Laws, and the any other relevant laws and regulations of the state of Connecticut.
- 6. Funding requires participation at the following percentages: Minority Business Enterprises at 3.0%; Women Business Enterprises at 5.0%.
- 7. Any Contract awarded under this request for qualifications or professional proposals is expected to be funded by a loan from the Sate of Connecticut Drinking Water State Revolving Fund and will be subject to requirements of subsections (h), (i) and (o) of Section 22a-482-4 of the Regulations of Connecticut State Agencies (RCSA). The State of Connecticut will not be a party to this request or any resulting contract.

9.0 SELECTION CRITERIA

Proposals will be evaluated as to State of Connecticut RCSA Section 22a-482-4 (i) ARCHITECTURAL/ENGINEERING PROCUREMENT REQUIREMENTS, and the award shall be made on the basis of the most responsive qualified firm in the sole discretion of SWD. The following criteria will be considered in determining the highest qualified firm and such information requested below shall be highlighted in the proposal:

- Competence to perform the services as reflected by technical training and education; general experience; experience of the assigned staff in providing the required services; and the qualifications and competence of persons who would be assigned to perform the services in a timely manner;
- 2. Ability to perform the services as reflected by workload and the availability of adequate personnel, equipment, and facilities to perform the service expeditiously;
- 3. Past performance as reflected by the evaluation of private persons and officials of other governmental entities that have retained the services of the firm with respect

to such factors as control of costs, quality of work, ability to assist in obtaining funding and an ability to meet deadlines.

- 4. Narrative description of the approach and scope of work to substantiate firm's understanding of the project objectives;
- 5. Personnel assigned to perform the tasks. The Project Manager must have demonstrated experience with domestic drinking water treatment facility design and operations and permitting procedures. Experience with federal, state and local funding is required.
- 6. Information demonstrating experience with water distribution treatment facility projects, particularly those where the firm's concepts, design and construction have been applied and implemented.
- 7. Services offered under this contract;
- 8. Fulfillment of project proposal requirements;
- 9. Completion of required information demonstrating the ability to perform the required tasks;
- 10. Experience and familiarity with projects funded by the Drinking Water State Revolving Fund Program.

The contract will be awarded based on a successful negotiated contract with SWD. SWD reserves the right to reject any or all parts of the proposal or parts thereof and to negotiate with the next qualified proposer.

10.0 LIST OF DOCUMENTS AVAILABLE FOR VIEWING AT SWD

The following information is available for viewing at the SWD offices on 605 West Queen Street, Southington, CT. Anyone wishing to view these files should contact Fred Rogers at (860-628-5593).

- 1. RCSA Section 22a-482-4(i) Architectural / Engineering Procurement Requirements
- 2. Mapping, CIP, proposed pressure zone information.
- 3. Historical data pertinent to this project

11.0 INSURANCE INFORMATION

The Consultant hereby agrees to maintain at its own expense comprehensive general liability, automobile liability, professional liability and workers' compensation insurance during the term of this Agreement in amounts determined to be sufficient by the SWD.

The commercial general liability insurance policies shall contain a minimum limit of liability of \$1,000,000 combined single limit per occurrence for bodily injury and property damage and shall name the SWD and its officers, agents and employees as additional insured. The general liability policy shall contain, but not limited to, operations liability, contractual liability, which insures any indemnities contained in the Agreement, products liability and completed operations, which shall be maintained for a period of not less than three years following completion of the work under the Agreement, in addition to personal injury and advertising liability, and broad form property insurance.

The Consultant shall also maintain commercial automobile liability insurance, subject to a minimum limit of liability of \$1,000,000 per accident for bodily injury and property damage. This insurance shall include coverage for all owned, non owned and leased/rented vehicles. The SWD and its employees, agents, and officers shall be designated as additional insured.

The consultant shall maintain professional liability insurance, which covers the services to be provided pursuant to the contract between SWD and the "Consultant". The minimum limit of liability shall be \$1,000,000 in the aggregate. The aggregate shall apply separately to each project on which the Consultant is working.

The Consultant further agrees to maintain at its own expense workers' compensation and employer's liability insurance, which insure all employees of the Consultant. The workers' compensation insurance shall comply with all workers' compensation laws and regulations in the state of Connecticut. The employer's liability insurance shall contain limits of liability of not less than \$100,000 for each accident, disease each employee and disease policy limit.

All such insurance required hereunder shall contain provisions requiring the insurance company(s) to provide thirty (30) days prior written notice to SWD in the event of cancellation, termination or material change to any policy terms and conditions.

Any insurance required hereunder written on a "claims made" rather than on an occurrence basis shall contain a retroactive day no later than the earlier of the commencement date of the services under the Agreement or execution of the Agreement and shall provide that in the event of cancellation or non-renewal, the discovery period for insurance claims (Tail Coverage) shall be available for at least sixty (60) months following termination of the services under the Agreement or termination of the Agreement, whichever is later.

The Consultant agrees to waive any right of claim against SWD, and their employees, agents, and officers for any losses, damages and expenses arising out of the services in the Agreement between SWD and the Consultant. All insurance required hereunder

shall contain waivers of subrogation in favor of SWD and its employees, agents and officers.

The insurance required hereunder shall be primary insurance, not excess or contributory, with out any right of contribution by any insurance maintained by or on behalf of SWD.

The Consultant agrees to provide SWD with certified copies of all insurance policies of insurance required hereunder or certificates of insurance, whichever SWD deems appropriate, prior to commencement of services under this Agreement and throughout the full term of this Agreement upon expiration or termination or change in any insurance coverage required hereunder.

The insurance requirements of the Agreement are an integral part of the Agreement. Any defect in the insurance program required in the Agreement may result in termination of the Agreement, as stipulated in the Agreement. No employee or the entity can modify the terms of the Agreement without the prior approval of Corporation Counsel and the Chief Administrative Officer or his/her designee.

The insurance maintained by the Consultant shall not serve to limit in any way the liability of the Consultant arising out of the services to be provided under this Agreement.