

Request for Qualifications

Sanitary Sewer System Inflow and Infiltration Study

General Overview:

The purpose of this Request for Qualifications is to select a qualified engineering consultant to complete a three part project involving a study of the sewer system within the Town of Bethel in order to determine points of inflow and infiltration within the system.

Background Information

The Town of Bethel is located in northern Fairfield County within the Housatonic Valley of western Connecticut and its immediate neighbors are the communities of Redding, Danbury, Brookfield, and Newtown. The Town of Bethel has a population of more than 18,000 people and encompasses an area of approximately 17 square miles.

Bethel is comprised predominantly of residential properties, although there are commercial and industrial areas of the Town, including the commercial corridor along Route 6, the Clarke Business Park located south of the downtown area and the Berkshire Industrial Park located just north of interstate route 84.

The Bethel sewer system consists of approximately 54 miles of sanitary sewers ranging in size from 4 inch to 21 inch in diameter. The oldest section of the sewer system, located in the downtown area, was constructed in the mid-1960s. These sewers consist primarily of twenty percent clay tile, asbestos cement (AC) pipe and precast concrete manholes. The newer sections of the sewer system that were constructed over the last 20 +/- years are located primarily in the northern section of Town in the area of Stony Hill Road (Route 6) and south of the downtown area at the Clarke Business Park. The sewers in these areas were constructed with polyvinyl chloride (PVC) pipe and precast concrete manholes.

The Bethel sewer system consists of three independent collection systems: 1) the southern collection system tributary to the Paul Street Pump Station, 2) the collection system north of Interstate Route 84, which is tributary to the Berkshire Pump Station, and 3) the collection system north and south of Stony Hill Road (Route 6), which is tributary to the Payne Road Meter chamber.

The collection system tributary to the Paul Street Pump Station consists primarily of the oldest part of the sewer system installed in the 1960s, with the notable exception of the sewers serving the Clarke Business Park, which were constructed in the mid-1980s. Flow is conveyed to the Paul Street Pump Station through a 12-inch and two 21-inch interceptors and is discharged from the Paul Street Pump Station to the Danbury sewer system through a force main to Cross Street in Danbury.

The collection system tributary to the Berkshire Pump Station was constructed in 1979 and includes primarily the Berkshire Industrial Park. Expansion of this collection system was completed to serve residential properties to the east (portions of Phase 3 and 4 sewer expansion project). Wastewater flow from the Berkshire Pump Station is discharged to the Beaver Brook Pump Station in Danbury.

The collection system tributary to the Payne Road Meter Chamber includes the commercial corridor along Route 6 (sewered in the early 1990s) and residential areas north and south of Route 6, which were sewered as part of Phases 1, 2, and 3 of the Stony Hill Project. Expansion of this collection was completed to serve residential areas north and south of Stony Hill Road (Route 6) as part of Phase 4 of the Stony Hill sewer system expansion project. A small amount of wastewater flow from Newtown enters this collection system on Stony Hill Road. Wastewater from the Payne Road Meter Chamber flows by gravity to a 15 inch sewer in Old Sherman Turnpike, which subsequently conveys the wastewater to the Beaver Brook Pump Station in Danbury.

There are nine town-owned wastewater pump stations in the Town of Bethel:

- *Paul Street Pump Station*
The Paul Street Pump Station is the largest pumping facility in Town and accepts wastewater flow from the southern portion of the sewer system. This pump station is about 25 years old and discharges to the Danbury collection system.
- *Plumtrees Road Pump Station*
The Plumtrees Road Pump Station, located on Plumtrees Road between Maple Avenue and Whittlesey Drive, is approximately 2 years old. Wastewater from this pump station is pumped through a force main to a gravity sewer at the intersection of Maple Street and Prospect Street and then subsequently flows by gravity to the Paul Street Pump Station.
- *Berkshire Pump Station*
The Berkshire Pump Station, located north of Interstate Route 84 and off Berkshire Boulevard in the Berkshire Industrial Park, is approximately 25 years old. Wastewater from this station is pumped directly to the Danbury sewer system.
- *Clarke Park No. 1 Pump Station*
The Clarke Park No. 1 Pump Station is located at the intersection of Clarke Circle and Turnage Lane. The pump station is approximately 30 years old and discharges to a gravity sewer on Francis J. Clarke Circle.
- *Clarke Park No. 2 Pump Station*
The Clarke Park No. 2 Pump Station is located near the southern edge of the Francis J. Clarke Industrial Park on Trowbridge Drive. The pump station discharges to a gravity sewer on Trowbridge Drive, which subsequently flows to the Clarke Park No. 1 Pump Station.
- *Stony Hill No. 1 Pump Station*
The Stony Hill No. 1 Pump Station is located between McNeil Drive and Old Hawleyville Road. This pump station is approximately 20 years old and discharges to the Stony Hill No. 2 Pump Station.
- *Stony Hill No. 2 Pump Station*
The Stony Hill No. 2 Pump Station is located between McNeil Road and Benedict Road on Stony Hill Road. The station is approximately 20 years old and discharges to a gravity sewer on Stony Hill Road near Benedict Road.

- *Walnut Hill Road Pump Station*
The Walnut Hill Road Pump Station is located across from Farm Court. This pump station is approximately 5 years old and discharges to the Stony Hill No. 1 Pump Station.
- *Payne Road Pump Station*
Payne Road Pump Station is located across from Brookview Court. This pump station is approximately 6 years old and discharges to Payne Road Meter Chamber.
- *Reservoir Street Pump Station*
The Reservoir Street Pump Station is located at 79 Reservoir Street. This pump station is approximately 8 years old and discharges to gravity and then to Paul Street Pump Station.

There is also a flow metering chamber on Payne Road, known as the Payne Road Meter Chamber. This chamber is located at the intersection of Stony Hill Road and Payne Road. The chamber is approximately 20 years old. Flow from a gravity sewer along Stony Hill Road is measured by the metering chamber before entering the Danbury collection system. Flow data is used to determine compliance with inter-local agreement limits.

General Scope of Work

The study will involve the following phases (as needed):

- Develop Clean Water Fund Application for DEEP funding.
- Flow Isolation/Flow Metering Studies
 - Develop a flow isolation/flow metering plan to effectively model existing flows within the sewer system.
 - Provide flow isolation/flow metering data quality assurance and control (QA/QC) and analytical services.
 - Review and assess the flows from each area of the system inspected and recommend where further I/I studies should be performed.
- Pump Station Evaluation:
 - Conduct inspection and assessment of Town's sanitary sewer pumping stations.
- Manhole Inspections
 - Evaluate the condition of each manhole within the sewer system according to the National Association of Sewer Service Companies (NASSCO) standards.
 - Identify and document damaged manholes that are contributing to I/I flows within the system.
 - Provide documentation for all inspection findings with NASSCO-approved methods, including photographs and/or videos.
 - Review and assess inspection data and give recommendations for rehabilitation, such as repairing a leaking joint, removal of infiltration dishes, or lining a leaking manhole.
- Smoke Testing

- Develop a smoke testing plan to effectively smoke test areas of the sewer system identified for further I/I studies.
 - Perform smoke tests and collect data.
 - Review and assess inspection data and give recommendations for rehabilitation.

 - Closed circuit Television (CCTV) Inspection
 - Prepare CCTV inspection RFP documents/specifications.
 - Provide CCTV inspection contract administration and management of inspection contractor(s).
 - Provide CCTV inspection data quality/quality assurance and control (QA/QC) and analytical services.
 - Review and assess the condition of each sewer pipe segment and manhole inspected and give recommendations for either sewer replacement or rehabilitation.

 - Review and update existing GIS mapping of sewer system GIS map, including:
 - Manhole numbering system
 - Flow direction indicators
 - Piping date; diameter/material/year installed/slope/elevation/etc
 - Manhole top of frame elevations
 - Hyperlinks to manhole inspection forms and other pertinent data
 - Develop sustainable system for on-going collection of system data
 - Recommend/implement electronic document management system

 - Prepare a Report including:
 - Overall system assessment
 - Inspection Data
 - Recommended rehabilitation methods and costs
 - Implementation plan for recommended rehabilitation
 - Updated sewer system GIS map and electronic data
- Assessment and Recommendation of Inflow Devices

Available information:

The following information will be provided by the Town:

- Existing sanitary sewer maps in GIS.
- 1964 field books (sewer cards)
- Available sewer record plans.
- Previous studies as needed
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Instructions for Responders:

A. Statements for Qualification (SOQ) must be submitted in accordance with the instructions and requirements contained in this RFQ. Failure to do so may result in the response being considered non-responsive and it may be rejected.

B. A Responder must promptly notify the Town of Bethel Public Works office of any ambiguity, inconsistency, or error which may be discovered upon examination of the RFQ. A Responder requiring clarification or interpretation of this RFQ should contact the Director of Bethel Public Works Douglas Arndt at arndtd@bethel-ct.gov no later than February 20, 2015.

C. Responders are to address the criteria below at a minimum as part of their submitted response.

1. Qualifications of personnel, including resumes of the "Principal-in Charge", the Project Manager and the key technical personnel to be assigned to this project. Discuss the experience of these persons, including years of experience in current positions and other relevant positions, municipalities served, and their roles in those projects and relate that experience to this project. Include what portion of this contract would be assigned to each person.

2. Corporate history, including the length of time in the business, corporate experience, strengths in the industry, business philosophy, and a description of the organizational structure of the firm; a description of the organizational structure for the management and operation of the services requested and/or provision of the items referred to in this RFQ, including an organizational chart denoting all positions and the number of personnel in each position.

3. Financial condition of the firm and ability to perform all obligations of any resultant contract.

4. The sufficiency of the financial resources and the ability of the Responder to comply with the duties and responsibilities described in this RFQ. Each responder shall provide a current annual financial report and the previous year's report and a statement regarding any recent or foreseeable mergers or acquisitions.

5. Experience in providing the services and/or items requested by this RFQ. Responder shall list experiences with infiltration and inflow studies and evaluation of pump stations and/ or any projects of similar size that have been undertaken within the past 10 years, including total hours by labor description, costs and change orders.

6. Past experience with wastewater projects funded by US EPA and more importantly, CT DEEP. Since it is anticipated that all or at least part of the work will be funded by one or both of these agencies, the consultant's ability to satisfy their requirements is paramount.

7. Competency Statement demonstrating the ability, capacity, and skill of the Responder to provide the services and/or items described in this RFQ and in a prompt and timely manner (flow metering to begin in spring of 2015) without delay or interference. Provide a proposed timeline, assuming the Responder was awarded this RFQ, in which it would take to complete each component of the Scope of Services.

8. Listing of any lawsuits in the past 5 years, related to your business, in which the Responder has been a defendant and provide the outcome.

9. The quality and timeliness of performance of previous contracts or services of the nature described in this RFQ.

10. Provide a narrative demonstrating fully and completely describing the proposed approach/methodology proposed by the Responder in providing these needed services. List any subcontractors likely to be used.

D. Each Responder should provide the names, addresses, email address, and telephone numbers of at least three (5) references in connection with supplying the services or items requested in this RFQ, especially from other local government operations similar to those being requested in this RFQ.

E. The Town may request additional information, clarification, or presentations from any of the Responders after review of the proposals received.

F. The Town has the right to use any or all ideas presented in reply to this RFQ

G. The Town is not liable for any costs incurred by any Responder in connection with this RFQ or any response by any Responder to this RFQ. The expenses incurred by Responder in the preparation, submission, and presentation of the proposal are the sole responsibility of the Responder and may not be charged to the Town.

H. The engineer will carry the following insurance with respect to service he performs for the duration of any contract to be let as a result of this process.

1. Worker's Compensation as required by the general laws of Connecticut

2. Public Liability Insurance, including the Town as an additional NAMED insured with limits of \$1,000,000 each occurrence and \$2,000,000 in the aggregate for property damage and bodily injury covering operations, completed operations and products liability. THIS REQUIREMENT OF NAMING THE TOWN AS AN ADDITIONAL ISSURED SHALL BE SET FORTH IN THE FINAL ENGERNEERING CONSULTANT AGREEMENT.

3. Automobile Liability Insurance, including the Town as an additional NAMED insured, covering the operations of all operations motor vehicles owned, leased, hired, or used by the Engineer in the furtherance of this Agreement with limits of \$1,000,000 each accident for bodily injury, and property damage. THIS REQUIREMENT OF NAMING THE TOWN AS AN ADDITIONAL ISSURED SHALL BE SET FORTH IN THE FINAL ENGERNEERING CONSULTANT AGREEMENT.

4. The engineer shall furnish, prior to commencement of work under this agreement, certificates of insurance evidencing worker's compensation, and the public, automobile, and professional liability coverages required PRIOR TO COMMENCEMENT OF SERVICES TO BE APPROVED AS TO CONTENT AND FORM BY THE TOWN'S INSURANCE AGENT.

5. Professional liability insurance for protection against claims arising out of the negligent performance of services as engineer in the amount of \$2,000,000 for each wrongful act and \$2,000,000 in the aggregate.

I. Save Harmless

1. As part of entering into any contract which may be let as a result of this process, the engineer for itself and its successors will be required to covenant and agree with the said Town to indemnify and save harmless said Town from any and all action, causes of action, judgments,

legal fees, claims and demands whatsoever, which may at anytime be instituted, made, tendered or recovered against the Town to the extent caused by the engineer's negligence in the performance of the engineering services performed pursuant to any such agreement.

IV. Evaluation Criteria and Selection Process An award will be based on the following criteria:

1. Qualifications of the consultant and firm.
2. Past experience of the firm working with CT DEEP and US EPA on state/ federally funded projects.
3. Demonstrated understanding of the project and all major issues.
4. References.

Based on the foregoing, the Town expects to invite one or more Responders to interview. The Town will select the proposal that it deems to be in its best interest and issue a tentative Notice of Award to the successful proposer. The award may be subject to further discussions with the proposer that are deemed necessary by the Town. The award shall be subject to the Responder's execution of a contract to incorporate the terms of this Request and other requirements of the Town. If the proposer does not execute the contract within fifteen (15) business days of the Notice of Award, the Town may withdraw the Notice of Award and enter into discussions with another Responder.

The Town of Bethel hereby notifies that it will affirmatively ensure that in any agreement entered into pursuant to this invitation, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex, religion, or national origin in consideration for an award.

The Town of Bethel is an Equal Opportunity Employer and does not discriminate against any person, firm partnership, or organization as it pertains to race, color, religion, sex, age, national origin, marital status, sexual orientation, medical condition, physical handicap or disability. Any person, firm, partnership, or organization contracting with or doing business with the Town shall be in conformity with the Town's policy on nondiscrimination.

Any contract awarded under this request for qualifications is expected to be funded in part by the State of Connecticut, Department of Energy and Environmental Protection. This procurement will be subject to requirements contained in Section 22a-482-4(h),(i), and (o) of the regulations of Connecticut State Agencies, including MBE/WBE participation. The State of Connecticut will not be a party to this request for qualifications or any resulting contract. As part of the terms of the final agreement, the successful responder shall if requested provide information and aide to the Town to help procure funding from the CT DEEP or any other Connecticut and/or Federal agency.

V. Submittal

One original, signed by the Responder or an authorized representative, and 5 Copies of the written qualifications and one electronic version in PDF format must be received by the Town of Bethel, Public Works Department prior to 4:00 p.m. on Friday February 27, 2015. Written qualifications should not exceed 30 pages in length.

Statement of Qualifications shall be sealed and either hand delivered to the following address.

Town of Bethel
Clifford J. Hurgin Municipal Center
Office of the Director of Public Works
Attn. Douglas Arndt
1 School Street
Bethel, CT 06801

Post marks will not be accepted, as they will be distributed to the selection committee following the end of the business day. All proposals should be clearly marked on the outside of the envelope: "Town of Bethel Infiltration and Inflow Study." The Town may consider proposals that do not address the items listed in this section as non-responsive, or may waive any irregularities at its sole discretion or decide to reject all proposals.