



**City of Zanesville, Ohio
Public Service Department**

REQUEST FOR QUALIFICATIONS

**ENGINEERING CONSULTING SERVICES
WATER SYSTEM ASSET MANAGEMENT PROGRAM**

INVITATION

Statements of Qualifications, Engineering Consulting Services - "Water System Asset Management Program", addressed to the Public Service Department Office, Municipal Building, 401 Market Street, Zanesville, OH 43701 will be accepted until 4:00 pm on November 21, 2017.

FUNDING

This effort will be funded by the City of Zanesville's Water Fund.

PROJECT BACKGROUND/PURPOSE

INTRODUCTION

The Ohio Environmental Protection Agency Division of Drinking Water is requiring the City of Zanesville to develop an Asset Management Program.

The City of Zanesville's Water Division is a regional public water system serving the City of Zanesville and portions of unincorporated Muskingum County. The system's infrastructure includes:

- 1 City's Ground Water Treatment Facility (built in 2011)
- 1 City's former Water Treatment Facility (built in 1917)
- 1 Water Maintenance Crew Building (located at 1084 Rear Central Avenue)
- 12 Active Water Wells and 3 Inactive Water Wells
- 1 Booster Stations
- 6 Distribution Storage Tanks/Reservoirs (High and Low Pressure)
- 250 (+/-) Miles of Water Distribution Pipe (Sizes 2", 4", 6", 8" 12" and 16")
- 1200 (+/-) Public Fire Hydrants
- 6700 (+-) Valves
- 12,200 (+/-) Meters/Customers

SCOPE OF WORK

The consultant will provide the following professional engineering services related to development of an Asset Management Program for the Water Division's water system assets. The City will be building its Water System GIS Data through an RCAP grant. The grant provides equipment and software that the City will own afterwards. It is expected to be the ArcGIS for water system infrastructure mapping. The City will have an enterprise ArcGIS Server license and will maintain data in a server. The City utilizes Tyler software for daily work orders, document storage and other asset information.

Task 1 – Asset Inventory and Condition Assessment

- Attend one (1) kick-off meeting with City staff to discuss the goals of the project and collect additional information to supplement what client has already provided to the consultant.
- Conduct a site visit to accessible facilities. The site visit will be coordinated for the same day as the kick-off meeting.
- Develop an inventory of water assets. The inventory will be in spreadsheet form and based on information provided by the client.
- A “top down” approach will be used, which inventories assets in blocks or types, as opposed to a “bottom up” approach which considers each individual asset (valve, hydrant, service, etc.). The top down approach is more cost effective and will result in an asset inventory framework that covers the entire water system.
- Evaluate the condition of each block of assets based on a site visit to accessible assets and a desktop evaluation using available information such as hydrant flow tests, operator input, and service history (number of breaks, etc.).
- The inventory will include type of asset, age, condition, service history, and estimated remaining useful life.

Task 2 – Level of Service and Criticality

Level of Service

- Assist with development of a Level of Service Statement. The Level of Service Statement defines the way in which the water system owners, managers, and operators want the system to perform over the long term. Typical Level of Service Statements include items relating to water quality, frequency of main breaks, interruptions in service, etc.
- Prepare a draft Level of Service Statement based on the consultant's experience and knowledge of the water system for review and comment by the client.
- The City currently uses Tyler software for asset management and managing work orders related to utility and facility maintenance. Assist in developing custom condition ratings using both institutional knowledge, record drawings, and existing condition data collected.
- Develop Daily, Monthly and Annual reporting methods for tracking critical water system operating components shall be developed. Information and tracking for these reports shall include, at a minimum, water main breaks, leaks, valve operation, hydrant flushing, new system taps, emergency requests, freeze-ups, leak surveys (in miles), water main replaced, water main rehabilitated, water quality requests, water quality complaints, service meter installations/replacements (by size), backflow inspections, backflow tests, etc.

- Respond to client comments and finalize the Level of Service Statement in the final Asset Management Program.

Assess Criticality

- Propose for confirmation by the City in determining the following methods for: the consequences, failure modes and priorities for each asset class and type using custom weight factors and algorithms. For each asset or asset block, estimate its probability of failure, and develop a scoring system (matrix) to rank assets based on their probability of failure. Consider material, age, condition, and other factors as appropriate.
- For each asset or asset block, estimate its consequence of failure. Develop a scoring system (matrix) to rank assets based on the impact their failure would have on the system's ability to meet the desired level of service. Consider remaining useful life, protection of public health and welfare, importance of the asset to operation of the system, and redundancy or lack thereof.
- Rank assets in order of importance (priority) based on a combination of probability and consequence of failure.

Task 3 – Financial Plan

Life Cycle Costing

- Prepare an opinion of probable cost to repair or replace each asset type or block. The opinions of cost will be planning level. Using the “top down” approach, opinions of cost will be developed for each asset block and will include all work assumed for full replacement of the asset. (For example, water main costs will include hydrants, services, and restoration.)

Long-Term Funding Strategy

- Determine the estimated cost per year to adequately fund repair and replacement of existing assets and compare that cost to the water system's current operating budget.

Task 4 – Program Presentation, Implementation, Communication and Training

Asset Management Program

- Prepare a written Asset Management Program presenting the results of the above tasks.
- The Asset Management Plan will:
 - Summarize an inventory and evaluation of all assets
 - Recommend operation and maintenance programs
 - Present an emergency preparedness and contingency planning program
- Submit a draft for review.
- Attend one (1) meeting to review the draft program with the client and receive comments.
- Revise the program in response to comments and submit up to five (5) copies of the final program.

Implementation / Communication Program and Training

- Provide information to be utilized by the water system's staff (Zanesville City Council) to present an update as part of the City's annual budget process.

Deliverables

1. Operating report and Standard Operating Procedure templates. Develop Standard Operating Procedures that incorporate the existing business methods in new business practices recommended by this project.
2. Asset Inventory spreadsheet (Tasks 1 and 2), including:
 - a. Asset inventory
 - b. Condition assessment
 - c. Probability of failure
 - d. Consequence of failure
3. Asset Management Program (Task 4), including:
 - a. Level of service statement
 - b. Life-cycle costing
 - c. Long-term funding strategy
 - d. Implementation/Communications Program
4. Communication program information

Meetings

1. Kick-off and site visits (Task 1)
2. Level of service workshop and review draft report (Tasks 2 and 4)

Limitations / Assumptions

- The asset inventory will be based on information, records, and reports to be supplied by the Zanesville Water Division.

Work Not Included

- Developing a GIS system.
- Condition assessment or inspection except as specifically noted above.
- Water rate study. Cost of service.

Anticipated Project Schedule

Statements of Qualifications Due	November 21, 2017
Negotiation of Consultant’s Contract	by December 29, 2017
Authorization to Proceed*	January 19, 2018
Kick-off and Site Visits	Late January/February 2018
Develop Program	February - April 2018
Level of Service Workshop and Review Draft Program	March - April 2018
Present Final Program	Late May 2018
Public Outreach	TBD
Submit to OEPA	August 2018

ENGAGEMENT OF THE CONSULTANT

A. Required Contents of the Submission (SOQ)

A sealed, plainly marked “RFQ, Water System Asset Management Program” on the outside of the envelope, addressed to the Public Service Department Office, Municipal Building, 401 Market Street, Zanesville, OH 43701 will be accepted until 4:00 pm November 21, 2017. One (1) digital (in PDF format) copy and One (1) printed copy of the SOQ shall be submitted and include the following information:

1. Firm (team) Experience (for each firm in the team):

Describe relevant experience in each of the following primary areas of focus:

- a. Familiarity with the City of Zanesville Water Division's operations
- b. Asset Management experience utilizing databases
- c. Overall project team experience

The firm's experience shall be summarized in a matrix format. In addition, detailed project descriptions of no more than five reference projects containing the majority of the focus areas listed above shall be included. The project descriptions shall be current and limited to a maximum of one full page per project, along with client references and up-to-date contact information (name, title, organization, phone, cell and email).

2. Project Team:

List each member of the proposed Project Team along with their:

- a. Firm affiliation
- b. Area of specialty
- c. Office location
- d. Total years of experience
- e. Years with current firm
- f. Specific involvement/role in projects used as references

One member of the Project Team must be assigned as the Project Manager that will act as the primary client contact and who shall be involved in day to day management of the Project. All resumes shall be included and limited to a maximum of two pages per team member.

3. Project Understanding and Approach:

The Consultant(s) shall state in succinct terms their understanding of what is required by this Request for Qualifications. Describe in narrative or outline form the consultant's approach and technical plan for accomplishing the work of this RFQ including the following:

- Describe the sequential tasks to be used to accomplish this project
- Indicate all key deliverables
- Describe the responsibilities of each person on the project team
- List the portion of the work to be subcontracted
- Include a list of information required or tasks to be completed by City staff.

Project Schedule: Provide a schedule for completing each task in the Scope of Work, including deadlines for preparing project deliverables.

4. Man-Hour Level of Effort:

Provide a proposed man-hour level of effort in table format coordinated with the anticipated list of tasks to complete the work. The man-hour level of effort shall be comprehensive and inclusive of the total man-hours to complete the project. Do not include any fee associated with the level of effort in the Statements of Qualifications.

Total budget for this project is estimated at \$40,000 from the City of Zanesville's Water Fund.

B. Ranking of SOQ

Each SOQ will be reviewed and ranked according to the following criteria:

a. Firm's experience successfully completing similar projects and individual Project Team member experience	Maximum of 40 points
b. Project Team	Maximum of 25 points
c. Approach to project	Maximum of 25 points
d. Quality of SOQ package	Maximum of 10 points

SCHEDULE

The project is anticipated to start in January 2018 and completed by the August 2018. Final schedule will vary based on the negotiated scope and work tasks.

CITY ROLE

City staff will be responsible for administering the project. Representatives of the City's Public Service Department will provide input and assistance with any necessary field work and review all deliverables from the effort. The primary contact at the City will be Paul Mills, Water Superintendent.

SELECTION AND CONTRACT DOCUMENT

Upon review of all responsive SOQs using the criteria outlined above, the City may select up to three (3) firms to interview. Following interviews, the highest-ranking firm will be invited to negotiate a final Scope of Services and fee with the City. When the contract is executed by both parties, the Consultant will be instructed to commence providing the work outlined in the contract. All information, data, documents, photos, computer records, and other materials of any kind acquired or developed by the consultant pursuant to this project shall be the property of the City of Zanesville. If the City is unable to reach agreement with the highest-ranking firm, the City will enter into negotiations with the next highest-ranking firm. The City reserves the right to negotiate directly with the firm(s) selected for additional project work.

RESERVATION OF RIGHTS

The City reserves the right to undertake such investigation as it deems necessary to evaluate the SOQs of the firm and to evaluate the SOQ submitted. Firms may be requested to execute releases for information. Failure to provide a release upon request will result in disqualification.

The City of Zanesville reserves the right to negotiate additional work.

The City of Zanesville reserves the right to reject any or all SOQs, to waive technical or legal deficiencies, and to accept any SOQ that it may deem to be in the best interest of the City and to negotiate the terms and conditions of any SOQ leading to execution of a contract.

ADDITIONAL INFORMATION

Requests for additional information should be directed to Paul Mills, Water Superintendent at 740-455-0631 or by email to paul.mills@coz.org. Addenda to this request for qualifications, if any, including written answers to questions, will be posted on the City of Zanesville website at the City's web site at <http://www.coz.org> under the project heading. Addenda and updates will NOT be sent directly to firms. Firms submitting SOQs should check the web site daily for addenda and updates after the release date. If Addenda is issued, firms should print out, sign and return addenda with the SOQ. Failure to do so may result in disqualification.

INDEMNIFICATION AND INSURANCE REQUIREMENTS

The Contract will require the Consultant to agree to pay on behalf of and hold harmless the City of Zanesville for all claims arising in whole or in part from its work on behalf of the City. Consultant will be required to maintain insurance in such form as will protect the Consultant from claims and liabilities for damages for bodily injury, including accidental death, and for property damage, which may arise from operations under this contract. Consultant shall also be required to maintain professional liability insurance in the minimum amount of \$1 million.