REQUEST FOR PROPOSALS
AND QUALIFICATIONS
for
ENGINEERING SERVICES
for the
DELANO WATER DISTRIBUTION SYSTEM

Delano Municipal Utilities (DMU) is requesting qualifications and a fee proposal for engineering services from a qualified consultant with extensive experience in water distribution modeling. Your request for consideration must be received in the form of a proposal and shall include six (6) hard copies and one (1) PDF or electronic version of your proposal no later than close of business (11:00 am) on **Friday March 31, 2023**. Please send the completed submittal and a cover letter to:

Delano Municipal Utilities
ATTN: Paul Twite, Manager
PO Box 65
11 Bridge Ave W
Delano, MN 55328

OVERVIEW

Delano is located in central Minnesota with a population of 6,638. The City's water system is operated by the *Delano Water, Power & Light Commission*. Highlights of the water system include:

- The current central treatment facility was constructed in 2006. It consists of four pressure filtration tanks containing sand, aggregates, and other filter media. The plant is currently limited to 1.5MGD but can be increased to 10 MGD as need arises. The plant was recently updated in 2022 at a cost of $250,000.
- The plant is operated semi-autonomously by SCADA (Rockwell Automation).
- Elevated storage includes one water tower with 1.5-million-gallon capacity. The tower was constructed in 2006 and was last inspected in 2019.
- The distribution system is comprised of approximately 65 miles of water mains ranging in size from 4" to 18". The water mains consist primarily of cast, DIP and PVC pipe. Mains are continually upgraded as roads are replaced.
- Raw water is drawn from the Quaternary Aquifer from four wells. The wells construction dates and depths are: Well #1 1937 140 feet, Well #2 1944 123 feet, and Well #3 1941 148 feet, and well #4 2005 196 feet.
- All four wells have recently been completely overhauled with new submersible pumps, valves, and partial casing. Thein Well Co. has been retained to perform annual inspections on Delano's wells.
- Peak daily water usage, occurring in 2022, was 1,545,000 million gallons.
- The water distribution system has been recently located by coordinates, mapped, and is available in a GIS format.

SCOPE OF SERVICES

DMU is requesting proposals for a comprehensive evaluation of its existing water production, filtration, distribution and storage system; and the preparation of a computer model of the entire system. The proposal shall include an estimated timeline for each component necessary to successfully model the Delano water system.

Below is a *partial list* of essential elements to include in the final report.

1. Create a water distribution model of DMU's water system utilizing a commercial software package. The proposal shall identify the software, and if possible, submit a recent sample model.
2. Develop a system pressure curve, including low-pressure and fire flow deficiencies.
3. Evaluate the current pumping & treatment capabilities.
4. Recommend upgrades or changes based upon energy efficiency and firm capacity considerations.
5. Evaluate and identify redundancy and deficiencies of the entire system.
6. Evaluate the efficacy of current distribution network.
7. Provide water model output for the following scenarios: adding a second tower to the system, adding additional industrial users, elevated storage out of service, age of water in the system due to closed valves creating "dead end" mains, temporary use of the system by-passing the water treatment plant distributing raw water from the wellheads into the system, and other scenarios defined by the Consultant which are deemed beneficial to the report. Shapefiles of each scenario shall be provided for incorporation into the DMU's GIS platform.
8. Provide hard copies and electronic version of the water distribution model files for use by DMU staff.
9. The completed and calibrated model shall be the property of DMU. The consultant shall be retained as needed on an hourly basis to operate the software for scenarios and evaluations.
10. Develop an annual hydrant flushing scheme to include locations and duration of each flush to achieve best water quality results.

PROPOSAL CONTENTS

The statement of qualifications/proposal will include:

1. A discussion of your project understanding and detailed scope of services outlining key issues and your project approach.
2. A project schedule outlining the timeline and estimated completion date of each major task identified in your scope of work.
3. The name, qualifications, experience and availability of the project manager and other key members of the project team and their related experience.
4. Past experience with references from at least three (3) municipal clients that you have recently provided similar engineering services to.
5. Project fees (Not-To-Exceed basis) for the proposed scope of services including an hourly rate sheet.

Lengthy detailed technical proposals and/or promotional brochures are not desired. Emphasis should be placed upon providing information concerning your project approach, scope of services, similar projects your firm has recently performed, and the availability and qualifications of your staff.

EVALUATION CRITERIA

Proposals received will be evaluated using the following criteria:

1. Responses from references provided
2. Project approach and scope of available services
3. Pricing and value for scope of services proposed
4. Anticipated completion date
5. Experience and education of staff

The Delano Water, Light & Power Commission will select the most responsive, responsible, and qualified consultant based on staff review and decision of the above listed criteria. Consultant selection will *not be based solely on the fees submitted*. Selection will also be determined based on the extent of experience in computer modeling, as well as favorable references from municipal clients.

Additional consideration shall be given to the consultant who offers direct, field service and technical assistance with aspects of water production including chemical dosing, water quality, pumping, treatment options, metering, and SCADA.

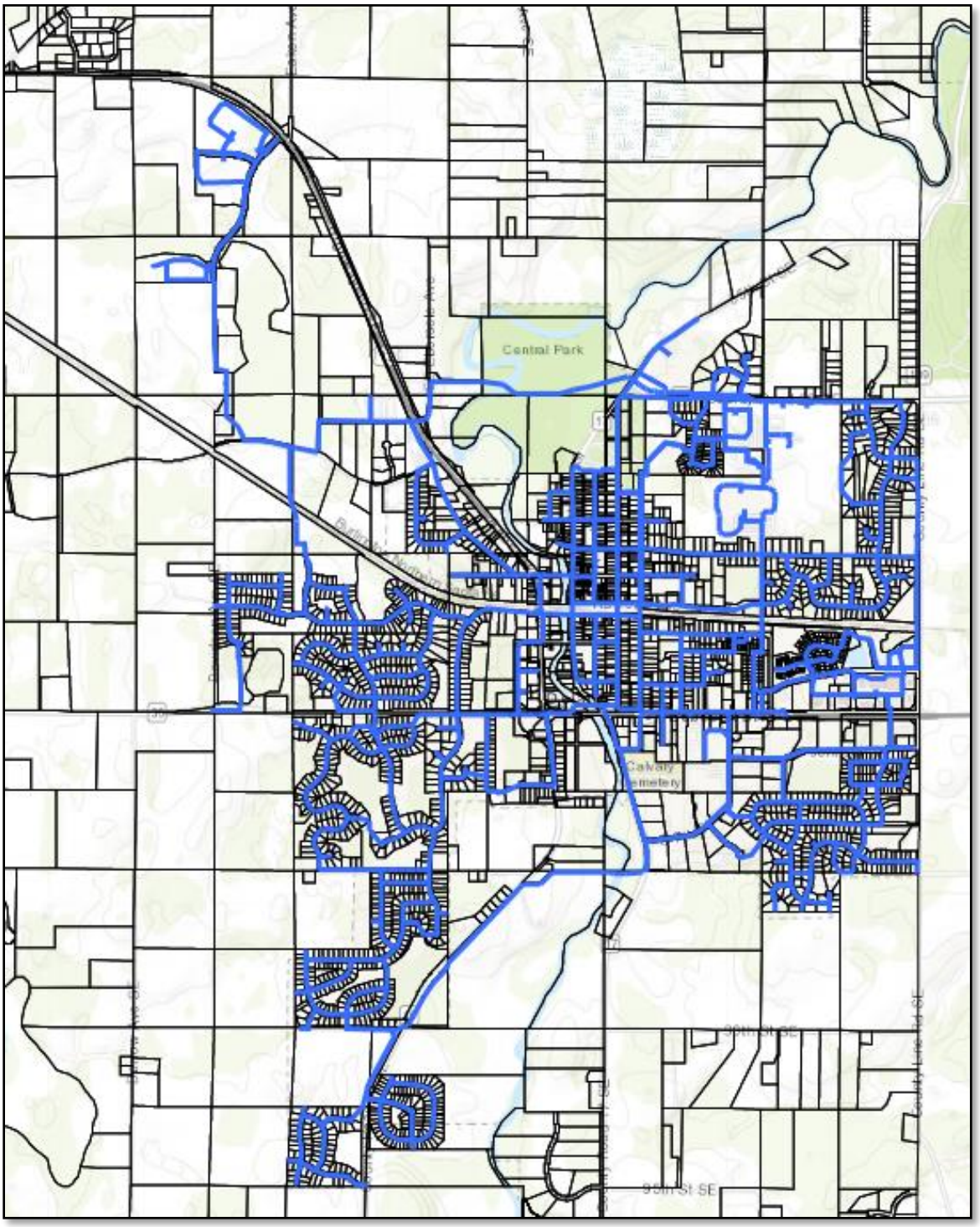
The respondent acknowledges the right of DMU to reject any or all proposals, and to waive informality or irregularity in any proposal received. In addition, the respondent recognizes the right of DMU to reject a proposal if it fails to furnish the data required by this request for proposal or if the proposal is in any way incomplete or irregular. DMU shall be the sole judge of compliance and reserves the right to accept or reject any or all proposals received.

INQUIRIES

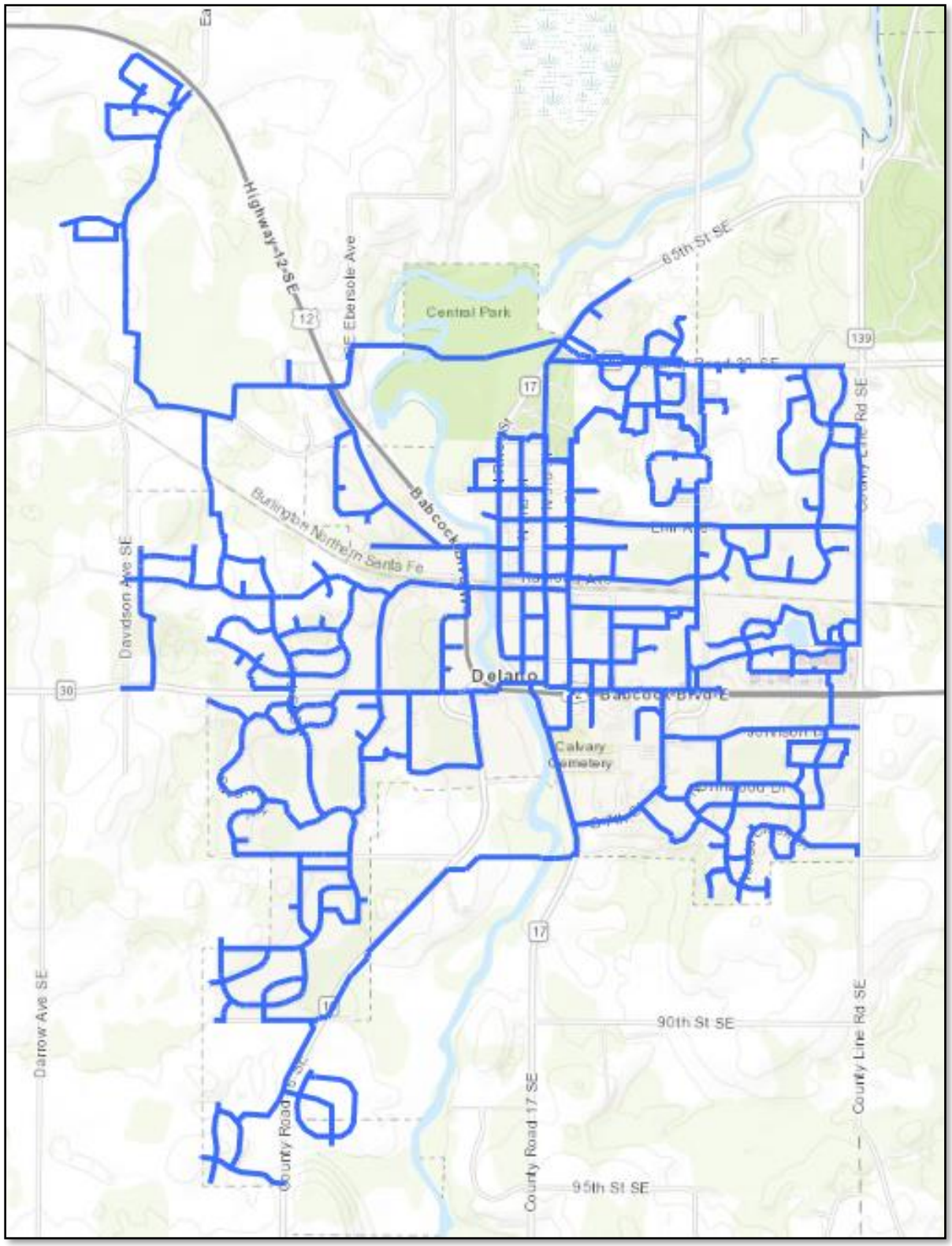
All inquiries shall be submitted with reasonable time for response. Please send inquiries to: Paul Twite, General Manager, (763)972-0557 or ptwite@delanomn.us

SUPLIMENTAL INFORMATION

APENDIX 1 Water System Map with parcels (ESRI Snapshot)



APENDIX 2 Water System Map – no parcels (ESRI Snapshot)



APENDIX 3 Miscellaneous Photos

Water Tower

Water Treatment Facility

Water Treatment Facility – Interior

Typical well interior