October 15, 2019

REQUEST FOR QUALIFICATIONS
City of Muscatine, Iowa
Public Works Department
Redundant Force Main Project
Musser Park to Sewage Treatment Plant (WRRF)

1. INTRODUCTION

Your firm is hereby invited to submit a written statement of qualifications to provide engineering services for the Redundant Force Main Project. The City of Muscatine intends to select a single engineering consultant for this project based on the RFQ responses.
To be considered by the City of Muscatine, responses to this RFQ must be received by 2:00 PM on December 03, 2019 at the Public Works office at 1459 Washington Street (563-263-8933).
This project includes the study of the existing conditions with regards to the current force main, concept design, and estimated costs for two alternatives for the line and associated work. Final design, construction cost estimate for the selected alternative and acquiring Canadian Pacific Railroad (CPR) and US Army Corps of Engineer (USACE) permits for this project's crossing of CPR right-of-way and modification to the Mississippi River Levee for the effluent line are also included in this project.

2. OBJECTIVE

The purpose of this project is to design and construct a redundant force main for sewer from Musser Park to the sewage Treatment Plan that can be also be used as a redundant line for the plant effluent water to the Mississippi River. The distance of the new pipe is approximately 3,700 feet with a wide variety of existing conditions.
The Design Objectives for this project area as follows:
Public Participation: A key to this project is public information being distributed via print and public information meetings so that the need for the project is understood and the reasons for the routing are conveyed to the affected property owners.
Coordination and Cooperation with Key Stakeholders: The development of this concept for the dual use of the redundant line needs to be developed with DNR and EPA concurrence. Also the permits from CPR and USACE need to be communicated to these agencies as far in advance as possible to allow for a smooth permitting and review process. The design schedule and permitting lead time need to be coordinated in a schedule.
Feasibility: By necessity, this project will proceed within a specific set of parameters. Cost, and time of implementation must be considered in all the alternatives looked at so that the final design and subsequent construction are technically sound and financially feasible. An analysis of the basic concept of this dual use needs to be done to make sure the regulatory requirements on this line do not make the concept unfeasible.

Construction Staging: The design of this project should minimize, as much as practicable, disruption to traffic flow on the streets. Closing streets and rerouting traffic is an acceptable alternative if convenient detours are available. The closing of streets will be limited to one block at a time for this project unless approved by City in the design phase of the project. **This construction staging plan must be developed in the first phase of the project so that accurate information can be given to the public at the public information meeting.**

3. SCOPE OF WORK

Given the project objectives, the City of Muscatine anticipates a Scope of Work consisting of five primary components:

1. Investigate existing conditions and review existing data available from the city. Review project concept with DNR.
2. Preliminary Design, route options, material options, construction staging, and public outreach.
3. Final Design of selected alternative, get project permits and complete DNR review.
4. Final Design of all ancillary items needed on the older lines to allow for the use of this piping as a raw sewage line to the plant, and also as an effluent discharge line to the Mississippi River, including abandoning the existing discharge line that goes under the levee and redoing valves and connections.
5. Analysis of the existing and new piping systems and providing options for access to these systems for future maintenance and then including selected options into the project design.

4. MINIMUM QUALIFICATIONS

The consultant selection process will be primarily based on review of their qualifications. To be considered, consultants must document the knowledge, skills and experience of the firm and the persons dedicated for the project duration.
The City of Muscatine anticipates a civil engineering firm as an appropriate prime consultant for the project. However, a strong experience level must be demonstrated for in-ground pressure pipe valve and pressure pipe design. The selected team that the City is looking for should exhibit the following qualifications:

- Final design on similar project. By similar, the project must contain valve design and design of pressure systems.
- Team must show experience with Railroad and USACE permitting.
- Previous project where DNR was involved with permitting the project beyond the standard system extension permits.
- Experience with waste water treatment plant design and process.
- Project experience with piping having dual usage is a plus but not a requirement.
- Team experience with retro fitting older piping in a plant along with retro fitting valving on underground lines.

5. SUBMITTAL CONTENTS

Submittal shall be limited to 6 pages (double sided) plus a single page to present the project staff and a single page to present the possible schedule for the project. Ancillary data that the consultant feels is necessary shall be included as a link within the submittal. The following items are also items the submittal must contain:

- A paragraph on firms understanding of the project.
- What advantages does the firm bring to the project?
- Identification of the dedicated project staff for the duration of the project.
- List of applicable projects the firm or team have completed through construction.
- Description of the project approach and when and where public involvement maybe the best for this project.
- Cost estimating methods for this project.
- Experience with permitting with CP Railroad, US Army Corps of Engineers (USACE), and Iowa DNR.
- Quality control methods along with firm's policies for checking design work prior to completion of final plans.
- Firm's commitment to doing a City of Muscatine constructability review near the end of final design. This will include dedicated project personnel coming to Muscatine to sit shoulder to shoulder with City staff to review and help in the review of the final design documents.

6. SELECTION CRITERIA

All firms who submit responsive statements of qualifications will be considered. In selecting a firm or team, the selection committee will take into consideration qualification information including such factors as:

- 25%-Firms experience, knowledge, familiarity and past performance with work similar to the piping and mechanical equipment scope of this project.
- 10%-Firms experience and working relationship with CP Railroad, USACE and DNR.
- 25%-Expertise and experience of staff proposed for this project. Experience of staff that will not be used for the project will not be taken into account.
- 20%-Firms experience with projects having alternative analysis.
- 20%-Discussions with references provided.

Once the best firms have been selected, an interview maybe required of the top firms to better present their vision for the project.

7. OWNER'S RESPONSIBILITY

The City of Muscatine shall provide or perform the following items:

- Access to and copies of all information of the City pertinent to this project.
- Presubmittal meeting. City shall conduct a presubmittal meeting in Muscatine on October 29, 2019 at 2:00 PM at the Public Works conference room at 1459 Washington Street.
- Provide GIS system information for corridor of redundant main.

- Access and tours of all sites involved with this project.

8. QUESTIONS

Email all questions regarding this RFQ to Jim Edgmond, City Engineer, at jedgmond@muscatineiowa.gov. Copy all emails to cmann@muscatineiowa.gov.

9. ATTACHMENTS

Project scope map

REDUNDANT FORCEMAIN MUSSER PARK TO WRRF
CITY OF MUSCATINE, IA