January 12, 2010

Re: Request for Qualifications (RFQ)/Request for Proposal (RFP) 
Rehabilitation/Reconstruction of Five Sanitary Sewer Lift Stations 
City Project Nos. 0877SN & 0858SN 
Bid Number: 10-05DS

The City of Duluth is seeking a consultant to provide engineering services for the development, design and contract administration to rehabilitate and/or reconstruct five sanitary sewer lift stations. To facilitate the City’s selection of a consultant, we are requesting that interested parties submit their qualifications (in response to this RFQ/RFP) to design, prepare plans and specifications and provide construction engineering services to rehabilitate/reconstruct several lift stations.

Background

The five lift stations under consideration include LS #3 (Generator), LS #9 and LS #14 as part of the 2010 Lift Station Improvements project (0877SN) and LS #23 and LS #8 as part of 2011 Lift Station Improvements project (0858SN).

Lift Station #3, 35 S. 45th Avenue East, is a triplex submersible pump station located near Lake Superior on 45th Avenue East. The station was constructed in 1999. The station pumping equipment consists of two KSB pumps with 34 horsepower motors and one KSB pump with a 10 horsepower motor. The pumps have a rated flow capacity of 1200 gpm, 1200 gpm and 265 gpm respectively. The combined capacity of the station with the two large pumps running is 1,920 gpm. The station has an average daily dry weather flow of 397,440 gpd. The station pumps through approximately 1200 feet of 16 inch force main before discharging to the gravity sewer at 42nd Avenue E and London Road. Due to its location and vulnerability to high wet weather flows a generator is needed to prevent overflows during power outages.

Lift Station #9, 1202 Minnesota Avenue, is a wet well/dry well station located on the corner of Minnesota Avenue and 12th Street and was constructed in the 1950's. The station consists of a concrete wet well with a storage capacity of 1,700 gallons per foot. The dry well is also cast-in-place-concrete construction and contains two Fairbank Morse centrifugal sewage pumps. The pumps have 10 horsepower motors and were flow tested at an average capacity of 700 gpm. The station has an average daily flow of 165,000 gallons. The station pumps through approximately 1000 feet of 10 inch force main, before discharging to a gravity sewer to LS # 8. Due to the configuration of the downstream collection system, it is not possible to run both pumps at this
station without causing a basement backup. The bottom of the wet well is flat and has a history of sand build-up. This station has a long list of maintenance issues.

**Lift Station #14**, 735 Garfield Avenue, is a wet well/dry well station and was constructed in the 1950's. The station contains two Worthington pumps, one which has a 3 horsepower motor and one which has a 7.5 horsepower motor. Both pumps were flow tested with the smaller pump having a capacity of 163 gpm and the larger pump having a capacity of 276 gpm. This station has an average daily flow of 50,970 gallons. The station pumps through approximately 5,140 feet of 8 inch force main before discharging to gravity sewer. It is important that this station remains in service at all times because the long force main makes it extremely difficult to pump around the station. One of the difficulties with this lift station is that some of the interstitial flows result in the deposition of gritty filings in the wet well. Consequently it is very important for this station to have good vac-tor truck access to the wet well. This station does have some odor problems, but because of its location there has not been many complaints. The primary problem with the station is that wet well is separated from the dry well control room by only an manhole lid.

**Lift Station #3**, 346 E Owatonna Street, is a duplex submersible station contained in a factory built, 6 foot diameter steel shell located on Dakota Avenue and Owatonna Street that was constructed in 1979. The station contains two Flygt submersible pumps. The pumps have 3.8 horsepower motors and were flow tested at a capacity of 122 and 131 gpm. The combined capacity with both pumps in operation is 158 gpm. The station has an average daily flow of only 3,170 gallons as it serves only a few homes. The station is actually located within a resident's front lawn and pumps through a 694 foot length of 4 inch DI force main before discharging into a gravity sewer. The steel shell appears to be very corroded with large pitting evidenced.

**Lift Station #8**, 729 Lake Avenue S., is a wet well/dry well station and was constructed in the 1950's. The station was upgraded in 1983 and 1987 by installing four new Fairbank Morse pumps with 30 horsepower motors that operate in series to overcome a very high static head. The two sets of pumps were flow tested at a capacity of 750 gpm. The station has a high average daily flow of 228,960 gallons and is considered to be an important station as it takes all of the flow from Park Point and passes it to LS #6. The station pumps through about 800 feet of 8 inch force main that runs up and over the lift bridge, before discharging into a gravity sewer immediately downstream of LS #7. The very unique force main configuration at this lift station forces the station to pump in a difficult manner. The pumps are controlled by electrically operated ball check valves that open and close slowly in order to avoid creating water hammer problem in the force main. Water hammer is of paramount concern due to the very high head at the station and the unstable configuration of the force main.

**Format of Submittals**

In order to facilitate the review and evaluation of the qualifications and proposals received, all submittals shall be organized in the following outline format and should not exceed twenty
A. Qualifications and Experience

Provide a resume of the firm’s background and experience in the development and design of similar public works design, especially those relating to lift station rehabilitation and reconstruction. Include a resume of key staff who will be working on this project, their involvement and their location. Describe the scope of the work performed for at least two projects and the involvement of the key project staff similar in scope to this request for qualifications. Include references from other clients for whom similar work has been performed. In addition, list the address, telephone number and fax number of the firm’s main office and of any regional or local offices that may be utilized.

B. Project Approach

Describe in detail the consultant’s view of the work required (approach) relative to rehabilitating and reconstructing lift stations. At a minimum, include discussion of expected methodology, hydraulic and pump requirements, electrical and SCADA requirements, and construction and site restraints.

C. Work Schedule

This work will be designed, bid and constructed as two projects. The first, “2010 Lift Station Improvements”, Project No. 0877SN will include LS #3, LS #9 and LS #14. The second will be “2011 Lift Station Improvements”, Project No. 0858SN will include LS #23 and LS #8. Provide a simple time line of the anticipated work schedule for each project. We anticipate selection of the consultant to be accomplished by March 8, 2010.

D. Additional Information

Outline the firm’s liability and professional responsibility insurance. Additionally, include information related to the firm’s financial stability and the present capacity to carry out the scope of work needed. Also indicate whether the project development and design would be fully completed by consultant staff, and/or the extent to which sub-consultants would be utilized.

E. Estimated Construction Costs

Provide an opinion of probable construction costs for the proposed construction costs for each project.

F. Proposal

Provide, in a separate envelope one copy of the cost proposal, clearly marked on the outside.

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“Cost Proposal” along with the responder’s official business name and address. Terms of the proposal as stated must be valid for the project length of time. Include a detailed work plan identifying the work tasks to be accomplished and the budget hours to be expended on each task for managing, design and construction of the two separate lift station improvement projects.

The proposal shall state the total fee, as well as subtotal fees for a) design services through bidding and b) construction inspection and management and any sub-consultants. Also to be included is an itemized breakdown of specific tasks for all design, inspection and management services proposed by the consultant in response to the city’s Request for Proposal. The proposal should also include a schedule of hourly billing rates for each employee who may be involved in design and construction engineering services (construction administration and construction observation). Also, includes rates of miscellaneous charges such as copies and mileage.

**Submittal Date**

Submit four (4) copies of the response to this RFQ/RFP to:

Dennis Sears - Purchasing Agent  
City of Duluth  
Room 100 City Hall  
Duluth, MN 55802

Responses must be received by 2:00 PM CDT on Wednesday, February 17, 2010.

**Consultant Evaluation and Selection Process**

The City of Duluth will evaluate and select the most qualified consultant(s) based upon the responses submitted to this request. The city reserves the right to seek additional information and/or to interview the top-rated firms.

Proposals will be evaluated and considered as follows:

- Overall firm qualifications and experience  
  10 points
- Qualifications, experience and location of key personnel on the project  
  20 points
- Approach in addressing and recognizing the overall project scope and understanding the City’s needs  
  25 points
- Familiarity with City of Duluth standards for wastewater pump stations  
  10 points
- Experience with SCADA controls and familiarity with the City’s SCADA  
  10 points
- Completeness of the proposal  
  10 points
- Consultant’s ability to complete projects within fees and budget  
  5 points
- Project costs/fees  
  10 points

Proposals will be evaluated on the “Best Value” basis with 90 percent qualifications and 10 percent cost consideration, The review committee will not open the cost proposal until after the
qualifications points have been awarded. The City of Duluth anticipates that the evaluation and selection will be completed by March 8, 2010.

Limitations

This Request for Qualifications/Request for Proposal does not commit the City of Duluth to award a contract or pay costs incurred in the preparation of the proposal of this request, or to procure a contract for services or supplies.

The City of Duluth specifically reserves the right to accept or reject any or all proposals, to negotiate with any qualified source, to cancel in part or entirely this Request for Proposal, to waive any proposal requirements, to investigate the qualifications of any proposal, to obtain new proposals, or proceed to have the service provided in any way as necessary to serve the best interests of the City of Duluth.

Thank you in advance for your time and effort in responding to this request. Please contact me directly at (218) 730-5076 if you have any questions in responding to this RFQ/RFP.

Sincerely,

Mark Guisfredi, P.E.
Project Engineer

cc: Jim Benning, Director of Public Works and Utilities
    Cindy Voigt, City Engineer
    Steve Lipinski, Manager of Utility Operations
    Eric Shaffer, Chief Engineer of Utilities
    Loren McLeod, Supervisor, Utility Operations
    Dennis Sears, Purchasing Agent