# ADVERTISEMENT REQUEST FOR PROPOSALS

# PROFESSIONAL ENGINEERING CONSULTING SERVICES FOR WASTEWATER TREATMENT PLANT CITY OF GRAND ISLAND, NEBRASKA

Sealed proposals will be received by the City Clerk's Office, 100 E. First Street, Grand Island, NE 68801 or P.O. Box 1968, Grand Island, NE 68802 until 4:00P.M. (local time) on March 30, 2010 for PROFESSIONAL ENGINEERING CONSULTING SERVICES FOR THE WASTEWATER TREATMENT PLANT, City of Grand Island, NE. Proposals received after the specified time will be returned unopened to sender. Proposals must be based on the City's Request for Proposals. Contact John Henderson, Operations and Engineering Superintendent, at (308) 383-8846 for further information.

Proposed services shall include, but are not limited to:

- Schematic Design
- Design Development
- Contract Document Preparation
- Bidding Services
- Services During Construction

The award winning offer will be required to comply with the City's insurance requirements.

Proposals will be evaluated based upon firm experience on similar projects, team experience on similar projects, experience with City of Grand Island, Understanding of the Project, Approach to the work, Responsiveness and Completeness of Proposal, and City Agreement & Fees. Proposals shall remain firm for a period of ninety (90) days after proposal due date. The City of Grand Island reserves the right to refuse any or all proposals, to waive technicalities, and to accept whichever proposal that may be in the best interest of the City, at its sole discretion.

RaNae Edwards, City Clerk



# REQUEST FOR PROPOSAL FOR PROFESSIONAL ENGINEERING CONSULTING SERVICES FOR WASTEWATER TREATMENT PLANT City of Grand Island, NE

# **SCOPE**

# PROJECT DESCRIPTION

The City of Grand Island is seeking the professional services of an engineering consultant to perform work at the City's Wastewater Treatment Plant (WWTP) regarding treatment capacity analysis for, coordination and design of a slipstreaming concept of a high carbon source soluble BOD waste stream, coordinating and approval of the Nebraska Department of Environmental Quality, including a sensitivity analysis input in an excel based rate model software spreadsheet. The evaluation is to assist the City's WWTP with the capacity evaluation to gauge the effectiveness of slip streaming in helping the treatment process at the WWTP, especially in regards to reducing nitrate levels in the City's WWTP effluent. The evaluation will include analysis of the need for the proper soluble BOD from the proposed digester and slipstreaming analysis on file with the City.

# WASTEWATER TREATMENT PLANT SLIP STREAM & CAPACITY EVALUATION

Perform analysis and prepare a capacity evaluation of the City Of Grand Island's WWTP. The capacity evaluation will be to reflect the ability of the City's WWTP to use a high carbon source soluble BOD waste stream from industrial beef packing plant JBS to meet a total nitrogen (TN) goal of 10 mg/l. The JBS plant is a major customer located immediately adjacent to and west of the City's WWTP. A slip stream analysis is on file with the City. The evaluation will include a study of and modeling of the future digester project as a source of soluble BOD. Other alternative sources of soluble BOD such as methanol should also be examined at this time.

# JBS & NDEQ COORDINATION

A presentation will be made to representatives of the City and JBS to discuss and explain the results of the slip stream & capacity evaluation. Then a meeting will be held at the NDEQ office to present the concept and ask for NDEQ approval. The slip stream concept will include a capacity analysis evaluation to ensure the City's WWTP has sufficient capacity for the slip streaming concept and can continue to meet discharge limits of our current NPDES discharge permit and future anticipated discharge limits for TN. A goal of10mg/l or lower should be met. The consultant will prepare summary minutes of all meeting and conference calls.

# **ALTERNATE SCENARIO EVALUATION**

The consultant will prepare a sensitivity analysis of the JBS slip stream and other alternatives as discussed above, to provide input into the City's current rate model. The analysis will examine opportunities to minimize the WWTP's capital improvement plan including operation and maintenance costs. Up to three (3) different model runs are anticipated. One model run would include the slip stream concept. A second model run would include rates with a significantly reduced waste load from JBS and a reduced digester project. A third model run would include a significantly reduced waste load from JBS with no digester project and continued land filling of sewage sludge.

# **ESTIMATES OF COST**

The consultant shall prepare estimates of costs for any proposals that are discussed. A final report will be presented to the City upon completion.

# ANTICIPATED SCHEDULE

Advertisement – March 6, 2010 Proposals Due – March 30, 2010 Negotiations Complete – April 6, 2010 Council Approval – April 13, 2010 Work Completion Date – as submitted by Consultant

# DISCUSSION WITH RESPONSIBLE OFFERORS AND REVISIONS TO PROPOSALS

As provided in the request for proposals, discussions may be conducted with responsible offerors who submit proposals determined to be reasonably susceptible of being selected for award for the purpose of clarification to assure full understanding of, and conformance to, the solicitation requirements. Offerors shall be accorded fair and equal treatment with respect to any opportunity for discussion and revision of proposals and such revisions may be permitted after submissions and prior to award for the purpose of obtaining best and final offers.

#### **SECTION I**

# Wastewater Treatment Background

The City of Grand Island has owned and operated the Wastewater Treatment Facility (WWTF) since the 1930's. The current facility located at 3013 E. Swift Road in Grand Island, Nebraska was constructed in 1965. The implemented infrastructure facilities constructed include:

- Screening and Pumping Station
- Aerated Grit Classification
- Primary Clarification
- Sludge Dewatering
- Blower Building
- Secondary Aeration Basins
- Final Clarification

## With upgrades in:

- 1980; Administration/Laboratory Facility, Aerobic Digestion Complex, Scum Pumping Station Final Clarification Basin and Sludge Storage Lagoon
- 1995; Aeration Basin Complex, Methanol Feed, Blower Building, Chlorine Disinfection Facility, Chlorine Contact Basin, Waste Activated Sludge Basin, Gravity Belt Thickener Pumping Station and Sludge Dewatering Centrifuge Upgrade
- 2001; Electrical Distribution Switchgear Facility
- 2003: Solids Handling Belt Filter Press Facility, Odorous Air Bio-Filter
- 2005; Ultraviolet Disinfection Facility

Future expansion or improvements to the system include:

 Bar Screen Replacement, Grit Removal Replacement, Primary Mechanism Replacement, Solid Waste Storage facility, and the addition of an Anaerobic Digestion System

The Wastewater Division presently uses activated-sludge process as the most significant biological process in treatment of domestic sewage and industrial wastewaters.

#### **SECTION II**

# Important facts

Grand Island is the fourth largest city in Nebraska, with an estimated population of 47,000, incorporated in 1872. Grand Island has one wastewater treatment plant that serves the entire city. It is operational 24 hours a day, 7 days a week (24/7), 365 days a year, with scheduled routine maintenance and/or special cleaning requiring periodic shutdowns of individual plant processes. The plant maintains over 277 miles of sewer collection pipelines and 15 lift stations: 60 percent of the plant's sewage (by volume/per day) comes from a wide variety of sources, while 40 percent (by volume) comes from larger agricultural-industrial entities. Grand Island discharges treated wastewater under a permit issued by the Nebraska Department of Environmental Quality.

JBS Swift & Company (formerly Swift, Monfort, ConAgra and Swift & Company) is a major industrial contributor, composing 65 percent of the wastewater treatment facilities historic loadings. With recent improvements to the JBS owned and operated pre-treatment system (25 million gallon lagoon, brought on line July 3, 2008) it has been reduced to approximately 40% of the loading to the City of Grand Island's Wastewater Treatment Plant. JBS Swift specializes locally in the beef processing and is in the value-added meats industry. Since 2007 it is a subsidiary of Brazilian Beef Company JBS. To date JBS Swift processes approximately 5,800 head of cattle a day. JBS Swift's pretreatment facility is a Dissolved Air Floatation Unit (DAF) facility and two anaerobic lagoon polishing units (25 and 9 million gallons respectively). These two lagoons are currently operated in series.

# **Current Aeration Basins**

Each of the existing four aeration basins consists of six zones. The first three zones in each basin are of equal size and can be operated under anoxic conditions for a total anoxic volume of 0.68MG/basin. The second (0.2267MG zone) and third zones are equipped with aeration diffusers and can be operated to provide additional aerated volume. The fourth, fifth, and sixth zones are of equal size and provide a total aerated volume of 2.0 MG/basin for a total of 2.68MG/ basin of total volume. Each basin length is 372 feet with a width of 65 feet and the side water depth of each basin being approximately 17 vertical feet. They are operated 24 hour per day 365 days per year.

#### **SECTION III**

# PREPARATION & SUBMISSION OF PROPOSALS

The proposer agrees that the preparation of all responses to this RFP shall be at the sole cost and expense of proposer and any and all claims to reimbursement for the cost and expense of preparation shall be waived.

Questions concerning the technical aspects of this request should be directed to John Henderson, Wastewater Treatment Plant Engineering/Operations Superintendent for the City Of Grand Island Public Works Department at telephone number W(308) 385-5430 C(308-383-8846).

Respondents to this RFP must deliver five (5) copies of their proposal to:

City of Grand Island City Hall, 100 East First Street P.O. Box 1968 Grand Island, NE 68801-1968 Attn: City Clerk

Proposals should be marked "WASTEWATER TREATMENT PLANT CAPACITY ANALYSIS" and shall be delivered to the Office of the City Clerk no later than 4:00 p.m. on March 30, 2010.

Proposals shall remain firm for a period of ninety (90) days after the proposal due date.

# Submittal of Proposal

Proposals are to be submitted in a sealed envelope and labeled as shown below. A complete proposal package shall consist of two individual envelopes that are both placed within a single complete proposal package. The **first envelope** shall contain the proposal transmittal letter and the firm's technical and qualification proposal (four copies), without the proposed compensation. A **second sealed envelope** shall also include the proposal transmittal letter and the proposed compensation (one copy). The single complete proposal package and each of the two individual envelopes shall be labeled as shown below.

City of Grand Island
City Clerk Office
P.O. Box 1968 (Postal Address), 68802
100 E. 1<sup>st</sup> Street (Street Address), 68801
Grand Island, NE

Label as appropriate: COMPLETE PACKAGE, TECHNICAL AND QUALIFICATION ENVELOPE, or COMPENSATION ENVELOPE

Project Name:

Request for Professional Engineering Consulting Service
Wastewater Treatment Plant Capacity

Submittal Date:

Firm Name:

Inquiries regarding the RFP should be directed to John M. Henderson, Operations and Engineering Superintendent (308-383-8846) or by inquiry to the address above

Proposals received after the designated time will not be considered in the selection process and will be retained unopened until after award. The city reserves the right to accept or reject any or all proposals and to waive informalities or irregularities in the selection process.

## **SIGNATURE**

The proposal shall be signed by an official, authorized to bind the consulting firm and shall expressly state the proposal is valid for 90 days.

#### **SECTION IV**

# **EVALUATION CRITERIA**

Proposals will be evaluated with the following considerations, along with the weight percentages assigned to each element which will be used to rank and evaluate the proposals:

•	Firm experience on similar projects -	15%
•	Team experience on similar projects –	15%
•	Experience with City Of Grand Island –	10%
•	Understanding of the project –	15%
•	Approach to the work –	15%
•	Responsiveness & Completeness of Proposal –	15%
•	Schedule & Proposed Fees-	15%

# SECTION V GRATUITIES AND KICKBACKS

City Code states that it is unethical for any person to offer, give or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefore. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a consultant under a contract to the prime consultant or higher tier consultant or any person associated therewith, as an inducement for the award of an agreement or order.

# **SECTION VI**

#### Insurance

Provide a summary of the firm's (and sub-consultant's) insurance coverage. Minimum limits and types of insurance that are required to be maintained throughout the term of the project are identified in this section.

# WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY

1. "Worker's Compensation and Employer's Liability." This insurance shall protect the Contractor against all claims under applicable State worker's compensation laws. This insurance shall provide coverage in every state in which work for this project might be conducted. The Contractor shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a worker's compensation law. This policy shall include an "all states" endorsement. The liability limits shall be not less than the following:

Worker's Compensation Employer's Liability Statutory Limits \$100,000 each accident \$100,000 each employee \$500,000 policy limit 2. "Business Automobile Liability." This insurance shall be written in comprehensive form and shall protect the Contractor, Contractor's employees, or subcontractors from claims due to the ownership, maintenance, or use of a motor vehicle. The liability limits shall be not less than the following:

Bodily Injury & Property Damage \$500,000 Combined Single Limit

3. "Comprehensive General Liability." The comprehensive general liability coverage shall contain no exclusion relative to explosion, collapse, or underground property. The liability limits shall be not less than the following:

Bodily Injury & Property Damage

\$ 500,000 each occurrence \$1,000,000 aggregate

4. "Umbrella Liability Insurance." This insurance shall protect the Contractor against claims in excess of the limits provided under employer's liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall not be less than the following:

Bodily Injury & Property Damage

\$1,000,000 each occurrence \$1,000,000 general aggregate

5. Additional Requirements. The City may require insurance covering a Contractor or Subcontractor more or less than the standard requirements set forth herein depending upon the character and extent of the work to be performed by such Contractor or Subcontractor.

Insurance as herein required shall be maintained in force until the City releases the Contractor of all obligations under the contract.

The Contractor shall provide and carry any additional insurance as may be required by special provisions of these specifications.

6. Certificate of Insurance. Satisfactory certificates of insurance shall be filed with the City prior to starting any work on this contract. The certificates shall show the City as an additional insured on all coverage except Workers Compensation. The certificate shall state that thirty (30) days written notice shall be given to the City before any policy is cancelled (strike the "endeavor to" wording often shown on certificate forms). If the Contractor cannot have the "endeavor to" language stricken, the Contractor may elect to provide a new certificate of insurance every thirty (30) days during the contract. The Contractor shall immediately notify the City if there is any reduction of coverage because of revised limits or claims paid which affect the aggregate of any policy.

#### **SECTION VII**

# FAIR EMPLOYMENT PRACTICES

Each proposer agrees that they will not discriminate against any employee or applicant for employment because cage, race, color, religious creed, ancestry, handicap, sex or political affiliation.

#### LB 403

Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

## **FISCAL YEARS**

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

#### **SECTION VIII**

# Cost Proposal

In a sealed envelope, as a separate document from the Technical Proposal, provide one (1) copy of the cost estimate required for each task in the work plan:

- A. Schematic Design
- B. 50 % Review (Design Development)
- C. 90 % Review (Contract Document Preparation)
- D. 100% Contract Documents
- E. Bidding Services
- F. Services During Construction (Construction Phase)

At a minimum, include line items for each sub – task identified for each task outlined in the Scope of Work above. The spreadsheet shall be in a format that will permit city staff to determine the key project team member(s) proposed for each task and sub – task and the number of management, engineering, technical, drafting and support personnel hours, and total cost envisioned for each task. The hourly rate, name of the team member and staff classification shall be included in the column headings of the spreadsheet.

Identify all other costs to be billed to the project including project expenses and sub-consultant costs (no markups on expenses and consultants will be allowed). Include a copy of the proposed rate schedule(s) to be used throughout the duration of the project including any adjustments that are predicted to occur during the life of the project. Work will be performed at actual costs for actual hours worked based on the rate schedule.

The deadline for submittal is noted in the "Preparation & Submission of Proposals" section. Please note that the submittal deadline is strictly held. Late proposals will not be accepted.

## **SECTION IX**

# Proposal Terms and Conditions

The city will not pay any costs incurred by the firm in preparing or submitting the proposal. The city reserves the right to modify or cancel, in part or in its entirety, this RFP. The city reserves the right to reject any or all proposals, to waive defects or informalities, and to offer to contact with any firm in response to any RFP. This RFP does not constitute any form of offer to contract.

End of Proposal Information