Invitation to Bid No. 170906
Water Treatment
OPR: Facilities Maintenance

Lubbock County
916 Main Street, Suite 503
P.O. Box 10536
Lubbock, Texas 79408
(806)775-1014

September 5, 2017

Whom It May Concern,

Lubbock County Commissioners' Court will receive sealed bids on the following indicated merchandise until ***2:00 P.M., Tuesday, September 19, 2017*** in the Purchasing Office, 916 Main, Suite 503, Lubbock, Texas 79401 (PO Box 10536, Lubbock, TX 79408), at which time bids will be publicly opened and read aloud.

It is estimated that bids will be evaluated and awarded in Commissioners' Court, *Monday, September 25, 2017*. However, bids must be firm for a 30-day period from bid opening date in case the Court desires additional evaluation time.

With uncertainty of mail delivery, the County cannot be responsible for bids which are not received before bid opening hour.

Inasmuch as comparison sheets are sent to all bidders and posted to the County web site, bid quotations will not be communicated by telephone. Interested bidders are encouraged to attend the bid opening should they desire quotations.

The County reserves the right to accept or reject any or all bids submitted, and shall be the sole judge in this matter.

Lubbock County is exempt from all city, state and federal sales tax. Your signed and otherwise correctly completed sealed bid (one copy only) should meet the following specifications or the Commissioners' Court may, at its option, refuse to consider the bid.

It is to be understood that upon the award of this bid / request for proposal the successful bidder(s) is/are responsible in complying with the Prompt Payment Act, effective July 1, 1986 (Government Code CHS. 2251.001 - 2251.043).

Vendors are required to have and maintain, at no cost to Lubbock County, insurance of the types and amounts as required by law and/or the bid specifications.

In those instances where manufacturer and/or model numbers of equipment/materials are referenced as "equal in quality" it is not the County's intent to rule out other manufacturers, nor will the named manufacturer receive preferential treatment. Lubbock County is the sole judge in determining the suitability of items bid.

Should vendors have deviations from bid specifications all deviations must be listed on a self-scribed attachment. This attachment must also be signed by an authorized company representative and be attached to the vendor's original bid.

Lubbock County, Texas is subject to the Texas Public Information Act, Chapter 552, Texas Government Code. Proposals submitted to Lubbock County, Texas in response to this RFP are subject to release by the County as public information. If the Proposer believes that the proposal, or parts of it are confidential, as proprietary information, (s)he must specify that either all or part is excepted, and provide specific and detailed justification for its claim of confidentiality. Vague and general claims to confidentiality are not acceptable. All proposals or parts of the proposals which are not marked as confidential will be considered public information after a contract has been awarded. The successful proposal may be considered public information even though parts are marked confidential.

Lubbock County, Texas assumes no responsibility for asserting legal arguments on behalf of Proposers. Proposers are advised to consult with their legal counsel concerning disclosure issues resulting from this proposal process and to take precautions to safeguard trade secrets and other proprietary information.

Company Name: _____

By (Print): _____Title: _____

Signature: _____Date: _____

Address: _____ Mailing: _____ ZIP: _____

Telephone: _____Fax: _____

Email: _____

General:

Lubbock County is requesting bids for purchasing commercial water treatment services for various Lubbock County facilities. Water treatment is required for steam generation, chilled and heating water closed loop system and cooling tower water treatment. Lubbock County is interested in a full service water treatment and consulting company to provide chemicals and service at a competitive price. Terms of contract will be October 1, 2017 through September 30, 2018. With the option for five one-year renewals.

For further information and a tour of the Facilities and equipment contact ***Benjamin Phelps, Lubbock County Plant Operator, 915 Buddy Holly or telephone 1-(806)-775-1009 for an appointment.***

Specific Information on Lubbock County Facilities:

Lubbock County Court House:

The closed loop water system consists of two systems:

1. *Chill Water*
    - 1- 350 ton York Chiller
    - 1- 350 ton Cooling Tower (BAC)
    - 3- Chill Water Pumps
    - 1- Cooling Tower Pump
    - 1- Plate and Frame Heat Exchanger

2. *Heating Water*
    - 1- Heating Water Pump
    - 2- Heat Exchanges

The chill water system consists of the chiller loop which is supplied by the chiller pump. The chiller piping loop supplies chill water to the building chill water loop piping system, and pumped to the building HVAC. The chill loop piping is interconnected to the Central Plant system by the tunnel piping and is isolated/controlled by the BAS (Building Automation System) to open/close the interconnect valves as required.

Central Plant:

The closed loop water system consists of two systems:

1. *Chill Water*
    - 1- 350 ton York Chiller
    - 1- 350 ton Cooling Tower (BAC)
    - 1-Chiller Pump for York Chiller
    - 1- Tower Pump for York Chiller
    - 2- Chill Water Building Pump for the Law Enforcement Center

The Chill Water System consists of the chilled water loop which is supplied by make-up in the Central Plant. The chilled water loop pumps are fed from the chiller loop. The building chill water pumps supply chilled water to the Law Enforcement Center HVAC units. The chiller loop piping system is interconnected to the Lubbock County Courthouse system by the tunnel piping and is isolated/controlled by the BAS (Building Automation System) to open/close the interconnect valves as required.

2. *Heating Water System*
    2- 350HP Steam Boilers
    2- Heating Water Pumps for the Law Enforcement Center
    2- Heat Exchanges
    2- 7.5 cu. ft. Water Softener

Heating Water System is operated by the BAS (Building Automated System) and normally operated from Oct. - May. Pump control can be selected to stop/start by outside air temperature control. The high/low water temperature is regulated by outside air temperature-reset schedule. The system has a regulated make-up system from domestic water.

ADULT PROBATION:

1. *Chill Water*:
    1- 40-ton chiller (Air Cooled)
    1- Chill Water Pump

2. *Heating Water*:
    2- 2 million BTU Hot Water Boiler
    1- Heating Water Pump

System has a regulated water make-up system from domestic water

Both systems are controlled and regulated by the BAS (Building Automated System).

916 Main St Building:

1. Chill Water
    1- 311 ton Trane Chiller
    1- Tower Pump for Chiller
    2- Chiller Pump for Chiller
    2- Building Pumps for the Chill Water Loop
    2- Plate and Frame Heat Exchangers

The chill water system consists of a chiller loop piping system which supplies chill water to the building chill water loop pumps and also supplies chill water to the basement building A/H units.

2. Heating Water System:
    3- 2 Million BTU Hot Water Boilers
    2- Heating Water Building Pumps
    3-recirculating pumps for the hot water boilers

The Heating Water System consists of 3- 2million BTU Hot Water Boilers with a recirculating pump for each Boiler. This Hot Water Loop supplies heating water to the building Heating Water Pump. This is a 4-pipe system that is controlled by the BAS (Building Automated System).

Lubbock County Detention Center:

1. Chill Water:
    2- 400 ton air-cooled Trane Chillers
    2- Chiller Pumps

2. Heating Water:
    5- Hot water Boilers
    2 Heating Water Building Pumps

There are also 2 domestic hot water boilers with their own recirculating pumps.

Please complete the following pages:

Section 1: Chemical Cost:

A. Estimated cost of treatment per year for the following:

$_____ Total estimate annual chemical cost per year.

B. Utilizing your chemical programs what is the cost of the following?

1. Total cost to treat 1,000 gallons of cooling water make-up.

_____

a. Total cost to treat 1 Mmlbs. Of boiler FW.

_____

2. Cost to treat 1,000 gallons of chilled water.

_____

3. Cost to treat 1,000 gallons of heating water.

_____

II. **Section 2: Water Conservation:**

A. Maximum cycles of concentration of the cooling water: _____

B. Maximum cycles of concentration of the boiler water based of feed water:

_____

III. Section 3: Product Information:

Cooling Water Inhibitor:

Product: _____ Residual dosage: _____

Cost to treat 1,000 gal. of makeup: _____

Cooling Water Biocide:

Product: _____ Residual dosage: _____

Cost to treat 1,000 gal. of system water: _____

Secondary biocide if recommended: _____

_____

Boiler Water Inhibitor:

Product: _____ Residual dosage: _____

Cost to treat 1,000 gal. Blowdown: _____

Alkalinity Adjustment:

Product: _____ 20 ML

Oxygen Scavenger:
Product: _____ 40 ppm

Neutralizing Amines:
Product: _____ Blend of amines: _____

Defoamer or sludge conditioners:
Product: _____ 20 ppm

Chilled/Hot water inhibitor:
Product: _____

IV. Section 4: Training and Service Policy:

Enclose a description of your training and service policy.

Water Treatment System Parameters

The system parameters need to be established and are important to monitor and properly control my systems. List your recommended parameters for the following:

A. Boiler Water Parameters:

P-alkalinity: _____

M-alkalinity: _____

OH-alkalinity: _____

FW cycles: _____

MU cycles: _____

Sulfite: _____ residual
Phosphate:

TDS: _____ (UmHOS or ppm)

pH: _____ boiler water

pH: _____ condensate

Hardness: < _____ 0 from softener, < _____ 0 polished

B. Cooling Water Parameters:

pH: _____

Silica: < _____ ppm

Total hardness: _____ ppm

Calcium: < _____ ppm

Phosphate dosage: _____

Phosphonate dosage: _____

Molybdate dosage: _____

C. Hot Water Parameters:

Nitrite dosage: _____ ppm

Molybdate dosage: _____

TDS: _____ umHOS

D. Chilled Water Parameters:

Nitrite dosage: _____

Molybdate dosage: _____

TDS: _____ umHOS