

“Notice of Intent to Award” Sole Source Contract

The purchasing department for the City of Bloomfield intends to make a purchase which has been determined to qualify as a "sole source" purchase made in accordance with NMSA 1978 Secs.13-1-126 and 13-1-128 (2012). The purpose of this “Notice of Intent to Award” is to publicly announce the intent of the City of Bloomfield to award a Sole Source Contract for a specific service, construction or item of tangible personal property required by the City.

The sole service award is to WesTech for updates and improvements to the Trident HS Filter Plant at the City of Bloomfield Water Plant. WesTech is the manufacturer of the Trident HS Filter Plant. See attached PDF for additional details.

Any contractor who does not agree that the service, construction or item of tangible personal property is available only from the contractor determined to be a sole source may protest the “Notice of Intent to Award” by contacting the purchasing department for the City of Bloomfield within fifteen (15) calendar days from the date this notice is posted.

The protest must be in writing and submitted via e-mail to: ksimpson@bloomfieldnm.gov. The words "PROTEST OF NOTICE OF INTENT TO AWARD SOLE SOURCE CONTRACT" must be in the subject line. The body of the email should describe the basis for the protest in detail along with the name of the contractor subject to the sole source protest. Additionally, the name and address of the company making the protest is required. Further questions can be directed to the purchasing department at ksimpson@bloomfieldnm.gov. (Posted 2/15/2022)

STAFF REPORT

To: Bloomfield City Council
Cc: George Duncan, City Manager
Kimberly Simpson, Finance Director
Ryan Lane, City Attorney
From: Jason Thomas, PE, Assistant City Manager 
Date: February 9, 2022
Re: “Discussion and Possible Action to Make a Sole-Source Award to WesTech Engineering, LLC, for Additional Repair/Upgrades to the Trident HS Package Treatment Plant Controls, Filters, and Chlorine Feed Control in the amount of \$112,703 plus GRT”

Council approved a sole-source contract to WesTech Engineering, LLC in December for the upgrade of the Trident HS Plant Controls. While on-site for their preliminary investigation work, City Staff discussed the need for several other repair / upgrades to the filter plant with them. WesTech is the designer and manufacturer of the Trident HS Filter and controls and has continued to research and develop improvements to this package plant design, which is now 15 years old.

The attached proposal from WesTech includes repairs / improvements that City Staff determined would be the most beneficial to improve the operation of the plant. Listed below is additional justification for each item.

1-A Additional I/O for Chem/Chlorine Feed Control

Liquid sodium hypochlorite is currently fed to the filtered water using a peristaltic pump that is set manually, based on the operator’s best approximation of the proper dosage, the age of the chemical (its strength degrades with age and temperature), flow rate, temperature, and the manual reading of a residual chlorine meter. This upgrade would use an Aquaritrol system to measure the residual chlorine further downstream and adjust the speed of the pump automatically to meet an operator-specified setpoint. This would provide optimized chlorine dosing and save chemical costs. The cost of this upgrade is \$9,786.

1-B 4 X Ethernet Adapters for VFD Drives

During WesTech’s site investigation, they found that four VFD drives were not ethernet-compatible, and therefore would require adapters to make them work with the new PLC. The cost of this upgrade is \$3,862.

1-C Panelview Plus 7 – 10” size upgrade to 15” size

The original PLC upgrade scope included a 10” screen to view the controls right on the PLC box in the plant. Operators requested an upgrade in size to 15” for better visibility. The larger screen will require more room in the PLC box. The cost of this upgrade is \$11,040.

1-D Display HMI Screens from the Control Room

The new HMI (Human-Machine Interface) screen, which will be displayed on the new panel mentioned above, in the filter room would be duplicated in the Control Room. This improvement was not included in the original PLC Upgrade scope, and will be a big improvement over the current arrangement. Currently, the operators can’t see the existing HMI unless they are standing in front of it in the filter room. With this upgrade, they can see all of the plant controls from the Control Room. The cost of this upgrade is \$9,000 and is mostly the cost of an additional license to be installed on the current computer by others, or the new computer included in Item 3A by WesTech personnel.

2-A Replacement Parts for AC Clarifier

The Adsorption Clarifier (AC) contains floating beads that, capture particles by adsorption (particles stick to the beads). When the beads are backwashed, a large amount of strain is placed on the screen and hardware that essentially hold these beads down. Through time, this hardware has been deformed, and beads will occasionally leak past the hardware during a flush cycle. There is also a significant amount of cleaning provided by a air scour, the nozzles have become plugged over time and reduced that air supply to approximately 50% or less. Staff had made modifications to strengthen the hardware, but the actual replacement parts are needed. The two sets of nozzles would also be replaced. The cost of these replacement parts is \$8,555.

2-B 2 X Modulating Air Actuators for AC Inlet Valves

The inlet valves on the AC are air actuated open and close valves. The open and close valves do not provide any backpressure on the VFD controlled transfer pump. When the Adsorption Clarifier is cleaning, there is less pressure and the pumps operate at the low end of the curve. Efficiency can be improved by operating the pump in the optimum range. These new actuators would provide that functionality and the valve would modulate to keep the VFD in range for optimum performance. The cost of this upgrade is \$4,402.

3-A Matrikon SCADA package for data trending

Data from the filter plants such as pressures, water levels, flow rates, chorine residual, and turbidity cannot be tracked without manually looking at these readings while standing at the filters. The upgraded data trending package will show changes in pressures, water levels, flow rates, and turbidity to more closely monitor filter performance, catch issues before they lead to failures, and trend data to monitor performance over time. This will result in real-time plant optimization which will ultimately result in backwash water savings, chemical savings, and higher water quality. The trended data will also help to increase accuracy on NMED required reporting, known as Monthly Operating Reports (MOR’s). Improvements include two monitors, computer, backup drive, OPC server, Easy Trender,

Desktop Historian, Excel Reporter, MS Office with Excel, Word, Teamviewer, and a daily report with all Historian Data saved every 24 hours. The cost of this upgrade is \$39,446.

3-B 7 X Replacement Modulating Air Actuators

The technology improves through the years, the new valve design uses much less compressed air. This saves on energy costs, better accuracy for control, and wear on the plant compressor. There are seven air actuated positioners that need to be replaced with a more efficient Bray 6A model positioners. The cost of this upgrade is \$14,272.

3-C Temperature Probe on BW Supply Line

WesTech recommends that the Backwash High Rate be adjusted to accommodate for water temperature. This can be done manually and if not done it can affect the backwash cycle efficiency. Too much flow can cause media loss, while too little can reduce the performance of the filter. The addition of a temperature probe on the backwash (BW) supply line that signals the control system provides the opportunity for automatic temperature adjustment. The backwash of the filter media can be optimized, thereby saving treated water usage by the plant. The cost of this upgrade is \$3,662.

4-A One Week Process Assistance

Start-up and Commissioning of these repairs and improvements includes one week of on-site assistance, training, and jar tests at a cost of \$8,678.

The total of these improvements is \$112,703 plus tax.

Staff has finalized a scope with WesTech to provide these improvements, as detailed in the attached proposal. Since WesTech is the manufacturer of the Trident HS Filter, Staff believes there is no other firm that can provide the successful upgrade to this system. Additionally, with the new upgrades, Westech engineers and technicians can dial in to the plant remotely and offer assistance during operations.

The existing WesTech Engineering, LLC contract for the PLC panel upgrade was \$148,975 plus tax. These funds were allocated out of the \$2.50/1000 gallon capital reserve. The unencumbered balance in this reserve is \$585,762. This upgrade project has been the only use of this fund since it was created. Staff recommends funding the WesTech scope of these improvements out of this fund.

Therefore, Staff recommends awarding a sole-source contract to WesTech Engineering, LLC in the amount of \$112,703 plus GRT for these improvements to the Trident HS Filter Plants.

Attachments:

WesTech Proposal

600 Arrasmith Trail, Ames, IA 50010
Phone: 515.268.8400

Job Name: Bloomfield	Ref. PO/Contract: SIGNED PROPOSAL 1830555
WesTech Job No: 24593A	Cust. Job No: n/a
Customer: City of Bloomfield	Revision No: A
Customer Contact: Jason Thomas	Date: 1/26/2022
WesTech Contact: Kevin Burt	Validity Period: 30 days
WesTech Email: kburt@westecth-inc.com	

SCOPE

Item	Description of Change and Statement of Reason	Net Price (USD)
1-A	Additional I/O for Chem/Chlorine Feed Control-requested	\$9,786.00
1-B	4 X Ethernet Adapters for VFD Drives-required	\$3,862.00
1-C	Panelview Plus 7 10" size upgrade to 15"-requested	\$11,040.00
1-D	Display HMI Screens from their Control Room-requested	\$9,000.00
2-A	Replacement Parts for AC Clarifier-required	\$8,555.00
2-B	2 X Modulating Air Actuators for AC Inlet Valves-optional	\$4,402.00
3-A	Matrikon SCADA package for data trending-optional	\$39,446.00
3-B	7 X Replacement Modulating Air Actuators -optional	\$14,272.00
3-C	Temperature Probe on BW Supply Line-optional	\$3,662.00
4-A	1 Week Process Assistance when everything is complete.	\$8,678.00
	Payment Terms Continue to be the following... 25% Submittals Provided by WesTech; 35% Release for Fabrication; 40% Notification of Ready to Ship; 100% Net 30 days	
Payment Terms	Same as Signed Proposal	
Freight Terms	FSP-FFA - FOB Shipping Point - Full Freight to Jobsite (USA ONLY)	
Freight Terms	Bloomfield, New Mexico	
	Taxes (sales, use, VAT, IVA, IGV, duties, import fees, etc.)	Not Included
	Total, Excluding Taxes If Applicable	\$112,703.00

TERMS

- (1) Unless specifically identified above or attached to the contrary, this Job Change Order does not impact Terms and Conditions for the Purchase of Goods and Services of the Existing Agreement.
- (2) Submittals will be provided in 2-3 weeks after acceptance of changes.
- (3) Equipment will ship 14 weeks after acceptance.
- (4) Acceptance of this Change Order proposal and any previously accepted Change Orders will impact the total contract value (not listed).

AUTHORIZATION

City of Bloomfield

WesTech Engineering, LLC.

Signed By: _____ Date

Signed by: _____ Date

Title: _____

Title: _____