



City of Grand Island

Tuesday, January 25, 2011

Council Session

Item G6

#2011-18 - Approving Bid Award - Water Treatment System Replacement

Staff Contact: Gary R. Mader

Council Agenda Memo

From: Gary R. Mader, Utilities Director
Jason Eley, City Attorney

Meeting: January 25, 2011

Subject: Water Treatment System Replacement

Item #'s: G-6

Presenter(s): Gary R. Mader, Utilities Director

Background

Utility boilers and steam turbines used for power generation require highly purified water because of the high pressures and temperatures utilized in the steam cycle. The current water purification system used to supply make up water for the Platte Generating Station boiler is in need of repair/upgrade to maintain reliable operation. The purification equipment was manufactured by Hungerford and Terry and installed during initial plant construction, approximately 30 years ago. The system consists of reverse osmosis preliminary treatment followed by demineralizers that use resin beads to remove positive and negative ions. This treatment process chain produces water purified to make it suitable for use in high pressure boilers. The reverse osmosis (RO) unit is one of the first units ever constructed and the membranes are no longer a standard size. The controls on the demineralizer use air valves and electro-mechanical relays to control resin regeneration cycles. Many of the valves and the chemical injection pumps need to be rebuilt. To evaluate the cost of repairing the existing system, Hungerford and Terry was retained to inspect and report findings regarding the condition of the system. A list of valves and pumps requiring replacement and rebuilding were recommended for replacement or in need of rebuilding, as well as a new electronic control system. Hungerford and Terry proposed a budget amount of \$500,000 to make these repairs.

A second option was investigated to replace the entire system with modern treatment equipment. The two options were compared using budgetary numbers and annual operational cost to determine total cost over the next 10 years. It was determined that installing a new system would have less capital cost, and because of advances in water purification technology, the annual operational cost will be half of the current system. Engineering staff therefore developed specifications for a new system based on the latest technology for water purification.

Discussion

The specifications for the Water Treatment System Replacement were advertised and issued for bid in accordance with the City Purchasing Code. Bids were publicly opened on Tuesday, January 11, 2011. Specifications were sent to eight potential bidders and responses were received as listed below. The engineer's estimate for this project was \$440,000.00.

<u>Bidder</u>	<u>Bid Price</u>
Eco-Tec, Pickering, Ontario	\$ 427,956.13

The bid was reviewed by Utility Engineering staff. Staff checked references provided by the contractor, and contacts provided a positive report. Also, Eco-Tec water treatment equipment is being used at the new power plant being built at Hastings. The bid is compliant with specifications and less than the engineer's estimate.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council award the Contract for the Water Treatment System Replacement to Eco-Tec of Pickering, Ontario, as the low responsive bidder, with the bid price of \$427,956.13.

Sample Motion

Motion to approve the bid award of \$427,956.13 from Eco-Tec for the Water Treatment System Replacement as submitted.



Jason Eley, Purchasing Agent

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Better Tomorrow, Today*

BID OPENING

BID OPENING DATE: January 11, 2011 at 2:15 p.m.
FOR: Water Treatment System Replacement
DEPARTMENT: Utilities
ESTIMATE: \$440,000.00
FUND/ACCOUNT: 520
PUBLICATION DATE: December 21, 2010
NO. POTENTIAL BIDDERS: 8

SUMMARY

Bidder: Eco-Tec
Pickering, Ontario,
Bid Security: Travelers Casualty & Surety Co.
Exceptions: None

Bid Price:
Materials: \$399,959.00
Labor: ----
Sales Tax: \$ 27,997.13
Total Base Bid: \$427,956.13

cc: Gary Mader, Utilities Director
Dale Shotkoski, City Attorney
Mary Lou Brown, Interim City Administrator
Lynn Mayhew, Utility Production Eng.

Bob Smith, Assist. Utilities Director
Jason Eley, Purchasing Agent
Pat Gericke, Utilities Admin. Assist.
Karen Nagel, Utilities Secretary

RESOLUTION 2011-18

WHEREAS, the Utilities Department invited sealed bids for Water Treatment System Replacement; and

WHEREAS, on January 11, 2011, bids were received, opened and reviewed; and

WHEREAS, Eco-Tec, Inc., of Pickering, Ontario, submitted a bid in accordance with the terms of the advertisement of bids and plans and specifications and all other statutory requirements contained therein, such bid being in the amount of \$427,956.13; and

WHEREAS, the bid of Eco-Tec, Inc. of Pickering, Ontario, is less than the estimate for Water Treatment System Replacement.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the bid of Eco-Tec, Inc. of Pickering, Ontario, in the amount of \$427,956.13, for Water Treatment System Replacement, is hereby approved as the lowest responsible bid.

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Adopted by the City Council of the City of Grand Island, Nebraska, January 25, 2011.

Jay Vavricek, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form	☐ _____
January 20, 2011	☐ City Attorney