



CITY COUNCIL AGENDA ITEM

Date: January 18, 2016

To: Brian Kischnick, City Manager

From: Tom Darling, Director of Financial Services
MaryBeth Murz, Purchasing Manager
Steve Pallotta, Building Operations Director
Gert Paraskevin, Information Technology Director

Subject: Standard Purchasing Resolution 4 – Cooperative Contract Award – IT Data Center Air Conditioner

History

May 14, 2007 City Council approved renovations for the Finance and Information Technology Departments (Resolution #2007-05-153). That renovation included the creation of a separate room with appropriate environmental controls to establish a proper IT Data Center. This room houses a majority of the servers in City Hall, data storage systems, network equipment and the telephone system. At that time Building Operations installed a 5-ton residential **comfort style** air conditioning unit to cool the room.

This unit has served us well for the past eight (8) and a half years but has reached its life expectancy. Industry averages suggest that under normal circumstances such an air conditioning unit should last 10-15 years. However, because it runs 24 hours a day, 7 days a week, which equates to approximately 75,000 hours of continuous operation, it is going to be well below industry averages. Building Operations currently maintains the unit and they respond very quickly and keep spare parts on hand in the event of a failure. However, due to the constant use, failures will and have occurred. Should the current air conditioning system breakdown for any length of time, we would have to shut down all systems until the repairs are complete or until we could install rental A/C units. This would severely impact staff and our ability to service residents and businesses. The comfort style air conditioning system also has no provision for controlling humidity levels within the data center. The current moisture levels have resulted in some corrosion of equipment affecting operation and life expectancy.

An alternative to a comfort cooling system is a **precision cooling** system designed specifically for the type of cooling a data center requires. The high sensitivity of electronic components in a data center means that temperature, humidity, air movement and air cleanliness must be kept consistent and within specific limits to prevent premature equipment failures and costly downtime.

Liebert manufactures such precision cooling systems and they are available under a State of Michigan contract. Management proposes to install a precision cooling system as a preventative measure to ensure our critical infrastructure housed in the IT Data Center does not experience an outage related to any environmental factors. This new air conditioning unit would also be much more efficient, and since the amount of equipment in the room has decreased over time, we can



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downgrade to a 3-ton unit rather than the current 5-ton unit. The comfort cooling system would not be removed, but would serve as a backup system should that ever be necessary.

Purchasing

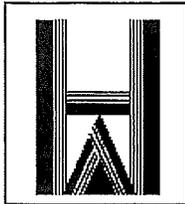
Hendrick Associates of Grand Rapids, MI; a dealer for Liebert Equipment is the awarded bidder from the MiDeal State of Michigan Purchasing Cooperative Contract #071B0200175. The contract includes the purchase, maintenance and support of Liebert equipment.

Financial

Funds are available in the Information Technology capital budget for the 2015/2016 fiscal year and designated as project number 20160004. Future maintenance will be funded by the Information Technology operating budget.

Recommendation

City Management requests authorization to purchase and install one (1) 3-Ton Liebert Datamate 10KW precision cooling system from Hendrick Associates of Grand Rapids, MI through the MiDeal State of Michigan Purchasing Cooperative Contract #071B0200175 for an estimated total amount of \$39,966.00 as per attached proposal number 2159802R3; which includes a five (5) year warranty on the AC compressor parts, and a one (1) year warranty on all project parts and labor. Annual maintenance would be approximately \$2,739.00. The award would be contingent upon the company's submission of required insurance certificates and permits.



HEDRICK ASSOCIATES

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COMPANY:	CITY OF TROY	PROPOSAL #:	2159802R3
ATTN:	GERT PARASKEVIN gert@troymi.gov	PAGES:	1 of 1
FAX:	EMAILED	DATE:	Oct 26, 2015
FROM:	KARL HUFFMAN		
PROJECT:	SERVER ROOM AC SYSTEM UPGRADES MIDEAL / MICHIGAN DMB STATE CONTRACT # 071B0200175		

We propose the following AC system upgrades with piping & electrical system upgrades for this project: **New 3 TON DATAMATE 10 KW AC System including the following material & services:**

- Nominal 10kW cooling at approximately 85F, 30% RH; 208 - 230 Voltage, 1 phase, 60 Hz
- Condensate Pump System; Electric Reheat and Steam Canister Humidification System included
- Hi Efficiency Air Cooled Condenser Model Number: PFH037A
- 208-230V/1ph/60Hz 95F Ambient Standard Sound Selection
- Liebert LCD control system with temperature alarm system
- Wall mounted temperature sensor to measure air temperature
- Adjustable supply air system; scroll, variable capacity compressor utilizing R-407C
- Crankcase compressor heater; Compressor Capacity control included
- Evaporator Type: slab, copper tubes - aluminum fins
- High temp alarm; Hot air low return with top front cold air discharge
- AC unit mounted LCD controller: Ethernet Web card option for remote monitoring included
- One remote shutdown terminal One alarm contact
- The Liebert WEB Card with HTML GUI display included
- Front service and maintenance access only
- Installation casters with leveling feet; Powder coated panels
- Certified installation by Liebert approved technicians / engineers is included; See scope of work attached
- Factory Certified Liebert Service Engineers located in Detroit, Lansing, & Grand Rapids,
- Installation labor with Receiving / unloading / moving / & Electrical wiring is included

TOTAL COST OF ABOVE AC SYSTEM UPGRADES INCLUDING FREIGHT: \$39,966.00

NOTE: Annual Maintenance Contract Cost is \$2,739.00 by DES Electric. Freight & delivery cost is included in all above. This proposal is valid for 90 days. Payment terms are net 30 days from date of invoice. Freight cost is included F.O.B. Shipping points. Taxes are not included. Warranty is five years on AC compressor parts; one year on all project parts & labor.

Thank you for giving us this opportunity to work with you on this project!

Sincerely,

Karl E. Huffman
KARL E. HUFFMAN
huffmank@hedrickassoc.com

1.) This quotation is subject to the manufacturers product warranty(ies) and Michigan State Contract Terms and Conditions . 2.) All purchase orders are to be made out to Hedrick Associates.