#### **COUNTY OF TUSCOLA**

# **DEPARTMENT OF BUILDINGS & GROUNDS**

**MICHAEL MILLER** 

Director

**THOMAS MCLANE** 

Assistant Director

207 E. Grant Caro, Michigan 48723 (989) 672-3756 FAX: (989) 672-4011

**TO: INTERESTED CONTRACTORS** 

FROM: MIKE MILLER DIRECTOR OF BUILDINGS & GROUNDS

**DATE: AUGUST 29, 2006** 

**RE: ROOFTOP HVAC REPLACEMENT** 

Tuscola County will be accepting bids on the replacement of the following rooftop HVAC equipment:

1. 3 Lennox units at the Health dept. building located at:

1309 Cleaver rd. Caro, MI 48723

The following specifications shall be considered in your bid:

### **Project Description**

### **HEALTH DEPT.**

Replace 3 air conditioning units with ones of like cooling capacity and natural gas heating capacity.

Bonding and Insurance Requirements

Bonding not required Proof of insurance required prior to starting work

### Scope of Work

- Contractor will remove the existing units and provide and install new roof top units, including but not limited to, any required wiring, roof work or repair, curbs, duct, piping, and controls for a complete and operational system
- Controls provided will be compatible with the existing Control system without additional equipment or programming costs
- Contractor is responsible to provide and install any special mounting hardware for equipment as well as all
  installation materials (conduit, tubing, railways, junction boxes, fittings, piping, duct, etc.) for a complete project.
- o All field devices and equipment will be mounted as per manufacturer recommendation.
- Contractor is responsible for equipment startup
- o Contractor is responsible for on-site installation supervision throughout the duration of the project.
- o Contractor is responsible for patching all building penetrations performed by the contractor during installation.
- o Each unit removal and replacement will occur within the same day.
- Contractor shall provide O & M manuals for all contractor provided equipment.

- This contractor is responsible for all generated trash.
- o Contractor shall clean all work areas on a daily basis and equipment after project completion.
- Contractor is responsible for all required permits.
- o Installation done as required by Federal, State, local codes and laws.
- Any and all correspondence concerning this project shall be directed to Mike Miller.
- Subcontractor shall review all invoices with Mike Miller before submitting invoice for payment.

## Equipment

- Acceptable equipment manufacturer Trane, Lennox, McQuay, York.
- The manufacturer shall have parts and service available throughout the U.S. and Canada.
- The equipment shall be shipped completely factory assembled, precharged, piped and wired internally ready for field connections.
- The manufacturer shall test operate system at the factory before shipment.
- o All electrical components shall have UL and CSA Listing. All wiring shall be in compliance with NEC and CEC.
- Shall be certified by CSA International (formerly AGA/CGA) and ratings are certified by GAMA.
- Shall be rated and certified in accordance with the USE certification program, which is based on ARI Standard 210/240-94.

# **Equipment Warranty**

- o Heat exchangers shall have a limited warranty for a full ten years.
- o Compressors Shall Have a limited warranty for a full five years.
- o All other covered components shall have a limited warranty for one year.

# **Heating System**

- o Tubular heat exchanger and inshot type gas burners shall be constructed of aluminized steel.
- Controls shall consist of direct spark ignition, electronic flame sensor controls, flame rollout switch, limit control, automatic redundant gas valve and blower prove switch on combustion air inducer.

# **Refrigeration System**

- The coils shall be non-ferrous construction with aluminum fins mechanically bonded to durable copper tubes.
   Coils shall be pressure leak tested.
- Outdoor coil shall be formed coil construction. Optional coil guards shall be available.
- Compressors shall be resiliently mounted and have overload protection.
- The refrigeration system shall have discharge, suction and liquid line service gauge ports, freezestat, highpressure switch, liquid line strainer, expansion valve and full refrigerant charge.
- o Control options available shall consist of low ambient controls, timed-off control and thermostat.

### **Miscellaneous**

- Cabinet shall be galvanized steel with a powdered enamel paint finish electrostatically bonded to the metal.
- Cabinet panels where conditioned air is handled shall be fully insulated to prevent sweating and minimize sound.
   Openings shall be provided for power connection entry.
- o Indoor coil condensate drain shall be provided.
- Lifting brackets shall be factory installed.
- o Economizer and economizer wiring harness shall be furnished and factory installed.
- o All components, wiring and inspection areas shall be completely accessible through removable panels.
- Centrifugal supply air blower shall be direct driven by a multi-speed motor.
- Blower shall be statically and dynamically balanced.
- o Direct drive propeller type condenser fans shall discharge vertically.
- $\circ\quad$  Fan motor shall be permanently lubricated and inherently protected.
- Fans shall have a safety guard.
- Filters shall 2 inch thick pleated filters shall be furnished.

Contractor is to view each location before bidding.

All work is to be completed by qualified personal.

All bids must be submitted by 4:30pm on September  $13^{th}$ , 2006 to Mike Miller 207 E. Grant St. Caro, MI 48723. Only closed sealed bids labeled "HVAC PROJECT" on the envelope will be accepted.

Any questions please call Mike Miller at 989-672-3756.

Tuscola County reserves the right to reject any and all bids, and to except the bid(s) that is in the best interest of the County. Any vender or parties who bids under this policy are doing so of their own free will and without liability to the County. A bid may be awarded to a higher bidder for reasons such as, but not limited to: quality, service, reliability, convenience, dependability, etc.