architects, engineers, interior designers, planners

MATRIX

REQUEST FOR PROPOSAL

DATE: July 23, 2013

TO: Qualified Bidders

FROM: MATRIX Architects Engineers Planners, Inc.
Two West Second Street, Suite 99
Tulsa, Oklahoma 74103-3131

RE: Medical Air Compressor System for
CityPlex Towers at Oral Roberts University
Tulsa OK

This Request for Proposal (RFP) process is a confidential request for components for a new medical air complete system including coordination with the Owner's installing contractor and providing start-up services as listed.

All proposal information is maintained as confidential and will not be published or expressed before or after the proposals are reviewed.

Project Site: Mechanical Room at ORU CityPlex Towers, 2488 East 81st Street South, Tulsa OK

Scope of Purchase:
This is a request for proposal for the purchase of:

- Item A. Medical Air Compressor
- Item B. Two (2) Master Alarm Panels
- Item C. Service Agreement, two (2) and five (5) year options, at Owner's discretion
- Item D. Extended Warranty
- Item E. Proximity of factory-trained technician
- Item F. Manufacturer's Alternates
- Item G. Delivery

Refer to specifications as noted:
Medical Air Compressor System dated July 23, 2013.

Bid Date: Thursday, 8 August 2013, 2:00 PM.
Four (4) copies of the proposal and submittals of the proposed Medical Air Compressor System performance rating and related products are to be delivered in sealed envelope marked as "confidential and privileged" information on the envelope, the cover-letter and any proposal information listing prices.

MATRIX Architects Engineers Planners, Inc.
Two West Second Street, Suite 99
Tulsa, Oklahoma 74103-3131
Office 918.587.4747
Facsimile 918.587.8008
www.matrixae.com

Address the proposal in a cover letter to:
Jeanine Horton
Oral Roberts University

Deliver information to:
Jeanine Horton
ORU Purchasing Department
7777 South Lewis Ave (Stovall Building)
Tulsa Oklahoma 74171
jhorton@oru.edu

Initial conditions and schedule.

Sales Tax: ORU CityPlex Towers is exempt from sales tax.

Site Walk. Mandatory. ORU CityPlex Towers, Suite #188, 10:00 AM, Thursday, 1 August 2013.

Equipment Delivery: The components of the medical air system will be delivered to ORU CityPlex Towers, 2488 East 81st St. South, Tulsa OK 74137-4225.

Z:\PROJECTS\1300.140-CITYPLEXORUMEDAIR (OR1)\SPECS\OR1 RFP.DOC

Proposal Form

Item A: Medical Air Compressor

Description, Make and Model number: _____

_____

Item B: Two (2) Master Alarm Panels

Description, Make and Model number: _____

_____

Including Freight and Deliver, for the Sum of: $ _____

_____ dollars
(written sum)

Item C: Service Agreement

Two (2) Year description: _____

_____

For the Sum of $_____

_____ dollars
(written sum)

Five (5) Year description: _____

_____

For the Sum of: $_____

_____ dollars
(written sum)

Item D: Extended Warranty for the Medical Air Compressor System.

For non-prorated extended warranty for years two (2) through five (5) years.

For the Sum of $: _____

_____ dollars

(written sum)

Item E: Proximity of factory-trained service technician to Project Site: _____ miles

Item F: Manufacturer's Alternates, provide attachments.

Manufacturer may quote multiple arrangements for compressors for consideration by the Owner.
Manufacturer may quote undefined alternates.
Provide sufficient and appropriate data to support alternates.

Item G: Delivery

Components specified and quoted here in will be delivered by _____

Additional charge for "Quick Ship" $_____to be delivered_____

_____ dollars

(written sum)

References:

Medical Air Compressor System specifications dated 23 July 2013.

Acknowledge receipt of the following Addenda:

Addendum No. _____

Addendum No. _____

Company: _____

Address: _____

Address: _____

Phone Number:_____Cell Number: _____

E-Mail:_____

Signed: _____

Date: _____

END of PROPOSAL FORM

SUMMARY

The scope of this document is to specify Owner-purchased equipment for a Medical Air System to be installed by the Owner's contractor.

The Manufacturer shall provide a complete medical air source, including all elements and accessories complying with all relevant requirements of the National Fire Protection Association Standard for Health Care Facilities (NFPA 99) supplying medical air continuously for the life of the equipment.

SUBMITTALS

A. Preconstruction Package
   1. Provide manufacturers literature and illustrations for all components indicating size, dimensions, capacity, and configuration. Indicate general assembly of components, mounting and installation details, and general layout of control and alarm panels.
   2. Provide Warranty Statement. Ensure forms are complete and registered to ORU CityPlex Towers.
   3. Include Dimensional Drawings.
   4. Provide installation instructions, piping and wiring diagrams of the factory package,
   5. Submit factory test reports of equipment prior to shipping.

B. Project Close out
   1. Submitted by Equipment Delivery
      a. List of Replacement Parts.
      b. Operation and Maintenance Manual with Maintenance Schedule.
   2. Submit Project Start-up Report immediately upon completion.

QUALITY ASSURANCE

A. Warranty
   1. Warranty shall encompass all components against defect for a period of 12 months following start-up.
   2. Include on site repairs including travel, labor and parts. Equipment will not be returned to the factory for adjustments or repair.
   3. Compressors and all pipeline components shall be warranted for 24 months following start-up.

B. Maintenance
   1. Normal maintenance for the scroll compressors, including all labor and parts shall be provided for 20,000 operating hours.
   2. The Manufacturer may offer a preventative maintenance contract for the remainder of the package by factory-authorized representatives for consideration with options for a period of two (2) years and five (5) years.

C. Installation
   1. The Manufacturer shall provide periodic onsite inspections by a qualified specialist during installation.

PRODUCTS

A. Approved Manufacturers
   1. BeaconMedaes
   2. Ohio Medical Corporation

B. Medical Air Compressor
   1. System shall be modular. System shall be completely factory assembled. The complete medical air package shall be pre-wired, pre-piped and assembled on one common base with single point connections for electrical, intake air, discharge air, condensate drains and integral control panel. All elements shall be factory installed including source valve. All piping shall be factory complete including all valves per NFPA 99.
   2. All moving parts (fans, pulleys and belts) shall be fully protected by an OSHA approved enclosure.
   3. All support structures shall be a minimum of 10 gauge steel.
   4. All components shall be redundant and valved to permit service to any component without interrupting air supply to the facility.
   5. Furnish a complete plant consisting of compressors, receiver, air treatment system and controls capable of providing a minimum of 77 scfm with a minimum of two compressors in service and one compressor out of service.
   6. Compressors shall be continuous-duty rated scroll type with sealed bearings, single stage, air-cooled. Compressors shall have of one fixed and one orbiting scroll sealed with replaceable PTFE tip seals between the scroll halves and rated for 120 PSIG discharge pressure. Orbiting bearings shall be grease filled and permanently sealed. Each compressor shall have an air-cooled aftercooler to minimize approach temperature to 15°F at 100°F ambient. Belt tensioning shall be adjustable.
   7. Compressor motors shall be a NEMA rated, open drip proof unit with 1.15 service factor suitable for 460 volt, three phase, 60hz.
   8. Compressor modules and motors shall be fully isolated from the main compressor base by means of a four point, heavy-duty isolation system for a minimum of 95% isolation efficiency. Engineering data shall be provided supporting isolation efficacy and equal weight distribution between supports. System shall be installed on the ground floor, exact location to be determined.
   9. Control system shall be NEMA 12 and UL labeled with touch screen controls.The following components shall be included, but not limited to:
      a. Automatic lead/lag sequencing and alternation.
      b. A separate circuit breaker disconnect for each compressor internal to the main control cabinet and protected by the safety interlock of that cabinet.
      c. Full voltage motor starters with overload protection.
      d. Redundant 120 Volt control circuit transformers.
      e. Visual and audible reserve unit alarm with isolated contacts for remote alarm and cancelable audio.
      f. Hand-Off-Auto (HOA) lighted selected switches.
      g. Panel-mounted pressure gauge.
      h. Runtime hour-meters for each compressor.
      i. When HOA switches are in Hand mode, system shall operate on pressure switch; compressors shall not run when lead switch is satisfied.

j. Provide visual and audible alarm for high discharge air temperature shutdown with isolated contacts for remote alarm.
k. A temperature sensor at the outlet of each compressor cylinder or air-end shall provide high-temp alarm and shutdown associated compressor.
l. Dryers shall be controlled from main control panel with selector switches mounted on control panel.

10. Provide redundant medical air treatment systems including desiccant dryers, filters, and purifiers sized for peak calculated demand. Include dew point and carbon monoxide monitoring. Medical air treatment shall include:
    a. Desiccant dryers producing at 10°F pressure dew point with ceramic-type dew point sensor with +/- 2°F accuracy. Dryer purge shall operate on a dew-point demand based control system. Transfer valve shall utilize ceramic slide plates. Valve shall require no periodic service and be covered by a 10-year factory warranty.
    b. Mounted pre-filter rated for 1 micron with automatic drain and element change indicator at the inlet to each dryer.
    c. Final line filters rated for 1 micron with element change indicators.
    d. Final line regulators, duplexed.
    e. Safety relief valves, duplexed, factory-mounted and piped at the outlet of each dryer.
    f. Carbon monoxide (CO) sensor with +/- 2ppm system accuracy.
11. System piping shall be brazed except where unions are required for service. Vibration flexes shall be all metal and of sufficient length to achieve full isolation.
12. Provide corrosion resistant, ASME Coded, National Board Certified 240-gallon receiver rated for a minimum 150 PSIG design pressure. Include a liquid level glass, safety relief valve, manual drain valve, and a screened automatic solenoid valve. During normal operation the flow of air will travel through the tank to allow water vapor to condense in the tank.
13. The system shall be expandable to a minimum of one additional compressor with components sized for future capacity.
14. The complete medical air system and all electrical components shall be factory tested prior to shipment by the Manufacturer.
15. Inlet line size shall be 4".
16. Outlet line size shall be 2".

C. Alarm Panels
    1. General Requirements
        a. Alarm panels shall be UL listed as an assembly and shall include factory wiring, transformers, and circuitry requiring only 115 or 230 volt primary power.
        b. Alarm panels shall meet the FCC Part 15, Subpart B and ICES-003 to reduce possibility of magnetic radiation interference with other equipment.
        c. Alarm panels shall arrive on the job site pre-configured or shall be configured in the field at no additional charge.
        d. Alarm system shall supervise its wiring to sensors and switches, indicating at the relevant panel(s) if any wire is cut, disconnected or open.
        e. Each signal shall include a LED indicator light to signify the condition monitored. Activation of any switch will light associated LED indicator light and actuate the audio alarm.
        f. Each panel shall include a power "ON" indicator and test function for testing all modules electrically.

g. Alarms shall include features permitting field adjustment of alarm volume and display intensity.
h. Termination of alarm wiring shall be done by or under supervision of manufacturer of alarm.
i. Network communication implementation shall provide browse, download, configure, and troubleshooting functions of Master Alarm Panel with a personal computer that is connected to the facility's Ethernet.
j. Alarm Panel shall include protocol card allowing connection to the facility's Schneider Electric Building Management System. Panels shall allow remote interrogation through any computer on the same intranet without requiring special programming or software. Manufacturer's personnel shall be responsible for alarm configuration at no additional charge.
k. Provide any software and manuals required for interface at time of commissioning at no additional charge.

2. Master Alarms
   a. Furnish one exact duplicate Master Alarm Panel, locations to be determined.
   b. Wire the master alarm panel's alarms directly to the individual sensors/switches, furnishing duplicate sensors/switches as required for compliance with NFPA99. Low voltage shielded wire shall be provided and installed by this contractor.
   c. Alarms shall be tested, labeled and fully operational upon completion of construction (Construction is by others, outside the scope of this Work). Where alarm configuration in software is necessary, it shall be provided by Manufacturer's representative at no additional charge.
   d. Provide alarm points as required per NFPA 99, including but not limited to:
      i. High and low pressure discharge, when pressure increases or decreases 20%.
      ii. High temperature discharge.
      iii. High and low dew point discharge, when dew point exceeds 35°F. or falls below 10°F.
      iv. High carbon monoxide discharge, when CO level exceeds 10 ppm.
      v. Operation of backup or leg compressor.