

Prepared By:



401 S. 18th St., Suite 400
St. Louis, MO 63103

Owner:



Saint Louis Zoo
One Government Dr
St. Louis, MO 63110

GENERAL

The Saint Louis Zoo (“Owner”) is requesting qualified contractors to submit Design/Build quotes for the replacement of the HVAC systems serving the South Entry Kiosk. The objective of this quote request is to provide a competitive means in which to identify and enter into contract with a single provider for the outlined scope of work.

Horner & Shifrin, Inc. is the engineer responsible for these specifications. Any technical questions relating to the quote shall be directed to the engineer. Any questions related to the bid shall be directed to the owner. The engineer’s representative is Casey Wilson (314-335-8620, cwilson@hornershifrin.com). The owner’s representatives are Marta Comas (mcomas@stlzoo.org) and James Calvin (jcalvin@stlzoo.org).

SUBMISSION OF BIDS

Quotes will be received by **4pm on January 31, 2022**, delivered via electronic submission to mcomas@stlzoo.org. Quotes shall clearly indicate scope of work proposed, approximate schedule including equipment lead times and days required to complete the work, exclusions, and any necessary clarifications.

The owner has the sole authority to issue any clarifications or changes to the RFP. No interpretations, exceptions, or supplementary information shall be binding unless such is provided in writing to all bidders in the form of an addendum to this RFP.

The selection of the successful bid will be made by the owner based on which quote is deemed most advantageous to the owner and may consider factors in addition to quoted price. The owner reserves the right to reject any and all bids.

WARRANTY

All materials, equipment, components, and devices furnished under this quote shall be guaranteed to be free from defects in materials and workmanship. Any defects or malfunctions that develop as a result of defective materials or workmanship shall be corrected at no cost to the owner for a period no less than one (1) year following the date of startup.

SCHEDULE

Proposed Time Line	
Site Visit	January 21, 2022 at 11:00am
RFI Deadline	January 28, 2022 at 5:00pm
RFP Due Date	February 4, 2022 at 5:00pm
Award of Contract (approximate date)	February 18, 2022
Mobilization	TBD based on contractors proposed timeline
Substantial Completion	TBD based on contractors proposed timeline

TERMS OF PAYMENT

TBD based on discussions with successful contractor

TAXES AND PERMITS

This project is tax exempt. The Saint Louis Zoo will provide all necessary documentation to Contractor for tax exemptions.

The project site is located in the City of St. Louis. All permits, inspections and related cost are the responsibility of the contractor and shall be included in the quote.

PRE-BID MEETING

A pre-bid site visit will take place on January 21, 2022 at 11 am. Contractors shall contact Marta Comas to schedule an alternate time if the 11am site visit cannot be attended.

DESCRIPTION OF WORK

The existing entry kiosk is a prefabricated, modular wall panel structure built within the archways of the brick façade at the existing south entrance to the Saint Louis Zoo. The modular wall panels are constructed of stucco, steel, insulated wall panels with aluminum channel framing, and a flat, metal roof system. The existing HVAC system consists of through-the-wall window air conditioning units located low on the east and west walls. Additionally, there is an RV style air conditioning unit with supplemental heat located on the roof, centered in the middle of the structure. The Saint Louis Zoo will remove any existing HVAC units and patch any wall and roof openings prior to the start of this work.

The scope of work for this project includes a new mini-split heat pump system. The new system shall consist of a heat pump outdoor unit capable of operating between an outdoor temperature range of 100 deg. F and 0 deg. F, (2) 4-way ceiling cassette style indoor units, all associated piping and controls, and equipment support structures. The system shall be rated for a minimum cooling efficiency of 19

SEER. Preliminary load evaluation determined a 2-ton mini-split system was needed with 20 MBH of heating; the contractor shall verify the final equipment size.

The outdoor unit is to be mounted to the brick arcade above the kiosk with a wall bracket that securely holds the unit in place. The 4-way ceiling cassettes are to be installed through the roof with one located between the west and central sets of workstations and the second between the east and central workstations. The Saint Louis Zoo will construct and install recessed cassette enclosures prior to the HVAC installation.

The contractor shall provide all refrigerant line sets and controls required for a fully functioning system. Location of all components shall be coordinated with the owner prior to installation. The suggested routing for the condensate of the indoor units is to pipe across the kiosk roof and terminate at the nearby trench drains located along the south kiosk wall.

Licensed electricians on staff with the owner will provide all required electrical permitting and power wiring for this project. All power requirements shall be coordinated with the zoo appointed electrician prior to the purchase of equipment. All other necessary subcontractors, including but not limited to test and balance, general trades, etc., are to be included as part of this qui.

The selection of new equipment shall be based on the information provided in the specifications attached to this RFP.

The successful contractor will be responsible for applying for any applicable Ameren rebates that may apply to this project. All proceeds from rebates shall be returned to the owner.

SCHEDULING AND PHASING

The zoo operates daily between 9am and 4 pm. The contractor will be responsible for working with the owner to determine a mutually agreeable time frame to perform the necessary work in order to minimize disruption to guests and employees.

INSURANCE

The successful contractor will be required to provide a Certificate of Insurance, including Workman's Compensation Coverage, naming The Saint Louis Zoo as additional insured.

ATTACHMENTS

1. Equipment Specification: Section 23 8126 – Split System Air-Conditioning Units (4 pages)
2. Bid Form (2 pages)

SECTION 23 8126 - SPLIT-SYSTEM AIR-CONDITIONING UNITS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes split-system air-conditioning and heat pump units consisting of separate evaporator-fan and compressor-condenser components. Units are designed for exposed mounting.

1.2 DEFINITIONS

- A. Evaporator-Fan Unit: The part of the split-system air-conditioning unit that contains a coil for cooling and heating and a fan to circulate air to conditioned space.
- B. Compressor-Condenser Unit: The part of the split-system air-conditioning unit that contains a refrigerant compressor and a coil for condensing refrigerant (evaporator for heating operation in heat pump units).

1.3 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

1.4 COORDINATION

- A. Coordinate size and location of all components, including but not limited to outdoor unit, indoor units, refrigerant pipe routing, condensate pipe routing, etc, with the Owner.

1.5 WARRANTY

- A. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Five years from date of substantial completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Mitsubishi Electronics America, Inc.; HVAC Division.
 - 2. Daikin
 - 3. Carrier Air Conditioning
 - 4. York International Corp.
 - 5. LG

2.2 INDOOR UNITS

- A. The indoor unit shall be factory assembled and pre-wired with all necessary electronic and refrigerant controls. Both liquid and suction lines must be insulated between the outdoor and indoor units.
- B. Unit Cabinet

1. Four-way grille shall be fixed to the bottom of the cabinet allowing two, three, or 4 way blow
2. The grille shall allow the unit to be serviceable from the bottom, without the need for an access panel

C. Fan:

1. The indoor fan shall be an assembly with a statically and dynamically balanced turbo fan direct driven by a single motor with permanently lubricated bearings. The fan shall be statically and dynamically balanced and operate on a motor with permanent lubricated bearings.
2. The indoor fan shall offer a choice of four speeds and auto settings.

D. Filter:

1. Return air shall be filtered by means of a long-life washable filter.

E. Coil:

1. The evaporator coil shall be a nonferrous, smooth plate fins on copper tube heat exchanger.
2. All tube joints shall be brazed with silver alloy or phoscopper.
3. All coils will be factory pressure tested.
4. The unit shall be provided with an integral condensate lift mechanism that will be able to raise drain water 33 inches above the condensate pan.

F. Electrical

1. The indoor unit shall receive 208 volt, 1 phase, 60 hertz power from the outdoor unit.

2.3 AIR-COOLED, COMPRESSOR-CONDENSER COMPONENTS

- A. Casing: Steel, finished with thermostatically applied powder coating, with removable panels for access to controls, weep holes for water drainage, and mounting holes in base. Provide brass service valves, fittings, and gage ports on exterior of casing.
- B. Compressor: High performance, hermetic, inverter driven, variable speed, dual rotary type Compressor motor shall have thermal- and current-sensitive overload devices, start capacitor, relay, and contactor.
- C. Refrigerant Coil: Copper tube, with mechanically bonded aluminum fins, complying with ARI 210/240.
- D. Fan: Aluminum-propeller type, directly connected to motor.
- E. Motor: Permanently lubricated, with integral thermal-overload protection.
- F. Low Ambient Kit: Low ambient head pressure controller.
- G. Mounting Base: Polyethylene.

2.4 ACCESSORIES

A. Thermostat:

1. The system shall include manufacturer provided thermostat that allows user to set/adjust the following functions:

- a. On/Off
 - b. Operating modes including cool, heat, and fan
 - c. Temperature Setpoint
 - d. Fan Speed
 - e. Scheduling
- B. Automatic-reset timer to prevent rapid cycling of compressor.
 - C. Refrigerant Line Kits: Soft-annealed copper suction and liquid lines factory cleaned, dried, pressurized, and sealed; factory-insulated suction line with flared fittings at both ends.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install units level and plumb.
- B. Install components using manufacturer's standard mounting devices securely fastened to structure.
- C. Connect pre-charged refrigerant tubing to component's quick-connect fittings. Install tubing to allow access to unit.

3.2 CONNECTIONS

- A. Install piping adjacent to unit to allow service and maintenance.
- B. Unless otherwise indicated, connect piping with unions and shutoff valves to allow units to be disconnected without draining piping
- C. Ground equipment.
 - 1. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

3.3 FIELD QUALITY CONTROL

- A. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
- B. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation. Remove malfunctioning units, replace with new components, and retest.
- C. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

END OF SECTION

Bidder is to complete all blank spaces on this form. Enter "Not Applicable" if necessary. Amounts should be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.

BID FORM

ST. LOUIS ZOO SOUTH ENTRY KIOSK HVAC INSTALLATION

Submitted By: _____
Bidder _____

Address _____
Phone _____
Contact Name _____

Base Bid:

The bidder proposes to furnish and install all equipment, materials, devices, labor, and services necessary to properly execute the work listed in the RFP documents and to provide a complete project for the following **Lump Sum** amount:

\$ _____.

The lump sum prices quoted shall be valid for a **minimum of 60 business days** from the date that the bids are due.

The bidder requires _____ working days from the notice of award to complete the work outlined in the RFP Document.

Addenda:

Bidder acknowledges the receipt of the following addenda (if none state such).

Addendum # _____ Dated: _____

Addendum # _____ Dated: _____

Addendum # _____ Dated: _____

We hereby agree that products furnished will be as outlined in the above description of work and the attached technical specification.

Quote Submitted By,

Signed

Print Name

Title

Company

Date

<Attach Scope, Exclusions, and Clarifications to the end of the bid form>