

# FRANKLIN COUNTY PURCHASING DEPARTMENT REQUEST FOR PROPOSAL (RFP) COVER PAGE

RFP NO: #202324

TITLE: Tower Pea Ridge (Washington County)

Solicitation Schedule & Deadlines:

October 25, 2023

November 3, 2023 2:00PM

November 9, 2023 4:30PM

November 16, 2023 2:00PM

Deadline for Submitting Questions Deadline to post Addendum

Solicitation Release/Advertising Date

Deadline to Submit Response

Responses must be received no later than "Deadline to Submit Response"

November 16, 2023 2:00PM

Shakara Bray, Purchasing Agent

Meagan Johnson, Assistant Purchasing Agent

Phone: 636-584-6274 Email: purchasing@franklinmo.gov

Submittal Instructions: Print this Packet in its entirety and complete all pages per instructions. Print the SEALED RESPONSE LABEL found in Attachment 1 of this packet and attach to the front of your envelope.

#### \*In the event of inclement weather, contact purchasing at the phone number above.

Company Name: \_\_\_\_\_\_

# **SUBMISSION CHECKLIST**

\_\_\_\_\_ I have reviewed the bid schedule and deadlines, located on the solicitation cover page

\_\_\_\_\_ I have read ALL Terms and Conditions and Bid documents closely

(Located at www.franklinmo.org)

# THE ITEMS LISTED BELOW ARE THE REQUIRED DOCUMENTATION FOR SUBMITTING A RESPONSE

### **USE THESE FORMS ONLY**

\_\_\_\_\_Solicitation Cover page

- \_\_\_\_\_Contractual Terms and Conditions Acknowledgement
- \_\_\_\_Company Profile
- \_\_\_\_\_Schedule of fees, completed and signed
- \_\_\_\_\_ I have one original and two copies that are labeled accordingly
- \_\_\_\_\_ Bid Bond or Cashier's Check-5% of total bid
- \_\_\_\_\_ I have review Annual Wage Order No. 30
- \_\_\_\_\_ I have included contact information
- \_\_\_\_\_ COI (Certificate of Insurance)
- \_\_\_\_\_ Envelope is sealed and label attached
- \_\_\_\_\_Affidavit for Work Authorization is completed and Notarized

*If you have already submitted W-9 information through Vendor Registry, you do not have to resubmit with response. Just reference Vendor Registry.* 

#### PURPOSE

Franklin County is seeking to purchase one (1) installed 400' self-supporting or guyedsupported tower with FAA approved LED strobed lighting system and with specified antennas, feed lines, ice bridge, waveguide ladder, climbing ladder with safety climb system and other related items in accordance with the TIA-222-G and other specifications as detailed below. In addition, the Commission requires replacement of the fencing and all site grounding including the integration / verification of the building ground ring located at this tower site. This tower will replace an existing tower. The exact location of the existing tower is 38° 6' 13.61'' N, 91° 2' 29.05'' W in Washington County, MO.

#### SCHEDULE

#### **Project Timelines**

The contractor must submit with their response the general drawings showing the type of construction, type of members, type of connections and any other pertinent information. Once the bid is awarded a notice to proceed will be issued. The contractor must coordinate the removal of the old tower and installation of the new tower to ensure there is no damage to equipment to remain. The contractor shall develop a schedule that will minimize the time the site is out of service. The contractor shall provide a project schedule of work and all other initial submittals including site plans, grounding plan and any other initial submittals required in this RFP within 15 days of "Notice to Proceed".

#### STANDARDS.

This project shall conform to the latest revisions of the following standards:

- American National Standards Institute (ANSI)/Telecommunications Industry Association (TIA) 222-G, Structural Standard for Antenna Supporting Structures and Antennas, hereafter referred toas TIA-222-G.
- Site Grounding and Other Items: Motorola Standards and Guidelines for Communications Sites R56, hereafter referred to as R56.

National Electrical Code, hereafter referred to as NEC.

Any applicable Federal Communications Commission standards, hereafter referred to as FCC.

Any applicable Federal Aviation Administration standards, hereafter referred to as FAA.

Any applicable Occupational Safety and Health Administration standard and practices, hereafter referred to as OSHA.

Any other standards specified in the above documents or this request for proposals (RFP) In the case of a conflict, the most stringent standard shall be used.

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Any applicable Federal Communications Commission standards, hereafter referred to as FCC.

Any applicable Federal Aviation Administration standards, hereafter referred to as FAA.

Any applicable Occupational Safety and Health Administration standard and practices, hereafter referred to as OSHA.

Any other standards specified in the above documents or this request for proposals (RFP) In the case of a conflict, the most stringent standard shall be used.

### SCOPE OF WORK

**Design Requirements.** All structural elements shall conform to TIA-222-G and the following:

- The tower shall be triangular in cross section and of rigid frame construction. All vertical tower members shall be **solid** round.
- Towers may be fabricated in sections of 10' or 20' (+/-) lengths.
- All parts of the tower structure shall be made of structural steel conforming to TIA-222-G. Bolts, other connecting devices and welding shall conform to TIA-222-G.
- The structural classification as defined in TIA-222-G shall be Class III.
- The exposure category as defined in TIA-222-G shall be Exposure C.
- The topographic category as defined in TIA-222-G shall be Category 1.
- Design loading shall include all current antennas, all feed lines, mounting hardware, aviation lighting, climbing ladder, waveguide ladder, safety climb system, any other wiring, hardware and appurtenances as required for the final installation as well **as a plus 100% of existing antennas, feed lines, and mounting hardware (double existing)**.
- Design criteria shall conform to TIA-222-G, Annex B for the county of the tower installation except for frost depth.
- The steel structure and all steel items shall be hot dip galvanized and shall not require primer and/or paint. Hot dip galvanizing shall conform to TIA-222-G.
- All steel items that are not part of the tower structure shall be designed to withstand the loading for the specified application and shall meet all applicable standards in this RFP and any industry standards.
- Mat and pier type foundation or drilled shafts are the designs required for the tower foundation. No surface slab-type foundations will be allowed for any tower or guy anchor foundations. A design frost depth of at least 40" shall be used for all tower and guy anchor foundations regardless of location.
- The tower shall include a fixed climbing ladder or step bolts and safety climb system the entire height of the tower in accordance with TIA-222-G, Class B.
- Waveguide ladders shall be installed on the tower at a spacing of 5' or less increments the entire height of the tower and they are to be fabricated into the tower structure.
- The replacement tower shall be located as close as practical to the same location as the existing tower including the tower foundation. Existing tower foundation shall be removed in its entirety.
- An approximate proposed site layout and existing tower information are included in this RFP.
- **Initial Tower and Site Submittals.** The contractor must include with their submittals, but not limited to the following and shall conform to all requirements in this RFP. All submittals shall be legible including all details and notes in the format provided. Structural plans, foundation plans and calculations shall be sealed by a Professional Engineer (PE) registered in the State of Missouri.
- Detailed structural/fabrication plans of the tower structure, and all related items. The plans shall show overall dimensions, sections, size and relative location of each member, details of connection between tower sections, detail of base plates, climbing ladder and any and all other necessary structural details as required.
- Structural plans shall include installation requirements to assure that the tower will be installed to withstand all required loading.
- Detailed foundation plans for tower foundation and all related items.
- Stress calculation of the tower and foundations in accordance with TIA-222-G and this RFP.
- Details of tower side and top mount antenna supports, coaxial cable supports, and any other details as required.

Project schedule as described above.

- Site plans showing the exact locations will be laid out between contractor and the Commission Representative prior to installation. This includes but not limited to the tower, foundations, guy orientation, equipment shelter (existing), generator slab propane tank, fencing, ice bridge, etc.
- Detailed site grounding plan in accordance with R56 and this RFP.

Removal.

- The existing 797' guyed tower, guy cables and guy anchors that are on site shall be removed and disposed of. All concrete bases and guy anchors shall be removed a minimum of 1' below grade (tower foundation shall be removed in its entirety, unless included in design per PE). Any and all other debris shall be removed and disposed of. No portion of any anchor can be cut off at the ground level. Existing guyed tower was lowered from 903' and shall not be climbed above 700' due to attempts to lower further with a seized leg and socket halting safe progress.
- Existing shelter, pad, generator, propane tank, and electric feed may need to be temporarily moved to ensure there is no damage while removing the tower. Contractor is responsible for all prep work as well as replacement and hook up. Once replaced, contractor is responsible for reconnecting and ensuring all systems are operable.
- Disposal: deliver any recyclable materials to a scrap recycling facility rather than dumping in a landfill.
- Existing antennas, tower mount radios, mounts, ice shield, and feed lines may be removed and reused in the new install. Any other antennas, feed lines and mounting hardware that are still in useable condition after demolition shall remain property of the Commission and may be reused for the install on the new tower.
- **Tower Fabrication.** Upon notification by the Commission, the contractor may order the fabrication of the tower structure. The fabricated tower shall conform to TIA-222-G and the approved drawings and specifications. All manufacturing and fabrication shall conform to TIA-222-G.
- **Clearing and Excavating.** The contractor shall furnish all equipment, labor, forms, all material, and the performing of all operations the excavation and installation of tower base foundations, ground rings, fence post bases and any other underground items. All vegetation, roots brush, grass sod, decayed matter, rubbish, etc. shall be removed from the area and disposed of by the contractor. Any removal of trees shall be approved by the Commission in coordination with the landowner. All excavated waste shall be disposed of by the contractor as directed by the Commission.
- **Tower Installation.** The tower shall be installed following the approved contractor provided schedule. Tower installation shall conform to the manufacturer's plans and requirements as approved by the Commission and requirements. The contractor shall follow applicable Occupational Safety and Health Administration (OSHA) and any other applicable safety requirements.
- *Equipment and Materials.* The contractor supplied equipment and materials shall be as specified in this RFP and shall be new and the manufacturer's latest current model.
- **Tower Plumb**. The entire tower shall be plumb from the top to the bottom. The contractor shall confirm that the tower is plumb with a transit after final guy wire tensioning and provide a certification. The contractor shall demonstrate conformance if requested by the Commission.
- *Galvanizing Repair*. Any damage to galvanized surfaces shall be brought to the attention of the Commission. Major damage will be reviewed by the Commission to determine if a field repair may be required. Any field repairs shall follow ASTM Standard A780. Use of paints containing zinc dust is permitted. The contractor must understand that the cad welding process will require field galvanizing repair.

- Tower Concrete. All concrete, reinforcing steel, any associated materials and installation practices shall conform to all concrete requirements in other sections of this RFP. Concrete shall have minimum design 28 days compressive strength of 4000 PSI, and compression testing shall be performed at 7 days and 28 days. The contractor shall be responsible for field quality control as described in other sections of this RFP, including but not limited to, making and testing concrete test cylinders. Test reports of tower foundation concrete breaking strength shall be provided to the Commission prior to tower erection.
- **Lighting**. The County will provide an ILS-3600-0IR-E2 including 3 flash heads, one monitoring system, 3 cabinets, and wiring kits. Contractor is responsible for mounting and installing equipment per FAA Regulations. Power is to be fed from generated power and monitored through the network switch within the shelter.
- Antennas. The following antennas and feed lines shall be provided and installed according to manufacturer's specifications and this RFP. See Figure 1- Antenna Placement Diagram (attached). No substitutions will be allowed unless otherwise noted.
- Antennas and Feed Line. Contractor shall remove and reinstall existing or provide new and install, one top mounted CommScope® DB224A VHF dipole antenna with 7/8" Heliax coax, one side mounted Sinclair Technologies VHF Corner Reflector Directive Antenna SV227-SF2SNM antenna with 7/8" Heliax coax mounted at 365', .one Cambium Networks 3ft Dual-Polar Parabolic RDH4500 at 240' at 333° (this is a two dish system, one at 240' and one at 220', reinstall as is current)with Reel Outdoor Copper Clad CAT5E connected to a Cambium PTP 670 Connectorized Radio at or near 235' with Reel Outdoor Copper Clad CAT5E to the ground (see figure 3), and one Cambium Networks 3ft Dual-Polar Parabolic RDH4500 at 140' at 333° (this is a two dish system, one at 140' and one at 120', reinstall as is current) with Reel Outdoor Copper Clad CAT5E to the ground (see figure 3), and one Cambium Networks 3ft Dual-Polar Parabolic RDH4500 at 140' at 333° (this is a two dish system, one at 140' and one at 120', reinstall as is current) with Reel Outdoor Copper Clad CAT5E connected to a Cambium PTP 670 Connectorized Radio at or near 135' with Reel Outdoor Copper Clad CAT5E to the ground (see figure 2).
- **Polyphaser® Coax Protectors**. The contractor shall use existing Polyphaser® within the structure and ensure it is installed according to manufacturer specifications and grounded according to R56.
- *Microwave Radios.* The contractor shall review existing install and reinstall the microwaves to match in order to re-establish the county's microwave ring.
- **Testing.** The contractor shall test the transmission lines and antennas after installation. The contractor shall test the lines with appropriate calibrated test equipment for losses and for SWR. Network connections should be tested for good connection. Sweep test equipment shall use frequency domain reflectrometry (FDR). Any shorts or other issues discovered in the transmission lines, antennas or accessories shall be corrected by the contractor. All test results and sweeps shall be provided to County for approval before final acceptance. The contractor shall be responsible for making all final connections. The installed coax cable and connectors shall not exceed the following specifications.
- SWR Testing. The maximum Standing Wave Ratio (SWR) measured from the transmitter side of the Polyphaser shall not exceed 1.5 with the final antenna connection in place at 155 MHz (for High VHF antennas).
- Return Loss Sweep Testing. A sweep test with distance on the horizontal and dB on the vertical scale shall be run. These losses shall be measured before the final antenna connection is made (*without* the antenna in place but including the polyphaser and all jumpers). The return loss shall not exceed 26 dB anywhere on the sweep.
- Coax Loss Testing. The total loss from the transmitter side of the Polyphaser to the antenna connection, including the Polyphaser, and all installed connectors shall not exceed the following losses measured at 155 MHz. These losses shall be measured before the final antenna connection is made (*without* the antenna in place but including the polyphaser and all jumpers).
- Distance to Fault Sweep Testing. A sweep test with distance on the horizontal and VSWR on the vertical scale shall be run on the final installation with the antenna in place, including the polyphaser and all jumpers. These sweeps shall be provided to County for records.

Feed Line Installation and Grounding.

- *Continuous Cables.* All coax cable runs shall be continuous from the antenna to 1' past the entry tube inside the building connecting to the Polyphaser. No splices will be allowed. All network cables shall be continuous from the antenna / ODU to 20' past the entry tube inside the building.
- *Coax Ends.* All end connectors for 7/8" feed line shall be CommScope® 78EZNF and shall be installed according to manufacturer's recommendations. No substitutions will be allowed
- *Network Ends.* All CAT5E cables will be connected with RJ45 intended for grounding per appropriate standards.
- Weather Sealing. All outdoor coax ends shall be sealed as follows; 1 layer of "courtesy tape" (electrical tape), ample butyl Coax Seal® material around the connection on top of the courtesy tape and 3 to 4 layers of 3M Super 33+® tape on top of the coax seal. The connector shall be completely weatherproof.
- *Installation.* Coax and network cables shall be installed so as not to exceed bend radius specifications. Coax and network cables shall be dressed so that there are no rub points with tower steel, hardware, other cables or antennas.
- Securing Cables. Vertical cables shall be secured at a spacing of every 5' or less using the waveguide ladder system using appropriate hanger clips. All horizontal cable runs shall be secured at a spacing of every 3'or less. The contractor shall provide and install all hanger clips designed for the waveguide ladder system and specified cables. All cables shall be properly secured at the bottom of the tower and at antenna connections and other locations to prevent stress on the end connectors and prevent any rubbing.
- Hoisting Grips. Stainless steel lace up style hoisting grips shall be provided and installed according to manufacturer's specifications. A minimum of 1 hoisting grip shall be installed for each coax cable located at the cable. Hoisting grips for 7/8" feed line shall be CommScope® part # 19256B or equivalent.
- **Coax Entry Port.** A Tube entry with 4" port. The waveguide entry port shall be provided and installed according to manufacturer's specifications on the existing building. Applicable rubber boots shall be provided for all installed cable. The entry port shall be Site Pro 1<sup>®</sup> part # TEP20 or equivalent with matching rubber boots. All unused ports shall be covered with matching rubber sealing caps.
- **Grounding Kits**. Coax grounding kits shall be provided and installed according to R56 and the manufacturer's specifications. Grounding kits are required at the antenna, the turn at tower base and at the equipment shelter entrance for each coax. Grounding kits shall be waterproofed according to R56 and the manufacturer's specifications. Grounding kits shall be CommScope® Part #220497 or equivalent.
- *Cable Marking.* All cables shall be marked with a system to identify each cable top and bottom. A cable marking guide shall be provided to the Commission by the contractor that identifies the antenna or device connected at the top.
- Waveguide Ice Bridge. The contractor shall provide and install a minimum 24" wide hot dip galvanized steel waveguide ice bridge with supports of sufficient strength to protect the cables from falling ice. Sufficient length of ice bridge shall be installed to provide full coverage between the equipment shelter and the tower. The ice bridge shall include trapeze type waveguide supports of necessary size to support all power cables and transmission lines for current and future antennas listed. Trapeze supports shall be provided at a spacing of every 3'or less of horizontal cable run. Waveguide clips designed for both the trapeze support and the installed cable shall be provided and installed. The ice bridge kit(s) shall be Commscope® part # WB-K210-B or equivalent.
- Antenna Tower and Site Grounding Requirements. Tower, building, fencing, ice shield bridge and anchor grounding must meet the latest revision of R56. The following highlights R56 items that apply to this project, but all applicable R56 standards shall be followed.
- *Materials.* All grounding materials, including but not limited to, ground rods, wire, bus bars, conduits, chemical grounding system (if used) shall conform to R56.
- *Ground Rod Spacing.* Ground rod spacing and quantity required shall be determined based on R56 requirements.

*Cad Welding*. All primary connections shall be exothermically connected (cad welded) on all ends. At a minimum cad welding shall conform to "Installers and Inspectors Guide for CADWELD® Electrical Connectors" by Erico®. This requirement applies to, but is not limited to, the following. All underground connections.

All tower and building ground ring connections and all connections to ground rods.

Connections from tower legs to the ground ring.

Connections from bus bars to ground rings.

All connections to fencing and gate jumpers.

Connections to ice bridge support posts and bonding jumpers.

- Dissimilar Metals. Dissimilar metals and corrosion control measures shall be employed as specified in R56.
- *Ground Bus Bars*. Bus bars are required at the tower base, outside and inside the equipment shelter (minimum of 3). Bus bars shall conform to R56.
- *Waveguide Ice Bridge.* Waveguide ice bridge shall be grounded in accordance with R56 including all support posts, bonding jumpers between support posts and all ice bridge segments.
- *Fence Grounding*. Grounding shall be installed on all fence corner posts, gate posts, with flexible jumpers to gates.
- *Equipment Shelter and AC Service.* A master ground bus bar shall be installed inside the building within 24" of the coax entry port. All internal ground connections shall be as specified in R56.
- *System Resistance Requirements.* Grounding system resistance shall conform to R56 Type "B" Sites. The contractor shall test the ground resistance with appropriate test equipment and procedures and document test results. The contractor shall demonstrate conformance if requested by the Commission.
- *Guy Anchor Grounding.* Guy anchor grounding should conform to R56, including but not limited to the following. If the steel guy anchor shaft is in contact with the soil, the ground wire shall be tinned to copper and the ground rod shall be galvanized. In this case, the guy anchor shaft shall be surrounded by 6" of gravel. Ground rod shall be a minimum of 2' from the concrete foundation.
- **Fencing and Compound.** Fencing shall conform to fencing requirements found in other sections of this RFP and the following. An approximate compound layout is included in this RFP with additional information.
- **Tower Base and Shelter Compound.** Fencing shall be a minimum 6' tall chain link fence enclosing the tower, building, generator and propane fuel tank.
- *Gate.* A 10' two-piece drive-in gate shall be provided and installed at the tower compound. See radio tower equipment shelter specification and shelter compound general layout. If a buried pipe is used at the gate closure a minimum of 6" of clean rock shall be placed in the bottom of hole prior to pipe installation and back filling to allow for proper pipe drainage.
- **Tower Guy Anchor Locations.** Fencing shall be a minimum 6' tall chain link fence. The fenced area shall consist of the anchor components and include a minimum 14' of clearance to the lowest cable. Also includes one 36" walk-in gate.
- Weed Barrier and Rock. All fenced areas shall have 5 oz. Dewitt Pro 5 Weed Barrier fabric, or equivalent heavy duty weed barrier cloth and 4" depth of 1" clean crushed limestone installed throughout the fenced area and 1' outside the fencing on all sides.
- **Digital Photograph Requirements**. The contractor shall provide to the Commission digital photographs to demonstrate conformance to this RFP and related requirements. Photographs shall be of sufficient quality, quantity and detail to clearly document the required items. At a minimum the following photographs shall be provided.

Site grounding system installation before backfilling

- All foundation forms and re-bar cages before concrete is poured.
- *Tower section connection points.*

Antenna installation showing mounts, properly dressed cables, etc.

- *Feed line installation demonstrating proper cable supports, hoisting grips, weather sealed connections, ground kit installation, etc.*
- **Final Tower Documentation.** The following final documentation is required in addition to any other documents required in this RFP.
- As Built Drawings. If any changes are made to the site layout, grounding plans, or other drawings, final as-built drawings shall be provided.
- Tower Plumb Certification. Certification that the entire tower is plumb shall be provided.
- *Coax sweeps*. The results of coax cable SWR and loss testing shall be provided.
- Cable Marking Guide. A guide to the cable marking shall be provided.
- *Grounding Test Results.* A report of the grounding system resistance shall be provided.
- Concrete Cylinder Test Results. Test reports of tower concrete breaking strength.
- *Construction Photographs.* Digital photographs to demonstrate conformance to specifications and any other photographs taken to document the installation.

ltem	Antenna	Height	Coax / Cables	Terminate	Asthmas	New or Used
A	CommScope <sup>®</sup> DB224A VHF dipole	Top / 400'	7/8" Heliax coax	Polyphaser / Shelter	Omni	Existing or New
В	Sinclair Technologies VHF Corner Reflector Directive SV227- SF2SNM Antenna	365'	7/8" Heliax coax	Polyphaser / Shelter	0°	Existing or New
С	Cambium Networks 3ft Dual-Polar Parabolic RDH4500	240'	Reel Outdoor Copper Clad CAT5E	Cambium Networks PTP 670 Connectorized Radio <b>(ITEM D)</b>	333°	Existing or New
D	Cambium Networks PTP 670 Connectorized Radio	235′	Reel Outdoor Copper Clad CAT5E	Grounding / Shelter		Existing or New
E	Cambium Networks 3ft Dual-Polar Parabolic RDH4500	220'	Reel Outdoor Copper Clad CAT5E	Cambium Networks PTP 670 Connectorized Radio <b>(ITEM D)</b>	333°	Existing or New
F	Cambium Networks 3ft Dual-Polar Parabolic RDH4500	140'	Reel Outdoor Copper Clad CAT5E	Cambium Networks PTP 670 Connectorized Radio <b>(ITEM G)</b>	44°	Existing or New
G	Cambium Networks PTP 670 Connectorized Radio	135′	Reel Outdoor Copper Clad CAT5E	Grounding / Shelter		Existing or New
Η	Cambium Networks 3ft Dual-Polar Parabolic RDH4500 - Antenna Placement Dia	120'	Reel Outdoor Copper Clad CAT5E	Cambium Networks PTP 670 Connectorized Radio <b>(ITEM G)</b>	44°	Existing or New

Figure 1 - Antenna Placement Diagram



Figure 2 - 240' Microwave Array (Items C, D, E)



Figure 3 - 140' Microwave Array (Items F, G, H)





## Additional Information: Geotechnical

Franklin County has ordered Geotechnical reports for the site based on the below specifications. This is for scheduling purposes. If further information is needed, the chosen contractor is responsible for those investigations and costs. If it is believed further information will be needed, a narrative and explanation shall be provided at the time of bid.

### See specifics for Geotechnical - Pea Ridge Tower below:

### Self Support Tower

Provide one soil boring per site and provide the following information at a minimum.

1. Allowable bearing pressure at incremental depths to a depth of 20' for shallow foundation or 60' plus or minus for drilled pier foundations

- 2. Water table below grade
- 3. Soil weight in pounds per Cu. Ft.
- 4. Skin friction values if drilled pier foundations are required
- 5. N values for all samples
- 6. Rock Quality Designation (RQD) if rock foundations are required

7. Passive Pressure coefficient for granular soils (KP), (PHI) and cohesion values for clay soils (c)

8. Soil electrical resistivity, pH values and corrosive nature of soil.

### <u>Guyed Tower</u>

*Provide four to seven soil borings per site and provide the following information at a minimum.* 

1. Allowable bearing pressure required at base (3' - 6' depth). All borings should be 15' to 20' deep. If drilled pier foundations are anticipated, boring depths should be increased to between 30' and 50'

- 2. Water table below grade
- 3. Soil weight in pounds per Cu. Ft.
- 4. Skin friction values if drilled pier foundations are required
- 5. N values for all samples
- 6. Rock Quality Designation (RQD) if rock foundations are required

7. Passive Pressure coefficient for granular soils (KP), (PHI) and cohesion values for clay soils (c)

8. Soil electrical resistivity, pH values and corrosive nature of soil.

#### SPECIFIC PROPOSAL REQUIREMENTS:

- 1. A Company profile which should indicate the number of years in business, number of employees, certifications and licenses held, resumes of key personnel, and experience performing installation of tower structures.
- 2. List of Contractor's proposed subcontractors, i.e.: crane service, hauling contractor, electrician, etc.
- 3. List of recent organizations that have used the Contractor's services on similar projects, with contact names and contact information for reference checks.
- 4. Description of Contractor's processes, method of approach, and timeline, including identification of specific services to be provided.
- 5. It is county expectation that contractor and any subcontractors will hold appropriate licenses/certifications for trade.
- 6. Contractor to provide approximate timeline from awarding of contract to completion of project.

The contents of this section include mandatory requirements that will be required of the successful bidder and subsequent contractor. The offeror is requested to provide responses to the requirements/desired attributes in this section pursuant to the directions identified herein. The offeror's response, whether responding to a mandatory requirement or a desired attribute, shall be binding in the event the bid is accepted by Franklin County. The offeror must provide all costs necessary to meet the mandatory requirements and the fulfillment of any desirable attributes in the appropriate section titled Pricing.

#### **EVALUATION CRITERIA**

Price to provide services requested (20%)

Ability, capacity, and experience of the contractor to perform the services; qualifications of staff proposed for the project (50%)

Technical Approach to the project (30%)

Each of the criteria above will be rated and weighted according to the information submitted.

#### SELECTION PROCESS

The County will review and evaluate the proposals based on the evaluation criteria. Contractors may be selected for interviews or questions for clarification. However, the County may choose to proceed without interviewing anyone.

The County reserves the right, in its sole discretion, to reject any or all proposals, or portion thereof, to waive technicalities or deficiencies in any or all the proposals. The County reserves the right to cancel the RFP in part or in its entirety.

#### **Prevailing Wage**

a.) Not less than the prevailing hourly rate of wages, as set out in the wage order attached to and made part of the specification for work under the contract, shall be paid to all workers performing work under the contract. (Section 290.250, RSMo.)

b.) The contractor will forfeit a penalty to the contracting public body of \$100 per day (or portion of a day) for each worker that is paid less than the prevailing rate for any work done under the contract by the contractor or by any subcontractor. (Section 290.250, RSMo). c.) The contractor and all subcontractors to the contract must require all on-site employees to complete the ten-hour construction safety training program required under Section 292.675, RSMo, unless they have previously completed the program and have documentation of having done so.

d.) The contractor will forfeit a penalty to the contracting public body of \$2500 plus an additional \$100 for each employee employed by the contractor or subcontractor, for each calendar day, or portion thereof, such employee is employed without the required training. (Section 292.675, RSMo).

# **INSURANCE REQUIREMENTS**

- 1. The Contractor shall furnish County with a certificate of insurance indicating proof of the following insurance from company's license in the State of Missouri:
  - A. Worker's Compensation and Employers' Liability: Worker's Compensation Statutory in compliance with the Compensation law of the Sate and Employers' Liability Insurance with a limit no less than \$1,000,000.00 each accident.

B. Comprehensive or Commercial General Liability with a minimum limit of \$1,000,000.00 per occurrence, \$3,000,000.00 aggregate combined Single Limit for Bodily Injury and Property Damage Liability. This insurance shall include, but not be limited to, the following coverage.

- 1. Premises Operations
- 2. Products and Completed Operations
- 3. Broad Form Property Damage
- 4. Contractual
- 5. Personal Injury

C. Automobile Liability with a minimum limit of \$1,000,000.00 per occurrence, \$3,000,000.00 aggregate Combined Single Limit for Bodily Injury and Property Damage Liability. This insurance shall include coverage for all the following:

- 1. Owned Automobiles
- 2. Hired Automobiles
- 3. Non-Owned Automobiles

D. The certificate shall list the Certificate Holder and Address as follows: Franklin County, 400 E Locust Street, Room 206, Union, Mo 63084. The services provided to Franklin County shall be listed under "Description of Operations."

E. Such insurance shall include under the General Liability and Automobile Liability policies Franklin County, its employees, elected officials, representatives, and members of its board and/or commissioners as "Additional Insured's".

2. The Agreement of Insurance shall provide for notice to the County of amendment or cancellation of insurance policies 30 days before such amendment or cancellation is to take effect.

# CONTRACTUAL TERMS AND CONDITIONS ACKNOWLEDGEMENT

The undersigned Vendor/Contractor has read, understood, and accepted the Terms and Conditions as published on the Franklin County Official Website located at:

http://www.franklinmo.org

All terms and conditions as stated shall be adhered to by Vendor/Contractor upon acceptance of contract. Vendor/Contractor enters into this agreement voluntarily, with full knowledge of its effect.

Vendor/Contractor Signature

Date

Vendor/Contractor Name and Title

### AFFIDAVIT OF WORK AUTHORIZATION

The grantee, sub grantee, contractor or subcontractor who meets the section 285.525, RSMo definition of a business entity must complete and return the following Affidavit of Work Authorization.

Comes now	(Name of Business Entity Authorized Representative)		
as	(Position/Title)		
first being duly sworn on my oath,	affirm(Business Entity Name) is		
enrolled and will continue to partic	cipate in the E-Verify Federal Work Authorization program with respect to		
employees hired after enrollment	in the program who are proposed to work in connection with the services		
related to	(Bid/Grant/Subgrant/Contract/Subcontract) for the duration of the grant,		
subgrant, contractor, or subcontra	ctor, if awarded in accordance with subsection 2 of section 285.530, RSMo. I		
also affirm that	(Business Entity Name)		
does not and will not knowingly er	nploy a person who is an unauthorized alien in connection with the		

awarded.

In Affirmation thereof, the facts stated above are true and correct. (The undersigned understands that false statements made in this filing are subject to the penalties provided under section 575.040, RSMo.)

Authorized Representative's Signature	Printed Name	Printed Name	
Title	Date		
Subscribed and sworn to before me this	of	I am	
Day	Month, Year		
commissioned as a notary public within the County of and my commission expires on Date		, State of	
Signature of Notary	Date		

### AFFIDAVIT OF WORK AUTHORIZATION

(Continued)

#### CURRENT BUSINESS ENTITY STATUS

I certify that \_\_\_\_\_\_ (Business Entity Name) <u>MEETS</u> the definition of a business entity as defined in section 285.525, RSMo pertaining to section 285.530, RSMo as stated above.

Authorized Business Entity Representative's Name (Please Print) Authorized Business Entity Representative's Signature

**Business Entity Name** 

Date

As a business entity, the grantee, sub grantee, contractor, or subcontractor must perform/provide the following. The grantee, sub grantee, contractor, or subcontractor shall check each to verify completion/submission:

 Enroll and participate in the E-Verify Federal Work Authorization Program (Website: <u>http://www.dhs.gov/e-verify</u>; Phone: 888-464-4218 Email: <u>e-verify@dhs.gov</u>) with respect to the employees hired after enrollment in the program who are proposed to work in connection with the services required herein;

AND

Provide documentation affirming said company's/individual's enrollment and participation in the E-Verify Federal Work Authorization Program. Documentation shall include a page from the E-Verify Memorandum of Understanding (MOU) listing the grantee's, subgrantee's, contractor's. or subcontractor's name and the MOU signature page completed and signed, at minimum, by the grantee, subgrantee, contractor, or subcontractor and the Department of Homeland Security – Verification Division; (if the signature page of the MOU lists the grantee's, subgrantee's, contractor's, or subcontractor's name, then no additional pages of the MOU must be submitted).

# **PRICING FORM**

# 202324 RFP Tower Pea Ridge (Washington County)

### **REQUIRED PRICING**

The Contractor shall complete the following pricing form and provide firm, fixed pricing necessary to meet the mandatory requirements of the solicitation.

Tower Installation New 300' Self-Supporting	\$
Tower Installation New 300' Guy-Supporting	\$
Tower Installation New 400' Self-Supporting	\$
Tower Installation New 400' Guy-Supporting	\$
Used Tower as Proposed	\$
Optional Guy Anchor Fencing	\$
Optional Unused Guy Anchor Concrete Removal	\$
Optional Geotechnical additional Investigation	\$

Company Name	 	
Authorized Signature	 	
Printed name and title		

Franklin County reserves the right to request supporting documentation for the proposed pricing. In addition, it may be necessary to evaluate the bidder's expertise and experience in order to award a bid. Franklin County reserves the right to request reference information and/or proof of expertise if necessary.

# **VENDOR INFORMATION**

ompany Name
1ailing Address
hone number
ontact Name
ontact Name Title
mail Address

# **ATTACHMENT 1**

#### SEALED RESPONSE LABEL

PLEASE ATTACH LABEL TO OUTSIDE OF PACKAGE

\_\_\_\_\_

## SEALED BID RESPONSE ENCLOSED

DELIVER TO: Purchasing Department 400 East Locust St, Rm 004 Union, MO 63084

SOLICITATION # 202324 DATE: November 16, 2023 2:00PM

# DESCRIPTION: Tower Pea Ridge (Washington County)

Vendor Name:

Vendor Address: