

**CHEROKEE NATION**

**REQUEST FOR SEALED PROPOSAL**

**DESIGN & BUILD**

**COMMUNICATION TOWERS**

**ADDENDUM 01**



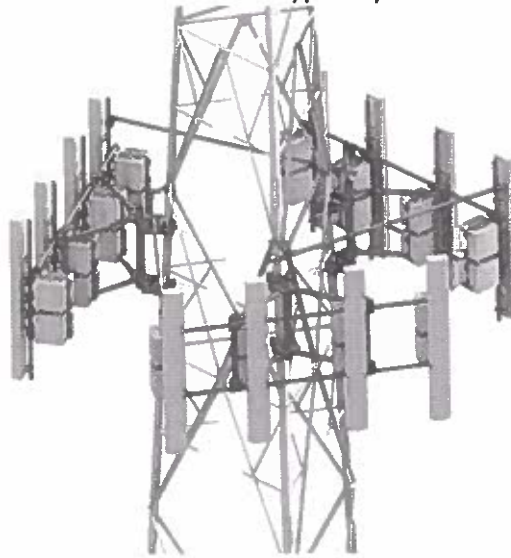
**Cherokee Nation Purchasing on behalf of  
Government Resources**

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**REQUEST FOR SEALED PROPOSAL (RFP)**  
**DESIGN/BUILD: COMMUNICATION TOWERS**  
**ADDENDUM 01**

The following questions and/or requests for information were received by the deadline stated in the RFP

**QUESTION:** The Scope of Work section, item number 4 states " All brackets and fixtures to attach the antennae required for up to 3 commercial carrier systems and one private LTE system"- Does this mean we will be responsible for installing the carrier mounts when erecting the tower? If so, how many? Example of a carrier mount below. This is what carriers typically use to mount all antennas and radios.



**RESPONSE:** It is not necessary to install the carrier mounts at this time.

**QUESTION:** In the scope of work section, it says "Each tower and tower site should be monitored 24x7 by remote cameras and door entry sensors. Security and sensor telemetry data will be backhauled to the Nation Network Operations Center" - Is this just while building the tower? Or do you want permanent remote camera systems?

**RESPONSE:** Cherokee Nation will assume responsibility for security and alarms.

**QUESTION:** Since the intent is to use these towers for both the Nation's LTE system, as well as other carriers, should we install a multi-meter bank system? This will allow for easier tie ins in the future.

**RESPONSE:** Bidders with multi-meter bank systems will be considered. See Attachment B for example.

**QUESTION:** Who is the power company for these sites? Will we have to trench from the sites to the main service pole? Or will they have a service drop near by to tie into?

**RESPONSE:** **The electric service providers in this region are Ozarks Electric, Lake Region Electric and Cookson Hills Electric. We suggest all offerors contact these coops for further information.**

**QUESTION:** In the scope of work section, it says "Create As-Builts of all tower sites, including shelters, generators, fuel tanks and fencing" – How many shelters would you like installed, and would you like each one to have its own generator?

**RESPONSE:** **1 shelter, and 1 generator at each tower location.**

**QUESTION:** Who will own the towers? Would the Cherokee Nation be open to a proposal where my team builds and owns the towers and pays for this or is the Cherokee Nation looking to own the towers and wants to hire a design build contractor to provide the equipment and assemble it?

**RESPONSE:** **Cherokee Nation will pay for and own the towers.**

**QUESTION:** I would like to go visit each of these sites this week, wanted to see if there are any special instructions for access to the site locations?

**RESPONSE:** **To schedule/discuss site visits, the Project Manager is Spencer Risenhoover. He may be reached at (918) 510-9208.**

**QUESTION:** Are we required to get the Soil Samples at each tower location for the tower foundation or have these already been done?

**RESPONSE:** **No soil samples have been taken. Vendors can bid standard soil. Based on environmental results soil samples may be required to prepare site. (environmentals will determine if testing is needed) All testing, additional expenses and change orders need to be complete by September 1, 2024.**

**QUESTION:** Is there any chance you could forward the tower loadings?

**RESPONSE:** **Low band and mid-band antenna with tower mounted RRH will be installed later. The system weight of 1 antenna and 1 RRH is an example weight of 150 lbs. Full capacity may be 4 systems with 3 sectors. See Attachment C as an example.**

**QUESTION:** In the TERO Certification & Information section, it states, "Proof of TERO certification must accompany and be included in sealed proposal submittal."

The owners who will be the Prime do not have TERO certifications. However, I'm pleased to inform you that our Project Coordinator/Manager has TERO certifications. Is that acceptable?

**RESPONSE:** **To receive Indian Preference, Proof of TERO certification must accompany and be included in sealed proposal submittal & be in the owner's name. It can be shared in the proposal the parties used on the project will be TERO certified.**

**QUESTION:** RFP states: Cherokee Nation TERO law and fees are applicable to any future agreements. Are there any special fees required from the Nation for this project? If yes, what are they and what amount?

**RESPONSE:** **TERO fees are applicable to the successful bidder: ½ of 1% of the total bid award. Cost for non-Natives onsite is \$25 per day.**

**QUESTION:** Can you please tell us exactly what professional licenses you are referring to?

**RESPONSE:** **Any licenses required for construction projects in Oklahoma and Cherokee Nation are required.**

**QUESTION:** Does it need to be domestic steel or not?

**RESPONSE:** **Page 5, section 23 of the RFP: Buy American – Recovery Act provisions: The buy American provisions direct that all of the iron, steel, and manufactured goods used in the project are produced or manufactured in the United States for a project for the construction, alteration, maintenance or repair of a public building or public work. This Buy American provision is applicable only to iron, steel, and manufactured good brought to the construction site for incorporation into a public building or public work. Products that do not fit the definition of manufactured goods are not covered.**

**QUESTION:** What shield factor (Ka) to use on the carriers?

**RESPONSE:** **The shield factor is based on antenna size, weight, and position. At this time, we can only give an example antenna and Remote Radio Head model. Consider the CCI TPA65R-BU8D antenna. It's 96" x 21" x 7.8" and weighs 82.5 lbs. Also mounted could be the Ericsson 4478 RRH. It's 16.5" x 13.4" x 7.7" and weighs 59.9 lbs. There will be up to 4 mount positions on three mount arms.**

**QUESTION:** The 24 hour monitoring system. Will fiber be available for backhaul to the NOCC or will that be our responsibility as well?

**RESPONSE:** **Cherokee Nation will assume responsibility for security and alarms.**

**QUESTION:** The 10' x 20 shelter. Do you have specs on those? Can they be a prefab metal shelter?

**RESPONSE:** **No specific specs for the shelter. The R56 standards section 5 are a guide.**

**QUESTION:** What is the voltage required for this project.

**RESPONSE:** **The radio equipment is not finalized at this time but the site will require 120/240 VAC input**

**QUESTION:** What is the service size coming into the site?

**RESPONSE:** **Four 200 Amp meters to provide 120/240Vac Power.**

QUESTION: Will the ATS be NEMA 1 inside or NEMA3R outside?

RESPONSE: **NEMA3R indoor or outdoor.**

QUESTION: Confirming Fuel source would be helpful.

RESPONSE: **Diesel**

QUESTION: I would not be able to quote the UPS without additional information. Really can't guess on that one.

RESPONSE: **The Nation will not require a UPS with this bid. It will be included in a later RFP.**

QUESTION: What is the size of the tower site compound? We will need this information for fencing and the amount of rock for the compound.

RESPONSE: **The site will be 100x100 feet.**

QUESTION: If possible, can we get a copy of the plan holders list?

RESPONSE: **This information is not available. All information is posted on the Nation's free public bid website [www.cherokeebids.org](http://www.cherokeebids.org).**

QUESTION: Can you please tell me which tower operator the nation sent the RFP to? We wish to subcontract to that Tower Operator.

RESPONSE: **This information is not available. All information is posted on the Nation's free public bid website [www.cherokeebids.org](http://www.cherokeebids.org).**

QUESTION: Are there any prints? Please provide if available.

RESPONSE: **Exhibit A-D has some example prints.**

QUESTION: Are there any soil reports? Please provide if available.

RESPONSE: **No soil reports are available at this time.**

QUESTION: Are the locations surveyed? Please provide if available.

RESPONSE: **No surveys have been performed at this time.**

QUESTION: Can I please get some clarification about the application process and TERO Certified, do we have to be TERO Certified to bid on the Procurement package?

RESPONSE: **Please call (918) 453-5000 and ask for the TERO office. This group will be glad to answer questions and provide the application.**

**A company does not have to be TERO certified to submit a bid. The Nation will accept bids from Indian & non-Indian owned companies.**

QUESTION: On pg. 18 of the specs., under "Project Description", it is stated "TIA-222-H Category 3". Please confirm that the category 3 reference should be Risk Category III.

**RESPONSE:** Since the towers may carry LTE band 14 (FirstNet) the rating is Risk Category III

**QUESTION:** Can more information be provided for the antenna loading? Antenna types and elevations to be installed would be helpful.

**RESPONSE:** Tower Tenants are not finalized. Its likely there will be private LTE + up to 3 other carriers with Low band and mid band.(B14, B5) radios.

**QUESTION:** Who is responsible for geotech information?

**RESPONSE:** Bidders are responsible for the Geotech information.

**QUESTION:** Is there a preferred foundation type?

**RESPONSE:** Concrete foundation for the tower and shelter. Gravel over the site.

**QUESTION:** In reviewing the documents I did not see where the size of the compound for each site was listed. the shelter is listed as 10' X 12' so I wanted to see if you could clarify that part?

**RESPONSE:** Each tower site is a 100x100 Ft plot of Cherokee owned land.

**QUESTION:** Another question on the compound, is there a certain type of fence that needs to be around each compound? I am assuming these are all chain link, but wanted to make sure before we complete our bid package.

**RESPONSE:** 6-foot chain link fence with three-strand barbed wire on the top. See attachment A Fencing

**QUESTION:** Will the question and answers be posted on the RFP in the procurement page?

**RESPONSE:** There will be an addendum issued by the date stated in the RFP. All questions or requests for information will be listed along with the responses. It will be posted on the bid website.

**QUESTION:** Do you have any other tower RFP that you have already awarded, that might have some question and answer documentation, about the RFP.

**RESPONSE:** Not at this time.

**QUESTION:** When can we physically walk the sites?

**RESPONSE:** To schedule/discuss site visits, the Project Manager is Spencer Risenhoover. He may be reached at (918) 510-9208.

**QUESTION:** Will there be any special escorts or requirements for people entering?

**RESPONSE:** To schedule/discuss site visits, the Project Manager is Spencer Risenhoover. He may be reached at (918) 510-9208.

**QUESTION:** Who is responsible for obtaining Access/Utility Easements?

**RESPONSE:** The tribe will meet with existing electric coops to arrange Utility feeds.

QUESTION: Soil Testing? Before construction for geo report or after construction for contaminants?

RESPONSE: **Vendors are responsible for soil testing**

QUESTION: Any surveying or staking currently present?

RESPONSE: **No survey or staking is available at this time. A KMZ of tower locations can be provided.**

QUESTION: Are we required to use certain vendors/rock providers ect?

RESPONSE: **No requirement for certain rock providers.**

QUESTION: Who is the power company for each tower location?

RESPONSE: **OzarkGo, Lake Region, NEOC, PSO, and Cookson are the power providers covering the tower locations.**

QUESTION: 200 amp electric service for shelter only or 600amp to 800amp service with 4 gang meter pack on community H-Frame for future carriers?

RESPONSE: **Multi-tenant meter rack is preferred.**

QUESTION: Who will determine if an access road is necessary?

RESPONSE: **Bidder will determine if an access road is necessary**

QUESTION: What are the compound dimensions?

RESPONSE: **100 x100 Ft see previous answers.**

QUESTION: Compound area to be graveled?

RESPONSE: **Yes compound area to be graveled**

QUESTION: Fence height with barbwire on top? 6' Height with 3 strands of barbwire on top for 7' overall height?

RESPONSE: **6-foot chain link fence with three-strand barbed wire on the top. See attachment A Fencing**

QUESTION: Cherokee Nation RF design and RAD Centers?

RESPONSE: **Low band and mid-band antenna with tower mounted RRH will be installed later. The system weight of 1 antenna and 1 RRH is an example weight of 150 lbs. Full capacity may be 4 systems with 3 sectors. See Attachment C as an example.**

QUESTION: Who is supplying the Cherokee Nation RF Equipment (Antennas, radios and RF components)?

RESPONSE: **The RF equipment vendor is under a separate RFP and not finalized.**

QUESTION: Other carrier RAD Centers and sector mounts? Other Carriers usually take care of this as they move onto the tower and supply/provide their own mounts and equipment at their desired RAD center.

RESPONSE: **This information is not available now.**

QUESTION: Security camera system, monitored 24/7? Does Cherokee Nation have a preferred security system or similar cameras in use currently?

RESPONSE: **Cherokee Nation will assume responsibility for security and alarms.**

QUESTION: Cherokee Nation to bring fiber to site. To the ROW or shelter location?

RESPONSE: **To the shelter location.**

QUESTION: Shelter - Concrete or fiberglass building material?

RESPONSE: **Mid Duty shelter is acceptable**

QUESTION: Shelter - Internal Alarms? Smoke, low -temp, high-temp, carbon monoxide?

RESPONSE: **Cherokee Nation will assume responsibility for security and alarms**

QUESTION: Shelter- Internal equipment requirements?

RESPONSE: **Stated in the RFP**

QUESTION: Shelter - Entry ports? How many ports, number of holes for each and location on the building?

RESPONSE: **Prepare from Ice bridge, power input, multiple tenants**

QUESTION: Shelter - External lighting requirements?

RESPONSE: **Yes**

QUESTION: Generator Voltage?

RESPONSE: **120/240 VAC**

QUESTION: Generator - Automatic transfer switch size in amperage?

RESPONSE: **Capacity for up to 4 networks**

QUESTION: Generator - Is the ATS service entrance rated or not?

RESPONSE: **Please provide more context to the question. NEMA3R- Indoor or outdoor**

QUESTION: Generator - Is the ATS indoors or outdoors?

RESPONSE: **NEMA3R- Indoor or outdoor**

QUESTION: Fence/Gate - Fences are to be 7'. Will they be the typical 6' chain link with 1' of barbed wire (3 strands)? If not, what are the requirements (e.g. materials, dimensions) for fences to be installed at each site? See Attachment A

RESPONSE: **See previous answer**



QUESTION: Fence/Gate - If an entrance gate is required from the main road into the site, what size? And single or double gate?

RESPONSE: **Double Gate**

QUESTION: Site Access - For sites requiring an access road, what width is required?

RESPONSE: **Vendor use what width is required to give your construction equipment access to the tower sites.**

QUESTION: Site Access - If there is an existing access road on the landowner's property, are we allowed to use it to access during construction?

RESPONSE: **This varies based on tower location. After bid is awarded, surveys to assess access needs and accompanying change orders must be completed by September 1<sup>st</sup>.**

QUESTION: Site - Is there going to be one standard size for the lease areas? Or will it vary by site? Please provide lease area dimensions.

RESPONSE: **All sites are 100x100 Ft on Cherokee land.**

QUESTION: Site - What is the compound size for each site?

RESPONSE: **All sites are 100x100 Ft on Cherokee land.**

QUESTION: Electrical/Telco - Is a four gang meter base acceptable?

RESPONSE: **See Attachment B**

QUESTION: Electrical/Telco - Will the multi-tenant rack be the same configuration as was installed at Kenwood?

RESPONSE: **See Attachment B**

QUESTION: Tower - Page 18 under "Project Description", it states TIA-222-H Category III. Should that reference be Risk Category III?

RESPONSE: **Yes**

QUESTION: RF - Will requirements/documentation of the Cherokee Nation's Private LTE network be provided? Example Configuration

RESPONSE: **See Attachment C Yes to awarded bidder.**

QUESTION: RF - Does the contractor provide sector mounts for the Private LTE network and other carriers?

RESPONSE: **No, this will be in a separate RFP.**

QUESTION: RF - Are the sector mounts to be installed at the time the tower is stacked?

RESPONSE: **No.**

QUESTION: Grounding - Motorola R56 Standards. Will a down lead on each tower leg also be required?  
RESPONSE: **See Attachment D**

QUESTION: Survey - Have land surveys been performed on all sites? If so, please provide the surveys. If not, are costs of the surveys to be included in our proposals?  
RESPONSE: **Surveys have not been performed.**

QUESTION: Survey - If surveys need to be ordered by the contractor, how wide should the access/utility easement be? Typical is 30' wide.  
RESPONSE: **This depends on the tower location. Surveys need to be completed and change orders requested by September 1<sup>st</sup>, 2024.**

QUESTION: Environmental - Have environmental studies been done on these sites? If so, please provide. If not, do these need to be ordered by the contractor?  
RESPONSE: **Environmental doesn't need to be done by a contractor. Environmental is in progress and not complete.**

QUESTION: Will a third party tribal monitor be required at each site?  
RESPONSE: **No**

QUESTION: Shelter - Is there a requirement to have internal grounding installed by the shelter manufacturer?  
RESPONSE: **The shelter is required to be grounded. The whole tower complex has a grounding system. The shelter should be attached to that.**

QUESTION: Shelter - Would you like the shelter to be constructed of pre-cast concrete (heavy duty) or lighter weight aluminum or fiberglass?  
RESPONSE: **Medium Duty**

QUESTION: Shelter - Does the HVAC system need to be redundant or single? What size AC ton is required? What is the Heat kw required?  
RESPONSE: **Capacity for up to 4 systems. Most employ indoor BBU and outdoor RRH.**

QUESTION: Shelter - Is there a color preference on the shelters?  
RESPONSE: **No color preference**

QUESTION: Shelter - Does the shelter need to be placed on a slab or is a steel skid configuration be acceptable?  
RESPONSE: **Gravel and Steel is acceptable**

QUESTION: Shelter - Is there a minimum roof height?  
RESPONSE: **Standard shelter height.**

QUESTION: Shelter - What is the minimum lb. per sq ft the roof load needs to accommodate?  
RESPONSE: **Capacity for racks and indoor ATS. Most systems have indoor BBU and outdoor RRH and antenna. Up to 4 systems may be accommodated. Actual weight load TBD.**

QUESTION: Shelter - What is the minimum lb. per sq ft the floor load needs to accommodate?  
RESPONSE: **Capacity for racks and indoor ATS. Most systems have indoor BBU and outdoor RRH and antenna. Up to 4 systems may be accommodated.**

QUESTION: Shelter - What is the minimum & maximum temperature allowable in the shelter?  
RESPONSE: **23F to 131F**

QUESTION: Shelter - Does the shelter need cross ventilation with exhaust fan? If so, what is the cfm minimum?  
RESPONSE: **Shelter should have HVAC**

QUESTION: Shelter - Does the shelter need cable ladders?  
RESPONSE: **Yes.**

QUESTION: Shelter - Should the shelter have a cable entry port? If so, how many port holes are required?  
RESPONSE: **See previous answer**

QUESTION: Schedule - What is the desired start date for construction of the tower sites?  
RESPONSE: **One month after award is announced.**

QUESTION: Terms - Will the project allow for progress and/or milestone payments? Or will it be per site completed?  
RESPONSE: **Progress payments will be made.**

QUESTION: Is there is a specific wind area/weight required for the reserved carriers. We would recommend using the TIA-222-G recommendations for 'heavy' carriers which is listed in the table here.

Carrier Type	No ice		Ice $t_i \leq 0.50''$ [ $t_i \leq 13$ mm]		Ice $0.50'' < t_i \leq 1.50''$ [ $13 < t_i \leq 38$ mm]		Transmission Lines
	(EPA) <sub>A</sub> ft <sup>2</sup> [m <sup>2</sup> ]	Wt kips [kN]	(EPA) <sub>A</sub> ft <sup>2</sup> [m <sup>2</sup> ]	Wt kips [kN]	(EPA) <sub>A</sub> ft <sup>2</sup> [m <sup>2</sup> ]	Wt kips [kN]	
Light (9 antennas max)	55 [6.5]	0.75 [3.3]	75 [7.9]	1.00 [3.3]	110 [10.2]	1.50 [6.7]	(9) 1 5/8 in. diameter (2.0 in. [51 mm] OD)
Heavy (12 antennas max)	80 [8.4]	1.20 [5.3]	100 [9.3]	1.20 [5.3]	135 [12.6]	2.00 [8.9]	(12) 1 5/8 in. diameter (2.0 in. [51 mm] OD)

**RESPONSE:** Low band and mid-band with tower-mounted RRH will be supported. The system weight of 1 antenna and 1 RRH is an example weight of 120 lbs. Full capacity may be 4 systems with 3 sectors. See Attachment C as an example.

**QUESTION:** Will our proposal be considered if we leave any of the items out listed on page 19?

Example:

4) All brackets and fixtures for carriers. In our experience, carriers prefer to dress out brackets and fixtures on the ground prior to installing them on the tower.

Can we exclude providing this?

**RESPONSE:** Mounting arms do not have to be provided at tower construction time.

**QUESTION:** What are the pay terms with Cherokee Nation. Will we be able to progress bill or will invoicing only be accepted after each site is completed and has passed an inspection?

**RESPONSE:** Progress payments will be made.

**QUESTION:** The engineering firm we have hired is working on a preliminary site design that will be the same for each site except, for the access road distance. The RFP mentioned we need to submit a design for approval, is this something we need to send in or bring to you before completing all 15 proposals.

**RESPONSE:** No.

**QUESTION:** Do we need to provide third party inspections for concrete, foundation post excavation but before concrete pour (includes rebar inspection), compaction, Final site inspection?

**RESPONSE:** Construction manager from engineering contract firm will do third party inspections.

**QUESTION:** The RFP specifies the Firm will provide "All brackets and fixtures to attach the antennae required for up to 3 commercial carrier systems and one private LTE system." We understand that we need to provide a waveguide cable ladder to permit the attachment of antenna lines but typically the big 3 cell companies have their own tower mounts as a requirement for their application. Providing these mounts would seem an unusual and unnecessary expense for the Nation.

Should we exclude the commercial tower mounts from our bids and, if so, should we also exclude the tower mounts from the private LTE system?

**RESPONSE:** **Agreed. Tower mounts will be installed later by wireless vendors**

**QUESTION:** Is there a loading specification for the towers more detailed than (3) commercial carriers, (1) private LTE system, and obstruction lighting (where applicable)?

**RESPONSE:** **Low band and mid-band with tower mounted RRH will be supported. The System weight of 1 antenna and 1 RRH is an example weight of 150 lbs. Full capacity may be 4 systems with 3 sectors. See Attachment C as an example.**

**QUESTION:** Do the generator and UPS need to be able to power all future tenants or just the private LTE system and shelter? Typically, commercial tenants provide their own back-up power by generator or battery.

**RESPONSE:** **Generator will be provided. The requirement for UPS will be fulfilled by the tenants in a later RFP.**

**QUESTION:** Can the UPS be housed inside the shelter or must it remain outside?

**RESPONSE:** **UPS requirement has been reassigned to a later RFP.**

**QUESTION:** Can you explain further about how security cameras and door sensors will connect to NOC systems?

**RESPONSE:** **The Cherokee Nation will have fiber to all the towers and connect back to their NOC**

**QUESTION:** Should we include primary power fees (install by utility company of transformer with conduit/conductors from the utility demarcation) in our bids, or merely bid to meet utility companies at the proposed transformer? Frequently, we bid to "stub up" our power and fiber conduits 5' outside the compound with the understanding that if the utility companies cannot meet us at that location a Change Order will have to be agreed on.

**RESPONSE:** **You can meet them at the proposed transformer**

**QUESTION:** While common practice, installing a 4' lightning rod on a 195' tower is contrary to Motorola R56 and ANSI/TIA-222-H recommendations. Can you confirm that this is an acceptable exemption to those grounding standards? The alternatives are to install obstruction lighting on all towers or to provide 189' towers.

**RESPONSE:** **Current standards identified in this RFP should be followed.**

**QUESTION:** Do you have any more specifications on the generator and ATS needed for this project?

**RESPONSE:** **See previous responses**

**QUESTION:** Do you have more information about the tower loading requirements?

**RESPONSE:** See previous responses

**QUESTION:** Who is responsible for surveys & easements which are necessary for FAA/FCC filings and utilities?

**RESPONSE:** The Cherokee Nation will file the FAA No-Hazard paperwork. The towers are on Cherokee land.

**QUESTION:** Is the cost of soil tests to be included in the bid?

**RESPONSE:** There are currently no soil tests

**QUESTION:** Who is responsible for NEPA and are the costs to be included in the bid?

**RESPONSE:** The Nation is in charge of NEPA

**QUESTION:** Who is responsible for Local and Federal Forest Service permitting if needed?

**RESPONSE:** The tower sites are on Cherokee land.

**QUESTION:** Shelter spec (concrete, fiberglass, what?) HVAC Loads, Breaker Panel specs?

**RESPONSE:** See previous responses

**QUESTION:** Compound size?

**RESPONSE:** See previous responses

**QUESTION:** Assumption of what load for 15-minute UPS backup?

**RESPONSE:** The UPS requirement has been moved to a later RFP. Not required in this response.

**QUESTION:** What are the specs for the Security Equipment- cameras, electronic gates, etc.?

**RESPONSE:** Cherokee Nation will assume responsibility for security and alarms.

**QUESTION:** What is the power requirement for the site and who is responsible for (100- or 200-amp, 120/240 single phase, three phase, multi-tenant)?

**RESPONSE:** See previous responses

**QUESTION:** Requirements for fiber optic connection, specifications (vault, H-Frame enclosure, shelter placement, Etc.)?

**RESPONSE:** See previous responses

**QUESTION:** How many meters are you expecting to be at the site?

**RESPONSE:** At least 4

QUESTION: NOC Specification including software format to be utilized for monitoring alarms?

RESPONSE: **Cherokee Nation will assume responsibility for security and alarms.**

QUESTION: Will the generator be inside of the building or on a pad outside?

RESPONSE: **On a pad outside**

QUESTION: Brand preference on generator (make/model)?

RESPONSE: **No preference**

QUESTION: Fence what material (wood, chain link, composite, gate, or door, 4'walk through, double 8' for equipment)?

RESPONSE: **6-foot chain link fence with three-strand barbed wire on the top. See attachment A Fencing**

QUESTION: Restoration, cleaning & landscaping, requirements?

RESPONSE: **As stated in the RFP**

QUESTION: Can you share any documents from the site in Kenwood that was built in 2023 and any design preferences from that build, if no documentation can we please get the location of the site so we can do a site visit to get a better picture of your design preferences?

RESPONSE: **We will not be able to provide the Kenwood documentation.**

QUESTION: We can price each tower foundation based upon normal soils. Providing the soil conditions vary and the foundation becomes larger or more difficult, would be able to adjust the foundation pricing?

RESPONSE: **Yes. Change orders need to be complete by September 1<sup>st</sup>.**

QUESTION: Are the shelters desired to be concrete, wood, or metal?

RESPONSE: **Medium duty metal or fiberglass**

QUESTION: We are planning to furnish antenna mounting hardware for four systems. Will all four sets of mounting hardware be installed on the tower initially?

RESPONSE: **The tower mounting hardware will be installed at the time the wireless equipment is installed.**

QUESTION: Do you prefer transfer switch to be mounted on rack outside? Inside shelter? On outside wall of shelter?

RESPONSE: **NEMA3R inside or outside**

QUESTION: Will there be any sites visits for bidders?

**RESPONSE:** See previous response.

**QUESTION:** Pg 19 – Ground clearing and soil testing. Does soil testing mean a geotechnical report or something else? Please clarify what is included in soil testing.

**RESPONSE:** Yes.

**QUESTION:** Do you have a schematic for the fence design? For example, do you want 6' fence with 1' of barbed wire? Do you want chain-link fencing? What is the total area you want fenced.

**RESPONSE:** **6-foot chain link fence with three-strand barbed wire on the top. See attachment A Fencing**

**QUESTION:** Site Grounding – Ground Ring – All site equipment, fixtures, buildings, fencing, electrical and Tower?

**RESPONSE:** Yes

**QUESTION:** Lightning Protection / Prevention?

**RESPONSE:** Yes

**QUESTION:** Site - Current Assumption is 100 x 100 6 ft Chain Link, with 3 strand Barbed wire top, 1 4 ft walk through gate 1 12 ft access gate.

**RESPONSE:** **6-foot chain link fence with three-strand barbed wire on the top. See attachment A Fencing**

**QUESTION:** Which sites will need access roads built? Are the remaining sites accessible by large trucks, heavy equipment and Cranes? Anticipated length and width of desired access roads, Compaction level Requirements? Type of access road finish, Gravel, Asphalt, Concrete?

**RESPONSE:** **This is different for each site. All change orders will need be submitted, reviewed and approved by September 1<sup>st</sup>, 2024 due to grant requirements.**

**QUESTION:** Are these temporary roads that will need to be restored after construction? Or will these roads remain?

**RESPONSE:** **The access road needs to remain.**

**QUESTION:** How much ground clearing will be required at each site?

**RESPONSE:** **This is different for each site. All change orders will need be submitted, reviewed and approved by September 1<sup>st</sup>, 2024 due to grant requirements.**

**QUESTION:** Estimate minimum 100x100 and 10 ft beyond fenced compound + Crane Pad prep (40x40)?

**RESPONSE:** **Site is 100x100 ft outer boundary**

**QUESTION:** Do you want rock and weed barrier at the tower sites?



**RESPONSE:** Gravel cover for tower sites.

**QUESTION:** How long of an ice bridge do you want at each site? 10', 20', etc.

**RESPONSE:** Include it in your design.

**QUESTION:** What service will you run to the shelter? Based on Generator Sizing Assuming 120 / 240VAC Single Phase

**RESPONSE:** Yes

**QUESTION:** Who will run power to the sites? If the tower provider, can you provide the distance from existing power to the tower for each site? Aerial or Buried Service if contractor provided?

**RESPONSE:** See previous responses

**QUESTION:** Ac electrical service to be terminated to common H Frame? What Meter Count is desired for initial installation or Plan for individual service meter bases on external H-Frame?

**RESPONSE:** At least 4 meters include internal or external in your design

**QUESTION:** Preferred TVSS (Transient Voltage Surge Suppressor) manufacturer?

**RESPONSE:** No preference.

**QUESTION:** Who is to Coordinate with Utility for Service orders and construction requirements? Has this already begun?

**RESPONSE:** The Nation will coordinate with COOPs. Discussions have begun.

**QUESTION:** Tower - Can you provide the intended antenna loading so we can also include the costs of brackets and mounts?

**RESPONSE:** Low band and mid-band with tower-mounted RRH will be supported. The system weight of 1 antenna and 1 RRH is an example weight of 150 lbs. Full capacity may be 4 systems with 3 sectors. See Attachment C as an example.

**QUESTION:** For the tower antenna loading: can you provide the specific design requirements for all bidders to design to the exact same conditions (i.e., 12' sector frames, (8) 8'x1' cell panels, (8) 22"x18" RRUs, and (6) 1 5/8" feedlines).

**RESPONSE:** Low band and mid-band with tower mounted RRH will be supported. The system weight of 1 antenna and 1 RRH is an example weight of 150 lbs. Full capacity may be 4 systems with 3 sectors. See Attachment C as an example.

**QUESTION:** Do any sites have limitations on the tower footprint (i.e., must fit within 30' square)?

**RESPONSE:** Tower sites are 100x100 Ft plots

**QUESTION:** Cable Ladder?

**RESPONSE: Yes**

**QUESTION: Climb Ladder and Safety Climb Included?**

**RESPONSE: Yes**

**QUESTION: Include or Exclude installation of Mounts in initial construction estimate?**

**RESPONSE: Exclude**

**QUESTION: Preferred Foundation type? Shallow Pad or Pier PE Stamp required for Foundation Design?**

**RESPONSE: Shallow pad is preferred**

**QUESTION: Tower - Excavation Permits required? Concrete Structural Permits and Inspections required? Do the counties or Municipalities require Cell Site Construction Permits?**

**RESPONSE: All tower sites are on Cherokee Land**

**QUESTION: Shelter -7 – Do you want a concrete, fiberglass shelter, Light weight Metal, or WIC (Walk in Cabinet)?**

**RESPONSE: Medium duty fiberglass or metal shelter**

**QUESTION: Shelter - Would a Platform and Outside plant cabinets be considered for cost and manufacturing lead time?**

**RESPONSE: Preference is shelter.**

**QUESTION: Shelter - HVAC – Package wall Mount units? With Dehumidifiers, DC optimizer for back up? Estimate 3.5 – 4 kw heat load / equipment rack? Redundancy N+1? Lead Lag Controls to keep all units in operational condition?**

**RESPONSE: Please provide specs in your design**

**QUESTION: Shelter - How many ports of entry in do you want on the shelter? Power, Fiber, Ground, Coax / RF**

**RESPONSE: To be determined on the number of sectors assigned.**

**QUESTION: Shelter - What rack setup do you want in the shelter?**

**RESPONSE: 4 racks for 4 tenants with cable management**

**QUESTION: Shelter - Do you need any alarming, basic package would be door, smoke, high and low temperature, hvac fail.**

**RESPONSE: No. Cherokee Nation will provide the security and alarm sensors.**

**QUESTION: Shelter - Do you have any idea the size of AC that will be needed or the heat load inside the building.**

**RESPONSE:** Most units are outdoor Remote radio head so do not contribute to AC load. Indoor units are Base band units, fiber optics, UPS units.

**QUESTION:** Shelter - How Many equipment Racks, What width 19" or 23"

**RESPONSE:** Estimate is 4 23"racks

**QUESTION:** Shelter - If racks are needed will you need any twistlock receptacles on the ceiling?

**RESPONSE:** Yes.

**QUESTION:** Shelter - How Many tiers of cable rack? Include fiber management above and between racks?

**RESPONSE:** Design is not finalized. Please estimate design for 4 carriers with racks and cable management.

**QUESTION:** Back up Power Solutions -Do you want the Generator / fuel tank to be diesel or propane?

**RESPONSE:** Diesel

**QUESTION:** Back up Power Solutions - 72 hr run time Diesel 250 Gal or Propane 600 Gal – Any special permitting or testing required for tank size? Ballistic rated tank or standard UL142 Tank? Add Maintenance Contract with Sale?

**RESPONSE:** Diesel, 72 hour run time, 250 Gal. Permitting and testing will be determined after environmental study is complete. UL 142 is acceptable. Cherokee Nation will assume a maintenance contract.

**QUESTION:** Back up Power Solutions -Is Dc Power System expected or required? 24 V DC or – 48 V DC? This is available and allows for dramatic cost savings, as well as UPS size reductions. Can utilize -48 V DC batteries for UPS systems as well further reducing costs.

**RESPONSE:** AC is required. Wireless manufacturers will provide UPS and adaptors to convert AC to input required for that device at a later date.

**QUESTION:** Back up Power Solutions -UPS to Back up what percentage of utility load? What size unit up to 10 KVa, 25 KVa, full 50 KVa for site back up?

**RESPONSE:** UPS requirement has been moved to a later RFP.

**QUESTION:** Back up Power Solutions -I have sample One Lines if needed to support this conversation, we will need an accurate anticipated loading to insure back up time is realized

**RESPONSE:** The UPS requirement has been moved to a later RFP.

**QUESTION:** Cameras / Security - Pan Tilt Zoom or Fixed? Infra Red and Color? What resolution is required?

**RESPONSE:** Cherokee Nation will assume responsibility for security and alarms.

**QUESTION:** Cameras / Security - What area and equipment is to be monitored?

**RESPONSE:** Cherokee Nation will assume responsibility for security and alarms.

**QUESTION:** Cameras / Security - Continuous stream or motion activated? Final design and specification to be determined based on requirements and site configuration.

**RESPONSE:** Cherokee Nation will assume responsibility for security and alarms.

**QUESTION:** Cameras / Security - Is there a preferred alarm aggregation device? What total alarm count is desired? Temperature High Low, Open Door any additional environmental, Power etc desired?

**RESPONSE:** Cherokee Nation will assume responsibility for security and alarms.

**QUESTION:** Cameras / Security - Will this tie into an existing monitoring system? If so, what brand are you using currently?

**RESPONSE:** Cherokee Nation will assume responsibility for security and alarms.

**QUESTION:** General - What are the TERO paperwork requirements for the successful bidder if they are not an Indian owned company? What are the fees for that?

**RESPONSE:** The fees are the same for the successful bidder whether they are Indian-owned or non-Indian owned.

**QUESTION:** General - Can you clarify what compliance with FAA & FCC regulations means in the evaluation factors, if the Cherokee Nation is handling all permitting with FAA and FCC?

**RESPONSE:** FAA/FCC compliance is required on all Cherokee Nation projects, please state willingness to comply.

**QUESTION:** General - What additional fees will be included with a non-TERO certified successful bidder?

**RESPONSE:** The fees are the same for the successful bidder whether TERO certified or non TERO certified.

**QUESTION:** General - Can we review any site surveys that were completed for these sites?

**RESPONSE:** No site surveys have been completed

**QUESTION:** General - Do you want security monitoring during construction? Or is the security monitoring just for the completed project?

**RESPONSE:** See previous responses

**QUESTION:** General - Can we have an extension on the deadline for bid submittals? If an addendum is posted on the February 27<sup>th</sup>, and the bid is currently due March 5,

an additional 1-2 weeks to review the addendum answers and to prepare a complete bid would be helpful.

**RESPONSE:** See Addendum 1

**QUESTION:** General - Can we progress bill for this by stage of project?

**RESPONSE:** See previous responses

**QUESTION:** General - What are the invoicing procedures? Do we invoice anytime, or can we only invoice at the end of the month?

**RESPONSE:** See previous responses

**QUESTION:** General - When the Cherokee Nation expect to determine a successful bidder and issue the Notice to Proceed?

**RESPONSE:** See RFP package

**QUESTION:** General - Has NEPA review been completed for these sites?

**RESPONSE:** No, NEPA has not been completed.

**QUESTION:** General - Will the successful bidder need to provide any permits for local construction, FCC, or FAA compliance?

**RESPONSE:** See previous replies

**QUESTION:** General - Under Project Responsibilities for The Firm, number 15 states: "testing all towers, including physical inspections, ground testing, security fencing, electrical connections, and generator operation." Is this one final walk through of each tower site to confirm everything is working, or something else? If something else, could you please clarify what testing you are wanting for each item.

**RESPONSE:** Construction Manager will do final walk-through and determine if there are any defects. All defects must be corrected to obtain final approval and close out project.

**QUESTION:** General - Would the Cherokee Nation be willing to remove the bonding requirements from the contract? Bonding has proven to be difficult for the Cherokee Nation because of the size of the project. We are looking for other insurance bonders. Could we instead set the money aside and progress bill as the contract progresses?

**RESPONSE:** The bonding requirements will not be removed.

**QUESTION:** General - Close Out Document format?

**RESPONSE:** Close out templates and documentation will be provided.

**QUESTION:** General - Test Documentation Format?

**RESPONSE:** Test document templates will be provided.

**QUESTION:** Tower - Tower loading: do you have any information on what you need other than the scope of work?

**RESPONSE:** See previous responses

**QUESTION:** Electrical Question - They call out for a 50KW service building, which is understood. If we are building wireless system for future tenets you will need a 600-amp (4) meter slot service. Do you want this included in the project?

**RESPONSE:** See previous responses

**QUESTION:** Grounding -The soil test let us understand if grounding rods or a chem system would need to be installed, this will have to wait until soil tests are performed. We can revise our scope of work depending on the upcoming soil reports if that's acceptable?

**RESPONSE:** All change orders will need be submitted, reviewed and approved by September 1st, 2024 due to grant requirements.

**QUESTION:** Building - What type of building do you prefer on these sites? And what are their requirements? We typically use a fiber bond 11'6"x20' on similar projects.

**RESPONSE:** See previous responses

**QUESTION:** UPS - Is there any particular size or spec needed on this?

**RESPONSE:** See previous responses

**QUESTION:** Drawings - Will we need a set of drawings done for each location (for bidding purposes)? Or if awarded the project will we have drawings made and submitted for approval before construction commences?

**RESPONSE:** Yes drawings will be needed before construction commences.

**QUESTION:** Regulatory Compliance - Will all we need to do is register with the FAA?

**RESPONSE:** The Nation will file FAA no hazard forms for tower sites.

**QUESTION:** Tower - Do mounts need to be provided for all future carriers?

**RESPONSE:** See previous responses

**QUESTION:** Tower Foundations will be designed and bid to a normal soils condition, until geotechnical testing is done and reviewed, is this acceptable?

**RESPONSE:** Yes. All change orders will need be submitted, reviewed and approved by September 1<sup>st</sup>, 2024 due to grant requirements.

**QUESTION:** Building - Is there a requirement for building type are concrete, fiberglass or metal buildings required?

**RESPONSE:** Medium duty shelters

**QUESTION:** Building - The standard specs for a 10'x20' building is listed below. Will this be acceptable?

**RESPONSE:** It is acceptable

Standard Building Specs:

Building Size:

- ◆ Exterior: 10'-0" W x 20'-0" L x 10'-2" H
- ◆ Roof overhang: 3"
- ◆ Interior: 8'-11" W x 18'-11" L x 9'-0" H
- ◆ Est. Weight: 46,000lbs (does not include customer supplied equipment)

Design Loading:

- ◆ Floor Load: 251psf (reinforce in battery area)
- ◆ Roof Load: 156psf
- ◆ Walls: 150 mph (standard design)
- ◆ Seismic Design Category: per site requirement

Construction Type:

- ◆ Floor: 5 ¾" lightweight concrete, waffle-type construction
- ◆ Walls: 4" solid lightweight concrete; 2 – Hour Fire-rated Construction
- ◆ Roof: solid lightweight concrete, 5" at eaves and 6" at ridge, gable design
- ◆ Step-joint floor perimeter design
- ◆ 5000 psi lightweight concrete
- ◆ Reinforcing steel #4 & #6 bars; 60,000 psi (Grade 60 ASTM-615)
- ◆ Meets bullet resistance UL 752 levels 1, 2, 3 & 6 for 4" concrete
- ◆ Walls: washed exposed aggregate and sealed exterior finish
- ◆ Roof: troweled surface, sealed and liquid applied roofing membrane
- ◆ Walls: R-13
- ◆ Ceiling: R-15

Interior Finish:

- ◆ Walls: white high-density polyethylene (NRP) over 7/16" OSB
- ◆ Floor: commercial grade vinyl tile, 12"x12"x1/8" with 4" base cove
- ◆ Ceiling: white high-density polyethylene (NRP) over 7/16" OSB

Entry:

- ◆ One (1) 3070, 18GA galvanized, insulated, primed & painted, steel door & 16GA frame
- ◆ One (1) lockset, deadbolt, Hager 3100 or equivalent
- ◆ One (1) lockset, passage, lever handle, Sargent or equivalent
- ◆ One (1) lockset construction core, Best, MAG-LA or equivalent (CX p/n 504501)
- ◆ Two (2) keys, construction operation, Best, MAG-LA, or equivalent (CX p/n 504108)
- ◆ Two (2) keys, core removal, Best, CAG-LA or equivalent (CX p/n 504107)
- ◆ One (1) 6" lockset pick guard, MLP-111-630 or equivalent (CX p/n 504303)
- ◆ One (1) hydraulic door closer, Sargent, 1104 or equivalent (CX p/n 504100)
- ◆ One (1) set door weather-stripping
- ◆ One (1) set anti-friction bearing door hinges, non-removable pin
- ◆ One (1) door drip cap

- ◆ One (1) 6" door hold latch
- ◆ One (1) door canopy, metal, 54" (CX p/n 570018, 570005)

Electrical:

- ◆ One (1) loadcenter, 40space, 120/240v, 200amp main breaker, 1 phase, NEMA 1, Square D, QO140M200 with cover or equivalent (CX p/n 430077, 430078), breakers as required
- ◆ One (1) disconnect switch, 200amp, 240volt, fused, single phase, NEMA 3R, Square D, D224NRB or equivalent (CX p/n 430282)
- ◆ Automatic transfer switch to be quoted as a separate line item along with the generator.
- ◆ One (1) manual transfer switch, 200amp, NEMA 3R, Square D, DTU224NR or equivalent
- ◆ One (1) generator receptacle, 200amp, 4W4P, Appleton, AR20044RS or equivalent w/backbox
- ◆ One (1) 4" sleeved service entry
- ◆ Six (6) duplex receptacles, 125v, 20 amp, NEMA 5-20R, Leviton, CR20V-BU or equivalent (CX p/n 430034) – wall mounted
- ◆ Two (2) exterior GFCI receptacles, 125v, 20 amp, NEMA 5-20R, Cooper VGF20V or equivalent in weatherproof box & cover
- ◆ Conduit, wiring, j-boxes, sealtite as required

Lighting:

- ◆ Six (6) interior LED light fixtures, 2bulb, 4 ft, with wrap-around lens cover
- ◆ One (1) exterior light fixture, LED w/photocell
- ◆ One (1) emergency/exit sign LED dual bulb with battery backup
- ◆ Two (2) interior light switches, 120v, 15 amp
- ◆ One (1) exterior light switch, 120v, 15 amp

HVAC:

- ◆ Two (2) wall mounted HVAC unit, 36,000 BTU, 5kw Heat Strip, 410A refrigerant, 11EER, 208volt, 1phase, Bard, W36AC-A05XPXXXJ or equivalent
- ◆ One (1) lead lag controller, Bard, MC4002-A
- ◆ HVAC supply and return grilles
- ◆ Pricing assumes that the hvacs will be mounted on the endwalls. If they are mounted on the sidewalls, they will have to be removed for shipment and re-installed on site by others.
- ◆ One (1) intake louver, 12"x12", Dayton, #4C556, with louver motor and filter frame or equivalent (470069, 470070, 470184, 470185)
- ◆ Two (2) vent hoods, exterior, 90 degrees, 16" (CX p/n 470068)

Alarms:

- ◆ All alarm conductors pulled and wired to terminal block
- ◆ One (1) 4'x8'x ¾" Telco Board
- ◆ One (1) alarm block, Siemon, S66M1-50 or equivalent (CX p/n 430075 & 430089)
- ◆ One (1) high temperature, Dayton, 1UHH2 or equivalent (CX p/n 460101)
- ◆ One (1) low temperature, Dayton, 1UHH2 or equivalent (CX p/n 460101)
- ◆ One (1) door intrusion alarm
- ◆ One (1) smoke detector, photoelectric, 120vac, battery backup, Gentex, or equivalent



- ◆ One (1) AC power fail alarm
- ◆ One (1) hydrogen detector, Arrgh HGD-DR
- ◆ HVAC fail alarms

**Grounding:**

- ◆ Halo ground, #2 green insulated stranded copper around inside perimeter of building with (4) #2 green insulated stranded copper drops – 10feet of extra wire coiled for attachment to site ground ring
- ◆ Two (2) ¼" x 4" x 20" copper ground bar, mounted on insulators/standoff, one interior, one exterior
- ◆ Metallic grounding, #6AWG green stranded copper: electrical panels, hvac grilles, cable ladder, etc
- ◆ Door grounding: #2 welding wire
- ◆ Four (4) 1" diameter PVC penetrations through wall for ground exit

**Cable Entry & Cable Ladder:**

- ◆ One (1) 12-port, 4" diameter waveguide entry port, 3x4 configuration –with sealing caps – waveguide boots by others
- ◆ Fifty (50) linear feet of 1 ½" x 12", gold chromate, tubular cable ladder with hangers and hardware
- ◆ One (1) 4" diameter PVC telco entry port

**Miscellaneous:**

- ◆ Three (3) set of PE sealed drawings
- ◆ One (1) wall pocket tray for files
- ◆ Furnish all anchorage connection brackets as required to secure shelter to customer supplied foundation
- ◆ Building will meet all Federal, State and Local Codes

**QUESTION:** Generator - What is the fuel type and voltage?

**RESPONSE:** Diesel 120/240 vac

**QUESTION:** Generator - What electrical service and voltage will be required?

**RESPONSE:** See previous responses

**QUESTION:** UPS system, what amperage and voltage and number of circuits are required

**RESPONSE:** See previous responses

**QUESTION:** For the UPS we need to know if they need a UPS sub-panel and how many equipment receptacles they would need (like ceiling or rack mounted receptacles that would be backed up by the UPS).

**RESPONSE:** See previous responses

**QUESTION:** Potential options if they intend to have capability for a backup generator - One (1) manual transfer switch, 200amp, NEMA 3R, Square D, DTU224NR or equivalent

**RESPONSE:** Backup generator is a requirement

**QUESTION:** Potential options if they intend to have capability for a backup generator - One (1) generator receptacle, 200amp, 4W4P, Appleton, AR20044RS or equivalent w/backbox

**RESPONSE:** See previous responses

**QUESTION:** Would the Cherokee Nation accept refurbished 10x12 shelters?

**RESPONSE:** No

**QUESTION:** For the carrier loading that is specified in the RFP, we have attached a sample loading that we see often with carriers. This is for one carrier only. If you don't have specific design requirements for the carriers, would you like all bidders to use this proposed loading? Multiplied by 3 for the up to three carriers as specified, and with 10' between carriers, assumed near the top?

**RESPONSE:** Yes. But there are 4 carrier networks, including the private network Cherokee Nation is building.

**FUTURE CARRIER DESIGN LOADING**

Elevation CL	Manufacturer	Model	QTY	Feedline Size	Feedline QTY
Commscope	Commscope	NHHSS-65C	9	1/2" Fiber	9
Ericsson	Ericsson	6449	3		
Ericsson	Ericsson	4449	3		
Ericsson	Ericsson	8843	3		
		12' Sector Frames	3		

**QUESTION:** What type of equipment will be put inside the shelter?

**RESPONSE:** The equipment in the shelter is not finalized yet. Possibly Baseband units for wireless gear, ONT for fiber connections, Fiber switches, rack mounted UPS systems, adaptors to convert AC to whatever the wireless gear requires, lighting for shed interior, HVAC equipment as part of the Shelter.

**QUESTION:** Is there a specific layout for cable tray inside the shelter?

**RESPONSE:** No specific layout. Need facility for 4 tenants

**QUESTION:** What is the expected start date for work to commence?

**RESPONSE:** **One month after contract is awarded.**

**QUESTION:** Tower - All brackets and fixtures to attach the antennae required for up to 3 commercial carrier systems and one private LTE system. Are we to quote 3 mounts for growth equipment? What type of private LTE system so correct mount can be quoted. Confirm that we are to provide antenna mounts and if we are how many mounts per centerline and what centerlines do you want these mounts at?

**RESPONSE:** **The mount brackets are not a requirement. They will be added when the wireless equipment is chosen.**

**QUESTION:** Tower - Site security plan, including 24/7 monitoring of each site and interface to NOC systems. What is the current NOC system already configured to communicate with? What systems are you currently running at your other locations?

**RESPONSE:** **Cherokee Nation will assume security for locations.**

**QUESTION:** Generator - Fuel Tank with capacity to power generator for 72 hours per tower. Is there a preference on fuel type?

**RESPONSE:** **Diesel**

**QUESTION:** Generator - Is there a preference on indoor vs outdoor generators?

**RESPONSE:** **Outdoor**

**QUESTION:** Generator - Is there a specific layout for cable tray inside the shelter?

**RESPONSE:** **No specific layout**

**QUESTION:** Generator - What Voltage is required What amp size of the breaker on the Gen. The amperage Size of the ATS & if it is 3 or 4 pole as well as what enclosure can type for the ATSs.

**RESPONSE:** **Nema3R enclosure, 200 amp service**

**QUESTION:** Shelter (10x20 Ft) for each tower site. Is there a desire for the generator to be housed in the shelter or will the generator be completely external? Preferred type of shelter, fiberglass, concrete, metal?

**RESPONSE:** **The generator is outside. Medium duty fiber or metal**

**QUESTION:** Will the shelter be fed primarily with AC Power from the utility grid?

**RESPONSE:** **Yes**

**QUESTION:** UPS - Uninterruptible power supply capable of 15 minutes at full load. What will the "full load" be in the long run? Is this a UPS or a full DC converter system with battery strings?

**RESPONSE:** See previous responses

**QUESTION:** UPS - Is the equipment requiring backup powered with AC or DC power?

**RESPONSE:** See previous responses

**QUESTION:** UPS - How many power feeds are required for each piece of equipment, and what is the current (in amps) for each feed?

**RESPONSE:** See previous responses

**QUESTION:** UPS - Will the power system be mounted in a rack or on the wall. If rack mounted, should we quote a rack as well?

**RESPONSE:** See previous responses

**QUESTION:** UPS - What size UPS do you need? (kVA or amperage) If unknown, what is the load it will be backing up?

**RESPONSE:** See previous responses

**QUESTION:** UPS - What voltage is currently available at your site?

**RESPONSE:** See previous responses

**QUESTION:** UPS - What voltage do you need?

**RESPONSE:** See previous responses

**QUESTION:** UPS - What battery runtime is required?

**RESPONSE:** See previous responses

**QUESTION:** UPS - Are there any clearances or size constraints?

**RESPONSE:** See previous responses

**QUESTION:** UPS - Do you have bypass requirements?

**RESPONSE:** See previous responses

**QUESTION:** UPS - What types of input and output connections are required/available?

**RESPONSE:** See previous responses

**QUESTION:** UPS - Does the UPS need to be scalable?

**RESPONSE:** See previous responses

**QUESTION:** UPS - Do you need redundancy?

**RESPONSE:** See previous responses

**QUESTION:** UPS - How is power getting from the UPS to your equipment?

**RESPONSE:** See previous responses

**QUESTION:** UPS - Do you have a need for enclosures, communications, seismic mounting,

floor stands or rail kits?  
**RESPONSE:** See previous responses

**QUESTION:** UPS - Would you like to remotely notify others of UPS events?  
**RESPONSE:** See previous responses

**QUESTION:** UPS - Is there a need to have orderly scheduled shutdowns?  
**RESPONSE:** See previous responses

**QUESTION:** UPS - Is a maintenance bypass switch needed?  
**RESPONSE:** See previous responses

**QUESTION:** UPS - How will your UPS software manage virtual servers during an extended power outage?  
**RESPONSE:** See previous responses

**QUESTION:** UPS - Do you need immediate factory response?  
**RESPONSE:** See previous responses

**QUESTION:** UPS - What kind of parts and labor coverage do you need?  
**RESPONSE:** See previous responses

**QUESTION:** UPS - Do you want any type of preventative maintenance?  
**RESPONSE:** See previous responses

**QUESTION:** SOW states "All brackets and fixtures attached antennae required for up to 3 carriers". Do you have specs for each one of these fixture locations?  
**RESPONSE:** See previous responses

**QUESTION:** SOW states "Site security plan, including 24/7 monitoring of each site and interface to NOC systems." Is this an internal NOC or will the awarded contractor provide this service?  
**RESPONSE:** Cherokee Nation will assume responsibility for security.

**QUESTION:** SOW states that a 7 foot fence needs to be around the compound. What are the dimensions of the compound?  
**RESPONSE:** Site is a 100x100 ft plot of land on Cherokee land. 6-foot chain link fence with three-strand barbed wire on the top. See attachment A Fencing

**QUESTION:** Who is the Power company for these sites?  
**RESPONSE:** See previous responses

**QUESTION:** Who will provide a concrete pad for the transformer?  
**RESPONSE:** Awarded contractor

**QUESTION:** Who will provide Electrical connection from transformer to building?  
**RESPONSE:** Contractor

**QUESTION:** When trenching for power from ROW (Right of Way) should a conduit be placed from the shelter site to "meet me point" in ROW?  
**RESPONSE:** Yes

**QUESTION:** What is the projected start date for this project?  
**RESPONSE:** 1 month after award date

**QUESTION:** What size of compound is the project requiring?  
**RESPONSE:** 100x100 Ft

**QUESTION:** Can the shelter be a reconditioned shelter?  
**RESPONSE:** No

**QUESTION:** What are you requiring within the shelter?  
**RESPONSE:** Racks, cable ladders, wireless equipment will be obtained in a later RFP.

**QUESTION:** What is the electrical load? 100 or 200 amps?  
**RESPONSE:** 200 amps.

**QUESTION:** Is there any specific order in which the sites need to be built?  
**RESPONSE:** Phases will be listed. Multiple vendors or crews will be working

**QUESTION:** What size road is the project requiring for access?  
**RESPONSE:** Standard access road.

**QUESTION:** Tower Loading - Carrier centerline spacing?  
**RESPONSE:** Appropriate spacing between carriers will be identified later.

**QUESTION:** Tower Loading - Carrier load amount? Generic acceptable?  
**RESPONSE:** Low band and mid-band antenna with tower mounted RRH will be installed later. The system weight of 1 antenna and 1 RRH is an example weight of 150 lbs. Full capacity may be 4 systems with 3 sectors. See Attachment C as an example.

**QUESTION:** Tower Loading - LTE equipment specs to be provided or just use generic?  
**RESPONSE:** Low band and mid-band with tower mounted RRH will be installed later. The system weight of 1 antenna and 1 RRH is an example weight of 150 lbs. Full capacity may be 4 systems with 3 sectors. See Attachment C as an example.

**QUESTION:** Tower design - Base face width requirements?

**RESPONSE:** Please specify your design.

**QUESTION:** Tower design - Compound size?

**RESPONSE:** Land Plot is 100 x 100 ft for all towers.

**QUESTION:** Foundation - Geotechs okay to get at each site?

**RESPONSE:** To schedule/discuss site visits, the Project Manager is Spencer Risenhoover. He may be reached at (918) 510-9208.

**QUESTION:** Foundation - Allowance for atypical designs (micropile, rock anchor, etc.)

**RESPONSE:** TBD environmental completion

**QUESTION:** Construction - Are we to only design the tower for 1 private carrier and 3 other carriers or do we also provide the tower mounts for all 3 in the bid? Reference Page 19. Qualified firm will provide line item 4?

**RESPONSE:** Design will be for one private carrier and option for co-location at a future date. Tower mounts covered under separate RFP.

**QUESTION:** Construction - Are we to assume normal soil conditions for the design of the foundations? Rocky soil conditions will add more costs to the bid, but without having the geotechnical report done we do not know the subsurface conditions.

**RESPONSE:** All change orders will need be submitted, reviewed and approved by September 1st, 2024 due to grant requirements.

**QUESTION:** Construction - Will we be required to have an approved archeologist on site during excavation?

**RESPONSE:** No

**QUESTION:** Construction - Soils Testing: Can we get more definition on what testing is required? We generally only have to have lift and density tests and the Geotech report. We can provide whatever you require.

**RESPONSE:** Soil testing will be required. All change orders will need be submitted, reviewed and approved by September 1<sup>st</sup>, 2024 due to grant requirements.

**QUESTION:** Would Hub Zone Certification be of any merit in the award of this project?

**RESPONSE:** No.

**QUESTION:** The project is headed as a Design-Build. Would the hybrid term Design-Bid-Build be desired?

**RESPONSE:** You need to design the towers.

**QUESTION:** As this is a Design-Build, would a price range for the sites be desired?

**RESPONSE:** Per tower cost is required

QUESTION: Would change orders for unknowns such as soil conditions be acceptable?

RESPONSE: **All change orders will need be submitted, reviewed and approved by September 1<sup>st</sup>, 2024 due to grant requirements.**

QUESTION: Would a phased approach be desired? Would it make sense to base phases on scopes and move the projects forward somewhat in parallel? Or are certain sites getting completed sooner more advantageous for the network buildout?

RESPONSE: **The project will have a phased approach**

QUESTION: What kind of time line or completion is hoped for? All sites completed over a span of years based on funding or other constraints? All sites completed this year?

RESPONSE: **Project completion time is one of the evaluation items.**

QUESTION: Do plat plans of the sites already exist and would they be made available? Or is site surveying part of the intended scope of work?

RESPONSE: **No. This is part of the SOW.**

QUESTION: Do you have an equipment list for the Cherokee LTE loading on the towers? We can estimate the needs of the cellular carriers for loading purposes. Should we incorporate the equivalent of a fourth 'full carrier' for the Cherokee LTE network?

RESPONSE: **The equipment list is not finalized. Assume up to 4 carriers.**

QUESTION: Is the initial construction for the Nation's use only? (In other words, will the future cellular carriers be providing and installing their own H frames/buildings/UPS/generators/etc?)

RESPONSE: **Yes.**

QUESTION: We noticed the Nation will provide fiber to each tower. Will the Nation also be providing the main power supply to the contractor-provided H frames?

RESPONSE: **Yes but the contractor will be responsible for their own utility use.**

QUESTION: Will the required roads for the sites be gravel, asphalt or concrete? OR will they be determined on a case by case basis during the design phase?

RESPONSE: **Case by Case basis**

QUESTION: For the UPS and generator, do you have an anticipated electrical load for which we would size up for a 15 minute minimum up time? Again, is this for the Nation's LTE equipment only, or is this to be sized large enough for all four system?

RESPONSE: **See previous responses**



**QUESTION:** You call for brackets and fixtures for the antenna for 3 commercial carrier systems and one private LTE. For the commercial carriers, the contacts I have all agreed that they would normally specify their own sector mounts on a site by site basis to account for orientation, power level requirements, etc. Would you like us to include only the mounting hardware required for the Nation's LTE system and omit the commercial carrier mounts?

**RESPONSE:** **The carrier mounts will be added later**

**QUESTION:** Does the Nation already have a NOC into which the security system needs to interface? If so, can you provide system requirements?

**RESPONSE:** **No.**

**QUESTION:** For bidding purposes, can a list of Tero certified subcontractors be obtained at the Cherokee Nation TERO office?

**RESPONSE:** **Yes.**

**QUESTION:** Are any bonds due on March 5, 2024, when our proposal is submitted?

**RESPONSE:** **A bid bond equal to five percent (5%) of grand total bid amount. A "bid bond" is one executed in connection with a bid offer to guarantee the contractor will enter into a contract if given the award. Only acceptable alternate in lieu of bid bond is a Cashier's Check.**

**QUESTION:** Is each bond required, or will providing any one of the three bonds mentioned in that section satisfy the bonding requirements?

**RESPONSE:** **A bid bond is required with the sealed proposal. Only the successful bidder is required to provide the payment and performance bonds.**

**QUESTION:** Have the tower locations been determined? Will each location have all applicable FAA determinations, FCC registration, if needed, and completed environmental study prior to commencing construction?

**RESPONSE:** **Tower locations are finalized, and list is submitted with this addendum.**

**QUESTION:** To provide the most accurate and cost-conscious bid, are boundary/ topographic surveys, utility routing plans, construction drawings or geotechnical investigation reports available for the 15 tower site locations? If not, is there a process by which the bid can be revised once the site-specific soil conditions, determination of ingress/ egress easement locations, site grading requirements, and similar other site-specific contingencies are identified?

**RESPONSE:** **No. All change orders will need be submitted, reviewed and approved by September 1st, 2024 due to grant requirements.**

**QUESTION:** Can you confirm if the bidding company responsible for obtaining soil testing?

**RESPONSE:** **Yes.**

**QUESTION:** Will the Cherokee Nation supplied fiber optic network connection be brought to the fenced tower compound location?

**RESPONSE:** **Yes into the shelter.**

**QUESTION:** Per the Scope of Work, the winner of the RFP will provide and install the tower materials, tower foundations, shelters, HVAC, UPS, generators, fuel tanks, and fencing around the sites, which would include installing the tower steel; safe climbing system; all brackets and fixtures to attach antennae for 3 commercial carriers and the private LTE network; 10'x20' shelter; 15 minute, full load, uninterruptible power supply; 50 Kw generator; 72 hour fuel tank; transfer switch; 50 Kw electrical connections, etc.. Will the winner of this RFP also be required to install the Cherokee Nation's shelter grounding system, install any radio equipment or lines and antennas on the tower, or optimization of that equipment into the overall network?

**RESPONSE:** **The UPS, radio equipment and antennas are part of another RFP due to be released soon.**

**QUESTION:** Are there specific tower design loading requirements for Cherokee Nation's private LTE network equipment or for the three commercial carrier systems that need to be included in the tower loading criteria?

**RESPONSE:** **Equipment is not finalized. Use generic loading for low and midband radios. See Attachment C**

**QUESTION:** For equipment shelters, does each shelter need to be a newly purchased shelter, or for cost savings measures would the Cherokee Nation like to consider repurposed shelters?

**RESPONSE:** **No repurposed shelters**

**QUESTION:** Can the foundation design be pad and pier or drilled foundation ?

**RESPONSE:** **Pad**

**QUESTION:** What size of compound do you require around tower (50'x50') example?

**RESPONSE:** **The land plot is 100x100ft**

**QUESTION:** Community H-frame 4 gang meter w/ 4'x4' NEMA? Encloser?

**RESPONSE:** **That is acceptable**

**QUESTION:** Telco conduit size?

**RESPONSE:** **2 inches**

**QUESTION:** Standard grounding w/ ground rods?

**RESPONSE:** **Stated in the RFP**

**QUESTION:** Do you wish to rock the compound?

**RESPONSE:** Yes

**QUESTION:** Do you prefer a certain brand of generator?

**RESPONSE:** No

**QUESTION:** Do you prefer a certain type of fuel for the generator (Deisel, natural gas)?

**RESPONSE:** Diesel

**QUESTION:** What type of racks do you prefer in the shelters 2 post 4 post?

**RESPONSE:** To be determined by equipment specifications.

**QUESTION:** What loading do you prefer for the tower? How many future tenants? RFP indicates 3 additional to your LTE.

**RESPONSE:** Stated in the RFP

**QUESTION:** Do you know the material list you will require for your LTE install? Who supplies the materials (antennas, microwave dish, hybrid cables to your mounting height of the Cherokee Nation equipment?

**RESPONSE:** That is part of a separate RFP

**QUESTION:** What RAD will the Cherokee Nation locate on the tower?

**RESPONSE:** This will be determined in a later RFP

**QUESTION:** Under project deliverable you mention a detailed design for tower and tower site. Do you require a full set of construction drawings with electrical/grounding etc.. for tower site?

**RESPONSE:** Yes

**QUESTION:** What is the timing of award?

**RESPONSE:** There is not a set timeline. The sealed proposals will be reviewed by a Selection Committee. This could take a week or more depending on the number of responses received. When it is determined what offer is accepted, the company will be notified and given ten (10) business days to provide the payment bond, performance bond, and the required certificate of insurance.

**QUESTION:** Will the construction be completed in phases? If so, can you elaborate?

**RESPONSE:** Construction will be done in a phased approach, sequence of construction will be determined by Cherokee Nation.

**QUESTION:** When do you anticipate starting the project?

**RESPONSE:** One month after the contract is awarded.

**QUESTION:** Is the Nation or Contractor responsible for 24/7 monitoring?

**RESPONSE:** The Nation will be responsible for the 24/7 monitoring.

**QUESTION:** Are we allowed to adjust the location and height of the suggested towers in order to provide adequate coverage for the intended area?

**RESPONSE:** **No.**

**QUESTION:** Can we get information on expected charges from Cherokee Nation for the following items:

- i. Fiber/transport? Monthly recurring charge and/or special construction
- ii. Rent
- iii. Power

**RESPONSE:** **No, this will not be shared with the contractor.**

**QUESTION:** RFP mentions LTE which we will provide but we will need to provide 5G as well in order to meet other requirements.

**RESPONSE:** **Procurement of LTE/5G equipment will be covered under another RFP.**

**QUESTION:** Construction would include standard road & fencing for a rural build? Special requests that significantly increased those costs. How would that be addressed?

**RESPONSE:** **Yes. All change orders will need be submitted, reviewed and approved by September 1st, 2024 due to grant requirements.**

**QUESTION:** Would Cherokee Nation entertain a two week extension to the RFP timeline? We have started the preliminary work to gather costs, per site, but additional time may be needed for actuals.

**RESPONSE:** **See Addendum 1**

**QUESTION:** Does the NATION intend to follow the same or similar guidance issued by the Treasury Department for the BEAD program in its administration of this NTIA grant?

**RESPONSE:** **The Nation will follow ARPA and NTIA guidelines for this project.**

**QUESTION:** Will the Nation require an archaeologist to be onsite during excavation?

- If so, who will be responsible for contracting and paying for their services?

**RESPONSE:** **No, if an archaeologist is required, Cherokee Nation will be responsible.**

**QUESTION:** Will the Nation have a representative on site while any work is being done?

- Will it be required to provide an office space or any other support for them?
- If the Nation will have an onsite representative will be required that they be on site for work to be done?

**RESPONSE:** **Yes, Cherokee Nation will have a Construction Manager and Construction Inspector on site. No office space will be required. No on site representative will be required for work to be done.**

QUESTION: The RFP states that the Nation will provide each tower with a fiber optic network connection. Where will the hand off point be? Do we need to take this to the nearest road easement?

RESPONSE: **Fiber will go into the shelter.**

QUESTION: Tower loading and design requirements - Is there information available for the LTE system antennae and equipment or should the proposal design be generic?

RESPONSE: **Low band and mid-band with tower mounted RRH will be installed later. The system weight of 1 antenna and 1 RRH is an example weight of 150 lbs. Full capacity may be 4 systems with 3 sectors. See Attachment C as an example.**

QUESTION: Tower loading and design requirements - Is it expected that brackets and supports for future carriers on the tower be installed or is it just intended that the tower be designed to be able to accommodate up to three future carriers antennae and equipment? There is substantial cost involved in providing the brackets and supports which is usually provided by the carrier at the time of installation.

RESPONSE: **Brackets are not installed at tower build time.**

QUESTION: Tower loading and design requirements - Is there a minimum spacing requirement between the carrier's equipment centerlines on the tower?

RESPONSE: **Design is not finalized. Wireless equipment will be installed later. Attachment C is an example.**

QUESTION: Tower loading and design requirements - Is there a base face width requirement?

RESPONSE: **Tower should be designed to support the example equipment**

QUESTION: Site design requirements - Should the compound be sized to accommodate the potential future carriers and their equipment; i.e., generators, fuel tanks, etc.

RESPONSE: **Yes. See previous comments.**

QUESTION: Site design requirements - Are there any other specific requirements that would affect the design or size of the compound that are not mentioned in the RFP?

RESPONSE: **Answer in RFP.**

QUESTION: Site design requirements - Are there any specific expectations for the security camera system? Such as, what areas need to be covered? How many cameras?

RESPONSE: **Cherokee Nation will assume responsibility for security and alarms.**

QUESTION: Site design requirements - Foundation design may vary substantially depending on the soil conditions discovered when the soils testing is done. Should bids be prepared for the "worst case scenario"?

**RESPONSE:** No. Assume normal soil conditions. All change orders will need be submitted, reviewed and approved by September 1<sup>st</sup>, 2024 due to grant requirements.

**QUESTION:** Site design requirements - Can a bid alternate be provided for atypical foundation designs based on soil conditions (micro-pile, rock anchor, etc.)

**RESPONSE:** TBD environmental completion All change orders will need be submitted, reviewed and approved by September 1st, 2024 due to grant requirements.

**QUESTION:** Will the Davis Bacon wage rates be under "Building Construction" or "Heavy Construction"?

**RESPONSE:** Heavy.

**QUESTION:** Will the \$25/day per non-Indian TERO fee be applicable to this project?

**RESPONSE:** Yes, all TERO fees are applicable.

**QUESTION:** RFP states Site security plan, 24/7 monitoring of each site and interface to NOC systems. We are requesting additional clarification to this listing. What exactly is being asked and what NOC systems are you referring to? I see it asks for remote cameras and door entry systems.

**RESPONSE:** Cherokee Nation will assume responsibility for security and alarms.

**QUESTION:** What are the requirements on the 24/7 remote cameras? Is the contractor responsible? What brands, sizing, type, etc? what will the contractor be involved/required on the data backhauled to the NNOC?

**RESPONSE:** Cherokee Nation will assume responsibility for security and alarms.

**QUESTION:** What are the requirements for the door entry systems? Is the contractor responsible? What brands, sizing, type, etc? what will the contractor be involved/required on the data backhauled to the NNOC?

**RESPONSE:** Cherokee Nation will assume responsibility for security and alarms.

**QUESTION:** Are there certain approved vendors the contractor is able to order/procure steel packages from for the tower package kits? Such as Sabre, Nello, Ehresmann, Valmont, ROHN, etc.

**RESPONSE:** Buy American is applicable. Quality of material must be equal to or better if any stated in RFP.

**QUESTION:** Will change orders / cost increase be approved upon completion of Geotech's being completed once soil conditions are determined?

**RESPONSE:** Yes. All change orders will need be submitted, reviewed and approved by September 1st, 2024 due to grant requirements.

QUESTION: Are there working day / hour restrictions to any of the sites? Meaning are the contractors limited to what days/hours we are able to access and work at the sites? Please list out site by site information.

RESPONSE: TBD

QUESTION: Are any locations in "active flight paths"?

RESPONSE: TBD

QUESTION: Are there any landowner restrictions we should be aware of at each site for access, staging, etc.?

RESPONSE: TBD

QUESTION: Is the contractor required to be TERO certified? Or is TERO certification only required if Indian preference is stated?

RESPONSE: **Per the RFP, proposals will be accepted from Indian and non-Indian owned companies. To receive Indian Preference, a company must be TERO certified and include a copy of the certificate in their sealed response.**

QUESTION: Are contractors able to partner with subcontractors for completing the project?

RESPONSE: Yes.

QUESTION: We would plan to partner with a company named \_\_\_\_\_ whom is a Cherokee owned business. They would perform all of the foundation installations and possibly more on the civil work. Any objections to this?

RESPONSE: **No issues as long the company is not on the federally debarred list and in good standing with Cherokee Nation.**

QUESTION: Would the contractor need to abide by Davis Bacon wage determinations? If so please specify requirements.

RESPONSE: **Yes, the wage scale used will vary dependent on county. The website to check wage scale is [SAM.gov](http://SAM.gov) | Home. Construction type: Heavy.**

QUESTION: Would the contractor be required to hire local Indian participants for construction? Is this required or is this simply recommended? What percentage is required/recommended? Please specify any details you have on this program.

RESPONSE: **Successful bidders are to submit their plan to employ and use Indian owned businesses. Refer to Attachments F & G in the RFP. These attachments are mandatory in sealed proposal. There is not a percentage mandated by Cherokee Nation.**

QUESTION: Would the contractor be responsible for surveys to determine the final locations of the towers, shelter, etc? any requirements on which firm we would hire for this portion or are we free to choose as we see fit?

RESPONSE: **Locations are determined by Cherokee Nation.**

QUESTION: Does the Nation have any requirements on what type of Geotech is performed? Any specific Geotech firms requested by the Nation or is the contractor able to choose?

RESPONSE: **No.**

QUESTION: Would the contractor be responsible for any of the future carrier work to be installed on these towers? There is a section which states the contractor is provide a very long list of equipment which includes items such as future carrier equipment. Typically that equipment is provided/installed by the future carriers/contractors.

RESPONSE: **No.**

QUESTION: What are the requirements for the HVAC's being installed? Brands, sizing, etc.?

RESPONSE: **TBD. Wireless Network equipment in separate RFP**

QUESTION: What are the requirements for the generators being installed? Brands, sizing, etc.?

RESPONSE: **See previous comments**

QUESTION: Please clarify UPS in the project description and any requirements for that portion.

RESPONSE: **See previous comments.**

QUESTION: What are the requirements for the shelters being installed? Brands, sizing, etc.?

RESPONSE: **See previous comments.**

QUESTION: What are the requirements on the fencing around the compounds? Sizing, type, other specifications? What type of lock systems are preferred?

RESPONSE: **6 feet with 3 strand barbed wire on top. No preferred locking system. See Attachment A for an example.**

QUESTION: Will the Nation cover power cost for bring power to a certain distance within the sites? Typically a transformer installed near the compound.

RESPONSE: **Cherokee Nation will cover the cost for power installation.**

QUESTION: Installation of the tower foundations and concrete pads will require excavation of earth both minor and large scale. Is this allowed? What type of monitoring will the nation require while excavations are ongoing? Will the contractor be responsible for any fee's associated with this?

RESPONSE: **Yes. Contractor will be responsible for any fees associated with this.**

QUESTION: On the note of foundations, are there any rules against excavation? We've seen some Nations build out similar builds with all "above grade" foundation systems.

RESPONSE: **No.**



**QUESTION:** Will the contractor be responsible for bringing any conduit to site for fiber optic runs? Or will this be a microwave hop driven project?

**RESPONSE:** **No. Included in a separate RFP**

**QUESTION:** Are we responsible for federal regulatory requirement costs such as NEPA, SHPO, ESA, FAA, FCC, etc. Looks like Cherokee Nation will be doing this though not sure about the NEPA, SHPO, or ESAs if required which will determine if tribal monitoring during construction is required.

**RESPONSE:** **No.**

**QUESTION:** Need tower compound dimensions required for fencing, fabric, and stone.

**RESPONSE:** **The land plots are 100 x 100 Ft on Cherokee land**

**QUESTION:** Need proposed tower loading including future loading requirements for tower design.

- I assume the following: All brackets and fixtures to attach the antennae required for up to 3 commercial carrier systems and one private LTE system.
- Though will there be any Cherokee Nation antenna and lines or microwave dishes, ice shields, etc?

**RESPONSE:** **Low band and mid-band with tower mounted RRH will be installed later. The system weight of 1 antenna and 1 RRH is an example weight of 150 lbs. Full capacity may be 4 systems with 3 sectors. See Attachment C as an example.**

**QUESTION:** Should be assume bare tower erection for the bid?

**RESPONSE:** **Yes**

**QUESTION:** Are we required to supply all mounts with the tower?

**RESPONSE:** **No. Will be in a separate RFP**

**QUESTION:** Cherokee Nation is installing the fiber conduit and handholes as per the Project Responsibilities section, "*The Nation will provide each tower with a fiber optic network connection.*"?

**RESPONSE:** **An additional RFP will come out for this work.**

## **ADDITIONAL INFORMATION**

- **The due date for sealed proposals has been changed/extended to March 19, 2024 by 5:00 pm CT. All other instructions on sealed proposal submittal and content requirements remain as stated in the RFP.**

# **ATTACHMENTS A - D**



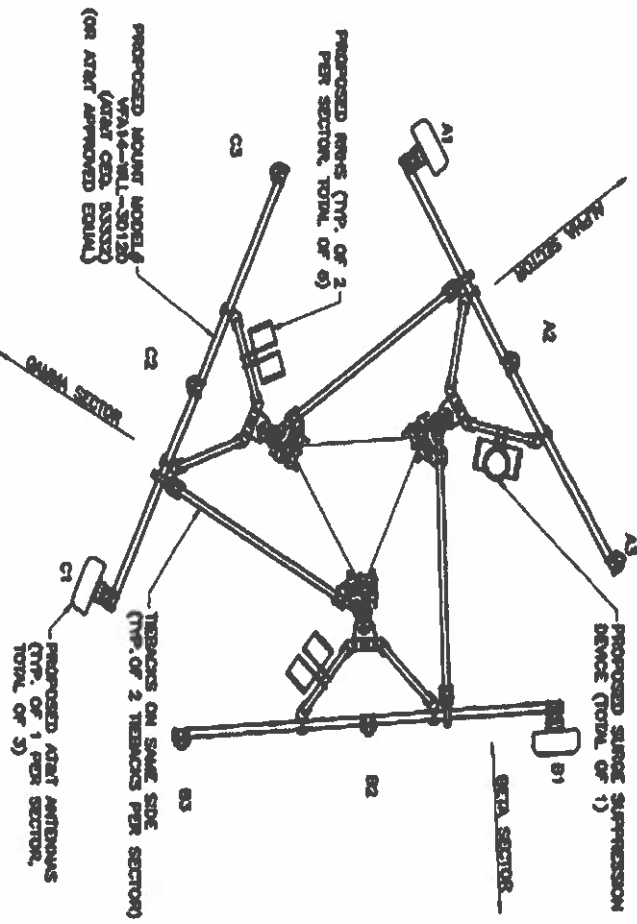


**ATTACHMENT C - CARRIER INFO EXAMPLES**

CARRIER	ELEVATION	EST EPA	ANTENNA QUANTITY	FEEDLINE TYPE
Private	190'	30,000 sq in	12	1 5/8" Coax
AT&T	180'	30,000 sq in	12	1 5/8" Coax
T-Mobile	170'	30,000 sq in	12	1 5/8" Coax
Verizon	160'	30,000 sq in	12	1 5/8" Coax

**KENWOOD CONFIGURATION**

SECTION	ANTENNA POSITION	MODEL	CL. OF ANTENNA (VOL)	AZIMUTH	CABLES	REVI	SOLID
A	A1	TP465R-BUARD	350'-0"	180°		(1) 4478 B14	(1) DCR-48-80-24-8C-8V
P	A2	N/A	350'-0"	180°		(1) 8043 B2/809A	
H	A3	N/A					
A	B1	TP465R-BUARD	350'-0"	180°	(2) 8040 DC POWER	(1) 4478 B14	(1) DCR-48-80-24-8C-8V
B	B2	N/A	350'-0"	180°	(1) 24-PWR FIBER	(1) 8043 B2/809A	
E	B3	N/A					
T	C1	TP465R-BUARD	350'-0"	180°		(1) 4478 B14	(1) DCR-48-80-24-8C-8V
A	C2	N/A				(1) 8043 B2/809A	
O	C3	N/A					



2 ANTENNA PLAN  
SCALE: 3/8" = 1'-0"



GRAPHIC SCALE: 3/8" = 1'-0"

- NOTES:**
1. CONTRACTOR TO REFER TO FINAL RIBS FOR ALL RF DETAILS.
  2. NET CABLE TO BE RUN TO 1ST CARRIER LITE FEED, AND DASH CHANGED TO ALL ACTIVE SECTOR ANTENNAS.
  3. REFER TO GENERAL NOTES FOR ANTENNA MOUNTING INFORMATION.
  4. CONTRACTOR TO REFER TO RIBS FOR CROSS-SECTION REQUIREMENT.
  5. DO NOT EXCEED 15' WIRE LENGTH FROM SURGE SUPPRESSOR TO FEED.
  6. MAINTAIN MINIMUM SEPARATION BETWEEN ALL EQUIPMENT.

**NOTE:**

BEFORE TO CONSTRUCTION, CONTRACTOR SHALL VERIFY THAT A STRUCTURE AND JOINT ANALYSIS, DEPICTING THE LONGEST SPAN, HAS TO BE PERFORMED AND SHOWS A "PASS" OR "ACCEPTABLE" RATING. UNDER NO CIRCUMSTANCE WHAT SO EVER SHALL THE PROPOSED EQUIPMENT BE INSTALLED WITHOUT SAID STRUCTURAL ANALYSIS. IF SAID STRUCTURE AND/OR JOINT BE MODIFIED, SUCH MODIFICATIONS SHALL BE COMPLETED PRIOR TO INSTALLATION OF THE PROPOSED EQUIPMENT.

OTHER CARRIER EXAMPLE

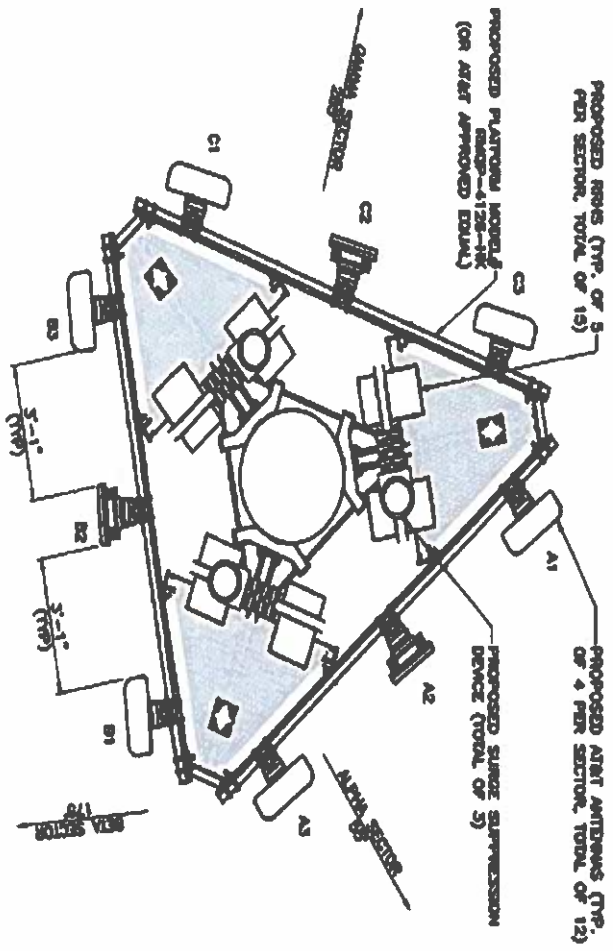
		PROPOSED						
SECTOR	ANTENNA POSITION	MODEL	CL. OF ANTENNA (VZL)	ASBATHN	ANTENNA SIZE	CABLES	BBM	SOULD
L P N A	A1	(1) TP465R-SUBD			5'		(1) 4478 B14 (1) 4428 B96 (1) 4418 B30 (1) 4448 B5/B12 (1) B543 B2/BB5A	
	A2	(1) A8B448 N77D (1) A8B419 N77D (STACKED)	140'-0"	95'	5'			
	A3	(1) TP465R-SUBD						
O E T A	B1	(1) TP465R-SUBD			5'		(1) 4478 B14 (1) 4428 B96 (1) 4418 B30 (1) 4448 B5/B12 (1) B543 B2/BB5A	
	B2	(1) A8B448 N77D (1) A8B419 N77D (STACKED)	140'-0"	178'	5'	(9) 6AWG DC POWER (3) 24-PAIR FIBER		(3) DC9-48-80-24-8C-EV
	B3	(1) TP465R-SUBD						
O A M A	C1	(1) TP465R-SUBD			5'		(1) 4478 B14 (1) 4428 B96 (1) 4418 B30 (1) 4448 B5/B12 (1) B543 B2/BB5A	
	C2	(1) A8B448 N77D (1) A8B419 N77D (STACKED)	140'-0"	285'	5'			
	C3	(1) TP465R-SUBD						

1 RF SCHEDULE

2 ANTENNA PLAN  
SCALE: 1/2" = 1'-0"



GRAPHIC SCALE: 1/2" = 1'-0"



- NOTES:**
1. CONTRACTOR TO REFER TO PNL RDS FOR ALL 65' DETAILS.
  2. RFT CABLE TO BE RUN TO 1ST CABINET LTR RFL AND DIRT CHASED TO ALL ACTIVE SECTOR ANTENNAS.
  3. REFER TO GENERAL NOTES FOR ANTENNA MOUNTING INFORMATION.
  4. CONTRACTOR TO REFER TO RDS FOR CROSS-SECTOR REDUNDANCY REQUIREMENTS.
  5. DO NOT EXCEED 16' WIRE LENGTH FROM SURGE SUPPRESSOR TO RFL.
  6. MAINTAIN ADEQUATE SEPARATION BETWEEN ALL EQUIPMENT.

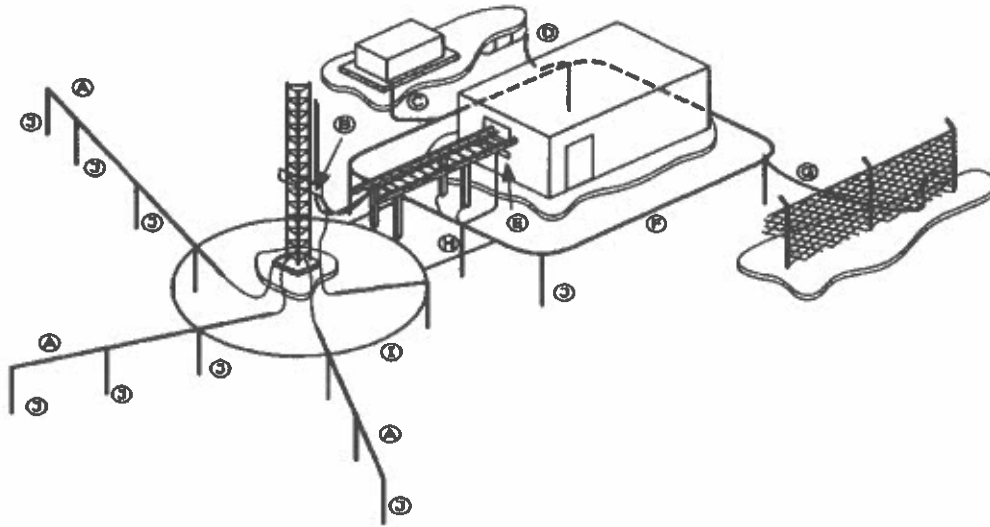
**NOTE:**  
PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY THAT A STRUCTURE AND JOINT ANALYSIS, DEPICTING THE LOADING SCHEMA, HAS TO BE PERFORMED AND SHOWS A "PASS" OR "ACCEPTABLE" RATING, UNDER NO CIRCUMSTANCE WHAT SO EVER SHALL THE PROPOSED EQUIPMENT BE INSTALLED WITHOUT SAID STRUCTURAL ANALYSIS. IF SAID STRUCTURAL ANALYSIS INDICATES THAT THE STRUCTURE AND/OR JOINT BE LOADED, SUCH MODIFICATIONS SHALL BE COMPLETED PRIOR TO INSTALLATION OF THE PROPOSED EQUIPMENT.





**ATTACHMENT D - GROUNDING PER MOTOROLA R56 STANDARDS**

**ATTACHMENT D - TOWER GROUNDING**



- A: Grounding Radials**
- B: Tower Ground Bus Bar and Down Conductor**
- C: Generator Grounding Conductor**
- D: Buried Fuel Tank Grounding Conductor**
- E: External Ground Bus Bar**
- F: Shelter Ground Ring**
- G: Fence Grounding Conductor**
- H: Ground Ring Bonding Conductors (2 minimum)**
- I: Tower Ground Ring**
- J: Earthing Electrodes (Ground Rods)**

**FIGURE 4-4 TYPICAL EXTERNAL GROUNDING ELECTRODE SYSTEM**

**ATTACHMENT D - GROUNDING PER MOTOROLA R56 STANDARDS (CONTINUED)**

**ATTACHMENT D - SITE GROUNDING**

