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**Van Zandt County, Texas**

**REQUEST FOR PROPOSALS**

**COMMUNICATIONS TOWER INFRASTRUCTURE**

**RFP Release**

**Date: Wednesday July 5, 2023**

**Mandatory Pre-Proposal Conference and Site Surveys**

**Date: Monday July 24, 2023 @ 9:00am**

**Questions / Clarifications Deadline**

**Date: Thursday July 27, 2023 @ 3:00pm**

**Proposal Due Date: Friday August 4, 2023 @ 3:00pm**

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Attachment 1: Proposal Pricing Sheets

Attachment 2: Sample Forms

Attachment 3: Land Survey Drawings (Precinct 1-3 and Sheriff Office sites)

Attachment 4: Precinct 4 Tillman Drawings (provided by Tillman)

Attachment 5: L3Harris Site Grounding and Lightning Protection Guidelines T4618RevF

Attachment 6: NATE Checklist for Evaluating Qualified Contractors

Attachment 7: Van Zandt County Permit for Installation of Culverts

# INFORMATION FOR RESPONDENTS

## Legal Notice – Request For Proposals

The Van Zandt County is accepting proposals for communications tower infrastructure and site improvements to provide the County with operational facilities and structures to support the deployment of a P25 trunked public safety grade radio system. Proposal Packets, including information on the mandatory pre-proposal (i.e. pre-bid) meeting and site visits, may be obtained at ***https://www.vanzandtcounty.org/page/vanzandt.County.Auditor/***. **Sealed proposals are due by 3:00 pm on Friday August 4, 2023**, at which time they will be publicly opened. Van Zandt County reserves the right to reject any and all proposals.

## Introduction

Van Zandt County (“County”) provides emergency communications services for its agencies. The County is requesting sealed proposals from qualified firms to provide equipment and services for communication tower infrastructure and site improvements to provide operational facilities and structures to support the County’s deployment of a P25, trunked, public safety grade radio system to serve the County and its agencies. Proposal scope shall include all planning and regulatory due diligence, design and complete implementation of the required communication tower infrastructure and site improvements on a “turnkey” basis. This turnkey project shall include all hardware, software, installation, design, warranty and maintenance, testing, and documentation, and all costs associated with providing the fully-functional communications tower infrastructure as described in this Request for Proposals (“RFP”).

The terms and conditions specified in this document will apply to the RFP as a whole, including all options addressed by the RFP. Only those respondents fully capable of complying with the terms and conditions stated herein will be considered qualified for an award and subsequent contract.

It is the intention of the County to execute a contract with the contractor whose proposal is deemed most advantageous in accordance with the evaluation criteria specified in this RFP. The County may conduct post-proposal discussions with any or all respondents deemed to be reasonably qualified for award. "Post-Proposal discussions" include, but are not limited to: requests for additional information, interviews, requests for proposal modifications or revisions and requests for "best-and-final" offers. The County may reject any part of any, or all, proposals.

Van Zandt County is an Affirmative Action/Equal Opportunity Employer. Section 3 Residents, Minority Business Enterprises, Small Business Enterprises, Women Business Enterprises, and Labor Surplus Area firms are encouraged to submit Proposals.

## Background Information

The County has contracted with L3Harris through a previous RFP process to upgrade to a P25 trunked public safety grade radio system. L3Harris is responsible for providing the P25 trunked radio and network equipment, microwave backhaul, and subscribe units. L3Harris is also responsible for all system equipment installations at the tower sites that are part of the County’s radio system.

Per the L3Harris system design, the County’s new P25 radio system will operate in the 700/800 MHz band and will require five (5) total tower sites strategically located throughout the County to achieve the County’s coverage requirements. Four (4) tower locations will be complete “greenfield” builds from open land. One (1) site will be a leased tower site that will include upgrades to site infrastructure including a new equipment shelter, generator and utility/grounding.

## Definition of Terms

“RFP” shall refer to this Request for Proposals. “Proposal” shall mean a written offer to provide the equipment and services in accordance with requirements specified herein.

“Respondent” or “Proposer“ shall mean a person, firm or corporation who submits a Proposal to provide equipment, material, and/or services necessary in the performance of the requirements specified herein.

“County” shall refer to Van Zandt County in the state of Texas and any official Van Zandt County departments and agencies.

"Site" or “Tower Infrastructure” shall refer to the physical land, proposed tower structure, and/or proposed improvements as required per this RFP.

“Furnish”, “provide”, “propose”, or “offer” shall mean to supply, equip, and deliver the specified equipment, material and/or services to the Purchaser.

“Must”, “shall”, “should”, “will”, “is required”, and “are required” are terms that identify a mandatory item or factor. Failure to comply with a mandatory item or factor may result in the elimination of the Respondent’s Proposal from future consideration.

“Agreement”, “Contract”, or “award” shall refer to the TOWER INFRASTRUCTURE purchase contract that will be negotiated with the Respondent deemed most qualified per §1.14.

“Contractor” shall mean a person, firm or corporation awarded a Contract(s) (i.e. the selected Respondent) through this RFP process to provide the equipment and services specified herein.

“Buyer” shall refer to the legal entity entering into a purchase Agreement with the Contractor for the purchase of good and services as defined by this RFP and subsequent contract documents.

“L3Harris” shall refer to the radio equipment vendor that Van Zandt County has contracted to with provide the P25 radio equipment.

## Turnkey Approach

The desired proposal is one in which the Contractor delivers, installs, and configures specified equipment and provides training and documentation. This RFP specifies equipment and performance standards. It is the Contractor’s responsibility to determine the specific hardware, accessories, and services required to deliver all of the tower infrastructure required to successfully support the County’s P25 radio equipment at all five (5) tower sites. The County will not issue change orders based on the fact that a detail was omitted from the Contractor’s proposal.

## RFP Requirements

The County views this RFP as the framework to be used by the Respondent in preparing and submitting a proposal, and as an integral part of the final contractual agreement to be negotiated with the Contractor. It is important for the Respondent to become familiar with the paragraph items within this section, as they will prevail in the event of any discrepancies or differences between project-related or contractual documents.

### RFP Procedural & Content Questions

The County has designated Sandy Hill as the “RFP Manager” for this project. The RFP Manager shall serve as the single point of contact throughout this procurement process. Any potential respondent requiring further clarification of the RFP procedure contained herein should submit specific questions via email to:

Sandy Hill

Van Zandt County Auditor

[sandy@vanzandtcounty.org](mailto:sandy@vanzandtcounty.org)

During the review of the RFP and preparation of the Proposal, certain errors, omissions or ambiguities may be discovered. Any explanation, clarification, or interpretation desired by a Respondent regarding any part or portion of this RFP must be requested in writing by **3:00pm on Thursday July 27, 2023 (Deadline for Questions/Clarifications).** Interpretations, corrections or changes to the RFP made in any other manner are not binding, and respondents shall not rely upon such interpretations, corrections or changes. Oral explanations or instructions given before the award of the Contract are not binding. The attempt to question staff or representatives of the County or municipalities within the County, verbally or otherwise, may result in disqualification.

Requests for explanations or clarifications may also be submitted via email to the RFP Manager as noted above. The email subject line must clearly identify the RFP by title.

### Right To Amend

The County reserves the right to amend or supplement the Request For Proposals giving equal information and cooperation to all Respondents. Any interpretations, corrections, or changes to the RFP will be made by addendum via the County’s website at ***https://www.vanzandtcounty.org/page/vanzandt.County.Auditor/***. Sole issuing authority of addenda shall be vested in the RFP Manager. Only information supplied in the RFP and official addenda shall be used in the preparation of Proposals.

### Compliance With Regulations

The selected Respondent shall comply with all rules, regulations, ordinances, codes and laws; shall secure and pay for permits and licenses necessary for initiation and completion of work and shall adhere to any provisions of Social Security, Worker’s Compensation or Unemployment Insurance Laws (local, state or federal). Respondents must disclose any fines, sanctions, debarment or litigation involving the company or its employees during the last five (5) years.

### Federal Grant Funds Requirements

Van Zandt County has been awarded funds through the American Rescue Plan Act (ARPA) and other grants which may be utilized for certain portions of this project. As such, requirements are placed upon the County and any vendor providing equipment or services through these grant mechanisms. Requirements specific to the ARPA include:

* Vendor Information
* Certificate of Liability Insurance
* Certification of active registration in System for Award Management (SAM)
* Certification that the firm or a firm principal is not debarred or suspended by the Excluded Parties List System (EPLS) in the System for Award Management (SAM)
* Conflict of Interest Certification (Form CIQ – Texas Ethics Commission)
* Disclosure of Lobbying Activities
* Certification Regarding Lobbying
* Completion of Texas Ethics Commission Form 1295

See §1.11 for full details regarding requirements for proposal content, forms, and disclosures. The selected Contractor will execute a contract/agreement with terms and conditions that include flow-down requirements of the funding agency. The selected Contract shall be an Affirmative Action/Equal Opportunity Employer and the County reserves the right to negotiate with any and all Respondents per the Texas Professional Services Procurement Act and the Uniform Grant and Contract Management Standards.

### Submission of Proposals

**PLEASE READ THIS SECTION CAREFULLY**

The Respondent must submit (1) original and three (3) additional hardcopies along with one (1) electronic copy in PDF format on USB drive of their response to the RFP. If the Proposal contains confidential information as defined in §1.6.6, the Respondent shall also submit one redacted electronic copy of the proposal in PDF format with confidential information removed. Proposals must be submitted in a sealed package or container marked **“COMMUNICATIONS TOWER INFRASTRUCTURE RFP - SEALED”** to the address below no later than 3:00 pm local time on Friday August 4, 2023. The public proposal opening will immediately follow. All proposals received after 3:00 pm on Friday August 4, 2023 will be considered non-responsive. **Faxed or electronic transmitted proposals WILL NOT be accepted.** It is the responsibility of the Respondent to ensure that the Proposal is received in a timely manner. Proposals received after the submission deadline will not be considered for award, regardless of whether or not the delay was outside the control of the Respondent. Van Zandt County reserves the right to negotiate with any and all Respondents submitting timely Proposals. The letter transmitting the proposal must be signed by an officer of the firm/organization authorized to bind the respondent as required by this solicitation.

**Van Zandt County**

**Purchasing Department (Attention: Sandy Hill)**

**Canton, Texas**

Van Zandt County

Auditor’s Office

122 E. Dallas, Room 102

Canton, Texas 75103

### Disclosure of Proposal Contents

Texas procurement codes require that proposals are handled and utilized in a manner that avoids disclosure of the contents to competing firms and keeps the proposal contents confidential during evaluations and contract negotiations. Designated participants in the proposal evaluation process will certify their concurrence with the confidentiality policy through an agreement with the County. The Respondent understands that any material supplied to the County may be subject to public disclosure under public records statues after award of a contract per §1.14. Trade secrets and confidential information in proposals are not open for public inspection or disclosure if such information is clearly identified and contained on a separate page in the proposal. This identification shall be performed by individually marking each relevant page with the words “Proprietary Information”. Per Texas procurement codes, pricing information for goods or services is not considered confidential information.

If the Respondent fails to identify proprietary information, they agree that by submission of their proposal any and all unmarked pages shall be deemed non-proprietary and made available upon public request.

### Cost of Proposal

This RFP does not commit the County to pay any costs incurred by any Respondent in preparation and/or submission of a Proposal, or for procuring or contracting for the items to be furnished under this RFP. All costs directly or indirectly related to responding to this RFP, including all costs incurred in providing supplementary documentation or presentation which may be required by the County will be borne by the Respondent.

Each respondent will be responsible for all costs incurred in preparing or responding to this RFP. The Respondent agrees to bear all risks for loss, injury, or destruction of hardware, software or goods and materials (ordered or supplied as the result of the eventual Contract) which might occur prior to delivery to the County; and such loss, injury, or destruction shall not release the Respondent from any obligations under this RFP or any resulting Contract.

### Rights to Proposal and Contractual Material

All reports, charts, schedules, or other appended documentation to any proposal, content of basic proposal, or contracts and any responses, inquiries, correspondence, and related material submitted by the Respondent shall become property of the County upon receipt.

### Right of Rejection

The County reserves the right to reject proposals from any Respondent who does not satisfy the requirements set forth herein as to their reliability and technical capability. The County also reserves the right to reject any or all proposals, to waive irregularities and or informalities and to make an award as may appear to be in the best interest of the County.

### Withdrawal of Proposal

A Proposal may be withdrawn by a duly authorized representative of the Respondent at any time prior to the proposal submission deadline, upon presentation of acceptable identification.

### Amending of Proposals

A Respondent may submit an amended proposal before the deadline for receipt of proposals. Such amended proposals must be complete replacements of a previously submitted proposal and must be clearly identified as such in the transmittal letter. The County will not merge, collate, or assemble proposal materials.

### Proposal Offer Firm

Responses to this RFP, including pricing information, will be considered firm for 180 days after the latter of: 1.) the due date for receipt of proposals; or 2.) the date of receipt of the Respondent’s last, best-and-final offer is submitted.

### Exceptions to RFP Specifications

Although the specifications in the following sections represent the anticipated needs of the County and its agencies, there may be instances in which it is in the County’s interest to permit exceptions to the specifications and accept alternatives.

It is important that the Respondent make clear where exceptions are taken to the specifications and how the Respondent will provide alternatives. Therefore, exceptions, conditions, or qualifications to the provisions of the specifications must be clearly identified as such together with reasons for taking exceptions. The Respondent should explain the benefit of the exception and how the proposed alternative meets or exceeds the intention of the original specification. If the Respondent does not make clear that an exception is being taken, this will be deemed to mean that the Proposer is responding to, and will meet, the specification as written.

### Consideration of Proposals

Discussions may be conducted with respondents capable of being selected for the award for the purpose of clarification. Until award of the Contract is made by the County, the right will be reserved to reject any or all proposals, to re-advertise for new proposals, or to proceed with the work in any manner as may be considered in the best interest of the County.

### Discovery

The County may elect to conduct any of the following additional activities with any respondent:

1. Equipment and products demonstrations
2. Reference checking
3. Client site visits
4. Meetings/interviews with Respondent representatives

### RFP Termination

The County reserves the right, at their sole and unqualified discretion, to cancel this RFP at any time.

### Surety Bond

Van Zandt County shall be the Obligee of the required surety bond (i.e. bid bond) associated with proposals. The Respondent shall make payable to Van Zandt County, a security bond in an amount equal to 5% of the total proposal price of all hardware, software, and services, excluding options, to be provided under the Contract. The surety bond shall be issued by a surety authorized to do business in the State of Texas. No cash, checks, certified check, cashier’s check or other forms of payment will be accepted. The selected Respondent’s bond will be retained until the Contract has been executed and the Respondent/Contractor has furnished the required payment and performance bonds. The County reserves the right to retain all other respondents' surety bonds for up to 180 days from proposal receipt deadline or until the Contract is executed, whichever is earlier. If the selected respondent should refuse to enter into a contract, Van Zandt County will redeem such respondent’s surety bond.

### No Obligation

This procurement in no manner obligates the County or any of its agencies to the eventual purchase, rental, or lease of any software, hardware or services offered until authorized by the County and confirmed by a written contract signed by an authorized representative of the County.

## Pre-Proposal Conference

The County will conduct a Pre-Proposal Conference for all interested parties.

Date: Monday July 24, 2023

Start Time: 9:00am CST

Location: Van Zandt County Regional Airport

36671 State Highway 64

Wills Point, Texas 75169

**Attendance at the conference is mandatory to submit a proposal.** A representative from each responding firm must attend the conference and complete the official sign-in form provided at the conference. The conference will begin as noted above with an informational meeting. Site visits to each of the five (5) tower site locations will follow the Pre-Proposal Conference meeting. Each site visit will last approximately 30 minutes to allow representatives from each firm ample time to collect photos, notes and to complete any preliminary due diligence required to assist them with the preparation of their Proposal Package. It is anticipated that the Pre-Proposal Conference and the site visits will last from 9:00am - 5:00pm.

Respondents will be required to email any pertinent questions per §1.6.1, prior to the conference, in order to allow the County time to prepare adequate responses. It is reiterated herein that any verbal questions and answers are informal and non-binding. Any questions issued at the Pre-Proposal Conference must be formally submitted through the defined process. Official answers to all questions will be provided per §1.6.1.

## Contractor Qualifications

Any Respondent (i.e. potential Contractor) offering tower infrastructure solutions must demonstrate competence with the design, supply, and installation of offered solution. References from projects of similar size and scope will be verified and shall comply with the following:

* The Respondent shall be an authorized sales agent for the equipment and hardware being offered.
* The Respondent must trained and fully qualified to design, deliver, and install all equipment and hardware offered.
* The Respondent/Contractor must be able to supply adequate local staff and facilities to implement the tower infrastructure project as defined herein.
* The Respondent/Contractor must be qualified to conduct business within the State of Texas.

The selected Respondent (i.e. Contractor) will serve as the prime contractor and will be responsible for all aspects of the project and the work quality of any subcontractors. Subcontractors must also demonstrate competence and experience within their specific scope of services and provide proof of insurance that applies to their scope of work.

The County reserves the right to reject any Proposal or part of any Proposal, if indication or review of any services or equipment proposed is deemed to have an unsatisfactory performance record or does not meet the requirements stated herein.

The County may make such investigation as is deemed necessary to determine the ability of the Respondent to provide the equipment, material, and services as required by this RFP and to determine the adequacy of the proposed equipment, material, and services. The Respondent shall furnish, upon request and in a timely manner, all such data and information requested for this purpose.

## Obligation of Respondent

Respondents are required to submit their Proposals upon the following express conditions:

a. Respondents shall thoroughly examine all specifications, plans, instructions, and all other documents pertaining to this RFP.

b. Respondents shall make all investigations necessary to thoroughly inform themselves regarding facilities for delivery of materials or equipment and the performance of services as required by the RFP.

c. No plea of ignorance by the Respondent of conditions that exist or that may hereafter exist as a result of failure or omission on the part of the Respondent to make the necessary examinations and investigations will be accepted as a basis for varying the requirements of this solicitation.

d. Proposal must comply with all federal, state, county, and local laws concerning these types of services.

In case of ambiguity or lack of clarity in stating prices in the Proposal, the County reserves the right to adopt the price written in words or reject the Proposal.

## Project Manager

The Contractor shall assign a Project Manager who shall be the single point of contact for the Contractor and shall have the power to make decisions concerning all technical and implementation matters. The Project Manager will manage system implementation of the Tower Infrastructure and maintain the project schedule as developed jointly by the Contractor and the County. The Project Manager will anticipate the need for system resources and have those resources available when the schedule calls for them. The Project Manager shall be available Monday through Friday, during normal business hours, throughout the term of the Contract. The Project Manager shall be expected to be on-site during key periods of installation, implementation and acceptance and as otherwise required by the County’s designated project manager. It is preferred that the assigned Project Manager not be assigned to, or distracted by, other major project(s) for the duration of the Tower Infrastructure project.

The Contractor’s Project Manager will respond to all project-related telephone calls, voicemails, and emails within 24 hours, exclusive of weekends and federal holidays. The Contractor’s Project Manager will provide weekly project updates via email no later than 3:00pm, Central Time, each Friday or as otherwise agreed by the parties. Project status meetings and/or conference calls will be held on a regular basis, with a schedule to be determined.

The County shall reserve the right to review and approve the resume and qualifications of the Contractor’s assigned Project Manager. The County shall further reserve the right to request replacement of the Contractor’s Project Manager or other key staff members if deemed in the best interest of the Project.

The County will designate a project manager to serve as its single point of contact for all technical and implementation matters.

## Proposal Contents

A Proposal is defined as a written offer to provide the equipment and services in accordance with requirements specified herein. To be compliant, the Respondent’s Proposal Package submission must include all of the following items:

1. A Cover Letter signed by owner or corporate officer expressing the Respondent’s intent to provide equipment and services as required in this RFP. This letter should include the firm name, address, phone number, and EIN.
2. Certification (print out) of the firm’s active registration in the System for Award Management (SAM)
3. Record search (print out) in SAM certifying that the firm or a firm principal is not debarred or suspended by the Excluded Parties List System (EPLS) in the System for Award Management (SAM)
4. NATE Checklist for Evaluating Qualified Contractors
5. Copy of the firm’s Certificate(s) of Insurance (COI) showing all required levels of insurance specified in this RFP (See §2.7 herein for Insurance Requirements)
6. Conflict of Interest Questionnaire Form CIQ - Texas Ethics Commission\*
7. Texas Ethics Commission Form 1295\*
8. Certification Regarding Lobbying\*
9. SF-LLL, Disclosure of Lobbying Activities\*
10. Respondent Profile per §1.11.1.
11. Technical Proposal per §1.11.2.
12. Cost Proposal per §1.11.3.
13. Surety Bond (i.e. Bid Bond)
14. Schedule - A project delivery and implementation schedule which defines project milestones referenced to contract award date.

\*Sample forms referenced above can be found in Attachment 2.

Any proposal submission that lacks any of these components will not constitute a proposal, will not be evaluated, and will not be eligible for contract award.

Only proposals for a complete Tower Infrastructure as defined in this RFP will be accepted in response to this RFP. The Respondent will carry full, non-assignable, and non-delegable responsibility for the technical and timely completion of all aspects of the project as defined in this RFP.

### Respondent Profile

The Respondent profile must provide information on the Respondent’s firm or organization, including the parent company, if applicable. In the specific order, it must provide the following information:

1. Clearly define the qualifications of the firm including experience with similar projects.
2. An outline of the Respondent’s proposed project organization including key project personnel and a statement of experience for each.
3. A description of how the Respondent proposes to provide support and maintenance for the equipment and options outlined in this RFP.
4. Professional references for the Respondent must be provided. A list of similar scope tower construction and site development projects must be provided. The Respondent shall provide project information regarding project status of all referenced projects.
5. A list of all proposed subcontractors will be provided describing the anticipated service and/or equipment to be provided. The experience, qualifications and technical support for each subcontractor shall be clearly stated. Respondents shall list all employees and subcontractors that will require access to County facilities. These employees will be subject to a background investigation prior to approval for access to those locations. The County shall have sole authority in approving Contractor employees and subcontractors for access.
6. The Respondent shall provide a preliminary outline demonstrating the Respondent's approach to organization and completion of the project encompassing all appropriate activities and milestones including those tasks, which are deemed to be the responsibility of the County. Tasks shall be clearly identified as to whether they are the responsibility of the Respondent, a specified subcontractor, or County. The primary purpose of the outline is to obtain a general understanding of the Respondent's approach to accomplishing the requirements herein.
7. The Respondent must provide a clearly stated description of their Problem Escalation Procedures that will be followed to support the timely implementation of the Tower Infrastructure project. This detailed description shall identify management and technical resources proposed to support the project in the event of equipment or personnel problems.

### Technical Proposal

A Technical Proposal must be submitted that encompasses all RFP requirements and options. The Technical Proposal must be clearly divided so that each optional task or item described in the RFP is completely distinguishable and may be considered separately. The Technical Proposal shall include a Point-By-Point response to the RFP (all sections). The Point-By-Point Response shall specifically accept, clarify, or take exception to each section of the RFP. Each response must be complete without reference to other sections of the response. An electronic copy of the RFP document will be made available to facilitate this requirement. The Technical Proposal must be physically separate from the submitted Cost Proposal. Proposals lacking adequate documentation will receive a lower score on the proposal evaluation.

### Cost/Pricing Proposal

The Cost/Pricing Proposal must be submitted as a separate document from the Technical Proposal and must include all costs of the proposed offering and system options as defined herein. Official proposal pricing sheets are included as Attachment 1. All costs associated with implementing the proposed equipment, services, and options must be included on the official pricing sheets. The Respondent may add items to the pricing sheet if necessary to accommodate their offering. An electronic copy of the pricing sheet will be provided as a courtesy. The Respondent shall be responsible for the accuracy of all information, calculations, and values presented in their pricing proposal. Additional narrative and other information may be included as needed to adequately explain all costs and options associated with the Proposal.

## Review and Evaluation of Proposals

The Van Zandt County Commissioner’s Court has appointed and approved an evaluation team for reviewing and scoring proposals associated with this RFP. All proposals will be reviewed for completeness and those found to be either incomplete or non-responsive will be rejected from further consideration. The evaluation team will determine if a Proposal is “non-responsive” and their decision will be conclusive. The evaluation team will evaluate responsive and complete proposals.

The evaluation team will conduct a technical evaluation to determine the technical compliance of each proposal and to determine that complete and responsive proposals have been submitted. The team will provide an evaluation of cost proposals and selection of potential Respondents for further evaluation and/or negotiations.

The evaluation team will rank proposals from best-to-least-desirable based on compliance with the Evaluation Criteria specified in Section §1.13 of this RFP. Discussions may be conducted individually with Respondents who submit responsive proposals and who are determined reasonably qualified for award of a Contract. Revisions and/or clarifications may be requested after proposal submission and before Contract award to obtain best-and-final offers.

## Evaluation Criteria

The project evaluation criteria are listed herein.

***Technical Compliance***. This evaluation shall consider the degree to which the technical requirements of this RFP are met.

Maximum Score **35**

***Respondent References***. This evaluation will consider the Respondent’s experience and qualifications with similar public safety radio system projects, professional references, financial stability, and other items included in the Respondent Profile section of this RFP.

Maximum Score **20**

***Acquisition Costs***. This evaluation will consider all costs associated with initial design and implementation and other optional and maintenance/inspection costs identified in the Cost/Pricing Proposal section of this RFP.

Maximum Score  **35**

***Complete Project Implementation Schedule***. This schedule shall include a time-line of all the tasks proposed by the Respondent. This schedule shall include all tasks to be completed by the Respondent and its subcontractors.

Maximum Score **10**

**Total Evaluation Score: 100**

## Standard of Award

The County reserves the right to accept or reject any and all Proposals and to re-solicit for proposals, as it shall deem to be in its best interest. Receipt of any proposal shall under no circumstance obligate the County to accept the lowest cost proposal. The award of a contract shall be made to the Respondent whose proposal is determined to be the best evaluated offer, taking into consideration demonstrated competence and qualifications to perform the service solicited in the RFP. The Respondent/Contractor shall be deemed as having been awarded a contract when the formal written notice of acceptance of its Proposal has been duly served upon the intended awardee by an authorized agent of the County. The County will enter into contract negotiations with the selected Respondent (i.e. the awardee). If the County are unable to successfully negotiate a contract with the selected Respondent, the County may, at its sole discretion, select an alternate Respondent or take other actions deemed to be in the best interest of the County.

# GENERAL TERMS AND CONDITIONS

## General

As noted in §1.6.4, federal grant funds may be utilized for certain portions of the project. The selected Contractor will execute a contract/agreement with terms and conditions that include flow-down requirements of the funding agency. The selected Contractor shall be an Affirmative Action/Equal Opportunity Employer and the County reserves the right to negotiate with any and all Respondents per the Texas Professional Services Procurement Act and the Uniform Grant and Contract Management Standards.

The County shall consider, as a competent Respondent, only those firms who are fully capable of complying with all terms and conditions set forth in this RFP.

## Changes

Van Zandt County may, from time to time, request changes in the services the Contractor will perform under this Agreement. Such changes, including any increase or decrease in the amount of the Contractor's compensation, must be agreed to by all parties and finalized through a signed, written amendment to this Agreement.

## Conflict of Interest

1. Governing Body. No member of the governing body of Van Zandt County and no other officer, employee, or agent of the Van Zandt County, who exercises any functions or responsibilities in connection with administration, construction, engineering, or implementation of the ARPA award between the Treasury Department and Van Zandt County shall have any personal financial interest, direct or indirect, in the Contractor or this Agreement; and the Contractor shall take appropriate steps to assure compliance.
2. Other Local Public Officials. No other public official who exercises any functions or responsibilities in connection with the planning and carrying out of administration, construction, engineering or implementation of the ARPA award between the Treasury Department and Van Zandt County shall have any personal financial interest, direct or indirect, in the Contractor or this Agreement; and the Contractor shall take appropriate steps to assure compliance.
3. Contractor and Employees. The Contractor warrants and represents that it has no conflict of interest associated with the ARPA Award between the Treasury Department and Van Zandt County or this Agreement. The Contractor further warrants and represents that it shall not acquire an interest, direct or indirect, in any geographic area that may benefit from the ARPA Award between the Treasury Department and the Van Zandt County or in any business, entity, organization or person that may benefit from the award. The Contractor further agrees that it will not employ an individual with a conflict of interest as described herein.

## SAM Requirements

The Respondent must have an active registration in SAM (System for Award Management) before supplying a proposal per this solicitation. Proof of the Respondent’s SAM registration is required as part of the proposal (see Section 1.11 Proposal Contents). In addition, each Respondent must provide documentation in their proposal verifying that neither the company nor the company’s principal is suspended and/or disbarred in [www.SAM.gov](http://www.SAM.gov) (see Section 1.11 Proposal Contents). The Respondent is solely responsible for navigating SAM and becoming registered. Neither the County, Trott nor the County’s Grant Advisor will provide support to a Respondent for the SAM registration requirements.

If the Respondent does not have active registration in SAM by the proposal submittal deadline associated with this RFP, the Respondent should provide documentation from SAM in their proposal confirming that they have submitted their data and information to SAM and their registration is pending approval. However, an awarded contract will not be offered by the County to a Respondent that is not active in SAM.

## Debarment and Suspension (Executive Orders 12549 and 12689)

The Contractor certifies, by entering into this Agreement, that neither it nor its principals are presently debarred, suspended, or otherwise excluded from or ineligible for participation in federally-assisted programs under Executive Orders 12549 (1986) and 12689 (1989). The term “principal” for purposes of this Agreement is defined as an officer, director, owner, partner, key employee, or other person with primary management or supervisory responsibilities, or a person who has a critical influence on or substantive control over the operations of the Contractor. The Contractor understands that it must not make any award or permit any award (or contract) at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Order 12549, “Debarment and Suspension.”

## Intent

It is the intent of this RFP and the resulting contract documents to describe a functionally complete project resulting in the required Tower Infrastructure and associated items and services. Any work, materials, or equipment that may reasonably be inferred from the contract documents as being required to produce the intended result will be supplied, whether or not specifically set forth herein. When words which have a well-known technical or trade meaning are used to describe work, materials or equipment, such words shall be interpreted in accordance with that meaning. Reference to standard specifications, manuals, codes or recommendations of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect at the time of contract award, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the contract documents) shall be effective to change the duties and responsibilities of the County, Contractor, or any of their subcontractors, consultants, agents or employees from those set forth specifically in the contract documents.

## Performance Bond

Simultaneous with delivery of each executed Contract, the selected Contractor shall provide a performance bond or bonds as surety for faithful performance of the Contract and for the payment of all persons performing labor on the project under the Contract and furnishing materials in connection with the Contract, in the amount of 100% of the Contract amount. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to and subject to investigation by the County.

## Insurance

The reference to Contractor throughout this section not only applies to the Prime Contractor but also to all of the Prime’s subcontractors. The Contractor and, if applicable, any subcontractors utilized by the Contractor, agree to keep and maintain for the duration of the Contract including but not limited to commercial general liability, auto liability, workers’ compensation, employer’s liability, professional liability, and umbrella coverage with at least the minimum limits shown below. The Contractor and all subcontractors shall provide evidence of insurance coverage consistent with this requirement prior to execution of the Contract.

The Contractor and all subcontractor’s shall furnish the Buyer with certificates of insurance for each type of insurance described herein, with the Buyer listed as Certificate Holder and as an additional insured on the Contractor’s and all subcontractor’s general liability policy and provide a waiver of subrogation on the Contractor’s and all subcontractor’s workers’ compensation policy. In the event of bodily injury or property damage loss caused by the Contractor’s or a subcontractor’s negligent acts or omissions in connection with Contractor’s services performed under this Agreement, the Contractor’s Liability insurance shall be primary with respect to any other insurance which may be available to the Buyer, regardless of how the “Other Insurance” provisions may read. In the event of cancellation, substantial changes or nonrenewal, the Contractor and Contractor’s insurance carrier shall give the Buyer at least thirty (30) days prior written notice.

No work shall be performed until the Contractor has furnished the above referenced certificates of insurance and associated endorsements, in a form suitable to the Buyer. Upon request, the Contractor shall provide copies of their insurance policies to the Buyer.

Commercial General Liability: $1,000,000 per occurrence / $2,000,000 aggregate

Excess (Umbrella) Liability: $5,000,000

Commercial Auto Liability: $1,000,000 combined single limit

Workers' Compensation: State of Texas Statutory

Employer's Liability: $1,000,000 each accident/total disease/employee disease

Pollution Liability: $1,000,000 per claim

Professional Liability: $1,000,000 per claim-made / $2,000,000 aggregate

Deductible shall be $5,000 or less on each of the above listed coverages

Van Zandt County shall be named as an **Additional Insured** and held harmless as respects to the service or work performed by the Contractor or any of its subcontractors.

FAILURE TO COMPLY WITH LAWFUL REQUIREMENTS OR ADEQUATE LIABILITY REQUIREMENTS MAY RESULT IN DELAY OF PAYMENTS AND/OR CANCELLATION OF THE AWARD.

## Equal Opportunity Clause

During the performance of this contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
3. The Contractor will not discourage or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee’s essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor’s legal duty to furnish information.
4. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
5. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, “Equal Employment Opportunity,” and of the rules, regulations, and relevant orders of the Secretary of Labor.
6. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
7. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
8. The Contractor will include the portion of the sentence immediately preceding paragraph (a) and the provisions of paragraphs (a) through (h) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

## Civil Rights Act of 1964

Under Title VI of the Civil Rights Act of 1964, no person shall, on the grounds of race, color, religion, sex, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

## Section 109 of the Housing and Community Development Act of 1974

The Contractor shall comply with the provisions of Section 109 of the Housing and Community Development Act of 1974. No person in the United States shall on the ground of race, color, national origin, religion, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title.

## Section 504 Rehabilitation Act of 1973, as amended

The Contractor agrees that no otherwise qualified individual with disabilities shall, solely by reason of his/her disability, be denied the benefits of, or be subjected to discrimination, including discrimination in employment, under any program or activity receiving federal financial assistance.

## Age Discrimination Act of 1975

The Contractor shall comply with the Age Discrimination Act of 1975 which provides that no person in the United States shall on the basis of age be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

## Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)

The Contractor certifies that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining this contract. The Contractor shall disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award.

## Small, Minority, Women’s, and Labor Surplus Enterprises/Contractors

1. The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area Contractors are used when possible.
2. Affirmative steps must include:
3. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
4. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
5. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
6. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
7. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
8. Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (1) through (5) of this section.

## Combating Trafficking in Persons

Pursuant to Chapter 52.222-50 of the F.A.R. the consultant agrees to comply with all provisions of the Combating Trafficking in Persons Act.

## Increasing Seat Belt use in the United States

Pursuant to Executive Order 13043, 62 FR19217 (Apr. 18, 1997), Recipient should encourage its contractors to adopt and enforce on-the-job seat belt policies and programs for their employees when operating company-owned, rented or personally owned vehicles.

## Reducing Text Messaging While Driving

Pursuant to Executive Order 13513, 74 FR 51225 (Oct. 6, 2009), Recipient should encourage its employees, sub recipients, and contractors to adopt and enforce policies that ban text messaging while driving.

## Energy Efficiency

The Contractor shall comply with the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201). (2 CFR 200 Appendix II (h)).

## Verification No Boycott Israel

As required by Chapter 2270, Government Code, the Contractor hereby verifies that it does not boycott Israel and will not boycott Israel through the term of this Agreement. For purposes of this verification, “boycott Israel” means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

## Foreign Terrorist Organizations

Pursuant to Chapter 2252, Texas Government Code, the Contractor represents and certifies that, at the time of execution of this Agreement neither the Contractor, nor any wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of the same (i) engages in business with Iran, Sudan, or any foreign terrorist organization as described in Chapters 806 or 807 of the Texas Government Code, or Subchapter F of Chapter 2252 of the Texas Government Code, or (ii) is a company listed by the Texas Comptroller of Public Accounts under Sections 806.051, 807.051, or 2252.153 of the Texas Government Code. The term "foreign terrorist organization" in this paragraph has the meaning assigned to such term in Section 2252.151 of the Texas Government Code.

## Contract Document Hierarchy

The Contract, statement of work, RFP, Contractor’s best-and-final offer, and Contractor’s Proposal and any subsequent, approved amendments will constitute the contract documents for each Contract. All requirements and all terms and conditions stated in the RFP will apply unless specifically superseded by the Contract, Statement of Work or other higher precedent document. Any inconsistencies will be resolved in the following order of precedence:

1. Contract

b. Statement of Work

c. Contractor’s best-and-final offer

d. Contractor’s Proposal

e. RFP

## Notices

All notices required by any of the Contract documents shall be in writing and shall be deemed delivered upon mailing by certified mail, return receipt requested, to the addresses specified in the Contract.

## Indemnification

The Contactor shall indemnify, defend and hold harmless Van Zandt County and its subsidiaries, divisions, officers, directors and employees from all liability, loss, costs, claims, damages, expenses, attorney fees, judgments and awards arising or claimed to have arisen, from any injury caused by, or allegedly caused by, either in whole or in part, any act or omission of the Contractor or any employee, agent or assign of the Contractor. This provision is not applicable to any claim arising out of an active or primary negligence of or by Van Zandt or its officers or employees.

The Contractor shall defend, indemnify and save harmless Van Zandt County and all its officers, agents and employees from all suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful bidder, or of any agent, employee, subcontractor or supplier in the execution of, or performance under, any contract which may result from bid award. The Contractor indemnifies and will indemnify and save harmless Van Zandt County from liability, claim or demand on their part, agents, servants, customers, and/or employees whether such liability, claim or demand arise from event or casualty happening or within the occupied premises themselves or happening upon or in any of the halls, elevators, entrances, stairways or approaches of or to the facilities within which the occupied premises are located. The Contractor shall pay any judgment with costs which may be obtained against Van Zandt County growing out of such injury or damages.

Nothing herein shall be construed as a waiver on the part of Van Zandt County to any defense of any claim, including, but not limited to the defense of governmental immunity.

## Assignment

The Contractor shall not assign any interest of this Agreement, and shall not transfer any interest in the same (whether by assignment or novation), without the prior written consent of Van Zandt County thereto; Provided, however, that claims for money by the Contractor from Van Zandt County under this Agreement may be assigned to a bank, trust company, or other financial institution without such approval. Written notice of any such assignment or transfer shall be furnished promptly to Van Zandt County.

## Errors or Omissions

If the Contractor discovers any error or omission in the Contract drawings or specifications or in the work undertaken or performed by it, it shall immediately notify the County in writing and the Contractor shall verify or correct the same. If, knowing of such error or omission and prior to its correction thereof, the Contractor proceeds with any work affected thereby, it shall do so at its own risk and the work so done shall not be considered as work done under contract and in performance thereof unless, and until, approved and accepted by the County.

## Governing Laws

The Contract shall be governed by and construed according to the laws of the State of Texas and Van Zandt County, Texas.

## Disability

In accordance with the provisions of the Americans With Disabilities Act of 1990 (“ADA”), Contractor warrants that it and any and all of its subcontractors will not unlawfully discriminate on the basis of disability in the provision of services to the general public, nor in the availability, terms and/or conditions of employment for applicants for employment with, or employees of Contractor or any of its subcontractors. Contractor warrants it will fully comply with ADA provisions and any other applicable federal, state and local laws concerning disability and will defend, indemnify and hold Van Zandt County harmless against any claims or allegations asserted by third parties or subcontractors arising out of the Contractor’s and/or its subcontractors alleged failure to comply with the above-referenced laws concerning disability discrimination in the performance of this agreement.

## No Obligation

This procurement in no manner obligates the County, or any of its agencies, to the eventual lease or purchase of any hardware, software or services offered until confirmed by a written Contract signed by an authorized representative of the County or authorized designee.

## Fiscal Funding Limitation

In the event no funds or insufficient funds are appropriated and budgeted or are otherwise unavailable by any means whatsoever in any fiscal period for payments due under this Contract, then the County will immediately notify Contractor of such occurrence and this Contract shall be terminated on the last day of the fiscal period for which appropriations were received without penalty or expense to the County of any kind whatsoever, except to the portions of annual payments herein agreed upon for which funds shall have been appropriated and budgeted or are otherwise available.

Any contract awarded as a result of this RFP process may be terminated if sufficient appropriations or authorizations do not exist. Such termination will be effected by sending written notice to the Contractor. The County’s decision whether sufficient appropriations and authorizations will be available shall be accepted by the Contractor as final.

## Taxes

The County is not subject to Federal Excise tax and is exempt from state and local taxes. The County’s Texas Sales and Use Tax Exemption Certification # is 1-75-6001190-4. A copy of this certification can be provided to the Contractor upon request.

## Total Payment to Contractor

The total payment figure specified by the Contractor in its Proposal or otherwise negotiated in the Contract(s) is the maximum payment that will be made by the County for the equipment, software, warranty, maintenance and all other services and equipment required by this RFP.

## Payment Terms

The following payment schedule will be utilized unless otherwise negotiated in the Contract. The Contractor shall submit invoices for payment based upon completed Project Milestones and Site Milestones further described herein.

The percentage payments for Project Milestones 1 and 2 will be based on the total cost of goods and services listed in the Contract. The Contract value may be revised during the Detailed Design Review (“DDR”) based on the addition and/or removal of options and/or other considerations described herein.

* Project Milestone 1 - 15% upon execution of Contract
* Project Milestone 2 - 20% upon issuance of Notice-To-Proceed (after DDR)

The remaining balance (65%) of the Contracted value after Project Milestone Payments 1 and 2 shall be divided out over the five tower sites using the following percentages. These percentages are based on the overall scope of goods and services required per site. “Greenfield” sites, those requiring a new tower structure, have each been allocated larger percentages versus the Precinct 4 Tillman site, which has less scope due to the existing tower and it being a “Leased” site.

1. Precinct 1 CR 1819 - 22.5%
2. Precinct 2 CR 2301 - 22.5%
3. Precinct 3 CR 3433 - 22.5%
4. Precinct 4 Tillman - 10.0%
5. VZC Sheriff’s Office - 22.5%

The following Site Milestone Payments will be used for the payment schedule to complete the project on a per site basis for the Greenfield sites.

* Site Milestone 1 - 20% upon completion of the “cured” tower, shelter and generator foundations
* Site Milestone 2 - 30% upon complete erection of the tower and installation of a temporary FAA tower lighting per FAA determination requirements
* Site Milestone 3 - 20% upon complete installation of the shelter and generator
* Site Milestone 4 - 30% upon Final Acceptance

The following Site Milestone Payments will be used for the payment schedule to complete the project of the Leased site.

* Site Milestone 1 - 20% upon completion of the “cured” shelter and generator foundations
* Site Milestone 2 - 50% upon complete installation of the shelter and generator
* Site Milestone 3 - 30% upon Final Acceptance

Payment shall be due thirty (30) days following the date of Contractor’s invoice and verification of completion of the milestone. The County shall be responsible for verification and approval of Contractor’s invoice, which approval shall not be unreasonably withheld.

**PURCHASE ORDERS:** A purchase order(s) shall be generated by Van Zandt County to the Contractor for all purchases that total five hundred dollars ($500.00) or more. The purchase order number must appear on all itemized invoices and packing slips. Van Zandt County will not be held responsible for any orders placed/delivered without a valid current purchase order number.

**INVOICES** shall show all information as stated above, shall be issued for each purchase order, and shall be either mailed directly to the Van Zandt County Treasurer, 121 East Dallas, Room 101, Canton, Texas 75103. Invoices can also be emailed to:

Sandy Hill

Van Zandt County Auditor

[sandy@vanzandtcounty.org](mailto:sandy@vanzandtcounty.org)

**PAYMENT** will be made upon receipt and acceptance by the County of items ordered and receipt of a valid invoice, in accordance with the State of Texas Prompt Payment Act, Article 601f V.T.C.S.

## Resolution of Program Non-Compliance and Disallowed Costs

In the event of any dispute, claim, question, or disagreement arising from or relating to this Agreement, or the breach thereof, including determination of responsibility for any costs disallowed as a result of non-compliance with federal, state or CDBG-DR program requirements, the parties hereto shall use their best efforts to settle the dispute, claim, question or disagreement.  To this effect, the parties shall consult and negotiate with each other in good faith within 30 days of receipt of a written notice of the dispute or invitation to negotiate, and attempt to reach a just and equitable solution satisfactory to both parties.  If the matter is not resolved by negotiation within 30 days of receipt of written notice or invitation to negotiate, the parties agree first to try in good faith to settle the matter by mediation administered by the American Arbitration Association under its Commercial Mediation Procedures before resorting to arbitration, litigation, or some other dispute resolution procedure.  The parties may enter into a written amendment to this Agreement and choose a mediator that is not affiliated with the American Arbitration Association.  The parties shall bear the costs of such mediation equally.  *[This section may also provide for the qualifications of the mediator(s), the locale of meetings, time limits, or any other item of concern to the parties.]*  If the matter is not resolved through such mediation within 60 days of the initiation of that procedure, either party may proceed to file suit.

## Termination for Cause

If the Contractor fails to fulfill in a timely and proper manner its obligations under this Agreement, or if the Contractor violates any of the covenants, conditions, agreements, or stipulations of this Agreement, Van Zandt County shall have the right to terminate this Agreement by giving written notice to the Contractor of such termination and specifying the effective date thereof, which shall be at least five days before the effective date of such termination. In the event of termination for cause, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs and reports prepared by the Contractor pursuant to this Agreement shall, at the option of Van Zandt County, be turned over to Van Zandt County and become the property of Van Zandt County. In the event of termination for cause, the Contractor shall be entitled to receive reasonable compensation for any necessary services actually and satisfactorily performed prior to the date of termination.

Notwithstanding the above, the Contractor shall not be relieved of liability to Van Zandt County for damages sustained by Van Zandt County by virtue of any breach of contract by the Contractor, and Van Zandt County set-off the damages it incurred as a result of the Contractor’s breach of contract from any amounts it might otherwise owe the Contractor.

Notwithstanding the above, the Contractor shall not be relieved of liability to Van Zandt County for damages sustained by Van Zandt County by virtue of any breach of contract by the Contractor, and Van Zandt County set-off the damages it incurred as a result of the Contractor’s breach of contract from any amounts it might otherwise owe the Contractor.

## Termination for Convenience

Van Zandt County may at any time and for any reason terminate Contractor’s services and work at Van Zandt County's convenience upon providing written notice to the Contractor specifying the extent of termination and the effective date. Upon receipt of such notice, Contractor shall, unless the notice directs otherwise, immediately discontinue the work and placing of orders for materials, facilities and supplies in connection with the performance of this Agreement.

Upon such termination, Contractor shall be entitled to payment only as follows: (1) the actual cost of the work completed in conformity with this Agreement; plus, (2) such other costs actually incurred by Contractor as are permitted by the prime contract and approved by Van Zandt County. There shall be deductions from such sums for any payments made to Contractor prior to the date of the termination of this Agreement. Contractor shall not be entitled to any claim or claim of lien against Van Zandt County for any additional compensation or damages in the event of such termination and payment.

## Non-Appropriation Remedies

In the event of non-appropriation of funds, irrespective of the source of funds, Van Zandt County may terminate Contractor’s services and work, in whole or in part, upon providing written notice to the Contractor specifying the extent of termination and the effective date. Upon receipt of such notice, Contractor shall, unless the notice directs otherwise, immediately discontinue the work and placing of orders for materials, facilities and supplies in connection with the performance of this Agreement. Upon such termination, all Services performed and finished and unfinished hardware and documentation deliverables produced or made by Contractor for the Count, up to and including the date of termination, shall become property of the County, and the Contractor shall be entitled to payment only as follows: (1) that portion of the Total Agreement Price accrued up to the point of termination for any such Services performed and finished and unfinished hardware and documentation deliverables, plus (2) such other costs actually incurred by Contractor as are permitted by the prime contract and approved by the County. There shall be deductions from such sums for any payments made to Contractor prior to the date of the termination of this Agreement. Except as set forth in this Section, Contractor shall not be entitled to any claim or claim of lien against the County for any additional compensation or damages in the event of such termination and payment.

## Abandonment

In the event the Contractor fails to complete all or any portion of the work to be performed as specified in the Contract, it will forfeit all retainage from completed portions of the project. Additionally, the Contractor will be liable for subsequent costs incurred to complete the project; to the extent such additional costs exceed the amount of contractual retainage held.

## Statement of Liability

The County shall not be liable in the event of loss, destruction, or theft of, Contractor-provided equipment, software and technical literature which might occur prior to transfer of ownership to the County. It is the Contractor’s responsibility to obtain insurance coverage for such loss in an amount the Contractor deems appropriate.

## Copyrights and Patents

License and/or royalty fees for the use of a process which is authorized by the Contractor for the County’s use for the equipment provided in this procurement must be reasonable and paid to the holder of the copyright or patent, or authorized licensee, directly by the Contractor and not by, or through, the County. If the Contractor uses any other design, device or materials covered by patent or copyright, it shall provide for such use by suitable agreement with the holder of such patented or copyrighted design, device or materials. It is mutually agreed to and understood that, without exception, the contract prices shall include all royalties or costs arising from the use of such designs, devices or materials in any way involved in the system.

Where activities supported by this project produce original computer programs, writings, sound recordings, pictorial reproduction, drawings, or other graphical representation and works of any similar nature (the term computer program includes executable computer programs and supporting data in any form), the County has the right to use, duplicate, and disclose, in whole or in part, in any manner, for any purpose whatsoever and have others do so. If the material is copyrightable, the Contractor may copyright such, and the County reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish and use such materials, in whole or in part to authorize others to do so.

No report, maps, or other documents produced in whole or in part under this Agreement shall be the subject of an application for copyright by or on behalf of the Contractor.

## Patent Rights and Inventions

The Contractor shall comply with the requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract. (2 CFR 200 Appendix II (f) and Rights to Inventions in 37 CFR Part 401).

Rights to Inventions Made Under a Contract or Agreement – If the Federal award meets the definition of “funding agreement” under 37 CFR §401.2 (a) and the Subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the Subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency. (2 CFR 200 Appendix II (f), Rights to Inventions).

## Confidentiality

The Contractor and County recognize that their respective employees and agents, in the course of performance of the Contract, may be exposed to information that is a trade secret or confidential within the meaning of applicable state law. The burden will be upon the party asserting confidentiality to ensure compliance with applicable law as to any information with respect to which confidentiality is asserted. Each party will agree in the Contract that it will not disclose any confidential information of the other party and further agrees to take appropriate action to prevent such disclosure by its employees or agents. If the County receives a request for disclosure of information that the Contractor has designated as confidential pursuant to law, it will promptly communicate such request to the Contractor. If a legal action is initiated to compel the disclosure of Contractor’s confidential information, the Contractor will be responsible for the defense of said action, including all costs and attorney’s fees. The obligation of confidentiality shall not apply to:

1. information that at the time of the disclosure is in the public domain;
2. information that, after disclosure, becomes part of the public domain by publication or otherwise;
3. information that a party can establish by reasonable proof was in that party’s possession at the time of disclosure;
4. information that a party receives from a third party who has a right to disclose it to that party; or
5. information that is subject to public records requests.

The County shall not be liable to the Contractor or any other person, firm, corporation or business entity for any damage resulting from a disclosure if information is required to be provided by law.

## Right to Publish

Throughout the duration of this procurement process and contract term, Respondents must secure, from the County, written approval prior to the release of any information that pertains to the potential work or activities covered by this procurement or the subsequent Contract. The Respondent shall not issue any news releases or other statements pertaining to the award or servicing of the agreement, which state or imply the County’s endorsement of Respondent’s products or services. Failure to adhere to these requirements may result in disqualification of the Respondent’s proposal or termination of the Contract.

## Findings Confidential

All of the reports, information, data, etc., prepared or assembled by the Contractor under this contract are confidential and the Contractor agrees that they shall not be made available to any individual or organization without the prior written approval of Van Zandt County.

## Personnel

1. The Contractor represents that they have, or will secure at its own expense, all personnel required in performing the services under this Agreement. Such personnel shall not be employees of or have any contractual relationship with Van Zandt County.
2. All of the services required hereunder will be performed by the Contractor or under its supervision and all personnel engaged in the work shall be fully qualified and shall be authorized or permitted under State and Local law to perform such services.
3. None of the work or services covered by this Agreement shall be subcontracted without the prior written approval of Van Zandt County. Any work or services subcontracted hereunder shall be specified by written contract or agreement and shall be subject to each provision of this Agreement.

## Compliance with Local Laws

The Contractor shall comply with all applicable laws, ordinances and codes of the State and local governments, and the Contractor shall save Van Zandt County harmless with respect to any damages arising from any tort done in performing any of the work embraced by this Agreement.

## Applicable Codes and Regulations

The Contractor is responsible for compliance with all applicable codes and regulations including but not limited to the latest adopted versions of the International Building Code, National Electrical Code, International Fire Code, International Mechanical Code, and all other applicable codes by the State of Texas. The Contractor shall also be responsible for compliance with applicable Environmental Protection Agency, Federal Communications Commission, and Federal Aviation Administration regulations and any other codes or regulations necessary for implementation of the Contractor’s proposal.

## Construction Permits

The Contractor shall be responsible for obtaining all necessary construction permits for system installation and implementation. The County will provide assistance in expediting the permitting process. The Contractor will retain the ultimate responsibility for obtaining the appropriate construction permits.

## Reports and Information

The Contractor, at such times and in such forms as Van Zandt County may require, shall furnish the Van Zandt County such periodic reports as it may request pertaining to the work or services undertaken pursuant to this Agreement, the costs and obligations incurred or to be incurred in connection therewith, and any other matters covered by this Agreement.

## Records and Audits

The Contractor shall ensure that Van Zandt County maintains fiscal records and supporting documentation for all expenditures of funds made under this contract in a manner that conforms to 2 CFR 200.300-.309, 24 CFR 570.490, and this Agreement. Such records must include data on the racial, ethnic, and gender characteristics of persons who are applicants for, participants in, or beneficiaries of the funds provided under this Agreement. The contractor shall retain such records, and any supporting documentation, for the greater of three years from closeout of the Agreement or the period required by other applicable laws and regulations.

## Access to Records

The U.S. Department of Housing and Urban Development (HUD), Inspectors General, the Comptroller General of the United States, the Texas General Land Office, and Van Zandt County, or any of their authorized representatives, shall have access to any documents, papers, or other records of the Contractor which are pertinent to the ARPA Award, in order to make audits, examinations, excerpts, and transcripts, and to close out the Van Zandt County’s ARPA contract with the Treasury Department.

## Retention of Records

The Contractor shall retain all required records for three years after the Van Zandt County makes its final payment and all pending matters are closed.

## Configuration Responsibility

Contractor will be responsible for the configuration and integration of all equipment, systems and services furnished under the Contract. Contractor will be solely responsible for the performance of the delivered equipment. Any additional components not specifically identified in the Contract and its attachments, but that is required in order to fulfill the requirements set forth under the terms and conditions of the Contract, shall be provided and installed by the Contractor without additional charge.

## Prime Contractor Responsibility

If a Proposal includes hardware, software and/or other services to be supplied by other vendors or subcontractors, it will be mandatory for the Contractor to act as Prime Contractor for the procurement of the entire system and related services. The Contractor shall be considered the sole point of contact with regard to contractual stipulations to include payment of any and all charges; the County does not recognize subcontractors in this instance.

In addition, the Contractor will be responsible for meeting all other requirements of these specifications. The Proposal must clearly indicate the hardware and software which is not manufactured, marketed and/or maintained by the Contractor.

Subcontractors utilized for the project shall be companies with extensive experience providing the relevant equipment and services assigned by the Contractor. The Contractor shall state the tasks and time commitments for each proposed subcontractor. Contractor shall provide acceptable documentation proving each subcontractor’s qualifications, the number of, and the qualifications of, their personnel available for the contract work. Contractor agrees to use only the subcontractors and personnel previously identified. Assignment of different subcontractors and personnel other than identified will require written permission from the County. The County reserve the right to disapprove, with reasonable cause, any subcontractor and any employee.

Contractor agrees that it is fully responsible for the acts and omissions of its subcontractors on the same basis as it is for the acts of omissions of persons directly employed by it, and that failure of the County to disapprove a subcontractor shall in no way relieve the Contractor of such obligations. Nothing contained in the Contract shall create any contractual relationship between any subcontractor and the County nor create any obligation on the part of the County to pay, or to see the payment of, any sums to any subcontractor. The Contractor shall not write any subcontract at variance with the conditions of the Contract documents.

The Contractor shall operate as an independent and not as an officer, agent, servant or employee of the County. The Contractor shall have exclusive control of, and the exclusive right to control, the details of its operations hereunder, and all persons performing same, and shall be solely responsible for the acts and omissions for its officers, agents, employees, vendors, and subcontractors. The doctrine of respondent superior shall not apply as between the County and Contractor, its officers, agents, employees, and subcontractors. Nothing herein shall be construed as creating a partnership or joint enterprise between the County and Contractor, its officers, agents, employees, consultants, and subcontractors.

Any subcontractor utilized by the Contractor to complete any of the goods and services described in this RFP shall have the applicable levels of insurance specified herein that are related to the services being performed by the subcontractor. See insurance requirements in §2.7.

## Detailed Design Review

The Contractor will submit a detailed design document for review in accordance with §3.15 within thirty (30) days of contract award unless otherwise agreed upon by the County. The Detailed Design will be presented at the specified Design Review meeting. The Contractor will be expected to interface with representatives from the County and its consultants to discuss any relevant project issues, options, and integration details. Any necessary design changes/modifications will be presented to the County within 14 days of the Detailed Design meeting.

Upon acceptance of the Contractor’s design, the County will issue a Notice-to-Proceed (NTP). Equipment ordering, delivery and installation will not begin until the County accepts the detailed design and issues a formal Notice-to-Proceed. Approval of design documentation by the County shall be general in nature and shall not relieve the Contractor of responsibility for the accuracy of the document nor for the proper design and performance of the equipment and services provided under this procurement.

## Work by County or their Vendors

The County reserves the right to perform work related to this project and to perform or award separate contracts in connection with other work at the site locations. All such work and responsibilities shall be identified in the Contract and/or Statement of Work. The Contractor shall incorporate and coordinate the Contractor's work with work of the County’s separate vendors as required by the Contract documents.

Costs caused by defective or ill-timed work shall be borne by the party responsible. If the Contractor claims that delay or additional cost is involved because of such action by the County and/or its separate vendors, the Contractor shall make such claims as provided in the Contract.

## Warranties

### General

The provisions of this section are general warranty terms.

### Warranty of Title

The Contractor warrants that it possesses good, clear, and marketable title to all equipment and materials provided hereunder and there are no pending liens, claims, or encumbrances whatsoever against said equipment and materials.

### Warranty of Specifications and Performance

The Contractor warrants that all equipment, materials and workmanship furnished, whether furnished by the Contractor, or its subcontractors and suppliers, will comply with the specifications, drawings and other descriptions supplied or adopted and that all services will be performed in a workmanlike manner.

Contractor shall be solely responsible for the performance of the delivered materials and equipment. Contractor shall provide Tower Infrastructure that shall provide the equipment, performance, and services as described in the Contract, its Exhibits, Statement of Work and the RFP.

### Equipment Warranty and Maintenance

All equipment, materials, parts, and services shall be warranted against defects in design, materials and workmanship for a period not less than one year as defined in §4.23.

## Final Acceptance

The Contractor shall receive final acceptance upon completion of the following steps:

1. Submission of all documentation required by the RFP
2. Completion of all construction and installation required by the RFP
3. Completion of all services as required by the RFP
4. Successful completion of all acceptance testing
5. Submission of acceptance test reports
6. Submission of all documentation including final design and “as-built” drawings
7. Final Acceptance will be issued by the County no later than thirty (30) days after successful completion of Items 1-6 above.

# TECHNICAL AND PERFORMANCE REQUIREMENTS

## General Requirements

The County is soliciting proposals from qualified firms to provide tower infrastructure and associated installation services for five (5) identified P25 Site locations within Van Zandt County to support the County’s P25 public safety trunked radio system deployment. The Respondent shall propose their equipment and services to achieve the requirements and shall be responsible for the method of accomplishing their Proposal. Any deviation from the requirements shall be specifically noted as an exception in the Proposal. The County shall have the sole authority to determine compliance with the stated requirements and the acceptability of any stated exception(s).

The Proposal must comply with the following general technical standards without exception:

* All equipment and services offered shall be of high quality and suitable for the intended purpose.
* No discontinued, used, or refurbished equipment shall be supplied.
* The Respondent or relevant subcontractor shall be authorized to sale the equipment being offered.
* All equipment, devices, and software (if applicable) proposed shall be current models with full manufacturer support at the time of Final Acceptance.

Section 3 shall provide operational and performance descriptions and minimum requirements for the desired Tower Infrastructure.

## Description of Desired Tower Infrastructure

A total of five (5) tower sites are required by the L3Harris RF Design to meet the County’s coverage requirements. The location details for the five (5) sites are listed in Table 1 below.



Table 1

Attachment 3 contains the land surveys that were recently completed for the Precinct 1 CR 1819, Precinct 2 CR 2301, Precinct 3 CR 3433 and VZC Sheriff Office sites. The land surveys were completed by Stanger Surveying (Stanger) who has offices located in Ben Wheeler and Tyler, Texas. If an easement to provide an access road to the tower compound location is required, it will be noted on the land survey drawing. Attachment 4 contains drawings for the Precinct 4 Tillman site that were provided by Tillman Infrastructure, the tower owner. All drawings in Attachment 3 and 4 define the legal boundaries of the property and tower compound and denote the location of the proposed or existing tower. The coordinates and ground elevations for the four “greenfield” towers that were identified by Stanger’s land surveys were used by the County to file the associated FAA Aeronautical Studies (FAA Studies). At the time of this RFP release, no results of the FAA Studies have been received.

## Tower Infrastructure Requirements

Based on the coverage and operational needs of the County’s P25 Radio System and the selection of tower sites to accommodate the system deployment, the following general infrastructure requirements have been developed for each of the five (5) tower sites. Table 2 defines the tower infrastructure, site upgrades and various studies that are required by the Contractor for each of the five (5) Tower sites.



**Table 2**

## Regulatory Studies

The Contractor will be responsible for performing the following regulatory and compliance studies for the four “greenfield” sites where new towers will be constructed. One or more of these studies may also be required for the County’s intended use of the Precinct 4 Tillman site which is an existing guyed tower owned and operated by Tillman Infrastructure.

* All National Environmental Policy Act (NEPA) related studies, filings, reporting and notifications
* All required FAA notices and filings after the initial 7460 filings by the County (including but not limited to the FAA 7460-2 Supplemental Notice)
* ASR Public Notice
* Certification of AM Regulatory Compliance1 (This is not required for the Precinct 4 Tillman site)

1According to the Federal Communications Commission (FCC) Rules and Regulations,

“§1 Subpart AA. Disturbance of AM broadcast station antenna patterns

Part §1.30000 Purpose.

This rule protects the operations of AM broadcast stations from nearby tower construction that may distort the AM antenna patterns. All parties holding or applying for Commission authorizations that propose to construct or make a significant modification to an antenna tower or support structure in the immediate vicinity of an AM antenna, or propose to install an antenna on an AM tower, are responsible for completing the analysis and notice process described in this subpart, and for taking any measures necessary to correct disturbances of the AM radiation pattern, if such disturbances occur as a result of the tower construction or modification or as a result of the installation of an antenna on an AM tower. In the event these processes are not completed before an antenna structure is constructed, any holder of or applicant for a Commission authorization is responsible for completing these processes before locating or proposing to locate an antenna on the structure, as described in this subpart.

Part §1.30002 Tower construction or modification near AM stations.

(a) Construction near a nondirectional AM station. Proponents of construction or significant modification of a tower which is within one wavelength of a nondirectional AM station, and is taller than 60 electrical degrees at the AM frequency, must notify the AM station at least 30 days in advance of the commencement of construction. The proponent shall examine the potential impact of the construction or modification as described in paragraph (c). If the construction or modification would distort the radiation pattern by more than 2 dB, the proponent shall be responsible for the installation and maintenance of any detuning apparatus necessary to restore proper operation of the nondirectional antenna.

(b) Construction near a directional AM station. Proponents of construction or significant modification of a tower which is within the lesser of 10 wavelengths or 3 kilometers of a directional AM station, and is taller than 36 electrical degrees at the AM frequency, must notify the AM station at least 30 days in advance of the commencement of construction. The proponent shall examine the potential impact of the construction or modification as described in paragraph (c). If the construction or modification would result in radiation in excess of the AM station’s licensed standard pattern or augmented standard pattern values, the proponent shall be responsible for the installation and maintenance of any detuning apparatus necessary to restore proper operation of the directional antenna.”

## Geotechnical Studies

Geotechnical studies must be completed for the four “greenfield” sites where new towers will be constructed. The geotechnical study may also be required for shelter and generator foundation design considerations. If this is the case, this study will also be required for the County’s intended use of the Precinct 4 Tillman “Leased” site. The purpose of the geotechnical services is to provide information and geotechnical engineering recommendations relative to:

* Subsurface soil conditions
* Groundwater conditions
* Earthwork
* Foundation design and construction
* Seismic considerations
* Field resistivity testing

The scope of services for the geotechnical studies should include drilling and sampling a sufficient number of soil borings to industry standard depths (20 to 40 feet), laboratory testing, and engineering analyses.

The Proposer’s pricing provided in its Proposal Package for tower foundations should assume normal soil conditions, typical for the areas of construction. If the results of one or more of the geotechnical studies returns a finding that requires soil treatment or a different foundation design, the Contractor’s pricing for the specific foundation will be modified and agreed upon by the parties. Note that it is not acceptable for a Contractor to use this condition to under bid the cost of the tower foundations in order to gain an unfair advantage in the proposal evaluation and scoring process. As stated previously, the Proposer’s pricing provided in its Proposal for tower foundations should assume normal soil conditions that are typical for the construction area. Proposers should clearly state in their Proposal how they arrived at the foundation design pricing presented. If the offered foundation pricing is based on past tower projects in Van Zandt County, neighboring Counties, or from some other project, please state the source.

## Construction Drawings

A full set of scaled construction drawings (CD) must be provided for each of the five sites that are generated and sealed by a licensed engineer in the State of Texas (Licensed Engineer). Proposed construction details for each site shall be presented at the Detail Design Review (DDR). These details shall be presented visually through the CDs. The CDs should show the following pages that depict the following items at a minimum:

* Detailed Site Plan
  + Tower Compound (any easement for access, access road, culvert, utility rack, fencing and gate, ground coverings - crushed rock and geotextile fabric)
  + Tower
  + Equipment Shelter w/ Dual HVAC
  + Ice Bridge
  + Generator
  + Signage
* Electrical Detail Plan
  + Shelter
  + Generator
  + All Utility Lines (including any hand holes)
    - All Grounding (shelter, generator, fencing, utility rack, etc.)
  + All Fiber Runs (if applicable for the site)
* Shelter Interior Plan
  + Door
  + Cable Trays
  + Waveguide Exit/Entry Port
  + Main Breaker Panel
  + NSC Breaker Panel (if applicable)
  + Service Disconnect
  + Manual Transfer Switch
  + Automatic Transfer Switch
  + FAA Lighting Controller (if applicable)
  + Telco/Alarm Board
  + Fire Extinguisher
  + Interior Light Fixtures & Switches
  + Exterior Light Fixture & Switch
  + Duplexed Service Outlets
  + All Grounding

The tower design and the tower foundation shall be incorporated into the CDs for the “greenfield” sites. The shelter and generator foundation designs shall be incorporated into the CDs for all sites.

The CDs shall be updated after construction is complete for each site to represent the as-built condition for each site. The as-built CDs for each site will be part of the project closeout and final acceptance deliverables.

All proposed and as-built CDs shall be provided electronically in PDF format and scaled and printable at paper size 11”x17”. The as-built CDs shall also be provided in the native format that they were created in (AutoCAD, etc.) so that they can be modified in the future, as needed. All drawings should be signed, sealed and dated by the Licensed Engineer.

## Tower Compound Requirements

This section describes the specifications for County sites requiring new tower compounds.

## 3.7.1 General

Table 2 denotes the four (4) sites that require a compound to be constructed by the Contractor. The approximate size of the compound is defined in Table 1 and in most cases is approximately 100 feet by 100 feet. However, the legal property definitions provided on the official land surveyor drawings (contained in Attachment 3) will be the final and official size of each tower compound. The tower compound will consist of the following key components:

* Access driveway
* Security fencing that surrounds the property
* Access gate that provides access to the interior of the compound
* Crushed stone that covers the ground surface of the property

In addition to the above components, the tower structure, equipment shelter, generator and utility frame will be located within the tower compound. These items will be discussed in more detail in the following sections.

## 3.7.2 Driveway

The compound should be accessible from the nearest main county road by a 20 foot wide site access driveway consisting of crushed stone. The driveway for the Precinct 3 CR 3433 will be achieved through an easement agreement with the neighboring property owner. The driveway for the Precinct 3 CR 3433 site will be considerably longer than the other “greenfield” tower sites. Please refer to the land survey drawing provided for the Precinct 3 CR 3433 site for more details.

The design and installation of the driveway should consider water drainage and if the driveway crosses a ditch area, a culvert(s) suitable to support a ¾ ton work vehicle should be installed by the Contractor. Attachment 7 contains the Van Zandt County Permit for Installation of Culverts. Please refer to this document as it relates to the installation of the culverts at the four “greenfield” tower sites. Unless specified differently by the County as part of the culvert permit process, the culvert(s) should be 30 feet long and the appropriate diameter for each site application. The culvert(s) should never be less than 12 inches in diameter.

If during the site construction process the Contractor deems that a temporary driveway is required to support cranes, large delivery vehicles, excavation equipment, etc., the Contractor shall provide and install at their sole cost a temporary driveway and not utilize the site access driveway for over-sized construction equipment and vehicles.

## 3.7.3 Security Fencing

The compound property shall be completely surrounded by a contiguous 8 foot tall chain link fence that is topped with three strands of razor wire. The razor wire topper should angle outward from the compound at a 45 degree angle and should extend at a minimum 12” above the top of the 8 foot chain link fence making the fencing 9 foot tall overall. The fencing and all gates should utilize galvanized metal components and should be installed with concrete footings as specified in the Figure 2 drawing. The fencing and access gate should be properly grounded per the specifications found in the L3Harris Site Grounding and Lightning Protection Guidelines T4618RevF (see Attachment 5).

## 3.7.4 Access Gate

The compound shall be accessible from the nearest main road via the driveway and a 20 foot wide double access gate. The gate shall be 8 foot tall chain link fence that is topped with three strands of razor wire, overall height 9 foot. The gate should utilize galvanized metal components and should be installed with concrete footings as specified in the Figure 2 drawing. The gate shall be heavy duty and contain a locking mechanism/means to accept a heavy duty outdoor-rated combination or key lock. The locking mechanism holes must be able to accept a lock with a shackle diameter of 0.5 inches or larger.

## 3.7.5 Ground Covering

All ground areas within the security fencing (tower compound) and all driveways shall be covered with a geotextile fabric and at least 4 inches of crushed stone to control vegetation, erosion and grass fires from approaching the tower compound. The crushed stone for the tower compound should match the material utilized for the access driveway. The geotextile fabric should be rated for at least 50 years durability.

## 3.7.6 Utility Rack

A utility rack shall be installed inside of each compound either to the left or right after entering the main access gate. The utility rack will support electric meters and the access and egress points for telco and electrical utilities for the site. The telco/fiber circuits and electrical service shall enter the compound and terminate at the utility rack via underground conduits from the nearest utility pole and/or utility vault. The utility rack should be at least 8 feet wide and 6-7 feet tall. The rack should be constructed and installed using concrete footings at the proper depth to fully support the existing structure and 50% future growth. The Rack should include a meter for the County’s use and meter socket space for an additional 5 meters for future tower tenants.

## 3.7.7 Signage

The Contractor will prove the following metal outdoor rated signs to be installed at each tower site that requires a new compound and tower (4 sites total). The required signs and counts include:

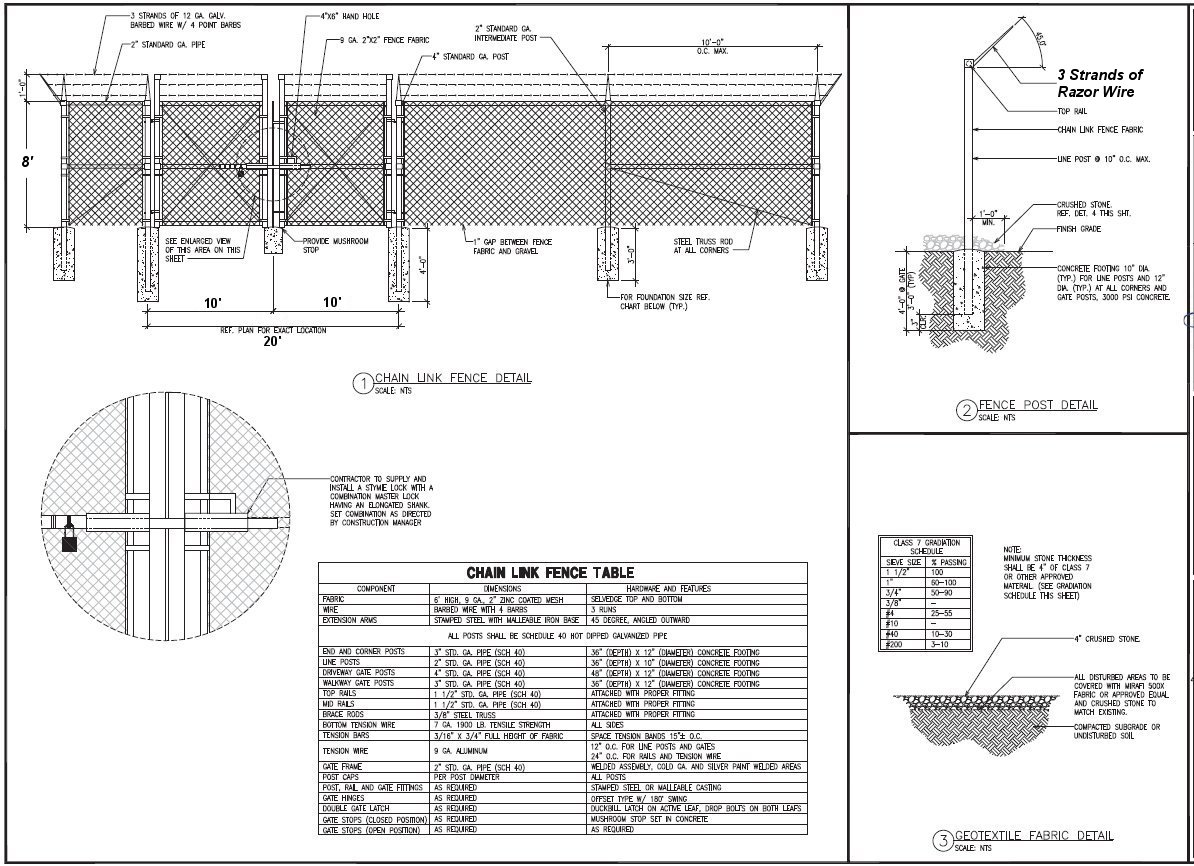
* Antenna Structure Registration (ASR) Sign – Customized with the FCC assigned ASR number; County to provide ASR’s once they are assigned. Each sign should be at least 12 inches x 16 inches in size, two signs per tower site, post one sign on the main access gate and one on the opposite side of the compound fencing, opposite the gate.
* Site Owner Information Sign - Van Zandt County Property, No Trespassing, For Leasing Information Call (phone number TBD). Each sign should be at least 16 inches x 24 inches, four signs per tower site. Post one sign on the main access gate and center the other three signs on each of the other three sides of the compound fencing.

**3.7.8 Drawings**

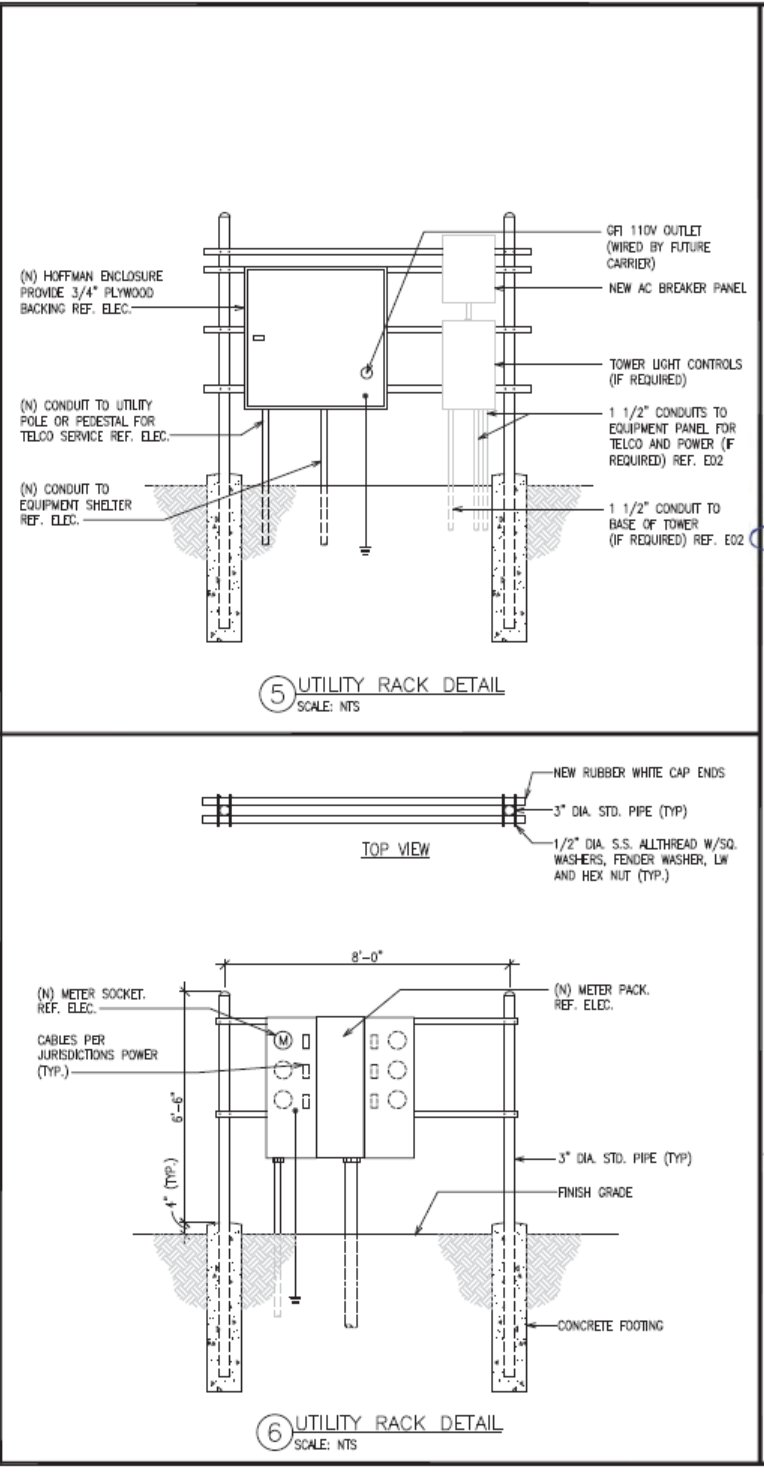
Figure 1 contains a drawing depicting the proposed layout for a typical 100 foot by 100 foot compound. Figure 2 contains example drawings that contain supporting details and additional specifications for the security fencing, access gate and geotextile fabric and crushed stone ground covering described previously. Figure 3 contains details and specifications for the utility rack. Figure 3 shows the FAA tower lightning controller mounted on the utility rack. Please note the FAA lighting controller will be installed inside of the County’s radio equipment shelter and not on the utility rack.



**Figure 1**



**Figure 2**

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**Figure 3**

## Tower Requirements

This section describes the tower specifications for the “greenfield” sites that require the construction of towers.

## 3.8.1 General

Table 2 denotes the four (4) sites that require a new tower build (”greenfield”). The Contractor should utilized a Texas-registered and licensed Professional Engineer (PE) to design the foundation and tower for each site. The licensed PE can be a staff engineer of the Contractor, a subcontractor or a licensed engineer of the tower structure manufacturer. The Proposer shall specify the arrangement and means that it intends to utilize to ensure the tower and all foundation designs are completed by a licensed PE in the State of Texas. The Contractor shall provide for each site PE sealed drawings that include the design specifications for the tower foundation, tower structure, equipment shelter and generator foundations and, if required, the wave guide bridge. The basic standard for the design of newly required steel antenna towers, wave guide bridges and supporting structures, shall be ANSI/TIA/EIA-222-H Risk Category III.

All new towers required by the County shall be self-supporting (free-standing) having an overall height of 300 feet above ground level (AGL). New towers shall be solid steel leg design. Each new tower shall be designed for a minimum sustained 120-mph wind speed with the full complement of necessary antennas and required lights and other federally-required equipment.

The positioning of the tower within each compound shall place one apex of the triangular tower pointed due north. The County’s equipment shelter and generator shall be placed towards a back corner of the tower compound so that it has minimal impact on future construction at the site associated with any wireless operator collocation.

## 3.8.2 Transmission Line Ladder and Climbing Ladder

Towers shall be supplied with full-length transmission line ladder(s) designed to accept all transmission lines needed for the proposed design plus a 50% growth factor.

Towers shall be equipped with an outside climbing ladder/cable safety device in accordance with current OSHA regulation 29 CFR §1910.27.

## 3.8.3 Tower FAA Lighting System

Tower lighting shall conform to FAA Advisory Circular AC 70/7460-1K, or current revision for Obstruction Marking and Lighting and shall conform to the requirements of each tower’s respective FAA determination. It is imperative that only properly shielded, RFI-conditioned lighting devices be provided. Proposer shall provide detailed lighting equipment specification literature in its proposal package sufficient in scope where the County can determine the suitability of the proposed lighting system. The lighting control/power cables shall be installed in conduit for the entire height of the tower. The tower lighting system proposed shall utilize LED technology to minimize tower climbs for lighting maintenance. The lighting system controller shall be installed inside of the equipment shelter at each of the “greenfield” sites.

The Contractor shall follow all FAA tower lighting standards, specifications and rules as it relates to the construction of the tower. This requirement includes properly notifying the FAA during the various stages of the tower construction process and placing temporary battery-powered FAA lighting on the tower at the required heights and locations until the permanent FAA lighting system can be installed at the site and made fully operational.

On September 11, 2020, the FAA changed specifications for LED-based red obstruction lights to make them visible to pilots using certain night vision goggle systems. Per FAA AC 150/5345-43, Specification for Obstruction Lighting Equipment, manufacturers are now required to meet the new specification for certified red LED-based obstruction lights. All provided LED tower lighting provided must comply with this specification.

## 3.8.4 Structural Design

Each tower shall be designed to support the proposed antennas, transmission line, wave guide, and other tower-mounted equipment. In addition, each tower shall be designed to support additional collocated wireless installations that are typical for commercial cellular/data providers (“Cell Providers”) like AT&T, Verizon, and T-Mobile and wireless installations that are typical for Wireless Internet Service Providers (“WISP”). It is the County’s intention that each “greenfield” tower is designed to have adequate structural capacity to allow non-County equipment to be added to the tower through a lease arrangement.

The specifications for the County’s installation along with the typical installation parameters for future collocated antennas are provided herein.

## 3.8.5 Tower Grounding and Lightning Protection

All towers at the four “greenfield” sites shall be designed and installed with electrical grounding and lightning protection systems that are in full accordance with the L3Harris Site Grounding and Lightning Protection Guidelines T4618RevF (see Attachment 5). See more details related to grounding, surge protection and lighting protection in § 3.12 of the RFP.

The design for the tower-top lighting rod protection system should implement a multiple rod design for redundancy. The tips of the lightning rods installed at the top of each tower should extend 10 feet above the top of the structure. The lightning rod tips height requirement can be accomplished by installing the rods atop an adequately designed and secured poles. The FAA Aeronautical Study for each site will be submitted taking into account appurtenances extending 10 feet above the top of each tower structure.

## 3.8.6 Required Tower Submittals

The Contractor shall furnish wind-load stress and foundation calculations used in the design of each proposed tower structure.

The Contractor shall furnish documentation approved by a registered professional engineer, licensed in the State of Texas, certifying that the proposed tower and foundation meets the requirements of the latest revision of the structural standard ANSI/EIA-222-H Risk Category III and is in accordance with these Specifications.

The Contractor shall furnish written certification that all installed tower components have been assembled and hot-dipped galvanized in accordance with these minimum requirements.

The Contractor shall provide a detailed report of electrical ground resistance measurements of the completed, as-installed, electrical grounding system, on a per-site basis with field drawings to indicate the measurement at specific locations.

The Contractor shall provide all environmental and regulatory studies, permits, and submittals necessary for proposed equipment and services.

The tower site layouts and configurations may be updated during the Design Review as needed to reflect the final designs and configurations.

## 3.8.7 Tower Installations for Design Considerations

Two tower designs should be provided by each Proposer. One design will accommodate the County’s installation and a smaller subset of co-located wireless companies. The second design will provide a tower that can support a larger number of co-located wireless companies. This approach provides the County with the options and details it requires to make a final decision on the strength and support capability of the tower that will ultimately be constructed at each tower site. The final decision on the tower design the County will require at each site shall be made at the Detailed Design Review after contract execution. The costs associated with each tower design will be considered during the vendor evaluation and selection process.

Tower Design 1 should be designed to support the following equipment installations:

* Van Zandt County P25 installation and associated tower-mounted equipment
* One (1) Cellular/Data Commercial Service Providers
* Two (2) WISPs

The alternate tower design adds the ability for the tower structure to support the equipment installations for two (2) additional Cellular/Data Commercial Service Providers. Tower Design 2 should be designed to support the following equipment installations:

* Van Zandt County P25 installation and associated tower-mounted equipment
* Three (3) Cellular/Data Commercial Service Providers
* Two (2) WISPs

Tower Design 1 and Tower Design 2 shall each include a 30% growth factor for the specified County equipment. **The 30% growth factor does NOT include the cellular and WISP general equipment requirements.**

## 3.8.8 Van Zandt County P25 Installation Specifications

The County’s standard P25 installation at each of the tower sites will include:

* Two (2) omni-directional type antennas (LMR - Land Mobile Radio antennas)
* Two (2) microwave dish antennas
* Two (2) GPS receive antennas
* Tower-top amplifier (TTA)
* Antenna mounts for each LMR and microwave dish antenna
* Transmission lines for each LMR antenna and TTA (one line per antenna and TTA)
* Waveguides for each microwave dish antenna

The Precinct 1 CR 1819 and Precinct 3 CR 3433 tower sites will also each require the installation of two additional conventional VHF radio system repeaters and their associated duplexed antenna system for inter-County interoperability. The antenna system associated with each conventional repeater would include the following:

* One (1) omni-directional VHF base station antenna (Decibel DB616, 5.3dBd, 20’, 52 lbs)
* One (1) transmission line (RFS LCF78-50JA, 7/8" diameter coax, 0.27 lb/ft)
* One (1) antenna mount (Sinclair SMK-425-A7-T3)

The Precinct 1 CR 1819, Precinct 3 CR 3433 and VZC Sheriff Office tower sites will also each require four (4) control station antennas to be installed at 20’ or less on the tower to support interoperability radios for communications with neighboring public safety agencies. The antenna system associated with each interop control station radio would include the following:

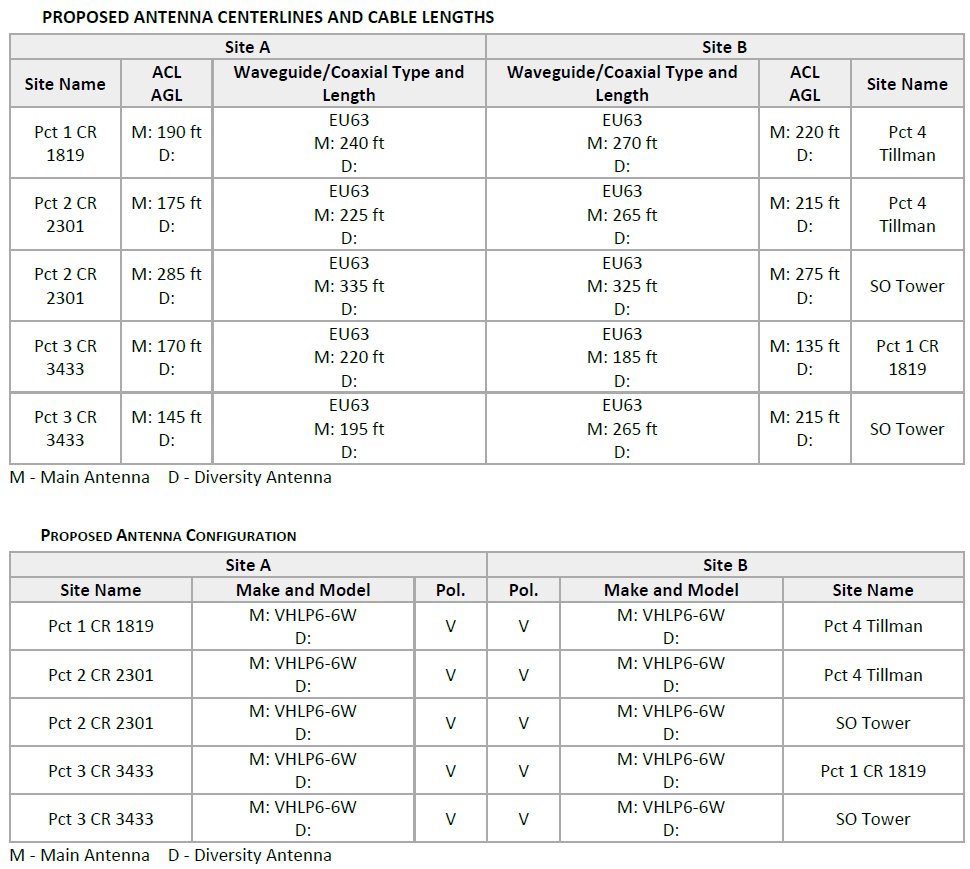
* One (1) omni-directional compact tri-band (VHF / UHF / 700-800-900) antenna (Sinclair SC2340-HMBSNF, unity gain, 57”, 4 lbs)
* One (1) transmission line (RFS LCF12-50J, 1/2“ diameter coax, 0.125 lb/ft)
* One (1) antenna mount (12”-24” standoff)

Table 3 contains the County’s LMR antenna installation details for each of the tower sites and Table 4 contains the County’s backhaul microwave antenna installation details for each site. In addition, Table 5 contains the size and loading specifications for the County’s LMR and Microwave antennas, their associated mounting hardware and transmission lines and the TTA. Please note that the microwave installation at each “greenfield” site will be the same. However, there are two different designs for the LMR omni-directional antennas and those are identified by site in Table 5.

Note that the Precinct 2 CR 2301 tower and Sheriff’s Office tower require the microwave dishes to be mounted near the top of the structure, above 285 foot. The structural design of these two towers should consider this requirement for the microwave backhaul design.



**Table 3**

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**Table 4**



**Table 5**

## 3.8.9 Typical Cellular/Data Commercial Provider Installation

A typical Cellular/Data Commercial Provider (Cell Provider) installation includes three sectors of multi-band panel antennas and the associated remote radio units (RRUs) mounted on the tower at the same elevation. For structural analysis considerations, it is assumed that a Cell Provider installation would include (specifications provided per item):

* Nine (9) panel antennas (Commscope JAHH-65C-R3B-V3, 96” H x 14” W x 8” D, 80 lbs)
* Twelve (12) RRUs (Ericsson 4478, 18” H x 14” W x 8” D, 58 lbs)
* Three (3) 12.5’ face width high capacity sector v-frame mounts (Commscope SFG22HDX-12-5-WL, 120” H x 150” W x 42” D, 738 lbs),
* Three (3) 1/2" fiber cables, and
* Six (6) 3/4” DC power cables.

## 3.8.10 Typical Wireless Internet Service Provider (WISP) Installation

A typical WISP installation includes eight (8) access point antennas using both unlicensed and licensed fixed wireless spectrum in the 5-7 GHz and 3.65 GHz frequency bands. At each new tower site, the WISP would like to obtain the highest possible space on the tower. For instance, assuming 0-225 feet on the 300 foot tower is available, the WISP would like to have a radiation center at or near 225 feet.

For ground space, the WISP will require a 6’ x 6’ concrete pad which will house an outdoor-rated cabinet, conduits, hand holes, and a 50 Amp electrical service. The WISP would also request an all utility easement from the right of way to the cabinet. Please note that all civil improvements required at the site by the WISP will be completed by the WISP and/or by its contracted vendor.

Table 6 contains the specifications for the WISP installations to use in the design of each “greenfield” tower and its foundation. Please note that the Cambium Networks PMP 450v has not been publicly released and wind-loading information is not available. They Contractor shall assume that PMP 450v will have the same physical footprint and wind-load as the PMP 450m. Typical mounting hardware should be assumed for the WISP antennas.



**Table 6**

## 3.8.11 Antenna Installation Heights

The tower drawings provided in Figure 4 denote the designed locations of the County’s antenna systems associated with its P25 radio system deployment. The tower drawings also denote proposed elevations for the Cell Provider and WISP antennas on each tower that should be utilized for developing the two tower designs requested.

The Cell Provider and WISP elevations noted in green on Figure 4 are associated with Tower Design 1 and the two additional Cell Provider elevations noted in blue on Figure 4 are the additional loading for Tower Design 2.

**As noted in §3.8.7, each tower design shall include a 30% growth factor for the County equipment.**



**Figure 4**

## Equipment Shelter Requirements

Table 2 denotes the five (5) sites that require a shelter. All proposals shall include new shelters for these locations. No used shelters shall be initially proposed. Allowing used shelters to be part of a proposal package could present volatility and uncertainty into the proposal and evaluation process. After award and contract execution, the selected Contractor will be required to present a Detailed Design Review (DDR) to the County and Radio Consultant. At the DDR, the Contractor can provide the County with an option of used and refurbished shelters if the offering provides at least a 30-40% savings verses new shelters. The County will consider refurbished shelters if the offering meets or exceeds all specifications and requirements for an equipment shelter provided herein. In no instance will the County accept used HVAC equipment. Regardless if the provided shelter is new or used, all HVAC units shall be new and under full manufacturer warranty.

## 3.9.1 General Requirements

Equipment shelters shall be of a skid-mounted, bullet-resistant, prefabricated concrete aggregate type designed to house radio communications and sensitive electronic equipment. Equipment shelters must provide an interior climate suitable for the operation of sensitive electronic equipment; it must be dust proof, watertight, and airtight.

## 3.9.2 Shelter Dimensions

Two different size radio equipment shelters will be priced for this project. The final shelter configuration may utilize a mix of small and large shelters or the shelter configuration may utilize large shelters at all five Tower sites for uniformity and future expansion capabilities across the entire network. The County’s P25 tower sites will require either a 12 foot by 12 foot shelter building (measured on the exterior) or a 12 foot by 16 foot shelter building.

The interior dimensions of the 12 foot by 12 foot shelter (small shelter) should be a minimum of 11 foot by 11 foot and the interior dimensions of the 12 foot by 16 foot shelter (large shelter) should be a minimum of 11 foot by 15 foot. The overall height of each of the shelter should be a minimum of 9 feet measured from floor to ceiling on the interior of the shelter.

Figures 5 and 6 herein contains drawings of the shelter sizes and proposed equipment layouts on the interior of the two size shelters.

## 3.9.3 Shelter Exterior

Each equipment shelter shall be supported by a concrete pad with attachment devices appropriate for securing the building assembly to survive severe storm force (no less than 120-mph) winds. Skid components, attachment hardware, cross-braces and lifting eyes shall be hot-dipped galvanized after fabrication.

The exterior wall finish shall be exposed aggregate. Exterior walls must be bullet proof and at least 5”-6” thick. The roof shall be a flat, tapered type having a minimum slope of 1/2" per foot from the roof centerline. The flooring material should be a laminate style with a high level of durability. All exterior wall, floor and roof joints shall be sealed using a compressible, resilient sealant. There shall be no exposed roof-to-wall or wall-to-floor joints. Walls shall have a minimum thermal insulation factor of R11.

Building openings for the door, air-conditioners, transmission line entrance and other entries shall be framed and sealed in such a manner that moisture cannot penetrate the insulation within the walls or the interior walls of the structure.

A single 42" wide x 84" tall x 3” thick insulated bulletproof steel door, equipped with a three-point latch, shall be provided for each shelter. All door hardware shall be stainless steel and incorporate three external hinges. Door shall open outward to maximize internal building utilization.

The shelter at each tower site should be positioned at ground-level so that the waveguide entry/exit panel is located within 20 feet of the tower’s transmission line ladder.

All hardware used on the exterior surfaces of this shelter shall be either hot-dipped galvanized or stainless steel.

All building and foundation detail drawings and related calculations must be reviewed, approved and stamped by a Texas-registered professional engineer.

## 3.9.4 Shelter Interior

Each shelter shall be equipped with a main overhead cable tray located above all planned equipment cabinet groupings that runs the length of the shelter and terminates at the waveguide entry/exit panel. The main cable tray should be at least 18 inches wide and should accommodate transmission lines and telecommunications cables, as necessary. Auxiliary cable trays running perpendicular to the main cable tray should also be provided to support telco lines, alarms lines, and various transmission lines and telecommunications cables, as necessary. The auxiliary cable trays should be at least 12 inches wide. All cable trays should be installed suspended from the 9 foot ceilings and also attached at each end to the walls of the shelter. The bottom edge of all cable trays should be installed 8 feet above the shelter floor so that it clears the top of the tallest L3Harris equipment cabinets/racks which are 7 feet tall. All cable tray joints shall be electrically bonded using No. 6 AWG copper wire jumpers with approved compression fittings. Trays shall be bonded to the shelter’s interior ground halo.

Each shelter should be outfitted with a waveguide entry/exit panel. The panel should include at least 12 ports, each 4 inch diameter in size. The panel should include adjustable rubber cable boots for each port so that the boot can be adjusted around the transmission lines and cables in order to prevent outdoor elements and insects from entering the shelter. The panel layout should be 4 x 3 design.

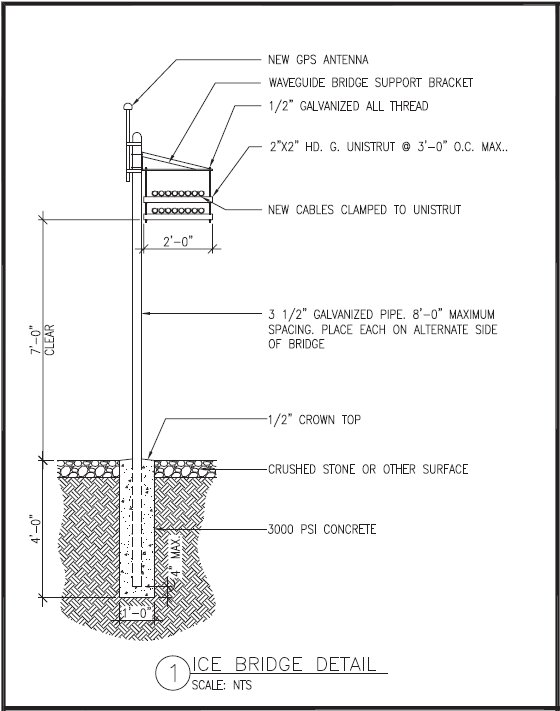
The Automatic Transfer Switch (ATS), the Manual Transfer Switch (MTS), and the Service Disconnect (SD) should be installed on the interior of each equipment shelter. The ATS, MTS and SD should be rated for electrical specifications that meet or exceed the requirements provided §3.9.5 Electrical Service.

The FAA Tower Lighting Controller should also be installed on the interior of each equipment shelter for the “greenfield” sites. The locations of these units and any other equipment installed on the interior walls of the shelter should not impede access into the shelter such that the doorway access is limited to less than 3 feet 6 inches.

Each shelter shall be equipped with an Emergency Power Off (EPO) switch, also called an EPO button or EPO panel. The EPO mechanism is a safety measure to quickly and completely disconnect electrical power to the entire shelter in the event of an emergency. Activation of the EPO switch will also prevent the generator at the site from activating and supplying backup power to the shelter/site. The EPO switch shall be installed on the interior wall of the shelter just to the right after entering the door. The EPO switch shall be equipped with a clear cover that prevents accidental activation.

Each shelter should be equipped with a 10 lb. carbon dioxide fire extinguisher designed specifically for combating fires associated with sensitive electronics. The provided extinguisher should be industrial-grade construction, powder coated for corrosion resistance, rechargeable and come with a wall bracket. The fire extinguisher should be mounted on the interior of each shelter near the door in a location that it does not block access.

Each shelter shall be equipped with an ice bridge to provide protected support for all of the County’s transmission lines and cabled from the tower’s cable ladder location to the waveguide entry/exit panel of the shelter. The ice bridge shall be designed to support 100% more load than proposed by the County for its equipment installation. See the ice bridge drawing in Figure 5 for more details on the construction requirements. Alternate designs for the ice bridge may be acceptable assuming compliance with County’s equipment loading/support requirements above and final approval by the County.



**Figure 5**

The shelter drawings provided in Figure 6 and Figure 7 denote the proposed layouts of the two shelter sizes. The drawings depict the proposed locations of the cable trays, service outlets, main panel, transfer switches, waveguide panel, door, AC units, and L3Harris-provided equipment racks/cabinets.



**Figure 6**



**Figure 7**

## 3.9.5 Electrical Service

Each shelter site should be equipped with 400 Amp single-phase 240 VAC electrical service. The Contractor shall furnish and install one main circuit breaker panel with a minimum of 30 breaker spaces. This breaker panel will be referred to as the Main Breaker Panel.

The electrical service to the shelter should be properly protected from surges prior to the service lines entering the main breaker panel. The electrical service should be properly grounded per the L3Harris Site Grounding and Lightning Protection Guidelines T4618RevF (see Attachment 5) and current applicable electrical codes.

The shelter shall be equipped with 7 or 8 total duplex service outlets feed by two dedicated 20A circuit breakers. The 12’x12’ shelter size will require 7 service outlets and the 12’x16’ shelter will require 8 service outlets. The duplex service outlets should be installed in the general locations depicted on the drawings provided in Figures 6 and 7 so that they do not hinder the placement of the equipment racks and are accessible per the proposed rack/cabinet locations against a wall. The duplex enclosures for the service outlets should be low profile with minimal extension from the shelter interior walls. All breakers, conduits, and wiring associated the service outlets must be provided and installed by the Contractor.

The County plans to install for interoperability two VHF conventional repeaters at the Precinct 1 CR 1918 site and two VHF conventional repeaters at the Precinct 3 CR 3433 site. Each repeater will require a 20A dedicated circuit for operation. The Contractor will be responsible for providing all the materials and the installation of these four circuits. The circuits should be installed overhead in the noted shelters. These circuits should be installed on the ceiling above the Future cabinet that is located next to the Microwave & Interop cabinet. The receptacle for each circuit will be either standard three prong or a twist-lock type to be determined.

Table 7 contains the AC loading calculations provided by L3Harris, which considers the DC Power Plant, 120 VAC inverters, and NSC circuits required for the L3Harris geo-redundant NSC (Network Switching Center). The L3Harris DC Power Plant to be installed inside of the equipment shelter at each of the five Tower sites will require four (4) 240 VAC dedicated 40Amp circuits and two (2) 240 VAC 20Amp circuits for power. These circuits will be hardwired into the DC Plant from the shelter’s main breaker panel by L3Harris. All conduits, wiring, breakers and installation of the circuits required for the L3Harris DC Power Plant on the interior of the equipment shelter at each site will be the sole responsibility of L3Harris.



**Table 7**

The Precinct 3 CR 3433 tower site (larger 12’x16’ shelter) will require a 120 VAC 30A breaker panel to provide power from the DC Power Plant to the L3Harris geo-redundant NSC (Network Switching Center). This breaker panel will be referred to as the NSC Breaker Panel. L3Harris will be responsible for all conduit and wiring necessary to make the connections to the NSC Breaker Panel.

The Precinct 1 CR 1819 tower site currently has an underground electrical service line for the home owner, which could interfere with the tower construction. The Contractor will need to work with the local power company to relocate the home owner’s electrical service during the timeframe that the electrical service for the County’s shelter is being brought into the site. The electrical service relocation will need to be addressed prior to the construction of the tower foundation at this site.

All installed circuits shall be labeled on the outlet cover and inside of the Main Breaker Panel using an intuitive naming convention. Labels for the outlet covers should be made with a label maker and not hand written. All labels on the inside door of the Main Breaker Panel should be made with a label maker or legibly written.

## 3.9.6 Grounding, Lightning Protection and Surge Protection

The shelter shall be furnished with an interior and exterior electrical ground halo and power surge protection in accordance with the L3Harris Site Grounding and Lightning Protection Guidelines T4618RevF (see Attachment 4). All grounding, lightning protection and surge protection requirements listed in the L3Harris Site Grounding and Lightning Protection Guidelines T4618RevF document should be adhered to for the shelter design and installation.

## 3.9.7 Telco/Alarm Board

Each shelter shall be furnished with a 4 foot x 4 foot wall mounted Telco/Alarm board provided for mounting punch blocks and future ancillary equipment. Each board should be provided with four (4) Standard Type-66 Punch Blocks, Siemon S66M1-50, or equivalent, for device alarm termination for each shelter. The dry-contact shelter/equipment alarms will be terminated at the 66 block(s) on the Telco/alarm board. Any equipment utilizing SNMP alarms will be routed via Contractor-supplied Ethernet to specified switch, provided by others. L3Harris will provide all other VIDA Virtual Site (VVS) components required to integrate site alarms and new equipment alarms per the alarm connection details in this plan. Alarm connections to the 66 block(s) to be made in accordance with the following practices:

* + All dry-contact equipment alarms will terminate at a standard Type 66 punch block on the A pin column.
  + Alarms will be cross-connected from the D pin column to a VVS MOXA block for integration into the VVS.

## 3.9.8 Lighting

LED light fixtures shall be provided and installed as necessary to provide effective illumination for the entire shelter. At a minimum, the overhead lighting should include three separate multi-bulb fixtures evenly distributed within the shelter and installed as to not limit access to the overhead cable trays. The interior lighting should be motion activated with settings available to specify the turn-off time in absence of motion. The interior lights switch shall be located just inside the door opening on the side opposite the hinges and at standard switch height (52” above floor to base of box). Emergency exit and interior lighting shall be provided as required by fire code. Exterior lights above/near the door and area lights on each of the exterior shelter corners shall be controlled by an outdoor rated photocell. The exterior lighting should activate at dusk and turned off at sunrise. All lighting provided and installed by the Contractor should by LED technology.

## 3.9.9 HVAC Units

Each shelter should be provided with new dual, wall-mounted heating and air-conditioning systems (HVAC) appropriately sized for each shelter/equipment’s anticipated heat load. Each HVAC unit shall incorporate circuitry to ensure that both compressors do not attempt to restart at the same time. There shall be timer circuits to rotate use of the two HVAC units on a weekly basis. Additionally, sensors may cause both HVAC units to run simultaneously as needed to reduce the internal temperature to a safe operating level. Table 8 contains the heat load figures for each site taking into account the L3Harris provided equipment.



**Table 8**

Each HVAC unit for each tower shelter (2 units total) should be designed to compensate for the BTU figures presented in Table 8 with an additional 35% growth factor to compensate for other ancillary equipment in the shelter that can also produce heat.

Shelters shall incorporate a thermostatically controlled fan system designed to operate in the event of a total HVAC failure and where the building’s interior temperature exceeds 90°F. This system shall incorporate appropriate dampers, screens and filters to limit dust and insect entry into the shelter.

## 3.9.10 Alarm Systems

The Contractor shall furnish and install various sensors and alarms at each site. These devices will be used by the County to remotely monitor critical operations and happenings at each Tower site to ensure the site is operating under optimum conditions. Data cables and wiring for each alarm, sensor and diagnostic output should be routed to the telco board in the shelter by the Contractor. Final punched down in the provided 66 block will be performed by others. The Contractor shall label all cabling and wiring at the telco panel with at least 4 feet of additional cabling to accommodate final terminations, connections, etc. All routing of data cabling and wiring that originate from outside of the shelter shall utilize separate underground conduits of sufficient size to accommodate not only the necessary wiring/data cabling but also a pull string per conduit path.

Each shelter shall include a humidity sensor and an over/under temperature sensor, continuously adjustable over the range of 30°F to 98°F, having independent Form-C output contacts suitable for high/low temperature alarm activation.

The Contractor shall furnish and install a door entry alarm sensor, magnetic type, having a Form‑C contact closure output.

The Contractor shall furnish and install a single-loop smoke/ fire alarm system. Smoke/fire alarm sensors shall be mounted above battery charger equipment, and in vicinity of AC power distribution panel board. Smoke/fire alarm panel shall have visual indicators depicting individual alarm sensor status. Smoke/fire alarm panel shall operate from both 120VAC and 12VDC battery power sources.

The diagnostics data provided by the generator and the diagnostic data monitoring the propane or diesel tank levels shall each utilize SNMP technology and shall be routed to the equipment shelter through Ethernet cables.

The diagnostics provided by the Automatic Transfer Switch, FAA tower lighting system, and HVAC units may be dry-contact or SNMP. The wiring for these alarms should be routed to the telco/alarm panel.

### 3.10 Generator

Each P25 Tower site should be equipped with a generator to provide backup power in the event there is a loss of commercial power. Five total County sites will require a new generator. Two different size generators will be priced for this project. The final generator configuration may utilize a mix of small and large units or the generator configuration may utilize large generators at all five Tower sites for uniformity and future expansion capabilities across the entire network. The two generator sizes include 30kW and 45kW units powered by propane. The propane tank shall have a capacity of 1,000 gallons. The generator should be installed on a concrete foundation that is properly designed to support the weight loading of the generator. The propane tank shall be buried at the proper depth in close proximity to the generator.

As an option, the County would like for proposers to provide pricing for an equivalent sized diesel generator with a comparable size fuel tank. The proposed diesel generator should include a design that incorporates the fuel tank as the base of the generator. The diesel generator should be installed on a concrete foundation that is properly designed to support the weight loading of the generator and a full fuel tank. Advantages of a diesel powered generator verses a gas powered generator should be provided if the proposer deems that one or the other affords the County substantial savings for the initial equipment purchase, installation and/or long term operational and maintenance of the unit.

**All fuel tanks provided (regardless of fuel type) shall be supplied at a full fuel level per the specification of the tank manufacturer. All pricing provided for generators should include the associated costs for providing the full fuel level discussed above.**

The diagnostics data provided by the generator and the diagnostic data monitoring the propane or diesel tank levels shall utilize SNMP technology and each shall be routed to the equipment shelter through Ethernet cables. The generator status alarms for all sites shall be integrated into the L3Harris system alarm, status, and reporting subsystem (RNM – Regional Network Manager).

## 3.11 Utilities

The installation of all electrical service and circuits, telco, fiber, data, grounding, and fuel lines should follow all applicable building codes and best practices. This include the depths at which the conduits are buried at each site and the sizing and material makeup of the conduits. Each Tower site will require electrical service to be provided by the Contractor to the utility rack in order to support the County’s intended operations at the site. One site also requires fiber to be brought by the Contractor from the equipment shelter to a termination point inside of the Sheriff’s Office Dispatch Area in order to support the County’s intended operations at the site. The electrical service should be provided via underground conduit from the most suitable nearby utility pole or utility vault. Hand holes with conduits should be provided as needed at specific locations from the electrical and telco sources to the utility rack. In addition, hand holes should be provided as needed at specific locations between the utility rack and the County’s equipment shelter.

All runs of electrical lines should be encased in the adequate size and appropriate material conduit for the application, no exposed 120V or 240V wiring or fiber runs. All conduits that may require an additional pull of electrical or fiber should be equipped with a pull string at each end and in all intermediate located hand holes.

### 3.12 Grounding, Lightning Protection and Surge Protection

All grounding, lightning protection and surge protection requirements listed in the L3Harris Site Grounding and Lightning Protection Guidelines T4618RevF document should be adhered to for all proposed designs and installations that are part of the overall scope of services covered by this RFP. This includes the tower, shelter, generator, security fencing, utility rack, ice bridge, cable ladder, utilities, etc. Failure of a Proposer to include the need and/or specification for grounding, lightning protection and/or surge protection in their proposal for one or more items at a site that included in the overall scope of this turn-key tower infrastructure project is not grounds for a future change order to provide the omitted grounding, lightning protection and/or surge protection specified in the L3Harris Site Grounding and Lightning Protection Guidelines T4618RevF document.

### 3.13 Fiber

Two sites will require new fiber installations for backhaul connectivity for the P25 radio project. These sites include Precinct 3 CR 3433 and the VZC Sheriff Office.

The Precinct 3 CR 3433 tower will require a fiber optic pathway to be provided using overhead and trenching from the nearest utility pole where existing fiber, provide by the ETCOG (East Texas Council of Governments), is located. This fiber run can be a combination of overhead lines and new utility poles. All fiber runs within the tower compound must be trenched to the utility frame and then to the equipment shelter. The fiber will need to be routed into the shelter.

The Sheriff Office tower will require a fiber optic pathway to be trenched from the tower to the SO building. The fiber will enter the SO building and be routed to the Radio Equipment Room (RER) located within the Dispatch Center. The trenching for the fiber routing from the SO tower to Dispatch should run along the side of the SO property as depicted by the blue dashed line on the map provided in Figure 8.

All trenched fiber runs should include hand hole boxes every 100 feet or as needed at shorter distances as dictated by the particular scope of work at each site. All overhead and trenching for the fiber should follow applicable coded for depth, conduit, hand hole connections, securing the fiber, etc. All fiber trenching shall include underground conduit of sufficient size to accommodate not only the necessary fiber optic cable but a pull string per conduit path. The Contractor will provide for each site four pair of unterminated single-mode fiber, installed within the fiber route’s conduit system. Twenty (20) feet of additional fiber should be provided at the termination point at each end of the path for both sites. Indoor, outdoor and any overhead fiber pathways shall conform to applicable codes and best industry practices. Fiber terminations will be provided by others in all cases.



**Figure 8**

## 3.14 Options

Proposer’s shall include details and pricing in their proposals for the following options that the County is considering for the P25 Tower sites.

* Tower Design 1
* Tower Design 2
* 12’ x 12’ Shelter
* 12’ x 16’ Shelter
* 30kW Propane Generator
* 45kW Propane Generator
* 30kW Diesel Generator
* 45kW Diesel Generator
* 2 Year Warranty
* 3 Year Warranty

## Detailed Design Review

### 

A Detailed Design Review (“DDR) meeting between the Contractor and the County shall be conducted no later than 30 days following the contract award and execution. The County will provide a location for the DDR meeting. The DDR process shall include a review of the Contractor's detailed design documentation for the total project. The documentation should be provided for each of the five County Tower sites.

Information to be submitted in the DDR shall include all data required to determine conformance with the requirements of the RFP and contract documents. The submission for each of the five Tower sites shall include:

1. Complete design documents, structural stress analysis, and construction drawings for the compound, tower structure, tower foundation, shelter foundation, generator foundation, shelter interior, utilities and grounding system.
2. All necessary plans, designs, and analyses related to site preparation or site upgrades.
3. Discussion of any configurations and options to be selected by the County.
4. Responsibility Matrix reflecting major project tasks and the responsible party or parties for accomplishing the task.
5. Project work plans and timelines through completion. The project schedule should be developed for the entire project but should include specifics for each Tower site. Implementation schedule and work plans should include ordering of equipment/materials, design efforts, relevant environmental studies, installation, inspections, testing, and final acceptance. The implementation schedule shall provide the major project tasks and include: 1.) the order of execution (per Tower site), 2.) start date (per Tower site), and 3.) estimated date of completion (per Tower site). The Contractor will track the actual process at such intervals as directed by the County.

The final design presented at the DDR presentation meeting shall be sealed and certified by a Professional Engineer licensed in the State of Texas.

The County will complete its review of the DDR documentation within 14 days, at which time the County will issue a Notice-to-Proceed (NTP). Ordering of equipment/materials, delivery, and installation will not begin until a formal NTP has been issued unless stated otherwise herein or agreed upon by the parties. Approval of the DDR documentation by the County is general in nature and shall not relieve the Contractor of responsibility for the accuracy of its documentation nor for the proper function and performance of equipment and components.

# 4.0 INSTALLATION, TESTING, MAINTENANCE & WARRANTY

## Implementation Schedule

The Proposal shall include a realistic and attainable implementation schedule, with major milestones listed and specifying those items required of the County to complete implementation. This schedule should be provided from a “per site perspective” and shall include all activities and tasks to be completed by the Contractor and its subcontractor and shall establish a projected Tower site handover date. The schedule shall be kept up to date throughout the project reflecting any relevant changes and/or adjustments. The day following the handover date would be the first day that L3Harris could begin installation of the P25 equipment and antennas systems at the site.

## Equipment Delivery

Equipment and material orders, delivery and installation will not begin until the County accepts the Contractor’s Detail Design Review, as described in §3.15, and issues a formal NTP.

All deliveries shall be freight prepaid by the Contractor with no charges or costs to be paid by the County at the time of delivery. All deliveries shall be made to a secure Contractor-provided facility or site locations as mutually agreed upon by the County and the Contractor. Deliveries shall be unloaded by the Contractor or delivery person. Regardless of the place of delivery, the Contractor shall notify the County’s Project Manager regarding the date, time, place, and items associated with each delivery within a reasonable time prior to the date and time thereof; provided, if the Contractor cannot determine the date and time with reasonable certainty, the required notice shall be given within 24 hours following the delivery.

The County shall have the right, but not the duty, to make inspections with regard to each and every item delivered. The delivery of materials or equipment shall not constitute partial or conditional acceptance of a Tower site or any of its components.

## Installation

### Installation Criteria

Installation efforts shall not begin at site location until such time that the County has issued a construction permit or construction NTP for that site. Issuance of a permit or NTP shall be contingent upon completion of all environmental and regulatory studies, permits, and submittals necessary for proposed equipment and services. Installation of all materials and equipment at each Tower site must meet FCC, FAA and EIA industry standards in all respects with specific attention given to applicable OSHA, County/City Codes, Fire Codes, and Electrical Codes and to the methods employed for civil construction, wiring, cabling, terminations, cable and wire labeling, documentation, wire codes, compound layouts, equipment shelter layouts, general appearance and operating performance. All installations shall further utilize electrical grounding and lightning/surge protection methodology per the Grounding, Lightning Protection and Surge Protections, as described in §3.9.6 (L3Harris Site Grounding and Lightning Protection Guidelines T4618RevF). The Proposal shall specifically state all codes, standards, and grounding criteria that will be utilized for site preparation and installation activities. If the installation of any material or equipment covered under this procurement requires a licensed tradesman to design and/or to perform the installation task, the Contractor shall utilize a licensed and qualified professional to perform said task.

The Contractor shall be responsible for the cost of repairing or bringing to original condition existing facilities or neighboring property that may suffer damage during the course of construction and installation at each Tower site. The Contractor and all subcontractors shall also completely remove from the premises at each Tower site all packaging, crates, and other litter due to their work.

The Proposal must describe installation plans and procedures and indicate the supporting organizational structure, listing specific qualifications of personnel and job functions proposed to complete the installation.

### Installation Procedures

Contractor shall provide adequate, technically competent, trained personnel to install all equipment and features supplied for the tower infrastructure. All installation activities shall be coordinated with the County’s Project Manager.

All construction and installation efforts by the Contractor and its subcontractors shall utilize best industry practices.

All interconnecting wiring shall originate/terminate at telephone type punch blocks. All punch block connections shall be made via bridging clips. Complete point-to-point wiring drawings shall be made and incorporated into the as-built system documentation.

## Site Handovers

It is understood that the next phase of L3Harris’ implementation of the Van Zandt County P25 Radio System Project cannot be fully started until all five Tower sites are constructed by the Contractor and handed over to the County. Once handover of the sites begins L3Harris should be able to begin their installation of P25 equipment in the shelters and the associated antennas systems on the tower. Thus, it is critical that the Contractor’s schedule for handover be continuously updated and communicated with the County.

## Acceptance Testing

### General

Upon completion of the installation at each Tower site, and before final acceptance, the Contractor shall perform the following tests and submit the results to the County, in writing:

A. On-site inspection of completed installation, with all deficiencies corrected

B. Equipment tests and verification of equipment performance, features, and functions

* Compound
* FAA Tower Lighting System
* Grounding
* Shelter
* Generator

Detailed test procedures for each of the system tests shall be submitted for approval to the County at least thirty (30) days before each test is scheduled to be performed. The County will approve, conditionally approve, or reject the test plan within fourteen (14) days of submittal.

Tests will not be considered valid tests unless the test plan has received prior approval and the tests are monitored by the County or its designated agent. The County reserves the right to disapprove any tests or test results which do not conform with agreed upon procedures and pass/fail criteria. If disapproved, it shall be the sole responsibility of Contractor to modify, correct, or repeat any such disapproved tests or test results to the satisfaction of the County and at no cost to the County.

All tests shall be coordinated in advance of system handover with the County’s Project Manager and shall be conducted during normal working hours, Monday through Friday, from 8:00 A.M. to 5:00 P.M.

### System Installation Compliance

Contractor shall conduct an on-site inspection of all facilities with the County prior to execution of the various test plans. This inspection shall demonstrate that all equipment has been delivered and installed at its proper location. The inspection shall demonstrate that all mechanical installation requirements have been completed and all equipment has been properly connected to electrical service, and properly grounded. Any discrepancies or issues impacting performance must be corrected by the Contractor prior to execution of the various tests. Minor issues may be added to a punch list for correction prior to Final Acceptance. Final equipment placement and connections shall be reflected in the as-built documentation.

### Punch List

Throughout the inspection and testing process, failures and issues shall be placed on a "punch list" to track and document necessary resolution for each Tower site. All punch list items shall be resolved prior to Final Acceptance for each Tower site. The County may agree to carry a minor number of punch list items beyond Final Acceptance. In such case, the parties will agree upon the value of open punch list items, which will be withheld until such time that the punch list items have been fully resolved.

## Documentation

Contractor shall supply, with site handover, complete site documentation including equipment maintenance and operations manuals. This documentation shall include all project-specific and pertinent plans, wiring lists, operating instructions, parts/equipment/serial number lists (by Tower site), circuit schematic diagrams, maintenance charts and tables, and a listing of all equipment and devices required to test and certify the tower infrastructure provided and installed at each Tower site. As-built documentation, site drawings, final parts/equipment lists, and serial number lists must be supplied a minimum of 30 days prior to overall Site Acceptance. The as-built documentation package shall include all passwords and login information, if applicable, for all software, applications and operating systems delivered. All sites must have an operations/maintenance manual and as-built documentation at the site covering all equipment installed at the site. Contractor shall also provide brochures and technical specification sheets for all other products furnished at each Tower site. The County may elect to receive documentation in electronic form at their discretion.

## Training

Contractor shall provide formal training for designated County personnel related to the following delivered and installed equipment. This training shall provide designated staff with a working knowledge of system operation and hands-on system experience.

All training shall occur during acceptance testing and prior to site handover or as agreed upon by the County and Contractor. The Contractor shall provide training for:

1. Generator operation including the manual and automatic transfer switches
2. Tower lighting system
3. Shelter functions and features

## Final Cleaning & Equipment Removal/Disposal

Prior to requesting Final Acceptance for a Tower site, the Contractor shall clean the work areas to the satisfaction of the County. The final cleaning includes the removal of all non-permanent protection materials from labels and glass surfaces, polish glass, clean exposed finishes, touch up minor finish damage, clean or replace filters of mechanical systems, remove packing materials and debris, and any other cleaning or repairs necessary to return the work areas to an acceptable condition.

## Final Acceptance

Final Acceptance for a Tower site shall not be requested by the Contractor until all acceptance testing, training, and documentation have been accepted by the County and all required equipment and services have been delivered.

## Initial Warranty and Maintenance

The Proposal shall include an initial warranty and maintenance period of not less than one (1) year. The initial warranty and maintenance coverage shall protect all equipment and services delivered under the Contract from defects in operation, design, materials, and workmanship. If the Contractor’s equipment is covered by a manufacturer’s warranty in excess of one year, the length of the included warranty term shall be clearly specified in the Proposal. Any and all restrictions and/or limitations to warranty coverage should be clearly defined in the Proposal.

Contractor shall be responsible for any needed warranty actions including all parts, software, labor, travel and all other expenses required. The Contractor shall state the procedure and methodology for obtaining equipment repairs during the warranty coverage period.

If any of the equipment provided by the Proposer (for example the generator, shelter, HVAC, FAA tower lighting system, tower, etc.) comes with a warranty that is greater than 1 year, then the Proposer shall state the length of the warranty and specify all of the details and stipulations associated with the warranty coverage.

## Extended Initial Warranty and Maintenance

The Proposal shall include pricing for a two (2) year and three (3) year initial warranty and maintenance period. The extended initial warranty and maintenance coverage shall protect all equipment and services delivered under the Contract from defects in operation, design, materials, and workmanship. If the Contractor’s equipment is covered by a manufacturer’s warranty in excess of one year, the length of the included warranty term shall be specified in the Proposal. Any and all restrictions and/or limitations to warranty coverage should be clearly defined in the Proposal.

## Extended Maintenance

The Proposer shall also provide recommendations for maintenance for all associated equipment and systems provided. The recommendations should include the maintenance schedule, and if provided by the Proposer, the cost of the maintenance for each subsystem or equipment should be provided in the Proposal. If some or all of the recommended maintenance is not a service provided by the Proposer then the Proposer should provide estimated costs for each maintenance item. The recommendations and pricing for maintenance should be provided for 5 years after the initial 1 year warranty expires.