

RFP for Category 6 Structured Cabling



Sabinal ISD

409 W. Cullins

Sabinal, Texas 78881

RFP For Cabling New Gym Facility

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1.0 INTRODUCTION

1.1 GENERAL BACKGROUND

The Sabinal Independent School District is seeking qualified candidates to submit proposals to install CAT6 cabling at the new gym facility being built by Sabinal ISD at 409 West Cullins Ave, Sabinal, TX 78881. This will include installation, termination, and certification of new structured cabling supporting desktop PCs, IP Phones, IP video cameras, Wireless Access Points, and Vape Detectors. This document describes the system requirements to be met in the proposals of the structured cabling vendors to secure under contract all materials, design, engineering, and installation for the structured cabling system that is a turnkey solution.

1.2 TERMS AND CONDITIONS OF BIDS

This is an invitation to submit a bid based on the materials, systems, and equipment described in this document. All bids must be submitted in accordance with the specifications and information contained herein, as well as with any addenda if required, issued by the SISD. It is the intent of the Drawings and Specifications to provide a complete workable structure cabling system ready for the SISD's use. Any item not specifically shown on the Drawings or called for in the Specification, but normally required for a complete system, is to be considered a part of the contract. Consideration other than cost alone will be used in making the determination of the award. These factors will include financial stability, availability, design support, project management, and field supervision. The Manufacturers and Products specified in the document are to be used. No substitutions of components specifically referenced will be allowed, without prior written customer consent after the submittal review.

1.3 INSTRUCTIONS TO THE BIDDER

Bids shall be valid for 180 days and other factors such as material and labor rate increase during the duration of this project must be taken into account. The Bidder shall consider the nature and amount of work to be done as well as the difficulties involved in its proper execution. The bid shall include all costs deemed necessary to cover all contingencies essential to the installation of the specified system. Total cost for installation materials, labor project management, and other miscellaneous items must be listed separately.

A complete materials list, including description, manufacturer, part number, quantity, unit price, and total price must also be included. A statement of estimated labor hours and prevailing hourly labor rates must be included.

All products and materials shall be new, clean, and free of defects, damage, and corrosion.

Where discrepancies are found during the bid process, the most stringent requirements must be included in the bid. Any cost encountered, which is not specifically itemized in the bid, shall not be incurred unless specifically agreed upon in writing by both parties. No additional compensation will be allowed for extra work incurred on the part of the Contractor due to the bidder's failure to notice any existing condition, which may cause additional labor.

Bid responses shall be concise following the format and numbering of this specification. Items not requiring responses shall be acknowledged by the bidder as being understood. Bidders must notify the SISD as soon as any omissions or errors are detected in the specification so corrective addenda may be issued. Such notification must be received by the SISD, at least, (7) days prior to the date for receipt of bids.

Bids will be accepted by Howard Karre at 409 W. Cullins Ave., Sabinal, TX 78881 by 2:00 p.m., on May 26, 2023. Inquiries and requests for clarifications should be directed to hkarre@sabinalisd.net by 5:00 p.m. on May 24, 2023, with the subject being 'RFP For Cabling New Gym Facility'.

1.4 RIGHTS OF THE SISD

The SISD reserves the right to accept any bid or, at its discretion, reject any or all bids for whatever reason it deems appropriate. The SISD reserves the right to purchase ALL or PART of the cabling materials and hardware needed for the project.

Receipt of a bid response does not obligate the SISD to pay any expenses incurred by the bidder in preparation for the bid response or obligate the SISD in any other respect.

The SISD reserves the right to modify the specifications contained in the Request for Proposal at any time during the bidding period.

Only changes issued as an addendum will be binding upon the SISD. No verbal instructions or interpretations of requirements shall be accepted.

1.5 SCHEDULE OF EVENTS

The schedule below indicates the critical dates that must be satisfied by the Contractor. The Contractor must staff its work crews appropriately to meet the project's completion. The Contractor shall also have staff available to provide coverage during the cutover period.

Event	Date
Release of this RFP	04/26/2023
RFP/BID Question Deadline	05/24/2023
RFP/BID Question Response	05/25/2023
Proposal Due & Bid Opening	05/26/2023

1.6 VENDOR REQUIREMENTS

The vendor must meet or exceed all minimum qualification requirements. All submitted quotes must be provided, at a minimum, for all requested information in this quote document. Any portion not included will be cause for elimination from the quote process. Each response will be reviewed to determine if it is complete prior to actual evaluation. The information should be organized as indicated in the quote requirements. Any portions of the submitted quote, which are to be treated by the SISD as proprietary and confidential information, must be clearly marked as such. The SISD reserves the right to eliminate from further consideration any response which is deemed to be substantially or materially unresponsive to the request for information contained in this section.

Vendors must include three (3) references for a project of similar implementation that has been completed within the past five (5) years.

- Job Location
- Contact name and telephone number.
- Date of contract
- Project Description
- Equipment/Service Installed

1.7 QUOTE EVALUATION

Each response will be reviewed prior to the selection process for completeness and adherence to the format. A response will be considered complete if all requested sections are included in the proper order and properly completed. Vendors may also provide any and all recommendations for consideration such as installation, maintenance, support, and design that is relevant to the total solution of the SISD's technology needs.

1.8 EVALUATION CRITERIA

The successful bidder will be chosen based upon but not limited to the following criteria:

1. Price of eligible goods and services - 50%
2. Prior experience and references - 25%
3. Personnel qualifications (certifications, longevity within the sector, etc.) - 25%

The SISD reserves the right to reject any or all bids.

1.9 CONTRACTOR QUALIFICATIONS

The Contractor shall at a minimum possess the following qualifications:

Be in business for a minimum of five (5) years.

The contractor shall demonstrate satisfactory financial conditions to carry out the work.

Possess those licenses/permits required to perform structured cable installations in the specified jurisdiction.

Personnel is knowledgeable in local, state, county, and national codes, and regulations. All work shall comply with the latest revision of the codes or regulations. When a conflict exists between local or national codes or regulations, the most stringent codes or regulations shall be followed.

Must possess the following minimum insurance requirements and name the SISD as an additional insured.

1) Workmen's Compensation Part One: Workers Compensation Part Two: Employer's Liability Bodily Injury by Accident	Statutory \$100,000 each accident Bodily Injury by Disease \$300,000 policy limit Bodily Injury by Disease \$100,000 each employee
2) General Liability	\$1,000,000 per occurrence \$2,000,000 policy aggregate
3) Auto Liability CSL Liability and Property Damage Uninsured Motorists	\$1,000,000 per accident \$1,000,000 per accident
4) Professional Liability (if applicable)	\$1,000,000 per claim

1.10 REQUIRED CONTRACTOR TRAINING

The Contractor shall be fully conversant and capable in the cabling of low voltage applications such as, but not limited to data, voice, and imaging network systems. The Contractor shall at a minimum possess the following qualifications:

Personnel trained and certified in the design of structured cabling systems.

Personnel trained and certified to install the structured cabling system. Provide references to the type of installation provided in this specification.

Personnel trained and certified in fiber optic cabling, splicing, termination, and testing techniques. Personnel must have experience using an optical light source and power meter plus OTDR.

Personnel trained in the installation of pathways and support for housing horizontal and backbone cabling.

1.11 CONTRACTOR RESPONSIBILITY

The contractor shall be obligated to exercise the highest standard of care in performing its obligations as defined in this request for proposal.

The contractor acknowledges that the SISD will rely on the contractor's expertise, ability, and knowledge of the system being proposed and shall be obligated to exercise the highest standard of care in performing its obligation as defined in the following Scope of Work.

1.12 MANUFACTURER QUALITY & PRODUCT SUBSTITUTIONS

All structured cable connecting hardware must be made by an ISO 9001:2000 Certified Manufacturer. All products must meet the technical requirements listed in sections 5-7. Any products not meeting these requirements will not be considered.

2 GENERAL REQUIREMENTS

2.1 CONFORMITY WITH RFP

All Proposals must conform to the requirements presented in this RFP. Proposals not in conformity may be rejected. Exceptions to any requirement must be clearly noted in the vendors' response.

2.2 UNIFORMITY OF PROPOSALS

To facilitate evaluation, all proposals must be submitted in a uniform format as described in Section 7 of this RFP.

2.3 ADDITIONAL INFORMATION

All inquiries or requests for information relative to this RFP should be directed by email to hkarre@sabinalisd.net. All materials submitted by the SISD must be treated as confidential and cannot be used for any other purpose than the response to this RFP.

Information submitted by a vendor will be considered confidential to the SISD and will not be used for any other purpose than evaluating vendor responses.

2.4 CONTRACT

The selected vendor **may be required to execute a contract written for and by** the SISD. The SISD may elect not to execute the vendor's standard contract. All Proposals should contain a statement indicating the vendor's willingness to accept a written contract. The vendor should indicate if this RFP and the vendor's written material could be included in the contract. Any exemptions to this requirement must be noted in the vendor's response.

2.5 RIGHT TO REJECT PROPOSALS

The SISD reserves the right to reject any or all proposals, to waive technicalities or informality, and to accept any proposal deemed to be in the best interest of the SISD.

2.6 LIABILITY AND INSURANCE

When identified, the selected contractor will be notified of the necessity to provide the required insurance as outlined in 1.9 above. Proof of insurance shall be provided within 15 days of the date of written notification to the contractor.

2.7 PRICE PROTECTION

Prices quoted in the proposal shall be firm prices and not subject to increase during the term of any contractual agreement arising between the SISD and a vendor. Vendors will quote prices minus any Federal Excise Tax. Vendors should stipulate the expiration date of their quoted price. All prices will include shipping and handling.

2.9 DELIVERY DATE

Vendors will specify in proposals the delivery date of their equipment, services, and products (i.e., how long from the time of order to delivery of hardware). Delivery times will be correlated to actually placing the order after approval for funding is granted.

2.10 VENDOR COMMITMENT

Vendors must state their commitment to maintain, support and upgrade their services at the current or the public-released level for at least the term of the contract.

2.11 MAINTENANCE AND SUPPORT

Vendors must supply the names and addresses of all service organizations that will provide support and maintenance on all products proposed herein. If appropriate, vendors must also specify the maximum time to elapse between the time a service call is made and the time a service representative arrives on site.

2.12 SYSTEMS RESPONSIBILITY

Notwithstanding the contents of the RFP, it is the responsibility of the vendor to verify the completeness, accuracy, and suitability of the vendor's proposal to meet the requirements of the SISD. The vendor without claim for additional payment shall provide any additional equipment required after installation to meet the project requirements, even if not specifically mentioned herein. It is understood that a complete solution for the network, which operates effectively and to the satisfaction of the SISD 's representative, is required. The successful vendor will be obligated to provide a turn-key solution that meets all guarantees in their proposal for the price contained therein and that all products provided operate successfully with the SISD 's existing telecommunication infrastructure and related systems and networks. All products must be completely new.

2.13 RIGHTS TO SUBMITTED MATERIALS

All proposals, responses, inquiries, or correspondence relating to or in reference to this RFP, and all reports, charts, displays, schedules, exhibits, and other documents provided by vendors will become the property of the SISD when received. Supporting technical manuals will be returned at the request of the vendor. The SISD retains the right to use any or all system ideas presented in any proposal, whether amended or not amended. Selection or rejection of a proposal does not affect this right.

2.14 DISCLAIMER AND CANCELLATION

The SISD reserves the right to waive any informality received where such acceptance, rejection, or waiver is considered to be in the best interest of the SISD. The SISD also reserves the right to reject any proposal where evidence or information submitted by the Vendor does not satisfy the SISD that the vendor is qualified to carry out the requirements of the contract documents.

This RFP does not commit the SISD to any specific course of action. The SISD reserves the right to not select any vendor or purchase any goods or services resulting from this RFP.

3 SCOPE OF WORK

The work shall consist of the following:

- Establishing a new communications closet for the building in the space identified
- Establishing cable pathways to facilitate both initial installation and future growth.
- Installation and termination of Category-6 network cabling at identified drop locations
- Labeling and documentation of installed cable plant
- Category-6 certification testing and test results
- Installation of single-mode 12-strand count fiber between the rack and existing building demarcation point. Terminations will be LC-type.
- Removal and demolition of pre-existing network cable post-migration

Respondents should note the following:

- Use of BICSI-certified installers is preferred. At least one BICSI-certified installer should be responsible for the review of work. Responses should include proof of certification. In the absence of certification, responses should include references and examples of recently completed projects of similar or larger scale.
- Use of core drilling may be required to establish pathways in some locations.
- The installation of new electrical circuits is out-of-scope and will be coordinated separately.
- A written commitment to warranty of work for a 1-year minimum is required.

3.1 PLANS AND SPECIFICATIONS

The SISD does possess CAD drawings of the subject. Relevant floor plans are attached to this document.

Approximately 100 jacks across 100 drop locations have been identified for this project.

Responses may or may not use suggested components outlined for the solution provided they meet the objectives outlined.

3.1.1 CABLING GUIDELINES

- All network drops shall consist of plenum-rated Category-6 cable, jacks, and biscuit boxes for in-ceiling drops.
- All network riser cables shall be AWG copper and blue in color.
- The pin-out for all drops is to be 568B.

- Cable distance shall not exceed 90 meters (300 ft.)
- A 10 ft. service loop will be provided on the patch panel side and a 3 ft. service loop will be provided on the wall jack or biscuit box side.
- A minimum bend radius of 1 inch shall be respected for all cabling.
- A maximum bundle size of 24 cables shall be respected.
- Cable bundles shall use Velcro fastening where appropriate; nylon cable ties are prohibited.
- Each drop will make use of a blue keystone termination and appropriate faceplate.

3.1.2 COMMUNICATIONS CLOSET GUIDELINES

- All communications racks, patch panels and ladder racks will be provided and installed by the general contractor.

3.1.3 LABELING AND DOCUMENTATION

- A labeling scheme, referred to as “Jack ID” hereafter, shall be used for all network drops as follows:
 - A single letter, A-C indicating the patch panel in the network closet.
 - A numerical digit 01-48 indicating the individual patch on that particular patch panel be it A, B, or C.
 - Example identifiers: A01, B02, A48, etc.
- For each cable the Jack ID shall appear using printed permanent labeling in 4 locations:
 - Each end of the cable within 1 ft. of termination.
 - On the box or faceplate of the drop, once.
- A cut sheet of Jack ID to room number mappings will be provided as a deliverable in electronic form.
- An as-built floor plan with drop locations will be provided in electronic form (CAD or PDF).
- Test results will be labeled using the Jack ID and provided as a single report.
- Test results will include a pass-fail summary followed by detailed test results for each Jack ID.

4.0 SUGGESTED COMPONENTS

Sabinal ISD is declining to submit a list of suggested components and will rely on the experience and integrity of the awarded contractor to make appropriate, cost-effective, suggestions for all solutions requested in this document.

5 TESTING

Testing of all newly installed cable channels shall be performed prior to system cutover.

5.1 COPPER TESTING

- All category 6A field testing shall be performed with a Fluke Networks DTX-1800 tester or better.
- All balanced twisted-pair backbone cables exceeding 90 m (295 ft) or 100 m (328 ft) shall be 100% tested for continuity if the applicant's assurance is not required.
- Category 6A balanced twisted-pair horizontal and backbone cables, whose length does not exceed 90 m (295 ft) for the basic link, and 100 m (328 ft) for the channel shall be 100 percent tested according to ANSI/TIA/EIA-568-B.1. Test parameters include wire map plus ScTP shield continuity (when present), length, NEXT loss (pair-to-pair), NEXT loss (power sum), ELFEXT loss (pair-to-pair), ELFEXT loss (power sum), return loss, insertion loss, propagation delay, and delay skew.

5.2 TEST EQUIPMENT CRITERIA

- All balanced twisted-pair field testers shall be factory calibrated each calendar year by the field test equipment manufacturer as stipulated by the manuals provided with the field test unit. The calibration certificate shall be provided for review prior to the start of testing.
- Auto test settings provided in the field tester for testing the installed cabling shall be set to the default parameters.
- Test settings selected from options provided in the field testers shall be compatible with the installed cable under the test.

5.3 FIBER OPTIC TESTING HORIZONTAL FIBER TESTING

- Fiber horizontal cables shall be 100% tested for insertion loss and length.
- Insertion loss shall be tested at 850 nm or 1300 nm for 50/125µm and 62.5/125µm multimode cabling in at least one direction using the Method B (1-jumper) test procedure as specified in ANSI/TIA/EIA-526-14A.
- The horizontal link must be guaranteed to meet 10G-BASE-FL performance requirements.

6 ADMINISTRATION & DOCUMENTATION

6.1 LABELING

- All cables shall be labeled at each end. The cable or its label shall be marked with its identifier.
- A unique identifier shall be marked on each faceplate to identify it as connecting hardware.
- Each port in the faceplate shall be labeled with its identifier.
- Each port on the connecting hardware shall be labeled with its identifier.

6.2 DRAWINGS

As-built drawings shall be supplied by the contractor showing the locations of and identifiers for all:

- Horizontal cable routing and terminations
- Data outlets/connectors
- Backbone cable routing and terminations

6.3 RECORDS AND REPORTS

All records shall be created by the installation contractor and turned over at the completion of work.

The format shall be computer-based and both soft copies and hard copies

shall be part of the As-built package. The minimum requirements include:

- Cable records must contain the identifier, cable type, termination positions at both ends, splice information as well as any damaged pairs/conductors.
- Connecting hardware and connecting hardware position records must contain the identifier, type, damaged position numbers, and references to the cable identifier attached to it.
- Test documentation on all cable types shall be included as part of the As-built package.

All reports shall be generated from the computer-based program used to create the records above. These reports should include but not be limited to:

- Cable Reports
- Cross-connect Reports.
- Connecting Hardware Reports

7 WARRANTY

Either a basic link or channel model configuration may be applied to the horizontal and/or backbone sub-systems of the structured cabling system. Applications assurance is only applied to a channel model configuration. All channels are to be qualified for linear transmission performance up to 250 MHz to ensure that high-frequency voltage phase and magnitude contributions do not prove cumulative or adversely affect channel performance.

7.1 SYSTEM WARRANTY

A ten (10) year or greater warranty available for the category 6A structured cabling system shall be provided for an end-to-end channel model installation which covers the applicant's assurance, cable, connecting hardware, and the labor cost for the repair or replacement thereof.

7.2 PRODUCT WARRANTY

The manufacturer of passive data equipment used in a manner not associated with the Systems Warranty must have a minimum of a five (5) year Component Warranty on all its products. The Product Warranty covers the components against defects in material or workmanship under normal and proper use.

7.3 APPLICATIONS SUPPORTED

Existing and future applications support a channel model warranty including those approved by the Institute of Electronic and Electrical Engineers (IEEE), the Asynchronous Transfer Mode (ATM) Forum, the American National Standards Institute (ANSI) or the International Organization of Standards (ISO) that specify compatibility with the cable referenced herein.