

## AMENDMENTS

1/12/18 – Extended due date for receipt of responses to 2/12/18

REQUEST FOR BID PROPOSAL  
ON DATA CLOSET FIBER CONNECTIONS  
FOR MULTIPLE SCHOOLS  
FOR THE BARROW COUNTY SCHOOL SYSTEM

**The Barrow County School System**  
***Information Technology Services***  
179 W. Athens Street  
Winder, Georgia 30680  
Voice - 770-307-0533

## **REQUEST FOR PROPOSAL (RFP) FOR STRUCTURED CABLING**

To: All Interested Vendors

You are invited to submit a formal, sealed proposal (bid) for new fiber connections between MDF and IDF's in multiple schools in the Barrow County School District, subject to e-rate funding approval, in accordance with the attached Conditions and Specifications.

All questions should be emailed no later than Friday, January 26<sup>th</sup>, to John St.Clair – [saint@barrow.k12.ga.us](mailto:saint@barrow.k12.ga.us). Any modifications to the RFP based on questions and answers regarding this offering will be posted as addendums to the RFP, and made available on the web site at <http://www.barrow.k12.ga.us/>. **Vendors are responsible for checking the web site for amendments to the RFP. Vendors should check for RFP updates prior to submitting final proposal.**

Responses will be brought to the school board for a vote on Tuesday, March 6<sup>th</sup>. Additionally, this project will be funded with federal e-rate funds, and final approval for the project will not be given until funds have been approved by the e-rate program. Prospective vendors must be participants in the e-rate program and must have a valid SPIN. E-rate funding approval may be given at any time in the 2018-2019 e-rate fiscal year. Vendor pricing response must remain valid until e-rate approval is given. District will generate purchase order within 30 days of receipt of e-rate approval. Vendor must invoice district for district's matching portion of total cost, and vendor must invoice e-rate program for e-rate funded portion.

Sealed proposals will be received until 11:00 AM Monday, February 12<sup>th</sup>. Proposals must be emailed to [saint@barrow.k12.ga.us](mailto:saint@barrow.k12.ga.us). Emailed proposals will only be deemed accepted for consideration upon delivery of a confirmation email from [jstclair@barrow.k12.ga.us](mailto:jstclair@barrow.k12.ga.us) to vendor's email indicating receipt of proposal. If vendor does not receive confirmation of receipt of proposal via email, vendor should consider proposal not to have been delivered.

Proposal emails should have a subject-line of "E-rate data closet fiber connection response"

## GENERAL CONDITIONS

1. Locations of Sites

The location of the work is at the various schools listed in the appendix.

2. Scope of Work

The following are the General Conditions for the work to be performed as outlined in the Specifications.

It is understood that except as otherwise specifically stated in the contract, the Vendor (Contractor) shall provide and pay for all materials, labor, tools, equipment, transportation, temporary construction of every nature and all other services and facilities of every nature whatsoever, necessary to execute, complete and deliver the work within the specified time. Permits and licenses necessary for the execution of the work shall be secured and paid for by the Vendor.

Any work necessary to be performed after regular working hours or on Sundays or legal holidays shall be performed without additional expense to the Owner.

3. Protection in General

The Vendor shall protect all buildings, trees, shrubs, lawns, and all landscape work from damage. Any damaged property shall be repaired and replaced at the Vendor's expense.

The Vendor shall protect all private roads, streets and sidewalks, driveway aprons, driveways, and shall make all necessary repairs at the Vendor's expense.

The Vendor shall protect all furniture, carpeting, flooring, doors, door facings, ceilings, windows, and interior walls from damage, and shall make all repairs or replacements at the Vendor's expense.

The Vendor shall protect all existing equipment, wiring, and cabling, and shall make all repairs or replacements at the Vendor's expense.

Prior to executing any repairs or replacements resulting from failure to adhere to these guidelines, Vendor shall notify Owner of nature/extent of damages and shall consult with Owner to insure that repairs are planned, executed, and completed in a manner satisfactory to Owner.

4. Change in Contract

The Owner will not be responsible for any change in the work involving extra cost unless approval in writing is furnished by the Owner before such work is begun.

5. Existing Conditions

The Vendor, in undertaking the work under this contract, is assumed to have visited the premises and to have taken into consideration all conditions which might affect the work. ***No consideration will be given to any claims based on lack of knowledge of existing conditions.***

6. Affidavits

Before acceptance of proposal by the Barrow County School System, the Vendor will be required to furnish affidavits on enclosed forms.

7. Insurance

Within seven days after notification of award, Vendor shall furnish to Owner a Certificate of Insurance showing compliance with the following limitations.

The Vendor agrees to comply with the provisions of Worker's Compensation laws of the State of Georgia.

It shall be stated on every policy or certificate of insurance, as the case may be, that "The insurance company agrees that Policy No. \_\_\_\_\_ shall not be canceled, changed, or allowed to lapse until ten (10) days after the Barrow County School System has received written notice as evidence by return receipt of registered letter, and it is agreed further that as to lapsing, such notice will not be valid if mailed more than fifteen (15) days prior to the expiration date shown on this policy".

The Vendor further shall maintain such other insurance (with limits as shown below) as shall protect the Vendor and Owner from any claims for property damage or personal injury, including death, which may arise out of operations under this contract, and the Vendor shall furnish the Owner certificates and policies of such insurance as shown below.

Below is listed the insurance coverage that must be procured by the Vendor at his own expense. The Vendor agrees to follow instructions indicated in each case:

A. Owner's Protective Liability Insurance

Protective injury, including death - limits of \$250,000.00 for each person and \$500,000.00 for each accident.

B. Vendor's Public Liability Insurance

Personal injury, including death - limits of \$250,000.00 for each person and \$500,000.00 for each accident.

Property Damage - limits of \$50,000.00 for each accident and \$100,000.00 for the aggregate.

**Disposition: Certificate of Insurance of both of above must be sent to Owner prior to commencement of work.**

No insurance will be acceptable unless written by a company licensed by the State Insurance Department to do business in Georgia.

8. Warranty

The Vendor shall furnish a **written warranty** which indicates that (a)the equipment (electronics) supplied under these specifications will be free from defects of materials and workmanship for a period of no less than five (5) years, (b)the cable plant and labor will be free from defects of materials and workmanship for a period of no less than fifteen (15) years from the date of final acceptance unless otherwise specified and, (c) all defects occurring within that period shall be corrected in a timely manner at no cost to the Barrow County School System.

9. Payments

District payment will be made only after inspection and approval by the Director of Technology or his designee. Such approval will be given only after all debris, equipment, materials, etc., are removed from the property, all cleaning completed, any damage repaired, and test results are delivered and approved. **Only a single payment is guaranteed to be made to the vendor when all aspects of the contract have been completed to the Owner's satisfaction. Partial payments may be authorized if circumstances warrant.**

Vendor is responsible for filing for payment with e-rate program for e-rate funded portion.

10. Application for Payment

All applications for district portion payment shall be signed by the Vendor and mailed to:

The Barrow County Schools  
Information Technology Services  
Attention: Mr. John St.Clair  
179 W. Athens Street

Or emailed to [saint@barrow.k12.ga.us](mailto:saint@barrow.k12.ga.us).

11. Addenda

Any addenda issued during the time of the request for proposal shall be addressed in the proposal, and in closing the contract they shall become part thereof.

12. Proposal Acceptance and Interpretations

The Barrow County School System may accept any proposal offered on an all, partial, or none basis, within funds available, whichever is in the best interest of the school system.

If any questions arise within the RFP documents, the vendor may submit to the Barrow County School System a written request for interpretation. Any interpretation of documents will be made by addendum to the RFP. Copy of such addendum, approved by the Director of Technology, will be made available on the school system web site. The Barrow County School System will not be responsible for any other explanation or interpretations. The Barrow County School System reserves the right to extend the due date if such information significantly amends this solicitation or makes compliance with the original due date impractical. The Barrow County School System reserves the right to reject any or all proposals and waive technicalities and informalities, including but not limited to late arrival of proposals so long as said proposal arrives on the date proposals are due.

13. Proposal Form and Format

Proposals should be submitted in the format specified within this document and containing information required by the RFP and be submitted via email to [saint@barrow.k12.ga.us](mailto:saint@barrow.k12.ga.us) with the subject line of "E-rate data closet fiber connection response." Proposals are only valid if a receipt from [jstclair@barrow.k12.ga.us](mailto:jstclair@barrow.k12.ga.us) is received by vendor. Vendor should consider the proposal not to have been delivered if a receipt is not received.

The acceptance of any or all alternatives will be at the discretion of the school system.

14. Vendor's Qualifications

As part of the proposal, vendor must complete the attached "Statement of Vendor's Qualification" form. Vendor may be required, before awarding of contract, to demonstrate to the complete satisfaction of the Barrow County School System, that vendor has the necessary facilities, ability and financial resources to execute the work in a satisfactory manner and within the time specified; that vendor has had experience in work of the same or similar nature; and that vendor has past history and references which will assure the Barrow County School System of vendor's qualifications for executing the work.

Vendors must submit a copy of a valid low-voltage license (Low-Voltage General, Low-Voltage Telecommunications, or Low-Voltage Unrestricted as issued by the State Construction Industry Licensing Board of Low-Voltage Contractors) of the individual(s) who will perform and/or supervise this work.

Vendors must submit a copy of a BICSI (Building Industry Consulting Service International) certified RCDD (Registered Communications Distributions Designer) certificate of the individual(s) who designs and/or supervises the design of the proposed work.

15. Stored Materials

Any materials stored on job site shall be Vendor's responsibility.

16. Specifications

Complete specification details or "cut-sheets" for all products proposed must be provided as part of the proposal package.

17. Trade Names "or Equal" Clause

The number and trade names given for any products are taken from various manufacturer's catalogs and shall, unless otherwise specified, be construed as being descriptive only of type, style, and quality of materials required. Material and/or equipment of other reputable manufacturers of equal quality, type, and style may be acceptable, whether specifically mentioned or not, in compliance with e-rate requirements.

Reference to or specification of any article, device, product, material fixture, form or type of construction, etc., by name, make or catalog number, with or without the words "or equal," shall be for the purpose of establishing a standard of quality and shall not be construed as limiting competition.

18. Accident Prevention

Precaution shall be exercised at all times for the protection of persons (including employees) and property and hazardous conditions shall be guarded against or eliminated.

19. Contract Form

Upon Contract award, the standard Purchase Order form mailed, or otherwise furnished, to a vendor results in a binding contract.

20. Indemnification

Vendor agrees to hold the Barrow County School System harmless and to indemnify the Barrow County School System from every expense, liability or payment arising out of or through injury (including death) to any person or persons or damage to property (regardless of who the owner may be of the property) of any place in which work is located arising out of or suffered through any act or omission of Vendor or subcontractor.

21. Vendor's Representative

The Barrow County School System reserves the right, with sole discretion, to refuse to allow any representative of the Vendor to service the contract in any manner. In this event the Vendor shall furnish another representative who is acceptable to the Barrow County School System.

The vendor **may not use subcontractors** for any portions of the work. The Barrow County School System will reject any un-authorized subcontractor without explanation or recourse by the Contractor or the subcontractor.

22. School District Regulations

The Vendor and its representatives shall follow all applicable Barrow County School System policies and regulations while on school district property, including the no smoking, no weapons, and drug-free policies. No work shall interfere with school or system activities or environment unless permission is given by the Principal of the school or the Network Telecommunications Manager.

23. Governing Law

All proposals and related documents submitted to the Barrow County School System by vendors are governed by the laws of the State of Georgia.

24. Special Stipulations

Attached to these General Conditions are certain conditions specific to the work to be performed.

25. Comprehensive list of references

Vendor's proposal shall include a detailed list of references along with contact person, dates of work, mailing address, and telephone numbers.

26. Demonstrated Capability of Vendor

The Vendor must provide proof of successful installation in a minimum of two sites using armored OM3 50/125 micron multimode plenum rated fiber.

**CHECKLIST FOR PROPOSAL TO PROVIDE STRUCTURED COMMUNICATIONS CABLING  
IN THE BARROW COUNTY SCHOOL SYSTEM  
WINDER, GEORGIA**

**BIDDERS:**

**YOU ARE REQUIRED TO COMPLETE THIS CHECKLIST AND INCLUDE IT WITH YOUR PROPOSAL.**

**YOUR PROPOSAL PACKAGE MUST INCLUDE THE FOLLOWING ITEMS IN THE ORDER SPECIFIED:**

- \_\_\_\_\_ 1. PROPOSAL CHECKLIST (This page)
- \_\_\_\_\_ 2. SIGNED PROPOSAL FORM (Following page of this document)
- \_\_\_\_\_ 3. PROPOSAL INCLUDING ALL OF THE FOLLOWING
  - \_\_\_\_\_ A. TOTAL COSTS OF PROPOSAL
  - \_\_\_\_\_ B. COMMENCEMENT AND COMPLETION SCHEDULES
  - \_\_\_\_\_ C. BILL OF MATERIALS AND LABOR PER TASK
  - \_\_\_\_\_ D. CATALOG PAGES AND/OR CUT SHEETS AS APPROPRIATE
  - \_\_\_\_\_ E. Proposed cable TESTING and ACCEPTANCE procedures and documentation
  - \_\_\_\_\_ F. WARRANTY services, procedures, conditions, and time periods.
  - \_\_\_\_\_ G. OTHER CONSIDERATIONS - See page 17 of this RFP
- \_\_\_\_\_ 4. STATEMENT OF VENDOR'S QUALIFICATIONS
- \_\_\_\_\_ 5. SIGNED AFFIDAVIT
- \_\_\_\_\_ 6. LOW VOLTAGE LICENSE AND PROOF OF RCDD CERTIFICATION



**PROPOSAL FORM TO PROVIDE STRUCTURED CABLING**

DELIVER TO  
THE BARROW COUNTY SCHOOL SYSTEM  
OFFICE OF INFORMATION TECHNOLOGY SERVICES  
JOHN ST.CLAIR, [saint@barrow.k12.ga.us](mailto:saint@barrow.k12.ga.us)

Having carefully examined the Proposal Invitation Letter, the General Conditions, and the Request for Proposal for Structured Cabling, any addenda, as well as the actual sites and premises, and conditions affecting the work, the undersigned proposes to provide the required materials, labor, and services specified in the attached proposal for the total sum of

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

Respectfully Submitted,

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
Address of Firm

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Name and Title

\_\_\_\_\_  
Name and Title of Vendor's Representative who will service contract

\_\_\_\_\_  
Address and Telephone Number of Vendor's Representative

\_\_\_\_\_  
Email address

**SUMMARY OF COSTS AND SCHEDULES**

**PROJECT COST SUMMARY – Print or type ALL amounts HERE:**

School	Materials	Labor	TOTAL
Auburn Elementary	\$	\$	\$
Bethlehem Elementary	\$	\$	\$
County Line Elementary	\$	\$	\$
Holsenbeck Elementary	\$	\$	\$
Statham Elementary	\$	\$	\$
Yargo Elementary	\$	\$	\$
Bear Creek Middle	\$	\$	\$
Haymon-Morris Middle	\$	\$	\$
Westside Middle	\$	\$	\$
Alternative School	\$	\$	\$
Apalachee High	\$	\$	\$
Winder-Barrow High	\$	\$	\$

**SCHEDULE SUMMARY – Print or type ALL quantities HERE:**

Estimate **Time of Commencement** of Installation after Notice of Award:

\_\_\_\_\_ calendar days \_\_\_\_\_ Other (Please explain below)

Estimate **Time to Completion** after Installation Begins:

\_\_\_\_\_ calendar days \_\_\_\_\_ Other (Please explain below)

\_\_\_\_\_  
(Vendor Name)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature Approving The Cost and Schedule Quotes Given Above)

\_\_\_\_\_  
(Print or Type Name of Vendor Representative Giving This Approval )

**PROPOSAL FORMAT**  
**BILL OF MATERIALS AND LABOR PER LOCATION**

*Attach separate pages as necessary utilizing this format  
 Materials listed in example below are illustrative and may or may not apply*

**School name**

Material or Labor Description and Units	Part/Item No.	Quantity	Unit Price	Extended Price
CABLE				
PATCH PANELS/WIRE MANAGEMENT				
RACEWAY & RELATED FITTINGS				
RACK MOUNT FIBER ENCLOSURE				
J HOOKS, TIES, CLIPS, etc.				
OTHER				

**Fully define and describe the testing and acceptance procedures and documentation. Tests performed must meet requirements specified in this RFP.**

**Fully explain all warranty provisions including services to be provided, procedures, conditions, response times and time periods.**

## **STATEMENT OF VENDOR'S QUALIFICATIONS**

To accompany proposals submitted for installing data and voice communications networks in the Barrow County School System.

Name of Vendor \_\_\_\_\_

Telephone Number \_\_\_\_\_

Email address \_\_\_\_\_

Business Address of  
Office or Facility Which  
Will Service This Contract \_\_\_\_\_

Distance from Barrow County School System ITS Miles \_\_\_\_\_ Minutes \_\_\_\_\_

When Organized? \_\_\_\_\_

Where Organized? \_\_\_\_\_

Partnership? \_\_\_\_\_ Corporation? \_\_\_\_\_

How many years have you been engaged in this business under the present firm name? \_\_\_\_\_

Have you ever refused to sign a contract at your original bid? \_\_\_\_\_

**Please attach a list of major accounts in Georgia comparable to the work proposed.**

If no accounts in Georgia, list other accounts.

Remarks: \_\_\_\_\_  
\_\_\_\_\_

***Attach copies of Low-Voltage License and RCDD Certificate of individual(s) who will perform/supervise/design the proposed work.***

The above statements must be subscribed and sworn to before a Notary Public.

Date: \_\_\_\_\_

Firm Name: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_  
Notary Public

Notary Seal

\_\_\_\_\_  
Commission Expires

**AFFIDAVIT**

In accordance with the Laws of Georgia, the following affidavit is required by all vendors submitting sealed proposals.

Fill out the affidavit below and include with this proposal.

State of \_\_\_\_\_

County of \_\_\_\_\_

Before me, an officer of said state, authorized by law to administer oaths, personally come the undersigned affiant, who on oath says that the attached proposal is submitted independently of any other proposal, and that this vendor has no interest, directly or indirectly, in any other proposal for said material, equipment, or services, and that this vendor will not receive any commission or any sum whatsoever, directly or indirectly, on the sale of said material, equipment, or services, in the event some other person, association, firm or corporation should be awarded the contract or sale for said material, equipment, and/or services.

\_\_\_\_\_ L.S.  
Affiant

Sworn to and subscribed before me on this  
the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_.

\_\_\_\_\_  
Notary Public

Notary Seal

\_\_\_\_\_  
Commission Expires

**Failure to properly execute this affidavit  
is considered grounds for rejecting this proposal**

## SCHOOL DISTRICT RESPONSIBILITIES

### The Barrow County School System and its contractors will:

#### Access for Installation

During the progress of the installation, allow the vendor and its employees access to the premises and facilities at all reasonable hours or at hours to which the school district and vendor may agree.

Provide free and clear access to existing conduit or allow vendor to place new conduit if necessary to all work locations, floors, buildings, etc., to support the media installation and provide vendor access to these adjacent areas where and when required.

#### Secure Storage

Provide secure storage space for materials and equipment during the progress of the installation.

#### Hazardous Conditions

Take such action as necessary to ensure that the premises are dry and free from hazardous materials or chemicals, (i.e., asbestos) and in such condition as not to be hazardous to the installation personnel or the material to be installed.

#### Inspections

Promptly make inspections when notified by the vendor that the project, or any part thereof, is ready for acceptance.

#### Coordination

Facilitate coordination between the work of the vendor and all other vendors and trades at the site(s). Such facilitation responsibility does not alleviate the cabling vendor of any responsibilities for completing this project in a timely and cost effective manner.

## VENDOR RESPONSIBILITIES

### The vendor will:

#### Provision

Provide all supervision, labor, tools, equipment, hardware and cabling materials as specified, transportation, erection, construction, unloading, inspecting, keeping inventory, and returning spare or unused material as specified in attached contract documents. Whenever used in this RFP the terms "provide," "furnish," "supply," or "install," etc., can be interpreted as requiring the vendor to both furnish and/or install materials, unless specific provisioning/installation of the materials by the school district is denoted.

#### Permits

Obtain all necessary city, county, municipal or state work/building permits at vendor's own expense.

#### Damage

Be responsible for and repair all damage to the building due to negligence of its workers, and report to the school system any such damage to the building which may exist or may occur during the occupancy of the quarters.

#### Fire Fighting Apparatus

Take necessary steps to ensure that required fire fighting apparatus is accessible at all times. Flammable materials shall be kept in suitable places outside the building.

### Identification

Identify to the district any work necessitating cutting into or through any part of the building structure such as girders, beams, concrete, dry wall, tile floors or partition ceilings. The school district and its contractors will approve such work before it is performed.

### Cutting, Drilling, Penetrating

Provide any cutting, drilling, or other structural penetration for the purpose of installing all conduits or sleeves through firewalls as required to meet codes.

### Sealing of Firewall Penetrations

Seal all firewall penetrations made to accommodate the cabling installed. Sealant materials and processes shall meet all applicable building codes **and must be approved by the general contractor.**

### Installation

Install the wire, cable, and associated hardware in accordance with the manufacturer's specifications.

### Trenching and Boring Beneath and/or Cutting Through Pavement

Provide any boring under and/or cutting through exterior concrete or asphalt pavement to allow burial of underground cabling. Provide any trenching necessary for burial of underground cabling. All boring, cutting, and/or trenching must be appropriately coordinated with the appropriate contractors and/or municipal authorities.

### Status Reports

Provide project status reports to school system's Network Telecommunications Manager of Information Technology Services or his designee as agreed upon before commencing work.

### Tests and Inspections

Conduct tests and inspections in the presence of designated school system personnel after installation has been completed in order that the school district may be assured that the requirements for the installation are met.

### Intended Completion

Give the school district notice of intended completion of each phase of the installation at least two days prior to such completion.

### Completion Notification

Promptly notify the school district of the completion of work on each project or such portion(s) thereof that is/are ready for inspection.

### Ceiling Tiles

For any work above ceiling tile, vendor must provide for the removal and reinstallation of all ceiling tiles required for the installation. Any tiles damaged by vendor's representatives will be replaced at the vendor's own expense prior to project completion.

### Defects

Promptly correct all defects for which the vendor is responsible.

### School System Contact

Coordinate all work with the school system contact who will be designated before the commencement of the installation.

## Clean Up

Upon completion of the work each day, remove all tools, equipment, rubbish and debris from the premises and leave the premises clean and neat.

## Subcontractors

Vendor **may not use subcontractors to perform any work.**

## **TEST/ACCEPTANCE CONDITIONS**

### Outline

**The PROPOSAL must contain an outline of the recommended acceptance criteria.** Prior to start of installation, the vendor will provide the school system with a complete detailed acceptance test procedure covering the offered distribution system. The criteria for acceptance procedure must be based upon contractual agreements as to what constitutes system failure and restoration procedure.

## **MAINTENANCE**

This section addresses the service maintenance contracts, levels of service, and service procedures that are of interest to the school system when assessing the service capabilities of a distribution systems vendor. If someone other than the vendor is to provide service, the servicing company, instead of the vendor, shall be listed along with the following information.

### Copy

A copy of the vendor's maintenance/service agreement with current prices, levels of service, and service procedures must be attached to the proposal.

### School District Responsibilities

The school district will notify the vendor of any equipment malfunction in accordance with normal reporting procedures provided by the vendor. The school district will provide reasonable access to equipment and maintain environmental standards as specified by the vendor. The school district will provide, if needed, space to store spare parts as designated by the vendor, which will remain vendor's property.

### Services

The following services must be provided as part of the contract:

- Labor
- Parts
- Technical resources and support for consultation for unique or major problems
- Maintenance according to specifications
- Records of service and administration

## **WARRANTY**

The vendor shall describe the appropriate product warranty periods, conditions, and services. The vendor shall also describe vendor's capability to collaborate with other vendors whose products rely upon the data transmission network for operability in order to develop solutions if difficulties and problems arise during the warranty period.

### POST WARRANTY MAINTENANCE

The vendor shall describe post warranty maintenance offerings and rates.



## SERVICE PROCEDURES

The vendor shall describe Service Procedures.

## OTHER CONSIDERATIONS

**Describe the following with supporting documentation as indicated:**

**What is the distance and location of maintenance forces in relation to the customer site?**

**What is the normal work schedule of your field maintenance personnel?**

**Can repair problems or outages be reported on a 24-hour basis? (If “yes,” please describe the procedure.) Specify any charges for service beyond normal business day/week, extraordinary travel or on-site maintenance.**

**Will you agree to a guaranteed installation date?**

## REQUEST FOR PROPOSAL (STRUCTURED CABLING)

### PROJECT SPECIFICATIONS

#### 1. Scope of Project Standards and Description

The Barrow County School System is interested in upgrading inter-closet fiber connections to 12-strand armored OM3 50/125 micron multimode plenum rated fiber capable of and tested to passing 10-gigabit Ethernet traffic, confirming to all applicable ANSI/EIA/TIA/BICSI standards.

Specifications for the fiber cabling are provided in this document.

The proposals submitted should address a network that provides connectivity between all nodes and includes all materials, installation labor, electronics, documentation, and training.

#### 2. Quality Assurance

This request for proposal establishes the general specifications for a “universal” premises distribution system that will support virtually all industry standards communications systems and allow multi-vendor compatibility on shared media to meet the data and voice needs of the Barrow County School System.

#### 3. Design Requirement

The system must be based on an open-distribution architecture so that existing equipment and facilities as well as future equipment from multiple vendors can be supported by the proposed system.

MDFs and IDF's must house all equipment. Equipment other than cable support (J-hooks or cable tray) will not be installed in any other areas unless authorized by the school system.

#### 4. Guarantees

Any fiber cabling must be tested and certified in compliance with the specifications outlined in the “**Standards for Structured Cabling Plant.**” The contractor must provide RCDD certification for network design.

#### 5. Testing and Certification

Testing fiber optic and copper distribution systems is crucial in assuring the overall integrity and satisfactory performance of the network. Test results quantify system quality, identify system faults, and establish the baseline accountability performance of the system. Proper testing also maximizes the longevity of the system, minimizes downtime and maintenance, and facilitates system upgrades or reconfigurations.

The contractor shall test, fully document, and provide proof of communications wiring systems certification.

Each communication outlet tested should include the patch panel, device jack, and all cable connecting them.

Testing must include complete, unmodified cat6 testing parameters, including but not limited to:

##### Copper testing

1. Length
2. Delay and delay skew
3. Impedance (TDR)
4. Resistance
5. Capacitance
6. Attenuation
7. Near End Cross Talk (NEXT)
8. Line Mapping
9. Return loss
10. PSNEXT (Power sum near-end cross talk loss)

- 11. PSELFEXT (Power sum equal level far-end cross talk loss)
- 12. ELFEXT Loss

and fiber testing including:

- 13. OTDR

Failure of vendor to provide these full test results will result in delaying of payment until full test results are provided. Network copper cabling plant must be demonstrated to be capable of supporting gigabit Ethernet data traffic, and fiber cabling plant must be demonstrated to be capable of supporting 10-gigabit Ethernet data traffic.

6. Fiber Optic Backbone

Fiber optic cable is required for all inter-building and intra-building backbone wiring. This includes all MDF to IDF and vertical riser applications.

Fiber optic cable shall possess the following construction and performance attributes:

At least 12 strand, armored OM3 50/125, multimode, plenum rated fiber optic cable.

7. Fiber Routing, Termination, and Labeling Requirements

Fiber optic connections should be terminated in rack mounted enclosures to ensure that the connections are protected. All fibers shall be permanently labeled (on the enclosures) at both ends indicating the originating and terminating location of each end. All unused fibers will be terminated for future use. All terminations shall use LC style connectors. Any necessary penetrations through walls in school are to be provided by vendor if not already existent and available. Any penetrations used or installed must use conduit sleeves with bushings to protect cabling.

8. System Documentation

System verification and acceptance documentation signed and dated by the installer (Contractor) and the design professional shall be provided. This documentation shall include test measurements and system calibrations performed for the entire system. Sample system operations shall also be performed with actual hardware or using Contractor provided test equipment and documented to verify that the system is operational and ready for acceptance.

## Standards for Structured Cabling Plant

All installations must comply with the Georgia Administrative Code. The most recent issue of the following standards and references apply in whole or in part to the installation of the communications and electrical power facilities. Where the guidelines differ with the listed reference standards, the standards shall dominate with the exception of the National Electrical Code which shall dominate.

The terms and definitions used in this RFP are found and specified in the following standards. All work and materials shall conform in every detail to the rules and requirements of the National Fire Protection Association, the local Electrical Codes and current manufacturing standards. All materials shall be listed by UL and shall bear the UL label. If UL has not published standards for a particular item, then other national independent testing standards shall apply and such items shall bear those labels. The cabling system described in this RFP derived from the recommendations made in recognized telecommunications industry standards. The following documents are incorporated by reference:

- A. **ANSI/TIA/EIA – 568-A**, Commercial Building Telecommunications Cabling Standards
  - **TSB-67**, Field Testing of UTP Cabling Systems
  - **TSB-72**, Centralizing Cabling Guidelines
  - **TSB-75**, Additional Horizontal Cabling Practices for Open Offices
  - **TSB-95**, Additional Field Testing Requirements for Category 5
  - **ANSI/TIA/EIA – 568-A, Addendum 1**: Propagation Delay and Delay Skew Specifications for 100 ohm 4-pair Cables
  - **ANSI/TIA/EIA – 568-A, Addendum 2**: Miscellaneous changes and corrections
  - **ANSI/TIA/EIA – 568-A, Addendum 3**: Hybrid and Bundled Cables
  - **ANSI/TIA/EIA – 568-A, Addendum 4**: Modular Patch Cord Production Testing
  - **ANSI/TIA/EIA – 568-A, Addendum 5**: Category 5e Performance
  - **ANSI/TIA/EIA - 568B.2-1**, all addendums: Category 6 standards
  
- B. **ANSI/TIA/EIA – 569-A**, Commercial Building Standards for Telecommunications Pathways and Spaces
  - **ANSI/TIA/EIA – 569-A, Addendum 1**: 2000, Perimeter pathways
  - **ANSI/TIA/EIA – 569-A, Addendum 2**: 2000, Furniture pathways
  - **ANSI/TIA/EIA – 569-A, Addendum 3**: 2000, Access floors
  - **ANSI/TIA/EIA – 569-A, Addendum 4**: 2000, Poke-thru devices
  
- C. **ANSI/TIA/EIA – 606**, Administration Standards for Telecommunications Infrastructure of Commercial Buildings
- D. **ANSI/TIA/EIA – 607**, Commercial Building Grounding and Bonding Requirements for Telecommunications
- E. **ANSI/TIA/EIA – 729**, Screened, 100 ohm Twisted Pair Cabling
- F. **ANSI/TIA/EIA – 758**, Customer-Owned Outside Plant Telecommunications Cabling Standards
  - **ANSI/TIA/EIA – 758-1, Addendum 1**, OSP Optical fiber cabling practices
- G. **BICSI – TDMM**, Building Industries Consulting Services International, Telecommunications Distribution Methods Manual (TDMM) – 9<sup>th</sup> Edition, 2000
- H. National Fire Protection Agency (**NFPA – 70**), National Electrical Code (**NEC**) – **2002**
- I. **TIA – 568.C.2**
  - General Conditions
  - A. #9 Warranty add Cabling System Warranty
    - 1. A Cable Products Warranty shall provide a complete warranty to guarantee a high performance cabling systems that meet application requirements. The guarantee shall include all cable installed in the structured cabling system. The Cable shall be warranted for a period of at least 15 or 25 years. Contractor must be a Certified Installer for solution provided.
  - 8. LAN Horizontal Wiring Specifications Cabling characteristic
    - Category 6 cable & connectivity. Products shall be made in the USA.
    - Cable performance guaranteed to 350 MHz
    - Cable must be third-party verified for guaranteed performance
    - Cable must meet specifications of General Cable 7131800.
  - 9. LAN Patch Panel
    - Category 6 modular patch panels 24 port.
    - A. Patch cords to be 28 AWG, factory made and tested

If this document and any of the documents listed above are in conflict, then the more stringent requirement shall apply. All documents listed are believed to be the most current releases of the documents. The Contractor has the responsibility to determine and adhere to the most recent release when developing the proposal for Installation.

This document does not replace any code, either partially or wholly. The contractor must be aware of local codes that may impact this project.

## APPENDIX A – REQUIRED TASKS PER LOCATION

### Task 1 – Establish Fiber Connections Between Data Wiring Closets

Install and test 12-strand armored OM3 50/125 micron multimode plenum rated fiber cabling from each school’s MDF to the school’s IDF’s with LC style terminations. Use existing equipment racks or data cabinets to house new fiber cabling. Vendor may use existing fiber enclosures if suitable to task or install new fiber enclosures if required. Vendor may use existing conduit, cable tray, and/or J-hooks to support fiber cabling or may install new support at vendor’s cost and discretion.

Vendor must maintain the functionality and connectivity of existing fiber connections when installing new fiber. Existing fiber may be temporarily disconnected and removed from enclosures if needed to install new fiber, but existing fiber must be reconnected and determined to be in operational order including connectivity upon completion of work. District will switch to new fiber connections at a later determined time after new fiber installation. Any outages must be short-term and pre-arranged with school or district IT staff. Pre-existing fiber may be left outside of fiber enclosure if needed to allow room for new fiber, but again vendor must still maintain existing connectivity and functionality of pre-existing fiber regardless of where pre-existing fiber is ultimately stationed.

For all racks and cabinets: Fiber enclosures are to be mounted as close to the top level as is possible.

Vendor will provide (6) fiber patch cables for each 12-strand fiber run, LC-LC 3-meter OM3 50/125 micron duplex multimode.

### Locations

School	Number of IDFs (Number of 12-strand fiber runs)
Auburn Elementary	3
Bethlehem Elementary	2
County Line Elementary	2
Holsenbeck Elementary	2
Statham Elementary	3
Yargo Elementary	3
Bear Creek Middle	5
Haymon-Morris Middle	3
Westside Middle	3
Alternative School	2
Apalachee High	8
Winder-Barrow High	10
<b>Total</b>	<b>46</b>