

# Adams-Friendship Area School District Request for Proposal

**CABLING UPGRADE ONLY** 

**JANUARY 3, 2024** 

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Adams-Friendship Area School District

All communications, questions and responses shall be directed to:

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# <u>NOTE</u>: This RFP is for the cabling upgrade for our phone/Public Address system. A separate RFP is posted for the hardware (phones & devices) related to our phone system.

# **<u>1 Introduction</u>**

**1.1 Statement of Purpose** The purpose of this Request for Proposal (RFP) is to invite prospective vendors to submit a proposal to provide a phone & Public Address (PA) system cabling solution that covers all steps from the initial site survey to equipment acquisition and complete installation, including cabling.

### 2 General Requirements

### 2.1 Goal and Objectives

The overall goal of this RFP is to install AFASD phone/PA cabling.

a) An objective of this Request for Proposal (RFP) is to contract with a single vendor to provide phone/PA cabling installation for AFASD

b) An objective is to meet AFASD phone/PA cabling needs in the most cost effective and efficient manner. The quantities described in this RFP are estimates only. AFASD shall not be obligated to purchase any quantity of services detailed herein.

c) In order to ensure that the required services are provided with the highest possible quality and professional services, AFASD is interested in establishing a contract with a vendor experienced and qualified in such contracts and that will provide the quality of services, products and equipment requested in a professional and timely manner.

d) Provide phone cabling for Administration building, Elementary, Middle School, and High School

e) Provide PA cabling for the Elementary, and High School. Provide options for the Middle School to function with its current system.

#### **<u>3 Overview of AFASD</u>**

Adams-Friendship Area School District (AFASD) is seeking to implement an on premise VoIP system to replace the existing analog system. AFASD has approximately 244 phone extensions across 3 schools, and one administration building. All buildings are connected via dedicated 1 gigabit fiber to the main district location at Adams-Friendship High School 1109 E North Street - Adams, Wisconsin. All district Main Distribution Frames (MDFs) and Intermediate Distribution Frames (IDFs) are connected via CISCO switching.

Administration (28) Elementary (73) Middle School (61) High School (82)

# **<u>4 Scope of Work for Phone Cabling Project</u>**

*Cable:* Data distribution shall be General Cable GenSpeed 6000 or equivalent and meet Category 6 specifications. All cable installed in an air plenum environment must be plenum rated and low smoke properties in accordance with the National Electric Codes. The contractor must be a certified installer of the manufacturer they are representing; A statement of warranty must be included in your bid proposal. All cables must also be certified.

**Raceway Installation:** Drops unable to be fished should receive raceway (Non-metallic raceways inside of offices and metallic raceways that will route from above the drop ceiling to the outlet locations. All necessary covers, end caps and fittings will need to be provided for a complete surface mount raceway. All colors of the raceway must be coordinated with the Project Manager.

*Cable Installation Specifics:* All cable must be run inside the wall or within the raceway. Cables need to be properly dressed and secured. All cables and faceplates must be labeled with a machine generated label per industry standards. Cabling systems within FDFs and IDFs should include CAT6: Patch panels, modular jacks, patch cords, cables, and couplers.

a) All cables shall be independently supported throughout the entire project as recommended.

b) All cables shall be protected from harm while passing through spaces that are not the property of the Owner.

c) Cables shall be routed point-to-point (home run). Cables shall not be spliced.

d) All cable runs must have a ten (10) foot service loop on the MDF end of the cable and a three (3) foot service loop at the jack end.

e) All cabling installed in the ceiling must be hung at least 8-inches above the finished ceiling. All cable must be routed to avoid fluorescent light fixtures or electric motors.

f) The outside sheath of any cable shall not be damaged.

g) The contractor shall terminate cables properly on both ends.

h) The contractor shall provide proper temporary protection for cables after pulling is complete but before final dressing and termination is complete.

i) Cable shall not be left lying on the floor or on top of drop ceiling grids.

j) The contractor shall use Velcro-styled straps to tie-wrap all cables. Tie-wrap shall occur on two (2) foot intervals.

k) Traditional cable ties shall be used where required to properly support cables and to protect them from harm or other environmental elements (i.e., to be used in ceilings to keep cables off of lighting fixtures or ceiling grids).

l) During installation, the contractor shall comply with the manufacturer's recommendation for pulling tensions.

m) The contractor shall comply with the manufacturer's recommendation for the short- and long-term minimum bend radius. o) Installation includes J-Hooks as required.

#### **<u>5 Workstation Termination</u>**

All cable connecting hardware and terminations shall meet the following standards:

A)The contractor shall:

i. Install all connecting hardware per manufacturer's instructions and recommendations.

ii. Field terminate all cables unless otherwise noted.

iii. Terminate cables in proper order and sequence.

iv. Utilize proper tools when performing terminations.

v. Leave no more than a 0.50 inch of untwisted cable at the terminated ends.

#### **<u>6 Workstation Cable Run Length</u>**

The maximum run of cable from any workstation to an IDF closet, or to the MC shall not exceed 290 linear feet with an allowance for patch cords. The overall length of the circuit (including patch cords) from desktop device to LAN equipment shall not exceed 100 meters.

Switch Station Panels: 24 port Category 6 rack-mounted modular patch panels, or equivalent. Patch panels shall be wired. All patch panels shall provide space for a label for each port in the back.

#### 7 Installation Guidelines

a) Provide and install modular patch panels onto racks in the IDFs for terminating the data distribution cables and tie cables.

b) Provide and install machine-printed label strips on the front and for each port of the patch panels.

c) Terminate the distribution cables in proper outlet labeling order.

d) Terminate individual cable pairs utilizing the proper tool.

e) Each patch panel port shall have a typed, non-smearing label using a self-adhesive sticker indicating the port number in accordance with the Cable Identification and Labeling section.

f) Install standard faceplates on appropriate walls

g) Utilize existing raceways and wiremold when available

h) Remove old cable

i) Convert existing Category 6 phone cables to integrate with an IP network where possible

j) Mount new rack in locations of existing phone 110 blocks

k) Establish improved cable pathway in the Administration tech office

# 8 Category 6 Cable System Test

a) Each cable shall be tested and certified for permanent link compliance with TIA Category 6.

b) Each pair shall be tested end-to-end (from the outlet port through the port at Category 6 data patch panels). Two (2) ten (10) foot patch cables shall be used at the test unit end so that the outlet, outlet termination, cable and termination block can be observed in the test.

c) End-to-end attenuation loss and near-end crosstalk shall be tested from 0.772 to 250 MHz and shall meet or exceed Category 6 TIA 568-C requirements.

d) All tested cables shall pass all performed tests. e) End-to-end attenuation loss and NEXT shall meet or exceed Category 6, TIA 568-C requirements.

e) If a problem or fail test occurs, the contractor shall evaluate and remedy the problem without any additional cost to the owner

f) The contractor is responsible for correcting and resolving any issues raised by the owner or its representative with respect to workmanship or deviation from standards stated herein

g) Provide AFASD documentation regarding test results, warranty associated with cable installation and 2 copies of cable routes/station ID's

# 9 Material List

List of all materials by part number, brand, and description and quantity

Material list of total cost including everything needed to complete the project, (i.e. patch cables, patch panels, keystone jacks, face plates, etc)

# **10 Expectations and Timelines**

- RFP posted January 3, 2024 January 31, 2024.
- Walkthrough tours of District facilities will be provided by a member of our District Technology staff to interested bidders on
  - o January 17, 2024
- The District requests bidder's sealed proposals no later than 3pm January 31, 2024
  - Proposals may be submitted via email to Sean Ringer: ringer\_s@afasd.net
- The District reserves the right to accept or reject all proposals
- AFASD will review proposals and may elect to schedule a presentation of proposed solutions TBD
- After review of proposed solutions, AFASD will recommend a proposed solution to the Board of Education at AFASD finance committee and regular board meetings during the month of April/May
- We expect and respect your professional expertise in recommending the best affordable solution
- Expected install date: June or July 2024