



Department of Information Technology

Date: 12/16/2016

Subject: E-Rate 470 2017 Project Narrative

Overview

Bethel Public Schools wishes to upgrade its infrastructure and wireless systems in each of its schools utilizing the project described in the 2017 E-Rate 470 form.

- We are requesting two bid types for this project. One will cover Installation labor and materials, the other will cover drop-ship networking equipment and accessories only. Vendors are free to bid either or both aspects of the project, but please bid the drop-ship separately from installation. The scope of these is outlined below.
- We are requesting vendors to break down their bids on a per-building basis to comply with funding requirements of the e-rate program.
- Quantities of equipment purchased are subject to change depending on e-rate funding, therefore please provide per-unit pricing for each item in your bid.
- The delivery of equipment and installation work can only be done after July 1, 2017.
- A walk through is scheduled for Friday, January 13th at 10:00am starting at Bethel Middle School, (snow date January 20th) for vendors providing detailed information on the installation portions of the project.
- The District has standardized on HPE / Aruba (formerly HP ProCurve) network switches and Cisco-Meraki Wireless access points. Preference will be given to the models listed. Switch modules and transceivers quoted shall be OEM units, not 3rd party compatible models.

Summary Per Building

- **Bethel High School**
 - The project at BHS will be drop-ship equipment only. No Installation component. The HP Networking managed switches will be programmed and set up by Bethel Schools' IT Department. Please refer to the Form 470 for the list of equipment for BHS.
- **Bethel Middle School**
 - The project at BMS has both drop-shipment and installation components.
 - The Installation project will replace the existing 4 runs of fiber distribution cabling with OM3 Plenum rated 12 strand distribution cable. New Fiber will be terminated in OM3 rated fiber patch panel type SC connectors, labeled and tested to 10GB bandwidth at minimum.
 - Existing fiber distribution will be left active and running in parallel with the new OM3 fiber.
 - All materials (fiber, patch panels, connectors, etc) for the BMS Installation project will be supplied by the installation vendor as part of the bid.

➤ **R.M.T. Johnson Elementary School**

- The project at Johnson School has both drop-shipment and installation components.
- For the list of drop-shipment equipment, please refer to the list of equipment on the form 470 for Johnson school.
- The installation portion will involve 3 major parts:
 - Dis-assembly and removal of 3 existing wall-mounted rack enclosures, and replacement of these with (1) 26-RU enclosure listed in the drop ship list in the Computer Lab, and (1) 18-RU enclosure in the Office copy room.
 - Test, label, and provide a new port map for all existing Ethernet cabling.
 - Termination into a patch panel of several existing Cat 5e runs that do not currently terminate in a patch panel.
 - Installation of a single run of OM3 Plenum rated 12 strand distribution cable in parallel with existing fiber distribution cable. New Fiber will be terminated in OM3 rated fiber patch panel type SC connectors tested to 10GB bandwidth at minimum.
 - Installation of up to 30 new Wireless Access Points, which will be purchased from the drop-ship list.
 - Each WAP will have a new run of Cat 6a cabling from the closest IDF to the location of the WAP, terminating the IDF end in a new Cat6a patch panel, with label. The other end terminates in a Cat6a RJ45 plug, or jack and patch cable, to plug into the WAP.
 - WAPs will generally be installed on the T-Bar of the drop ceilings using hardware packaged with the WAP.
 - Bethel Schools' IT department will configure and label the WAPs prior to installation and update the floor plans with the final WAP and room designations to ensure accurate placement.
- All needed materials not included on the drop-ship list (e.g., fiber, Cat 6a cable runs, patch panels, connectors, etc) for the Johnson project will be supplied by the installation vendor as part of their bid.

➤ **F.A. Berry Elementary School**

- The project at Berry School has both drop-shipment and installation components.
- For the list of drop-shipment equipment, please refer to the list of equipment on the form 470 for Johnson school. Bethel IT will program and set up switches and Access Points in this list.
- Installation of up to 22 new Wireless Access Points, which will be purchased from the drop-ship list.
 - Each WAP will have a new run of Cat 6a cabling from the closest IDF to the location of the WAP, terminating the IDF end in a new Cat6a patch panel, with label. The other end terminates in a Cat6a RJ45 plug, or jack and patch cable, to plug into the WAP.

- WAPs will generally be installed on the T-Bar of the drop ceilings using hardware packaged with the WAP.
- Bethel Schools' IT department will configure and label the WAPs prior to installation and update the floor plans with the final WAP and room designations to ensure accurate placement.
- All needed materials not included on the drop-ship list (e.g., fiber, Cat 6a cable runs, patch panels, connectors, etc) for the Berry project will be supplied by the installation vendor as part of their bid.

➤ **Anna Rockwell Elementary School**

- The project at Rockwell School has both drop-shipment and installation components.
- For the list of drop-shipment equipment, please refer to the list of equipment on the form 470 for Rockwell school.
- The installation portion will involve 3 major parts:
 - Dis-assembly and removal of 2 existing wall-mounted rack enclosures, and replacement of these with (1) 26-RU enclosure listed in the drop ship list in the Media Center Office, and (1) 18-RU enclosure in the Main Office copy room.
 - Test, label, and provide a new port map for all existing Ethernet cabling.
 - Termination into a patch panel of several existing Cat 5e runs that do not currently terminate in a patch panel.
 - Installation of a single run of OM3 Plenum rated 12 strand distribution cable in parallel with existing fiber distribution cable. New Fiber will be terminated in OM3 rated fiber patch panel type SC connectors tested to 10GB bandwidth at minimum.
 - Installation of up to 16 new Wireless Access Points, which will be purchased from the drop-ship list.
 - Each WAP will have a new run of Cat 6a cabling from the closest IDF to the location of the WAP, terminating the IDF end in a new Cat6a patch panel, with label. The other end terminates in a Cat6a RJ45 plug, or jack and patch cable, to plug into the WAP.
 - WAPs will generally be installed on the T-Bar of the drop ceilings using hardware packaged with the WAP.
 - Bethel Schools' IT department will configure and label the WAPs prior to installation and update the floor plans with the final WAP and room designations to ensure accurate placement.
- All needed materials not included on the drop-ship list (e.g., fiber, Cat 6a cable runs, patch panels, connectors, etc) for the Rockwell project will be supplied by the installation vendor as part of their bid.

Please do not hesitate to ask if you have any questions regarding this project.

---David Arre

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