Prairie Grove School District Project Narrative

HIGH SCHOOL

Prairie Grove School District is seeking to upgrade their existing fiber optic cabling backbone at the high school from 1Gbps to 10Gbps. The (2) C3KX-NM-10G modules and (2) SFP-10G-LR SFPs will be used to replace existing SFPs which are only running at 1Gbps. No installation is required for this equipment. Prairie Grove technology staff members will install and configure this equipment. This equipment must be compatible with current switches used by PGSD (currently Cisco 3500 series and 2900 series switches).

Prairie Grove High School has two existing edge switch cabinets that are currently connected to the core switching infrastructure via copper cabling. PGSD is seeking to replace this copper cabling with multi-mode fiber cabling (12-strand) indoor cabling. This cabling does not need to be plenum cabling. If J-Hooks, or other existing cabling management does not currently exist within the fiber path, vendors should install J-Hooks (or a similar solution) to keep the fiber cabling off of the existing ceiling grid. If any firewalls must be penetrated during installation, vendors must properly repair holes for fire stopping purposes by meeting local building codes. Fiber cabling should meet or exceed Panduit FODRX12Y specifications. Fiber trays should meet or exceed Panduit FMT1 specifications. The two cabinets will be homerun fiber pulls back to the high school office server room. Each fiber length is approximately 300-meters or less. A fiber tray will need to be installed in all three cabinet locations.

PGSD would like to upgrade their firewall. Currently, the district uses a Smoothwall S8 next-generation firewall appliance. The district has exceeded the capacity of the S8 appliance and would like to purchase the Smoothwall S14 appliance as an upgrade. General firewall specifications for bid purposes include a next-generation firewall capable of IDS/IPS, content filtering, malware detection, and SSL/SHH inspection with the capacity to service 2,000 users and up to 1.5Gbps bandwidth throughput. Bids should include the appliance (discounting any non-E-rate eligible services and features) and support. Installation and configuration services may be required if PGSD technology staff members are not familiar with the winning product. Installation and configuration should not be required if the winning appliance is a Smoothwall S14 due to previous knowledge and management of Smoothwall devices by technology staff.

MIDDLE SCHOOL

Prairie Grove School District is seeking to upgrade their existing fiber optic cabling backbone at the middle school from 1Gbps to 10Gbps. The (1) C3KX-NM-10G modules and (2) SFP-10G-LR SFPs will be used to replace existing SFPs which are only running at 1Gbps. No installation is required for this equipment. Prairie Grove technology staff members will install and configure this equipment. This equipment must be compatible with current switches used by PGSD (currently Cisco 3500 series and 2900 series switches).

A network cabling project need has been identified at the middle school (7th grade building) campus. This project will seek to install (2) Cat6 network drops per classroom (one faceplate with two terminations per faceplate) inside (6) classrooms. These drops will be run inside the wall of each room, when possible. If not possible in all locations, surface-mount conduit will be permitted. Each drop will be run to an existing switch cabinet inside the building and will be terminated onto a new 48-port patch panel. Access point drops will be pulled to each classroom and terminated onto a new 24-port patch panel in the same existing switch cabinet. All drops are to be terminated, tested, and labeled.

An existing 2-post, floor-mount, rack exists within the PGSD 5/6 grade building. This rack has no security and cannot accept larger equipment, such as a USP. PGSD is seeking to replace this old rack with a wall-mount with cabinet specifications that are at least 12U with the ability to accommodate devices which are up to 24” deep. Something similar to the Tripp-lite SRW18USDP is desired, although 18U is not necessarily required if the vendor can purchase a 12U cabinet with the required depth. This project will also include moving existing cabling, including fiber, from the old rack into the new cabinet. Two new 48-port patch panels are required. A Panduit fiber tray (FMT1) or equivalent may be required.

ELEMENTARY SCHOOL

Prairie Grove School District is seeking to upgrade their existing fiber optic cabling backbone at the elementary school from 1Gbps to 10Gbps. The (1) C3KX-NM-10G modules and (2) SFP-10G-LR SFPs will be used to replace existing SFPs which are only running at 1Gbps. No installation is required for this equipment. Prairie Grove technology staff members will install and configure this equipment. This equipment must be compatible with current switches used by PGSD (currently Cisco 3500 series and 2900 series switches).

The network cabling, Cat6 project, will address the need for installation of more wireless access points as well as the need for upgraded network cabling in classrooms and a computer lab. This cabling is indoor, Cat6, non-plenum, blue cabling. Total Cat6 runs are estimated at (88). This includes (18) pulls into classroom ceilings for wireless access points. These access point drops will be terminated onto a new 24-port patch panel in an existing switch cabinet. Another (30) drops will be ran inside an existing computer lab to replace cabling that is very old. These drops will need to be terminated, tested, and labeled. They will be pulled into the new switch cabinet that will be installed. The remaining (88) drops will be pulled into classrooms (2 drops per classroom). When possible, these drops will be installed inside walls with gang boxes and faceplates. Alternatively, surface-mount conduit/boxes will be permitted when inside wall access is not possible. All drops will be terminated, tested, and labeled.