



WIRELESS NETWORK: BID2021-e03

Montville Public Schools – Elementary Schools and Palmer

*800 Old Colchester Road
Oakdale, CT 06370
Phone: (860) 848-1228*

Website: <http://www.montvilleschools.org>

Elementary Schools and Palmer Wireless RFP

INTRODUCTION

This wireless project is for 4 schools. PBL, which is in the Palmer Building serves about 31 students. The other three schools are Mohegan (MOH), Dr. Charles E. Murphy (CEM) and Oakdale (OAK) elementary schools serves approximately 290 students each. The locations of the schools are as followed:

Palmer Building
238 Maple Ave
Uncasville, CT 06353

Mohegan Elementary School
49 Golden Rd
Uncasville, CT 06382

Dr. Charles E. Murphy School
500 Chesterfield Rd
Oakdale, CT 06370

Oakdale Elementary School
30 Indiana Circle
Oakdale, CT 06370

1.0 Objective

Montville Public Schools (MPS) is seeking proposals from qualified vendors to replace and upgrade the existing wireless network, coverage of wireless and related network infrastructure to support the additional access points for the schools as described in this Request for Proposal (“RFP”). District may choose to proceed with all or some of the project/purchase. Building maps and blueprints will be available after the virtual vendor meeting or by sending a request to erate@montvilleschools.org. The new wireless network shall be a controller or cloud based, enterprise class wired/wireless network and should be compatible with a Cisco networking, Extreme Networking, and HP networking. The purpose of this RFP is to expand and replace our existing Meraki wireless infrastructure to provide coverage for the entire elementary school, including classroom spaces, Media Center, Cafeteria, Food Service Area, Maintenance, Gymnasium, Auditorium, and front offices. We are estimating 140 access points, 4 48 port and 6 24 port POE switches, cabling, 6 patch panels and any other hardware/supplies for installation of access points and switches. Any brands/makes/models listed on this 470 are to include “OR EQUIVALENT” brands/makes/models. The exact quantities will be determined by the vendor. The wireless needs to support the districts 1:1 program which is iPads, Chromebooks for students and Windows laptops for teachers.

2.1 Background

The current network is not capable of supporting the anticipated demands for high densities of Wi-Fi enabled devices. The current access points are Meraki and need to be replaced with new Meraki access points or equivalent. The existing HP switches are linked with a 1-gig connection. However, the existing Meraki switches that are used to power the current access points should

Elementary Schools and Palmer Wireless RFP

be replaced. We are replacing the existing HP switches to Extreme switches not through this RFP, but as a separate project. The schools are currently standardized on Active Directory 2016.

The Schools network infrastructure consists primarily of HP ProCurve switches and Meraki POE switches for the wireless, but network hardware and software from other manufacturers will be considered, provided they match or exceed the capabilities of the existing Meraki and new Extreme switches, or equivalent. We are currently working on a plan to replace all switches to Extreme, which is not part of this project. Vendor may have to increase the number of switches to power the access points. If additional switches are added, Vendor needs to provide battery backup.

A description of the current network and drawings will be discussed at and available during the virtual vendor meeting.

2.2 Scope of Service

- 1) The wireless network shall be designed by the Vendor to support at least 40 high-speed wireless devices in each classroom. Computer Labs and Libraries shall be designed to support at least 100 devices and cafeterias and the multipurpose building shall support up to 150 devices. All quantities & capacities are approximate and subject to change.
- 2) Patch panels and switch ports shall be added to each MDF/IDF hosting access points using switches equivalent to or better than the existing switches. Ports shall be POE and added on a two for one basis. For every Access Point port needed, at least one additional port shall be available on the switch.
- 3) Vendor is responsible for configuring **all devices** needed to implement the new wireless network. MPS technical staff shall be consulted prior to making any and all changes to any MPS system. Configuring should include best practice.
- 4) The wireless network shall be configured to have multiple SSID's on dedicated VLAN's as defined by MPS technology staff during installation and setup. Secure enterprise level authentication shall be provided. MPS technology staff will be responsible for installing any services needed on MPS servers and will be consulted prior to Vendor configuring those services.
- 5) A physical controller or cloud base controller can be installed. If Meraki is chosen, configured with the existing Meraki network would be expected.
- 6) The Vendor shall provide all physical installation and removal of existing access points.
- 7) Vendor shall work with MPS IT staff to configure a Guest VLAN and SSID that provides limited network access.
- 8) A complete post-installation site survey shall be completed to show that all instructional areas have a minimum RSSI of -65 dBm and office spaces have a minimum RSSI of -70 dBm (in both the 2.4 GHZ and 5 GHZ bands) in all locations of those areas. This survey shall be provided to the district once complete. All capacities are approximate and subject to change.
- 9) All work not found in conformance with the intent of the proposal shall be

Elementary Schools and Palmer Wireless RFP

repaired promptly at no additional charge to MPS.

- 11) The Vendor must provide a guarantee that the system will operate and perform as advertised when students and staff fully utilize the system. This includes minimum RSSI of -65 dBm or -70 dBm (in both the 2.4 GHz and 5 GHz bands) in all designated spaces as listed in 2.2.9. The Vendor will be required to provide the appropriate devices at no charge if spaces are found that do not meet these requirements.
- 12) Vendor will provide any additional and/or replacement wiring, patch panels, terminators and/or patch cables as needed to complete this project.
- 13) All cabling must be CAT6 cable or greater.
- 14) **Vendor will pull a building permit for the project.**
- 15) Vendor is responsible for all project management; this is to be a turn-key solution with involvement of Montville IT staff limited to specification of network security parameters, VLAN definition, and installation of any needed services on MPS-owned servers.
- 16) Any or all existing access points not used in the project will need to be removed from the ceiling and given to MPS IT Staff. The existing Cat. 6 from unused access points maybe used for new access points or left above the ceilings for future use. If existing cabling is being used, please verify the cable is in good standing. May need to re-terminate the ends of CAT6 cables.

2.3 Specifications

- 1) Equipment must meet or exceed the 802.11 a/g/n/ac wave 2/ax standard.
- 2) The system must be Wi-Fi Certified for 802.11 a/g/n/ac wave 2/ax or greater.
- 3) Each access point must be an array of at least 3x3 or 4x4 radios that support 802.11 a/g/n/ac wave 2/ax.
- 4) Each access point must have at least 2-gigabit Ethernet ports.
- 5) Mounting brackets
- 6) Software and firmware updates for 5 years bundled or longer
- 7) Each access point must support VLAN tagging on individual SSID's.
- 8) Each access point must include spectrum analyzing capabilities.
- 9) Each access point must have the ability to switch users from the 2.4 GHz spectrum to the 5 GHz spectrum automatically as needed for client load balancing purposes.
- 10) Each individual radio in an access point must be manageable i.e. increase/decrease RX/TX, capable of setting different security protocols per radio, etc.
- 11) Access points must have adaptive antenna technology and not transmit 100% of the time in an omnidirectional pattern.
- 12) Each switch will have sufficient gigabit ports to meet the two to one requirement for switch ports and able to stack with Extreme switches.
- 13) Each switch will have sufficient power over Ethernet (POE) ports to meet the two to one requirement for switch ports.

Elementary Schools and Palmer Wireless RFP

- 14) Any area that does not have a drop ceiling will require a wall mount bracket or other mounting option and suitable wiring raceways and moldings to achieve a finished installation appearance.
- 15) Category 6 cabling is required. Each node must be properly terminated, tested, and verified with appropriate documentation. Use of long patch cables (greater than 15') is prohibited from an existing wall jack. Vendor will be responsible for any additional or replacement cabling.
- 16) Vendor will provide a list of access points with Room numbers/location and MAC Address.
- 17) Centralized management of proposed access points, including:
 - a. Configuration management
 - b. Global configuration changes
 - c. Ability to load floor plans into the centralized management to create heat maps
 - d. Monitoring capabilities for spectrum analysis and wireless intrusion detection/ protection
 - e. Radio management that assigns channels, helps avoid RF interference
 - f. Security options including WPA2, 802.1X with Radius secure authentication and rogue access point detection
 - g. Auditing
 - h. Delegated administration
- 18) **Reimbursement method for E-rate will be SPI.** Vendor is responsible for providing their valid Service Provider Identification Number (SPIN) with bid.

2.4 Warranties

All warranties by Vendor and manufacturer on both products and labor must be specified in the proposal. The Vendor's warranties shall commence with acceptance of/or payment for the work in full. Minimum acceptable warranty on hardware, parts, and labor is 3 years.

2.5 Service

The Vendor must provide terms of service should repair become necessary and the work and materials needed that are not covered under warranty.

2.6 Virtual Vendor Meeting

Due to COVID, we will have one Virtual Vendor Meeting. All questions need to be submitted to erate@montvilleschools.org. We will have a virtual Vendor Meeting on Zoom to review RFP and answer project questions. Vendors may not arrange a private meeting.

Virtual Vendor Meeting See Appendix A

Elementary Schools and Palmer Wireless RFP

3.1 Evaluation Methodology

Each proposal will be evaluated based on criteria and priorities as defined by MPS, who will choose the submission that, taken as a whole, and in MPS's sole opinion, is in the best interest of the most cost-effective. Proposals should address the evaluation criteria itemized below.

The evaluation criteria include, but are not necessarily limited to, the following:

- Price for all parts, labor, design, project management, programming, and shipping and handling.
- The proposal's alignment with the desired solution as described in section 2, above.
- The Vendor's overall performance record, including responsiveness and reputation based upon feedback from available references.
- The perceived quality of the Vendor's response, including completeness, accuracy and appropriateness.
- Stability/risk of Vendor, including assessment of risk that they may not be able to fulfill responsibilities.
- Vendor location for base of operations and support personnel.

3.2 Evaluation Criteria

- Price – 30%
- Design and Technical Features – 25%
- Service and Support location and experience – 20%
- Installer Qualifications and Experience – 10%
- Quality of References – 15%

TERMS AND CONDITIONS OF REQUEST FOR PROPOSAL (RFP)

4.1 Response Submission

Responses to this RFP must be submitted and delivered to MPS as "sealed bids" no later than 12:00 p.m. on Wednesday, March 31st, 2021 ("Final Submission Date"). Proposals must include a digital copy on flash drive. Acceptable digital formats include Word or PDF. It is the sole responsibility of the respondents to ensure that their responses arrive in a timely manner. MPS will reject all late arrivals. Envelopes containing responses to this RFP shall be so marked as to be easily identified as containing RFP proposals. The outside of the envelope shall be identified as follows:

"Wireless Network Proposal: Bid 2021-e3"

Montville Public Schools
Attn: Nichols Savoie
800 Old Colchester Road
Oakdale, CT 06370

Oral, telephone, electronic mail or fax bids shall not be considered, nor will modifications of proposals by such communication be considered. The completed proposal shall be without erasures or alterations. Delivery of the proposals will be considered authorized by the service

Elementary Schools and Palmer Wireless RFP

provider to make a contract, if awarded.

Responses to this RFP shall be provided as one quote. The quote will cover the wireless Access Points, cabling and switches needed to support the wireless installation. A vendor does need to provide a quote for the entire solution.

Any questions should be made in writing via e-mail to Mr. Nicholas Savoie, erate@montvilleschools.org Director of Technology by 2:00 pm March 18th, 2021. All questions will be posted on the website (www.montvilleschools.org) under RFP's on the top menu. No phone calls will be taken.

4.2 Proposal Preparation/Layout Instructions

- 1) **Cover Letter** (maximum 1 page)
- 2) **Proposal Summary** - Please summarize your response and your company's qualifications. Additionally, you may use this section at your discretion to articulate why your company's products and services are uniquely suited for enterprise networking. Please include ap of the proposed Access Point locations
- 3) **Services Requested** –
 - Creation of a solution to replace/expand the wireless network at Palmer, MOH, CEM and OAK. The total number of access points will be finalized at time of contract signing, as quantities and locations may change.
 - Additional features and functionality of proposed products that enhance the delivery of existing or new services to MPS. These could include things like centralized management, heat maps, detection of interference devices and rogue access points.
 - Explanation of Monitoring tools and ongoing maintenance should also be included in responses.
 - Access points must be engineered to obtain maximum performance using techniques such as installing them below the tile on the ceiling grid, avoiding light fixtures, etc.
 - Any additional applicable wiring for access points using Cat 6 cabling.
 - Vendor must collect existing network configurations from switches to be replaced for the new equipment
 - Switch assembly, staging and applying migrated configurations
 - Onsite installation and final configuration of switches, Remote fine tuning after onsite installation
 - The plan for equipment must include new, not refurbished or remanufactured equipment
 - Switch stacks must be engineered to be resilient to switch failure using stacking technology, redundant power supplies, and other failsafe technologies
 - Documentation supporting the estimated life cycle of proposed products and product families, warranties and maintenance contracts, and any other information that would support an ongoing replacement program.
 - Installation, activation and configuration of the Access Points, and wireless network switches must be completed by the vendor and configured to Montville Public School standards.

Elementary Schools and Palmer Wireless RFP

4) Cost Proposal

Pricing tables must be included for services as proposed by the vendor.

Additionally, the cost proposal should address the following points:

- Vendors should provide separate pricing schedules for each component you are responding to: access points, switches, software, Installation, etc. It is the MPS's expectation that proposed prices will be honored throughout the term of a negotiated agreement.
- Vendors are to respond to complete solutions. Partial solutions will not be considered. The MPS welcomes cost-effective alternatives to products or designs which the vendor deems to be worthy of consideration. In cases where an alternative is being suggested, we request that you provide the rationale for the alternative.
- Please list all one-time charges and fees, such as for installation.
- Please describe your preferred pricing strategy for the products and services you would propose.
- Please identify if you are bidding on any other services from an MPS 470 application for E-rate year 2021, and if there is any impact on how you priced your response to this RFP.
- Please list any optional or supplementary products or services you are proposing and the benefit to the MPS, and how they would be priced.
- Please indicate the assumptions you used to develop the pricing strategy, or any other part of your proposal.
- Vendor should also take notice that pricing should be firm, including a line item for expected tariff increases, if any. The school district will not be responsible for increased pricing not quoted.
- Vendor should specifically note any **non-E-Rate eligible** items in bid response.

5) References

- References of at least three (3) installations of similar application size and complexity.

4.3 Costs Associated with Preparation of the Vendor's Response

MPS will not be liable for any cost incurred by the respondents in preparing responses to this RFP or negotiations associated with award of a contract.

4.4 Proposal Binding Period

- 1) All prices quoted in The Vendor's response for will firm until completion of project. The project will be contingent upon e-rate funding and BOE funding. MPS will not start the project until the funding commitment letter is received from E-rate. **Reimbursement method for E-rate will be SPI.**

Elementary Schools and Palmer Wireless RFP

4.5 Bid Opening Procedure

All bids will be opened at 1:00 p.m. on March 31, 2021, and all bidders and other interested persons are invited to be present via Zoom virtual meeting. Please email erate@montvilleschools.org for a Zoom invite link by 10:00 am on March 2nd, 2021.

Vendors are welcomed to attend the Zoom Meeting, but attendance is not mandatory. Lack of attendance will NOT be construed to indicate lack of interest nor will it reflect negatively on Vendor during review of proposal. Bids are due 12:00 p.m. on March 31, 2021.

4.6 Omissions

Omissions in the proposal of any provision herein described shall not be construed as to relieve The Vendor of any responsibility or obligation to the complete and satisfactory delivery, operation, and support of any and all equipment or services.

4.7 Evaluation of Responses

MPS may at its discretion and at no fee to MPS, invite any Vendor to be available for questioning during the response evaluation for the purpose of clarifying statements in the response.

4.8 Right to Reject

MPS reserves the right to accept or reject all proposals or sections thereof and when the rejection is in the best interest of MPS and reserves the right to award without further discussion.

4.9 Basis of Award

MPS will award a contract based on the following terms:

- 1) Must have a current USAC SPIN and SPAC. (Reimbursement method for E-rate will be SPI.)
- 2) References of at least three (3) installations of similar application size and complexity. (All references should include: a contact person, dates of work, mailing address and telephone numbers.)
- 3) Proof of certifications and qualifications for all engineers and installers associated with this project.
- 4) Issuance of a Purchase Order will be contingent upon final approval and acceptance by MPS.

4.10 Insurance Requirements

Within two (2) days after notification of award, The Vendor shall furnish to the Montville Public Schools a Certificate of Insurance showing compliance within the following limitations:

- 1) The Vendor agrees to comply with the provisions of Worker's Compensation Laws of the State of Connecticut.
- 2) It shall be stated on every policy or Certificate of Insurance, as the case may be, that "The insurance company agrees that the policy shall not be canceled, changed, or allowed to lapse until ten (10) days after the Montville Public Schools

Elementary Schools and Palmer Wireless RFP

has received written notice as evidenced by the return receipt of registered mail, 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 the policy.”

- 3) The Vendor shall name Montville Public Schools as an additional insured, on a primary, non-contributory basis on the General Liability. The Vendor shall provide a waiver of subrogation on the General Liability and Workers Compensation policies.

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

The Montville Public Schools Protective Liability Insurance:

- Personal injury, including death, limits of \$1,000,000.00 for each person and \$1,000,000.00 for each accident.

Vendor’s General Liability Insurance:

- Limit of \$1,000,000

4.11 Questions

For questions or comments regarding this RFP process or the RFP documents, please submit your questions or comments in email. You may submit questions and/or clarification in writing until 2:00 pm March 18th, 2021. If it becomes necessary for Montville Public Schools to revise any part of this RFP, or to provide clarification or additional information after the documents are released, MPS will post addendums to the MPS website, www.montvilleschools.org.

Please Submit questions via email to:
Nicholas Savoie
erate@montvilleschools.org

4.12 Governing Law

All RFPs and related documents submitted to the Montville Public Schools by the Vendor are governed under the laws of the State of Connecticut.

Elementary Schools and Palmer Wireless RFP

APPENDIX A

Virtual Vendor Meeting Details:

When joining the Zoom meeting please make sure you have your Name listed. Any names that show as phone numbers will not be accepted in the Zoom Meeting. During the Zoom meeting MPS will be sharing a screen. Please make sure you will be able to view screen sharing on your device.

Meeting is March 12, 2021 at 11:00 am

Join Zoom Meeting

<https://montvilleschools-org.zoom.us/j/85157325281?pwd=TVF3QUJHa09SNTM3WFZIOFZFa3pCdz09>

Meeting ID: 851 5732 5281

Passcode: 956727

One tap mobile

+13126266799,,85157325281# US (Chicago)

+16465588656,,85157325281# US (New York)

Dial by your location

+1 312 626 6799 US (Chicago)

+1 646 558 8656 US (New York)

+1 301 715 8592 US (Washington DC)

+1 346 248 7799 US (Houston)

+1 669 900 9128 US (San Jose)

+1 253 215 8782 US (Tacoma)

Meeting ID: 851 5732 5281

Find your local number: <https://montvilleschools-org.zoom.us/j/85157325281>

Elementary Schools and Palmer Wireless RFP

APPENDIX B

**Maps and Floor Plans will be handed out during the Virtual Vendor
Zoom Meeting or can be requested by emailing erate@montvilleschools.org**