

Caribou Community School  
Caribou, ME  
RSU 39  
Bidding Documents Network Switches and Wireless Access Points

SECTION 2-A

NOTICE TO CONTRACTORS

PUBLIC SCHOOL PROJECT

Sealed proposals, in envelopes plainly marked proposal for:

**Caribou Community School, Network Switches and Wireless Access Points, Caribou, Maine.  
Dated: 05/21/2020**

Brief Job Description:

**Furnishing of, coordination, and installation of Network Switches and Wireless Access Points for the new Caribou Community School.**

Addressed to: **RSU 39  
75 Glenn St,  
Caribou, ME 04736**

**Bids shall be emailed in PDF format, in the same message, delivered to [John@TabbTech.com](mailto:John@TabbTech.com), [MBouchard@RSU39.org](mailto:MBouchard@RSU39.org) and [LMilliard@RSU39.org](mailto:LMilliard@RSU39.org) and received no later than 2:00 PM (Eastern Time), on 6/5/2020. Bids received after 2:00 PM (Eastern Time) will not be considered.**

**All interested bidders shall register for addenda and Q/A responses to [John@TabbTech.com](mailto:John@TabbTech.com). Any questions must be submitted via email no later than 12:00 PM on 6/2/2020. Answers will be forwarded to all bidders.**

**A site inspection is not planned as part of this bidding process. Electrical plans are available as part of the bid documentation.**

The owner reserves the right to waive all formalities, and reject any and all proposals, or to accept any proposal. Proposals shall be submitted upon the letterhead of the bidder in pdf format. No decision regarding who is the successful bidder will be made at the time of bid receipts.

Electronic PDF format files of Bidding Documents may be downloaded at:

Maine BREM website:

<http://www.maine.gov/dafs/brem/business-opportunities>

**END OF SECTION**

SECTION 2-B

PROPOSAL FORM  
SHORT FORM  
PUBLIC SCHOOL PROJECT

BIDDER: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TO: **RSU 39**  
**75 Glenn St,**  
**Caribou, ME 04736**

**[John@TabbTech.com](mailto:John@TabbTech.com)**  
**[MBouchard@RSU39.org](mailto:MBouchard@RSU39.org)**  
**[LMilliard@RSU39.org](mailto:LMilliard@RSU39.org)**

A. Having carefully examined the form of contract, general conditions and plans and specifications dated 05/21/2020

Prepared by:

For: **Caribou Community School, Network Switches and Wireless Access Points, Caribou, Maine 04736.**

as well as the premises and conditions affecting the work, we the undersigned propose to furnish all labor, equipment and materials necessary for and reasonably incidental to the construction and completion of this proposal for the amount of:

Base Bid \_\_\_\_\_ Dollars \$ \_\_\_\_\_

B. This proposal includes the following addenda to the plans and specifications:

Addendum No. \_\_\_\_\_, Dated \_\_\_\_\_ Addendum No. \_\_\_\_\_, Dated \_\_\_\_\_  
Addendum No. \_\_\_\_\_, Dated \_\_\_\_\_ Addendum No. \_\_\_\_\_, Dated \_\_\_\_\_

C. The undersigned agrees, if awarded the contract, to start the work on **1 July 2020** and complete the work as outlined in section I.I.3.

Any material or materials not specified in the bidding document but deemed worthy of consideration may be introduced by the bidder in a separate letter attached to this proposal. A cost comparison must be included giving the comparison with the material specified and the reason for the suggested substitution. The basic bid shall be as specified.

The undersigned agrees, if this proposal is accepted, to sign a contract and deliver it, along with the bonds and affidavits of all insurance specified within twelve (12) calendar days after the date of notification of such acceptance, except if the 12th day falls on a holiday, a Saturday or Sunday, then the conditions will be fulfilled if the required documents are received before 12:00 o'clock noon on the day following the holiday, or the Monday following the Saturday or Sunday, and as a guarantee thereof, herewith submits a certified or cashiers check or bid bond as required.

SIGNED: \_\_\_\_\_

BY: \_\_\_\_\_

\_\_\_\_\_  
P.O. Address

NOTE: If bidder is a corporation, write state of incorporation, and if a partnership, give full names of all partners.

**END OF SECTION**

**Request for Proposals**  
**for**  
**Network Equipment**  
**and**  
**Wireless Access Points**

Issued 05/21/2020

**Overview of the bidding process and  
Instructions to bidders for the Network Equipment for the New Caribou  
Community School in Caribou, Maine.**

RSU 39 is currently constructing a new Elementary/Middle School in Caribou, Maine to be completed in the Summer of 2020. Following this introduction are specifications for the Network and limited IT systems to be included in the school.

The response to this Request for Proposals must be a written proposal indicating the products to be provided and installed to meet the specifications and the unit pricing for each major section. Please indicate pricing of major categories of products and unit pricing where requested. Written responses are due at 2:00PM on June 5, 2020.

Proposals shall be in PDF format and delivered simultaneously to the following (3) recipients: [John@TabbTech.com](mailto:John@TabbTech.com), [MBouchard@RSU39](mailto:MBouchard@RSU39) and [LMilliard@rsu39.org](mailto:LMilliard@rsu39.org)

No announcement will be made at the bid opening regarding which bidders may be awarded the contract.

RSU 39 reserves the right to award the contract to the provider with the proposal deemed to be the best value. Determination of the proposal with the best value is solely at the discretion of the RSU 39. RSU 39 reserves the right to reject all proposals.

All reimbursable expenses shall be included in the base bid. These shall include but not be limited to:

1. Mileage and lodging expense in connection with this Agreement.
2. Processing fees paid for securing approval of authorities having jurisdiction over the project.
3. Any paper reproductions for submissions, which require signed approval by State government or regulatory agencies i.e the FCC.
4. Postage, handling, and delivery of any project related Instruments.
5. Misc. costs associated with the delivery of this proposal.
6. Freight costs for the delivery to equipment to the site.

Those interested in bidding on this project should register their interest via email to [John@TabbTech.com](mailto:John@TabbTech.com). in order to be notified of any addenda or further information regarding this RFP. Any questions shall be emailed to John Tabb at [John@TabbTech.com](mailto:John@TabbTech.com). Responses shall be considered part of the RFP documents and will be emailed to all bidders. Questions must be submitted by 12:00 noon on June 2, 2020.

## I. GENERAL

- A. These specifications are for Network Equipment for the new Caribou Community School.
- B. Installation services associated with this RFP is limited to the mounting and connection to the structured cabling system of wireless access points. The Owner will perform the configuration and installation of the network switches.
- C. The intent is for vendors to meet all specific features listed in this request for proposal (RFP). If there are alternates that would be of benefit to the owner either through reduced cost or improved functionality or flexibility, specifically indicate which features and specifications are not being included, and what features are being added that are not herein listed, and how these modifications benefit the user (price/performance).
- D. All work on site must be performed in compliance with rules and guidelines established by the general contractor. The winning bidder will be working directly for RSU 39.
- E. The contractor shall complete all work of this Agreement by August 21, 2020.
- F. Compliance with all relevant codes including but not limited to:
  - 1. Local and state building, plumbing, mechanical, electrical, fire and health department and public safety codes agencies.
  - 2. National Fire Protection Association (NFPA).
  - 3. Occupational Safety and Health Act (OSHA).
  - 4. National Electrical Code (NEC).
  - 5. National Electrical Safety Code (NESC).
  - 6. The ICC National Building Code.
- G. Equipment types included in this RFP
  - 1. Ethernet switching and routing.
  - 2. Wireless network equipment.
  - 3. Mounting accessories and miscellaneous hardware.
  - 4. Fiber optic jumpers.
  - 5. Any power supplies or ancillary equipment that is required to allow the specified systems to function.
- H. Project Conditions
  - 1. The School is a new facility scheduled for completion in August 2020.
  - 2. Any damage to existing conditions by the systems vendor will be their responsibility to repair to new condition consistent with construction documents for the project. Damages incurred and not repaired by systems vendor will be completed by the Owner and deducted from the amount due to the systems

vendor.

3. Cleanup will be done daily and removed from site. Do not expect to use any onsite dumpsters as they are for strict use by the general contractor and their subcontractors. Areas worked in shall be left in a vacuumed condition, for areas completed by the general contractor prior to your work being done or completed. In all cases leave the area in better condition than you found it.
4. Related systems provided and installed by others:
  - a. Structured cabling system for Voice and Data including equipment racks, cabling, patch panels, and workstation jacks.
  - b. Phone System.
  - c. AV systems.
  - d. Intercom System.
  - e. Conduits, Back Boxes, and Cable Tray.

#### I. PERFORMANCE REQUIREMENTS

1. Submit proposal with recommendations that maximizes the features described herein. Include documentation on major system components with the proposal (e.g. brochure or technical data sheet).
2. Include all necessary labor and the selection of the proper type and quantities of the system components and accessories to assure a complete and operational system.
3. Following installation a test of signal strength levels throughout occupied areas of the building and selected outside areas shall be performed with coverage gaps clearly identified.
4. Include proof of manufacturers approved supplier status for major system components where this is required for warranty service.
5. Each vendor must include a list of at least 3 similar projects completed in the last 3 years. Provide contact information including contact name, organization, phone, and email.

#### J. ALTERNATES

1. Where manufacturer's names are listed this is to establish a standard for quality and design. Where one manufacturer's name is mentioned, products of other manufacturers will be acceptable if, in the opinion of the Owner, the substitute product is of quality equal to or better than that of the material specified.
  - a. **Note:** the Owner currently operates a network management system by Ubiquity and the intent is to continue with this system and add this school to the overall district network.
2. Detailed specifications and, if the Owner determines it is necessary, samples of proposed alternate products shall be provided to the Designer for review prior to purchase or installation of proposed alternates.

3. Cost for removal and replacement of any unapproved alternates pertaining to the items specified in this section is the sole responsibility of the systems installer.

#### K. SUBMITTALS

1. Provide submittals in pdf format following award of contract but prior to commencing work. Any work commencing prior to approval is at the system installer's own risk.
2. Submittal documentation shall include the following:
  - a. Table of contents.
  - b. Systems installer Name, Contact Name, Address, Telephone Number, Fax Number, and email address.
  - c. Manufacturers' certificate of warranty for the complete (or each and every of the various subsystems) Communications System. Clear documentation of effective warranty periods. All warranties shall be filled out in the Owner's name.
  - d. Maintenance Documentation including the following:
    - i. List of all equipment by manufacturer.
    - ii. Information necessary for the Owner's technical staff to perform routine and/or corrective maintenance.
    - iii. List of all spare parts.
    - iv. Original copies of manufacturer's installation and operation instructions arranged alphabetically by manufacturer.

## II. PRODUCTS

#### A. Network Switches

1. All ports shall be 10/100/1000 auto sensing with PoE available on all ports. Note: it is the responsibility of the installer to insure that PoE capabilities of the switches meet the power requirements of attached access points.
2. Switches shall be capable of layer 2 routing.
3. Switches shall support management protocols SNMP 1, RMON 1, RMON 2, RMON 3, RMON 9, TELNET, SNMP 3, SNMP 2C, HTTP. And be manageable through either a GUI or command line interface.
4. VLAN support including complete IEEE 802.1Q.
5. Uplink optics shall be included as noted in the equipment table.
6. The switch stack in the MDF must be equipped with fiber optic modules to accept incoming fiber links from all IDF's.
7. Link between telecommunications rooms shall be 10Gbps on OM3, fiber



(there is a 12-strand OM3 fiber optic cable installed from the main equipment room to each telecommunications room).

8. Verify full functionality of backbone link and interconnection between each switch in each stack.
9. Switch basis of design is by Ubiquity Edge Switch PoE+ series with full power options of 750W for 48-port switches and 500W for 24-port switches.
10. See Appendix A for switch types and quantities.

B. Patch Cords

1. Fiber Optic jumpers of duplex 50/125 $\mu$  OM3 fiber with appropriate connector types to mate between the fiber optic patch panel and fiber port on the associated switch, (for the purpose of the proposal assume the jumpers are SC to LC ). Length determined by distance from switch to fiber patch panel with 1.5 meter added length allowance for future moves within the rack. Confirm connector compatibility with backbone infrastructure and switch ports prior to ordering.
2. Category 6 copper patch cords are already owned for connectivity between the patch panels and switches in the TR's.
3. Cat6 patch cords required to connect to wireless access points shall be included as part of this proposal. The location of data drops for AP's are already in place as shown on the drawings.

C. Wireless network system

1. Wireless network equipment shall be by the following manufacturers or approved alternates:
  - a. Ubiquity
2. Wireless system shall be capable of 802.11ac with throughput capability of 800 Mbps at each access point.
3. Wireless network shall be a managed system capable of dynamically adjusting to traffic loads that move throughout the facility due to the use of systems.
4. Access points shall be powered through 802.3at PoE+.
5. Access points shall include all mounting hardware for both wall and ceiling tile rail installations.
6. Protective covers shall be installed over access points in the gyms.
7. Basis of design are the following models from Ubiquiti. Acceptability of other manufacturer's products will depend on meeting the capabilities of the models below.
  - a. Classroom/Typical AP – UniFi-AP-HD
  - b. High Capacity AP – UniFi-AP-XG

D. UPS

1. Basis of design is the APC Smart-UPS X 3000VA.
2. Shall be rack mounted, install at the lowest available location on racks with network switches.
3. 3000 VA Output power capacity.
4. Nominal output voltage of 120V.
5. Less than 5% output voltage distortion.
6. Nominal input voltage of 120V, with NEMA L5-30 input connector.
7. Hot-swappable leakproof sealed battery.
8. Full time noise filtering and surge protection to 680 Joules.
9. Automatic self testing and disconnected battery notification.
10. Network management card AP9631 included.
11. Include Remote temperature probe.
12. LCD status and control panel.

E. WARRANTY

1. Switches, firewall, and wireless equipment shall have a 1-year manufacturers warranty included in the base bid.
2. Additional warrantee options may be listed as add alternate(s).

### III. EXECUTION

A. FIELD QUALITY CONTROL

1. Provide an on-site job supervisor to coordinate with the Owner throughout the performance of the work through completion.
2. There will be Pre-Start Meeting to review existing conditions and project schedule with the Owner.
3. Owner will require a schedule to be submitted prior to commencing along with a Purchase & Delivery Schedule to be updated regularly.

B. FIELD SERVICES

1. Install all equipment and make final connections to access points throughout the school. Note, cabling from telecommunications rooms to access point locations is by others. Patch cord from the data jack to the access point to be provided as part of this scope.
2. Perform field inspection and testing.

C. SUPPORT

1. Provide 1-year of unlimited phone support.
2. Provide monitoring and management services for the wireless network for a 1-year period.

## Appendix A

Switch Count and Type by Data Room:

Note that all model numbers are by Ubiquity.

| <b>Item</b>    | <b>Location</b> | <b>Quantity</b> | <b>Model</b> |
|----------------|-----------------|-----------------|--------------|
| AP             | Classroom       | 67              | UAP-AP-HD    |
| AP             | LargeSpace      | 6               | UAP-AP-XG    |
| 48-Port Sw     | A156            | 3               | ES-48-750W   |
| 24-Port Sw     |                 | 1               | ES-24-500W   |
| 16-Port agg sw |                 | 1               | ES-16-XG     |
| SFP+ 10G       |                 | 7               | UF-MM-10G    |
| Direct Att 10G |                 | 4               | UDC-2        |
| 48-Port Sw     | E129            | 3               | ES-48-750W   |
| 24-Port Sw     |                 | 0               | ES-24-500W   |
| SFP+ 10G       |                 | 3               | SFP+ 10G     |
| 48-Port Sw     | E206            | 3               | ES-48-750W   |
| 24-Port Sw     |                 | 1               | ES-24-500W   |
| SFP+ 10G       |                 | 4               | SFP+ 10G     |

In addition to the above network equipment provide a quantity of three (3) APC Smart-UPS X 3000VA.