

EPPING SCHOOL DISTRICT

EPPING, NEW HAMPSHIRE

EPPING SCHOOL DISTRICT	REQUEST FOR COMPETITIVE BIDS AND PROPOSALS FOR WIDE AREA NETWORK DIGITAL TRANSMISSION of SELF PROVISIONED FIBER, LEASED LIT FIBER, DARK FIBER or SERVICES DELIVERED OVER THIRD-PARTY NETWORKS with MULTI-YEAR CONTRACT, INCLUDING NETWORK EQUIPMENT AND MAINTENANCE
Direct all inquiries concerning this bid to: Epping School District Attention: Maggie Taylor All questions must be submitted via email no later than 12:00 P.M. EST, <u>February 25, 2022</u> Deadline for Site Surveys: <u>February 24, 2022</u> Please contact Thomas Rup: thomas.rup@eppingsd.org	Please return one (1) hard copy and one (1) digital copy of your response to Ms. Maggie Taylor, contact for Epping School District, 31225 Bainbridge Road, Suite H, Solon, OH 44139. All responses are due by 2:00 P.M. EST, <u>March 04, 2022</u> All responses must be signed and have “Epping WAN” notated on the outside of the sealed package.
Email Contact for RFP: metaylor@epicinc.org.	

NOTE: Questions concerning the specifications in this Request for Proposals will be received until date and time listed above. **ALL QUESTIONS MUST BE SUMITTED IN WRITING BY EMAIL TO THE EMAIL ADDRESS LISTED ABOVE.** NO QUESTIONS will be received by telephone. Questions received after the date and time listed above will not be considered. It is the OFFEROR’S responsibility to assure that all addenda have been reviewed and, if need be, signed and returned.

NOTICE TO BIDDERS: Sealed Proposals subject to the conditions herein will be received until the date and times listed above.

EPPING SCHOOL DISTRICT

EPPING, NEW HAMPSHIRE

EPPING SCHOOL DISTRICT	EPPING HIGH SCHOOL BUILDING CONNECTING TO EPPING SAU 14 OFFICE
REQUEST FOR COMPETITIVE BIDS AND PROPOSALS FOR WIDE AREA NETWORK DIGITAL TRANSMISSION of SELF PROVISIONED FIBER, LEASED LIT FIBER, DARK FIBER or SERVICES DELIVERED OVER THIRD-PARTY NETWORKS with MULTI-YEAR CONTRACT INCLUDING NETWORK EQUIPMENT AND MAINTENANCE	
RFP RELEASE DATE: February 04, 2022	RFP RESPONSE DATE: March 04, 2022
TO CONDUCT SITE SURVEYS Please contact Thomas Rupp: thomas.rup@eppingsd.org The deadline to conduct a site survey is February 24, 2022, 2:00PM EST	
Epping School District does not discriminate on the basis of age, race, color, national or ethnic origin, sex, or handicap in employment practices or in administration of any of its educational programs and activities in accordance with applicable federal statutes and regulations.	

TABLE OF CONTENTS

I.	INSTRUCTIONS TO BIDDER AND GENERAL TERMS AND CONDITIONS.....	4
II.	BUILDING LOCATIONS.....	11
III.	DATES AND ACTIVITIES.....	11
IV.	BID SUBMISSION FORM.....	12
V.	CUSTOMER EQUIPMENT CERTIFICATION FORM...	13
VI.	WAN REFERENCES.....	14
VII.	SERVICE DESCRIPTION REQUEST.....	15
VIII.	AVAILABILITY OF SERVICES.....	26
IX.	E-RATE ELIGIBLE PRICING.....	28
X.	MAP DATA ©2022 Google of HIGH SCHOOL TO SAU OFFICE...	30
XI.	SECA COST ALLOCATION SCENARIOS FOR SPECIAL CONSTRUCTION...	31
XII.	E-RATE REQUIREMENTS FOR VENDORS.....	36
XIII.	ENVIRONMENTAL OBJECTIVES.....	37

Epping School District is soliciting for a fiber based Wide Area Network for the School District from qualified Service Providers for the Schools listed in Section II and the services listed in Section VII.

I. INSTRUCTIONS TO BIDDER AND GENERAL TERMS AND CONDITIONS

1. E-Rate instructions: This bid will be issued at the same time the FCC Form 470 is filed; this bid will remain posted for no less than 28 days. It is the responsibility of the service provider to follow and track updates to the Form 470 within the E-Rate Productivity Center (EPC) a.k.a. The E-Rate Portal, for responses to questions that may be received during the bidding process.
2. Funding will be subject to E-Rate eligibility and District Approval. Any Contract entered into by the District will be contingent upon E-Rate funding.
3. Proposals must be made in the official name of the firm or individual under which business is conducted (showing official business address) and must be signed in ink by a person duly authorized to legally bind the person, partnership, company or corporation submitting the proposal.
4. Offerors are to include all applicable requested information and are encouraged to include any additional information they wish to be considered.
5. **Lowest Corresponding Price:** Per FCC rules, vendors must offer the Lowest Corresponding Price when submitting proposals. Lowest Corresponding Price (LCP) is defined as the lowest price that a service provider charges to nonresidential customers who are similarly situated to a particular E-rate applicant (school, library, or consortium) for similar services. See 47 CFR, Part 54, Section 54.500(f). Service providers cannot charge E-rate applicants a price above the LCP for E-rate services. See 47 CFR Section 54.511(b). There is a rebuttable presumption that rates offered within the previous 3 years are still compensatory.
6. ALL BIDS ARE DUE not later than **2:00 P.M. Eastern Standard Time, March 04, 2022**. Please return one (1) hard copy and one (1) digital copy of your response to Ms. Maggie Taylor, contact for Epping School District, 31225 Bainbridge Road, Suite H, Solon, OH 44139.
7. **One (1) clearly identified sealed original of your proposal as well as one (1) digital media (CD, DVD, USB drive) copy is required for district evaluation. The printed version should be loosely bound. Both versions should be mailed in the same package.** It is a REQUIREMENT THAT BID RESPONSE PRICING BE SUBMITTED ON **PRICING SPREADSHEETS**. Responsive proposals should provide straightforward, concise information that satisfies the requirements of this RFP. The District does not wish nor require that vendors bind their responses nor staple sections together. Responses in 3 hole punched binders or loose with a binder clip are sufficient and desired. Emphasis should be placed on skills and experience that respond to the needs of the School District, the requirements of this RFP, and completeness and clarity of content..
8. Bids received prior to the time of opening shall be held unopened. No responsibility will be assumed by the district or its representatives for the premature opening of a BID NOT PROPERLY IDENTIFIED.
9. Every effort has been made to ensure that all information needed by the offeror is included herein. If an offeror finds that the proposal cannot be completed without additional information, if there are any questions for this bid, please direct those to: metaylor@epicinc.org. All replies to the questions shall

EPPING SCHOOL DISTRICT

be in writing. All questions and written replies will be distributed to all offerors and will be regarded as a part hereof.

10. If there are any questions regarding this RFP please direct those to: metaylor@epicinc.org. The **deadline for questions will be February 25, 2022 at 12:00 pm EST**. No questions will be accepted after this time.
11. All entries shall be entered in ink or typewritten and shall remain firm for a period of not less than **(ninety) 90 days**. Mistakes may be crossed out and corrections inserted adjacent thereto, and shall be initialed, in ink, by the person signing the proposal.
12. By submission of an offer, you are guaranteeing that all services meet the requirements of the solicitation.
13. When specifications or descriptive papers are submitted with the offer, enter offeror's name and solicitation name.
14. The district reserves the right to ask clarifying questions of Vendors and to request best and final offers upon review of initial proposals.
15. The district reserves the right to select the proposal which it deems most appropriate and is not bound to accept any proposal based solely upon price. Any award resulting from this bid shall be made to the offeror whose proposal is determined to be most advantageous to the district taking into consideration price and the evaluation factors set forth herein.
16. After recording the bids received, the bids will be referred to the appropriate administrative office for tabulation, review, and subsequent negotiations for contracts and recommendations for Board action, if necessary.
17. The intent of the District is to enter into a negotiated procurement prior to acceptance of an offer, therefore, it must be understood that confidentiality and impartiality are of paramount importance.
18. Proposals, amendments thereto or withdrawal requests must be received by the time advertised for proposal opening to be timely filed. It is the vendor's sole responsibility to ensure that these documents are received by the person at the time indicated in the solicitation document.
19. Vendors **must** include a copy of their service agreement with their proposal.
20. The document that will form the contract shall include the entire solicitation, all amendments, the winning offeror's proposal and the subsequent "Contract Agreement".
21. This solicitation does not commit **Epping School District** to award a contract, to pay any cost incurred in the preparation of a proposal, or to procure or contract for the articles of goods or services. The owner reserves the right to accept or reject any or all proposals received as a result of this solicitation, to negotiate its entirety this solicitation if it is in the best interest of the owner to do so. The offeror shall bare all costs associated with the preparation of the response.
22. All vendors will receive EQUAL CONSIDERATION in the bidding procedures
23. Bids will be awarded to the BIDDER who MEETS SPECIFICATIONS, complies with all INSTRUCTIONS AND CONDITIONS, and demonstrates product superiority via demonstrations and test runs if required.

24. **Ambiguous Offers:** Offers, which are uncertain as to terms, delivery, compliance to requirements and/or specifications, may be rejected or otherwise disregarded.
25. **Prohibition of Gratuities:** Whoever gives or offers to any public official or public employee any compensation including a promise of future employment to influence his action, vote, opinion or judgment as a public official or public employee or such public official solicits or accepts such compensation to influence his action, vote, opinion or judgment shall be subject to the punishment as provided by New Hampshire law. The provision of this section shall not apply to political contributions unless such contributions are conditioned upon the performance of specific actions of the person accepting such contribution nor shall they prohibit a parent, grandparent or relative for making a gift to child, grandchild or other close relatives for love and affection except as hereinafter provided."
26. **Offeror's Qualifications:** Offers shall be considered only from offerors who are regularly established in the business called for, and who in the judgment of the district, are financially responsible and able to show evidence of their reliability, ability, experience, and have personnel directly employed or supervised in the manner called for under this contract. The district may make such investigation as deemed necessary to determine the ability of the offeror to perform the work, and the offeror shall furnish to the district all such information and data needed for this request, including a detailed list of the equipment which the offeror proposes to use; and a detailed description of the method proposed for service completion/installation. The district reserves the right to reject any offer if the evidence submitted by, or investigation of such offers demonstrates that the offeror is not properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional offers will not be accepted.
27. **Explanation to Prospective Offerors:** Any prospective Offeror desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing soon enough to allow a reply to reach all prospective Offerors before the submission of their offers. Oral explanations or instructions given before the award of the contract will not be binding. Any information given to a prospective Offeror concerning a solicitation will be furnished promptly to all other prospective Offerors as an amendment of the solicitation, if that information is necessary in submitting offers or if the lack of it would be prejudicial to any other prospective Offeror.
28. **Offeror's Responsibility:** Each offeror shall fully acquaint himself with conditions relating to the scope, and restrictions attending the execution of the work under the conditions of this proposal.
29. **Competition:** This solicitation is intended to promote competition. If the language, specifications, terms and conditions, or any combination thereof restricts or limits the requirements in this solicitation to a single source, it shall be the responsibility of the interested vendor to notify the district in writing. The solicitation may or may not change, but a review of such notification will be made prior to award.
30. **Waiver:** The owner reserves the right to waive any provisions of this solicitation.
31. **New Hampshire Law Clause:** Upon award of a contract under this solicitation, the person, partnership, association, or corporation to whom the award is made, must comply with the laws of the state of New Hampshire, which require such person or entity to be authorized and/or licensed to do business in this state, by submission of this signed offer, the Offeror agrees to subject itself to the jurisdiction and process of the courts of the state of New Hampshire, as to all matters and disputes arising or to arise under the contract and the performance thereof, including any questions as to the liability of taxes, licenses, or fees levied by the State/County.
32. **Accidents:** The vendors shall hold the owner harmless from any and all damages and claims that may arise by reason of any negligence on the part of the vendor, his agents, or employees in the performance of this contract, and in case of any action brought therefore against the owner of any of its agents or

employees, the vendor shall assume full responsibility for the defense therefore, and upon his failure to do so on the proper notice, the owner reserves the right to defend such motion change all cost thereof to the vendor. The vendor shall take all precautions necessary to protect the public against injury.

33. **Affirmative Action:** The successful Offeror shall take affirmative action in complying with all Federal, State and County requirements concerning fair employment, employment of the handicapped and concerning the treatment of all employees, without regards of discrimination by reasons of race, color, sex, religion, and or national origin.
34. **Force Majeure:** Neither the District nor the successful offeror shall be considered to be in default of this Agreement if delays in or failure of performance shall be due to Uncontrollable Forces, the effect of which, by the exercise of reasonable diligence, the non-performing party could not avoid. The term "Uncontrollable Forces" shall mean any event which results in the prevention or delay of performance by a party of its obligations under this Agreement and which is beyond the reasonable control of the non-performing party. It includes, but is not limited to fire, flood, earthquakes, storms, lightning, epidemic, war, riot, civil disturbance, sabotage, and governmental actions. Neither party shall, however, be excused from performance if nonperformance is due to forces which are preventable, removable, or remediable and which the non-performing party could have, with the exercise of reasonable diligence, prevented, removed, or remedied with reasonable dispatch. The non-performing party shall, within a reasonable time of being prevented or delayed from performance by an uncontrollable force, give written notice to the other party describing the circumstances and uncontrollable forces preventing continued performance of the obligations of this Agreement. If a force majeure event extends for a period in excess of 30 days in the aggregate, either Party may immediately terminate this Agreement upon written notice.
35. **Non- Appropriations:** Any contract entered into by the owner resulting from this solicitation shall be subject to cancellation without damages of further obligation when funds are not appropriated or otherwise made available to support continuation of performance on a subsequent fiscal period or appropriated year.
36. **Assignment:** No contract may be assigned, sublet or transferred without written approval of the Director of Technology.
37. **Arbitration:** Under no circumstances and with no exception will the Epping School District act as arbitrator between the Offeror and any sub-contractor.
38. **Change Orders:** No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders to the contract will be made in writing by the Appointed Contracting Officer.
39. **Special Notation:** The Purchasing Department is acting under that authority given to it in the District Procurement Policy to procure contracts. The resulting contract is between the District and the successful offeror. The Purchasing Department bears no liability for any damages that any party may incur in the execution or enforcement of the contract.
40. **ALL BIDS MUST BE SIGNED.** (See Bid Submission Form). Unsigned bids will not be considered. An authorized representative of the bidder shall sign all bids before submission. A corporate signature without an individual name is not an acceptable signature.
41. **Notice for Taxes, Travel and Living Expenses:**
All prices/rates quoted must include all taxes (local, state, and federal) as separate line item.

Please provide a complete proposal, avoiding any hidden items, and include any estimates for labor, equipment delivery, licenses, as well as cost-reimbursable items such as travel, and out-of-pocket expenses.

42. **SPIN Number:** Please include SERVICE PROVIDER INFORMATION NUMBER (SPIN) for e-rate purposes.
43. **References:** Proposers must provide a minimum of three (3) current references of similar services/solutions they have provided, including contact information. See section VI.
44. Each response must address the vendor's understanding and capabilities to provide services for all schools. Examples of vendor's successful implementation of these services are required to demonstrate capability. Examples must address service, scope, and reliability as suitable for the solutions being proposed.
45. **Contract Negotiations:** The District reserves the right to conduct contract negotiations on details beyond what is specified in this RFP. Additionally, the District may also move to the next highest scoring bidder if contract negotiations aren't concluded to the District's satisfaction.
46. **Award: Epping School District** reserves the right to reject any and all proposals and to make an award in the best interest of the District.
47. **Awarded Vendor:** each year, during the renewal process, price drops should be included as part of the renewal process, as applicable, and included in signature documents for renewal.
48. **Insurance:** RFPs for Services involving the furnishing of labor, materials, and/or equipment, while said Services are being performed the successful vendor must maintain in full effect the following minimum insurance coverage:
 - i. Workers' Compensation.
 - ii. Comprehensive public liability in the sum of \$100,000 for each person and \$300,000 for each accident, including contract liability. Such shall be endorsed with a save harmless clause in favor of the School District, its officers, members, and employees.
 - iii. Property damage in the amount of \$50,000.
 - iv. Automobile and truck insurance in an amount not less than \$300,000 on account of any one accident, and property damage in amount not less than \$50,000.
 - v. If special hazards, such as might result from blasting, represent a possibility, these shall be covered by a rider to the policy or policies in an amount of not less than \$50,000.
 - vi. Prior to the beginning of the Service, etc., to be performed, a certificate of insurance shall be furnished to the School District showing the insurance coverages required above. The Contractor shall assume full responsibility for loss of life and property, injuries to persons, including all employees of the Contractor or Subcontractors.
49. **Responders should be aware of the following reasons for bid response disqualification.**
 - The School District may reject an erroneous bid after the bid opening if any, some, or all of the following conditions exist: (1) an error was made; (2) the error materially affected the bid; (3) rejection of the bid would not cause a hardship on the district, other than losing an opportunity to receive commodities at a reduced cost; and (4) enforcement of the part of the bid in error would be unconscionable;

EPPING SCHOOL DISTRICT

- Vendor is on Red Light status with the FCC or is delinquent on a debt to a state or federal government agency or entity;
- Vendor has not been in business for at least 5 years performing the services or furnishing the equipment required in this RFP;
- Vendor does not have an E-Rate SPIN number;
- Vendor has not signed the RFP documentation;
- Vendor has not sent the pricing spreadsheet in their response;
- Vendor cannot provide all equipment and services listed in the RFP unless otherwise noted in this solicitation that separate contracts may be awarded for subsets of equipment and/or services;
- Vendor does not agree to provide discounted billing to the District if requested.
- Vendor cannot certify that equipment placed in District and school locations do not pose a national security risk, specifically the vendor must certify equipment placed at customer locations is not from Huawei, ZTE, Hytera Communications Corp, Hangzhou Hikvision Digital Technology Company and Dahua Technology Company. (See FCC News Release: <https://www.fcc.gov/document/fcc-releases-list-equipment-services-pose-security-threat> , *FCC Publishes List Of Communications Equipment And Services That Pose A Threat To National Security*. Released, 2021-03-12.)

50. **Proposal Evaluation:** Proposals received on-time will be evaluated based on the E-Rate criteria as outlined below. The following factors will be used in evaluating bid responses; price is weighted higher than any other single factor. Prices will be evaluated using a three (3) year contract term with options for an additional two (2) years through two (2), one-year contract extensions for services provided over a leased lit and third-party network solution, and a five (5) year contract term with options for an additional two (2) years through two (2), one-year contract extensions for services provided over a dark fiber solution. For the self-provisioned solution, the one (1) year price will be considered.

Factor	Weight
E-rate eligible recurring, special construction, and one-time circuit costs (E-rate eligible costs: the total cost of ownership for the eligible components of the proposed service. Total cost of ownership takes into account all one-time and recurring costs. Note that E-rate eligible costs refers to the pre-discount cost of the solution, not the post-discount portion of costs that are the responsibility of the Applicant. This criterion must be the highest weighted per E-rate program rules.)	25
Evidence of prior successful experience is detailed and related to the proposed services, technical capability, and service reliability; References provide assurance that vendor can deliver the services and/or required products. Prior Experience in a similar K-12 education environment. (Strong and unequivocal evidence that proposing organization's human, organizational, technical, and professional resources (including Education and E-Rate expertise) and abilities can support the proposed project, which will meet the full scope of the requirements specified in the RFP.)	20
Total Cost for first year of Contract (if special construction is included).	15

EPPING SCHOOL DISTRICT

Overall suitability of the proposal for current and future needs of the School District as well as Quality of Response (A substantially responsive Bid is one that conforms to all the terms, conditions, and specifications of the Bidding Documents without material deviation, reservation, or omission).	15
Other Cost Factors (including price of E-Rate ineligible goods and services, if any. Any costs of the proposed service that are not eligible for E-rate funding. This does not refer to the post-discount portion of eligible costs that are the responsibility of the Applicant.	10
Conformance of proposal to instruction for format and contents of proposal	5
Offers the District discounted billing for E-Rate (SPI)	5
Environmental Objectives ¹	5
Total	100

¹ See last page for a complete listing of Environmental Objectives.

II. BUILDING LOCATIONS

BUILDING LOCATIONS
Epping High School 21 Academy Street Epping, NH 03042
Epping School District Epping SAU 14 Office 213 Main Street Epping, NH 03042

III. DATES AND ACTIVITIES

1. If there are any questions regarding this RFP please direct those to: metaylor@epicinc.org.
2. TO CONDUCT SITE SURVEYS Please contact Thomas Rup: thomas.rup@eppingsd.org.
The deadline to conduct a site survey is February 24, 2022, 2:00PM EST.

3. RELEVANT DATES:

Event	Date
Release bid to Bidders	February 04, 2022
Deadline for Site Survey to be conducted	February 24, 2022, 2:00 PM EST
Deadline for bid Questions	February 25, 2022, 12:00 PM EST
Deadline for Proposal Submission	March 04, 2022, 2:00 PM EST
Dates of E-Rate Service for Services Self-Provisioned	July 1, 2022 through June 30, 2023
Dates of E-Rate Service (If leased lit, Leased dark fiber, or Services provided over third-party solutions)	July 1, 2022 through June 30, 2025 With two possible voluntary extensions of 12 months each or July 1, 2022 through June 30, 2027 With two possible voluntary extensions of 12 months each

IV. BID SUBMISSION FORM²

COMPANY NAME _____

COMPANY ADDRESS _____

E-RATE SPIN NUMBER _____

RESPONSIBLE PERSON'S NAME AND AUTHORIZED SIGNATURE*

NAME

SIGNATURE

DATE: _____

CONTACT TELEPHONE: _____

CONTACT EMAIL: _____

**Signature certifies that the proposed solution and services meet all requirements outlined in the bid and that the vendor will comply with all specified requirements.*

² Please return this page with your company's response.

V. CUSTOMER EQUIPMENT CERTIFICATION FORM³

(For Option B and D listed in section VII: Service Description Requests.)

_____(COMPANY NAME)

CERTIFIES THAT EQUIPMENT PLACED IN DISTRICT AND SCHOOL LOCATIONS IS
NOT FROM HUAWEI TECHNOLOGIES COMPANY, ZTE CORP, HYTERA
COMMUNICATIONS CORP, HANGZHOU HIKVISION DIGITAL TECHNOLOGY
COMPANY, AND/OR DAHUA TECHNOLOGY COMPANY.

RESPONSIBLE PERSON'S NAME AND AUTHORIZED SIGNATURE:

NAME

SIGNATURE

DATE: _____

³ *Please return this page with your company's response.*

VI. WAN REFERENCES⁴

REFERENCE #1:

NAME OF REFERENCE

CONTACT

PHONE NUMBER

EMAIL ADDRESS

REFERENCE #2:

NAME OF REFERENCE

CONTACT

PHONE NUMBER

EMAIL ADDRESS

REFERENCE #3:

NAME OF REFERENCE

CONTACT

PHONE NUMBER

EMAIL ADDRESS

⁴ Please return this page with your company's response.

VII. SERVICE DESCRIPTION REQUESTS

Epping School District is soliciting bids from qualified Carriers (Vendors) for a fiber based Wide Area Network for the School District buildings listed above in Section II.

Epping School District will evaluate fiber-based network infrastructure proposals for the Wide Area Network solution for the Wide Area Network solution for the District entities. The District will evaluate long term contract options self-provisioned fiber, leased dark fiber, leased lit fiber and services provided over a third-party network as defined by the FCC Second E-Rate Modernization Order.

Qualified Vendors should include in the following in their proposals:

- Any Special Construction Costs⁵ if necessary.
- The self-provisioned fiber, and third-party network infrastructure costs.
- Any maintenance cost of the infrastructure proposed.

Epping School District will consider traditional network designs or alternative proposals that, in accordance with E-Rate guidance, maximize cost effectiveness. Respondents should clearly illustrate proposed network design and construction routes. The District is not advocating or mandating any preconceived network design or construction route and leaves this decision up to the vendor to present their best solution while recognizing the cited termination locations.

OPTION A: Self-Provisioned Fiber Proposals:

The District will accept proposals that provide a special construction project for a District owned six (6) strand, (3 pair) single mode fiber network. The District will compare any proposals for self-provisioned broadband network against the cost of leased lit fiber, leased dark fiber, and service over third party networks to the total cost of ownership over the life of the facility for self-construction option. In accordance with USAC rules, the cost of any strands not lit during the funding year must be allocated out as ineligible charges. Epping School District desires a fully “turn-key” project so respondents should provide explanation for the District’s involvement in the process including ownership and sourcing of permits, etc.

Self-Provisioned Fiber Construction Specifications & Project Management:

- Specifications for a newly constructed fiber infrastructure are contained in Appendix C: OSP Installation Specifications.
- Selected respondent and its subcontractors will provide all project management to accomplish the installation of all project work as outlined in the “Pricing Spreadsheet” that is included as a separate Excel spreadsheet with this RFP.
- Project management should include all necessary paperwork and permits including but not limited to rights of way, easements, and pole attachments.
- The respondent will provide engineer(s), certified on selected fiber system specifications and procedures to manage all phases of project as outlined in this proposal. This includes ordering and managing the bill of materials as outlined in the “Pricing Spreadsheet” that is included as a separate Excel spreadsheet with this RFP, directing and managing cable placement and restoration, directing and managing splicing crews and providing detailed documentation at the end of the project.
- Selected respondent and its subcontractors will develop a project management plan, which will include a milestone chart. The milestone chart will outline any critical path events and then track these with the appropriate agency/organization whether; selected respondent, subcontractor or the district.

⁵ See Section XI: SECA Cost Allocation Scenarios for Special Construction Costs.

NETWORK EQUIPMENT FOR SELF-PROVISIONED FIBER OR LEASED DARK FIBER

Epping School District is also seeking bids for necessary network equipment to place circuits (self-provisioned fiber or leased dark fiber) into service at 10Gbps once the fiber is available. Network equipment should be Ubiquiti Networks Products or equivalent. Pricing information, as well as manufacturer and model, should be included in Equipment pricing matrix in the “Pricing Spreadsheet” that is provided with this RFP. **Network equipment for self-provisioned or leased dark fiber may be bid as a stand-alone service by anyone, even if they are not bidding on any fiber service.** Please note that respondents submitting a fiber proposal may also bid on equipment provided they bid them separately and do not bundle equipment costs with their fiber proposal.

Maintenance for Self-Provisioned Fiber Projects

The District requires on-going maintenance of the fiber on self-provisioned fiber solutions.

Respondent may offer maintenance services either themselves or through third-party subcontractors. If respondent intends to use third-party subcontractors to deliver a part or all of the service, this should be clearly indicated in the response.

Self-provisioned fiber construction responses are not required to include a maintenance response. Maintenance on self-provisioned fiber may be bid as a stand-alone service by anyone, even if they are not bidding on any fiber service. Please note that respondents submitting a self-provisioned fiber proposal may also bid on maintenance services provided they bid it separately and do not bundle maintenance costs with their fiber proposal. Price quotes are requested for 36 and 60 months options for terms of service.

Respondents are required to fill out the “Pricing Spreadsheet” that is included as a separate Excel spreadsheet with this RFP. Responses for maintenance on self-provisioned fiber must include scheduled routine maintenance as a monthly or annual cost as well as unscheduled break/fix maintenance as an annual time and material cost estimate. Explanation of how the annual scheduled and unscheduled maintenance was estimated should be included.

Maintenance Terms and Conditions

Respondent shall maintain the applicable fiber seven days per week, twenty-four hours per day. Upon notification from the district of a malfunction relating to the applicable fiber, respondent shall respond to such malfunction within two (2) hours and thereafter proceed to correct the malfunction with reasonable diligence. When pricing maintenance, the respondent should include an overview of maintenance practices including:

- Routine maintenance and inspection
- Scheduled maintenance windows and scheduling practices for planned outages
- Marker and handhole inspection and repair
- Handling of unscheduled outages and customer problem reports
- What service level agreement is included and what alternative service levels may be available at additional cost
- What agreements are in place with applicable utilities and utility contractors for emergency restoration
- Repair of fiber breaks
- Mean time to repair
- Replacement of damaged fiber
- Post repair testing
- Replacement of fiber that no longer meets specifications
- Policies for customer notification regarding maintenance
- Process for changing procedures, including customer notification practices
- Process for moves, adds, and changes
- Process for responding to locate requests

OPTION B: Fully Managed Leased-Lit Fiber Proposal:

The District must have dedicated, symmetrical transport bandwidth of 1Gbps up to 10Gbps with Service Level Agreement (SLA) guarantees between the designated endpoints (the Epping High School Building to Epping SAU 14 Office) listed above in section II. Price quotes are requested for 36 months with two (2) one-year extensions for terms of service.

Important requirements for this WAN connectivity at the district are as follows:

- **The network proposed solution must allow for network to pass VLAN traffic (i.e. QinQ, Fully Meshed Connectivity, or Ethernet Network Services, etc.).**
- **Service provided must be Layer 2 ELAN (Any to Any) between all locations**
- **Support of transparent passage of Layer 2 and/or Layer 3 traffic without additional routing configurations required by the School/District**

Each respondent is required to complete the leased lit fiber pricing matrix in the “Pricing Spreadsheet” that is provided with this RFP. No increased pricing will be allowed during the term of the quoted special construction, NRC, and MRC rate in each pricing cell of the matrix. If an increase in bandwidth is requested during the contract period the contract does not renew.

The proposed lease is to include any and all subsequent charges, including but not limited to, costs from utility companies for use of poles, licenses and permits to perform work, and other expenses, which may be incurred.

The District prefers direct connections to the network hub in the solution and respondents should clearly illustrate proposed construction routes. The District will consider other network designs or alternative proposals that, in accordance with E-Rate guidance, maximize cost effectiveness.

Epping School District is not advocating or mandating any preconceived network design or construction route and leaves this decision up to the vendor to present their best solution while recognizing the cited school termination locations.

All costs must be provided in an itemized format. A pricing spreadsheet provided with this RFP must be completed. Bidders will be responsible for accurately providing all costs.

In reference to LEASED LIT FIBER WAN proposals, Switching Services are desired to provide routing and limiting protocol transmission between school district buildings where needed. SLD regulations require that the telecommunications provider must own this hardware; all on-site telecommunications (Priority 1) equipment shall be owned and maintained by the carrier.

In order to assess the vendor’s ability to provide a fiber based Wide Area Network necessary to meet District needs, the response to this bid must address the “development process”. Describe in detail how your fiber based Wide Area Network solution actually provides the services described. This description should include, but not be limited to:

1. Transport alternatives considered and explanation of solution(s) selected
2. Anticipated time requirements to obtain permits, certifications, etc.
3. Anticipated time to install services solution.
4. Use of subcontractors for cable and electronics installation, etc.
5. A project management and implementation plan that includes a timeline outlining the completion of the network for each building.

The solution must be scalable. Price quotes are requested for 36 months with two 12-month renewals for terms of service. No increased pricing will be allowed during the term of the quoted special construction, NRC, and MRC rate in each pricing cell of the matrix.

If an increase in bandwidth is requested during the contract period the contract does not renew. As bandwidth needs are steadily rising, respondents are free to bid higher tiers of bandwidth than what is requested to demonstrate their future scalability.

Epping School District will evaluate fiber-based network infrastructure proposals for the Wide Area Network solution. The District will evaluate long term contract options for leased lit fiber solutions, as defined by the FCC Second E-Rate Modernization Order.

OPTION C: LEASED DARK FIBER WAN:

Epping School District is requesting a leased dark fiber network solution from the Epping High School Building Epping SAU 14 Office with location addresses listed above in section II. The price quote should be for a lease of six (6) strands (3 pair) of single mode fiber from the hub to each eligible entity location for 60 months with two 1-year voluntary extensions for the terms of service. Each respondent is required to complete the leased dark fiber pricing matrix in the “Pricing Spreadsheet” that is provided with this RFP.

Fiber Maintenance Terms and Conditions

The District requires on-going maintenance of the fiber on all leased dark fiber solutions. Maintenance responses are required as follows:

- All leased dark fiber responses require maintenance as part of the response, even if maintenance is subcontracted out to a third party. In the case of the 3rd party maintenance, the respondent must hold and manage the subcontract and is ultimately responsible for the SLA. It is assumed that the dark fiber network is part of a more comprehensive fiber infrastructure of the service provider. The respondent will include only the portion of maintenance that is required to support the District fiber segments versus overall network maintenance. If the fiber serves multiple customers, the cost of maintenance should be shared among all the recipients. It is assumed that maintenance costs are included in the monthly lease fee.
- Respondent shall maintain the applicable fiber seven days per week, twenty-four hours per day. Upon notification from the district of a malfunction relating to the applicable fiber, respondent shall respond to such malfunction within two (2) hours and thereafter proceed to correct the malfunction with reasonable diligence. When pricing maintenance, the respondent should include an overview of maintenance practices including:
 - Routine maintenance and inspection
 - Scheduled maintenance windows and scheduling practices for planned outages
 - Marker and handhole inspection and repair
 - Handling of unscheduled outages and customer problem reports
 - What service level agreement is included and what alternative service levels may be available at additional cost
 - What agreements are in place with applicable utilities and utility contractors for emergency restoration
 - Repair of fiber breaks
 - Mean time to repair
 - Replacement of damaged fiber
 - Post repair testing
 - Replacement of fiber that no longer meets specifications
 - Policies for customer notification regarding maintenance

- Process for changing procedures, including customer notification practices
- Process for moves, adds, and changes
- Process for responding to locate requests

NETWORK EQUIPMENT FOR SELF-PROVISIONED FIBER OR LEASED DARK FIBER

Epping School District is also seeking bids for necessary network equipment to place circuits (self-provisioned fiber or leased dark fiber) into service at 10Gbps once the fiber is available. Network equipment should be Meraki Brand Name Products or equivalent. Pricing information, as well as manufacturer and model, should be included in Equipment pricing matrix in the “Pricing Spreadsheet” that is provided with this RFP. **Network equipment for self-provisioned and leased dark fiber may be bid as a stand-alone service by anyone, even if they are not bidding on any fiber service.** Please note that respondents submitting a fiber proposal may also bid on equipment provided they bid them separately and do not bundle equipment costs with their fiber proposal.

OPTION D: Services Delivered Over Third-Party Networks Proposal:

Services over third-party networks is defined as point-to-point broadband service delivered over a service provider or other third party owned network. This service option is to represent any technology neutral third-party transport mediums including both fiber and non-fiber options. The service is a fully managed service, with the service provider supplying the equipment, provisioning the bandwidth and providing technical support/management of the service. One-time special construction should be bid separately from the monthly recurring cost for the fully managed leased service. Price quotes are requested for 36 months with two 12-month renewals for terms of service.

Epping School District must have dedicated, symmetrical transport bandwidth of at least 1Gbps with Service Level Agreement (SLA) guarantees between the designated endpoints. The solution must be scalable to 10Gbps. Respondents are required to fill out the table in “Pricing Spreadsheet” that is provided with this RFP. If special construction is necessary, respondents are required to separate out pricing: Special Construction Pricing. No increased pricing will be allowed during the term of the quoted special construction, one-time fee, and monthly fee in each pricing cell of the spreadsheet. If an increase in bandwidth is requested during the contract period the contract does not renew. As bandwidth needs are steadily rising, respondents are free to bid higher tiers of bandwidth than what is requested to demonstrate their future scalability.

As stated above, this request is technology neutral and for a fully managed service. Bids are required to include all services and components necessary to make the service operational. Respondent may offer services either themselves or through 3rd party subcontractors. If respondent intends to use third-party subcontractors to deliver a part or all of the service, this should be clearly indicated in the response.

SPECIAL CONSTRUCTION:

In E-Rate terminology, special construction refers to the upfront, non-recurring costs associated with the installation of new fiber to or between eligible entities. If no new fiber is being installed, then any installation costs are considered standard non-recurring costs (NRC). Applicants may seek funding for special construction charges in connection with leased lit fiber, leased dark fiber, and self-provisioning. Special construction charges eligible for Category One support consist of three components:

1. construction of network facilities
2. design and engineering
3. project management

Note: The term “special construction” does not include network equipment necessary to light fiber, nor the services necessary to maintain the fiber. Charges for network equipment and fiber maintenance are eligible for Category One support as separate services, but not as special construction.

All options can include special construction or one-time E-Rate eligible non-recurring costs as well as E-Rate eligible recurring circuit costs.

To the extent that the winning service provider installs additional strands of fiber for future business ventures, the winning service provider assumes full responsibility to ensure those incremental costs are allocated out of the special construction charges to the district in accordance with FCC rules and orders. If, after the issuance of the FCDL, USAC or the FCC determines that the winning service provider did not cost allocate those charges associated with the additional strands, Epping School District will not be responsible for reimbursing the winning vendor and the winning vendor will assume all responsibilities deemed ineligible by USAC. For examples of cost allocation, please see document in Section XI as prepared by the State E-Rate Coordinators' Alliance (SECA).

Specifications for a newly constructed fiber infrastructure for Outside Plant Design & Installation

Material Requirements:

- Material will comply with those standards as established by UL or NEMA and shall be commercial grade. All materials will be new and free from defects.
- Selected contractor and its subcontractors will provide all material management to ensure that the project remains on track according to the project milestones,
- All due caution will be exercised in transporting and off-loading all materials to prevent any damage during shipping or placement. Any damage to any materials after their initial receipt and inspection by the respondent will be the sole responsibility of the respondent, who will replace such damaged hand holes at no additional expense to the district.
- Buried conduit shall be EMT (Electrical Metallic Tubing) multi-duct with at least three innerducts. EMT fitting shall be gland or set screw type, and each conduit shall be equipped with a graduated pull tape or rope.
- Unless specified by right-of-way owner, crossings will be two conduits, PVC-Sch 40 or better.
- The exact requirements for location and type of conduit within the building shall be verified with building owner.
- All Hand Holes shall be (State) DOT approved, 45,000 lb. load rated CDR or comparable enclosures on roadways and railways, and pedestrian rated hand holes for non-roadways and railways.
- Large-radius sweeps shall be provided where required for offset or change in direction of conduit. Bend radius rating of the cable must be adhered to for all conduit bends, pull boxes, and hand holes.
- Fiber must be single-mode with the following specifications:
 - TU-T G.652.C/D compliant
 - Maximum Attenuation @ 1310nm: 0.34 dB/km
 - Maximum Attenuation @ 1385nm: 0.31 dB/km
 - Maximum Attenuation @ 1550nm: 0.22 dB/km
- Connector types should be LC unless otherwise specified by the district.
- Any warranties associated with the fiber and any other outside plant materials must revert to the district as the fiber owner upon completion of construction,

Specifications:

Survey

- Comply with all ordinances and regulations. Where required, secure permits before placing or excavating on private property, crossing streams, pushing pipe or boring under streets and railways. Pre-survey shall be done prior to each job.
- Respondent will locate underground lines of third parties in cable route area

Permits and Traffic Control

- The respondent must adhere to all applicable laws, rules and requirements and must apply for permits to place infrastructure per specification per county or city ordinance applicable to where the infrastructure is being placed.
- All traffic control, in accordance with local, state, county, or permitting agency laws, regulations, and requirements, will be the respondent's responsibility. The respondent's construction schedule will take into consideration sufficient time for the development and approval of a traffic control plan.

Tracer Wire Installation

- Tracer wire shall be placed with all conduit installed unless armored or traceable cable is used. The respondent will provide the tracer wire and shall install, splice and test (for continuity) the tracer wire. If the tracer wire is broken during installation, the wire should be repaired and tested for continuity after repair.
- For multi-duct installation, install a 5/8" X 8" copper clad ground rod in the hand-hole located on public right-of-way. Place a #12 insulated copper locate wire from the ground rod to the fiber optic termination room or to the outside of the building directly below the pull box and terminate on one side of an insulated indoor/outdoor terminal block to the master ground bar in the fiber optic termination room or place a ground rod on the outside of the building. Locate block in an accessible location. This is for "locate purposes only," not for grounding purposes. Note on as-built where ground is placed and tag located wire as "locate wire."

Depth of Burial

- Except where otherwise specified, the cable shall be placed to a minimum depth of 36" along roadways and 24" on private property. Greater cable depth will be required at the follow locations:
 - Where cable route crosses roads, the cable shall be placed at a minimum depth of 48" below the pavement or 36" below the parallel drainage ditch, whichever is greater, unless the controlling authority required additional depth, in which case the greatest depth will be maintained.
 - Where cable crosses existing sub-surface pipes, cables, or other structures: at foreign object crossings, the cable will be placed to maintain a minimum of 12" clearance from the object or the minimum clearance required by the object's owner, whichever is greater.

Highway, Railroad, and Other Bored Crossings

- All crossings of state or federal highways and railroads right-of-way shall be made by boring and placing a pipe casing. The cable shall be placed through the pipe casing. Country road and other roadways shall be bored, trenched, or plowed as approved by the appropriate local authority.
- All work performed on public right-of-way or railroad right-of-way shall be done in accordance with requirements and regulations of the authority having jurisdiction there under.
- Respondent shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the Work as drawn.
- Where the cable route crosses railroad right-of-way, the cable shall be placed at a minimum depth

of 60" below the railroad surface or 36" below the parallel drainage ditch, whichever is greater, unless the controlling authority requires additional depth, in which case the greatest depth will be maintained.

Cable Markers

- Cable markers shall be placed within 48 hours of cable installation. Unless the right-of-way or property owner specifies otherwise, cable markers shall be placed at all change in directions, splices, fence line crossings, at road and stream crossings, and other points on the route not more than 1,000 feet apart.
- In addition, on highway right-of-way, the markers shall be located at the highway right-of-way line. Markers shall always be located so that they can be seen from the location of the cable.

Hand Holes

- Hand holes will be placed in accordance with standard industry practice following the specifications provided in the construction plans, typical drawings, and detail drawings. Special attention and planning must be exercised to ensure accessibility by other groups after construction has been completed.
- All hand holes unless otherwise stipulated by the drawings will be buried with 12" to 18" of cover at final grade.
- Immediately after placement, the soil around and over the hand hole will be tamped and compacted. Should any washouts occur, the respondent will be responsible for correcting the problem immediately without additional cost to the district.
- After cable placement, all ducts will be sealed.
- All splice hand holes/manholes will be grounded
- A minimum of 100' coil of cable shall be left in each hand hole/building for splicing use.

Splicing

- Fiber to fiber fusion splicing of optical fibers at each point including head ends is required.
- Complete testing services, such as end to end, reel testing, and splice loss testing, ORL, power meter/laser source testing and WDM testing is required.
- Individual splice loss will be 0.10 dB for single-mode unless after 3 attempts these values cannot be achieved, then the fibers will be re-spliced until a splice loss within 0.05 dB of the lowest previous attempts is achieved. Splice loss acceptance testing will be based on the fusion splicer's splice loss estimator.
- All cables to buildings shall be fusion spliced within a minimum of 50' of entering a building at a location to be determined by the owner with an existing single mode fiber and terminated at customer's rack.

Aerial Plant

- District is open to aerial fiber runs using existing utility poles, but respondent must adhere to pole owners' requirements for clearances, spans, grounding, guys and attachments.

Testing Cable

- The respondent shall be responsible for on-reel verification of cable quality prior to placement.
- Completed test forms on each reel shall be submitted to the district.
- Respondent assumes responsibility for the cable after testing. This responsibility covers all fibers in the cable.
- The respondent shall supply all tools, test equipment, consumables, and incidentals necessary to perform quality testing.
- The cable ends shall be sealed upon completion of testing.
- In addition to splice loss testing, selected respondent will perform end-to-end insertion loss testing

of single-mode fibers at 1310 nm and 1550 nm from one direction for each terminated fiber span in accordance with TIA/EIA-526-7 (OFSTP 7). For spans greater than 300 feet, each tested span must test to a value less than or equal to the value determined by calculating a link loss budget.

Restoration

- All work sites will be restored to as near their original undisturbed condition as possible, all cleanup will be to the satisfaction of the district and any permitting agencies.
- Respondent shall provide a brief description of restoration plan in the response, with the expectation that a more detailed restoration plan will be delivered prior to construction begins.
- Work site restoration will include the placement of seed, mulch, sod, water, gravel, soil, sand, and all other materials as warranted.
- Backfill material will consist of clean fill. Backfilling, tamping, and compaction will be performed to the satisfaction of the district, the representative of any interested permitting agency, and/or the railroad representative.
- Respondent will be responsible for any restoration complaints arising within one year after the district's final acceptance.
- Excess material will be disposed of properly.
- Debris from clearing operations will be properly disposed of by the respondent/subcontractors as required by permitting agencies or the railroad. Railroad ties, trees, stumps or any foreign debris will be removed, stacked, or disposed of by the respondent as per requirements by other interested permitting agencies, and/or the district.
- Road shoulders, roadbeds, and railroad property will be dressed up at the end of each day. No payment for installation will be permitted until cleanup has been completed to the satisfaction of the any permitting agencies, and/or the district.
- Site clean-up will include the restoration of all concrete, asphalt, or other paving materials to the satisfaction of the other interested permitting agencies, and/or the district.

Documentation

As-built drawings will include:

- Fiber cable routes
- Drawings, site drawings, permit drawings, and computerized design maps and electronically stored consolidated field notes for the entire route must include:
 - Verification of as-built and computerized maps
 - Splicing locations
 - Optical fiber assignments at patch panels
 - Optical fiber assignments at splice locations
 - Installed cable length
 - Date of installation
 - Aerial installation documents should include
 - Pole attachment inventories
 - Pole attachment applications
 - Pole attachment agreements between respondent and other utilities
 - GPS points of reference for utility poles
 - Photo images of poles to which fiber is attached
 - Underground installation documents should include
 - Conduit design and detailing
 - Manhole detailing
 - Preparation of all forms and documentation for approval of conduit construction and/or installation,
- Fiber details will include:

- Manufacturer
- Cable type and diameter
- Jacket type: singlemode
- Fiber core and cladding diameter
- Fiber attenuation per kilometer
- Fiber bandwidth and dispersion
- Index of refraction
- OTDR documentation will include:
 - Each span shall be tested bi-directionally from endpoint to endpoint.
 - Each span's traces shall be recorded and mapped. Each splice loss from each direction and the optical length between splices as well as any of the information required by Span Map.
 - Reel acceptance
 - Individual fiber traces for complete fiber length
 - Paper and computer disk records of all traces
 - Losses of individual splices
 - Anomalies
 - Wavelength tests and measurement directions
 - Manufacturer, model, serial number, and date of last calibration of OTDR
- Power Meter documentation will include:
 - Total link loss of each fiber
 - Wavelengths tested and measurement directions
 - Manufacturer, model, serial number, and date of last calibration for all equipment used

References, Standards, and Codes

Specifications in this document are not meant to supersede state law or industry standards. Respondents shall note in their response where their proposal does not follow the requested specification to comply with state law or industry standard. The following standards are based upon the *Customer-Owned Outside Plant Design Manual* (CO-OSP) produced by BICSI, the *Telecommunications Distribution Methods Manual* (TDMM) also produced by BICSI, ANSI/TIA/EIA and ISO/IEC standards, and NEC codes, among others.

It is required that the respondent be thoroughly familiar with the content and intent of these references, standards, and codes and that the respondent be capable of applying the content and intent of these references, standards, and codes to all outside plant communications system designs executed on the behalf of the district.

Listed in the table below are references, standards, and codes applicable to outside plant communications systems design. If questions arise as to which reference, standard, or code should apply in a given situation, the more stringent shall prevail. As each of these documents are modified over time, the latest edition and addenda to each of these documents is considered to be definitive.

(See table next page.)

Table 1 — References, Standards, and Codes

Standard/Reference	Name/Description
BICSI CO-OSP	BICSI Customer-Owned Outside Plant Design Manual
BICSI TDMM	BICSI Telecommunications Distribution Methods Manual
BICSI TCIM	BICSI Telecommunications Cabling Installation Manual
	Customer-Owned Outside Plant Telecommunications Cabling Standard
TIA/EIA - 568	Commercial Building Telecommunications Cabling Standard
TIA/EIA - 569	Commercial Building Standard for Telecommunication Pathways and Spaces
TIA/EIA - 606	The Administration Standard for the Telecommunications Infrastructure of Commercial Buildings
TIA/EIA - 607	Commercial Building Grounding and Bonding Requirements for Telecommunications
TIA/EIA - 455	Fiber Optic Test Standards
TIA/EIA - 526	Optical Fiber Systems Test Procedures
IEEE 802.3 (series)	Local Area Network Ethernet Standard, including the IEEE 802.3z Gigabit Ethernet Standard
NEC	National Electric Code, NFPA
NESC	National Electrical Safety Code, IEEE
OSHA Codes	Occupational Safety and Health Administration, Code of Federal Regulations (CFR) Parts 1910 - General Industry, and 1926 - Construction Industry, et al.

VIII. AVAILABILITY OF SERVICES:

In the case of Leased Lit Fiber and Services Delivered over Third-Party Networks:

1. Proposed services must me the following specifications:
 - a. The provider will make all reasonable efforts to ensure 99.99% network availability of each circuit.
 - b. .25% frame/packet loss commitment
 - c. 25ms network latency commitment
 - d. 10ms network jitter commitment
 - e. There is no right of the provider to limit or throttle the capacity of the circuit at any time for any reason.
 - f. Vendor stated commitment is to respond to any outage within two (2) hours and a four (4) hour restoration of service.
2. Network operations center: Solution will provide customer support functions including problem tracking, resolution and escalation support management on a 24x7x365 basis. Customer has the right and is encouraged to call concerning any problems that may arise relative to its connection with vendor provided services.
3. Trouble reporting and response: Upon interruption, degradation or loss of service, Customer may contact Vendor by defined method with a response based on trouble level. Upon contact from the Customer, the Vendor support team will initiate an immediate response to resolve any Customer issue. Customer will receive rapid feedback on trouble resolution, including potential resolution time.
4. Escalation: In the event that service has not been restored in a timely manner, or the Customer does not feel that adequate attention has been allocated, the Customer can escalate the trouble resolution by request. A list of escalation contacts will be provided when implementation schedule is completed.
5. Resolution: The Customer will be notified immediately once the problem is resolved and will be asked for verbal closure of the incident.
6. Trouble reporting, escalation and resolution: A detailed trouble reporting, escalation and resolution plan will be provided to the district.
7. Measurement: Time starts from the time the Customer contacts vendor and identifies the problem. Credits for outages of a certain duration or longer will be identified. Credits for outages should be the following:

Length of Service Outage	Credit is the following percentage of monthly recurring cost
Less than 2 hours	No Credit

EPPING SCHOOL DISTRICT

Greater than two (2) hours and less than four (4) hours	5%
Greater than four (4) hours and less than eight (8) hours	10%
Greater than eight (8) hours and less than twelve (12) hours	15%
Greater than twelve (12) hours and less than sixteen (16) hours	20%
Greater than sixteen (16) hours and less than twenty-four (24) hours	35%
Greater than twenty-four (24) hours	50%

8. Reports: Upon request, an incident report will be made available to the Customer within five (5) working days of resolution of the trouble.
9. Link performance per segment: The service will maintain the proposed link performance throughout the term of the contract.
10. Historical uptime: Provide aggregate uptime statistics for your proposed service in the geographic area encompassing Applicant.

System and services must be installed, tested, and fully operational to all specified sites at least 48 hours prior to 7:00 am, July 1, 2020. Unless otherwise negotiated with the District, the District reserves the right to terminate the contract and award services to the next qualified vendor if the system and services are not available at the time and date specified above.

Service activation must be transparent and any down time required to activate the system and services must be approved by District personnel.

The vendor must provide documentation on the resources they will use to manage, monitor, and repair equipment and infrastructure at all locations.

Epping School District reserve the right to cancel the contract with the vendor for non-performance at any time during the contract period. Nonperformance includes but is not limited to failure to supply good quality service, failure to provide services for the full term of the contract, installation performance, poor billing and customer service services, and failure to maintain status as an authorized representative of services.

IX. E-RATE ELIGIBLE PRICING:

All pricing must be submitted using the “Pricing Spreadsheet” that is included as a separate Excel spreadsheet with this RFP.

OPTION A: Self-Provisioned - Provide a proposal with a District owned 6 strand single mode fiber network based on a special construction project with associated costs (right-of-way, easements, pole attachments, maintenance, repair and service of the network, etc.).

OPTION B: Leased Lit Fiber - Provide a lit fiber solution with either a Layer 2 network with associated Ethernet connectors, an optical wavelength leased lit fiber service with associated Ethernet connectors, or a leased lit fiber Ethernet service of at least 1Gbps with Service Level Agreement (SLA) guarantees between the designated endpoints. A 36 Month agreement is preferred, with two (2) 1 year voluntary extensions.

OPTION C: Leased Dark Fiber WAN: Provide proposals for 6 strand single mode with associated Ethernet connectors to the district for the options described in the Pricing Spreadsheet included with this RFP. (Includes Maintenance Fees as well.) A 60 Month agreement is preferred, with two (2) 1-year voluntary extensions.

OPTION D: Services Delivered Over Third-Party Networks - Epping School District must have dedicated, symmetrical transport bandwidth of at least 1Gbps with Service Level Agreement (SLA) guarantees between the designated endpoints. The solution must be scalable to 10 Gbps. 36 Month agreement preferred, with two (2), 12-month voluntary extensions.

Maintenance for Self-Provisioned Fiber and Leased Dark Fiber WAN (included in option A and C): The District is requesting pricing on-going maintenance of the fiber on self-provisioned and leased dark fiber solutions. Please note that respondents submitting a leased dark fiber proposal may also bid on maintenance services provided they bid it separately and do not bundle maintenance costs with their fiber proposal. Price quotes are requested for 36 and 60 months terms of service.

Category 1 Network Electronics for Self-Provisioned Fiber and Leased Dark Fiber WAN (included in option A and C):

The District is also seeking bids for necessary network equipment to place circuits into service at 1Gbps once self-provisioned or leased dark fiber is available. Network equipment should be Ubiquiti Networks or equivalent. Pricing information, as well as manufacturer and model, should be included in Equipment pricing matrix of E-Rate Eligible “Pricing Spreadsheet” that is provided with this RFP. Network equipment for self-provisioned and dark fiber may be bid as a stand-alone service by anyone, even if they are not bidding on any fiber service. Please note that respondents submitting a fiber proposal may also bid on equipment provided they bid them separately and do not bundle equipment costs with their fiber proposal.

Special Construction⁶ Information for Form 471 and PIA Review:

All E-Rate applications including special construction are subject to detailed questioning during PIA review where the cost of proposed special construction will be reviewed based on the cost of historical builds in the region. Additionally, certain information on necessary special construction is needed to accurately fill out the Form 471. Respondents are required to fill out the table in “Pricing Spreadsheet” that is provided with this RFP. Additionally, respondents are encouraged (but not required) to submit the additional information in the “Pricing Spreadsheet” that is provided with this RFP that will likely be requested during PIA review. **If respondents do not submit this additional information with their bid, and their solution is chosen, they must be prepared to promptly provide that information and any additional**

⁶ See Section XI: SECA Cost Allocation Scenarios for Special Construction Costs.

information not described in this RFP when requested. Please note that vendors may assist applicants with preparing funding requests or responding to PIA questions and may speak directly with PIA reviewers.

Special Construction Payment Plan Option:

Depending on the overall cost of the solution, South Butler County School District requests that the respondents consider allowing the District to pay the non-discount share of special construction costs (portion of costs that are the responsibility of the applicant) to be paid in equal annual installments over three years from Funding Year 2022 to Funding Year 2024 inclusive. Responses must include agreement or non-agreement of this request. Respondents are required to fill out the table in “Pricing Spreadsheet” that is provided with this RFP indicating their wiliness to consider the payment plan option.

X. MAP DATA ©2022 Google of HIGH SCHOOL TO SAU OFFICE



- Any route that is deemed cost-effective may be used to provide fiber by the service provider.
- TO CONDUCT SITE SURVEYS Please contact Thomas Rup: thomas.rup@eppingsd.org.
- The deadline to conduct a site survey is February 24, 2022, 2:00PM EST.

XI. E-RATE SPECIAL CONSTRUCTION COSTS – EXCESS STRANDS COST ALLOCATION

Funding Year 2018 - Prepared by the [State E-rate Coordinators' Alliance](#) - October 23, 2017

I. LEASED LIT FIBER AND LEASED DARK FIBER

A. Excess Strands for Applicant's Future Use

If the service provider installs additional strands for the applicant's exclusive future use in a leased dark fiber or leased lit fiber special construction project, and if the applicant can show documentation that buying a cable containing the number of strands placed in the fiber system for the applicant's future use is more cost effective than buying a fiber cable with the number of strands the applicant plans to place into service the first year, no cost allocation of the excess strands is required and no other special construction charges would need to be cost allocated.

If the service provider installs excess strands for the applicant's exclusive future use in a leased dark fiber or leased lit fiber special construction project where the excess strands will remain dormant until they are lit for the applicant in the future, and if the applicant cannot show that it is not more cost effective than buying the exact number of fiber strands being lit in the first year, the applicant must cost allocate the costs associated with the excess strands only. No other special construction charges would need to be cost allocated.

B. Excess Strands for Service Provider's Future Use

For lit services special construction and leased dark fiber special construction, if the service provider wishes to place extra strands in the build for its own use, the E-rate applicant must cost allocate the cost of the service provider-owned extra strands, as well as all incremental costs of those extra strands from the special construction E-rate funding request. It is not a pro-rata share, but an incremental cost calculation that must be backed by detailed documentation.

Example 1 from Funding Year 2018 USAC Fiber Training Slides applies:

COST-ALLOCATION: FIBER EXAMPLES

- **Example 1:** Leased lit fiber or leased dark fiber provider installs 12-strands in fiber run to a large school district hub and wants to add 36 additional strands for its own ineligible use, resulting in additional labor costs (e.g., splicing) and plant costs (e.g., larger termination boards, additional handholes).

Result: Cost of 36 additional fiber strands and all associated incremental increases in costs (e.g., the additional labor/outside plant costs) above what would be incurred if only the 12-strands of fiber were installed must be allocated out of the applicant's special construction funding request.

EPPING SCHOOL DISTRICT

Applicant's should seek documentation from the provider which outlines the added incremental costs attributable to designing, managing and constructing a fiber system with a 48-strand cable instead of a 12-strand cable. Such costs should include (but are not limited to):

- Splice Labor. If any fibers over the applicant's fibers are spliced, the labor for these additional splices must be cost allocated.
- Splice Enclosures are placed to protect splices. If any fibers over the applicant's fibers are spliced and require an enclosure, the enclosures for these additional splices must be cost allocated.
- Fiber Installation Labor. This represents the incremental cost of pulling a larger cable through the buried conduit.
- Structured materials installation. This represents the additional cost of burying a larger conduit to support the additional fibers.

Note that the costs associated with installing a larger cable strand than what is required by the applicant are ineligible and the service provider should not include such costs in their special construction billing to the applicant but should be prepared to show evidence during PIA review that it did not charge the applicant for these incremental costs.

Figure 1: Here is a table outlining some possible incremental costs:

Item	12 Strand cable construction	48 strand cable construction	Cost Allocation Amount that service provider should remove from the special construction request
Fiber Cable	38 cents per foot	\$1.04 per foot	66 cents per foot
Design and Engineering	\$2.12 per foot	\$2.42 per foot	30 cents per foot to depict additional splices at A and Z locations
Project Management	\$1.18 per foot	\$1.18 per foot	0
Splice labor*	\$11.00 per splice	\$11.00 per splice	\$11 per splice over 12 splices at any splice site
Splice enclosures**	\$205 per enclosure	\$205 per enclosure	\$205 per enclosure for every enclosure over 12
Fiber Patch Panel	\$71.43 per panel	\$218.60 per panel	\$147.17 per panel
Conduit and other structured materials	1.25" conduit required \$1.95 per foot Handhole (40,000 lb rated) \$2695 per unit Fiber Marker \$30 per unit	1.5" conduit required \$2.35 per foot Handhole (40,000 lb rated) \$2695 per unit Fiber marker \$30 per unit	40 cents per foot No cost difference for handhole No cost difference per marker
Fiber Installation Labor ***	25 cents per foot	28 cents per foot	3 cents per foot
Structured Materials Installation	\$2.85 per foot	\$3.10 per foot	25 cents per foot

(conduit, markers, handholes)****			
Markers	Place every 500'	Place every 500'	No cost difference
Handholes	Place every 1000'	Place every 1000'	No cost difference

II. SELF-PROVISIONED (APPLICANT-OWNED) FIBER:

There are different cost allocation rules that apply, depending on whether fiber is only being purchased and used by:

- A) A single, eligible entity (school or library)
- B) A consortium of all eligible entities
- C) A consortium of eligible and ineligible "NON-public sector, municipal entities"
- D) A consortium of eligible and ineligible "public sector, municipal entities"

A) Single, Eligible School or Library

1. If the applicant installs the exact number of fiber strands that they will light in the first year, and no extra fibers are installed, all fiber strands and special construction charges are eligible and no cost allocation is required.
2. If the applicant installs more fiber strands than it will light in the first year, E-rate will pay for the number of strands being lit in the first year, but not the additional strands. No cost allocation is required for the special construction charges. E-rate applicants can only receive E-rate funding for self-provisioned fibers that are lit within the funding year. If they request excess strands that will remain dormant until the applicant lights the excess strands for their exclusive future use, then they would need to cost allocate the cost of the unlit stands in the applicable funding year.

If the applicant can show documentation that buying a cable containing the number of strands placed in the fiber system for the applicant's future use is more cost effective then buying a fiber cable with the number of strands the applicant plans to place into service the first year, no cost allocation for excess strands by the applicant is required.

Example 2 from the Funding Year 2018 USAC Fiber Training Slides applies:

COST-ALLOCATION: FIBER EXAMPLES

- **Example 2:** School district seeks to install 48 strands of fiber in a self-provisioned network, only plans to light 12 strands within the FY. The remaining 36 stands will be reserved for the applicant's exclusive future use.

Result: Applicant must allocate the cost of the excess fiber strands out of the funding request, but no portion of the remaining special construction costs.

Item	12 Strand Cable	48 Strand Cable	Cost Allocation Amount that applicant should remove from the one-time special construction reimbursement request
Fiber Cable	\$.38 per foot	\$1.04 per foot	\$.66 per foot

B) Consortium Comprised of All E-rate Eligible Entities

As with Example 2, all fiber (lit and unlit in the first year) must be dedicated to only eligible entities only and the cost of strands not lit in the first year must be cost allocated.

C) Consortium of Eligible and Ineligible Entities (NON-public sector, municipal)

If the eligible entity purchases and installs fiber for the usage of the eligible entities and the ineligible (non-public sector) entities, the funding request will be denied. E-rate funded self-provisioned fiber is exclusive owned by the E-rate applicant consortium and is for the exclusive use of the E-rate eligible applicant.

In this case, Example 3 from the Funding Year 2018 USAC Fiber Training Slides applies:

COST-ALLOCATION: FIBER EXAMPLES

- **Example 3:** School district seeks to install 48 strands of fiber in a self-provisioned network that will be used by the school district, the State Department of Social Services, and a non-profit organization.

Result: Funding request denied. Self-provisioned networks must be owned by eligible schools and libraries, which may not resell E-rate-supported services and products.

D) Consortium of Eligible Entities and Ineligible “Public Sector, Municipal Entities”

For a self-provisioning consortium that includes a public-sector partner, the special construction cost-allocation rules are the same as the Leased Lit Fiber services with special construction or Leased Dark Fiber services with special construction. The cost of the ineligible fibers must be deducted from the funding request, but only the incremental costs related to labor, materials, engineering, project management, and design must be cost allocated.

For the purposes of E-rate, “public sector partner” is defined as health care providers and public sector (governmental) entities, including, but not limited to state colleges and universities, state educational broadcasters, counties and municipalities.

For this type of consortium, Example 4 from the Funding Year 2018 USAC Fiber Training Slides applies:

COST-ALLOCATION: FIBER EXAMPLES

- **Example 4:** The applicant is an E-rate consortium comprised of schools and municipal entities. It seeks to self-provision a network that will be owned entirely by the schools, but will also be used by the municipal entities.

Result: The cost of all fiber strands used by the municipal entities must be allocated out of the funding request, as well as any additional special construction costs incurred because of the installation of those fiber strands (e.g., any increased labor charges, increased plant costs, 100% of the costs of any laterals built to the municipal entities).

Note: The eligible applicant should be prepared to show evidence during PIA review that it has deducted all incremental costs associated with design, engineering, project management, construction, procurement of fiber and procurement of structured materials of the larger strand cable when compared to the costs associated with design, engineering, project management, construction, procurement of fiber and procurement of structured materials of the fiber strand cable only used by the eligible applicant.

XII. E-RATE REQUIREMENTS FOR VENDORS:

Vendors submitting proposals under this RFP must agree to meet the following conditions relating to the E-rate program and be willing to include such requirements in the Vendor's contract:

Discounted Bills: Should the District so choose, Vendor must agree to provide discounted bills to District which reflect the net charges due to the District after E-rate discounts have been reflected (also known as the "non- discount" amount). The Vendor will then invoice USAC using the Form 474 SPI form for the E-rate discount amount. Vendor shall be solely responsible for timely filing invoices with USAC. Accordingly, Vendor understands and agrees that District will NOT be liable to Vendor and Vendor shall have no recourse against the District for any discounted amount that Vendor submits late to USAC for payment, if USAC refuses to pay the invoice due to late filing. Further, Vendor understands and agrees that District shall not be liable to Vendor and Vendor shall have no recourse against the District for any discounted amount that Vendor submits to USAC for payment if Vendor is at fault for USAC's refusal to pay. If the District's actions or failure to act are responsible for the non-payment of the Vendor's invoice with USAC, the District shall not be liable to Vendor and Vendor shall have no recourse against the District for the amount at issue until both the District and the Vendor have exhausted their administrative remedies of appeal to USAC and/or the FCC.

If Vendor learns of any federal, state or local investigation conducted by any regulatory authority or law enforcement authority that could have an adverse impact on the District's ability to continue to receive the benefit of E-rate funding, Vendor must notify the District within 30 calendar days of learning of such investigation. The District reserves the right to cancel the agreement without penalty if the investigation impedes the District's ability in any way to receive the benefit of E-rate funding, subject to any investigation of wrongdoing.

Vendor shall maintain all bids, quotes, records, correspondence, receipts, vouchers, delivery information, memoranda and other data relating to Vendor's services and any subcontractors to the District. All such records shall be retained for 10 years following completion of services and/or installation of equipment, and shall be subject to inspection and audit by the District.

Vendor must maintain and enforce an internal E-rate audit process that ensures that Vendor complies with all E-rate program rules and regulations. This process must include the following:

- Where labor is involved, maintaining detailed, signed individual timesheets
- Ensuring that ineligible charges are not submitted to USAC
- Invoicing to USAC that is consistent with the contract and the District's Form 471.
- Ensuring that services or products are not provided to the District without District's express written permission or official purchase authorization
- Ensuring that District-approved substitute services or products are prominently noted on invoices submitted to USAC and the District
- When E-rate eligible services or equipment are allocated or installed in multiple buildings, support for the allocation consistent with the amount and buildings identified in the Form 471
- Documenting that E-rate funded services were provided within the allowable contract period and program year
- Charging proper FRN(s)
- Ensuring that invoices and USAC forms are submitted to the District in a timely manner
- Ensuring that USAC forms are filled out completely, accurately and on time
- Ensuring that Forms 472 are signed/dated by Vendor's representative in a timely manner
- Maintaining fixed asset list of E-rate-supported equipment provided to the District with detailed information for each item (model number, serial number, product description) and made available to the District in electronic format upon project completion.

XIII. ENVIRONMENTAL OBJECTIVES

The following Environmental Objectives are provided for your review and consideration. They will be used in the evaluation of responses to this bid and Form 470 associated with this bid.

- **Quality and Responsiveness of Proposal** – the degree to which responder answered the bid questions; completeness and clarity of response; conformance to instructions; conformance to terms and conditions; conformance to bid specifications.
- **Technical Merit of the Proposed Solution** – Did the responder demonstrate a comprehensive understanding of the project and familiarity with the requirements and specifications?
- **Substantial Responsiveness** – Does the proposal fulfill the requirements and the technical specifications or propose a different design that does not offer substantial equivalence in critical performance parameters or in other requirements?
- **Technology Evaluation** – The technology platform and architecture being proposed needs to be evaluated to make sure that the equipment can meet the application and service demands that will be placed on the services requested.
- **Relevant Experience** – Does the responder have experience in the configuration and installation of services similar to the scale and scope that you intend for your district?
- **Availability of Technical Support** – Are there readily available technicians who will provide troubleshooting?
- **Check References** – Contact references to verify quality and technical performance of the services installed by responders.
- **Reliability of Service/Continuance of Service** – What is the responder's record of reliability? What is the maximum length of downtime for transition, upgrade, and repair (the period of time during which service is not provided) of the services requested?
- **Flexibility** – Responder's willingness and experience in adapting to mid-course corrections.
- **Scalability** – Is the solution architecture scalable for future growth and enhancements?
- **User Experience** – Ease of use; compatibility with existing systems/hardware.
- **Open Standards** – Does the solution utilize Proprietary or Open Standards based equipment?
- **Review of Terms and Conditions** – Does the responder have SLAs? What is their detailed plan that will enable them to meet the SLA? Are the terms and conditions too arduous to do business with the proposer?
- **Vendor's Financial Stability** – Review the financials of the bid responders to ensure they have the financial livelihood to deploy the project.
- **Warranty** – Extended warranty offer; length of time on individual components, replacement components and parts; quick and efficient exchange and replacement process.