

White Pine County School District

BEN #143413

Request for Proposal – Leased Lit Fiber

TIMELINE

- October 5, 2018: Release of Request For Proposal in the E-rate Productivity Center
- October 19, 2018: Questions must be submitted on or before this date to Paul Johnson, CFO, @ paul.johnson@wpcnvadmin.com and carbon copy Mel Van Patten, Consultant @ mvanpatten@e-ratecentral.com
- October 22, 2018: Answers to questions posted to the E-rate Productivity Center
- November 30, 2018: RFP responses are due on or before this date to Paul Johnson, CFO, @ paul.johnson@wpcnvadmin.com and carbon copy Mel Van Patten, Consultant @ mvanpatten@e-ratecentral.com

SCOPE OF SERVICES

Section 1: Introduction

White Pine County School District, hereafter referred to as Applicant, is requesting proposals for leased lit fiber services for delivery of wide area network (WAN) services to the district. Service is expected to originate at the district hub site and be delivered to the eligible service locations. All locations, with addresses and demarcation points, are listed in the attached pricing sheet. The cutover is being planned to occur sometime toward the end of School Year 2019-2020.

Note that four of the schools are adjacent to a planned street revitalization/beautification project that includes approximately 5 miles of new conduit placed by the Nevada Department of Transportation. This placement of conduit was authorized by the Nevada Legislature and signed into law by the Nevada Governor in November of 2016 ([Nevada Senate Bill 53](#)). Respondents should display they have explored acquiring a conduit that is part of this beautification project. The City of Ely has expressed a desire to the applicant to maximize use of this new conduit. E-rate guidelines also encourage the use of existing or planned conduit where possible in special construction projects.

A preliminary draft of the conduit path appears as appendix B.

Section 2: Facilities that are included in this bid

School Name	Address	Latitude, Longitude	Students
White Pine HS	1800 Bobcat Drive, Ely, NV 89301	39.2393016, -114.87558	342
White Pine MS	844 Aultman St, Ely, NV 89301	39.248622, -114.889317	236
Steptoe Valley HS	700 Aultman St, Ely, NV 89301	39.248506, -114.890867	30
David E. Norman ES	1135 Ave C, Ely, NV 89301	39.258139, -114.867659	374
McGill ES	25 Avenue F, McGill, NV 89318	39.397601, -114.778789	180
Lund Comb School	301 E 2nd, Lund, NV 89317	38.862099, -114.999578	90

Section 2: Services

1. Applicant is seeking bids for a fully managed, leased lit fiber solution.
2. Network Design and Construction Routes

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- a. Applicant will consider traditional network designs (such as hub and spoke) or alternative proposals that respondent proposes. The applicant's stated decision criteria (outlined in the RFP) will be used to determine if an award is made as-a-result of this RFP. The applicant has, in accordance with E-rate guidelines, rated cost of service as the highest weighted factor in its decision criteria.
 - b. Respondents should clearly illustrate proposed network design and construction routes.
 - c. Applicant 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.
3. Special Construction
- a. 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.
 - i. Special construction and service eligibility for reimbursement have changed starting funding year 2016. See the Federal Communications Commission E-rate modernization order 2 (WC Docket No. 13-184) (<https://www.fcc.gov/document/fcc-releases-order-modernizing-e-rate-21st-century-connectivity>) for more information.
 - b. Special construction charges eligible for Category One support consist of three components:
 - i. construction of network facilities
 - ii. design and engineering
 - iii. project management
 - c. If no new fiber is being installed, then any installation costs are considered standard **non-recurring costs (NRC)**. For leased lit fiber solutions requiring special construction, this means that the costs associated with building the fiber are considered special construction and the costs associated with the equipment required to activate the service are a standard NRC.
 - d. **Special Construction Payment Plan Option and State Match**
 - i. The applicant requests that the respondents consider allowing Applicant 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 four years from Funding Year 2019 to Funding Year 2022 inclusive. Responses must include agreement or non-agreement of this request.
 - ii. Respondents agree to provide all information necessary to applicant to apply for State of Nevada Special Construction Matching funds.
 - e. Excess fiber strands for special construction projects
 - i. 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.
 - ii. 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, Applicant will not be responsible for reimbursing the winning vendor and the winning vendor will assume all responsibilities deemed ineligible by USAC.
 - iii. For examples of cost allocation, please see document in Appendix A as prepared by the State E-rate Coordinators' Alliance (SECA).

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Section 4: Solution Specifications

1. Leased Lit Fiber (with or without Internet Access)

USAC has instructed that for funding year 2019, Leased Lit Fiber (with or without Internet Access) is the E-rate Category 1 service option to choose when bidding point to point wide area network (WAN) connections. **WAN connections do not connect to an Internet access point.** WAN connections are point-to-point fiber connections that connect individual instructional/non-instructional facilities in the same school district. This school district WAN network design, the WAN connection can terminate at an aggregation point for all school district WAN connections. This aggregation point is called the hub location. This is what the applicant is proposing to bid.

- a. Applicant must have dedicated, symmetrical transport bandwidth of 100 Mbps, 1 Gbps, 10 Gbps between the designated endpoints. Not all bandwidths will be bid for every site. Please check the pricing sheet in appendix C.
- b. Contract options are requested for 36 month, 60 month and 84 month terms of service.
- c. Each respondent is required to complete the attached pricing sheet with this RFP.
 - i. Special construction, monthly recurring cost, and any additional non-recurring costs are **required** to be broken out and listed separately.
 - ii. Respondents are free to propose alternate pricing terms provided they have also included pricing in the requested format.
 - iii. 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.
- d. If an increase in bandwidth is requested during the contract period the contract does not renew.
- e. All solutions must adhere to the following Service Level Agreement (SLA) terms and the terms found in Section 4:
 - i. The provider will make all reasonable efforts to ensure 99.99% network availability of each circuit.
 - ii. .25% frame/packet loss commitment
 - iii. 3ms network latency commitment
 - iv. 4ms network jitter commitment
 - v. There is no right of provider to limit or throttle the capacity of the circuit at any time for any reason
 - vi. Vendor stated commitment is to respond to any outage within two (2) hours and a four (4) hour restoration of service (see schedule of service credits below).

Service credits for a greater than 2-hour response will accumulate as follows:

Length of Service Outage	Credit is the follow percentage of Monthly Fiber Maintenance Fee
Less than 2 hours	No Credit
Two (2) hours to four (4) hours	5%

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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%

Section 5: Service Level Agreement for lit service and managed service

For all lit service proposals and for all Category 1 Network Equipment Managed Service solutions. The respondent must agree to the following service specifications:

- a. 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.
- b. 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.
- c. 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.
- d. Resolution: The Customer will be notified immediately once the problem is resolved and will be asked for verbal closure of the incident.
- e. Trouble reporting, escalation and resolution: A detail trouble reporting, escalation and resolution plan will be provided to the district.
- f. Measurement: for leased lit fiber and a reasonable restoration of service for leased dark fiber. Time starts from the time the Customer contacts vendor and identifies the problem. Credits for outages of shortage will be identified.
- g. Reports: Upon request, an incident report will be made available to the Customer within five (5) working days of resolution of the trouble.
- h. Link performance per segment: The service will maintain the proposed link performance throughout the term of the contract.
- i. Historical uptime: Provide aggregate uptime statistics for your proposed service in the geographic area encompassing Applicant.
- j. Service outage credit: The respondent must agree to the following or a more stringent schedule of service outage credits (also outlined in section 4).

Length of Service Outage	Credit is the follow
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	percentage of MRC
Less than 2 hours	No Credit
Two (2) hours to 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%

Section 6: General Terms for All Proposals

- a. Failure to include any requested information noted as required by the respondent is grounds for disqualification.
- b. Description of Proposal
 - i. Respondent's proposal should include all sites for the option bid. If the respondent bids leased dark fiber or leased lit fiber – all sites must be included in the bid. Failure to include all sites in a bid option could be considered ground for
 - ii. Respondent will provide a description of their proposal for all services and solutions.
 - iii. Description will include an overview of the proposal, any deviations from the requested architecture, design or requirements, assumptions made, and other detail Applicant may find useful or necessary (or could differentiate the solution from a competing proposal).
- c. Timeline
 - i. For each response, respondents must include a timeline for all bringing all sites online.
 - ii. Proposals requiring little to no special construction should be able to bring all sites online by the July 1 start of the funding year.
 - iii. For solutions requiring special construction, a schedule of bringing

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sites online should be included with an explanation of how this timeline shifts if the date of the E-rate funding commitment shifts.

- d. Demarcation
 - i. All solutions must terminate service or infrastructure in the demarcation point at each address specified in the pricing sheet.
 - ii. Solutions bringing service to the property line but not to the demarcation point are not acceptable.
 - iii. Respondent must specify specific demarcation setup included in base fees, e.g. wall mounted CPE and CAT6a handoff, rack mount patch panel, etc.
- e. Network Diagram
 - i. For each response, respondents must include a network diagram displaying the paths to be used to serve each endpoint.
- f. References
 - i. For each response, respondent must provide 3 references from current or recent customers (preferably K-12) with projects equivalent to the size of Applicant.
 - ii. If respondent responds to more than one option (e.g. leased lit fiber service as well as leased dark fiber), provide 3 references for each.
- g. E-rate Program Integrity Assurance (PIA) Review
 - i. If their solution is chosen, respondents are required to promptly provide Applicant with any information being requested as part of PIA review.
 - ii. Vendors may assist applicants with preparing funding requests or responding to PIA questions and may speak directly with PIA reviewers.
 - iii. For all responses that include special construction, the respondent agrees to, by submitting its bid to produce all construction labor, construction materials and other cost information requested during PIA review.
- h. Required Notice to Proceed and Funding Availability
 - i. Applicant will follow the purchasing policies of the Applicant Board and requirements and procedures of the FCC's E-rate program as administered by the Universal Service Administrative Company to be eligible for all available funding.
 - ii. The implementation of any associated contracts resulting from this competitive bid process will be dependent on the district's' issuance of a written Notice to Proceed.
 - iii. E-rate funding notification alone will not signify Notice to Proceed. The district will have the right to allow the contract to expire without implementation if appropriate funding (including any state matching funds for special construction projects) does not come available.

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Section 6: Evaluation Criteria

1. Leased Lit Fiber

% Weight	Criteria
35%	E-rate eligible recurring and one-time circuit costs ¹
15%	Complete bid submission
10%	Ability to support requirements of this RFP ³
25%	Proposed contract terms and conditions ⁴
5%	E-rate ineligible recurring or one-time costs ⁵
10%	Provider references ⁶

2. Criteria Explanation

1. 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.
2. Complete bid submission: Bids concisely address Applicant's requirements, as set forth in the RFP, and do not contain a significant amount of corporate boilerplate marketing information
3. Ability to support requirements of this RFP: proposed solution clearly meets Applicant's requirements and needs
4. Proposed contract terms and conditions: Proposed contract has flexibility and terms desired by Applicant
5. E-rate ineligible costs: 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.
6. Provider references: response included K12 references that were similar in size and scope
7. Compatibility with existing network infrastructure: proposed equipment is easily compatible with the existing equipment used by the Applicant.

Section 7: Other

1. Respondents should be aware that the Ely Shoshone Tribe plans to release an RFP to solicit bids for a similar set of E-rate reimbursable services for the tribal library for FY 2019-20.

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Appendix A

E-rate Special Construction

Excess Strands - Cost Allocation Scenarios

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.

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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.

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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

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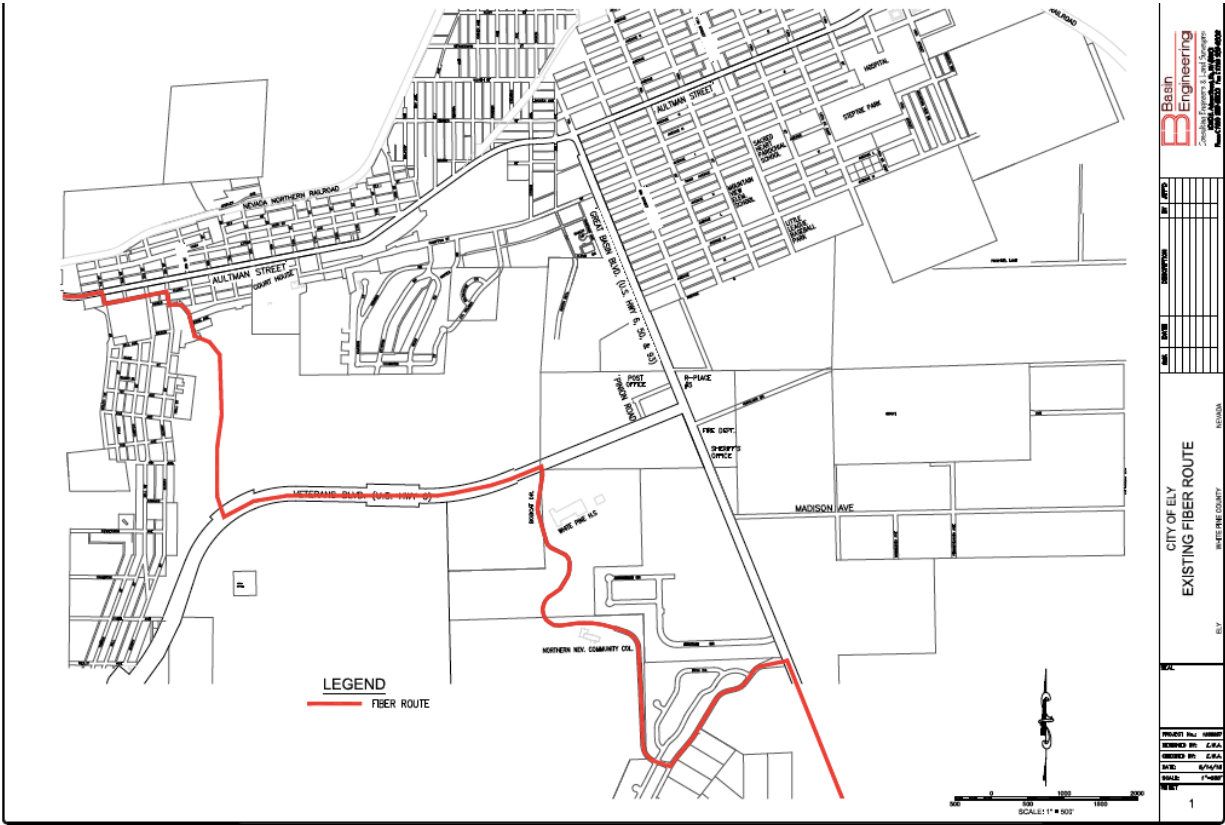
evidence during PIA review that it did not charge the applicant for these incremental costs.

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 (conduit, markers, handholes)****	\$2.85 per foot	\$3.10 per foot	25 cents per foot
Markers	Place every 500'	Place every 500'	No cost difference
Handholes	Place every 1000'	Place every 1000'	No cost difference

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Appendix B: Planned Fiber Route through Ely



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Appendix C: Pricing Sheet

The following bid opportunity uses this definition of service:

- Leased Lit Fiber – is a connection from the school location (Z location) back to the hub (A Location) that does not include ISP Service. This connection is transported over fiber (no other transport medium can be bid for this option).

36 Months

A location	Z Location	100 Mbps Monthly Recurring	1G Monthly Recurring	10G Monthly Recurring	Non-recurring Special Construction
White Pine High School	White Pine Middle School	DO NOT BID			
White Pine High School	Steptoe Valley High School		DO NOT BID	DO NOT BID	
White Pine High School	David E. Norman Elementary School	DO NOT BID			

60 Months

A location	Z Location	100 Mbps Monthly Recurring	1G Monthly Recurring	10G Monthly Recurring	Non-recurring Special Construction
White Pine High School	White Pine Middle School	DO NOT BID			
White Pine High School	Steptoe Valley High School		DO NOT BID	DO NOT BID	
White Pine High School	David E. Norman Elementary School	DO NOT BID			

84 Months

A location	Z Location	100 Mbps Monthly Recurring	1G Monthly Recurring	10G Monthly Recurring	Non-recurring Special Construction
White Pine High School	White Pine Middle School	DO NOT BID			
White Pine High School	Steptoe Valley High School		DO NOT BID	DO NOT BID	
White Pine High School	David E. Norman Elementary School	DO NOT BID			

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36 months

A location	Z Location	100 Mbps Monthly Recurring	1G Monthly Recurring	10 G Monthly Recurring	Non-recurring Special Construction
White Pine High School	Lund Combined School			DO NOT BID	
White Pine High School	McGill Elementary	DO NOT BID			

60 months

A location	Z Location	100 Mbps Monthly Recurring	1G Monthly Recurring	10 G Monthly Recurring	Non-recurring Special Construction
White Pine High School	Lund Combined School			DO NOT BID	
White Pine High School	McGill Elementary	DO NOT BID			

84 Months

A location	Z Location	100 Mbps Monthly Recurring	1G Monthly Recurring	10 G Monthly Recurring	Non-recurring Special Construction
White Pine High School	Lund Combined School			DO NOT BID	
White Pine High School	McGill Elementary	DO NOT BID			