OWEN J ROBERTS SCHOOL DISTRICT

REQUEST FOR PROPOSAL
LEASED DARK AND LEASED LIT FIBER CONNECTION
&
MAINTENANCE / OPERATIONS ON LEASED DARK FIBER

Response Deadline: FRIDAY, DECEMBER 14, 2018 AT NOON E.S.T.

1.0 INTRODUCTION

1.1 Background

The Owen J Roberts School District ("District") issues this Request for Proposals ("RFP") for a single connection between the District's Administration Building and West Vincent Elementary School. The District is seeking proposals for leased dark fiber and leased lit fiber, in accordance with E-rate rules. Proposals are sought for 5-year, 7-year and 10-year pricing, all with up to 5 additional 1-year extensions.

Vendors submitting proposals for leased dark fiber should also include a separate proposal for maintenance/operations of that fiber during the contract term.

The District is not seeking proposals for network electronics as we already own such electronics.

The District intends to apply for discounts on the services listed in this RFP through the federal Universal Service Support Mechanism for Schools and Libraries, commonly known as "E-rate." Several criteria and restrictions pertinent to the E-rate program are included herein and must be met by the successful vendor in order for the proposal to be considered a Qualified Proposal.

1.2 Issuing Officer and Technical Contact

The Issuing Officer and Technical Contact for general and technical questions related to this RFP is:

Paul Sanfrancesco
Director of Technology
Owen J. Roberts School District
901 Ridge Road
Pottstown, PA 19465
PSanFran@ojrsd.com

Prospective Vendors must direct and confine all inquiries and communications concerning this procurement to the Issuing Officer and correspondence should be made via e-mail. Although there is no due date for questions, the District encourages prospective Vendors to submit any questions they may have as soon as possible. Questions should include "E-rate Fiber RFP" in the subject line to ensure that the issuing officer identifies the email as relating to this procurement.

Vendors are responsible for periodically monitoring the USAC web site for any updates relating to this RFP.

1.3 Deadline for Proposals

The deadline for proposals to be submitted to the Issuing Officer via e-mail is Friday, December 14, 2018 at Noon EST. E-mail proposals must be labeled "E-rate Fiber Proposal". All required Vendor information, certifications and attachments must be included with the proposal.

1.4 Format of Proposal

The RFP is very specific about the requirements of these procurements. If a Service Provider does not agree to any of the terms listed in this RFP, they must provide the specific item number and the specific, detailed reason they cannot agree to that term in their Proposal. Service Providers' compliance with the specifications of this RFP will be taken into account as part of the evaluation process. The District also specifically requests that all replies to this RFP be succinct and not contain extraneous information that is not requested in this RFP.

1.5 Vendor Presentations

District reserves the right to ask clarifying questions of Service Providers and to request in person or remote presentations upon review of proposals. If required, the District expects that these presentations will occur within two weeks of the initial proposal due date in November. The District reserves the right to accept revised proposals following these presentations.

1.6 Modification or Withdrawal of Proposals

Proposals may be modified or withdrawn by the Service Provider prior to the established due date and time.

1.7 Rejection or Acceptance of Responses

District will review the proposals for compliance with the procedural requirements set forth in this RFP and may reject any proposal that materially fails to comply. Any deviation from the performance requirements or other terms of the RFP, informalities or defects, if in substantial compliance with the terms and intent of the RFP, may be accepted or rejected by District at its discretion.

1.8 Notification of Successful Bidder(s)

The successful bidder(s) will be advised of selection by the Issuing Officer through the issuance of a notification of award letter via email. Any notification of the selection of the successful bidder shall have no legal effect unless and until the parties negotiate a mutually acceptable agreement. Unsuccessful bidders also will be notified via email after a contract has been signed with the successful vendor.

1.9 Security and Pennsylvania Act 34 Clearance/Act 151/Act 114 Clearances

All personnel (contractors and subcontractors) that will be working on this project in the schools must observe all security and safety procedures of each school facility and must secure all record checks required by law which include Act 34 Criminal Record Check, Act 151 Fingerprints, Act 114 Child Abuse History Clearance. While working in schools, all personnel must wear identifying clothing and/or badges identifying their name and company.

On-site work at the school sites cannot commence until the provider has obtained all relevant certifications, licenses, permits and/or required qualifications for its workers and each school has cleared the personnel for work in District's locations.

1.10 Tax Exempt Status

The District is exempt from Pennsylvania Sales and Use Tax and has other federal and state tax exemptions afforded to public school entities and/or similar political subdivisions. This notice shall serve to satisfy any notification required by the provider as to these tax exemptions. Vendors must ensure that their cost proposals specifically outline and include all applicable taxes, fees and surcharges from which the District is not exempt or that will be imposed or assessed by Vendor, as required in RFP Attachments.

1.11 Additional Information for Service Providers

District reserves the right to:

- Amend, modify, cancel this RFP or not award any contract;
- Modify or add to the requirements contained in this RFP at any time after the issuance of this RFP via RFP amendment;
- Award a contract for any or all parts of the RFP to one or more service providers and negotiate terms and conditions to meet requirements consistent with this RFP;
- Utilize any and all ideas submitted in the RFP proposals received;
- Request providers to clarify their RFP proposals;
- Purchase the most cost-effective proposal(s) and not necessarily the lowest-priced proposal(s) in accordance with E-Rate rules where price of E-rate eligible services is the factor given the most points in the evaluation among all of the various factors considered in the evaluation.

1.12 Reasons for Disqualification of Proposals

If any of the following conditions occur, Service Provider's proposal may be disqualified from being evaluated.

1.12.1 Service Provider's proposal is submitted after the deadline and proposals have been opened by District.

1.12.2 Service Provider is on Red Light Status with the FCC.

1.12.3 Service Provider is not authorized to do business in Pennsylvania or is not authorized to provide services requested in this proposal to all buildings within the District.

1.12.4 Service Provider does not have a Service Provider Identification Number ("SPIN").

1.12.5 Services are not all provided under a single E-rate SPIN number. Separate SPIN numbers are permitted for each separate procurement.

1.12.6 Service provider cannot provide all services by July 1, 2019 to locations listed in Attachment A.

1.12.7 Service Provider has not disclosed whether any of the services are being leased or resold from other vendors and if so, has not disclosed exactly what services are being resold.

1.12.8 Service Provider has not disclosed all taxes, fees, surcharges, etc. and their amounts or percentages in their proposal.

1.12.9 Vendor does not agree to answer any and all the special construction questions posed by USAC during PIA review.

1.12.10 District reserves the right to disqualify a Vendor for the use of subcontractors that do not meet the requirements of this RFP or other legitimate business concerns.

1.12.11 Vendor is not deemed a "qualified" bidder as a result of reference checks and other research conducted by the District.

1.12.12 If a Service Provider becomes subject to any FCC or USAC investigation they must notify the District within 15 days. The District reserves the right to disqualify any Service Providers under investigation.

2.0 SCOPE OF SERVICES REQUESTED

2.1 Network Configuration and Technical Requirements

The District is seeking leased dark and leased lit fiber proposals to connect the District's Administration Building and West Vincent Elementary School. Vendors may propose dark fiber services leased by the District (IRU or traditional lease) or leased lit fiber services.

In the case of a lit fiber solution, the point-to-point connection should operate at 1Gbps with fiber handoff. In the case of a leased dark fiber solution, the fiber should be single mode and include 2 fiber strands.

Below are the technical requirements for the requested services:

2.1.1 Proposals must include all buildings and services requested in Attachment A. The District intends to sign one contract with a single prime vendor.

2.1.2 Proposals must include detailed network diagrams depicting both logical and physical designs. Google Earth compatible KMZ files are required for the physical designs.

2.1.3 Vendors proposing leased dark fiber must include maintenance throughout the contract term on the fiber. Details on Vendor's Operations and Maintenance Practices must be included. The District will require on-going maintenance and operations of the fiber for the entire length of the initial contract. When pricing maintenance and operations, the respondent should include an overview of their fiber maintenance practices, including:

- Routine maintenance and inspection,
- Scheduled maintenance windows and scheduling practices for planned outages,
- Fiber monitoring including information on what fiber management software is used, what fiber monitoring system is used, and who performs the monitoring,
- 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,
- Replacement of damaged fiber,
- Replacement of fiber which no longer meets specifications,
- Policies for customer notification regarding maintenance,
- Process for changing procedures, including customer notification practices;

The pricing for dark fiber maintenance should include the annual cost per linear mile for dark fiber maintenance and operations.

2.1.4 Fiber that is buried must be 3' (three feet) deep or more. Micro-trenching installations are not permitted.

2.1.5 In the case of a lit fiber solution, the Vendor's solution must be Layer 2 (L2) based with VLAN transparency and QoS transparency.

2.1.6 In the case of a lit fiber solution, the Vendor's handoff equipment must use the 1000BASE-LX standard for 1Gb circuits. The handoff device at the Administration building must be capable of providing two 1Gb fiber connections configured with LACP to connect to our core switches. West Vincent Elementary shall be a single standard fiber handoff.

2.1.7 In the case of a lit fiber solution, the Vendor's handoff equipment must be owned by the Vendor. The equipment must be rack mountable (preferably a 1U design) and have dual power supplies. Equipment details must be included in Attachment A.

2.1.8 All cable installed within buildings must be plenum rated and installed to code. This includes supporting the cable in the ceiling with J-hooks or other required supports.

2.1.9 Vendor must identify all subcontractors and any partners used to deliver services in their proposal. This includes leased fiber, fiber maintenance, fiber installation, site surveys, etc. As noted in section 1.12, District may disqualify a Vendor if they do not identify all subcontractors/partners in proposals.

2.1.10 All Vendor proposals must be 100% fiber based. The District will not accept proposals for services other than lit or dark fiber, including point-to-point wireless links.

2.1.11 All Vendor proposals must include a detailed description of their testing and turnup procedures. These descriptions should include a rough timeline for when these procedures will be completed. Additionally, the District requires copies of all final OTDR tests completed on circuits.

2.2 Support Metrics & Network Performance

Vendors shall describe their problem resolution procedures. Vendors shall provide:

2.2.1 Dedicated point of contact for problem resolution

2.2.2 A description of Vendor's emergency capabilities

2.2.3 The location of the nearest support depot and service personnel

2.2.4 30-minute or better proactive monitoring notifications

2.2.5 Mean time to repair (MTTR) of 4-hours or better for equipment failure and 6-hours or better for fiber failure

2.2.6 30-minute or better response to outage/trouble notifications from District

2.2.7 24/7/365 support for all circuits and services with a 24/7/365 staffed NOC

2.2.8 1-week Advanced Notification of all planned outages that affect District services

2.2.9 99.9% or greater availability

2.2.10 Sub-10ms (RTT) latency on each circuit

2.2.11 90% or greater sustained throughput on each circuit

2.2.12 Sub-2ms jitter on each circuit

2.2.13 Under 0.1% packet loss on each circuit

2.2.14 A description of Vendor's support staff qualifications and training, including outside plant maintenance & repair, OTDR expertise, etc.

2.2.15 A copy of the Vendor's support escalation procedures including contact information and job titles

2.2.16 Copy of SLA with proposal, including at a minimum $100 credit per hour of outage (credits begin after 6-hours), rounded up to full hours. The SLA should apply 24/7 with automatic service credits. The specific terms of the SLA will be negotiated between the District and Vendor.

2.3 Billing Support

Monthly consolidated billing that is easy to reconcile is required, along with available live customer support. Proposers shall submit examples of billing documents, and shall describe the available customer support including online billing and administrative access to District's account information. Clarity of content, readability and document appearance of the Vendor's billing information will be reviewed. District requires online access to all billing information, ordering information and billing statements.

Discounted billing is required by the District.

2.4 Pricing Format

Proposal must specify all taxes, fees and surcharges, including any fees, taxes or surcharges, paper statement fees, special taxes, PA Gross Receipts Tax, Universal Service Fees, Universal Service Administrative Fees, regulatory recovery fees, property taxes, etc. Proposals must include all costs that the District will be invoiced for.

The District will not pay any such fees or charges over the course of the agreement that are in addition to those disclosed in the proposal. Any proposal that does not meet this requirement will have points deducted in the bid evaluation and will be required to submit a revised proposal with this information included.

Vendor should propose pricing in two formats:

1) Pricing that does not include any up-front, non-recurring charges (NRC). All charges must be rolled into the monthly recurring charges (MRC). District requires that the MRC for all non-hub sites be the same for each location in order to simplify billing and budgeting. Additionally, the District requires that the MRC will be the same for each of the two hub sites, but it may be different than the MRC of the non-hub sites. Vendor must propose pricing on a per-site basis and may not propose one lump MRC to cover all sites. If billing begins prior to USAC issuing funding commitment, the District will pay the full MRC cost (both discounted and non-discounted share) until the funding commitment is issued. At that time, the District expects the Vendor to issue service credits for the discounted portion of the MRC.

2) Pricing that includes up-front, non-recurring charges (NRC) related to special construction costs for the network. Should the District choose to pay an NRC, the District will request the successful Vendor spread the non-discounted portion of NRC over a period of four years as allowed by E-Rate rules if the District selects pricing with NRC (this includes all NRC costs for non-eRate eligible locations). Vendors should indicate their willingness to spread the NRC costs over four years and disclose any and all fees or interest charges that would be assessed on these payments. Maintenance costs should be broken out from any NRC

proposed and presented as an MRC to satisfy E-rate requirements.

The winning vendor will be asked to provide a breakdown of special-construction charges in order to satisfy E-rate review requirements. This includes invoice-level detail on associated costs, including:

- Route assessment, maps, ROW access and/or easement requirements
- Whether fiber will be buried, strung through conduit (existing or newly installed), and/or strung aerially on poles (existing or newly installed), and any associated terms and costs (e.g., pole attachment agreements imposing make-ready costs, trenching and/or boring costs)
- Quantity and cost of other plant elements (e.g., handholes, splice enclosures, vaults)
- Charges for engineering, environmental assessments, traffic control and permits, surveys, testing, etc.
- A full list of likely questions is attached to this RFP as Appendix B for reference purposes only. Vendors must be willing to answer these questions during PIA review if they are selected as the successful vendor. Vendors unwilling to agree to answer these questions will have their proposals disqualified.

2.5 Timeline for Installation of Services & Delivery Service Level Agreement (DSLA)

Installation of service shall begin on or after January 1, 2019 so that service is fully operational by July 1, 2019 at the latest. Installation shall not begin, however, until after a contract between the parties has been executed.

Vendor shall provide a project manager to assist with conversion of services and must identify that individual in their proposal. There may be a need for some of the installation to occur after hours. The rate for after-hours installation shall be the same as the installation costs during business hours.

Weekly status meetings must be held between the Project Manager and District for the duration of the project.

2.6 Contract Term

The District requests proposals for the following initial contract terms: Proposals are sought for 5-year, 7-year and 10-year pricing, all with up to 5 additional 1-year extensions.

3.0 E-RATE REQUIREMENTS

Vendors submitting proposals under this RFP must agree to meet the following conditions relating to the E-rate program:

3.1 SPIN

Vendor must obtain a valid E-rate SPIN number (Vendor Identification Number), and must provide that SPIN in the Proposal submitted in response to this bid opportunity. All services included in this RFP must be submitted under a single SPIN.

3.2 Form 473, Service Provider Annual Certification Form

Vendor must agree to timely submission to the SLD a completed Form 473. This form is available on the SLD's website at http://www.usac.org/sl in the Forms section.

3.3 Discounted Bills

If requested by District, Vendor must provide discounted bills to District which reflect the net charges due to District after E-rate discounts have been reflected (also known as the "non-discount" amount). If District does not receive E-rate funding approval by July 1 of any year in which the contract is in effect, District agrees to pay the full amount of the monthly charges until District receives E-rate funding approval and files Form 486, Receipt of Services Confirmation Form, and Vendor receives the Form 486 Notification Letter. As soon thereafter as practical, Vendor shall provision monthly bills to reflect the E-rate discounts and to credit District for the pre-paid E-rate discount amounts for the monthly bills prior to District's receipt of E-rate funding approval. District shall have the sole discretion to decide whether the credit shall be refunded to District or used toward payment of the non-discounted amount of subsequent monthly bills.

3.4 Document retention

Vendor must retain copies of all invoices and record of District payments for a period of eleven years and be willing to provide this information to the District upon request. Such retention may be done electronically.

3.5 Subcontracting

Any and all subcontractors must be identified in Vendor's proposals. Subcontractor's must abide by the same rules and standards as set forth in this RFP as the proposing Vendors.

4.0 CONDITIONS AND CONTRACTS

4.1 Right Not to Award

District reserves the right to reject all proposals and not award a contract under this RFP, to narrow the scope of this project prior to contract signing, and/or to accept or reject any one or more proposals in part and thus award all or part of this project to one or more vendors.

4.2 Good Faith Negotiation of Contract

The District will sign a separate, mutually-agreeable vendor contract as long as the conditions included in this bid will supersede all vendor contractual language. Vendor is expected to negotiate a written agreement with District. District is not obligated to accept Vendor's standard terms and conditions. If a contract acceptable to District is not agreed upon by January 30, 2019, District may award the services to the next highest scoring Vendor. Vendor shall provide a proposed contract with all terms and conditions including any applicable Addenda, as part of their proposal.

4.3 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.

5.0 INFORMATION TO BE INCLUDED IN PROPOSAL

In addition to the other information required to be provided, Vendor must also include with their proposal responses to the following questions:

5.1 Provide a complete description of whether the services requested in this RFP will be provided using all of the vendor's own facilities or whether certain services or lines will be leased or resold from another company; or a combination of the above. Please be specific in your response. If services are being resold or leased, bids must indicate what services/lines are being resold or leased and must indicate the vendor's ability to monitor and maintain the required service level throughout the network.

5.2 Provide a description of your firm's previous and ongoing relationship, if any, with the District.

5.3 Provide the names and contact information of at least 4 current K-12 clients of approximately the same size as the Owen J Roberts School District that are using the same or similar goods and/or services as requested in this RFP.

5.4 Provide name and contact information for person authorized to negotiate terms and conditions.

5.5 Provide a description of the firm's experience with the federal E-rate program.

5.6 Provide federal Tax ID Number, E-rate SPIN Number, and FCC Registration Number (FCCRN).

5.7 Provide certification that the Vendor currently is not subject to the Red Light Rule and will notify the District if they are placed on Red Light Status with the FCC. Further, provide a certification that the Vendor's principals are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation, by any Federal department or agency, from transactions involving the use of Federal funds. Where Vendor is unable to certify to any of the Statements in this certification, Vendor shall attach an explanation to their proposal.

5.8 Provide contact name and contact information where questions related to the proposal can be directed with statement certifying that this person (or his/her authorized representative) will be available in December 2018 – March 2019 in order to assist with the completion of the District's E-rate applications, as requested.

5.9 Provide copy of terms and conditions for proposed contract.

5.10 Pennsylvania Right-to-Know Law

Vendor is required to clearly identify any specific information that they deem as proprietary and request to be withheld from public view. Vendor must provide one copy of its redacted proposal with all proprietary information omitted. District intends to comply with the Pennsylvania Right to Know law concerning requests for release of documents regarding this procurement, including the release of proposals after bid opening. Per E-rate regulations, price of winning bid is not confidential information.

6.0 EVALUATION

Proposals will be evaluated by a committee appointed by the Issuing Officer. Any Proposal that does not meet the minimum requirements in this Bid will be excluded from evaluation. In accordance with E-Rate regulations, the price of E-Rate eligible services will be the most heavily-weighted factor for all decisions.

ATTACHMENT A
Service Sites and Pricing Proposal

Service needed between these two buildings:

Owen J. Roberts Administration Building	901 Ridge Road, Pottstown, PA 19465
West Vincent Elementary School	2750 Conestoga Rd, Chester Springs, PA 19425

Proposal	Initial Term	Monthly Recurring Cost	Non-Recurring Cost	List of Anticipated Taxes, Surcharges, Fees and estimated amounts	Date Service Will Be Delivered:
A1 – Leased Dark Fiber – no NRC	5	**$**	**N/A**		
A2 – Leased Dark Fiber – No NRC	7	**$**	**N/A**		
A3 – Leased Dark Fiber – No NRC	10	**$**	**N/A**		
A4 – Leased Dark Fiber – w/NRC	5	**$**	**$**		
A5 – Leased Dark Fiber – w/NRC	7	**$**	**$**		
A6 – Leased Dark Fiber – w/NRC	10	**$**	**$**		
B1 – Leased Lit Fiber – No NRC	5	**$**	**N/A**		
B2 – Leased Lit Fiber – No NRC	7	**$**	**N/A**		
B3 – Leased Lit Fiber – No NRC	10	**$**	**N/A**		
B1 – Leased Lit Fiber – w/NRC	5	**$**	**$**		
B2 – Leased Lit Fiber – w/NRC	7	**$**	**$**		
B3 – Leased Lit Fiber – w/NRC	10	**$**	**$**		

ATTACHMENT B
Special Construction Sample PIA Questions

The winning bidder will be required to divulge to USAC cost-related information related to any special construction costs. Proposers' commitment to cooperate and provide the requested information is vital to ensure the receipt of E-rate funding approval. USAC has procedures in place to preserve the confidentiality of service provider's proprietary and competitively sensitive information. Vendors are not required to return this document with answers with their proposals, but by submitting a proposal, vendors are agreeing to answer these or similar questions if selected as the winning bidder.

Information that Proposers Should Be Prepared to Submit to USAC (Upon Request)

1) **Total Project Plant Route Feet**
2) **Average Cost per Foot of Outside Plant**
3) **Total Strands**
4) **Number of E-rate Eligible Strands**
5) **Detailed breakdown for the Special Construction Charges**
    a. Provide a Bill of Materials.
    b. Identify and explain in detail the most expensive items on the construction invoice/bill of materials.
        i. For example, if labor is the most expensive line item provide details such as the size of the labor crew, the number of hours of estimated work
        ii. Was there a minimum number of hours for which the crew had to be hired that exceeded the labor hours required for the build
        iii. Were there unique construction issues (e.g., a directional bore requirement because of rocky soil or a surface that could not be plowed; expensive make ready for pole attachments; bridge crossings; waterway crossings; railroad crossings; historic preservation issues or environmental issues) that caused the cost per foot to be inflated? If so, please provide a detailed explanation of these issues.

6) **Fiber Route Maps**

Please provide a map file of the route being constructed. That mapped out route should be available in either a .kmz or .json file.

7) **Latitude and Longitude of Fiber Route Start Points and Fiber Route End Points**

Please provide all of the details requested below of each route's endpoint within your fiber network that is being constructed.

Route Start Point		
Start Point Name (Include BEN Name and Number, if applicable)	**Latitude**	**Longitude**
	0	0
	0	0
	0	0
	0	0

Route End point

End Point Name (Include BEN Name and Number, if applicable)	Latitude	Longitude
	0	0
	0	0
	0	0
	0	0

Plant Type and Plant Mix Percentages and Costs

Please provide the information requested below for the whole project:

Plant Mix:

Plant Type	Expected Plant Mix	Existing Plant Mix	Average Cost per Foot for Type of Plant Mix
Please indicate what % of build will be Aerial.	0.00	0.00	0.00
Please indicate what % of build will be Direct Buried.	0.00	0.00	0.00
Please indicate what % of build will be Buried with Conduit (underground).	0.00	0.00	0.00
Total (of the three categories above must = 100%)	**0.00**	**0.00**	**N/A**

8) Plant Type and Plant Mix Details

a. Please indicate the cost per foot for the Aerial portion of the fiber build.
   i. Please provide a further breakout of this cost:
   ii. What is the average cost per foot for the Fiber Material? (e. g, cost per foot of only the fiber cable.)
   iii. What is the average cost per foot for the Fiber Placement? (e. g. cost of attaching only the fiber cables on to the poles.)
   iv. What is the average cost per foot for the Structure Material (all outside plant materials except fiber cable this could include anchors, j-hooks or guywires)?
   v. What is the average cost per foot of the Structure Placement (E.g., adding of new poles, anchor or guywires that will be owned by applicant)?
   vi. What is the average cost per foot for the Pole Make Ready? (E.g., on carrier owned poles, any enhancement that needs to be done to accept new fiber such as addition of guy, anchor or clearing of attachment points for new cable. This also includes the cost of placing new poles that will be owned by the pole owner.)

b. Please indicate the cost per foot for the Direct Buried portion of the fiber build.
   i. Please provide a further breakout of this cost:
   ii. What is the average cost per foot of the Fiber Material? (E.g., cost per foot of the fiber cable that will be directly placed into the ground (no conduit).
   iii. What is the average cost per foot of the Fiber Cable Placement? (E.g., labor cost per foot of placing the fiber cables in to the ground.)
   iv. What is the average cost per foot for the Buried Conduit (e.g., in direct bury installations conduit that is necessary for special portions of the builds such as railroad crossings, road crossings or in bores under waterways (rivers, creeks, streams, ponds))?
   v. What is the average cost per foot of the Trenching (e.g., cost of digging trench, cost of machinery needed for trenching and any permitting cost to lay new fiber)?

c. Please indicate the cost per foot for the Buried with Conduit (Underground) portion of the fiber build.
   i. Please provide a further breakout of this cost:
   ii. What is the average cost per foot for the Fiber Material? (E.g., cost of the actual fiber cables that will be pulled through the conduit.)
   iii. What is the average cost per foot for the Fiber Placement? (E.g., cost placing or pulling the fiber through the conduit.)

iv. What is the average cost per foot for the Structure Material (E.g., Cost of conduit, handholes, vaults, markers, etc.)?
v. What is the average cost per foot of the Structure Placement (E.g., labor and permitting for placement of all structure materials)?

9) Electronics Cost Detail (for lit fiber or managed solutions only)

Please provide the information requested below for the whole project:

Electronics Cost Detail	Material	Labor
Please provide the cost of Material and Labor for Customer Premise Equipment (CPE) needed to light the fiber being built.		
Please provide the cost of Material and Labor for Core Equipment needed to light the fiber being built.		
If you are not seeking any E-rate funding for CPE or Core Equipment needed to light the fiber, please explain why.		

10) Count of Remote Nodes

Please provide the information requested below for the whole project:

Count of Remote Nodes by Speed	Number Facilities/Locations
In your network, how many facilities/service location will be provided a 1gbps or less circuit to your hub/demarc?	
In your network, how many facilities/service locations will be provided at greater than 1gbps circuit to your hub/dermarc?	
Node Count	

11) Core/Host Node Detail

Please provide the information requested below for the whole project:

Core/Host Node Detail At the network Hub, there is generally either a router or a switch to which the circuits from service locations/facilities connect.	Active Ports
On the equipment located at the Hub, how many ports are connecting a service location at the speed of 1gbps or less ?	
On the equipment located at the Hub, how many ports are connecting a service location at the speed of greater than 1gbps but less than or equal to 10gbps?	
Node Count	

12) Alternative Route Questions

a. Did you explore any alternative routes for the fiber build requested?
b. If yes, please provide the cost estimates and route specifics for these alternative routes explored.
c. If no alternatives were explored, please explain how the chosen route was identified as the most cost-

effective route.

13) Additional Eligibility Question(s)

*Please answer **all** of the following questions and/or provide the documentation requested.*

For all documentation attached please identify which question it corresponds to.

		Questions	Response (Required)
		For FRN ------- please indicate the total number of fiber strands that will be installed at the time of construction. Note 1: By "total number of fiber strands," we mean the total number of strands installed as part of the special construction build, irrespective of whether the strands: (a) will be lit for the applicant's use or a potential other purpose; (b) will be lit this funding year or a future funding year; (c) have been cost-allocated out of the funding request; or (d) were not included in the one-time charges quoted to the applicant for the special construction project in the first instance.	
		Of the total number of strands identified in response to Question 1, how many of the strands will be installed for the applicant's exclusive use <u>and</u> will be lit within this funding year?	
	2(a)	How many recipients of service will be served by the strands identified in response to Question 2? Note: Please state whether multiple recipients of service are located in one building and will be served by the same set of fiber strands.	
	2(b)	What will be lit date for the fiber strands identified in response to Question 2 (if different segments of the build will be lit at different times prior to June 30, provide the latest lit date)?	______/______/________ • <u>If the date entered above is on or before June 30, 2018, proceed to Question 3.</u>

		If the lit date is currently unknown, please state "unknown," and proceed to Question 3. Note that you will be asked to demonstrate compliance with the obligation to light the fiber by the end of the funding year (i.e., June 30), when invoices for this FRN are submitted to USAC for reimbursement.	• If the date entered above is after June 30, 2018, proceed to Question 2(c).
	2 (c)	If the lit date entered in Question 2(b) is after June 30, 2018, do you contend that special construction has been unavoidably delayed due to weather or other reasons? If yes, proceed to Question 2(d). If no, proceed to Question 3.	☐ Yes ☐ No ☐ N/A (lit date on or before June 30, 2018).
	2 (d)	Applicants may request a one-year extension of the deadline to complete special construction and light the fiber if they demonstrate that special construction has been unavoidably delayed due to weather or other reasons. Please provide an explanation of the unavoidable delay that is preventing special construction from being completed in time to light the fiber by the end of the funding year (i.e., June 30). Please include a description of any intervening events (e.g., an unusual weather events), relevant facts about the complexity of the fiber build, and any other factors you would like USAC to consider. Then proceed to Question 3.	______________________________

		Enter the total number of remaining strands here [Answer to Q1 – Answer to Q2 = Answer to Q3] ("Excess Fiber Strands"). If the response to this question is zero (0), you may disregard the remaining questions in this document. Otherwise, proceed to Question 4.	
		Will <u>ALL</u> of the Excess Fiber Strands installed in your project be specifically for the applicant's exclusive future use (e.g., anticipated growth in bandwidth requirements or future expansion)? If yes, proceed to Question 4(a). If no, proceed to Question 6.	☐ Yes ☐ No
	4(a)	Will all of the Excess Fiber Strands installed for the applicant's exclusive future use remain dormant (dark) until lit for the applicant's exclusive use during a future funding year (i.e., no other party will use the Excess Fiber Strands between the time they are installed and the time the applicant is ready to use them in the future)? If yes, proceed to Question 4(b). If no, proceed to Question 7.	☐ Yes ☐ No
	4(b)	Have the Excess Fiber Strands been cost-allocated out of the special construction FRN? If yes, proceed to Question 4(c). If no, proceed to Question 5.	☐ Yes ☐ No
	4(c)	Please state the amount cost-allocated out of the special construction FRN and provide documents showing the basis for the cost-allocation. If your documents do not delineate specific costs of fiber installation, explain the tangible basis for the cost-allocation provided. Please contact the service provider for any additional information required to respond to this question.	

		After doing so, you may disregard the remaining questions in this document. You may be contacted in a separate communication regarding your responses to these questions.	
	An applicant may install Excess Fiber Strands that will not be lit within the same funding year as the funding request if: (i) the strands are installed exclusively for the applicant's future bandwidth needs; and (ii) the strands will remain dormant until lit for the applicant's exclusive future use. The cost of such Excess Fiber Strands must be allocated out of the relevant special construction FRN. Remaining special construction charges do not have to be cost-allocated. Because the above-referenced cost-allocation was not included in your funding request, the amount of the funding request will need to be adjusted. Please provide the information requested by Questions 5(a)-(c). If you do not have the information requested in Questions 5(a)-(c), contact the service provider to obtain it. After providing the requested information, you may disregard the remaining questions in this document. You may be contacted in a separate communication regarding your responses to these questions.		
	5(a)	Please provide the specific cost of the Excess Fiber Strands that: (i) will not be lit this funding year; (ii) are being installed for the applicant's exclusive future use; and (iii) will remain dormant until lit for the applicant.	
	5(b)	Please provide the documentation identifying the cost of the Excess Fiber Strands stated in response to Question 5(a).	
	5(c)	If your documentation does not delineate the cost of the Excess Fiber Strands, please provide the tangible basis for the cost identified in response to Question 5(a) above.	

	You have stated that Excess Fiber Strands will be installed as part of your project. You have also indicated that the Excess Fiber Strands will not be installed for the exclusive future use of the applicant Will the Excess Fiber Strands be installed as part of the special construction project solely because using a cable with a higher strand count than what will be lit for the applicant's use within this funding year has been deemed to be more cost effective than installing just the number of strands that will be lit for the applicant's use within this funding year? If yes, proceed to Question 6(a). If no, proceed to Question 7.	☐ Yes ☐ No
	6(a) Please provide an explanation and documents demonstrating that the higher strand solution, resulting in the installation of the Excess Fiber Strands, is the most cost effective option. Please be as specific as possible. For example, if the applicant seeks to light 6 strands for its use this year, but a 12-strand cable was deemed more cost-effective, provide a breakdown of the relative costs of installing 6-strands vs. 12-strands, and provide supporting documentation. Proceed to Question 6(b).	
	6(b) Will all of the Excess Fiber Strands remain dormant (dark) unless lit for the applicant's exclusive use during a future funding year (i.e., no other party will use the Excess Fiber Strands until used exclusively by the applicant in the future)? If yes, you may disregard the remaining questions in this document. You may be contacted in a separate communication regarding your responses to these questions.	☐ Yes ☐ No

		If no, proceed to Question 7. Note: Please answer Question 6(b) irrespective of whether the Excess Fiber Strands: (a) would be lit this funding year or a future year by the applicant or any entity other than the applicant; (b) have been cost-allocated out of the funding request; or (c) were not included in the one-time charges quoted to the applicant for the special construction project and stated in the FRN.	
	You have indicated that Excess Fiber Strands will be installed as part of your project. You have also indicated that either: ▪ The Excess Fiber Strands will not be installed for the applicant's exclusive future use; ▪ The Excess Fiber Strands will be installed for the applicant's exclusive future use, but will not remain dormant (dark) until the fiber is used by the applicant in a future year; ▪ The Excess Fiber Strands will not be installed solely because installation of a higher strand count than what will be lit for the applicant's use this funding year has been deemed to be the most cost-effective option; or ▪ The Excess Fiber Strands will be installed solely because installation of a higher strand count than what will be lit for the applicant's use this funding year has been deemed to be the most cost-effective option, but the Excess Fiber Strands will not remain dormant (dark) until they are used by the applicant in a future year. Please provide the information requested by Questions 7(a)-(d). Note: Answers to these questions are required irrespective of whether the Excess Fiber Strands: (a) would be lit this funding year or a future year; (b) have been cost-allocated out of the funding request; or (c) were not included in the one-time charges quoted to the applicant for the special construction project and stated in the FRN.		

	7(a)	What other party is planning to use the Excess Fiber Strands? If multiple parties plan to use the Excess Fiber Strands, please identify all of them. If the fiber provider intends to use the Excess Fiber Strands to serve other customers, name the fiber provider. **Note**: This question does not seek information about the ultimate end-users of fiber strands. For example, if a leased lit fiber or leased dark fiber provider intends to use the Excess Fiber Strands to serve other customers, the answer to this question would be the name of the service provider. If a municipality plans to use Excess Fiber Strands installed as part of a self-provisioned network to serve other community institutions, the answer to this question would be the name of the municipal entity.	
	7(b)	On what date does the other party plan to start using the Excess Fiber Strands? If multiple parties plan to use the Excess Fiber Strands, please identify the dates that each party plans to start using them. If the lit date for the Excess Fiber Strands is unknown, please state "unknown."	____/____/_______
	7(c)	Is the applicant receiving any compensation in exchange for the planned use of the Excess Fiber Strands by another party (e.g., is the applicant being paid a fee, receiving a gift, receiving services/products in trade, or otherwise being compensated for use of the Excess Fiber Strands)? If so, please describe the compensation that the applicant will receive.	
	7(d	Please provide any documents pertaining to the information provided in response to Questions 7(a)-(c). If you do not know the answers to one or more	

	)	of the questions above, please contact the service provider to obtain them. Proceed to Question 8.	
	Please provide the specific cost of installing the Excess Fiber Strands for use by another party as described in Question 7. Your response should include the both costs of the Excess Fiber Strands themselves and any additional special construction charges incurred due to the addition of the Excess Fiber Strands to the build (i.e., beyond what would be necessary if only the fiber strands that will be lit for the applicant's use within this funding year were installed).		
	8(a)	Please provide documentation substantiating the costs identified in response to Question 8. If you do not have such documents, please contact the service provider. Then proceed to Question 9.	
	8(b)	If you are unable to provide the documentation requested by Question 8(a), please explain the tangible basis for the costs you have identified in response to Question 8. Then proceed to Question 9.	
	Have the costs that you identified in response to Question 8 been identified in your special construction FRN as ineligible costs allocated out of the funding request?		☐ Yes ☐ No