

**To the Purchasing Department,**

**In compliance with the above, the undersigned offers and agrees, if this offer is accepted within \_\_\_\_\_ calendar days (30 calendar days unless a different period is inserted by the purchaser) from the bid open date, specified above, to furnish any or all items upon which prices are offered, at the price set opposite each item, delivered at the designated point(s), within the time specified.**

Bidder guarantees shipment from \_\_\_\_\_

within \_\_\_\_\_ days

FOB \_\_\_\_\_

After receipt of order at address shown

Terms \_\_\_\_\_

Bidder's name Vendor \_\_\_\_\_

Signed By \_\_\_\_\_

Typed Name \_\_\_\_\_

Title \_\_\_\_\_

Street Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Date \_\_\_\_\_ Phone \_\_\_\_\_

Fein \_\_\_\_\_

BOG 43



The attached “Huntington Metro Fiber Build” Request for Proposal has been developed by the West Virginia Telehealth Alliance, Inc., which is a non-profit organization dedicated to advancing telehealth use and capabilities throughout the Mountain State.


The project is being undertaken as part of the WVTA’s participation in FCC’s Rural Health Care Pilot Program and will establish a fiber optic backbone serving key eligible medical and medical research locations in West Virginia. Under a contractual agreement with the WVTA, Marshall University will be serving as the procurement agent and project manager for the WVTA for the project’s bidding, construction and operation.

Any questions or inquiries about this RFP or the project should be directed to the following:

Jack L. Shaffer, Jr.  
Technical Director  
West Virginia Telehealth Alliance  
(304) 201-5707  
[www.wvtelehealth.org](http://www.wvtelehealth.org)

or

Stephanie Smith  
Office of Purchasing  
Marshall University  
One John Marshall Drive  
Huntington, WV 25755-4100  
(304) 696-2822

Request for Proposal	 <p align="center"><b>Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing One John Marshall Drive Huntington, WV 25755-4100</b></p> <p align="center">Direct all inquiries regarding this order to: (304) 696-2822</p>	<b>Proposal#</b>  MU09-TELEHEALTH
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<b>Vendor:</b>	<b>Phone:</b> <b>Fax:</b>	<b>For information call:</b> <b>Buyer:</b> Stephanie Smith <b>Phone:</b> (304) 696-2822
<b>FEIN/SSN:</b>		

Sealed requests for proposals furnishing services described below will be received by the Institution. TO RECEIVE CONSIDERATION FOR AWARD, THE PROPOSAL WILL BE SUBMITTED ON THIS FORM IN ORIGINAL, SIGNED IN FULL IN INK AND (6) COPIES, AND RECEIVED IN THE PURCHASING DEPARTMENT TO HAVE A DATE/TIME STAMP AFFIXED, ON OR BEFORE THE DATE AND TIME SHOWN FOR THE PROPOSAL OPENING. The Institution reserves the right to accept or reject proposals separately or as a whole, to reject any or all proposals, to waive informalities or irregularities and to contract as the best interests of the Institution may require. PROPOSALS ARE SUBJECT TO THE GENERAL TERMS AND CONDITIONS AS PRINTED ON THE REVERSE SIDE HEREOF AND AS SET FORTH HEREIN.

<b>DATE</b> 1/22/09	<b>DELIVERY REQUIREMENTS</b>	<b>DEPARTMENT REQUISITION NO.</b>	PROPOSALS OPEN: 4/14/09 @ 3:00 pm	<b>BIDDER MUST ENTER DELIVERY DATE FOR EACH ITEM BID</b>
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Item #	Quantity	Description	Unit Price	Extended Price
		<p align="center"><b>REQUEST FOR PROPOSALS</b></p> <p>Marshall University, on behalf of the West Virginia Telehealth Alliance will accept proposals for the following services until <u>3:00 p.m.</u> on <u>April 14, 2009</u>. At that time, proposals will be recorded in Room 125, Old Main Building, located on the Campus of Marshall University.</p> <p align="center"><b>West Virginia Telehealth Alliance Project</b> Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Huntington, WV 25755</p>		

Total	
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**MARSHALL UNIVERSITY, SERVING AS THE PROCUREMENT AGENT FOR THE WEST  
VIRGINIA TELEHEALTH ALLIANCE,  
REQUEST FOR PROPOSAL  
MU09-TELEHEALTH / RFP # 01**

1. GENERAL INFORMATION

1.1. PURPOSE

Marshall University, hereafter referred to as the University on behalf of the West Virginia Telehealth Alliance, (WVTA), invites proposers to provide fiber, design, and installation services.

Marshall University, acting as a coordinating agent and participant of the WVTA, is soliciting proposals to provide the agents and participants of the WVTA with the design, installation, testing and acceptance of a fiber optic backbone serving key medical and medical research locations in Huntington, WV as listed herein. In future phases of the West Virginia Telehealth Alliance Project, rural clinics that have normal referral patterns or are remote locations to any of the three Huntington facilities (Cabell Huntington Hospital, Saint Mary's Medical Center and Marshall University Physicians and Surgeons) will have spoke Metropolitan Ethernet connections from these major health care facilities that are linked via fiber. These rural facilities have daily clinical, educational and business interactions with their associated major healthcare facilities. All locations are actively engaged in Electronic Medical Records, Medical Imaging and remote clinical education. The West Virginia Telehealth Alliance has developed a bold plan for the advancement of telehealth adoption and telemedicine utilization in West Virginia, particularly in areas that are rural and medically underserved and face significant rural economic and demographic obstacles. Greater use of a dedicated network of advanced telecommunication and information infrastructure is vital to enabling rural health care centers in our state to access and leverage telehealth applications, information systems and educational resources.

1.2. DEFINITIONS

As used in this RFP, the following terms, whether used in the singular or plural, shall have the following meanings:

Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, will hereinafter be referred to as "Marshall" or the "University" or "Buyer" in conjunction with WVTA Respondents to the RFP shall be referred to as "Bidders."

The Bidder to whom the contract is awarded shall be referred to as the "Vendor."

State means State of West Virginia.

Contractor means proposer awarded the contract.

Proposer or Bidder means an entity submitting a proposal in response to this RFP in accordance with the requirements specified herein.

Contract means the written agreement that will be entered into by the University and the successful proposer which will be based on this RFP.

Proposal or Bid means the package on which the proposers will bid and is more fully described in this RFP.

RFP means the Request for Proposal requested herein.

1.3. PROJECT

The project will be segregated into two phases: Phase 1 (this RFP) consists of the Fiber Design and Installation RFP and Phase 2, the Make-Ready Work required to complete Phase 1.

Phase 2 reimbursements will be released after validation by quotes from the utility vendors.

This Request for Proposal is made as part of the Federal Communications Commission's Rural Health Care Pilot Program and will be funded in part by the medical and educational agents and participants. This initiative is the first phase of a multi-year enhancement of broadband service to rural health care and the Medical Centers serving and collaborating with rural providers. The enhancement will include access to Internet2 services via Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance.

Information concerning the FCC/USAC pilot program can be found at the following website <http://www.usac.org/rhc-pilot-program/> and the complete proposal at: [http://fjallfoss.fcc.gov/prod/ecfs/retrieve.cgi?native\\_or\\_pdf=pdf&id\\_document=6519408880](http://fjallfoss.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6519408880)

#### 1.4. RFP FORMAT

This RFP has four parts: "Section 1" contains general information; terms and conditions; "Section 2" describes the background and working environment of the project; "Section 3" is a statement of the specifications for the services requested pursuant to this RFP, contractual requirements, and general terms and conditions; and, "Section 4" explains the required format of the Vendor's response to the RFP including the evaluation criteria to be used in evaluating the proposals received and how the evaluations will be conducted.

#### 1.5. INQUIRIES

It is the responsibility of the bidder to inquire about any condition of this RFP that is not understood. Responses to inquiries, if they change or clarify the RFP in a substantial manner, will be forwarded by addenda to all parties that have received a copy of the RFP. Addenda will also be posted on our web site, <http://www.marshall.edu/purchasing/bids.html>.

Additional inquiries regarding specifications of this RFP must be submitted in writing to the Marshall Buyer with the exception of questions regarding the proposal submission which may be oral.

The bidder, or anyone on the bidder's behalf, is not permitted to make any contact whatsoever with any member of the evaluation committee. Violation may result in rejection of the bid.

All inquiries of specification clarification must be addressed to:

[smiths@marshall.edu](mailto:smiths@marshall.edu)

Stephanie Smith

Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance,

Office of Purchasing

Old Main Room 125

Huntington, WV 25755-4100

Fax: (304) 696-3333

The deadline for written inquiries is identified in the Schedule of Events, Section 1.19

#### 1.6. ORAL STATEMENTS AND COMMITMENTS

Bidder must clearly understand that any verbal representation made or assumed to be made during any oral discussion held between Bidder's representatives and any Marshall personnel is not binding. Only the information issued in writing and added to the Request for Proposal specifications file by an official written addendum are binding.

## 1.7. ECONOMY OF PREPARATION

Bidder assumes all costs of preparation of the bid. The University and any of its employees or officers shall not be held liable for any expenses incurred by any bidder responding to this RFP for expenses to prepare, deliver the proposal, or to attend any mandatory pre-bid meeting or oral presentations.

## 1.8. PUBLIC RECORD

### 1.8.1. Written Release of Information:

All public information may be released with or without a Freedom of Information request, however, only a written request will be acted upon with duplications fees paid in advance. Duplication fees shall apply to all requests for copies of any document.

Currently the fees are \$0.50/page or a minimum of \$10.00 per request whichever is greater.

### 1.8.2. Risk of Disclosure:

The only exemptions to disclosure of information are listed in West Virginia Code §29B-1-4. Primarily, only trade secrets, as submitted by a bidder, are exempt to public disclosure. The submission of any information to Marshall by a bidder puts the risk of disclosure on the bidder. The University does not guarantee non-disclosure of any information to the public.

### 1.8.3. Confidentiality:

The information contained in bids submitted for the University's consideration is available for public inspection unless specifically requested and marked in the bid package. Pricing and other information that is an integral part of the offer cannot be considered confidential.

The University will honor requests for confidentiality for information of a proprietary nature. Clearly mark and isolate any information considered confidential.

## 1.9. LABELING OF RFP SECTIONS

The sections within this RFP contain instructions governing how the vendor's proposal is to be arranged; submitted; and to identify the material to be included therein.

## 1.10. MANDATORY REQUIREMENTS

The mandatory sections included in sections 3 and 4 require a response, and they describe the minimum requirements requested in this RFP. Any specification or statement containing the word "must", "shall, or "will" are mandatory. The Bidder is required to meet the mandatory specifications in order to be eligible for consideration and to continue in the evaluation process. A simple "yes" or "no" response to these sections is not adequate. Failure to meet mandatory items shall result in disqualification of the Bidder's proposal and the evaluation process terminated for that bidder.

Decisions regarding compliance with the intent of any mandatory specification shall be at the sole discretion of the University.

## 1.11. INFORMATIONAL SECTIONS:

All non-mandatory information specifications do not require a response from the Bidder. They are intended to aid the bidder in structuring an effective proposal capable of meeting the needs of the University.

## 1.12. CONTRACT TERMS AND CONDITIONS

This Request for Proposal contains all the contractual terms and conditions under which the State of West Virginia and the University will enter into a contract.

## 1.13. ECONOMY OF PREPARATION

Proposals should be prepared simply and economically, providing a straightforward, concise description of Bidder's abilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content.

## 1.14. PROPOSAL SUBMISSION INSTRUCTIONS

Bidders must complete a response to all mandatory specifications in order to be considered. Each proposal should be formatted as per the outline in Section 4 of this RFP. No other arrangement or distribution of the proposal information may be made by the bidder. Failure on the part of the bidder to respond to specific requirements detailed in the RFP may be the basis for disqualification of the proposal. The University reserves the right to waive any informality in the proposal format and minor irregularities.

### 1.14.1. Best Value Purchasing Standard Format

All Requests for Proposals should follow the standard format defined by the Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing. This format addresses required areas and enables the University to modify the background and scope of work to meet its needs.

### 1.14.2. Technical and Cost Proposals

All proposals must be submitted to the Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing prior to the date and time stipulated in the RFP as the opening date. All bids will be date and time stamped to verify official time and date of receipt.

Proposals shall be requested and received in two distinct parts: Technical and Cost. The cost portion shall be sealed in a separate envelope and will not be opened initially.

#### 1.14.2.1. Technical Bid Opening:

The Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing will open only the technical proposals on the date and time specified in the Request for Proposal. The representative for the Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing will read aloud the names of those who responded to the solicitation. The Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing Buyer will confirm that the original packages contain a separately sealed cost proposal prior to providing the courtesy copies to the University Evaluation Committee to begin the evaluation process.

#### 1.14.2.2. Cost Bid Opening

Upon approval of the technical evaluation from the West Virginia Telehealth Alliance Technical Bid Review Committee, the Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing shall schedule a time and date to publicly open and read aloud the cost proposals. The Bidders shall be notified of this date.

### 1.14.3. Delivery Location and Time

Bidders mailing proposals should allow sufficient time for mail delivery to ensure timely arrival. In accordance with West Virginia Code §5A-3-11, the Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing cannot waive or excuse late receipt of a proposal which is delayed and late for any reason. Any proposal received after the bid opening date and time will be immediately disqualified in accordance with State law and the administrative rules and regulations.

Normal business hours are 8:00 a.m. to 4:30 p.m. Monday through Friday. Bids received after the due date will be returned unopened. Bids are open to the public. Bidders are strongly encouraged to submit bids in advance of the due date to avoid the possibility of missing the due date because of unforeseen circumstances. Bidders assume the risk of the methods of dispatch chosen. The University assumes no responsibility for delays caused by any package or mail delivery service. Postmarking by the due date WILL NOT substitute for receipt of bid. In the event that the University is closed due to inclement weather on the day that a bid is due, bids will be accepted on the next day that the University is open. Bidders may wish to call 304-696-HELP if the weather is bad, to learn if the University has closed. Additional time will not be granted to any single bidder, however, additional time may be granted to all bidders when the University determines that circumstances require it. FAXED OR E-MAIL BIDS WILL NOT BE ACCEPTED.

Bidders responding to this RFP shall submit:

One original plus nine (9) convenience copies of technical, one CD of technical and one cost proposal to:

Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing  
Old Main Room 125  
One John Marshall Drive  
Huntington, WV 25755-4100

The outside of the envelope or package(s) should be clearly marked:

Buyer: Stephanie Smith  
Requisition#: WV09-TELEHEALTH  
Opening Date: 02/18/09  
Opening Time: 3:00 pm

### 1.14.4. Technical Evaluation:

The pre-selected, approved evaluation committee will review the technical proposals, deduct appropriate points for deficiencies and make a final written consensus recommendation to the Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing Buyer. If the Buyer approves the committee's recommendation, the technical evaluation will be forwarded to an internal review committee within the Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing.

### 1.14.5. Cost Evaluation and Resident Vendor Preference:

The evaluation committee completes its review and prepares the final evaluation making its recommendation for contract award based on the highest scoring Bidder and sends a final consensus recommendation to the Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing.

Resident Vendor Preference is not applicable to this RFP.

1.14.6. Proposal Selection:

The University may select the bidder which, in its opinion, has made the bid that is the most cost effective as defined by the FCC Rural Health Care Pilot Program. The University reserves the right to waive minor irregularities. Scholarships, donations, or gifts to the University, will not be considered in the evaluation of bids. The University reserves the right to reject any or all bids, in whole or in part, and is not necessarily bound to accept the lowest cost bid if that bid is contrary to the best interests of the University. The University may cancel this Request for Proposal or reject any or all bids in whole or in part. If the University determines in its sole discretion that only one bidder is clearly more qualified than any other under consideration, a contract may be awarded to that bidder without further action.

The contract is prepared and signed in the Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing, forwarded to the WVTA and the Attorney General's Office for approval as to form if necessary, encumbered and mailed to the appropriate parties.

1.14.7. Award Protest:

Bidders may appeal the award decision by submitting a written protest to the Director of the Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing within five (5) business days of the award notice, with a copy of the protest to the successful bidder. The protest must contain a statement of the basis for the challenge.

Proposal Understanding:

By submitting a proposal, the bidder agrees and assures that the specifications are adequate, and the bidder accepts the terms and conditions herein. Any exceptions should be noted in your response.

1.15. Proposal Validity:

Unless specified otherwise, all proposals shall be valid for 90 days from the due date of the proposal

1.16. Addenda:

If it becomes necessary to revise any part of this RFP, an official written addendum will be issued by the University to all bidders of record.

1.17. Independent Price Determination:

A proposal will not be considered for award if the price in the proposal was not arrived at independently without collusion, consultation, communication or agreement as to any matter relating to prices with any competitor unless the proposal is submitted as a joint venture.

1.18. Price Quotations:

The price(s) quoted in the bidder's proposal will not be subject to any increase and will be considered firm for the life of the contract unless specific provisions have been provided for adjustment in the original contract.

1.19. Schedule of Events:

Thursday 1/22/2009 Release of RFP by this date

Friday 1/30/2009 Written Questions Deadline for Mandatory Pre-Bid Conference

Thursday 2/19/2009 Mandatory Pre-Bid Conference in Huntington  
Friday 2/27/2009 Post Pre-Bid Vendor Question Deadline  
Friday 3/13/2009 Release of response to questions to qualified bidders and/or Bid Addendum  
Tuesday 4/14/2009 Bid Opening @ 3:pm

1.20. Mandatory Pre-bid Conference:

A **mandatory** pre-bid conference will begin at 10:am on Thursday 2/19/2009 at the same location – Drinko Library Auditorium on the Huntington Campus of Marshall University. It is expected to conclude at 4:30 pm that day as each site will be visited. Only bidders in attendance will be able to submit proposals for the project.

1.21. Insurance and Bond Requirements:

The successful Bidder will be required to execute a Contract, provide a Performance Bond and a Labor and Material Payment Bond for 100% of the contract award, comply with all of the rules and regulations of the West Virginia Workers' Compensation Fund, and provide evidence of insurance coverage to the minimum limits required by the Contract documents.

Insurance and bond requirements are explained in detail in Section 3; "Special Terms and Conditions".

1.22. Conflict of Interest:

Vendor affirms that it, its officers or members or employees presently have no interest and shall not acquire any interest, direct or indirect, which would conflict or compromise in any manner or degree with the performance or its services hereunder. The Vendor further covenants that in the performance of the contract, the Vendor shall periodically inquire of its officers, members and employees concerning such interests. Any such interests discovered shall be promptly presented in detail to the University.

1.23. Prohibition against Gratuities:

Bidder warrants that it has not employed any company or person other than a bona fide employee working solely for the bidder or a company regularly employed as its marketing agent to solicit or secure the contract and that it has not paid or agreed to pay any company or person any fee, commission, percentage, brokerage fee, gifts or any other consideration contingent upon or resulting from the award of the contract.

For breach or violation of this warranty, the University shall have the right to annul this contract without liability at its discretion or to pursue any other remedies available under this contract or by law.

1.24. Certifications Related to Lobbying:

Vendor certifies that no federal appropriated funds have been paid or will be paid, by or on behalf of the company or an employee thereof, to any person for purposes of influencing or attempting to influence an officer or employee of any Federal entity, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement.

If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee or any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, the Vendor shall complete and submit a disclosure form to report the lobbying.

Vendor agrees that this language of certification shall be included in the award documents for all sub-awards at all tiers, including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements, and that all sub-recipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this contract was made and entered into.

#### 1.25. Vendor Relationship:

The relationship of the Vendor to the University shall be that of an independent vendor and no principal-agent relationship or employer-employee relationship is contemplated or created by the parties to this contract. The Vendor as an independent vendor is solely liable for the acts and omissions of its employees and agents.

Vendor shall be responsible for selecting, supervising and compensating any and all individuals employed pursuant to the terms of this RFP and resulting contract. Neither the Vendor, nor any employees or vendors of the vendor, shall be deemed to be employees of the University for any purposes whatsoever.

Vendor shall be exclusively responsible for payment of employees and vendors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, and licensing fees, etc. and the filing of all necessary documents, forms and returns pertinent to all of the foregoing.

Vendor shall hold harmless the University, and shall provide the University with a defense against any and all claims including but not limited to the foregoing payments, withholdings, contributions, taxes, social security taxes and employer income tax returns. The Vendor shall not assign, convey, transfer or delegate any of its responsibilities and obligations under this contract to any person, corporation, partnership, association or entity without expressed written consent of the University. Whether the Vendor is corporation, partnership, other legal entity, or an individual, the Vendor is an independent vendor. If the Vendor is an individual, the Vendor's duties will be performed with the understanding that the Vendor is a self-employed person, has special expertise as to the services which the Vendor is to perform and is customarily engaged in the independent performance of the same or similar services for others. The manner in which the services are performed shall be controlled by the Vendor; however, the nature of the services and the results to be achieved shall be specified by the University. The Vendor is not to be deemed an employee or agent of the University and has no authority to make any binding commitments or obligations on behalf of the University except as expressly provided herein.

#### Subcontracts/Joint Ventures:

The Vendor is solely responsible for all work performed under the contract and shall assume prime vendor responsibility for all services offered and products to be delivered under the terms of this contract. The University will consider the Vendor to be the sole point of contact with regard to all contractual matters. The Vendor may, with the prior written consent of the University, enter into written subcontracts for performance of work under this contract; however, the vendor is totally responsible for payment of all sub-vendors.

#### 1.26. Equal Opportunity:

In the execution of the contract, the Vendor and all sub-vendors agree, consistent with University policy, not to discriminate on the grounds of race, color, religion, sex, sexual orientation, national origin or citizenship status, age, disability or veteran's status and to provide reasonable accommodations to qualified individuals with disabilities upon request.

#### 1.27. Sexual Harassment:

The University is committed to providing a positive environment for all involved. Sexual harassment, whether intentional or not, undermines the quality of this educational and working climate. The University thus has a legal and ethical responsibility to ensure that all can learn and work in an

environment free of sexual harassment. Consistent with the state and federal law, this right to freedom from sexual harassment was defined as University policy by the Board of Governors. Failure to comply with this policy could result in termination of this contract without advanced notice.

1.28. Smoking Policy:

The University must comply with the "Work place Smoking Act of 1985" and MRSA title 22, 1541 et seq "Smoking Prohibited in Public Places." In compliance with this law, the University has prohibited smoking in all University System buildings. This rule must also apply to all vendors and workers in existing University buildings. The vendor shall be responsible for the implementation and enforcement of this requirement within existing buildings.

1.29. Condition and Care of Site and Protection of the Work:

The vendor shall continuously maintain adequate protection of all work covered by the contract from damage and shall protect the property from injury or loss arising in connection with this contract, and shall make good any such damage, injury or loss. The vendor shall adequately protect adjacent property as provided by law and the Contract Documents.

1.30. Assignment:

Neither party of the contract shall assign the contract without the prior written consent of the other, nor shall the Vendor assign any money due or to become due without the prior written consent of the University.

1.31. Indemnification:

The Vendor agrees to indemnify, defend and hold harmless the University, their officers, and employees from and against: (1) Any claims or losses for services rendered by any sub-vendor, person or firm performing or supplying services, materials or supplies in connection with the performance of the contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or sub-vendors by the publication, translation, reproduction, delivery, performance, use or disposition of any data used under the contract in a manner not authorized by the contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees or sub-vendors to observe State and Federal laws, including but not limited to labor and wage laws.

1.32. Liquidated Damages:

Not applicable to this RFP.

1.33. Litigation:

This contract and the rights and obligations of the parties hereunder shall be governed by and construed in accordance with the laws of the State of West Virginia. The Vendor agrees that any litigation, action or proceeding arising out of this contract, shall be instituted a state court located in the State of West Virginia.

1.34. Contract Provisions:

After the successful Bidder is selected, a formal contract document will be executed between the University and the Vendor. In addition, the RFP and the Vendor's response will be included as part of the contract by reference. The order of precedence is the contract, the RFP and the Vendor's proposal in response to the RFP. If a separate contract is not written, the contract entered into by the parties shall consist of the RFP, the signed bid submitted by the Vendor, the specifications including all modifications thereof, and a purchase order or letter of agreement requiring signatures

of the University and the Vendor, all of which shall be referred to collectively as the Contract Documents. In the event one or more clauses of the contract are declared invalid, void, unenforceable or illegal, that shall not affect the validity of the remaining portions of the contract.

1.35. Compliance with Laws and Regulations:

The Vendor shall observe all laws, ordinances, regulations and policies of the United States, the State of West Virginia, the City of Huntington, and the University which may be applicable to its operation and shall, at its own cost, maintain all permits and licenses necessary to its operation. The vendor shall procure all necessary permits and licenses to comply with all applicable laws, Federal, State or municipal, along with all regulations, and ordinances of any regulating body. The Vendor shall pay any applicable sales, use or personal property taxes arising out of this contract and the transactions contemplated thereby. Any other taxes levied upon this contract, the transaction, or the equipment, or services delivered pursuant here to shall be borne by the vendor. It is clearly understood that the University is exempt from any taxes regarding performance of the scope of work of this contract.

The Vendor further agrees to comply with the Civil Rights Act of 1964 and all other applicable laws and regulations, Federal, State and Local Government.

1.36. Non-Appropriation of Funds:

If the University is not allotted funds in any succeeding fiscal year for the continued use of the service covered by this contract by the West Virginia Legislature, the University may terminate the contract at the end of the affected current fiscal period without further charge or penalty. The University shall give the vendor written notice of such non-allocation of funds as soon as possible after the University receives notice. No penalty shall accrue to the University in the event this provision is exercised.

1.37. Cancellation/Termination:

The University may terminate any contract resulting from this RFP immediately at any time the Vendor fails to carry out its responsibilities or to make substantial progress under the terms of this RFP and resulting contract. The University shall provide the Vendor with advance notice of performance conditions which are endangering the contract's continuation. If after such notice the Vendor fails to remedy the conditions contained in the notice, within the time period contained in the notice, the University shall issue the Vendor an order to cease any and all work immediately.

The University shall be obligated only for services rendered and accepted prior to the date of the notice of termination. The contract may also be terminated by the University with thirty (30) days prior notice. If the Vendor defaults in its agreement to provide personnel or equipment to the University's satisfaction, or in any other way fails to provide service in accordance with the contract terms, the University shall promptly notify the Vendor of such default and if adequate correction is not made within 30 days, the University may take whatever action it deems necessary to provide alternate services and may, at its option, immediately cancel this contract with written notice. Except for such cancellation for cause by the University, either the University or the Vendor may terminate this contract by giving 90 days advance written notice to the other party.

Cancellation does not release the Vendor from its obligation to provide goods or services per the terms of the contract during the notification period.

1.38. Survival:

The terms, conditions, warranties and representations made in this contract will survive the termination of this contract for a period of one year.

1.39. Contract Modification and Amendment:

The parties may adjust the specific terms of this contract (except for pricing and/or commission) where circumstances beyond the control of either party require modification or amendment. Any modification or amendment proposed by the Vendor must be in writing to the Director of Purchasing or his designee. Any agreed upon modification or amendment must be in writing and signed by both parties.

If changes to the original contract become necessary, a formal contract change order will be negotiated by the University, serving as the procurement agent for the West Virginia Telehealth Alliance and the Vendor, to address changes to the terms and conditions, costs of work included under the contract. An approved contract change order is defined as one approved by the Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Office of Purchasing and if necessary approved as to form by the West Virginia Attorney General's Office, encumbered and mailed prior to the effective date of such amendment.

An approved contract change order is required whenever the change affects the payment provision or the scope of the work. Such changes may be necessitated by new and amended Federal and State regulations and requirements. If the Vendor needs clarification or deviation from the terms of the contract, it is the Vendor's responsibility to obtain written clarification or approval from the Director of Purchasing or his designee.

As soon as possible after receipt of a written change request from the University, serving as the procurement agent for the West Virginia Telehealth Alliance, but in no event more than thirty (30) days thereafter, the Vendor shall determine if there is an impact on price with the change requested and provide the University, serving as the procurement agent for the West Virginia Telehealth Alliance, a written statement to identifying any price impact on the contract or to state that there is no impact. In the event that price will be impacted by the change, the Vendor shall provide a description of the price increase or decrease involved in implementing the requested change.

No change shall be implemented by the vendor until such time as the vendor receives an approved written change order.

1.40. Invoices:

The Vendor shall submit invoices, in arrears, as outlined by the guidelines of the FCC/USAC, (15% participant and 85% USAC) at the address on the face of the purchase order labeled "Invoice To" pursuant to the terms of the contract.

1.41. Record Retention (Access & Confidentiality):

Vendor shall comply with all applicable Federal and State of West Virginia rules and regulations, and requirements governing the maintenance of documentation to verify any cost of services or commodities rendered under this contract by Vendor.

The Vendor shall maintain such records a minimum of five (5) years upon contract termination and make available all records to the University personnel at Vendor's location during normal business hours upon written request by the University within 10 days after receipt of the request. Vendor shall have access to private and confidential data maintained by the University to the extent required for Vendor to carry out the duties and responsibilities defined in this contract.

Vendor agrees to maintain confidentiality and security of the data made available and shall indemnify and hold harmless the University against any and all claims brought by any party attributed to actions of breach of confidentiality by the Vendor, sub-vendors or individuals permitted access by Vendor.

#### 1.42. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION PROJECTS

If any real property or structure thereon is provided or improved, his assurance shall obligate the Provider, or in the case of any transfer of such property, any transferee, for the period during which the real property or structure is used for a purpose for which any State payment is extended or for another purpose involving the provision of similar services or benefits. If any other goods or services are so provided, this assurance shall obligate the Provider for the period during which it supplies such goods or services. The Provider recognizes and agrees that such right to provide property, goods, or services to the State will be extended in reliance on the representations and agreements made in this assurance, and that the State shall have the right to seek judicial enforcement of this assurance. This is binding on the Provider, its successors, transferee, and assignee, or any authorized person on behalf of the Provider. Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, reserves the right to cancel this contract immediately upon written notice to the vendor if the commodities or services supplied are of an inferior quality or do not conform to the specifications and/or contract. Any request for changes or corrections to the final contract must be submitted in writing to the Director of Purchasing in order to be considered. The unit prices on all contracts not containing a price adjustment agreement will be considered firm for the life of the contract unless an amendment in writing is agreed to by both parties to the contract. All purchases of tangible personal property incorporated into a building or other structure at Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, are subject to the West Virginia consumer sales tax. The tax of 6% is applicable to materials only. However, vendors must register with the City of Huntington and pay a business and occupation tax of 2% on the total contract price.

Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, may reject, revoke, or cancel this contractor any part thereof, and, in the absence of provisions for liquidated damages as set forth in the body of this contract, shall have the right to recover any and all damages sustained as the result of the vendor's failure to perform, in whole or in part, the terms and conditions of this contract. The State may withhold from any remittance due the vendor under the terms and conditions of this contract an amount equal to the damages sustained by such failure of performance on the part of the vendor. Marshall University is not liable for any expenses incurred by bidders in the preparation or presentation of bids. All bids must be signed in the original by the bidder's representative.

The vendor warrants that all goods and services furnished will be designed, constructed, and performed so as to comply with the William Steiger Occupational Safety and Health Act of 1970, as amended from time to time, and the rules, regulations, and standards issued there under by any applicable governmental authority which as of the date of this agreement will apply to the goods and services furnished hereunder.

The vendor warrants that all chemical substances sold by it to Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, comply with and are inventoried or registered pursuant to the requirements of the Toxic Substance Control Act, and rules and regulations issued there under by all applicable governmental authorities.

The vendor shall furnish Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Safety Office with a Material Safety Data Sheet (MSDS OSHA Form 20) disclosing all potentially hazardous substances in any product which the vendor sells or offers for sale to Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance. Potentially hazardous substances shall include but shall not be limited to those substances regulated under 29CFR1910.1200. It is the intention of Marshall University not to purchase any products which contain asbestos or asbestos components in the equipment or materials to be supplied by the vendor. The vendor warrants that all equipment and materials to be supplied by the vendor under this contract are free of asbestos, except in the extent that such

asbestos is specifically identified in writing by the vendor and specifically accepted in writing by the University.

#### 1.43. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS

1. Except when authorized by the director of the Purchasing Division pursuant to subsection 2 below, no contractor may use or supply steel products for a state contract project other than those steel products made in the United States. As used in this contract,
  - a. "State contract project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of any materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
  - b. "Steel products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more of such operations, from steel made by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process.
  - c. "United States" means the United States of America and includes all territory, continental or insular, subject to the jurisdiction of the United States.
2. The director of the Purchasing Division may, in writing, authorize the use of foreign steel products if:
  - a. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
  - b. The director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.
3. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W.Va. Code §5A-3-56.

#### 1.44. DOMESTIC ALUMINUM, GLASS, & STEEL IN PUBLIC WORKS PROJECTS

In accordance with West Virginia Code §5-19-1 et seq., every contract for construction, reconstruction, alteration, repair, improvement, or maintenance of public works, where the cost is more than \$50,000 and, in the case of steel only, where the cost of steel is more than \$50,000 or where more than 10,000 pounds of steel products are required, the State will accept only aluminum, glass, or steel products produced in the United States. In addition, items of machinery or equipment purchased for use at the site of public works shall be made of domestic aluminum, glass, or steel unless the cost of the project is less than \$50,000 or less than 10,000 pounds of steel are used in public works projects. Foreign made aluminum, glass, or steel products may be accepted only if the cost of domestic products is found to be unreasonable. Such cost is unreasonable if it is 20% or more higher than the bid price for foreign made products. If the domestic aluminum, glass, or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, foreign products may be supplied only if domestic products are 30% or more higher in price than the foreign made products. If, prior to the award of a contract under the above provisions, the spending officer of the spending unit determines that there exists a bid for like foreign aluminum, glass, or steel that is reasonable and lower than the lowest bid for domestic products, the spending officer may request, in writing, an evaluation and reduction in the lowest bid for such domestic products. All vendors must indicate in their bid if they are supplying foreign aluminum, glass, or steel.

## 2. OPERATING ENVIRONMENT

### 2.1. Location:

**See Appendix I, FCC USAC Internet2 Huntington Fiber map**

**Buildings (Hubs) Served (all pricing must be itemized according to each of the buildings served as stated below):**

1. Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, 's Robert C. Byrd Biotechnology Science Center (Housing School of Medicine Faculty) to St. Mary's Medical Center
  - 24SM Fiber- Diverse Route
  - Diverse Entrance # 1 into St. Mary's Medical Center
  - 20th St., Huntington, WV
  - 2900 1st Ave, Huntington, WV
2. St. Mary's Medical Center to St. Mary's Medical Education Center
  - 24SM Fiber- Diverse Route
  - Diverse Entrance # 2 into St. Mary's Medical Center
  - Diverse Entrance # 1 into St. Mary's Medical Education Center
  - 2900 1st Ave, Huntington, WV
  - 2825 Fifth Ave, Huntington, WV - Old Big Bear on 29<sup>th</sup> St. Huntington, WV
3. Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, Cabell Hall (Campus fiber connect site only) to St. Mary's Medical Education Center
  - 24SM Fiber- Diverse Route
  - Diverse Entrance # 2 into St. Mary's Medical Education Center
  - 20th St., Huntington, WV
  - 2825 Fifth Ave, Huntington, WV - Old Big Bear on 29th St. Huntington, WV
4. Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, 's Drinko Library (Campus fiber POP) to the Byrd Clinical Center via the AEP APCO AMP Site – 1122 Seventh Ave, Huntington, WV (this is the site of a number of CLEC co-locations and will optimize connectivity to a number of carriers) A service loop adequate to enter and leave this building must be supplied.
  - 24SM Fiber – Diverse Route from Existing Fiber Route

- 1 John Marshall Drive, Huntington, WV
- 1249 15th St, Huntington, WV

5. Byrd Clinical Center to the Cabell Huntington Hospital

- 24SM Fiber – Diverse Route from Existing Fiber Route
- 1249 15th St, Huntington, WV
- 1340 Hal Greer Blvd, Huntington, WV

6. Byrd Clinical Center to the Cabell Huntington Surgery Center

- 24SM Fiber
- 1249 15th St, Huntington, WV
- 1201 Hal Greer Blvd, Huntington, WV

2.2. Permits/Easements/Right-Of-Ways

All construction within a public right-of-way owned by or under the jurisdiction of the City, the County, or the State, must conform to the appropriate codes. The Contractor is responsible for obtaining construction permits and for ensuring that the most current standards are met. Any new aerial or conduit distribution routing will be determined by the Contractor as part of the proposal.

The vendor will coordinate with the Buyer and the appropriate authority for obtaining pole attachment right of ways, easements, permits, etc.

As the fiber will ultimately be owned by the Buyer, it will be the Buyer's responsibility to obtain the Right-of-Ways, Pole Attachment and property easements.

2.3. Make-Ready Work (Phase 2):

Pole installation shall be in accordance with all Local, AEP, Verizon Communications and RUS requirements.

Pre existing pole lines must be capable of supporting proposed cables. To determine the adequacy of an existing pole line inspect for loading capabilities. Verification should include the following:

- Poles physical integrity (i.e. Poles bent or split)
- Presence of guys or anchors
- Existence of a ground system
- Clearance from other utilities
- Specifications of pole – height, class, age, composition
- Ownership and Joint use issues

It is the Contractors responsibility to supply all application documentation to and coordinate with the utility pole owners (AEP, Verizon Communications and/or other).

2.4. Additional Services

Bidder shall provide, in detail, and list associated costs for additional goods and/or services available to the University but not necessarily addressed. The University shall determine which additional service options shall be most beneficial from both a cost and service standpoint, and may further

negotiate these options to include or omit dependent on the needs of the University, at the current time and in the future.

2.5. Vendor Employee Requirements:

The Bidding Contractor must provide one or more on-staff employees who are: BICSI RCDD/OSP Certified and have a minimum of five (5) years experience with outside plant cabling, and who are full-time employees with evidence of the certification and experience attached to the bid. These certifications will be verified.

The Bidder Contractor must have a current Service Provider Identification Number (SPIN) to bid on this RFP.

2.6. University Contact after proposal award:

Mr. Michael Adkins  
Director, Telecommunications & Networks  
Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance,  
DL125  
1 John Marshall Drive  
Huntington, WV 25755  
Email: [Adkins@marshall.edu](mailto:Adkins@marshall.edu)  
Phone: (304)696-3209

### 3. PROCUREMENT SPECIFICATIONS

#### 3.1. General Requirements:

The primary objective of this document and any subsequent contract is to obtain the most feasible and cost effective installation for the Buyer with required standards for product and service quality.

#### 3.2. Scope of Work:

The project will be segregated into two phases:

Phase 1 (this RFP) consists of the Fiber Design and Installation RFP and Phase 2, the Make-Ready Work required to complete Phase 1. The Phase 2 allowance estimate must be included in the cost proposal. However, the allowance will be reviewed for adjustments after quotes are received from the utility companies.

#### 3.3. Certification/Experience

Provide evidence of the certification and experience. These certifications will be verified.

##### 3.3.1. Service Provider Identification Number

Bidder must have a current Service Provider Identification Number (SPIN).  
Provide current SPIN

##### 3.3.2. Staff Certification

Bidder must have one or more on-staff employees who are BICSI RCDD/OSP Certified.

##### 3.3.3. Experience

Bidder must have a minimum of five (5) years experience with outside plant cabling.

Provide bio of experience, and location of the representative(s) that will service the University. Are the representatives employees of your company?

Bidder must have full-time employees.

Contact Person:

Bidder will provide the University with a telephone number at which a company representative can be reached 24 hours per day, 7 days per week to be used in the case of an emergency. A toll free number is required on this contract

#### 3.4. References

Provide a minimum of three (3) references. These references should be organizations with which the proposer provided services on a contract similar in size and scope to Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, . The Buyer must be able to contact the references without notification to the Bidding Contractor.

At least two (2) references should be for contracts of similar or larger scope of work. It would be preferable if one (1) reference is an organization of an emergency or public service nature with 24-hour operation preferred

Provide references that are able to confirm the successful installation and support of other clients of equal size.

The references must include the name, address, and telephone number of top-level management contact person for each reference, and must include the equipment and services supported within the scope of this RFP

3.5. Fiber Optic Cable: See Exhibits I - IV

The fiber requested is a 24 Single-mode, 8.3/125 um, fiber serving each location. The fiber route will include aerial installation as the majority of the route with underground installation into the main buildings (hubs) to be served. The fiber route from building to building must contain route diversity with diverse entrances into and out of the main hub locations.

The cable shall meet all requirements stated in the specification exhibits.

The Contractor MUST provide documentation in the form of specification sheets from the manufacture with the bid response. This documentation will be reviewed by the Buyer to ensure that the cable selected by the Contractor does in fact meet or exceed the specifications for a Fiber Optic cable as specified in the ANSI/EIA/TIA-568-B.3. Review of this documentation by the Consortium does not relieve the Contractor of any requirements specified in this Invitation to Bid.

3.6. Design Package: See Exhibits I-IV

The design of Aerial and underground conduit systems are governed by the installation requirements of the NEC, EIA/TIA Standards and the BICSI Telecommunications Distribution Methods Manual.

The design shall meet all requirements stated in the specification exhibits.

Provide detail of proposal including:

1. aerial and underground routes,
2. building entrances,
3. route diversity,
4. implementation plan

3.7. Timeline

Bidders should clearly identify the time line and how it plans to provide services. Bidder shall provide implementation schedule, including, but not limited to resources required, timeline, equipment and manpower or IT requirements from the University.

Bidder shall present support methods, response time, resources and working hours.

3.8. Special Terms and Conditions

3.8.1. Performance and Labor & Material Bond Requirement:

The successful vendor shall furnish a Performance and Labor/Material Bond for 100% of the amount of the contract. The corporate resolution authorizing the officer of the Surety Company to bid the corporation should accompany the bonds. In lieu of a performance and Labor/Material Bond, other acceptable securities include certificates of deposit, cashier's checks, and certified checks made payable to Marshall University, serving as the procurement agent for the West Virginia Telehealth

Alliance, . Personal or business checks are not acceptable in lieu of the Performance Bond, or Labor/Material Bond. Bonds are required prior to award but are not required at the time of bid.

3.8.2. Bid Bond Requirement:

A certified check in the amount of five percent (5%) of the total Bid, or a satisfactory Bid Bond furnished by a solvent surety company authorized to do business in the State of West Virginia in an amount equal to five percent (5%) of the total bid, must be submitted by each Bidder with his bid.

3.8.3. License Requirements:

The Successful bidder shall provide all taxes, permits, fees, insurance, liability, compensation, and any other items necessary to render the University free and harmless from all claims arising from services performed under this contract. Contract insurance, liability, and compensation shall be sufficient to cover contractor's employees and the public in general.

West Virginia State Code §21-11-2 requires that all persons desiring to perform contractual work in this State must be duly licensed. The West Virginia Contractor licensing board is empowered to issue the Contractor License. Application for a contractor license may be made by contacting the West Virginia Department of Labor, 1800 Washington Street East. Charleston, WV 25305, telephone 304-558-7890.

West Virginia State Code §21-11-11 requires any prospective Bidder to include the Contractor License number on their Bid. The successful Bidder will be required to furnish a copy of their Contractor License prior to issuance of Purchase Order/Contract.

3.8.4. West Virginia Workers Compensation

The Successful bidder shall comply with all rules and regulations of the West Virginia Worker's Compensation Commission.

3.8.5. Wage Rates:

The Successful bidder and all subcontractors shall pay the higher of the US Department of Labor minimum wage rates or the West Virginia Department of Labor minimum wage rates as established for Cabell County pursuant to West Virginia Code 21-5-1 et seq. See Attachment A.

3.8.6. Purchasing Affidavit:

Purchasing Affidavit is required prior to award. West Virginia Code §5A-3-10a requires that the chosen Bidder submit an affidavit regarding any debt owed to the State. The affidavit must be signed and submitted prior to award. It is preferred that the affidavit be submitted with the proposal. Purchasing Affidavit is available online <http://www.state.wv.us/admin/purchase/vrc/pAffidavit.pdf>

3.8.7. Agreement Addendum: Form WV-96

Agreement addendum is required to be submitted with the bids. Any contract resulting from an award from this RFP and a Bidder's proposal must include, but is not limited to, in its terms and conditions all mandatory sections contained herein. Agreement Addendum is available online <http://www.state.wv.us/admin/purchase/VRC/wv96.pdf>

3.8.8. Vendor Registration:

Vendors participating in this process should complete and file a Vendor Registration and Disclosure Statement (Form WV-1) and remit the registration fee. Vendor is not required to be a registered vendor in order to submit a proposal, but the successful bidder must register and pay the

fee prior to the award of an actual purchase order or contract. Vendor Registration & Disclosure Statement (Form WV-1) is available online: <http://www.state.wv.us/admin/purchase/vrc/wv1.pdf>

3.8.9. Insurance Requirements:

Successful vendor shall furnish proof of coverage of Commercial General Liability Insurance prior to issuance of a contract. See attached insurance certificate for amount of coverage. Insurance certificates are required prior to award but are not required at the time of bid.

3.8.10. Special License Requirements:

Vendor's License, etc. (List any specific licenses or other special license requirements for this project)

3.8.11. Litigation Bond: Not applicable to this RFP

3.8.12. Debarment and Suspension:

Bidder will not be considered in proposal process if debarred or suspended and no entity, agency or person associated with the Bidder is debarred or suspended. Submission of a signed bid in response to this solicitation is certification that your firm (or any sub vendor) is not currently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal department or agency. Submission is also agreement that the University will be notified of any change in this status.

3.9. Required Forms:

- |   |                               |
|---|-------------------------------|
| 1. Bid Bond see exhibit V   | At bid opening time & date    |
| 2. Labor & Material Bond  | At time of award              |
| 3. Performance Bond   | At time of award              |
| 4. Insurance Certificate:   | At time of award              |
| 5. Purchasing Affidavit:  | Bid opening time & date       |
| <a href="http://www.state.wv.us/admin/purchase/vrc/pAffidavit.pdf">http://www.state.wv.us/admin/purchase/vrc/pAffidavit.pdf</a> |                               |
| 6. WV-96 Agreement Addendum   | At time of award              |
| <a href="http://www.state.wv.us/admin/purchase/vrc/wv96.pdf">http://www.state.wv.us/admin/purchase/vrc/wv96.pdf</a>             |                               |
| 7. W-9 Form:  | At time of award              |
| <a href="http://www.irs.gov/pub/irs-pdf/fw9.pdf">http://www.irs.gov/pub/irs-pdf/fw9.pdf</a>                                     |                               |
| 8. WV-1 Form Vendor Registration  | At time of award              |
| <a href="http://www.state.wv.us/admin/purchase/vrc/wv1.pdf">http://www.state.wv.us/admin/purchase/vrc/wv1.pdf</a>               |                               |
| 9. Service Provider Identification # (SPIN)   | At time of bid opening & date |
| 10. Contractor's license #  | At time of bid opening & date |

#### 4. PROPOSAL ARRANGEMENT

Bidders shall ensure that all information required herein is submitted with the bid. All information provided should be verifiable by documentation requested by the University. Failure to provide all information, inaccuracy or misstatement may be sufficient cause for rejection of the proposal or rescission of an award. Bidders are encouraged to provide any additional information describing operational abilities.

Responses to each requirement below should be in order and clearly marked with the section number to which they respond.

##### 4.1. Bidder's Proposal Format:

The proposal should be formatted in the same order, providing the information listed below:

Title page - Should state the RFP Subject and number, the name of the Bidder, Bidder's business address, telephone number, name of authorized contact person to speak on behalf of the Bidder, dated and signed.

Submittals: Bidder must submit the required documents. Refer to Section 3

Table of Contents - Clearly identify the material by section and page number.

Section I – Experience and Credentials

Section II – References

Section III – Fiber Optic Cable

Section IV – Design Package

Section V – Timeline

Cost

One (1) cost proposal shall be submitted under separate cover and sealed.

##### 4.2. Evaluation Process:

###### 4.2.1. Experience and Credentials Refer to Section 3.3

- Current SPIN,
- BICSI RCDD/OSP
- Prior documented experience with the installation of similar projects.
- Bidding Contractor has a satisfactory record, verifiable through references, of service to customers, comparable in nature and scope to services required under the contract.

###### 4.2.2. References: refer to section 3.4

Company Location  
Operating Experience/Accounts  
References

- 4.2.3. Fiber Optic Cable: refer to section 3.5
- 4.2.4. Design Package: refer to section 3.6
- 4.2.5. Timeline: Refer to Section 3.7

4.3. Method of Evaluation:

The proposals will be evaluated by a committee of nine (9) individuals in accordance with the criteria stated. The Bidder who meets all the mandatory specifications and attains the highest point score of all Bidders may be awarded the contract. The recommendation of the successful Bidder will be made by a consensus of the evaluation committee.

4.4. Evaluation Criteria:

The following are the evaluation factors and maximum points possible for technical point scores:

Bids will be evaluated on many criteria deemed to be in the best interests of the University and WVTA, including, but not limited to:

Experience and Credentials	15 points
References	15 points
Fiber	15 points
Design Package	20 points
Timeline	<u>5 points</u>
Sub-Total	70 points
Cost	<u>30 points</u>
Total	100 points

Each cost proposal will be scored by use of the following formula for all bidders who attain the minimum acceptable score:

$$\text{Lowest price of all proposals} \div \text{Price of proposal being evaluated} \times 30 = \text{Price Score}$$

4.5. Minimum Acceptable Score:

Bidders must score a minimum of 70% of the total technical points possible. The technical points are listed above. The minimum qualifying score on the technical portion is 49 points.

All bidders not attaining the minimum acceptable score (MAS) shall be disqualified and removed from further consideration.

The University will select the successful bidder's proposal based on best value purchasing which is not necessarily the bidder with the lowest price. Cost is considered but is not the sole determining factor for award. The University does reserve the right to accept or reject any or all of the proposals, in whole or in part, without prejudice, if to do so is felt to be in the best interest of the University and WVTA.

Bidder's failure to provide complete and accurate information may be considered grounds for disqualification. The University reserves the right, if necessary, to ask bidders for additional information to clarify their proposals.

The evaluation committee will evaluate the mandatory general requirements and specifications prior to having the proposal scored. Only the highest scoring proposals will be eligible for further consideration.

#### 4.6. Award, Best and Final Offers

The University will compile the final scores for each proposal. The award will be granted in one of two ways. The award may be granted to the highest scoring responsive and responsible proposer. Alternatively, the highest scoring proposal or proposers may be requested to submit Best and Final Offers (BAFO). If BAFOs are requested by the University and submitted by the proposer, they will be evaluated against the stated criteria, scored and ranked by the evaluation committee. The University may require more than one series of BAFOs and discussions. If more than one BAFO is requested, a proposer's immediate previous offer shall be construed as the proposer's BAFO unless the proposer submits a timely notice of withdrawal or another BAFO. The Director of Purchasing shall notify each qualified proposer of the scope of the requested BAFO and shall establish a date and time for their submission. However, a proposer should not expect that the University would request a BAFO.

#### 4.7. Notification of Intent to Award

A Contract shall be awarded to the proposer who, in the judgment of the University and WVTA, best meets the RFP needs and is awarded the highest amount of points based on the POINTS MATRIX described more fully in Section 4, Article 4.4. All proposers shall be notified in writing by the Purchasing Office of the awarded result.

#### 4.8. Executed Contract to Constitute Entire Agreement

In the event of contract award, the contents of the RFP (including all attachments) RFP addenda and revisions, the proposal of the successful proposer, and additional terms agreed to, in writing, by the university and the contractor shall become part of the contract. Failure of the successful proposer to accept these as a contractual agreement may result in a cancellation of award.

## **EXHIBIT I**

### **GENERAL FIBER OPTIC SPECIFICATIONS**

The cable shall meet all requirements stated in this specification. The cable shall meet the requirements of the United States Department of Agriculture Rural Utilities Service (RUS) 7 CFR 1755.900 and the ANSI/ICEA Standard for Fiber Optic Outside Plant Communications Cable, ANSI/ICEA S-87-640-1992. Cable shall be gel filled, or dry water blocked.

**Single-Mode Fiber Optic Specifications:** Single-mode optical fibers shall be 8.3  $\mu\text{m}$ /125.0  $\mu\text{m}$ , and shall comply with ANSI/EIA/TIA-492BAAA.

**Cable Transmission Performance Specifications:** Each cabled fiber shall meet the attenuation performance specifications of ANSI/TIA/EIA-568-B, and measured in accordance with ANSI/EIA/TIA-455-78A or 61.

The attenuation of the cabled fiber shall be uniformly distributed throughout its length such that there are no discontinuities greater than:

- 1.0 dB/km at 1310 nm
- 1.0 dB/km at 1550 nm

**Physical Cable Specifications:** The mechanical and environmental specifications for outdoor optical fiber cable shall be in accordance with ANSI/ICEA S-83-640.

**Chromatic Dispersion:** The Zero Dispersion Wavelength ( $\lambda$ ) shall be between 1300 nm and 1321.5 nm, and the maximum value of dispersion slope at  $\lambda_0$ , shall be no greater than 0.093 ps/km- $\text{nm}^2$ . Dispersion measurements shall be made in accordance with ANSI/EIA/TIA-455-168, Spectral Group Delay, ANSI/EIA/TIA-455-169, Phase-Shift, or ANSI/EIA/TIA-455-175, Differential Phase-Shift.

**Mode Field Diameter:** The nominal mode field diameter shall be 8.7  $\mu\text{m}$  to 10.0  $\mu\text{m}$  with a tolerance of  $\pm 0.5 \mu\text{m}$  at 1300 nm when measured in accordance with ANSI/EIA/TIA-455-164, Far-Field Scanning, or ANSI/EIA/TIA-455-167, Variable Aperture Method in the Far Field.

**Cut-Off Wavelength:** The cutoff wavelength of cabled single-mode optical cable shall be  $< 1270$  nm when measured in accordance with ANSI/EIA/TIA-455-170.

**Specifications for outdoor fiber cable construction:** Optical fibers shall be placed inside a loose buffer tube. The nominal outer diameter of the buffer tube shall be 3.0 mm. All cables will be gel filled, or dry water blocked. Each buffer tube shall contain up to 12 fibers. Each fiber shall be distinguishable by means of color coding in accordance with TIA/EIA-598-A, "Optical Fiber Cable Color Coding." Buffer tubes containing fibers shall be color coded with distinct and recognizable colors in accordance with TIA/EIA-598-A, "Optical Fiber Cable Color Coding."

The central anti-buckling member shall consist of a dielectric, glass reinforced plastic (GRP) rod. The purpose of the central member is to prevent buckling of the cable. The GRP rod shall

be over coated with a black colored thermoplastic when required to achieve dimensional sizing to accommodate buffer tubes/fillers.

Each buffer tube shall be filled with a non-hygroscopic, non-nutritive to fungus, electrically non-conductive, homogenous gel. The gel shall be free from dirt and foreign matter. The gel shall be readily removable with conventional nontoxic solvents.

Two polyester yarn binders shall be applied contra helically with sufficient tension to secure each buffer tube layer to the dielectric central member without crushing the buffer tubes. The binders shall be non-hygroscopic, non-wicking and dielectric with low shrinkage.

All-dielectric cables (non-armored) shall be sheathed with medium density polyethylene (MDPE). The minimum nominal jacket thickness shall be 1.4 mm. Jacketing material shall be applied directly over the tensile strength members and water blocking tape. The polyethylene shall contain carbon black to provide ultraviolet light protection and shall not promote the growth of fungus. See Figure 1.

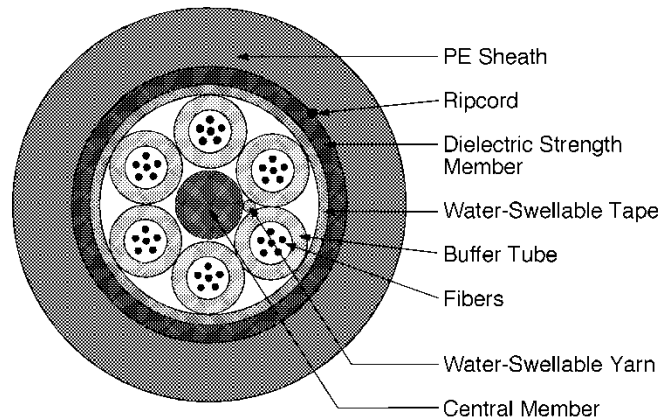


Figure 1

Armored cables shall have an inner sheath of MDPE. The minimum nominal jacket thickness of the inner sheath shall be 1.0 mm. The inner jacket shall be applied directly over the tensile strength members and water blocking tape. A water blocking tape shall be applied longitudinally around the outside of the inner jacket. The tape shall be held in place by a single polyester binder yarn. The armor shall be a corrugated steel tape, plastic-coated on both sides for corrosion resistance, and shall be applied around the outside of the water blocking tape with an overlapping seam with the corrugations in register. The outer jacket shall be applied over the corrugated steel tape armor. The outer jacket shall be a MDPE with a minimum nominal jacket thickness of 1.4 mm. The polyethylene shall contain carbon black to provide ultraviolet light protection and shall not promote the growth of fungus. See Figure 2.

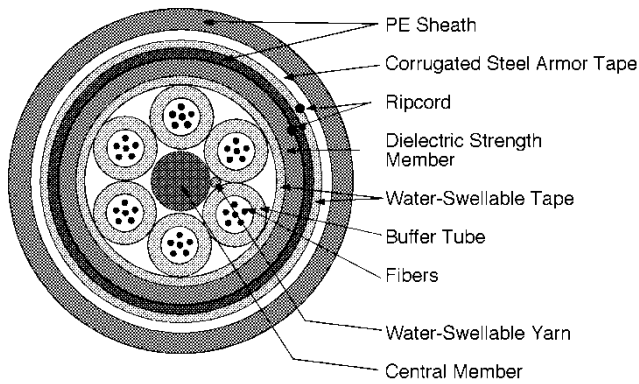


Figure 2

Cable jackets shall be marked with manufacturer's name, sequential meter or foot markings, month and year, or quarter and year of manufacture, and a telecommunication handset symbol, as required by Section 350G of the National Electrical Safety Code (NESC). The actual length of the cable shall be within -0/+1% of the length markings. The print color shall be white, with the exception that cable jackets containing one or more coextruded white stripes shall be printed in light blue. The height of the marking shall be approximately 2.5 mm.

The maximum pulling tension shall be 2700 N (608 lbf) during installation (short term) and 890 N (200 lbf) long term installed.

**Fiber cable performance specifications:** When tested in accordance with FOTP-3, "Procedure to Measure Temperature Cycling Effects on Optical Fibers, Optical Cable, and Other Passive Fiber Optic Components," the change in attenuation at extreme operational temperatures (-40°C and +70°C) shall not exceed 0.2 dB/km at 1550 nm for single-mode fiber

All cabled optical fibers > 1000 meters in length shall be 100% attenuation tested. The attenuation of each fiber shall be provided with each cable reel.

The cable manufacturer shall be ISO 9001 registered.

**Fiber Optic distributions centers:** Individual fibers shall terminate in Fiber Closet Connector Housing utilizing Duplex SC Connector Panels with six duplex (6) SC compatible single mode adapters and insert installed or LC Connector Panels with six (6) LC compatible single mode adapters and inserts installed.

**Fiber Optic Connectors:** Fiber Optic Connectors shall be SC or LC Connectors with a composite ferrule, it shall incorporate a single mode fiber stub that is fully bonded into the ferrule. Must be compliant with ANSI/EIA/TIA-568B.

Standard of quality shall be Corning Anaerobic SC Connector or Corning (Model # 95-201-41-SP), or equivalent. Duplex Clips shall be provided for installation into Fiber Distribution Cabinets

## **EXHIBIT II**

### **INSTALLATION CONSIDERATIONS**

At all sites requiring fiber, all fiber is to be run in a Hierarchical Star Backbone configuration with fiber starred from a single location.

All backbone fiber is to be a minimum of twenty-four (24) strand single mode 8.3/125  $\mu\text{m}$  fiber.

The single mode optical fiber cable system shall be capable of transmitting signals with a bandwidth of up to 500 MHz at both 1310nm and 1550 nm. The cumulative signal loss, through connectors, jumpers, couplings, and fiber cable, shall be less than the total link loss budget as detailed in ANSI/TIA/EIA- 568B.

All indoor fiber optic cable shall be installed in innerduct (including fiber in cable trays). Plenum rated inner duct must be used in air plenum Areas, including tunnels connecting buildings that are considered part of the air return system.

All fiber-optic cable splices shall be fusion spliced.

The Minimum Bend Radius of the fiber shall be 20 X cable O.D. during installation and 10 X cable O.D. long term.

All cable shall be installed and terminated in accordance with the manufacturers recommended procedures.

**Cable Splicing:** All fiber splicing must be accomplished with the fusion splice method. No mechanical splices will be accepted. Cable must be splice free from the building entrance to the termination point except for a single non-plenum to plenum or transitional splice when the cable enters the building. If a transition splice must be made in a plenum area, the non-plenum cable and the splice must be encased in an approved plenum rated material.

### **TRENCH AND BORE- INSTALLATION GUIDELINES**

Minimum depth of a trench for fiber-optic cables should allow at least 1 m (36") of cover from the top of the final grade. Depth of fiber optic cable must be below the frost line to avoid frost heave.

Telecommunication cables shall not be run in the same trench as gas, oil, water, power, sewer, etc. When crossing another utility facility, maintain 305 mm (12") of separation. Cable system shall be routed so as to allow for safe access for construction, inspection, and maintenance. When crossing under roads or railroad via ducts, the cable shall be placed inside either a metal or rigid plastic duct for protection.

### **EXHIBIT III**

### **AERIAL DESIGN SPECIFICATIONS**

All fiber cables must be double lashed to a 6.6M support strand using .038 super high strength lashing wire. No self supporting or figure eight type cables.

- Clearances for aerial cable over road ways and parking lots must meet National Electrical Safety Code (N.E.S.C.) standards.
- Guying for aerial cables must meet requirements specified in the TIA-758-A Standard and the BICSI Customer-Owned Outside Plant 3rd Edition.
- Detailed drawings must be submitted to AEP and Verizon Communications for pole attachment approval.
- All riser cable must be protected by a minimum of three 3/16"x 8' u-guards.
- A maintenance loop must be placed every ten spans for emergency restoration. Each maintenance loop must be a minimum of 100 feet in length and lashed to the support strand.
- Stand off brackets must be used when required by AEP or Verizon Communications for backside pole attachments.
- All aerial cable design must meet the heavy storm loading requirements set forth in the TIA-758-A Standard. - When federal, state, city, or county requirements differ from those of the AEP or Verizon Communications, BICSI Customer-Owned Outside Plant 3rd Edition, and TIA-758-A, adhere to governmental requirements only when they are more stringent than those of the fore mentioned.

### **AERIAL INSTALLATION PRACTICES**

The Contractor will provide poles if necessary for Aerial Cable Run. The poles shall be of the proper class to support the necessary pole loading as set forth in NESC-242-2 as Grade B, C, or N. All poles shall be of the same class, regardless of length and timber species, and must be able to withstand the same horizontal load applied 60 cm (2 ft.) from the top of the pole.

The poles shall be designed to meet all loading requirements including Transverse Storm Loading, Vertical Loading and Bending moments due to eccentric loads.

Dead end and corners in pole line shall be properly guyed to support the cable or wire facility.

All exposed guy wires shall be properly grounded and insulated.

Contractor shall use proper stringing tension for strand to minimize high-tension bowing and creeping and low tension sagging.

**Messenger Strand System:** Messenger strand will be used to support cables. Strand and cable shall be placed on the road side of the pole when conditions permit. Messenger strand shall be carefully configured to meet the load requirement of the cable. Contractor shall consist of 3/16" diameter 7-wire galvanized "6.6M" steel messenger strand. Messenger strand shall be manufactured to ASTM-A475 specifications and be accepted by USDA Rural Utilities Service

(RUS) standards. Strand to be at least a utilities grade, and have a minimum breaking strength of 5,500 lbs., and have a left lay and at least an "A" rated galvanized coating weight.

**Strand Attachments:** Contractor shall provide and install the appropriate S guy bolts, B beam clamps, wall straps, brackets, etc., as necessary to adequately support the strand as per RUS standards.

S guy bolts (or commonly called anchor rods or thimbleye bolts) shall be a minimum 5/8" diameter with a straight shank and be designed for attaching messenger strand deadends. The bolt length shall be at least 4" longer than the pole width it will be attached to.

Strand Connectors: Contractor shall provide and install all B strand connectors, suspension/cable clamps, grounding tap clamps, hangers, 1-bolt and 3-bolt clamps to adequately support the strand as indicated.

**Anchors and Guys:** Provide as necessary including but not limited to:

- Expansion anchors
- Screw anchors
- Plate anchors
- Pole to Pole anchors
- Stub and anchor

All Aerial Cables shall meet the required separation from Power and Traffic and shall meet the requirements as detailed in the National Electric Safety Code, Section 23.

Aerial Cable shall be attached to a poles and building by using the proper supporting attachments (support clamps, thru bolts, mast clamps, suspension clamps, mast brackets, eye bolts, anchors, etc.). A properly designed vertical wall attachment shall be used to attach the aerial cable to the wall. Follow the installation requirements of ANSI/TIA/EIA-758 and the BICSI TDM.

Aerial Cable shall enter a building through a raceway (conduit) with an approved service head. And must be properly grounded and attached to the building. See BICSI Manual for detail.

Entrance through a wall shall require the entry conduit sleeve to be sloped downward to the outside so that the outward sleeve is 1.3 cm (1/2") below the inside end.

All cables shall be properly lashed to cable supports and shall have spacers to separate cables and suspension strand at lashing points.

**Fiber Labeling:** Upon completion of each network installation, the vendor will label all terminated optical fibers on both ends with a machine-generated label using a corresponding numbering and/or name scheme (both ends must have the same number).

Contractor will tag all new fiber construction at every pole attachment (for aerial fiber) with fiber tags listing the Buyer and fiber information.

## **EXHIBIT IV**

### **FIBER-OPTIC CABLING SYSTEM FIELD TEST REQUIREMENTS**

#### **General Requirements:**

Every fiber optic cabling link in the installation shall be tested in accordance with the field test specifications defined by the Telecommunications Industry Association (TIA) standard ANSI/TIA/EIA-568-B.

ANSI/TIA/EIA-568-B, defines the passive cabling network, to include cable, connectors, and splices (if present), between two optical fiber patch panels (connecting hardware). A typical horizontal link segment is from the telecommunications outlet/connector to the horizontal cross-connect.

This TIA document describes three typical backbone link segments:

- main cross-connect to intermediate cross-connect,
- main cross-connect to horizontal cross-connect, or,
- intermediate cross-connect to horizontal cross-connect. The test shall include the representative connector performance at the connecting hardware associated with the mating of patch cords. The test does not, however, include the performance of the connector at the interface with the test equipment.

100% of the installed cabling links must be tested and must pass the requirements of the standards mentioned above and as further detailed in this Section. Any failing link must be diagnosed and corrected. The corrective action shall be followed with a new test to prove that the corrected link meets the performance requirements. The final and passing result of the tests for all links shall be provided in the test results documentation in accordance with this Section.

Trained technicians who have successfully attended an appropriate training program and have obtained a certificate, as proof thereof shall execute the tests. These certificates may have been issued by any of the following organizations or an equivalent organization:

- the manufacturer of the fiber optic cable and/or the fiber optic connectors
- the manufacturer of the test equipment used for the field certification
- Training organizations authorized by BICSI (Building Industry Consulting Services International with headquarters in Tampa, Florida).

Field test instruments for single mode fiber cabling shall meet the requirements of ANSI/TIA/EIA-526-7. The light source shall meet the launch requirements of ANSI/EIA/TIA-455-50B, Method A. This launch condition can be achieved either within the field test equipment or by use of an external mandrel wrap (as described in clause 11 of ANSI/TIA/EIA-568-B.1) with a Category 1 light source.

The tester shall be within the calibration period recommended by the vendor in order to achieve the manufacturer-specified measurement accuracy.

The fiber optic launch cables and adapters must be of high quality and the cables shall not show excessive wear resulting from repetitive coiling and storing of the tester interface adapters.

The Pass or Fail condition for the link-under-test is determined by the results of the required individual tests.

A Pass or Fail result for each parameter is determined by comparing the measured values with the specified test limits for that parameter.

A representative of the Buyer's inspection team shall be invited to witness field testing. The representative shall be notified of the start date of the testing phase 5 business days before testing commence.

A representative of the Buyer's inspection team will select a random sample of 5% of the installed links. The representative (or his authorized delegate) shall test these randomly selected links and the results are to be stored in accordance with the prescriptions in this Section. The results obtained shall be compared to the data provided by the installation contractor. If more than 2% of the sample results differ in terms of the pass/fail determination, the installation contractor under supervision of the end-user representative shall repeat 100% testing and the cost shall be borne by the installation contractor.

The Contractor in a table shall record light loss performance.

All cable shall be factory tested on a reel basis with performance data for each cable supplied to the State. Tests shall be conducted at 1310 NM and 1550 NM with the attenuation in dB/km recorded for each fiber.

Contractor shall supply Quality Control data sheets prepared by the cable supplier for each cable reel with the as-built documentation.

All fiber optic cable shall be visually inspected, and continuity testing shall be performed on each fiber of each cable reel on-site prior to installation to insure no damage occurred during shipment. Contractor shall submit these results.

**Performance Test Parameters:** ANSI/TIA/EIA standard 568-B prescribes that the single performance parameter for field testing of fiber optic links is link attenuation (alternative and equivalent term: insertion loss), when installing components compliant with this standard.

The link attenuation shall be calculated by the following formulas specified in ANSI/TIA/EIA standard 568-B

- $Link\ Attenuation = Cable\_Attn + Connector\_Attn + Splice\_Attn$
- $Cable\_Attn\ (dB) = Attenuation\_Coefficient\ (dB/km) * Length\ (Km)$
- $Connector\_Attn\ (dB) = number\_of\_connector\_pairs * connector\_loss\ (dB)$
- Maximum allowable connector\_loss = 0.75 dB
- $Splice\_Attn\ (dB) = number\ of\ splices\ (S) * splice\_loss\ (dB)$
- Maximum allowable splice\_loss = 0.3 dB

Test equipment that measures the link length and automatically calculates the link loss based on the above formulas is preferred. Standard of quality is the Fluke DTX-1800.

The above link test limits attenuation are based on the use of the One Reference Jumper Method specified by ANSI/TIA/EIA-526-7, Method A.1; or the equivalent method such as Fluke Network's application note *Loss Testing of Premises Fiber Optic Links (Lit # 1560065)*. The user shall follow the procedures established by these standards or application notes to accurately conduct performance testing.

Singlemode backbone links shall be tested at 1310 nm *and* 1550 nm in accordance with ANSI/TIA/EIA-526-7, Method A.1, One Reference Jumper or the equivalent method outlined in Fluke Networks application note *Loss Testing of Premises Fiber Optic Links (Lit # 1560065)*. All singlemode links shall be certified with test tools using laser light sources at 1310 nm and 1550 nm.

Links destined to be used with network applications that use laser light sources (under filled launch conditions) shall be tested with test equipment based on laser light sources. This rule should be followed for cabling systems to support Gigabit Ethernet. Gigabit Ethernet only specifies laser light sources.

### ***TEST RESULTS AND AS-BUILT DOCUMENTATION***

The As-built package must be signed and stamped by an RCDD/OSP and submitted to the Buyer for final system acceptance. The Contractor must submit to the Buyer a formal report listing all fibers and all test specification results. The technician performing the test must sign the report and present the test equipment for inspection.

As-built Documentation must include:

- ❑ Test Results as described in this section.
- ❑ Manufactures Quality Assurance test documents
- ❑ Site map in Auto Cad format to include:
  - streets and avenues,
  - Pole location and number,
  - guy and anchor location,
  - attachment hardware,
  - underground conduits,
  - building entrances,
  - Building floor plans for all internal routes,
  - Termination hardware and panels,
  - Splice information

□ RCDD/OSP Signature and Seal

The test result information for each link shall be recorded in the memory of the field tester upon completion of the test.

The test result records saved by the tester shall be transferred into a Windows™-based database utility that allows for the maintenance, inspection and archiving of these test records. A guarantee must be made that these results are transferred to the PC unaltered, i.e., “as saved in the tester” at the end of each test.

The popular ‘csv’ format (comma separated value format) does not provide adequate protection and shall not be acceptable.

The documentation for the completed job shall be stored and delivered on CD-ROM; this CD-ROM shall include the software tools required to view, inspect, and print any selection of test reports.

A paper copy of the test results shall be provided that lists all the links that have been tested with the following summary information:

- The identification of the link in accordance with the naming convention defined in the overall system documentation
- The overall Pass/Fail evaluation of the link-under-test including the Attenuation worst case margin (margin is defined as the difference between the measured value and the test limit value).
- The date and time the test results were saved in the memory of the tester

General Information to be provided in the electronic data base containing the test result information for each link:

- The identification of the customer site as specified by the end-user
- The overall Pass/Fail evaluation of the link-under-test
- The name of the standard selected to execute the stored test results
- The cable type and the value of the ‘index of refraction’ used for length calculations
- The date and time the test results were saved in the memory of the tester
- The brand name, model and serial number of the tester
- The revision of the tester software and the revision of the test standards database in the tester

The detailed test results data to be provided in the electronic database for each tested optical fiber must contain the following information

- The identification of the link/fiber in accordance with the naming convention defined in the overall system documentation
- The insertion loss (attenuation) measured at each wavelength, the test limit calculated

for the corresponding wavelength and the margin (difference between the measured attenuation and the test limit value).

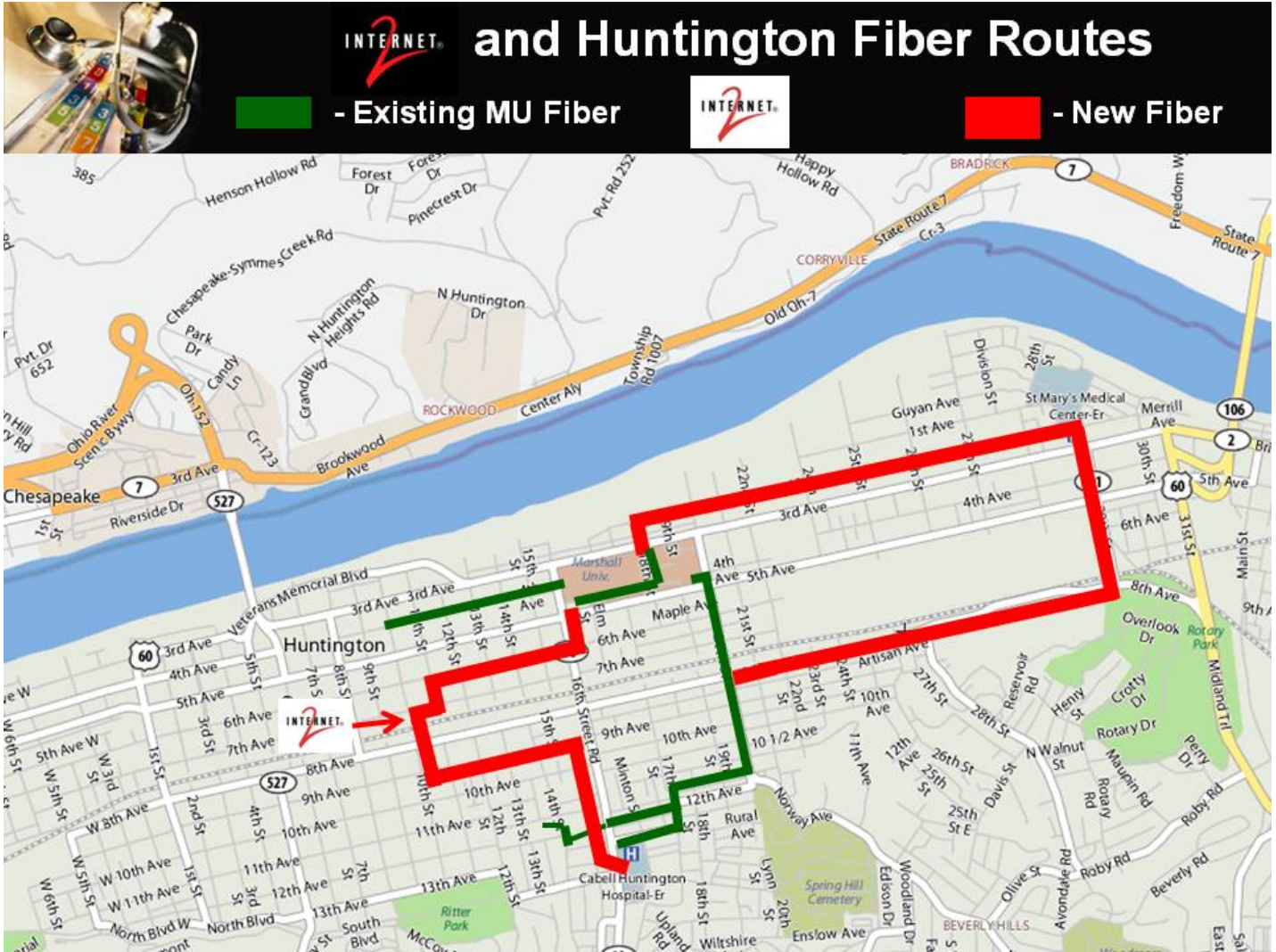
- The link length shall be reported for each optical fiber for which the test limit was calculated based on the formulas in this section.

Refer to Section 2.1

<b>Buildings (Hubs) Served (all pricing must be itemized according to each of the buildings severed as stated below):</b>				
	Location	Base Bid	Allowance/Estimate for Phase 2 Make Ready Work	Total
1.	<b>Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, 's Robert C. Byrd Biotechnology Science Center to St. Mary's Medical Center</b>			
	24SM Fiber- Diverse Route			
	Diverse Entrance # 1 into St. Mary's Medical Center			
	20th St., Huntington, WV			
	2900 1st Ave, Huntington, WV			
2.	<b>St. Mary's Medical Center to St. Mary's Medical Education Center</b>			
	24SM Fiber- Diverse Route			
	Diverse Entrance # 2 into St. Mary's Medical Center			
	Diverse Entrance # 1 into St. Mary's Medical Education Center			
	2900 1st Ave, Huntington, WV			
	2825 Fifth Ave, Huntington, WV - Old Big Bear on 29 <sup>th</sup> St. Huntington, WV			
3.	<b>Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, 's Cabell Hall to St. Mary's Medical Education Center</b>			
	24SM Fiber- Diverse Route			
	Diverse Entrance # 2 into St. Mary's Medical Education Center			
	20th St., Huntington, WV			
	825 Fifth Ave, Huntington, WV - Old Big Bear on 29th St. Huntington, WV			

<b>Buildings (Hubs) Served (all pricing must be itemized according to each of the buildings severed as stated below):</b>				
	Location	Base Bid	Allowance/Estimate for Phase 2 Make Ready Work	Total
4.	<b>Marshall University, serving as the procurement agent for the West Virginia Telehealth Alliance, 's Drinko Library to the Byrd Clinical Center via the AEP APCO AMP Site – 1122 Seventh Ave, Huntington, WV (this is the site of a number of CLEC co-locations and will optimize connectivity to a number of carriers) A service loop adequate to enter and leave this building must be supplied.</b>			
	24SM Fiber – Diverse Route from Existing Fiber Route			
	1 John Marshall Drive, Huntington, WV			
	1249 15th St, Huntington, WV			
5.	<b>Byrd Clinical Center to the Cabell Huntington Hospital</b>			
	24SM Fiber – Diverse Route from Existing Fiber Route			
	1249 15th St, Huntington, WV			
	1340 Hal Greer Blvd, Huntington, WV			
6.	<b>Byrd Clinical Center to the Cabell Huntington Surgery Center</b>			
	24SM Fiber			
	1249 15th St, Huntington, WV			
	1201 Hal Greer Blvd, Huntington, WV			

# Appendix I – Huntington Fiber Map Routes



## **Appendix II – Rural Health Centers that will benefit from this Metro-Fiber RFP**

The West Virginia Telehealth Alliance Strategic Plan which was included in the original FCC Rural Health Care Pilot Program application (see Attachment 1 - pages 19 through 72) discussed how the WVTA will coordinate with the existing telehealth/telemedicine activities of MDTV, CAMC, Marshall University, the West Virginia School of Osteopathic Medicine, the participating members of the West Virginia Hospital Association and the Community Health Network of West Virginia, the West Virginia Primary Care Association, First Choice network and participating community mental health centers, free clinics, local health departments, state-operated facilities and other health care providers through a dedicated network utilizing a scalable high-speed broadband infrastructure. Identify gaps in service and access as part of a review of services during the first 12 months of operation. Item 3 of the Summary of Telehealth (and related) Programs in West Virginia section of the Strategic Plan specifically discussed the telehealth activities currently underway by the Marshall University School of Medicine (MUSOM) as well as other health care organizations in and around the Huntington medical referral region. Two Federally Qualified Health Centers (FQHC's) were specifically mentioned in this section:

**Opportunities for enhancement through WVTA network:** The MUSOM currently uses telehealth applications for consultations with primary care providers at the Lincoln Primary Care Center located in Lincoln County and the Tug River Health Association located in McDowell County. Digital retinal examinations of diabetic patients at Tug River Health Clinic are also conducted. The telehealth system also is used for grand rounds and coordination of rural residency programs.

Both of these FQHC's are already participating with MUSOM with advanced telehealth activities and regularly refer patients to specialists affiliated with the hospitals located in the Huntington area. Having the Huntington area hospitals inter-connected by way of a metro-fiber ring would provide a single connection point that would allow these FQHC's to access specialists from all three institutions – not simply those affiliated with MUSOM.

Of the two organizations, Tug River Health Association is the best positioned to take advantage of this level of enhanced access that will be provided by this interconnection. Since the submission of the WTVA RHCPP application over a year ago, Tug River has continued its pursuit of advanced telehealth/telemedicine activities. A new program offered at McDowell County's only school based health center, Tug River/Mt. View Medical Center is the behavioral health program. Availability and access to behavioral health services are extremely limited in McDowell County. Access, privacy and transportation issues are addressed by this program. Providing services where the children are located helps to address these issues. A licensed clinical psychologist from the Marshall University School of Medicine faculty provides behavioral assessment and counseling to children referred by the medical staff at the SCHC and the teachers at the Mt. View Middle and High Schools.

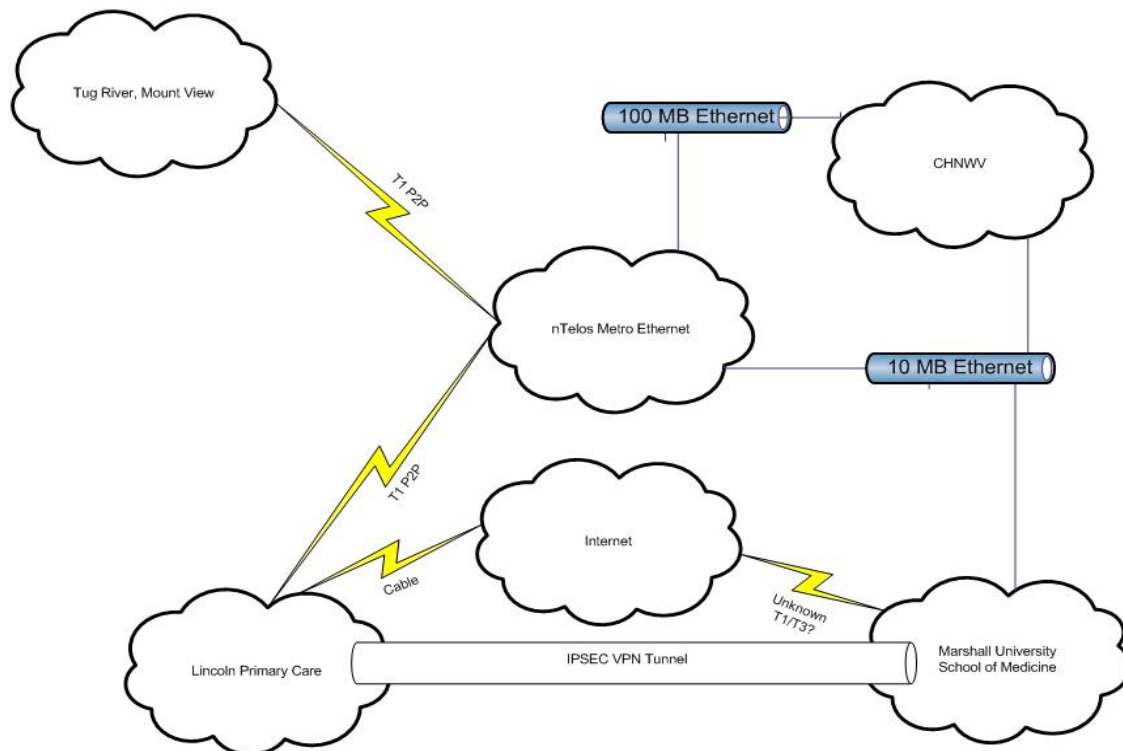
Ken Devlin, MA, commutes over 6 hours one day each month to evaluate and assess the psychological needs of the children and determine children's interest in participating for follow-up utilizing telehealth technology. Kenneth J. Devlin, M.A., is a licensed clinical

psychologist and instructor for the Department of Family and Community Health and coordinates behavioral training for the residency. He is active in the wilderness (dive medicine), sports and occupational medicine program divisions. He is the team psychologist for Cabell Huntington Hospital's Regional Pain Program.

The patients are interviewed one on one and then participate in live counseling sessions from a distance of approximately two hundred fifty miles. This assists in addressing several barriers to provision of care - access and transportation. The program utilizes a survey, Guidelines for Adolescent Preventative Services. The surveys are completed by each patient. Based upon this assessment tool, patients are referred to the psychologist. Reimbursement for these services depends upon the health insurance carrier. Behavioral health via telemedicine qualifies as a government face to face encounter.

"The children are very excited. They are very comfortable with teleconferencing since they have grown up in the age of technology as opposed to older generations", says Ken Devlin. "I think this is an excellent program."

This program is made possible by the advanced telecommunications network already established between Tug River, The Community Health Network of West Virginia, and Marshall University. This connectivity is diagrammed below:



Community Health Network of WV,  
Marshall University School of Medicine  
And  
Tug River's Mount View site  
Connectivity Diagram  
As of 12/12.08  
Prepared by William Harman

Once the Huntington metro-fiber ring is complete, Tug River will have the ability to use specialists at Cabell-Huntington Hospital and St. Mary's Medical Center as well as Marshall University all through this single connection point.