

DARK FIBER INSTALLATION

INVITATION FOR BIDS

PROJECT: Dark Fiber Installation
510 N Main to 271 W 3rd.
Wichita, KS 67203

COUNTY BID NUMBER: 16-0023

PRE-BID MEETING:

A pre-bid meeting will be held on site. Bidders are to meet at 538 N Main (Munger Building) beginning at 10:30 a.m. CST on Monday March 7, 2016.

Attendance is not mandatory; however, this will be the only time to meet directly with County staff to answer questions concerning this project. General contractors are encouraged to have their subcontractors attend this meeting to view the site conditions.

Bidders are encouraged to examine bidding documents as early as possible. **In order to ensure each bidder has the most current information for bidding there is an established date and time for last questions to be asked. Bidders requiring clarification or interpretation of the Bidding Documents shall make such requests, in writing only, to Kim Evans, Purchasing Agent, at Kimberly.j.evans@sedgwick.gov no later than 5:00 p.m. CST on March 11, 2016**

RESPONSES TO INVITATION FOR BID:

Responses will be received in the Sedgwick County Purchasing Department, located in the Division of Finance, Main Courthouse, 525 N. Main Street, Suite 823, Wichita, Kansas, until **1:45 p.m. CDT** on Tuesday, March 29, 2016. Late Bids will not be accepted and will not be considered for award recommendation.

BID RESPONSES WILL BE OPENED AT: 2:00 p.m. CDT on Tuesday, March 29, 2016.

This meeting will be held in the Division of Finance, Main Courthouse, 525 N. Main, Suite 823, Wichita, Kansas. All interested parties are invited to attend this meeting, as bids/responses will be received, publicly opened and read aloud.

After review and appropriate approval, a contract will be awarded to the lowest responsive, responsible and best bidder meeting specifications and appropriately licensed to do the specified work outlined in these documents.

A RECOMMENDATION FOR CONTRACT AWARD:

will be made to the Board of Bids and Contracts at its regular meeting **at 10:00 a.m. CDT on March 31, 2016**, generally held in the County Commission Meeting Room located at 525 North Main, third floor, Wichita, Kansas, although this date or location could change.

CONTRACT AWARD:

Board of County Commissioners will consider award on **Wednesday, April 6, 2016, although this date could change.**

PROJECT SCOPE:

Sedgwick County is seeking a firm to provide, install, terminate and test dark fiber from 510 N Main to 271 W 3rd, Wichita, KS 67203. **Please see Attachment A-Specifications at the end of this document.**

BIDDING DOCUMENTS:

1. Complete sets of Bidding Documents shall be used in preparing Bids.
2. The Owner shall assume no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
3. The Owner, in making copies of the Bidding Documents available, do so only for the purpose of obtaining Bids on the work and do not confer a license or grant for any other use.
4. Bids shall include furnishing all labor, materials, equipment and performing the work for the above-described Project in strict accordance with the Bidding Documents and any Addenda.

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DURING BIDDING PERIOD:

Inquiries regarding Bid Documents, Bid/Selection process or any requests for information about this specific project shall be directed in writing only to:

Kim Evans, Purchasing Agent
525 North Main Street, Suite 823
Wichita, KS 67203
Telephone: (316) 660-7258 Fax: (316) 383-7055
E-mail: kimberly.j.evans@sedgwick.gov

OWNER'S REPRESENTATION:

Owner's Representative for the duration of the Project:

Joe Currier, IT Manager-Sys Admin & Telecom
510 North Main Street, 2nd Floor
Wichita, Kansas 67203
Telephone: (316) 660-9822
E-mail: joe.currier@sedgwick.gov

BIDDER'S REPRESENTATION:

In order to induce the Owner to accept their Bid, in addition to and not in lieu of any other representations and warranties contained in the Bidding Documents, the Bidder represents and warrants the following to the Owner:

1. The Bidder and their subcontractors are financially solvent and possess sufficient working capital to complete the work, and perform all obligations hereunder.
2. The Bidder is able to provide the plant, tools, materials, supplies, equipment, and labor required to complete the work and perform the Bidder's obligations hereunder.
3. The Bidder will be authorized to do business in the State of Kansas, and will be properly licensed to do this work.
4. The Bid and execution of the Bidding Documents and the Bidder's performance thereunder are within the Bidder's duly authorized powers.
5. The Bidder has made an exhaustive study of the Bidding Documents; understands the terms and provisions thereof; and has sought or will timely seek any and all necessary clarifications prior to submitting the Bid; and that the Bid is made in accordance with the foregoing.
6. The Bidder has visited the Project and is completely familiar with the local and special conditions under which the work is to be performed and has correlated such knowledge with the requirements of the Bidding Documents.
7. The Bid is based upon the approved materials, systems and equipment described in the Bidding Documents without exception, including all warranties, coordination and components required to perform the work.
8. The Bidder certifies that their Bid is submitted without collusion, fraud, or misrepresentation as to other Bidders, so that all Bids for the Project result from a free, open and competitive bidding environment.
9. The Bidder possesses a high level of experience and expertise in the business administration, management, and superintendence of projects of the size, complexity and nature of this particular Project, and that the Bidder will work with the care, skill and diligence of such a contractor.
10. The Bidder acknowledges that the Owner is relying upon this Bidder's skill and experience in connection with the work being bid herein.
11. That complete sets of Bidding Documents were used in the preparation of the Bid and that the Owner is not responsible for errors or misinterpretations resulting from the use of incomplete sets of such Documents.

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The foregoing warranties are in addition to, and not in lieu of (A) any and all other liability imposed upon the Contractor by law with respect to the Contractor's duties, obligations and performance of the work and (B) any and all other warranties, representations and certifications made in the Bidding Documents. The Contractor's liability hereunder shall survive the Owner's final acceptance of and payment for the work. All representations and warranties set forth herein and in the Contract Documents shall survive the final completion of the work or the earlier termination of this Agreement.

Bid Guarantee:

1. Bid Security is required in the amount of at least 5% of the bid plus all additional alternates. In case of multiple prices in a bid or alternate, write for the maximum possible contract amount.
2. Bid Security can be in the form of a certified or Cashier's Check or Bid Bond acceptable to Sedgwick County. Checks are to be made payable to the Sedgwick County Clerk and drawn on a solvent Kansas bank or trust company. These checks or bonds will be retained by Sedgwick County until the purchase contract has been awarded.
3. Bid Bonds shall be written by a bonding agency approved by the United States Treasury Department and licensed to do business in the State of Kansas.
4. Bid Bonds shall be submitted on AIA Document A310, latest edition, as issued and approved by the American Institute of Architects.
5. Bid Security will be retained by the Sedgwick County Clerk until the Contract for the Project has been completed and is a guarantee that if awarded the Contract, the Bidder will enter into a contract and give bonds as required. In the event the successful Bidder fails to consummate a signed Contract, through no fault of the Owner, Bid Security shall be retained by the Owner as liquidated damages and not as a penalty.
6. Sedgwick County reserves the right to retain the Bid Security of the three (3) lowest Bidders until the successful Bidder has entered into a Contract or until 60 days after Bid opening, whichever is the shorter. All other Bid Securities will be returned as soon as practicable.

Sedgwick County is desirous of allowing as many Kansas vendors as possible the opportunity to participate, including minority owned, woman owned and small businesses, in the roles of general contractors and subcontractors. If your company does not fall into either of these categories, your efforts to contract with vendors who fall in these categories are appreciated.

General Contractor will be required to maintain a subcontractor worksheet throughout the project and will submit the worksheet to County staff at anytime requested but shall submit the worksheet at the completion of project.

END OF INVITATION FOR BIDS

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INSTRUCTIONS TO BIDDERS

PROJECT: Dark Fiber Installation
510 N Main to 271 W 3rd.
Wichita, KS 67203

COUNTY BID NUMBER: 16-0023

Bids shall be made in accordance with these Instructions to Bidders:

- A. Responses to this invitation will be accepted only from General Contractors who are licensed to do business in Sedgwick County.
- B. Applications will also be accepted from General Contractors who have applied to receive a reciprocal license.
- C. A copy of General Contractor's Certificate of Insurance will be required to be submitted with the Bid at the time the bids are due. Insurance policy will be due from the successful contractor as part of the required documents prior to issuance of the notice to proceed.
- D. Bidding Documents shall include the Invitation for Bids, Bid Form, construction drawings, proposed Contract Documents, including any Addenda issued prior to receipt of Bids, supplemental information and any additional information requested.
- E. Bids must be on a lump sum basis and shall be the Contract Amount.
- F. Bidder Qualifications: For the duration of the project, all Prime Bidders shall be located within Sedgwick County, Kansas or establish an office in Sedgwick County, Kansas, and may be required by the Owner to furnish information to support the Bidder's capability to fulfill the Contract if awarded the Contract. Such information does not need to be submitted with the Bid, but may be requested at the Owner's option. Such information may include, but not be limited to, the following:
 1. Proof of registration with the Kansas Director of Taxation by non-resident Bidders (K.S.A. 79-1009).
 2. Proof of registration with the Kansas Secretary of State by foreign corporations.
 3. List of projects of similar size and type the Bidder has constructed or in which the Bidder has been engaged in a responsible capacity.
 4. Evidence the Bidder maintains a permanent place of business.
 5. A current financial statement.

Examination:

1. BEFORE SUBMITTING A BID, each Bidder shall examine carefully all documents pertaining to the work and visit the site to fully inform himself of the condition of the site and the conditions and limitations under which the work is to be performed.
2. SUBMISSION OF A BID will be considered presumptive evidence that the Bidder has fully informed himself of the conditions of the site, requirements of the Contract Documents, and of pertinent national, state and local codes and ordinances, and that the Bid made allowances for all conditions, requirements and contingencies.
3. In reviewing these Documents, it is evident that certain information, if disclosed to the public, may jeopardize the security of Sedgwick County, and appropriate measures will be taken to maintain confidentiality.
4. **In order to ensure each bidder has the most current information for bidding there is an established date and time for last questions to be asked. Bidders requiring clarification or**

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interpretation of the Bidding Documents shall make such requests, in writing only, to the Purchasing Agent no later than 5:00 p.m. CST on March 11, 2016.

5. Samples shall be submitted by the above referenced deadline to permit evaluation and notification of Bidders.
6. Any interpretation, correction or change of the Bidding Documents will be made by written Addenda. Interpretations, corrections, or changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections, and changes.

Addenda:

1. DISCREPANCIES OR OMISSIONS in the documents will be clarified in the form of an electronic Addendum and will be posted on the County web site. Bidders finding discrepancies, omissions, or who are in doubt as to the meaning of any portion of the Contract Documents, should immediately request an interpretation from the Senior Purchasing Agent. In response, an Addendum will be issued and the contractor shall rely solely on information contained in the written Addenda about said discrepancy or omission. **The Owner will not be responsible for any other form of instructions or interpretations given to the contractor, either verbal or written.**
2. ADDENDA received by Bidders shall be acknowledged by same on their Bid Form.

Substitutions:

1. Each Bidder represents that their Bid is based upon materials and equipment described in the Bidding Documents.
2. No substitution will be considered unless written request has been submitted to the Purchasing Agent for approval by 5:00 p.m. CST on March 11, 2016. Each such request shall include a complete description of the proposed substitute, drawings, cuts, performance or test data, or information necessary for a complete evaluation. If the Project Manager approves any proposed substitution, such approval will be set forth in an Addendum.

Preparation of Bids:

1. BIDS shall be made on unaltered Bid Forms furnished by the County, or detached from this Project Manual.
2. FILL IN all blanks on the Bid Form with ink or type. Blanks left on Bid Form may be cause for disqualification of Bidder.
3. SIGN BID FORM in longhand, with name typed below signature. Where Bidder is a Corporation, Bids must be signed with the legal name of the Corporation, followed by the legal signature of an officer authorized to bind the Corporation to a contract.
4. RECAPITULATION of work to be done shall not be included with any Bid.
5. Where so indicated by the makeup of the Bid Form, amounts shall be expressed in both words and figures, and in case of discrepancy between the two, the written amount shall govern.

Identification and Submission of Bid:

1. Contractor shall provide one (1) Original of the Bid Response Form, Bid Security and other supplemental information required to be submitted with the Bid.

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2. All of the Bid Documents shall be enclosed in a sealed envelope with the notation "Bid Enclosed" on the face. The firm name and address, Bid number, Bid opening date, and Bid opening time shall be provided in the lower left-hand corner of the Envelope.

Modification and Withdrawal of Bid:

1. A Bid may not be modified, withdrawn or canceled by the Bidder during the stipulated time period that a Bidder's Bid Security is held following the time and date designated for the receipt of Bids. The Bidder so agrees in submitting his Bid.
2. WITHDRAWAL BEFORE BID OPENING: A Bid may be withdrawn at any time before Bid Opening, but may not be resubmitted. If a bidder withdraws a bid, as authorized in K.S.A. 75-6905, the awarding authority may require that such bidder shall not be allowed to perform any work on the project through subcontract agreements or by any other means including re-bids.
3. AFTER BID OPENING: No Bid may be withdrawn or modified, except where the award of contract has been delayed for more than 60 days.

In the event of an Award, the lowest, responsive, responsible and best bid price meeting the specifications will be required to enter into contract required for the Project. Said Bidder shall also provide a Performance Bond for the full amount of the contract. The Performance Bond, in the amount of 100% of the Contract amount, must be submitted within 30 calendar days after award of contract. Failure to return these Documents within the required time period may cause a cancellation of the Award.

Consideration of Bids/Selection Process:

1. Bids received will be opened and read aloud publicly.
2. Owner shall have the right to determine the acceptable Bidder on the basis of the sum of the Base Bid and the Alternates accepted.
3. The Owner will award a contract to the lowest, responsive, responsible and best Bidder provided:
 - a. The Bid conforms to and has been submitted according to the requirements of the Bidding Documents and includes the Certificate of Insurance including Contractor's General Automotive Liability, Workers Compensation Insurance and Owner's Liability Insurance.
 - b. The Bid is judged to be reasonable.
 - c. The Bid does not exceed the funds available.
 - d. The Bid complies with the Instruction to Bidders and Mandatory Requirements.
 - e. The completion time is satisfactory to the Owner.
 - f. Evidence of the experience, qualifications and financial responsibility of the Bidder and his Subcontractors and the time of completion are all satisfactory to the Owner.
 - g. The County reserves the right to reject Bidders in accordance with the Bidding Documents.
4. Bids will be screened by a Review Committee consisting of the Project Manager and the Purchasing Agent.
5. No negotiations, decisions, or actions shall be initiated by any firm as a result of any verbal discussion with the Owner or employee of the Owner before the opening of responses to the document.

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6. The Owner shall have the right to waive any informality and/or irregularity in any Bid received.
7. The Owner shall have the right to reject any and all Bids.

Time for Completion and Liquidated Damages:

All Bidders are required to state on the Bid Form the time needed for all work under the general contract to be completed, which would yield their best Bid. Unless otherwise required, this time frame shall be stated in calendar days and shall represent the Contractor's commitment to complete the project on schedule.

The contractual period will begin with the issuance of Notice to Proceed and continue through completion of the project.

The Agreement will include a stipulation that liquidated damages will be assessed in the amount of \$817.42 per calendar day after Completion Date that the work is not substantially complete.

Upon satisfactory completion of the Contract, a formal CERTIFICATE OF PROJECT COMPLETION will be forwarded to the Contractor by the Project Manager. The date of substantial completion of the Project will be the starting date of the warranty period.

All work shall be in accordance with all Federal and State Laws, Local Ordinances and Building Codes, and the 2010 Standards for Accessible Design.

Taxes: Materials and equipment incorporated in the work are exempt from payment of sales tax under the laws of the State of Kansas.

Project Time Line:

The following dates are provided in addition to those previously stated to help interested contractors in planning participation in the project herein. The dates listed, however, are in no way guaranteed and are subject to change without notice.

Project out for bid – Monday February 29, 2016
Pre-bid Meeting – Monday March 7 at 10:30 a.m. CST
Last questions received – Friday March 11 at 5:00 p.m. CST
Last Addendum Issued – Wednesday March 16 at 5:00 p.m. CDT
Bids Due in Purchasing – Tuesday, March 29 at 1:45 p.m. CDT
Bid Opening – Tuesday March 29 at 2:00 p.m. CDT
Board of Bids and Contracts – Thursday, March 31 at 10:00 a.m. CDT
Board of County Commissioners – Wednesday, April 6 at 9:00 a.m. CDT

Notice to Proceed:

No work shall commence until the Owner issues a Notice To Proceed, and a Notice To Proceed will not be issued until all of the following are delivered to the Purchasing Office, 525 N Main Ste 823, Wichita, Kansas, 67203 by the selected vendor:

1. The Contract signed by the representative with authority and ability to do so.
2. Performance and Statutory Bonds with the attached powers of attorney. Attach the receipt of the Clerk of the District Court to the Statutory Bond.
3. List of subcontractors and supplier's proof of a valid Contractor's license from the jurisdiction in which the work is being performed for both contractor and applicable sub-contractors is required.
4. Corporate Resolution of authority to sign and deliver the Contract Documents, executed by the Corporation's Secretary or Assistant Secretary and dated before all other dated submittals.

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5. Domestic (Kansas) corporations shall furnish evidence of good standing in the form of a Certificate signed by the Kansas Secretary of State. Foreign (non-Kansas) corporations shall furnish evidence of authority to transact business in Kansas, in the form of a Certificate signed by the Kansas Secretary of State.
6. Construction Schedule with major milestones identified.
7. Insurance Certification for Payment.

Such documents must be delivered within ten (10) days of the Owner's written notification to the successful Bidder. If they are not delivered within such time then the Bidder will be deemed to have abandoned its contract with the Owner, and the Owner will award a contract to the next lowest and best Bid.

1. The successful Bidder shall not make claim either for time or money against the Owner for labor or materials performed or delivered prior to issuance of the Notice to Proceed.
2. The County's responsibility to issue a Notice To Proceed is expressly conditioned on the Contractor's timely execution and delivery of such documents.
3. The County intends to issue a Notice To Proceed within 30 days of receipt of Bids.
4. Bidders shall also note that the Work cannot begin until after a State of Kansas Sales Tax Exemption Certificate has been provided by Sedgwick County and affixed to the Purchase Order and the Notice to Proceed.
5. Contractor must submit Insurance Policy.

END OF INSTRUCTIONS TO BIDDERS

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BID FORM

BID PROVIDED BY:

(Company Name)

I have received the Bid Documents, Specifications, and Construction Documents, collectively known as the Contract Documents for Construction of the

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COUNTY BID NUMBER 16-0023

as prepared by Sedgwick County Purchasing Office

In submitting this Bid, I agree:

1. To hold my Bid open for 60 days after the date of this Bid.
2. To enter into and execute a Contract, if awarded on the basis of this Bid, and to proceed in accordance with the requirements of the General Conditions and Contract Form.
3. To provide all labor, materials, equipment, tools of trades and labor, accessories, appliances, warranties and guarantees, and to pay all royalties, fees, permits, licenses and applicable taxes necessary to complete the work in accordance with the proposed Contract Documents.
4. To remove and haul away from the construction site any and all debris arising from this contract and to assume sole liability for all removal, handling, and dumping of debris.
5. To comply with any and all local, state, federal or other governmental laws, rules and regulations with respect to the transportation, disposal, and dumping of debris and other excavated materials and Contractor shall secure any and all necessary permits and approvals incident to said transportation, dumping and disposal.
6. To further agree to indemnify and hold the Owner and Designer harmless from any and all claims and/or damage of any kind whatsoever as a result of the Contractor's performance of this Contract.
7. That attached to this Bid is one copy of the Certificate of Insurance including Contractor's General Automotive Liability, Workers Compensation Insurance and Owner's Liability Insurance.

8. **CALENDAR DAYS:**

The Undersigned agrees to reach substantial completion of the Work in _____ consecutive calendar days from the date of Notice to Proceed.

The Undersigned agrees to reach final completion of the Work in _____ consecutive calendar days from the date of Substantial Completion.

Total Calendar Days _____

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9. **BID:**
BASE BID
To complete the Base Bid Work, in the time stipulated, in accordance with the Bidding Documents for the lump sum price of:

_____ Dollars (\$_____).

10. **ADDENDA:**
The Bidder acknowledges receipt of the following numbered Addenda:

None (___) #1(___) #2(___) #3 (___) #4(___) #5(___)

11. **AGREEMENTS:**
The Undersigned agrees to the following terms and conditions:

- a. An incomplete Bid, or other information not requested which is written on this Bid Form, may be cause for rejection.
- b. Read the Invitation for Bids and the Instructions to Bidders carefully.
- c. The Owner reserves the right to reject any or all Bids and to waive all technicalities should such action be deemed to be in the best interest of the Owner.
- d. This Bid may not be withdrawn for a period of 60 calendar days following the receipt and opening.
- e. Failure to acknowledge receipt of any Addendum issued may be cause for Bid rejection.
- f. In the event that changes to the work are required, the undersigned agrees that ten percent (**10%**) total between General and Subcontractors of his net costs shall be added thereto for Overhead, Profit and General Requirements (including but not limited to, Insurance and Bonds).

12. **MAJOR SUBCONTRACTORS:**
The Undersigned acknowledges the following named major subcontractors are to be used for their respective division of work. Contractors shall identify by type, any disadvantaged, minority and women-owned businesses used as a subcontractor for this project.

Subcontractor: _____

Address – City, State, Zip: _____

Additional, if necessary:

13. **DECLARATIONS:**
The Undersigned hereby declares he has carefully examined the Drawings and Specifications, has visited the actual location of the work, has satisfied himself as to all conditions and understands that, in signing this Bid Form, he waives all right to plead any misunderstandings regarding same and agrees to be bound by the provisions of said Drawings and Specifications and all statements made therein.

The Undersigned proposes to enter into Contract and to furnish and pay for the specified Bonds and other required Documents within 10 working days after notification of award of Contract.

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14. FIRM IDENTIFYING INFORMATION:

FIRM NAME _____

CONTACT _____

SIGNATURE _____ TITLE _____

PRINT NAME _____

ADDRESS _____ CITY/STATE _____ ZIP _____

PHONE _____ FAX _____ HOURS _____

TAX PAYER I.D. NUMBER _____

COMPANY WEBSITE ADDRESS _____ E-MAIL _____

NUMBER OF LOCATIONS _____ NUMBER OF PERSONS EMPLOYED _____

TYPE OF ORGANIZATION:

Public Corporation ___ Private Corporation ___ Sole Proprietorship ___ Partnership ___ Small Business ___

General Nature of Business _____

Manufacturer ___ Distributor ___ Retail ___ Dealer ___ Service ___

___ Not Minority/Caucasian (00) publicly traded companies and nonprofits are in this category

Minority Owned Business:

___ African American (05), ___ Asian Pacific (10), ___ Subcontinent Asian (15), ___ Hispanic (20),

___ Native American (25), ___ Other (30) - Please specify _____,

___ Not Minority/Caucasian – Woman Owned (50), ___ African American – Woman Owned (55),

___ Asian Pacific – Woman Owned (60), ___ Subcontinent Asian – Woman Owned (65), ___ Hispanic –

Woman Owned (70), ___ Native American – Woman Owned (75), ___ Other – Woman Owned (80)

15. SIGNATURE AND SEAL:

DATED THIS _____ DAY OF _____, 2016.

LEGAL NAME OF PERSON, FIRM OR CORPORATION

MAILING ADDRESS OF ABOVE

SIGNATURE

TELEPHONE NUMBER

FAX NUMBER

(Affix Corporate Seal here)

E-MAIL

REQUEST FOR BID CONDITIONS

In submitting a response to this Request for Bid, vendors hereby understand the following:

1. Pricing offered in the bid document will be provided to other local governments and governments whom SedgwickCounty regularly enters into cooperative agreements.
2. Sedgwick County reserves the right to reject any and/or all bids and responses to these and/or related documents, to accept any item(s) in the bids, to waive any irregularity in the bids, and further if determined to be non-responsive in any form, or if determined to be in the best interest of Sedgwick County.
3. Alternate bids (two or more bids submitted) will be considered for an award. SedgwickCounty reserves the right to make the final determination of actual equivalency or suitability of such bids with respect to requirements outlined herein. The bids submitted, and any further information acquired through interviews, will become and is to be considered a part of the final completed contract. If there is any variance or conflict, the bid specifications will control.
4. Bidders MUST return, completed copies of the entire document to the Sedgwick County Purchasing Department, 525 North Main, 8th Floor, Suite 823, Wichita, KS 67203, on or before the date and time specified. Bids must be sealed in an envelope and marked with the firm name and address, bid number, bid opening date, and bid opening time. The time clock stamp, located in the Sedgwick County Purchasing Department will determine the time of receipt.
5. Bids submitted may not be withdrawn for a period of 60 days immediately following the opening of this Request for Bid. Prices MUST be free of federal, state, and local taxes unless otherwise imposed by a governmental body, and applicable to the material on the bid.
6. Sedgwick County interprets the term "Lowest Responsible and Best Bidder" as requiring Sedgwick County to: (a) choose between the kinds of materials, goods, wares, or services subject to the bid, and (b) determine which bid is most suitable for its intended use or purpose. SedgwickCounty can consider, among other factors, such things as the availability of service(s), part(s) material(s) and/or supply(s), warranty, maintenance, freight costs, performance of product and labor cost of items upon which bids are received.
7. All requested information must be supplied. If bidders cannot respond to any part of this request, bidders should state the reason they cannot respond and note an exception. Bidders may provide supplemental information to assist SedgwickCounty in analyzing its bid.
8. If the bidder refuses or fails to make deliveries of the materials within the times specified on the face of the Request for Bid or purchase order, SedgwickCounty may, by written notice, terminate the contract or purchase order.
9. The bidder will certify and warrant that goods, personal property, chattels, and equipment sold and delivered are free and clear of any and all liens, or claims of liens, for materials or services arising under, and by virtue of the provisions of K.S.A. Sections 58-201, et seq., and any other lien, right, or claim of any nature or kind whatsoever.
10. The successful bidder will hold and save SedgwickCounty, and its officers, agents, servants/employees harmless from liability of any patented, or unpatented invention, process, article, or appliance manufactured, or used in the performance of the contract, including its use by SedgwickCounty. Vendors working on county property or on behalf of County will be required to carry minimum insurance listed in bid document.
11. All items furnished, if applicable, must be the best of their respective kinds, and will be free from defects in material and workmanship. Items will be subject to County inspection and approval at any time within 30 days after delivery. If a substitution is made, it will be the decision of a SedgwickCounty representative to determine if it is of equal quality. Items furnished must be manufactured in compliance with all existing legal or governmental directives.
12. Unless specified otherwise, all items bid are to be as a minimum but not necessarily limited to: new, current model year, and untitled prior to shipping and/or installation.
13. Sedgwick County is desirous of allowing as many Kansas vendors as possible the opportunity to participate including minority men and women-owned businesses, and small businesses in the roles of providing goods and services to Sedgwick County. If your company does not fall into any of these categories, your efforts to contract with vendors who do fall into these categories are appreciated. Construction projects utilizing subcontractors requires a subcontracting worksheet. Contact purchasing department for details.
14. Contracts entered into on the basis of submitted bids are revocable if contrary to law.

15. County reserves the right to enter into agreements subject to the provisions of the Cash Basis Law (K.S.A. 10-1112 and 10-1113), the Budget Law (K.S.A. 79-2935). Agreements shall be construed and interpreted so as to ensure that the County shall at all times stay in conformity with such laws, and as a condition of agreements the County reserves the right to unilaterally sever, modify, or terminate agreements at any time if, in the opinion of its legal counsel, the Agreement may be deemed to violate the terms of such law.
16. The Bidder agrees to comply with K.S.A. 44-1030.
 - a. The contractor shall observe the provisions of the Kansas act against discrimination and shall not discriminate against any person in the performance of work under the present contract because of race, religion, color, sex, disability, national origin, or ancestry;
 - b. In all solicitations or advertisements for employees, the contractor shall include the phrase, "equal opportunity employer," or a similar phrase to be approved by the commission;
 - c. If the contractor fails to comply with the manner in which the contractor reports to the commission in accordance with the provisions of K.S.A. 44-1031 and amendments thereto, the contractor shall be deemed to have breached the present contract and it may be canceled, terminated or suspended, in whole or in part, by the contracting agency;
 - d. If the contractor is found guilty of a violation of the Kansas act against discrimination under a decision or order of the commission which has become final, the contractor shall be deemed to have breached the present contract and it may be canceled, terminated or suspended, in whole or in part, by the contracting agency; and
 - e. The contractor shall include the provisions of subsections (a) through (d) in every subcontract or purchase order so that such provisions will be binding upon such subcontractor or vendor.
17. All project participants, consultants, engineers, contractors and subcontractors, must comply with all applicable Federal, State and County laws pertaining to contracts entered into by governmental agencies. All participants must comply with the Americans with Disabilities Act (ADA), including the 2008 ADA Amendments Act, and 2010 ADA Standards for Accessible Design.
18. Contractors/subcontractors performing new construction, maintenance, alterations, or additions to Sedgwick County buildings or facilities must comply with building guidelines/codes, and the 2010 ADA Standards for Accessible Design. Any violation of the provisions of the ADA or 504, or specification deficiencies, should be reported to the county's ADA coordinator. Failure to notify the county's ADA coordinator for remedy may be considered a breach of contract and may be grounds for cancellation, termination for suspension, in whole or in any part of the contract. All construction plans will have the county's ADA coordinator approval prior to beginning any work.
19. Contractors/vendors providing services to the public on behalf of Sedgwick County will agree that all personnel in their employment that have direct contact with the public will attend ADA Awareness and Sensitivity training provided by Sedgwick County or the Independent Living Resource Center. Training should be coordinated through the county's ADA coordinator, (316) 660-7052 and evidence of training shall be provided to the county's ADA coordinator. Any violations of the provisions of ADA or section 504, will be deemed a breach of contract and be subject to termination of contract.
20. The successful bidder may have access to private or confidential data maintained by the County to the extent necessary to carry out its responsibilities of the contract. Contractor shall be responsible for compliance with the privacy provision of the Health Insurance Portability and Accountability Act (HIPAA) and shall comply with all other HIPAA provisions and regulations applicable. If the successful bidder is a business associate as that term is defined under HIPAA, the contract shall include the County's standard business associate addendum. A copy of that standard addendum is available on request.
21. The bidder responding to this bid solicitation proposes to furnish all materials, labor, supplies, equipment and incidentals necessary to provide the equipment/materials/services described herein in accordance with the Notification of Solicitation (if applicable), Request for Information (if applicable), Request for Bid, Addenda, Contract, Bonds, Insurance, Plans, Specifications, any Instructions, Mandatory Requirements and Conditions.
22. Unless specified elsewhere in the document, all prices quoted must be F.O.B. Destination, Freight Prepaid and Allowed, which will include all delivery, handling, and any other charges related to delivery including surcharges.
23. It will be understood that the bidder's sureties and insurers, as applicable, are subject to the approval of the County.
24. Prior to a vendor being awarded a contract, Domestic (Kansas) corporations shall 1) furnish evidence of good standing in the form of a Certificate signed by the Kansas Secretary of State. Foreign (non-Kansas) corporations shall furnish evidence of authority to transact business in Kansas, in the form of a Certificate signed by the Kansas Secretary of State; and 2) a copy of the Corporation Resolution evidencing the authority to sign the Contract Documents, executed by the Corporation's Secretary or Assistant Secretary.

25. Sedgwick County will not award to any vendor that is currently listed in the exclusion records of the SAM (System for Award Management) website maintained by the General Services Administration (GSA) or to any vendor presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.
26. Upon award, the bidder agrees to execute and deliver to the County a contract in accordance with the contract documents (if applicable) within ten days of notice of the award to the bidder. The bidder agrees that the surety/deposit given concurrently herewith will become the property of the County in the event the bidder fails to execute and deliver such contract within the specified time. In the further event of such failure, the bidder will be liable for the County's actual damages that exceed the amount of the surety.
27. It will be understood that time is of the essence in the bidder's performance. The bidder agrees that the County's damages would be difficult or impossible to predict in the event of a default in the performance hereof; and it is therefore agreed that if the bidder defaults in the performance of the contract documents, the bidder will be liable for payment of the sums stipulated in the contract documents as liquidated damages, and not as a penalty.
28. The bidder hereby certifies that he or she has carefully examined all of the documents for the project, has carefully and thoroughly reviewed this Request for Bid, has inspected the location of the project (if applicable), and understands the nature and scope of the work to be done; and that this bid is based upon the terms, specifications, requirements, and conditions of the Request for Bid documents. The bidder further agrees that the performance time specified is a reasonable time, having carefully considered the nature and scope of the project as aforesaid.
29. It will be understood that any bid and any and/or all referencing information submitted in response to this Request for Bid will become the property of Sedgwick County, and will not be returned. As a governmental entity, Sedgwick County is subject to making records available for disclosure after Board of County Commission approval of the recommendation.
30. Sedgwick County will not be responsible for any expenses incurred by any vendor in the development of a response to this Request for Bid including any onsite (or otherwise) interviews and/or presentations, and/or supplemental information provided, submitted, or given to Sedgwick County and/or its representatives. Further, Sedgwick County will reserve the right to cancel the work described herein prior to issuance and acceptance of any contractual agreement/purchase order by the recommended vendor even if the Board of County Commissioners has formally accepted a recommendation.
31. By submission of a response, the bidder agrees that at the time of submittal, he or she: (1) has no interest (including financial benefit, commission, finder's fee, or any other remuneration) and will not acquire any interest, either direct or indirect, that would conflict in any manner or degree with the performance of bidder's services, or (2) benefit from an award resulting in a "Conflict of Interest". A "Conflict of Interest" will include holding or retaining membership, or employment, on a board, elected office, department, division or bureau, or committee sanctioned by and/or governed by the Sedgwick County Board of County Commissioners. Bidders will identify any interests, and the individuals involved, on separate paper with the response and will understand that the County, at the discretion of the Purchasing Director in consultation with the County Counselor, may reject their bid/quotation. The bidder certifies that this bid is submitted without collusion, fraud or misrepresentation as to other bidders, so that all bids for the project will result from free, open and competitive bidding among all vendors.
32. Sedgwick County will issue a purchase order/contract for the acquisition of products/services specified as a result of an award made in reference to this document. Contract documents will be subject to any regulations governed by the laws of the State of Kansas and any local resolutions specifically applicable to the purchase.
33. Any dispute arising out of the contract documents or their interpretation will be litigated only within the courts of the State of Kansas. No prepayment of any kind will be made prior to shipment. Payment will be made upon verification of delivery, compliance with specifications, assurance that the product/service performs as specified and warranted, and receipt of correct invoicing.
34. Sedgwick County will accept responses transmitted via a facsimile unless stated to the contrary within this document. Bids must be received prior to the time and dates listed to be considered responsive. Sedgwick County will not accept late responses and will return them to the sender. Further, Sedgwick County will NOT: (1) guarantee security of the document received; (2) be held responsible for Bids which are NOT legible (and may choose to reject such responses); and, (3) guarantee that the receiving facsimile machine will accept transmission or that phone lines are functioning and available for transmission. Submitting a bid response via facsimile does NOT relieve the bidder of: (1) responsibilities stated in the document (such as attendance at a mandatory pre-bid conference); (2) providing non-paper informational items which must be returned with the response (diskettes, large drawings, photographs, models, etc.); and, (3) providing original copies of bid sureties (bonds, certificates of insurance, etc.).

DARK FIBER INSTALLATION

BONDS

PERFORMANCE AND LABOR AND MATERIAL BONDS:

PERFORMANCE AND LABOR AND MATERIAL BONDS shall be furnished to the Owner by the Contractor, in an amount equal to 100 percent of the Contract Sum as security for the faithful performance of the contractor and payment of all persons performing labor and furnishing materials in connection with the contract. Said payment bond shall also be executed as a statutory bond and filed in the office of the Clerk of the District Court of the County in which the Project is located. Contractor shall provide the Owner with a certified copy of said statutory bond as so filed.

BONDS FURNISHED shall be written by a SURETY approved by the U.S. Treasury Dept. and licensed to do business in the State of Kansas. No Work shall be commenced until bonds are in force.

FORM OF BOND shall be Statutory Payment Bond – State of Kansas.

POWER OF ATTORNEY for the surety company agent must accompany each bond issued, and must be certified to include the date of the bonds.

PROVIDE TRIPLICATE COPIES of the bond forms and power of attorney.

COST of the bonds shall be included in the bid and paid for by the Contractor.

END OF SECTION

DARK FIBER INSTALLATION

**BOND TO THE STATE OF KANSAS
STATUTORY PAYMENT BOND
(K.S.A. 60-1111, as amended)**

WITNESSETH: That _____ (“Principal”),
and _____ (“Surety”), are
hereby jointly and severally held and firmly bound unto the STATE OF KANSAS in the sum of
_____ dollars
(\$_____) lawful money of the United States of America, for the use and
benefit of all persons entitled thereto and for the payment of which we hereby bind ourselves,
our successors, assigns, heirs, executors and administrators.

THE CONDITION OF THE OBLIGATION IS SUCH, THAT,

WHEREAS, the Principal has entered into an Agreement with Sedgwick County, Kansas dated
_____, 2016, for improvements described as the

Dark Fiber Installation
510 N Main to 271 W 3rd.
Wichita, KS 67203

(the “Work”) according to the Contract Documents, which are incorporated herein by reference.

NOW, THEREFORE, if the Principal and its subcontractors shall pay all indebtedness incurred
for supplies, materials or labor furnished, used or consumed in connection with the Work
including gasoline, lubricating oils, fuel oils, grease, coal and similar items used or consumed
directly in furtherance of the Work, then this obligation is to be null and void; otherwise to remain
in full force and effect.

The Surety covenants and agrees that no change, extension of time, alteration or addition to the
Contract Documents or to the Work shall in any way reduce, nullify, or affect the Surety’s
obligations on this bond; and the Surety hereby waives notice on any such change, extension of
time, alteration or additional to said Contract Documents or Work.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed and
delivered this _____ day of _____, 2016.

Principal _____

Title _____

Surety _____

Title _____

DARK FIBER INSTALLATION

PERFORMANCE BOND

WITNESSETH THAT, _____ (“Principal”) and _____ (“Surety”) ARE HELD AND FIRMLY BOUND UNTO THE BOARD OF COUNTY COMMISSIONERS OF SEDGWICK COUNTY, KANSAS, (the “County”), for the use and benefit of claimants herein below identified in the amount of:

_____ dollars (\$_____).

and in the amount of any change orders issued for the Work, for which payment Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT,

WHEREAS, Principal has by agreement dated _____, 2016 entered into a contract with the County for the construction described as **DARK FIBER INSTALLATION FROM 510 N Main St. to 271 W 3rd St.** in accordance with the Contract Documents.

NOW, THEREFORE, if the Principal shall well and truly perform all the covenants, conditions, and obligations of the Contract Documents and any Addenda and Change Orders and shall hold the County and all interested property owners harmless against all claims, loss, damage, demands, or causes of actions which they may sustain or suffer by reason of any breach of said Contract Documents or of negligence of the Principal or of improper execution of the Work or use of inferior materials by the Principal; and if said Principal shall maintain the improvements as provided for in said Contract Documents and shall make good all defects in material and workmanship for a period of one year, or for such other period as provided for in the Contract Documents; then, this obligation shall be void: Otherwise to remain in full force and effect.

FURTHERMORE, the Surety consents and agrees that no price change, extension of time, alteration, or addition to the terms of the Contract Documents or to the Work to be performed thereunder shall in any way affect Surety’s obligation on this bond; and Surety hereby waives notice of any such change, extension of time, alteration or addition to said Contract Documents.

IN WITNESS WHEREOF, the Principal and Surety have duly executed these presents all as of the day and year first above written.

Principal _____

Title _____

Surety _____

Title _____

DARK FIBER INSTALLATION

**CERTIFIED COPY OF A RESOLUTION
OF THE BOARD OF DIRECTORS
OF _____
A KANSAS CORPORATION**

The undersigned, being the duly elected qualified and acting Secretary of _____, a Kansas corporation (the "Corporation"), hereby certifies as follows:

At a special meeting of the board of directors of the Corporation, held _____, 2016, when meeting was duly and properly called according to the by-laws of the Corporation and at which a quorum of said board was present, the following resolution was passed and adopted:

"WHEREAS, the Corporation desires to contract with Sedgwick County, Kansas (the "County") for the construction of certain public improvements, and,

"WHEREAS, the Corporation desires to authorize certain officers of the Corporation to execute and deliver to the County all agreements and documents related thereto.

"NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF _____, a Kansas corporation, that _____ (name), _____ (title), of the Corporation, be and is hereby authorized to execute and deliver to the County all contracts and documents incidental thereto, including but not limited to statutory bonds, construction bonds, insurance agreements and policies, plans and specifications, and any further documents required thereby, relating or pertaining to the following described project:

**Dark Fiber Installation
510 N Main to 271 W 3rd
Wichita, KS 67203**

"BE IT FURTHER RESOLVED BY THE BOARD OF DIRECTORS OF THE CORPORATION that the authority conferred hereby upon such officer is continuing unless notice in writing be given by the Corporation to the County."

DATED this _____ day of _____, 2016.

Secretary

(SEAL)

DARK FIBER INSTALLATION

EXHIBIT A

INSURANCE

Liability insurance coverage indicated below must be considered as primary and not as excess insurance. Contractor shall furnish a certificate evidencing such coverage, with County listed as an additional insured, except for professional liability, workers' compensation and employer's liability. Certificate shall be provided with bid/proposal submittals. Certificate shall remain in force during the duration of the project/services and will not be canceled, reduced, modified, limited, or restricted until thirty (30) days after County receives written notice of such change. All insurance must be with an insurance company with a minimum BEST rating of A-VIII and licensed to do business in the State of Kansas. It is the responsibility of Contractor to require that any and all approved subcontractors meet the minimum insurance requirements. Contractor shall obtain the above referenced certificate(s) of insurance, and in accordance with this Agreement, provide copies of such certificates to County.

WORKER'S COMPENSATION

Applicable State: Statutory
Employer's Liability:.....\$100,000

CONTRACTOR'S LIABILITY INSURANCE. Form of insurance shall be a Comprehensive General Liability Automobile Liability.

1. BODILY INJURY
Each Occurrence:\$500,000
Aggregate:\$500,000
2. PROPERTY DAMAGE
Each Occurrence:\$500,000
Aggregate:\$500,000
3. PERSONAL INJURY
Each Person Aggregate:\$500,000
General Aggregate:\$500,000
4. AUTOMOBILE LIABILITY. Owned, non-owned and hired.
Bodily Injury, Each Person:\$500,000
Bodily Injury, Each Occurrence:\$500,000
Property Damage, Each Occurrence:.....\$500,000

XCU Coverage

Remove Exclusion.

BUILDER'S RISK INSURANCE

In the amount of the initial Contract Sum, plus the value of subsequent modifications and cost of materials supplied and installed by others, comprising the total value for the entire Project on a replacement cost basis without optional deductibles.

UMBRELLA COVERAGE

Following form for both the general liability and automobile:\$500,000

PROJECT SUBCONTRACTING WORK SHEET

Project Name: Dark Fiber Installation 510 N Main to 271 W 3rd Check here if you are not using subcontractors ____

Bid #	16-0023
General Contractor	
Created by	

General Contractors shall provide the name, description, DBE classification (type) Minority Certification #, date of work and dollar value for each subcontractor (including lower-tier subcontractors) used to complete the referenced project. Contractors may be required to provide back up documentation to verify information. Each column requires input.

DBE classification type: African American (1); Asian (2); Hispanic (3); Native American (4); other minority (5); Women Owned Business (6). Additional general classifications: Small Business Owner (7); Does not meet any classification (0).

	Subcontractor Name and Address	Type	Jurisdiction Name & Minority Certification # (if vendor has one)	Description of Services	Date of Work	Dollar Value of work
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Form shall be submitted to Purchasing at the completion of project.

DARK FIBER INSTALLATION

Attachment A-Statement of Work

- 48 strands of fiber (24 single mode, 24 multi mode) to be ran from 510 N Main, 2nd floor datacenter to 271 W 3rd, Wichita, KS 67203 4th floor datacenter.
- Terminated with LC connectors
- Labeled
- Tested-test results to be provided to Sedgwick County.
- Work **MUST** comply with all building code, laws and ordinances.
- Project to be complete and accepted by county staff **no later than June 1, 2016.**

CONTINUED ON NEXT PAGE

DARK FIBER INSTALLATION

SEDGWICK COUNTY

**Product and Installation Specifications
for
Building Data Communication Cabling**

August 2015

DARK FIBER INSTALLATION

1. OVERVIEW

This document is the specification for the installation of Structured Cabling Systems at Sedgwick County. The data part is suitable for the provision of high speed Ethernet communications for individual buildings. The principle use of this practice is for the construction of new building, major renovations, or additions to cable plant.

1.1 General Scope

The practice basically follows the relevant EIA, TIA, CSA standards and architectures for commercial buildings. As such, it is focused on the facilities required within a building not the inter-building facilities that are required to ensure a comprehensive County wide network. For specifications of telecommunications rooms see the County document "Communications Infrastructure Specifications, Standards and Practices" and for conduit sizes see the EIA/TIA 569B standard.

The practice aims to ensure a cabling system that will give a predictable, consistent and flexible subsystem with a substantial lifetime for the applications that Sedgwick County needs. It specifies Cat 6 cable for the horizontal UTP copper systems. The formerly specified Cat5e cable has been replaced by Cat6 cable. This practice specifies which OEMs can be used. Recommended OEMs include, but are not limited to, Belden, Commscope, Panduit and Leviton. It will be noted that for telecommunications rooms, there is single vendor approach for the piece parts such as racks, power distribution units and cable management subsystems. This is done for consistency to make it easier for technicians to service and expand the facilities in those rooms.

1.1.1 This document specifies the requirements for the installation of all horizontal UTP cabling and all copper/fiber backbone cabling to support voice and data applications in a new or renovated space. It should be noted that Category 6 cabling is specified in the vertical riser in addition to fiber.

1.1.2 The cabling contractor shall supply and install a complete telecommunications cabling system based on a physical star wiring topology that is designed in accordance with practices recommended by the Building Industry Services International (BICSI) organization. Furthermore, the cabling contractor shall include all communication outlets, terminating hardware and selected connectivity devices as outlined in this specification.

1.1.3 It is the responsibility of the cabling contractor to report any errors and/or omissions in this specification with their bids.

1.2 Inquiries Bidders who find discrepancies or omissions in this specification, or who have any doubt as to the meaning or intent of any part of this specification, shall direct their questions or other inquiries by email or facsimile to the Manager, Network Implementation, I+TS/ Enterprise Infrastructure Solutions of Sedgwick County.

2. PRODUCT AND INSTALLATION STANDARDS

2.1 The equipment, material and installation shall conform to the latest version of the applicable codes, standards and regulations of authorities having jurisdiction.

DARK FIBER INSTALLATION

2.2 All components supplied and/or installed will support current applications and any future application introduced by recognized standards or user forums that use EIA/TIA 568 component and link/channel specifications for cabling.

2.3 The specifications detailed in this document are accompanied by EIA/TIA and/or CSA requirements both for product and installation practices. The following are communications standards documents that must be adhered to:

Standard	Title
ANSI/TIA-568-C.0	Generic Telecommunications Cabling for Customer Premises
ANSI/TIA-568-C.1	Commercial Building Telecommunications Cabling Standard
ANSI/TIA-568-C.2	Balanced Twisted-Pair Telecommunication Cabling and Components Standard
ANSI//TIA-568-C.3	Optical Fiber Cabling Components Standard
ANSI/EIA/TIA-569-A	Commercial Building Standard for Telecommunications Pathways and Spaces
ANSI/EIA/TIA-606(A)	Administration Standard for the Telecommunications Infrastructure of Commercial Buildings Product and Installation Specifications For Building Data Communication Cabling 5
ANSI/EIA/TIA-607(A)	Commercial Building Grounding and Bonding Requirements for Telecommunications
ANSI/EIA/TIA-598	Color Coding of Fiber Optic Cables
ANSI/EIA/TIA-455	Test Procedures For Fiber Optics, Cables and Transistors
ANSI/EIA/TIA-604-3	FOCIS 3 Fiber Optic Connector Intermatability Standard
ANSI/ICEA S-83-596	Fiber Optic Premises Distribution Cable
ANSI/ICEA S-83-640	Fiber Optic Outside Plant Communications Cable
ANSI/NECA/BICSI-568	Standard for Installing Commercial Building Telecommunications Cabling

3. PRODUCT SPECIFICATIONS

3.1 General Conditions

3.1.1 This document specifies that the horizontal structured cabling system shall be a single manufacturer end-to-end solution. Recommended manufacturers include, but are not limited to, Panduit TX 6000TM System, Belden IBDN 2400 System, Commscope Gigaspeed XL, and

DARK FIBER INSTALLATION

Hubbell NEXTSPEED Cat.6 AMP Connect solution. See appendices for examples of vendor product list and part numbers. It is recommended to consult vendors on current product offerings. Product and Installation Specifications For Building Data Communication Cabling 6.

3.1.2 The Cat 6 end-to-end system solution shall meet or exceed 250MHz in the channel. Third party test results shall be required such as ETL test results. In house manufacturer test results are not acceptable.

3.1.3 Products installed must meet or exceed all local, provincial and federal building, fire, health, safety and electrical codes.

3.1.4 The cabling contractor is responsible for complete storage, handling, delivery, and installation of all materials used in the performance of the work.

3.1.5 The cabling contractor is responsible for keeping the workplace clean, safe and free from debris at all times. All debris must be removed from the site on a daily basis. The costs for cleaning are the responsibility of the cabling contractor.

3.2 Cabling Support Structure

3.2.1 The cabling contractor is to supply and install cable support system and any other miscellaneous hardware required for supporting all horizontal cabling where conduit or cable tray has not been provided. All horizontal cabling must be supported at 48" to 60" intervals.

3.2.2 Where required by local codes all cabling shall be installed in metallic EMT conduit.

3.3 Communications Cabling Category 6 Horizontal Data Cable

3.3.1 The horizontal data cabling shall be solid copper, blue unshielded twisted pair (UTP), 4-pair, 23 AWG, CMP rated (FT6) or CMR rated (FT4), Category 6 cable as applicable. Acceptable examples of cables are Panduit TX 6000TM System, Belden IBDN 2400 System, Commscope Gigaspeed XL, or Hubbell NEXTSPEED Cat6 AMP Connect solution.

3.3.2 The cable shall be tested and characterized to 350 MHz and have a positive PSACR above 250 MHz. It shall also be UL listed.

3.3.3 The jacket shall be printed with a 1000' to 0' marking system and/or 333 meters to 0 meters system.

3.4 Work Area Outlet Solutions Category 6 Modular Jacks

3.4.1 Horizontal UTP Category 6 data cabling to be terminated at the workstation shall be terminated with modular 8 position, 8 wire RJ45 connector. Recommended OEMs include, but are not limited to Panduit, Belden, Commscope or Hubbell. Modules are to be wired as per T568A. Modular data jacks shall be blue in color except when used for wireless applications in which case they shall be orange in color.

3.4.2 The approved horizontal UTP Category 6 voice cabling to be terminated at the workstation shall be terminated with modular 8 position, 8 wire RJ45 connector. Recommended OEMs include, but are not limited to Panduit, Belden, Commscope or Hubbell. Modules are to be wired as per T568B. Modular voice jacks shall be blue in color.

DARK FIBER INSTALLATION

3.4.3 Modular jacks must meet FCC Part 68 Subpart F; contacts are to be plated with 50 micro inches of gold.

3.4.4 Modular jack contacts shall have a minimum of 2500 plug insertions without degradation of electrical or mechanical performance as per the IEC60603-7 specification.

3.4.5 Jack termination shall utilize a paired termination sequence. Maintain untwist to a maximum of ½ inch during termination. Leave one (1) foot or thirty (30) centimeters of cable slack in the ceiling above each work area outlet location. If the cable is installed in conduit leave one (1) foot or thirty (30) centimeters of cable slack in the closest pull box and or cable tray.

Work Area Patch Cords

3.4.6 Patch cords shall be stranded Category 6 and meet or exceed FCC Part 68 and IEC 60603-7 specifications. The plug shall have contacts plated with 50 micro inches of gold for improved durability and have a minimum of 2500 plug insertions without degradation of electrical or mechanical performance.

3.4.7 The patch cord shall be blue in color and shall be ten (10) feet or three (3) meters in length except when used for wireless applications in which case they shall be orange in color and shall be no more than seven (7) feet or two (2) meters in length.

3.4.8 Patch cords shall be manufacturer assembled and verified. Some of recommended manufacturers are Panduit, Belden, Commscope, and Hubbell. Flush Mounted Faceplates

3.4.9 The horizontal UTP cabling shall be terminated at the workstation on a flush mounted wall plate. Each faceplate shall be 4 or 6 ports on a single gang to allow for future growth. All unused ports will have blank modules installed.

3.4.10 Faceplates shall be UL listed and CSA Certified. Furniture Faceplates

3.4.11 Horizontal UTP cabling terminated at the workstation in systems furniture shall use a four-port faceplate. All unused ports shall be filled in with blank inserts.

3.5 Telecommunications room termination solutions

Horizontal Data Cable Terminations

3.5.1 All data Cat 6 horizontal UTP cabling shall be terminated on RJ45 modular jacks and connected to modular rack mount patch panels. The modular patch panels shall be mounted in a standard 19" rack.

3.5.2 Modular patch panels shall be 24 or 48 port modular panels and shall be black in color. RJ45 modular jacks shall be used to connect to modular patch panels.

3.5.3 Leave ten (10) feet and or three (3) meters of slack in the telecommunications room to allow for future rack relocation if required. Do not store the slack in bundled loops. Cable slack should be stored in an extended loop or in figure eight.

Telecom Room Patch Cords

DARK FIBER INSTALLATION

3.5.5 Patch cords shall be stranded Category 6 and meet or exceed FCC Part 68 and IEC 60603-7 specifications. The plug shall have contacts plated with 50 micro inches of gold Product and Installation Specifications For Building Data Communication Cabling 9 for improved durability and have a minimum of 2500 plug insertions without degradation of electrical or mechanical performance.

3.5.6 Data patch cords shall be blue in color and shall be seven (7) feet and or two (2) meters in length unless otherwise specified.

3.5.7 Approved patch cords shall be manufacturer assembled, tested and verified. Some of recommended manufacturers are Panduit, Belden, Commscope or Hubbell.

Fiber Optic Backbone Cabling – Singlemode

3.5.9 The approved intra-building singlemode fiber optic backbone cables shall be 9/125um OS2 and constructed with Corning optical fiber. Indoor cables shall be tight buffered with CMP (FT6) or CMR (FT4) where applicable. If needed, outdoor cables shall be loose tube CMR (FT4) outdoor rated fiber optic cable. Recommended manufacturers are Panduit, Belden, Commscope, Corning, and Hubbell.

3.5.10 The approved intra-building singlemode fiber optic backbone cables from the Building Entrance Facility (BEF) to the Telecommunications Room (TR) shall be a minimum twelve (12) strand cable unless otherwise specified by Sedgwick County.

3.5.11 Cable to be formed into groups of 12 fibers. Groups and individual fibers shall be identified in accordance with ANSI/EIA/TIA-598-A

3.5.12 Fiber optic cable groups shall be assembled to form a single compact core and covered by a protective sheath. The sheath shall consist of an overall jacket and one or more layers of dielectric material applied over the core. Fiber Optic Connectors

3.5.13 The fiber optic connectors must be field installable connectors. The connectors shall be LC style UPC for both inter-building backbone cables and intra-building backbone cables. All connectors are to meet ANSI/EIA/TIA and IEC standards for repeatability.

3.5.14 The connector shall be capable of terminating on either 900 micron tight-buffered cable, 3.0 mm jacketed fibers or 250 micron loose tube fibers. The connector shall also have a zirconia ceramic ferrule for both multimode and singlemode connectors and must have a locking feature to the coupler.

3.5.15 The connector shall provide a strain relief mechanism for installation on a single fiber. The fiber within the body of the connector shall be isolated mechanically from cable tension bending and twisting as per ANSI/TIA-568-C.3.

Fiber Optic Patch Panels

3.5.16 The fiber optic patch panel shall be rack mountable in a 19" rack and black in color. The panels shall comply with ANSI/TIA-568-C.3 (connecting hardware section). Recommended manufacturers include, but are not limited to Panduit, Belden, Commscope, Corning and Hubbell.

DARK FIBER INSTALLATION

3.5.17 The fiber optic patch panel shall have a slide out shelf or swing out drawer for access to the fiber terminations, adapter panels for patching.

3.5.18 The fiber optic patch panel shall provide for bend radius control and use a strain relief to accommodate the fiber optic cables.

3.5.19 The fiber optic patch panel shall be capable of terminating tight buffered and loose tube multimode or singlemode fiber optic cables.

Fiber Optic Patch Cords

3.5.20 Dual fiber optic patch cords are to be singlemode 9/125um. Connector types on ends of patch cords to be determined by Sedgwick County.

3.5.21 Patch cords to be factory assembled and verified. Fiber patch cords shall comply with ANSI/TIA-568-C.3

3.5.22 The color of the singlemode patch cords will be yellow. The length of the patch cords will be ten (10) feet or three (3) meters unless otherwise specified. Recommended manufacturers include, but are not limited to, Panduit, Belden, Commscope, Corning and Hubbell.

3.6 Rack and Cable Management System

Telecommunication Racks

3.6.1 Telecommunication racks shall be 19", floor mounted, black in color, accommodate a minimum of 45 rack unit space, and have anchor holes in the base. Each rack shall be equipped with one (1) duplex outlet on a dedicated 15 A, 120 V, isolated ground circuit. Panduit CMR series rack part number 19X84S is an example of a recommended manufacturer.

3.6.2 All telecommunications racks are to be fitted with one (1) black 10 outlet horizontal, rack mount, power strip.

3.6.3 All racks are to be equipped with a Telecommunications rack ground bar, example Panduit TRGB19.

3.6.4 The color of the rack and accessories shall be black.

Vertical Cable Management

3.6.5 A six inch (6") vertical cable manager is to be provided on each side of the 19" inch rack, except where racks are ganged together. Panduit patch runner PRVF6 (vertical manager), PRD6 (door) or equivalents shall be used.

3.6.6 Where racks are ganged together utilize an eight inch (8") PRVF8 (vertical manager), PRD8 (door) or equivalents between the racks. Depending on the number of horizontal drops where racks are ganged together the twelve inch (12") PRVF12 (vertical manager), PRD12 (door) or equivalent shall be used.

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3.6.7 The vertical cable manager shall have a metal door that hinges open from the right or left.

3.6.8 The vertical cable manager shall have bend radius control built into the manager so as patch cables transition into the manager they are not resting on a sharp edge.

Horizontal Cable Management

3.6.9 One (1) horizontal cable manager per copper patch panel is to be provided. Managers are to be 1U for 24 port patch panel or 2U for 48 port patch panel.

3.6.10 The horizontal cable manager door shall hinge up or down, must have bend radius control built into the slots for patching and transitioning into the vertical managers and must have retaining clips.

3.6.11 The color of the horizontal cable manager shall be black. Panduit PatchLink series, WMPFSE, WMPHF2E is an example of an acceptable product.

3.7 Raceway Solutions

3.7.1 All single channel or multi-channel Raceway solutions and accessories installed shall be Panduit, Wiremold, or equivalent.

3.7.2 All Raceway shall be installed to the recommended practices of the manufacturer and all applicable electrical codes. All accessories shall have bend radius control built in for communications cabling as per the ANSI/EIA/TIA 569 –A standard.

3.8 Grounding and Bonding

3.8.1 The grounding and bonding of the telecommunications system shall meet all local, provincial and national codes and bylaws.

3.8.2 All grounding and bonding shall be installed as per ANSI/EIA/TIA 607(A)

3.8.3 A separate ground should be established for the telecommunications system. Where this is not possible the telecommunications system ground shall be tied into the building/electrical ground.

3.8.4 A communications ground that is continuous and permanent through all telecommunication rooms must be established.

3.8.5 All racks and cabinets must be grounded to the telecommunications grounding system using 6 AWG green insulated stranded copper ground wire. All racks are to be equipped with Panduit TRGB19 telecommunications rack ground bars or equivalent.

3.9 Miscellaneous

Test Equipment

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3.9.1 The cabling contractor is to use the Fluke DTX series scanner or equivalent with the latest version of firmware to test the UTP cabling system. All optical fiber shall be tested with a light source meter. (Details in the testing section of this document.)

Spiral Wrap

3.9.2 Cables running from system furniture feed points to the system furniture shall be neatly wrapped with Panduit T50R-C series spiral wrap and or PW series Pan Wrap or equivalent. Cabling contractor to size the spiral wrap accordingly.

Fire Stopping

3.9.3 The cabling contractor must supply and install all required fire stopping materials to reestablish the integrity of any and all fire-rated architectural structures and assemblies they have worked on. Mechanical systems consisting of standard conduit, sleeves, cored holes and all horizontal and backbone pathways that penetrate fire-rated barriers shall be fire stopped. The cabling contractor must install an approved fire-stop material recommended by CSA, ULC or UL in accordance with all applicable codes. Intumescent putties and or cementitious materials with a minimum three (3) hour rating shall be used.

4. INSTALLATION

The approved contractors that have been chosen to participate in this bid shall be a certified installer. The contractor shall have a minimum of five (5) years industry experience and have been trained in the proper installation practices as per ANSI/TIA- 568-C. All contractors shall have manufacturer trained technicians with a minimum of two (2) years installation experience.

4.1 General Conditions

4.1.1 The approved cables and components must be installed and terminated in accordance with the ANSI/TIA-568-C standard. Particular attention must be given to maintaining the integrity of the pair twists, bend radius and ensuring proper distance is kept from fluorescent light fixtures, electrical cables or any other source of EMI.

4.1.2 Leave ten (10) feet and or three (3) meters of slack in the telecommunications room to allow for future rack relocation if required. Do not store the slack in bundled loops. Store cable slack in an extended loop or a figure eight. Leave one (1) foot of cable slack in the ceiling above each work area outlet location.

4.1.3 The maximum horizontal cable length is not to exceed 90 meters or 295 feet. If the 90 meters or 295 feet constraint cannot be met, the cabling contractor is to notify Sedgwick County.

4.1.4 All plywood backboard(s) are to be supplied and installed by the contractor unless otherwise noted. All plywood backboards shall be fire retardant.

4.1.5 All cables and pathways such as conduits, cable tray or other systems used for communication cable distribution to be run parallel or perpendicular to building lines.

4.1.6 To minimize any possibilities of disruption, maintain the minimum clearances from electrical and heat sources when routing cables.

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4.1.7 Any deviation from the cable routing, outlet and equipment locations shown on drawings must be approved by the consultant and documented on as-built drawings.

4.1.8 Avoid scraping, denting, or otherwise damaging cables, before, during or after installation. The cabling contractor, without any additional compensation, shall replace damaged cables.

4.1.9 Bush, ream and remove any sharp projections on all conduits prior to installation of communications cables.

4.2 Horizontal Cable Distribution

4.2.1 The cabling contractor is to supply Panduit Tak-Ty cable ties or equivalent and any other miscellaneous hardware required to support horizontal cabling where conduit or cable tray has not been provided.

4.2.2 Pull all cables in a continuous run. No cable splices will be permitted.

4.2.3 Leave one (1) foot or thirty (30) centimeters of cable slack in the ceiling above each work area outlet location. If the cable is installed in conduit leave one (1) foot or thirty (30) centimeters of cable slack in the closest pull box and or cable tray.

4.2.4 When bundling cables, comply with manufacturer's recommended bundling practices for installation. Ensure that excess pressure is not placed on the cable at any point that may result in the compression or deformation of the cable jacket and internal pair/conductor geometry.

4.2.5 Provide blank filler plates for all unused modular jack positions on faceplates.

4.3 Horizontal Cabling

4.3.1 Supply and install horizontal cabling as detailed on communications cabling layout drawings.

4.3.2 A typical station cable drop consists of a combination of one (1) horizontal voice and one (1) horizontal data cable unless otherwise noted on the drawings and or otherwise specified.

4.3.3 All horizontal data and voice cabling will originate from the telecommunication room out to the designated workstation location in a star topology.

4.4 Rack and Cable Management System

4.4.1 All 19" racks and brackets are to be located as shown on communications cabling layout drawings.

4.4.2 All racks are to be anchored securely to the floor.

4.4.3 All racks, patch panels, cabinets, metal raceways and data equipment are to be grounded to building ground bus bars using Panduit Network Grounding Systems product or equivalent.

4.5 Fire Stopping

4.5.1 Fire stopping requirements must include prevention of fire from passing through a barrier. These seals are required to maintain safety and security within the clients' premises.

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4.5.2 The cabling contractor must re-establish the integrity of any and all fire-rated architectural structures and assemblies they have worked on.

4.6 Labeling

4.6.1 All labels shall be Panduit Identification or equivalent Products for voice and data structure cabling systems.

4.6.2 Cable labels shall be of self-laminating vinyl construction with a white printing area and a clear tail that self laminates the printed area when wrapped around a cable. The clear area should be of sufficient length to wrap around the cable at least one and one-half times and be installed within 2" of the termination point of the cable, patch cord or pigtail.

4.6.3 All adhesive cable labels shall meet the legibility, defacement, and adhesion requirements specified in UL 969 (Ref. D-16). In addition the labels shall meet the general exposure requirements in UL 969 for indoor use.

4.6.4 All cable labels shall be compliant with the TIA/EIA-606(A) Section 6.2.2 Cable Labeling, Section 6.2.4 Termination Hardware Labeling, and Section 6.2.6 Termination Position Labeling.

4.6.5 All patch panel and BIX/110 block labels are to be mechanically printed and are to follow the guidelines in CSA-T528-93 for Color Coding of Termination Fields.

4.6.6 Label all cabling in accordance with CSA-528 specifications. One label should be attached to the front of the workstation faceplate, one to the front of the patch panel, and one at each end of the cable.

4.6.7 All labels must be mechanically printed. Hand written labels are not permitted.

4.6.8 All intra-building and inter-building backbone cables for voice and data shall be labeled. Labeling shall include destination (building) to and from at each end.

4.6.9 The horizontal cables shall be labeled in the format D-floor#-room#-cable#. The per room cable numbers shall be sequential beginning at 1.

Example: D03-038-2 represents a second data cable to room 038 of the third floor. Example: D11-099-5 represents a fifth data cable to room 099 of the 11th floor.

4.7 Testing

4.7.1 The cabling contractor is to use the Fluke DTX series or equivalent with the latest version of firmware to test the UTP cabling system. A light source and power meter will be used to for all fiber optic cables. The cabling contractor must ensure that all cabling is tested in accordance to the proposed specifications of the category installed.

4.7.2 Upon completion of testing by the cabling contractor, a Sedgwick County representative may choose to witness up to 10% of the cables being tested.

4.7.3 All deficiencies must be corrected before the Project Manager will provide a certificate to release the holdback on the project.

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4.7.4 Category 6 field test parameters shall be. Testing of all 4 pairs is to include but not be limited to the following:

- 1) Wire Map
- 2) Insertion Loss
- 3) Equal Level Far End Cross Talk (ELFEXT)
- 4) Power sum equal level far end cross talk (PSELFEXT)
- 5) Delay Skew
- 6) Power sum attenuation to crosstalk ratio (PSACR)
- 7) Near end cross talk (NEXT)
- 8) Propagation Delay
- 9) Cable length
- 10) Power sum near end cross talk (PSNEXT)
- 11) Return Loss

4.7.5 A tester with the most recent version of its software and firmware must perform all tests in accordance to ANSI/EIA/TIA TSB-67. The nominal velocity of propagation (NVP) must be set specific to each cable manufacturer before testing. Portable testers to be calibrated on a minimum annual basis. Fluke DTX or equivalent shall be used.

4.7.6 Test patch cords for the tester must be designed and approved for testing by the manufacturer. Field assembled patch cords are not acceptable.

4.7.7 Test each strand of fiber with a Power Meter / Light Source combination operating at wavelengths of 850 nm and 1300 nm for multimode fibers and 1310 nm and 1550 nm for single mode fibers. Perform these tests in both directions. These tests shall be completed after cable installation, splicing and connectors are installed. Provide test results in soft copy to the Sedgwick County representative for the project.

4.7.8 All cable faults must be corrected. Splicing of any cables will not be permitted, for any reason, unless prior authorization is received in writing by Sedgwick County.

5. DOCUMENTATION

5.1 "As built" drawings

The cabling contractor is required to provide as-built drawings of the cable installation. This shall include the pathway of the cables from the telecommunications rooms to the workstation. The as-built drawings shall also include all additional cabling installed during the project. The cabling contractor shall provide the as-built drawings to Sedgwick County within 7 business days of the completion of the project.

5.2 Cable test results

The cabling contractor shall provide all test results in hard and soft copy to Sedgwick County. The electronically supplied test results shall be in the proper tester format. Test results shall include all voice and data horizontal cables and all voice and data backbone cables. The hard copy report shall indicate for each cable, when it was tested successfully and the signature of the technician that performed the test. The entire report must be signed by an authorized person for the cabling contractor at the end of the project.

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6. WARRANTY

The cabling contractor must provide the owner with a 20 year product warranty and a minimum one (1) year labor warranty.