DARK FIBER INDEFEASIBLE RIGHT OF USE ("IRU") AGREEMENT

Between

MuniNet Fiber Agency

And

Commonwealth of Kentucky

Dated: January 31, 2018

EXHIBITS

Exhibit A Segment Route Descriptions

Exhibit A-1 Core Segment Map (Princeton to Nortonville)

Exhibit A-2 Lateral Segment 1 Map (Nortonville to Greenville)

Exhibit A-3 Lateral Segment 2 Map (Greenville to Central City)

Exhibit B Fiber Splicing, Testing, and Acceptance Standards and Procedures

Exhibit C Cable Installation Guidelines

Exhibit D Sites

Exhibit E Fiber Handoff

Exhibit F Building Entrance Cable

Exhibit G Project Records

Exhibit H Maintenance Agreement

Exhibit I Change Form

Exhibit J Corning Certificate of Compliance

DARK FIBER IRU AGREEMENT

THIS DARK FIBER IRU AGREEMENT (this "Agreement") is made as of the 31st day of January, 2018 (the "Effective Date") by and between MuniNet Fiber Agency ("MuniNet"), a public agency of the Commonwealth of Kentucky created pursuant to an Interlocal Cooperation Agreement among a group of Kentucky municipal electric utilities, having its principal office at 1500 Broadway, Paducah Kentucky 42001 and Commonwealth of Kentucky ("Commonwealth"), having its principal office at 702 Capital Avenue, Frankfort, Kentucky 40601 (MuniNet and Commonwealth are each referred to herein as a "Party" and collectively as "Parties").

BACKGROUND:

Whereas:

- A. Pursuant to RFP 758 1500000003-5 issued July 11, 2014 (as amended from time to time, the "RFP"), the Commonwealth selected Macquarie Infrastructure Developments LLC ("Macquarie") to design, build, finance, operate and maintain a statewide fiber optic network, known generally as the NG-KIH System, to provide broadband services to the citizens of the Commonwealth (the "Project");
- B. On December 22, 2014, the Commonwealth and Macquarie entered into a master agreement (as amended from time to time, the "Master Agreement") in respect of the Project;
- C. In 2015, Macquarie assigned its rights and obligations under the Master Agreement to KentuckyWired Infrastructure Company, Inc. ("Project Co."). Project Co. then entered into a Project Implementation Agreement with KentuckyWired Operations Company, LLC ("Operations Co.");
- D. On September 3, 2015, the Commonwealth and Project Co. entered into a project agreement (as amended from time to time, the "**Project Agreement**") in respect of the Project and to facilitate the financing of the Project. As part of this Project Agreement, Operations Co. and its subcontractors have specifically designed and tailored the NG-KIH Network to the geographic area of the Commonwealth in a series of "rings";
 - E. A component of the NG-KIH System is located in western Kentucky;
- F. MuniNet, through ownership or other arrangements, has the rights to use or intends to develop a fiber optic communication system along the Route depicted in Exhibits A-1, A-2 and A-3 (the "System").
- G. MuniNet can provide fiber facilities located in western Kentucky that fit the design of the NG-KIH Network; and

H. Commonwealth desires to acquire from MuniNet, and MuniNet desires to provide to Commonwealth, an indefeasible right of use with respect to certain optical fibers in the System upon the terms and conditions set forth below.

NOW, THEREFORE, in consideration of the mutual promises set forth below, and other good and valuable consideration; the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

ARTICLE I DEFINITIONS

Capitalized terms and phrases used in this Agreement shall have the following meanings:

"Acceptance Date" shall have the definition set forth in Exhibit B.

"Acceptance Standards" means the standards set forth in Exhibit B with respect to the testing and condition of the Commonwealth Fibers.

"Affiliates" means, with respect to any entity, an entity controlling, controlled by, or under common control with such entity by means of direct or indirect majority equity ownership.

"Agreement" or "Dark Fiber IRU Agreement" shall have the definition set forth in the first paragraph, above.

"Available" means that the Commonwealth Fibers meet the standards set forth in Sections 2, 3 and 4 of Exhibit B attached hereto.

"Building Entrance Cable" shall have the meaning set forth in Section 2.3 of this Agreement.

"Business Day" means a day other than Saturday, Sunday or a federal or state holiday in the Commonwealth of Kentucky.

"Cable" means the fiber optic cable included in the System and the Building Entrance Cables and includes the Commonwealth Fibers, the MuniNet Fibers and their respective associated splicing connections, splice boxes and vaults, and conduit.

"Change" means an alteration, addition, deletion or other modification to the System or Sites, including but not limited to Site relocations, made in accordance with Article VII of this Agreement.

"Change Form" means the Change document referenced in Article VII of this Agreement and attached at Exhibit I.

"Claim" means any claim, action, dispute, or proceeding of any kind between Commonwealth (or any of its Affiliates, successors or assigns) and MuniNet (or any of its Affiliates, successors, or assigns) and any other claim, transaction, occurrence, loss, liability, expense or other matter arising out of, in connection with, or in any way related to, the

Commonwealth IRU, the Cable, the System, this Agreement or any other instrument, arrangement or understanding related to the Commonwealth IRU.

"Commonwealth Equipment" means optronic (opto-electrical), electronic, or optical equipment or materials, facilities or other equipment owned, possessed or utilized (other than the System), by Commonwealth.

"Commonwealth Fibers" means those certain Fibers in which Commonwealth shall be granted an IRU hereunder as set forth in Section 2.1 and Section 2.3.

"Commonwealth IRU" shall have the definition set forth in Section 2.1.

"Connecting Point" means a point where the network or facilities of the Interconnecting Parties will connect to the System as specified in Exhibit E of this Agreement.

"Contract Price" shall have the definition set forth in Section 3.1.

"Core Segment" means the fiber route from Princeton, Caldwell County, Kentucky to Nortonville, Hopkins County, Kentucky as depicted generally in Exhibit A-1 to this Agreement.

"Customary Industry Practice" means using standards, practices, methods and procedures to a good commercial standard, conforming to federal, state, county and city law and ordinances and exercising the degree of skill and care, diligence, prudence and foresight which would reasonably and ordinarily be expected from a qualified, skilled and experienced person engaged in a similar type of undertaking under the same or similar circumstances.

"Effective Date" shall have the meaning set forth in the introductory paragraph of this Agreement.

"Facility Owners" means any entity (other than MuniNet) owning any portion of the System and leasing to MuniNet, or providing an IRU to MuniNet in, any portion of the System.

"Fiber Acceptance Testing" means the fiber acceptance testing described in Exhibit B.

"Fiber(s)" means any optical fibers contained in the System and the Building Entrance Cables, including the Commonwealth Fibers, the MuniNet Fibers and the fibers of any third party in the System excluding, however, any fibers granted (whether through ownership, IRU, lease, or otherwise) to Government Authorities in exchange for use of streets, rights of way, or other property under the jurisdiction of such entity.

"Force Majeure Event" shall have the definition set forth in Section 21.1.

"Government Authority" means any federal, state, regional, county, town, municipal, territorial, or tribal government, whether domestic or foreign, or any department, agency, bureau, or other administrative, regulatory or judicial body of any such government, including, without limitation, any multinational body obtaining authority from any of the foregoing.

"Indefeasible Right of Use" or "IRU" is an exclusive, indefeasible right to use the specified property, but does not convey title, ownership, or rights of possession in any real or personal property.

"Indemnitee" shall have the definition set forth in Section 14.1.

"Indemnitor" shall have the definition set forth in Section 14.1.

"Interconnecting Party" or "Interconnecting Parties" means MuniNet, the Commonwealth or a Permitted User which connects its equipment to the System in accordance with the terms and conditions of this Agreement and, with respect to a Permitted User, in accordance with the terms and conditions of a written agreement with the Parties.

"Lateral Segment 1" means the fiber route from Nortonville, Hopkins County, Kentucky to Greenville, Muhlenberg County, Kentucky as depicted generally in Exhibit A-2 to this Agreement.

"Lateral Segment 2" means the fiber route from Greenville, Muhlenberg County, Kentucky to Central City, Muhlenberg County, Kentucky as depicted generally in Exhibit A-3 to this Agreement.

"Lateral Segments" means Lateral Segment 1 and Lateral Segment 2 when referred to collectively.

"Lenders" means one or more financial institutions, vendors, suppliers or other financing sources utilized by MuniNet or Commonwealth, as the case may be.

"Maintenance Agreement" shall mean that certain Maintenance Agreement attached and incorporated herein as Exhibit H, between MuniNet and Commonwealth whereby MuniNet provides maintenance and repair services to Commonwealth in connection with the Commonwealth Fibers.

"MuniNet Fibers" means those certain Fibers in which MuniNet retains ownership hereunder as set forth in Section 2.1 and Section 2.3.

"NG-KIH Network" means the Next Generation Kentucky Information Highway Project (AKA KentuckyWired).

"Network Operation Center" or "NOC" means a telecommunications point of presence and, unless the context indicates otherwise, refers to a MuniNet-designated point of presence along the Route depicted in Exhibit A-1, A-2, and A-3.

"Outage" means that the Commonwealth Fibers are not Available.

"Permitted Users" means OpenFiber Kentucky Company, LLC, KentuckyWired Operations Company, LLC, NG-KIH Design Build LLC and LTS Kentucky Managed Technical Services LLC.

"Representatives" shall have the definition set forth in Section 19.1.

"Required Rights" shall have the meaning assigned to the term in Section 4.2.

"Released Party" means each of the following:

- (a) Any Affiliates of the other Party, Facility Owners, and any Lenders, except to the extent such Lender has assumed a Party's position under this Agreement by reason of default by such Party or foreclosure by the Lender;
- (b) Any employee, officer, director, stockholder, member, or trustee of the other Party or its Affiliates or Lenders; or
- (c) Assignees of the entities included in the above subparagraphs (a) or (b) and any employee, officer, director, stockholder, partner, member, or trustee of such assignees.

"ROW" means right-of-way.

"Route" shall mean the route upon which the System is or will be constructed and installed and shall consist of the Core Segment and the Lateral Segments.

"Segment" shall refer to the Core Segment, Lateral Segment 1, or Lateral Segment 2 as the context requires.

"Segments" means any of the Core Segment, Lateral Segment 1, and Lateral Segment 2 when referred to collectively.

"Span" means a discrete portion of the System and may refer to a portion of the System between two Transmission Sites or between a Transmission Site and a point of presence or System end point, or to a portion of the System between two points of presence or a point of presence and a System end point, or a portion of the System affected by relocation or other circumstance.

"Site(s)" shall mean the sites listed in Exhibit D.

"System" shall have the meaning set forth in Paragraph F above.

"Taking" shall have the definition set forth in Section 21.2.

"Term" means the term of this Agreement as set forth in Section 9.1, and includes any renewal term, as may be agreed to by the Parties in writing.

"Third Parties" means private entities (including but not limited to NG-KIH Design Build LLC) that may wish to construct last mile fiber spurs to Sites.

"Transmission Sites" means the MuniNet designated optical amplifier, regenerator, or junction sites along the Route as specified in Exhibits A-1, A-2 and A-3.

ARTICLE II CONVEYANCE OF IRU

2.1. Conveyance upon Acceptance. Effective as of the respective Acceptance Date for the Core Segment, Lateral Segment 1 and Lateral Segment 2, and contingent upon Commonwealth's timely payment as provided for in Section 3.3 of this Agreement, MuniNet hereby grants to Commonwealth an exclusive IRU during the Term (the "Commonwealth IRU"), for the purposes described herein, in the Commonwealth Fibers along the Route as described in Exhibits A-1, A-2, and A-3, and in the Fibers allocated to the Commonwealth within the Building Entrance Cables in accordance with Section 2.3. The Commonwealth Fibers within the Route are more particularly described as follows:

a. Core Segment

MuniNet shall construct the Core Segment using primarily underground construction and installation. The Core Segment shall consist of approximately 169,643 feet of 288 count fiber optic cable, of which 240 individual fibers shall be Commonwealth Fibers and 48 individual fibers shall be MuniNet Fibers. MuniNet shall complete construction of the Core Segment by December 7, 2018

b. Lateral Segment 1

MuniNet shall construct Lateral Segment 1 using primarily underground fiber construction and installation for approximately 111,500 feet of 144 count fiber optic cable, of which 56 individual fibers shall be Commonwealth Fibers and 88 individual fiber shall be MuniNet Fibers. MuniNet may install new Fibers or utilize existing Fibers in Lateral Segment 1. MuniNet shall complete construction of Lateral Segment 1 by May 29, 2018.

c. Lateral Segment 2

MuniNet shall construct Lateral Segment 2 using primarily underground fiber construction and installation for approximately 66,453 feet of 144 count fiber optic cable, of which 48 individual fibers shall be Commonwealth Fibers and 96 individual fibers shall be MuniNet Fibers. MuniNet may install new Fibers or utilize existing Fibers in Lateral Segment 2. MuniNet shall complete construction of Lateral Segment 2 by March 5, 2019.

2.2. Construction Responsibilities. MuniNet shall be responsible for all elements of construction of the Segments and the Building Entrance Cables, including but not limited to: walkouts, staking, engineering, permitting, pole attachments and pole attachment agreements, make ready engineering and construction, conduit access, required ROW and/or easement, all required Fiber and equipment installation, Building Entrance Cables and termination on fiber panels within Sites, including meeting the standards set forth in Exhibit C – Cable Installation Guidelines. Notwithstanding the foregoing sentence, Commonwealth shall provide at its sole cost a fiber connection cabinet for installation by MuniNet at the western end of the Core Segment and will obtain all permits, ROW, and/or easements necessary for installation and operation of the fiber connection cabinet at that location.

- 2.3. Sites and Building Entrance Cable. MuniNet shall be responsible for extending and installing certain fiber optic cables from the Route to the Sites designated in Exhibit D of this Agreement (each, a "Building Entrance Cable") in accordance with the guidance provided in Exhibit F. At each Site, MuniNet will bring the Building Entrance Cable to a fiber termination panel at a location established by agreement of the Commonwealth and MuniNet. MuniNet at its cost shall supply the fiber termination panel at each Site. The Parties will establish, on a Site by Site basis, where the Building Entrance Cable will enter the structure on the Site and where the fiber termination panel at which the Building Entrance Cable will be terminated will be located within said structure. Provided, however, if the Parties have not agreed as to where the fiber termination panel will be located by the time that MuniNet is ready to install the Building Entrance Cable at the Site, MuniNet will (i) install a 4x4 backboard sheet at a location of MuniNet's choosing that is compatible with Good Industry Practice, (ii) mount a fiber termination panel to the backboard, (iii) coil 25 feet of cable at the Site, and (iv) terminate the Building Entrance Cable at the fiber termination panel on the backboard In all other instances, MuniNet will (i) install a 4x4 backboard sheet at the agreed location, (ii) mount a fiber termination panel to the backboard, (iii) coil 25 feet of cable at the Site, and (iv) terminate the Building Entrance Cable at the fiber termination panel on the backboard. The Commonwealth will provide at its expense all jumpers required for connecting the Commonwealth Equipment to the fiber termination panels at the Sites. The Commonwealth shall have an IRU (upon the terms and conditions described in Section 2.1) in the number of Fibers in the Building Entrance Cable for a particular Site as is shown in the column of Exhibit D designated as "Fiber Needed" pertaining to the respective Site. All other Fibers within each such Building Entrance Cable shall be MuniNet Fibers and may be employed or granted (whether through ownership, IRU, lease, or otherwise) by MuniNet for any lawful purpose.
- **2.4.** Completion of Construction. MuniNet shall complete construction of the Core Segment, Lateral Segment 1 and Lateral Segment 2 by the completion date for each Segment set forth in Section 2.1(a), (b) and (c), respectively.
- 2.5. Additional Fibers. Commonwealth may request the grant of an IRU in additional fibers from MuniNet in any of the Segments. MuniNet shall have no obligation to provide such IRUs in additional fibers, however, and such a request shall not be considered a request for a Change for purposes of this Agreement. Any such grant shall be effective only upon the written agreement of both Parties based upon mutually agreeable pricing, terms and conditions.

ARTICLE III CONSIDERATION

3.1. Contract Price. The total construction costs for the Segments and Building Entrance Cables, exclusive of any rock adder or Change that may apply, is provided herein. Commonwealth's share of the estimated construction costs for a particular Segment is calculated by dividing the total construction cost for the Segment by the number of Fiber strands available in the Segment, then multiplying the quotient by the number of Fiber strands in the Segment to be provided to the Commonwealth. MuniNet will be responsible for the portion of said construction costs for the Segments above the Commonwealth's cumulative share.

- a. Commonwealth's total share of the construction costs for the Segments is \$2,641,404.89, exclusive of (i) the value of fiber optic cable the Commonwealth will provide for the construction of the Core Segment in accordance with Section 3.4 of this Agreement, (ii) possible additional payment by Commonwealth with respect to rock boring in accordance with Subsection e. of this Section 3.1, and (iii) the costs associated with any Changes.
- b. MuniNet's total share of the construction costs is \$1,239,142.70, exclusive of (i) the value of fiber optic cable MuniNet will provide for the construction of the Lateral Segments, and (ii) possible additional expense arising from rock boring beyond that to be paid by Commonwealth pursuant to Subsection e. of this Section 3.1.
- c. Commonwealth will pay MuniNet the additional sum of \$209,880.00 for constructing the extension of the Building Entrance Cables from the Segments to the various Sites set forth in Exhibit D and installing the Building Entrance Cable and fiber termination panel at each of said Sites. The amount set forth in the immediately preceding sentence shall include MuniNet's cost of acquiring the necessary fiber optic cable, but shall be exclusive of (i) possible additional payment by Commonwealth with respect to rock boring in accordance with Subsection e. of this Section 3.1, and (ii) the costs associated with any Changes.
- d. The sum of the amounts to be paid by the Commonwealth under subsections a. and c. of this Section, exclusive of any adder for rock and Change costs, is \$2,851,284.89 (the "Contract Price).
- The respective construction costs for the Segments and the Building Entrance Cables to be borne by each Party as set forth above in this Section 3.1 do not include the costs for boring through rock. MuniNet shall maintain detailed records of the precise locations along the Route and the paths of the Building Entrance Cables at which rock formations are encountered that in Customary Industry Practice make boring of the rock for installation of the Cable necessary or advisable. MuniNet shall maintain detailed records of the locations and linear footage of all borings performed on account of rock and the costs incurred for the performance of such boring work. MuniNet shall make regular reports to the Commonwealth concerning the extent, locations, and costs of rock boring work done for purposes of constructing the Cable in the Segments and the Building Entrance Cables. All records to be kept by MuniNet pursuant to this Section 3.1.e. shall be available for inspection by the Commonwealth at all reasonable times. Rock boring work shall be performed for MuniNet by a contractor selected in compliance with the applicable public bidding statutes. For all rock boring work performed in connection with construction of one or more of the Segments and with extension of the Building Entrance Cables to any of the Sites, a portion of the fully-allocated costs, including MuniNet's reasonable overhead charge, for performance of the work by MuniNet (as reasonably determined by MuniNet, but not to exceed \$42.50 per foot) shall be paid by the Commonwealth in accordance with the following percentages: Core Segment - 83%; Lateral Segment 1 - 39%; Lateral Segment 2 - 33%; and Building Entrance Cables -50%.
- f. MuniNet shall be responsible for all costs associated with maintaining the Fibers of the Segments and the Building Entrance Cables in accordance with the requirements of the Maintenance Agreement attached hereto as Exhibit H, including but not limited to cable, locates, conduit fees, pole attachment fees, joint use fees, all routine, unscheduled and emergency maintenance and MuniNet's equipment. MuniNet shall have no obligation to relocate or

maintain any Building Entrance Cable or to install a new Building Entrance Cable with respect to any Site that may be relocated after initial installation of the Building Entrance Cable to the Site made in accordance with the terms of this Agreement. Notwithstanding any provision of this Agreement (including the attached Exhibits), the costs incurred by MuniNet in making any relocations of any portion of the System or a Building Entrance Cable mandated by the Commonwealth or any of its political subdivisions during the Term shall be determined and paid to MuniNet by Commonwealth in accordance with Section 7.8 of this Agreement.

3.2. Method of Payment. Commonwealth shall pay the Contract Price and any other payments pursuant to this Agreement by wire transfer of United States currency to an account or accounts designated by MuniNet in writing.

3.3. Time of Payment.

- a. Commonwealth shall make a payment of \$1,425,642.44 (representing 50% of the Contract Price) that is due on the Effective Date. MuniNet acknowledges that pursuant to KRS 45.453, the Commonwealth has thirty (30) days thereafter in which to make the payment required by this subsection. The Parties agree that for each calendar day after the Effective Date that said payment is not received by MuniNet, a day shall be added to the respective dates by which MuniNet is required to have completed construction of the Segments as set forth in Section 2.1 of this Agreement.
- b. Commonwealth shall make a payment of \$712,821.22 (representing 25% of the Contract Price) upon completion of 50% of the total 347,596 feet of the Segments to be constructed (i.e., 173,798 feet).
- c. Commonwealth shall make a payment of \$427,692.73 (representing 15% of the Contract Price) upon the earlier to occur of (i) completion of 75% of the total 347,596 feet of the Segments to be constructed (i.e., 260,697 feet), or (ii) completion of construction of the Core Segment.
- d. Commonwealth shall make a payment of \$285,128.49 (representing 10% of the Contract Price) upon the satisfaction by MuniNet of the each of the following: (i) completion of construction of each of the Segments; (ii) compliance of the Commonwealth Fibers in each of the Segments with the applicable Acceptance Standards; and (iii) delivery to Commonwealth of the Project Records specified in Exhibit G to the Agreement.
- e. Simultaneously with the payment required by Subsection d. of this Section, Commonwealth shall also pay the compensation due to MuniNet in connection with any Changes (to the extent not previously paid) and Commonwealth's portion of the rock boring costs, if any, determined in accordance with Section 3.1.e.
- **3.4. Provision of Fiber.** Commonwealth and MuniNet shall each contribute Fiber for this System.
- a. Commonwealth shall contribute approximately 169,643 feet of 288 count fiber optic cable for the Core Segment, the value of which is not included in the Commonwealth's share of the construction costs in Section 3.1 of this Agreement. Upon delivery to MuniNet, the

fiber optic cable shall meet ITU-T standards for single-mode optical fiber and cable (including Recommendation ITU-T G.652). At the time of its delivery, Commonwealth shall provide the certificate of compliance for each reel of fiber, as provided by Corning, showing the fiber optic cable has been tested and meets the Corning cable specifications. An example of the certificate of compliance is provided in Exhibit J – Corning Certificate of Compliance. If such certification is not provided in a timely manner or if MuniNet's contractor for construction of the Core Segment, in its sole discretion, elects to not rely on the certificate provided by Corning and instead have the fiber optic cable tested, MuniNet will have the fiber optic cable tested at the site of its delivery by Commonwealth at a cost of \$936.00 per 288 count reel, or \$3.25 per fiber for reels less than 288 count, of fiber optic cable to cover the testing costs which is included in the Contract Price. Within a reasonable time after delivery of a reel of fiber optic cable, MuniNet will provide the Commonwealth with written notice of MuniNet's acceptance of the reel or rejection of the reel as nonconforming. MuniNet will also supply the Commonwealth with the results of all tests, if any, performed on the fiber optic cable by or on behalf of MuniNet or its contractor for construction of the Core Segment. The Commonwealth will ship the fiber in one or more shipments as designated by MuniNet within 45 days of receiving a written request or requests from MuniNet setting forth the amount of fiber and the delivery location. The fiber optic cable delivered by Commonwealth will be free of all liens and other interests of third parties and Commonwealth will execute a bill of sale in favor of MuniNet at the time of delivery. Title to fiber optic cable that meets the required standards will pass to MuniNet upon delivery to MuniNet.

b. MuniNet shall contribute approximately 111,500 and 66,453 feet of 144 count fiber optic cable for Lateral Segment 1 and Lateral Segment 2, respectively, the value of which is not included in MuniNet's share of the construction costs in Section 3.1 of this Agreement. MuniNet may install new Fibers or utilize existing Fibers in the Lateral Segments. Upon completion of construction, the Commonwealth Fibers in the Lateral Segments will meet the acceptance standards set forth in Exhibit B.

Provided, however, should the amount of fiber optic cable required for construction of the Core Segment increase as a result of a Change request from the Commonwealth, the Commonwealth shall promptly provide the additional footage required. If the amount of fiber optic cable required for construction of Lateral Segment 1 or Lateral Segment 2 increases, MuniNet shall provide the additional footage required.

ARTICLE IV CONSTRUCTION

4.1. Fiber Acceptance Testing. Exhibit B sets forth Post-Construction Fiber Acceptance Testing procedures and test deliverables that MuniNet shall provide to Commonwealth, and the procedures for determining the Acceptance Date of a Segment. Notwithstanding the foregoing, all Commonwealth Fibers in the Segments shall meet the Acceptance Standards as described in Exhibit B on or before the respective construction completion dates for the Segments as set forth in Section 2.1, as such dates may be adjusted in accordance with the terms of this Agreement.

- **4.2. Acceptance Date Obligations**. As of the Acceptance Date of the Commonwealth Fibers in any Segment, MuniNet hereby represents and warrants on an ongoing basis throughout the remainder of the Term that:
 - (a) MuniNet shall have obtained all rights, licenses, authorizations, easements, leases, fee interests, or agreements necessary to provide for the occupancy by such Segment of real property or fixtures (such as conduit, bridges, river crossings, or transmission towers);
 - (b) MuniNet is the legal owner of the Commonwealth Fibers or shall have obtained by IRU agreement, lease, or otherwise the right to use any portion of the System along the Segment or Span it does not own; and
 - (c) such Segment and the Commonwealth Fiber in such Segment shall be free of defects in materials and workmanship and is installed and constructed, at a minimum, in accordance with the specifications set forth in Exhibits B and C.

The rights MuniNet is required to obtain pursuant to Subsections (a) and (b) above are referred to as "Required Rights." Subject to the terms of Section 9.2, MuniNet shall renew or replace existing Required Rights through the Term.

- 4.3. Provision of As-Built Drawings. Within two (2) months after the Acceptance Date of a Segment, MuniNet will provide Commonwealth with as-built drawings for the Segment complying with the requirements for as-built drawings as set forth in Exhibit G. If there is a material change in the as-built drawings as a result of maintenance or relocation, MuniNet shall deliver updated as-built drawings to Commonwealth with respect to the relevant Segment within the later of one-hundred eighty (180) calendar days following the completion of such change or thirty (30) calendar days after receipt of Commonwealth's request.
- 4.4. Compliance with Exhibit C Cable Installation Guidelines. MuniNet shall complete all construction in accordance with Exhibit C Cable Installation Guidelines.

ARTICLE V CONNECTION AND ACCESS TO THE SYSTEM

- **5.1.** Connections. Subject to the provisions herein, Commonwealth shall pay for and arrange all connections of the Commonwealth Equipment and its other facilities with the Commonwealth Fibers at the points of demarcation set forth in Exhibit E.
- 5.2. No Unauthorized Access to System. Other than the Commonwealth Fibers, Commonwealth shall not access the MuniNet Fibers, any NOC, or any other part of the System or permit any third party, including the Permitted Users, to access the MuniNet Fibers, any NOC, or any other part of the System, without the prior written consent of MuniNet. Commonwealth shall be entitled to access the Commonwealth Fibers from all reasonable and customary access points, including without limitation all associated (a) splicing connections; (b) splice boxes and vaults; (c) with regard to Commonwealth Fibers installed above ground, cabinets and huts; and

(d) with regard to Commonwealth Fibers installed below ground, handholes, manholes, and conduit.

ARTICLE VI THIS SECTION INTENTIONALLY LEFT BLANK

ARTICLE VII CHANGES TO THE SYSTEM

- 7.1 Request for a Change. Either the Commonwealth or MuniNet ("Applicant" or "Respondent" as the case may be) may propose a Change in the form of a modification of the Route, the System design specifications, or the addition, elimination or relocation of one or more Sites by giving written notice to the other Party using the Change Form attached to this Agreement at Exhibit I. The Applicant shall provide all information regarding the proposed Change, including but not limited to, a detailed description of the proposed Change, its impact on the System, Applicant's proposed equitable adjustment of the Contract Price and the applicable dates by which MuniNet shall have completed construction of of the Segment(s), all information required by the Change Form and any other information which may support the Change request.
- 7.2 Change Meeting. If promptly requested by either Party, a meeting will be held within fifteen (15) Business Days of Respondent's receipt of the Change Form to discuss the proposed Change, its potential impact on the System, its costs or any other matter relating to the Change or the System. Prior to or during the meeting, the Respondent may request additional information which the Applicant agrees to provide within ten (10) Business Days of the request. The Parties may agree to multiple meetings to discuss the proposed Change. Applicant may amend the Change Form to address concerns raised by Respondent in the course of the Parties' discussions.
- 7.3 Respondent's Review of Change. The Respondent may reject any request for a Change if the Change Form is incomplete or if, upon review of the Change Form and all supporting information, the Respondent reasonably determines that the Change could have a negative impact on the System, that the proposed adjustments of the Contract Price and/or construction completion deadlines are insufficient or inequitable, or that any other terms and conditions of the proposed Change are inequitable or impracticable of performance. The Respondent shall complete its review of the Change within twenty (20) Business Days of the later to occur of Respondent's receipt of the Change Form (as same may be amended) and the last meeting held in accordance with Section 7.2 of this Article.
- 7.4 Approval or Rejection of Change. If the Respondent elects to reject the proposed Change upon completion of its review of the proposed Change in accordance with Section 7.3 of this Article, the Respondent shall provide a written response explaining the basis for its rejection of the Change. Approval of a Change may be demonstrated by the signature of an authorized representative of Respondent on the Change Form or by other written statement approving the

Change. Upon execution by the Parties of the Change Form or other written agreement setting forth the terms and conditions of the Change, work may begin to perform the Change.

- 7.5 Payment. If payment for a Change is due from the Commonwealth, it shall pay the Change costs within thirty (30) days of its written approval of the Change. If payment for a Change is due from MuniNet, it may (a) provide a credit to the Commonwealth to be applied against any payment due from the Commonwealth under this Agreement or (b) make a lump sum payment within thirty (30) days of the Commonwealth's approval of the Change under Section 7.4 of this Article.
- 7.6 Dispute. If the Applicant disagrees with the Respondent's rejection of a Change, the Applicant may within five (5) Business Days of receiving the rejection of the Change initiate a Claim under the dispute procedure set forth in Article XXII of this Agreement
- 7.7 Records. The Applicant and Respondent shall maintain all documents relating to each Change, including electronic documents, in accordance with Exhibit H and the Kentucky Open Records Act.
- 7.8 Change Costs. Where the Parties have not agreed on a lump sum amount (which may include an allowance for overhead and profit) or unit pricing for determining the value of work to be performed under a proposed Change or of any Claim pertaining to an adjustment of the Contract Price, such value of the work (the "Change Costs") will be determined as provided in this subsection. The Change Costs means the sum of all costs necessarily incurred and paid by the Party performing the Change (the "Change Party") in the proper performance of the work. Such costs shall be in amounts no higher than those prevailing in the locality of the System, and shall include the following items:
- (a) Costs of all materials and equipment furnished and incorporated in the Change work, including costs of transportation and storage thereof, suppliers' field services required in connection therewith;
- (b) Payments made by Change Party to subcontractors for work performed or furnished by subcontractors;
- (c) Payments made by Change Party to engineers for professional services provided or furnished by engineers under an agreement with the Change Party;
- (d) Costs of special consultants and independent contractors (including, but not limited to, surveyors, attorneys, testing laboratories, and accountants) employed for services specifically related to the Change Work;
- (e) Supplemental costs directly related to performance of the Change Work such as utilities, fuel, safety and sanitary facilities at the work site, premiums or costs for any required bonds or permits, and all costs associated with acquisition of needed rights-of-way, permits, and/or easements; and

In addition to the foregoing Change Costs, the Change Party shall also be allowed a fixed fee for overhead and profit of ten (10) percent of the sum of the Change Costs.

- 7.9 Rights-of-Way, Permits, Easements. The Change Party shall make commercially reasonable efforts to acquire rights-of-way, permits, and/or easements required to perform the Change, but shall have no liability under this Agreement arising by virtue of any inability on its part to acquire such rights-of-way, permits, or easements at a cost or within a time frame that the other Party deems reasonable and acceptable.
- 7.10 Period for Requesting Changes. Neither the Commonwealth nor MuniNet may request a Change after construction work on the Segments has been substantially completed.

ARTICLE VIII USE OF THE SYSTEM

- **8.1.** Notice of Damage. Commonwealth and MuniNet shall each promptly notify the other Party of any matters pertaining to any damage or impending damage to or loss of continuity of the Commonwealth Fibers that are known to it or that could reasonably be expected to adversely affect the Commonwealth Fibers as provided in the Maintenance Agreement.
- 8.2. Preventing Interference with Other Fibers. Neither Commonwealth nor MuniNet shall use equipment, technologies, or methods of operation that interfere in any way with or adversely affect the System or the use of the System by the other Party or authorized third parties or the respective fibers, equipment, or facilities of the other Party or authorized third party. Each Party shall take all reasonable precautions to prevent damage to the System and to Fibers used or owned by the other Party or third parties. Notwithstanding the above, the provisions of this Section shall not prevent a Party from using commercially reasonable equipment, technologies, or methods of operation if the interference or adverse effect on the other Party or a third party results primarily from such other Party's or third party's use of equipment, technologies, or methods of operation that are not commercially reasonable or that are not standard in the telecommunications industry.
- **8.3.** Liens. Commonwealth shall not cause or permit any part of the System to become subject to any mechanic's, materialmen's, or vendor's lien, or any similar lien. MuniNet shall not cause or permit any of Commonwealth's rights under this Agreement to become subject to any mechanic's, materialmen's, or vendor's lien, or any similar lien. If a Party breaches its obligations under this Section, it shall immediately notify the other Party in writing, and shall promptly cause such lien to be discharged and released of record without cost to the other Party.

ARTICLE IX TERM

- **9.1. Term.** Subject to the Commonwealth's right to terminate this Agreement earlier in accordance with 200 KAR 5:312, the Term of the Agreement shall begin on the Effective Date and end on the thirtieth (30th) anniversary of the Effective Date.
- 9.2. Condition on Renewal; Termination after Term. The Parties may, but are not required to, renew or extend this Agreement upon the expiry of the Term upon such terms and conditions as the Parties may agree upon in writing. Neither Party shall be required, however, to extend the Term, renew the Agreement or otherwise agree to Commonwealth's or any third party's use of the Fiber or System after the Term. During any extension period, unless the

Parties agree otherwise in writing, MuniNet may terminate the Agreement with respect to a Segment on at least twelve (12) months' notice. MuniNet may provide such notice terminating the Agreement pursuant to this Section, however, only if MuniNet or the Facility Owner has made a bona fide determination to decommission the Cable in the Segment within six (6) months of the date for which MuniNet gives notice of termination of the Agreement.

- 9.3. Effect of Termination. No termination of this Agreement shall affect the rights or obligations of any Party hereto:
 - (a) with respect to any payment hereunder for services rendered prior to the date of termination or with respect to recovery of all amounts permissible under 200 KAR 5:312;
 - (b) pursuant to Articles XI (Audit Rights), XIV (Indemnification), XV (Limitation of Liability), XVI (Insurance), XVII (Taxes and Governmental Fees), XIX (Confidentiality), XX (Prohibition on Improper Payments), XXII (Dispute Resolution), or XXIII (Rules of Construction) or Sections 12.2 (Exclusion of Warranties); or
 - (c) pursuant to other provisions of this Agreement that, by their sense and context, are intended to survive termination of this Agreement.

ARTICLE X MAINTENANCE AND RELOCATION

- 10.1. Maintenance. MuniNet will provide maintenance of the Commonwealth Fibers during the Term and pursuant to the Maintenance Agreement attached hereto and incorporated herein as Exhibit H.
- 10.2. MuniNet Relocation Procedures. If MuniNet is required by a third party with legal authority to do so, to relocate all or any portion of the System or the Commonwealth Fibers, MuniNet shall provide Commonwealth thirty (30) calendar days' prior notice of any such relocation, if possible, and shall proceed with such relocation. MuniNet shall have the right to direct such relocation, including the right to determine the extent of, the timing of, and methods to be used for such relocation, provided that any such relocation:
 - shall be constructed and tested in accordance with the specifications and requirements set forth in this Agreement and applicable Exhibits;
 - (b) shall not adversely affect the use, operation or performance of Commonwealth's network or business, or change any Connecting Points or end points of the Segments; and
 - shall not interrupt service to Commonwealth except to the extent deemed necessary by MuniNet to effect the relocation in accordance with Customary Industry Practice after giving at least fourteen (14) days' notice to Commonwealth of the date, time and expected duration of the interruption.

10.3. Maintenance of Commonwealth Equipment Excluded. MuniNet shall have no obligation under this Agreement to maintain, repair, or replace Commonwealth Equipment.

ARTICLE XI AUDIT RIGHTS

11.1. Subject to the Commonwealth's and MuniNet's obligations under the Kentucky Open Records Act, each Party shall keep such books and records (which shall be maintained on a consistent basis and substantially in accordance with generally accepted accounting principles) and shall readily disclose the basis for any charges (except charges fixed in advance by this Agreement or by separate agreement of the Parties) or credits, ordinary or extraordinary, billed or due to the other Party under this Agreement and shall make them available for examination, audit, and reproduction by the other Party and its duly authorized agents or representatives for a period of one (1) year after such charge or credit is billed or due.

ARTICLE XII WARRANTIES

- 12.1. Warranties Relating to Agreement Validity. In addition to any other representations and warranties contained in this Agreement, each Party hereto represents and warrants to the other that:
 - (a) it has the full right and authority to enter into, execute, deliver, and perform its obligations under this Agreement;
 - (b) it has taken all requisite corporate action to approve the execution, delivery, and performance of this Agreement;
 - (c) its execution of and performance under this Agreement shall not violate any applicable existing regulations, rules, statutes, or court orders of any local, state, or federal government agency, court, or body; and
 - (d) this Agreement constitutes a legal, valid and binding obligation enforceable against such Party in accordance with its terms.
- 12.2. EXCLUSION OF WARRANTIES. EXCEPT FOR THE LIMITED EXPRESS WARRANTIES SET FORTH IN SECTION 12.1, MUNINET MAKES NO WARRANTY TO COMMONWEALTH OR ANY OF ITS REPRESENTATIVES, AFFILIATES, USERS OF ITS IRU, OR LENDERS, WHETHER EXPRESS OR IMPLIED OR STATUTORY, AS TO THE INSTALLATION, DESCRIPTION, QUALITY, MERCHANTABILITY, COMPLETENESS, USEFUL LIFE, FUTURE ECONOMIC VIABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY FIBERS, THE SYSTEM, OR ANY SERVICE PROVIDED HEREUNDER OR DESCRIBED HEREIN, OR AS TO ANY OTHER MATTER, ALL OF WHICH WARRANTIES ARE HEREBY EXPRESSLY EXCLUDED AND DISCLAIMED.
- 12.3. No Third-Party Warranties. No Facility Owners, Released Parties or Lenders have made any representation or warranty of any kind, express or implied, to Commonwealth concerning MuniNet, the Commonwealth Fibers, the Cable, or the System or as to any of the

matters set forth in Sections 12.1 or 12.2. No Lenders of the Commonwealth have made any representation or warranty of any kind, express or implied, to MuniNet concerning Commonwealth, the Commonwealth Fibers, the Cable, or the System or as to any of the matters set forth in Sections 12.1 or 12.2.

ARTICLE XIII DEFAULT

- 13.1. Default and Cure. The Commonwealth may terminate this Agreement for either default or convenience in accordance with 200 KAR 5:312. Except as set forth in Section 13.2, a Party shall not be in default under this Agreement until one of the following events occurs: (i) said Party fails to make a payment of any undisputed amount required under this Agreement when due and such failure continues for more than ten (10) days after such Party receives written notice of such failure from the other Party; provided, however, that the notice and supporting statement concerning the amount in dispute were provided in accordance with Section 13.2; or (ii) either Party fails to perform or comply with any other material obligation, agreement, term, or provision of this Agreement applicable to it and such failure continues for more than thirty (30) days after such Party receives written notice of such failure from the other Party; provided, however, that if such failure to perform or comply cannot reasonably be cured within such thirty (30) day period, and if the Party receiving notice of such failure is proceeding promptly and with due diligence in curing the same, the time for curing such failure shall be extended for a period of time as may reasonably be necessary to complete such curing. Any event of default may be waived at the non-defaulting Party's option. Upon the failure of a Party to timely cure any such default after notice thereof from the other Party and expiration of the above cure periods, then the non-defaulting Party may, subject to the terms of Articles XV (Limitation of Liability) and XXII (Dispute Resolution), pursue any legal remedies it may have under applicable law or principles of equity relating to such breach.
- 13.2. Disputed Amounts. Notwithstanding any provision to the contrary in Sections 13.1 or 13.3, either Party shall have the right to dispute in good faith any amount due under this Agreement, provided that (i) the disputing Party provides written notice of such dispute to the other Party by the date that any such amount is due; (ii) the disputing Party presents a written statement of any billing discrepancies to the other Party in reasonable detail together with supporting documentation and evidence within fifteen (15) days after the date that any such amount is due; and (iii) the disputing Party negotiates in good faith with the other Party to resolve any such dispute within sixty (60) calendar days of the date any such amount is due. When the Parties agree to a resolution of a dispute, Commonwealth shall pay any amounts owed to MuniNet in accordance with such resolution within thirty (30) days of the resolution of such dispute. When the Commonwealth is owed an amount as a result of a resolved dispute, MuniNet shall provide a credit of such amount on Commonwealth's next invoice or, if final payment has been made by the Commonwealth for construction of the Segments and installation of the Building Entrance Cables to the Sites, within thirty (30) days of resolution of the dispute. In the event the Parties fail to mutually resolve or settle the dispute within sixty (60) days of the date any such disputed amount is due, the Parties will pursue resolution of the dispute in accordance with Article XXII of this Agreement.

- 13.3. Failure to Pay. If Commonwealth is in default under Section 13.1(i) for failure to pay any undisputed amounts owed under this Agreement, and such failure continues for a period of ten (10) calendar days after receipt of MuniNet's notice that it will disconnect the Commonwealth Fibers, MuniNet may, in addition to the remedies set forth in Section 13.1, disconnect the Commonwealth Fibers from all Connecting Points and from all Commonwealth Equipment on MuniNet's or other person's premises and cease providing power and other MuniNet shall restore such Connecting Points and Commonwealth Equipment connections and resume providing services only if Commonwealth before such restoration (a) pays MuniNet's bona fide estimate of all costs incurred or expected to be incurred with respect to actions taken by MuniNet pursuant to this Section 13.3, and (b) pays all past-due amounts with applicable interest pursuant to KRS 45.454. In the event that, upon a failure timely to pay all Contract Price payments under Section 3.1 above or other amounts owed to MuniNet under this Agreement (such as any rock boring adder that may apply), Commonwealth does not take the actions described in clauses (a) and (b) above in this Section 13.3 within thirty (30) days after MuniNet's disconnection of the Commonwealth Fibers or cessation of services as described above in this Section, then, in addition to all other remedies described in this Section 13.3, this Article XIII or otherwise in this Agreement, MuniNet shall have the right to terminate this Agreement and the Commonwealth IRU with respect to the Commonwealth Fibers and Commonwealth shall have no further rights under this Agreement.
- 13.4. Interest. If Commonwealth fails to make any payment under this Agreement when due, such amounts shall accrue interest, from the date such payment is due until paid, including accrued interest, at a rate (unless specifically described elsewhere in this Agreement) equal to one percent (1%) per annum or, if lower, the highest percentage allowed by law.

ARTICLE XIV INDEMNIFICATION

14.1. Indemnification. To the extent permitted by law, including but not limited to Section 177 of the Kentucky Constitution, the Commonwealth and MuniNet (each Party known individually as the "Indemnitor") hereby agree to indemnify, defend, protect and hold harmless the other Party and its employees, officers, directors, members, managers, and the employees, officers, and directors of its members (the "Indemnitee"), from and against, and assumes liability for: (i) claims made by a third party for any injury, loss or damage to any person, tangible property or facilities of any person to the extent arising out of or resulting from the grossly negligent acts or omissions or willful misconduct of the Indemnitor or its officers, employees, servants, Affiliates, agents, contractors, licensees, invitees and vendors, or any entity for whom it is in law responsible, arising out of or in connection with the performance by Indemnitor of its obligations under this Agreement; (ii) any claims, liabilities or damages arising out of any violation by Indemnitor of any regulation, rule, statute or court order of any Government Authority in connection with the performance by Indemnitor of its obligations under this Agreement; and (iii) any liability to a third party arising directly or through one or more intermediaries from an action or claim brought by the Indemnitor against such third party, but only to the extent such third party has a right of indemnification, impleader, cross claim, contribution or other right of recovery against the Indemnitee for any indirect, special or consequential damages awarded against such third party in favor of the Indemnitor.

14.2. Material and Continuing Obligation. Each Party's obligation to indemnify, defend, protect, and save the other Party harmless is a material obligation to the continuing performance of the other Party's obligations hereunder.

ARTICLE XV LIMITATION OF LIABILITY

15.1. EXCLUSION OF INDIRECT DAMAGES. SUBJECT TO 200 KAR 5:312 IN THE CASE OF MUNINET'S DEFAULT, BUT NOTWITHSTANDING ANY PROVISION OF THIS AGREEMENT TO THE CONTRARY, NEITHER PARTY, NOR ITS MEMBERS OR AFFILIATES, SHALL BE LIABLE TO THE OTHER PARTY OR ITS EMPLOYEES, OFFICERS, DIRECTORS, MEMBERS, MANAGERS, FACILITY OWNERS, LENDERS AND AFFILIATES FOR ANY SPECIAL, INDIRECT, OR PUNITIVE DAMAGES, OR DAMAGES FOR LOST REVENUE OR LOST PROFITS, WHETHER FORESEEABLE OR NOT, ARISING OUT OF OR IN CONNECTION WITH SUCH PARTY'S PERFORMANCE OR FAILURE TO PERFORM ITS RESPECTIVE OBLIGATIONS HEREUNDER, INCLUDING, BUT NOT LIMITED TO LOSS OF PROFITS OR REVENUE (WHETHER ARISING OUT OF (I) TRANSMISSION INTERRUPTIONS OR PROBLEMS, ANY INTERRUPTION OR DEGRADATION OF SERVICE OR OTHERWISE; (II) CLAIMS OF COMMONWEALTH, WHETHER OCCASIONED BY ANY OBLIGATIONS PERFORMED BY, OR FAILED TO BE PERFORMED BY, THE OTHER PARTY; OR (III) ANY OTHER CAUSE WHATSOEVER, INCLUDING BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, OR STRICT LIABILITY, ALL CLAIMS FOR WHICH INDIRECT DAMAGES ARE HEREBY SPECIFICALLY WAIVED. **NOTHING** CONTAINED IN SECTION 15.1 SHALL BE DEEMED TO LIMIT AN INDEMNITOR'S **OBLIGATIONS** UNDER **SECTION** 14.1. FOR **PURPOSES** OF CLARITY. COMMONWEALTH SHALL ONLY BE ENTITLED TO SEEK DAMAGES THAT WOULD OTHERWISE BE EXCLUDED PURSUANT TO THIS SECTION 15.1 TO THE EXTENT THAT COMMONWEALTH IS PROHIBITED FROM WAIVING THE DAMAGES DESCRIBED IN SECTION 15.1 PURSUANT TO 200 KAR 5:312.

NOTWITHSTANDING THE FOREGOING, THE LIQUIDATED DAMAGES PROVISIONS SET OUT IN EXHIBIT H HERETO ARE EXCEPTED FROM THIS EXCLUSION HEREIN; PROVIDED, HOWEVER, THAT SAID LIQUIDATED DAMAGES SHALL NOT BECOME APPLICABLE TO MUNINET UNLESS AND UNTIL MUNINET HAS RECEIVED PAYMENT OF THE FULL CONTRACT PRICE AND ALL OTHER AMOUNTS OWED TO IT UNDER SECTION 3.1 OF THIS AGREEMENT.

15.2 No Recourse Against Released Parties. Neither Party shall have any recourse of any kind against any Released Party or any assets of a Released Party in respect of any Claim except in the case of such Released Party's gross negligence or willful misconduct, it being expressly agreed and understood that no liability whatsoever shall attach to, or be incurred by, any Released Party in respect of any other Claims under, or by reason of, this Agreement or any other instrument, arrangement or understanding related to the Commonwealth IRU. Each Party waives all such recourse to the extent set forth in this Section on behalf of its successors, assigns, and any entity claiming by, through, or under such Party.

15.3 Commonwealth Contracts. To the extent Commonwealth is permitted to allow other parties to use the Commonwealth Fibers for any purpose, Commonwealth, in any contract or offering of service, capacity, or rights of use that involves use of the System, shall include in such contract or offering a written limitation of liability that is binding on Commonwealth's customers and is a least as restrictive in all material respects as the limitations set forth in Sections 15.1 and 15.2.

ARTICLE XVI INTENTIONALLY LEFT BLANK

ARTICLE XVII TAXES AND GOVERNMENTAL FEES

- 17.1. Taxation of Commonwealth. MuniNet understands that as of the Effective Date, Commonwealth represents that it is a tax-exempt entity. Accordingly, and notwithstanding the remainder of this Article, MuniNet shall not, directly or indirectly, seek reimbursement or contribution from Commonwealth for any tax from which Commonwealth is, in fact, exempt.
- 17.2. Commonwealth Obligations. The Commonwealth represents that it is not subject to taxation.
- 17.3. MuniNet Obligations. Subject to Sections 16.2 above, MuniNet shall timely report and pay any and all sales, use, income, gross receipts, excise, transfer, ad valorem or other taxes, and any and all franchise fees or similar fees properly assessed against it due to its construction, ownership, physical location or use (other than use of the Commonwealth Fibers) of the System.

ARTICLE XVIII NOTICE

18.1. Notice Addresses. Unless otherwise provided in this Agreement, all notices and communications concerning this Agreement shall be in writing and addressed to the other Party as follows:

If to Commonwealth:

Commonwealth of Kentucky

Attention: Secretary

Finance and Administration Cabinet 702 Capital Avenue, Room 383 Frankfort, Kentucky 40601 Facsimile No. (501) 564-6785

With a copy to:

Kentucky Communications Network Authority

Attention: Executive Director 201 St. Clair Street, 4th Floor Frankfort, Kentucky 40601 Facsimile No. (502) 564-0883

If to MuniNet:

MuniNet Fiber Agency

Attn: Administrator

P.O. Box 1095, 401 Olive Street

Murray, Kentucky 42071 Facsimile No. (270) 753-6494

With a copy to:

MuniNet Fiber Agency

Attention: Chief Technical Officer P.O. Box 180, 1500 Broadway Paducah, Kentucky 42002-0180 [for courier delivery use 42001] Facsimile No. (270) 575-4027

or at such other address as may be designated in written notice delivered to the other Party.

18.2. Notice and Invoice Delivery. Unless otherwise provided herein, notices and invoices shall be hand delivered, sent by registered or certified U.S. Mail, postage prepaid, or by commercial overnight delivery service, or transmitted by facsimile, and shall be deemed served or delivered to the addressee or its office when received at the address for notice specified above when hand delivered, upon confirmation of sending when sent by facsimile, on the day after being sent when sent by overnight delivery service, or three (3) United States Postal Service business days after deposit in the mail when sent by U.S. mail.

ARTICLE XIX CONFIDENTIALITY

19.1. Confidentiality Obligation. The Parties have heretofore entered into a confidentiality and non-disclosure agreement for the protection of each Party's Confidential Information (as defined below). To the extent permitted by the Kentucky Open Records Act ("KORA"), if either Party provides confidential business or proprietary or trade secret information ("Confidential Information") to the other or, if in the course of performing under this Agreement or negotiating this Agreement a Party learned Confidential Information regarding the facilities or plans of the other, the receiving Party shall (a) protect the Confidential Information from disclosure to third parties with the same degree of care accorded its own confidential and proprietary information, but in any case with at least reasonable care and (b) refrain from using such Confidential Information except in negotiating or performing under this Agreement. Notwithstanding the above, a Party may provide such Confidential Information to its directors, officers, members, managers, employees, agents, attorneys, contractors, and consultants (collectively, the "Representatives"), and to its Affiliates, Lenders, Facility Owners, potential assignees (who are bound by a written agreement restricting use and disclosure of such Confidential Information on at least as stringent terms as are contained herein), and Representatives of Affiliates, in each case whose access is reasonably necessary. Each such recipient of Confidential Information shall be informed by the Party disclosing Confidential Information of its confidential nature in writing, and shall be directed to treat such information

confidentially and shall agree to abide by these provisions. In any event, each Party shall be liable (with respect to the other Party) for any breach of this provision by any person or entity to which that Party discloses Confidential Information. Should Commonwealth receive a request under the KORA to which Confidential Information provided by MuniNet is responsive, Commonwealth shall promptly give MuniNet notice of such request before disclosing any information with respect to such request; provided, however, that Commonwealth shall use its best efforts to ensure that any and all such Confidential Information is treated as exempt from disclosure pursuant to the KORA, and that if some portion of the information must be disclosed under the KORA, so much of the Confidential Information as qualifies as exempt from disclosure under the KORA will be redacted and not disclosed. The terms of this Agreement (but not its execution or existence) shall be considered Confidential Information for purposes of this Article, except as set forth in Section 19.3. The obligations set forth in this Section shall survive expiration or termination of this Agreement for a period of two (2) years, except that, with respect to any Confidential Information designated by the disclosing Party as a trade secret, and entitled to protection as such, the obligations set forth in this Section shall survive such expiration or termination indefinitely.

- 19.2. Permitted Disclosures. Notwithstanding any other provision herein, neither MuniNet nor Commonwealth shall be required to hold confidential any Confidential Information that:
 - (a) becomes publicly available other than through the recipient's disclosure in violation of the requirements of this Article;
 - (b) is required to be disclosed by a Government Authority, regulatory authority, or judicial order, rule, or regulation or proceedings with respect to this Agreement or a Party's obligations as a public entity, provided that a Party subject to such requirement shall promptly notify the other Party of such requirement;
 - (c) is independently developed by a person or entity without use of, or reference to the disclosing Party's Confidential Information;
 - (d) becomes available to a person or entity without restriction from a third party who is not otherwise restricted from disclosing such Confidential Information;
 - (e) is required by its Lender and is given to such Lender on a confidential basis; or
 - (f) to the extent disclosure by the receiving Party is required by applicable law or regulation.
- 19.3. Goodwill and Publicity. Neither Party shall use the name, trade name, service mark, or trademark of the other in any promotional or advertising material without the prior written consent of the other. The Parties shall coordinate and cooperate with each other when making public announcements related to the terms of this Agreement and each Party shall have the right to promptly review, comment upon, and approve any publicity materials, press releases,

or other public statements by the other Party that refer to, or that describe any aspect of, this Agreement.

ARTICLE XX PROHIBITION ON IMPROPER PAYMENTS

20.1. Neither Party shall use any funds received under this Agreement for illegal purposes or a purpose not contemplated by the terms of the Agreement or in compliance with ethical operation of the Party's business. Neither Party shall pay any commission, fees or rebates to any employee of the other Party. If either Party has reasonable cause to believe that one of the provisions in this Article has been violated, it, or its representative, upon presentation of evidence supporting such reasonable cause, may audit the books and records of the other Party for the sole purpose of establishing compliance with such provisions. Any such audit must be performed during the normal business hours of the Party being audited and in a manner that does not unreasonably interfere with the business operations of the Party being audited.

ARTICLE XXI FORCE MAJEURE; EMINENT DOMAIN

- 21.1. Excused Performance. Neither MuniNet nor Commonwealth shall be in default under this Agreement with respect to any delay in its performance caused by any of the following conditions (each a "Force Majeure Event"): (a) act of God; (b) fire; (c) flood; (d) material shortage or unavailability not resulting from the responsible Party's failure to timely place orders or take other necessary actions therefor; (e) government codes, ordinances, laws, rules, regulations, or restrictions; (f) war, acts of terrorism, vandalism or civil disorder; (g) Cable cuts not due to the gross negligence or willful act of MuniNet; or (h) any other cause beyond the reasonable control of the Party whose performance is delayed. The Party claiming relief under this Article shall promptly notify the other in writing of the existence of the Force Majeure Event relied on, the expected duration of the Force Majeure Event, and the cessation or termination of the Force Majeure Event. The Party claiming relief under this Article shall exercise commercially reasonable efforts to minimize the time for any such delay.
- 21.2. Eminent Domain. Should any portion of Commonwealth Fibers belonging to MuniNet or the underlying Facility Owner be acquired by eminent domain, nationalization, or expropriation (each of which, a "Taking") by any authority or entity possessing such power, then in that event MuniNet shall have the option, in its sole discretion, to either (i) receive the full amount of any awards resulting from the Taking and at its sole cost relocate all or any portion of the Commonwealth Fibers which is the subject of the Taking in accordance with the provisions of Section 10.2; or (ii) be excused from performance of its obligations to the extent provided in Section 21.1.

ARTICLE XXII DISPUTE RESOLUTION

22.1. It is the intent of MuniNet and Commonwealth that any disputes which may arise between them, or between the employees of each of them, be resolved as quickly as possible. Quick resolution may, in certain circumstances, involve immediate decisions made by the Parties' authorized representatives. When such resolution is not readily achieved, the Parties

hereto agree to resolve such disputes in accordance with the provisions of this Article. Any election herein to engage in mediation of the dispute shall not be binding upon either Party and is in addition to any other remedies available under the Agreement or law.

- 22.2. Commonwealth and MuniNet shall each designate, by separate letter, representatives as points of contact and decision making with respect to the obligations and rights of the Parties, said letters to be furnished by each Party to the other within thirty (30) days from the Effective Date. Any disputed issues arising during the term of this Agreement shall in all instances be initially referred to the Parties' designated representatives. The Parties' designated representatives shall endeavor to render a mutually agreeable resolution of the disputed issue, in writing, within seventy-two (72) hours of such referral. Either Party may replace its designated representative upon written notice to the other Party identifying the new designated representative.
- 22.3. By mutual agreement, the Parties' designated representatives may continue to seek resolution of any Claims or disputes arising under the terms and provisions of this Agreement which the Parties' representatives have been unable to resolve within the seventy-two (72) hour time period. If the Parties' designated representatives do not resolve the dispute, the claimant may present its Claim in writing to the other Party within thirty (30) days after the circumstances which gave rise to the claim or dispute took place or became known to the claimant, or within thirty (30) days after the date on which the Parties' representatives acknowledge in writing their inability to achieve resolution, whichever is later. The written claim shall contain a concise statement of the Claim or issue in dispute, together with relevant facts and data to support the Claim.
- 22.4. Any controversies or disputes arising out of or relating to this Agreement that are not resolved in accordance with the preceding procedure may upon agreement of both MuniNet and Commonwealth be referred to nonbinding mediation. An aggrieved Party shall be under no obligation to engage in mediation before proceeding with resolution of its Claims in accordance with Section 22.6 herein. When a Claim is referred to mediation, the Parties shall endeavor to select a mutually acceptable mediator knowledgeable about issues relating to the subject matter of this Agreement. In the event the Parties are unable to agree on a mediator, either Party may apply to the Franklin Circuit Court, Frankfort, Franklin County, Kentucky to appoint a mediator. The mediator shall not have the authority, power or right to alter, change, amend, modify, add or subtract from any provision of this Agreement, assess damages or costs to either Party, or to award punitive damages.
- 22.5. During the continuance of any mediation process, each Party shall continue to perform its respective obligations under this Agreement.
- **22.6.** Should any controversy, Claim or dispute not be resolved through the dispute resolution process set forth in this Article XXII, any Party believing itself to be aggrieved may pursue resolution of its Claims in accordance with the provisions of KRS 45A.225 through 45A.255.

ARTICLE XXIII RULES OF CONSTRUCTION

- 23.1. Interpretation. The captions or headings in this Agreement are strictly for convenience and shall not be considered in interpreting this Agreement or as amplifying or limiting any of its content. Words in this Agreement that import the singular connotation shall be interpreted as plural, and words that import the plural connotation shall be interpreted as singular, as the identity of the parties or objects referred to may require. References to "person" or "entity" each include natural persons and legal entities, including corporations, limited liability companies, partnerships, sole proprietorships, business divisions, unincorporated associations, governmental entities, and any entities entitled to bring an action in, or that are subject to suit in an action before, any state or federal court of the United States. The word "including" means "including, but not limited to." "Days" refers to calendar days and "Business Days" has the meaning assigned in Article I. Unless expressly defined herein, words having well-known technical or trade meanings shall be so construed.
- 23.2. Cumulative Remedies. Except as set forth to the contrary herein, any right or remedy of MuniNet or Commonwealth shall be cumulative and without prejudice to any other right or remedy, whether contained herein or not.
- 23.3. No Third-Party Rights. Nothing in this Agreement is intended to provide any legal rights to any person or entity not an executing Party to this Agreement except to the extent, if any, as is expressly provided under the indemnification and insurance provisions.
- 23.4. Agreement Fully Negotiated. This Agreement has been fully negotiated between and jointly drafted by MuniNet and Commonwealth.
- 23.5. Industry Standards. Except as otherwise set forth herein, for the purpose of this Agreement, the generally accepted standards, practices, methods and procedures of performance followed by members of the telecommunications industry in the relevant market engaging in an undertaking of similar scope and size shall be the measure of whether a Party's performance hereunder is reasonable in terms of the degree of skill, care, diligence and prudence required.
- 23.6. Cross References. Except as the context otherwise indicates, all references to Exhibits, Articles, Sections, Subsections, Clauses, and Paragraphs refer to provisions of this Agreement.
- 23.7. Limited Effect of Waiver. The failure of either MuniNet or Commonwealth to enforce any of the provisions of this Agreement, or the waiver thereof in any particular instance, shall not be construed as a general waiver or relinquishment on its part of any right provided for in such provision, but the same shall nevertheless be and remain in full force and effect.
- 23.8. Severability. If any term, covenant or condition in this Agreement shall, to any extent, be invalid or unenforceable in any respect under the laws governing this Agreement, the remainder of this Agreement shall not be affected thereby, and each term, covenant or condition of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

23.9. No Partnership Created. The relationship between MuniNet and Commonwealth shall not be that of partners, agents, or joint venturers for one another, and nothing contained in this Agreement shall be deemed to constitute a partnership or agency agreement between them for any purposes, including federal income tax purposes. MuniNet and Commonwealth, in performing each of their obligations hereunder, shall be independent contractors or independent parties and shall discharge their contractual obligations at their own risk.

ARTICLE XXIV ASSIGNMENT

- 24.1. Conditions to Effective Assignment. Subject to the other terms and conditions set forth in this Article XXIV, an assignment or other transfer of this Agreement or a Party's rights or obligations hereunder, in whole or in part, to any other party shall not be effective without (a) the non-assigning Party's prior written consent, which consent shall not be unreasonably withheld, conditioned, or delayed; (b) the written agreement of the assignee to be bound by all terms and conditions of this Agreement; and (c) such assignee's agreement to promptly cure all prior defaults of the assigning Party under this Agreement. If assignment is permitted under this Article without the non-assigning Party's consent, then the assignor shall give prior written notice of the assignment to the non-assigning Party.
- 24.2. Consent Not to be Unreasonably Withheld. The non-assigning Party shall not unreasonably withhold, delay, or condition its consent required hereunder to an assignment if neither the assigning Party nor the proposed assignee is in default under this Agreement or any other agreement with the non-assigning Party.
- **24.3.** Assignments to Particular Classes of Entities. The provisions of Section 23.1 notwithstanding:
 - (a) MuniNet may grant a security interest in some or all of its rights and obligations under this Agreement or in the assets of the System to any Lender to MuniNet. If Commonwealth so requests, MuniNet shall obtain from any such Lender a written non-disturbance agreement substantially to the effect that such Lender acknowledges Commonwealth's rights and interests under this Agreement and agrees not to disturb such rights and interests so long as Commonwealth is in compliance with the terms and provisions of this Agreement, including, without limitation, the payment in full when due of all amounts payable by Commonwealth hereunder.
 - (b) Commonwealth may grant a security interest in some or all of its rights and obligations under this Agreement in all or any part of the Commonwealth IRU, to a Lender to Commonwealth. If MuniNet so requests, Commonwealth shall obtain from any such Lender a written agreement substantially to the effect that (i) such Lender is subject to all of the terms and conditions of this Agreement that are binding on Commonwealth, and (ii) to the extent such Lender exercises its rights as a secured party, (A) it does not acquire any greater rights or assume any lesser obligations than were available to or imposed upon Commonwealth

- prior to such exercise and (B) it would be subject to any rights and remedies available to MuniNet under this Agreement at such time.
- (c) Either Party may assign its interest in this Agreement without the prior consent of the other Party (i) to any entity that is a successor to such Party by merger, consolidation, sale or transfer of all members' interests, or operation of law; (ii) to a purchaser of all or substantially all of such Party's assets; (iii) to any entity that acquires all of the System, including the Segments; or (iv) to an Affiliate of such Party, so long as, in the case of any assignment to an Affiliate, the assignor remains fully and jointly and severally liable for all its obligations hereunder.
- **24.4.** Agreement Binds Successors. This Agreement and the rights and obligations under this Agreement (including the limitations on liability and recourse set forth in this Agreement benefiting the other Party and the Released Parties) shall be binding upon and shall inure to the benefit of MuniNet and Commonwealth and their respective permitted successors and assigns.
- 24.5. Change in Control not an Assignment. Notwithstanding any presumptions under applicable state law that a change in control of a Party constitutes an assignment of an agreement, a change in control of a Party shall not be deemed an assignment for purposes of this Agreement.
- 24.6. Right to Subcontract. MuniNet may subcontract for construction, installation, testing, maintenance, repair, restoration, relocation, or other operational and technical services it is obligated to provide hereunder or may have the underlying Facility Owner or its contractor perform such obligations, but MuniNet in any event shall remain fully and directly responsible to Commonwealth for the performance of such services and obligations.

ARTICLE XXV ENTIRE AGREEMENT; AMENDMENT; EXECUTION

- **25.1. Integration; Exhibits.** This Agreement constitutes the entire and final agreement and understanding between MuniNet and Commonwealth with respect to the subject matter hereof and supersedes all prior agreements relating to the subject matter hereof, which are of no further force or effect. The Exhibits referred to herein are integral parts hereof and are made a part of this Agreement by reference. Where the terms of the Agreement and an Exhibit conflict, the Exhibit will control.
- **25.2.** No Parol Amendment. This Agreement may only be amended, modified, or supplemented by an instrument in writing executed by duly-authorized representatives of MuniNet and Commonwealth.
- 25.3. Counterparts. This Agreement may be executed in one or more counterparts, all of which taken together shall constitute one and the same instrument.
- 25.4. Electronic and Facsimile Delivery. This Agreement may be duly executed and delivered by a Party by execution and delivery of the signature page of a counterpart to the other

Party by electronic mail in "portable document format" (".pdf") form, or by any other electronic means or by Facsimile; *provided* that, if delivery is made by electronic mail in .pdf form, or by any other electronic means, the executing Party shall promptly deliver a complete counterpart that it has executed to the other Party.

25.5. Governing Law. This Agreement shall be governed by and construed and enforced in accordance with the laws of the Commonwealth of Kentucky without regard to the conflict of laws rule of that state.

IN WITNESS WHEREOF and in confirmation of their consent to the terms and conditions contained in this Agreement and intending to be legally bound hereby, MuniNet and Commonwealth have executed this Agreement as of the dates set forth below.

	*
MUNINET FIBER AGENCY	COMMONWEALTH OF KENTUCKY
By: Marty T Ivy	By: William M. Landrum " Print Name: WZLLEAM M. LANDRUM "
Title: 6 an Mc	Title: SecaFin, Admin Glant
Date: 2/5/2018	Date: 7 Johny 2018
ATTEST:	ATTEST M M
By tony hompsen	By: Patrick Miller
Print Namo. TONIU / horroson	Print Name: Petrick McGee
Title: Eca Mo.	Title: Assistant General Counsel
Date: 2/5/2018	Date: February T. 2018
/ *	J ,

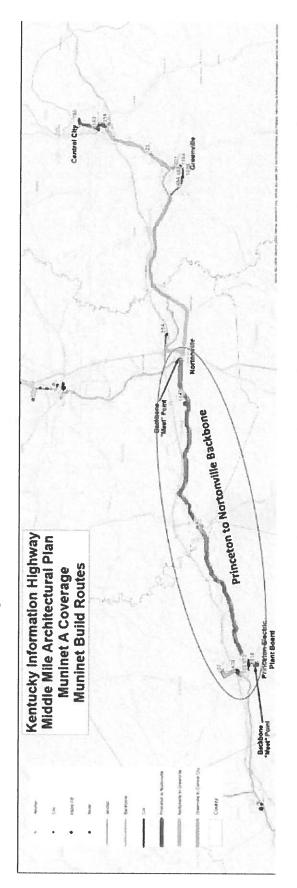
473861v54

EXHIBIT A-1, A-2 AND A-3

CORE AND LATERAL SEGMENT MAPS

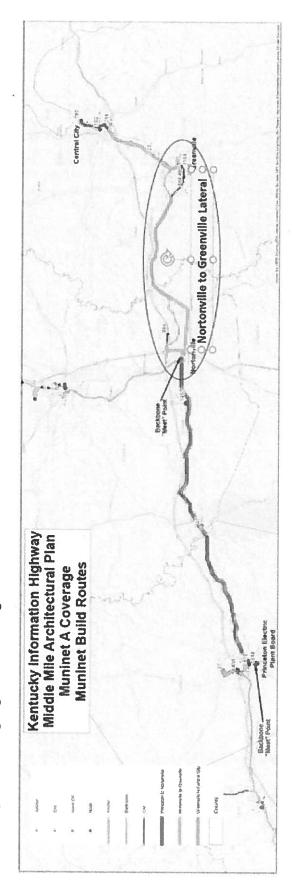
Core Segment

The Core Segment is highlighted in the diagram below as "Princeton to Nortonville Backbone.



Lateral Segment 1

Lateral Segment 1 is highlighted in the diagram below as "Nortonville to Greenville Lateral".



Lateral Segment 2

Lateral Segment 2 is highlighted in the diagram below as "Greenville to Central City Lateral".

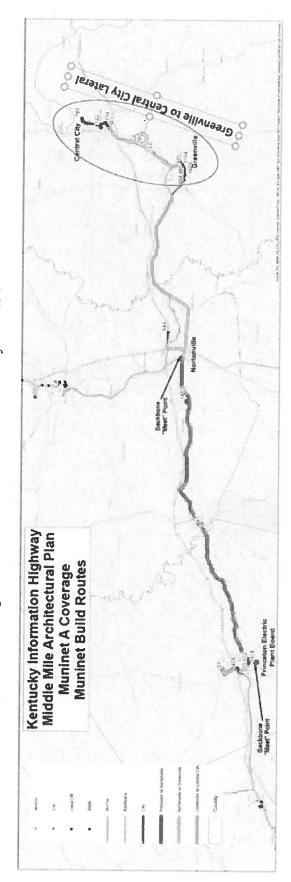


EXHIBIT B

Fiber Splicing, Testing, and Acceptance Standards and Procedures

1. Initial Construction Testing

- A. During initial construction, MuniNet shall use an optical time domain reflectometer ("OTDR") to test splices and an OTDR and a 0.5-km launch reel to test pigtail connectors. Such initial construction tests shall be uni-directional and performed at 1550 nm.
- B. If the combined front-end connectors and pigtail splice loss value exceeds 0.8 dB, MuniNet shall break the splice and re-splice until the loss value is 0.8 dB or less. If MuniNet is unable to achieve a loss value of 0.8 dB or less after five total splicing attempts, the splice shall be marked as Out-of-Spec ("OOS"). The .8 dB spec does not apply to fibers that are being spliced that have different mode-fields. Splice loss may be higher due to the mode-field mismatch.
- C. If the loss value for a splice, when measured in one direction with an OTDR, exceeds 0.3 dB, MuniNet shall break the splice and re-splice until the loss value is 0.3 dB or less, provided that, if MuniNet is not able to achieve a loss value of 0.3 dB after three total splicing attempts, then MuniNet shall mark the splice as OOS. The .3 dB loss spec does not apply to fibers that are being spliced that have different mode-fields. Splice loss may be higher due to the mode-field mismatch.

2. End-to-End Testing

- A. After MuniNet has established end-to-end connectivity on the fibers during initial construction, it shall:
 - perform bi-directional OTDR end-to-end tests to record splice loss measurements,
 - test continuity to confirm that no fibers have been "frogged" or crossed at any splice points, and
 - record loss measurements using a light source and a power meter.
- B. At Fiber termination points, the pigtail splice loss shall be at least .80 dB, and the reflection level at such termination points shall be less than -50dB.
- C. MuniNet shall perform the bi-directional OTDR end-to-end testing at both 1550 nm and 1625 nm for the Core Segment and OTDR end-to-end testing at 1310 nm for Lateral Segments 1 and 2. The results of such tests shall not be deemed within specification unless showing loss measurements between fiber distribution panels at each end of the Core Segment and Lateral Segments 1 and 2 are in accordance with the loss specifications set forth by the ITU-T G.652 standard for dB per kilometer loss. MuniNet shall measure and verify losses for each splice point in both directions and average the loss values. MuniNet shall mark any splice points as OOS that have a splice loss greater than 0.05 dB per event. MuniNet shall also designate as OOS any cumulative splice loss across a Span consisting of the entire Core Segment if the bi-

directionally averaged cumulative splice loss across such Span exceeds 0.25 dB per km at 1550 nm and 0.35 dB at 1625 nm. MuniNet shall likewise designate as OOS any cumulative splice loss across a Span consisting of either Lateral Segment 1 or Lateral Segment 2 if the bidirectionally averaged cumulative splice loss across either such Span exceeds 0.30 dB per km at 1310 nm, 0.25 dB per km at 1550 nm, and 0.35 dB per km at 1625 nm. Any such OOS splice points or Segment Spans shall be subject to Section 4, below.

3. Post-Construction Testing

After performing permanent splicing (in conjunction with repair of a cable cut, replacement of a segment of cable, or other work after initial installation and splicing of the cable), the test procedures set forth in Section 2 (End-to-End Testing) of this Exhibit shall apply to the relevant fibers and cable segments. The provisions in Sections 5 (OTDR Equipment and Settings) and 6 (Acceptance Test Deliverables) of this Exhibit, that are relevant to such testing shall also apply. MuniNet may, after the Acceptance Date, adopt any alternative methods of testing that are generally accepted in the industry and that provide sufficient data to fulfill the objectives of the tests set forth in this Exhibit.

4. Out-of-Spec Splices

Out-of-Spec splices or Spans shall be noted, but shall not preclude Acceptance of a fiber if the Out-of-Spec condition does not affect transmission capability (based on use of then-prevailing telecommunications industry standards applicable to equipment generally used with the relevant type of fiber) or create a significant possibility of an outage. In the event the Commonwealth is later able to reasonably establish that the OOS splice or Span affects service, MuniNet shall take necessary action to bring the splice or Span into compliance with the applicable specifications under Section 1 of this Exhibit.

5. OTDR Equipment and Settings

MuniNet shall use OTDR equipment and settings that are, in its reasonable opinion, suitable for performing accurate measurements of the fiber installed. Such equipment and settings shall include, without limitation, equipment models compatible for testing and able to support the following settings:

A. Index of refraction settings:

	1310 nm		1550 nm	1625nm
Lucent Truwave	1.4505			
(Classic and RS)	1.4707		1.4701	
Corning SMF-28	1.4675	ti	1.4681	[N/A]
Corning SMF-LS	1.471	·	1.470	
Corning LEAF	N/A		1.469	
Corning MetroCore	N/A		1.469	
Sumitomo Fiber	1.467		1.467	
8				

B. Tests of a pigtail connector and its associated splice:

4 km Range 50ns Pulse

1. m Resolution

6. Acceptance Test Deliverables

MuniNet shall provide computer media (CD-ROM) and or hard copies containing the following information for the relevant fibers and cable segments:

- A. Verification of end-to-end fiber continuity with power level readings for each fiber taken with a stable light source and power meter.
- B. Verification that the loss at each splice point is either (i) in accordance with 2.C. above or (ii) in accordance with the requirements of Section 4 of this Exhibit.
 - C. The final bi-directional OTDR test data, with distances.
- D. Cable manufacturer, cable type (buffer/ribbon), fiber type, number of fibers, number of fibers per tube, and distance of each section of cable between splice points.
- E. Provide document for Chromatic Dispersion & PMD measurements. This is to validate if there is an issue with fiber delivery MuniNet will repair or replace.

7. General Testing Procedures and Acceptance

A. As soon as MuniNet determines that the Commonwealth Fibers in a given Span meet the Acceptance Standards such that there is Fiber connectivity between all fiber distribution panels along such Span or connectivity to Commonwealth requested spliced off-net location, it shall provide the deliverables set forth in Section 6 of this Exhibit. Commonwealth shall have fourteen (14) calendar days after receipt of test deliverables for any Span to provide MuniNet written notice of any bona fide determination that the Commonwealth Fibers on such Span do

not meet the Acceptance Standards. Such notice shall identify the specific data that indicate a failure to meet the Acceptance Standards.

- B. Upon receiving written notice pursuant to Subsection 7.A of this Exhibit, MuniNet shall either:
 - (i) expeditiously take such action as shall be reasonably necessary to cause such portion of the Commonwealth Fibers to meet the Acceptance Standards and then re-test the Commonwealth Fibers in accordance with the provisions of this Exhibit; or
 - (ii) provide Commonwealth written notice that MuniNet disputes Commonwealth's determination that the Commonwealth Fibers do not meet the Acceptance Standards.

After taking corrective actions and re-testing the Commonwealth Fibers, MuniNet shall provide Commonwealth with a copy of the new test deliverables and Commonwealth shall again have all rights provided in this Article with respect to such new test deliverables. The cycle described above of testing, taking corrective action and re-testing shall take place until the Commonwealth Fibers meet the Acceptance Standards.

- C. If MuniNet provides notice to Commonwealth pursuant to Clause B (ii), Commonwealth shall within five (5) calendar days of such notice designate by written notice to MuniNet the names and addresses of three reputable and independent fiber optic testing companies. MuniNet shall designate one of such companies to conduct an independent re-test of the Commonwealth Fibers for the relevant Span. If, after such re-testing, the testing company determines that the Commonwealth Fibers
 - (i) meet the Acceptance Standards, then Commonwealth shall pay the testing company's charges for performing the testing and the acceptance date for the relevant Span shall be fourteen (14) days after MuniNet provided its test deliverables.
 - (ii) do not meet the Acceptance Standards, then MuniNet shall pay the testing company's charges for performing the testing and shall perform the corrective action and re-testing set forth in Subsection B(i).
- D. Unless Commonwealth provides a written objection pursuant to Subsection A, the acceptance date of a Span shall occur on the fourteenth (14th) day after MuniNet provides the test deliverables for that Span, or, if earlier, the date Commonwealth provides written acceptance of such Span. Commonwealth's acceptance (pursuant to this subsection or of Subsection C) of the last Span within a Segment shall constitute "Acceptance" of the Commonwealth Fibers for such Segment. The date of Acceptance for each Segment shall constitute the "Acceptance Date" of such Segment.
 - E. Acceptance testing shall progress Span by Span along the System as Cable

splicing progresses, so that test deliverables may be reviewed in a timely manner. The Commonwealth shall have the right, but not the obligation, to have an individual present to observe such testing and MuniNet shall provide the Commonwealth at least seven (7) days' prior notice of its testing schedule. Within thirty (30) calendar days after MuniNet conclusion of the Fiber Acceptance Testing in any given Span, MuniNet shall provide the Commonwealth with a copy of the test deliverables.

EXHIBIT C Cable Installation Guidelines

1. Material

- Existing construction may not comply with portions of these Cable Installation Guidelines.
- Steel or PVC conduit shall be minimum schedule 40 wall thickness.
- Any exposed steel conduit, brackets or hardware (e.g., bridge attachments) shall be hot-dipped galvanized after fabrication.
- All split steel shall be flanged.
- Handholes shall have a minimum H-15 loading rating.
- Manholes shall have a minimum H-20 loading rating.
- Warning signs shall display universal do not dig symbol, "Warning-Buried Fiber-Optic Cable," company name and logo, local and emergency One Call toll-free numbers.

2. Minimum Depths

Minimum cover required in the placement of the conduit/cable shall be forty-two inches (42"), except in the following instances:

- Existing construction may not comply with portions of these Cable Installation Guidelines as existing fiber is typically buried at a depth of 30 to 36 inches.
- The minimum cover across streams, river washes, and other waterways shall be sixty inches (60") below the clean out line or existing grade, whichever is greater.
- At locations where the cable crosses other subsurface utilities or other structures, the cable/conduit shall be installed to provide a minimum of twelve inches (12") of vertical clearance from the utility/obstacle. The cable/conduit can be placed above the utility/obstacle, provided the minimum clearance and applicable minimum depth can be maintained; otherwise the cable/conduit shall be installed under the existing utility or other structure.
- In rock, the cable/conduit shall be placed to provide a minimum of eighteen inches (18") below the surface of the solid rock, or provide a minimum of forty-two inches (42") of total cover, whichever requires the least rock excavation.
- Where existing pipe is used, current depth is sufficient.

3. Buried Cable Warning Tape

All cable/conduit installed by "open cut" method shall be installed with buried cable warning tape. In such case, the warning tape shall be:

- laid a minimum of twelve inches (12") above the cable/conduit
- generally placed at a depth of twenty-four inches (24") below grade and directly

- above the cable/conduit
- a minimum of three inches (3") wide and display "Warning-Buried Fiber-Optic Cable," a company name, logo and emergency one-call toll-free number repeated every twenty-four inches (24").

4. Conduit Construction

- Conduits may be placed by means of trenching, plowing, jack and bore, multi-directional bore or directional bore.
- Conduits shall generally be placed on a level grade parallel to the surface, with only gradual changes in grade elevation.
- Steel conduit shall be joined with threaded collars, Zap-Lok or welding. (Welding is the preferred method.)
- All jack and bores shall use HDPE or steel conduit.
- All directional or mini-directional bores shall use HDPE or steel conduit.
- Any cable placed in swamp or wetland areas shall be placed in HDPE, PVC, or steel conduit.

Where required by the permitting agency:

- all crossings of paved city, county, state, federal, and interstate highways, or railroad crossings shall be encased in steel conduit,
- all longitudinal cable runs under paved streets shall be placed in steel or concrete encased PVC conduit,
- all cable placed in metropolitan areas shall be placed in steel or concrete covered PVC conduit, and
- at all foreign utility/underground obstacle crossings, steel conduit shall be placed and shall extend at least five feet (5') beyond the outer limits of the obstacle in both directions.

5. Innerduct Installation

- No cable shall be placed directly in any split/solid steel conduit without innerduct. This might not be the case in existing fiber.
- Innerduct(s) shall extend beyond the end of all conduits a minimum of eighteen inches (18"). No cable shall be placed directly in any split/solid steel conduit without innerduct. This might not be the case with existing fiber.

6. Cable Installation in Conduit

- The cable shall be installed using either a sealed pneumatic cable blowing system or a powered pulling winch and hydraulic powered assist pulling wheels.
- The maximum pulling force to be applied to the cable shall be six hundred pounds (600 lbs.).

- Sufficient pulling assists shall be available and used to insure the maximum pulling force is not exceeded at any point along the pull.
- The cable shall be lubricated at the reel and all pulling assist locations.
- A pulling swivel breakaway rated at six hundred pounds (600 lbs.) shall be used at all times.
- Splices shall be allowed only at planned junctions and reel ends.
- All splices shall be contained in a handhole or manhole.
- A minimum of twenty meters (20m) of slack cable shall be left in all intermediate handholes and manholes.
- A minimum of thirty meters (30m) of slack cable shall be left in all splice locations.
- A minimum of fifty meters (50m) of slack cable shall be left in Transmission Sites and points of presence.
- PVC conduit/innerduct may be split, with the cable installed inside the split duct and plowed in.

7. Manholes and Handholes

- Manholes shall be placed in traveled surface streets and shall have locking lids. This might not be the case with existing fiber.
- Handholes shall be placed in all other areas.

8. EMS Markers

EMS Markers shall be placed directly above the lid of all buried handholes or shall be fabricated into the lids of the handholes.

9. Cable Markers (Warning Signs)

- Cable markers shall be installed at all changes in cable running line direction, splices, pull boxes, assist-pulling locations, and at both sides of street, highway or railroad crossings.
- Markers shall be spaced at intervals of no more than five hundred feet (500') apart in metropolitan areas (areas where there is either extensive development and improvement or rapid growth (new building construction)) and within line of sight (not to exceed one thousand feet (1,000')) in non-metropolitan areas.
- Markers shall be positioned so that they can be seen from the location of the cable and generally set facing perpendicular to the cable running line.
- Splices and pull boxes shall be marked on the cable marker post.

10. Updating of Guidelines

MuniNet may revise these Cable Installation Guidelines to include new procedures, materials, or processes so long as the changes achieve the objectives of the specifications set forth above and are in accordance with, or superior to, then-current telecommunications industry standards.

EXHIBIT D Sites

Muninet A Site List

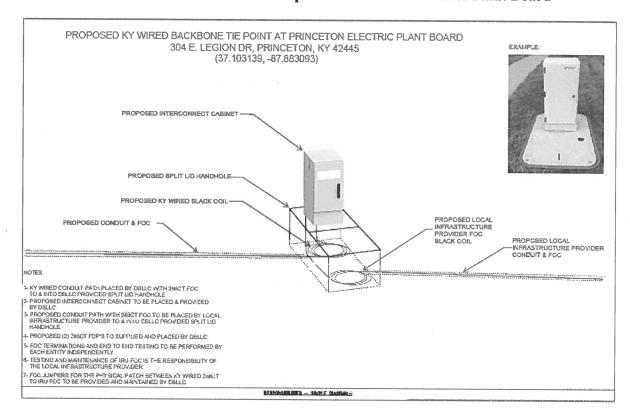
Notes	Backbone segment only - no site entry connection required, Muninet installing 288 and will need 48 there	200000000000000000000000000000000000000		Site 27 and the LGE/KU substation will be built by MuniNet's partner,	Site 438 will be built by MuniNet's	partner, Princeton Electric PlantBoard													
Muninet A Fiber Count W/spares	240 conr	6	4		Site	part			36			-							
Mu LGE/KU Fibe		H	-	2		+		-	4			-	-						
sale LGE		l				-	-			-			-				1		
ite Sites & Wholesale or Spares			L	20		-	-		32					L					
County Site Fiber with Needed Spares for Wholesale				60				-	80										
Fiber		2	4	4	2	2	2	2	2	7	4	4	2	2	2	2	2	2	
Segment Type	Node	3	Anchor	Anchor	3	3	3	ই	3	8	Anchor	Anchor	S	3	3	S	3	ই	
Zip Code	42431	42442	42408	42445	42445	42445	42445	42445	42330	42330	42330	42367	42345	42345	42345	42345	42345	42464	
County	Hopkins	Hopkins	Hopkins	Caldwell	Caldwell	Caldwell	Caldwell	Caldwell	Muhlenberg	Muhlenberg	Muhlenberg	Muhlenberg	Muhlenberg	Muhlenberg	Muhlenberg	Muhlenberg	Muhlenberg	Hopkins	
City	Madisonville	Nortonville	Dawson Springs	Princeton	Princeton	Princeton	Princeton	Princeton	Central City	Central City	Central City	Powderly	Greenville	Greenville	Greenville	Greenville	Greenville	White Plains	
Address	2000 College Dr, Madisonville, KV 42431	370 11' 20.87" North and 870 30' 49.20" West	317 Eli St Dawson Springs, KY 42408	350 Beckner Ln. Princeton, KY 42445	300 MicBeth Street	114 South Harrison Street, Princeton, KY 42445	105 W COURT SQ	100 E Market St	1200 RIVER RD	107 Legion Drive	406 Everly Brothers Bivd, Central City, KY 42330	510 W Main St Greenville, Ky 42345	131 Main Cross	136 S MAIN ST	117 South Main Street, Greenville, KY 42345	210 S Boggess Avenue	518 Hopkins Street	1000 WESTERN KENTUCKY PKWY	
Site Name	Madisonville Community & Technical College - North Campus	Madisonville	Dawson Springs School	Caldwell Co High School	CHFS Caldwell Co Child Based Services	ublic Library	Gov't Site DDL CALDWELL CO	Gov't Site Caldwell County Clerk	JUS CORR Green River Correctional Complex	Muhienburg Co Heaith Department	Madisonville Community & Technical College - Muhlenberg County Campus		Gov't Site Muhlenburg County Clerk	Gov't Site DDL MUHLENBERG CO	Harbin Memorial Public Library	CHFS Muhlenbarg Co Child Based Services	CHFS Muhlenberg Co Child Based Services	Gov't Site JUS KSP/Post 2 Hopkins Co	
Site Category	KCTCS	KET	K-12	K-12	Gov't Site	Library	Gov't Site	Gov't Site	Gov't Site	Gov't Site	KCTCS	K-12	Gov't Site	Gov't Site	Library	Gov't Site	Gov't Site	Gov't Site	
Ring#	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Lateral ID	219	219	219	27	27	219	219	219	218	218	218	218	1164	1164	1164	1164	1164	218	
Site ID	219	1457	47	27	438	1618	572	303	780	1163	218	123	1164	601	1626	485	484	994	

Each Site will have a twelve (12) count Building Entrace Cable. MuniNet and Commonwealth will each have access to six (6) fibers of the Building Entrance Cable.

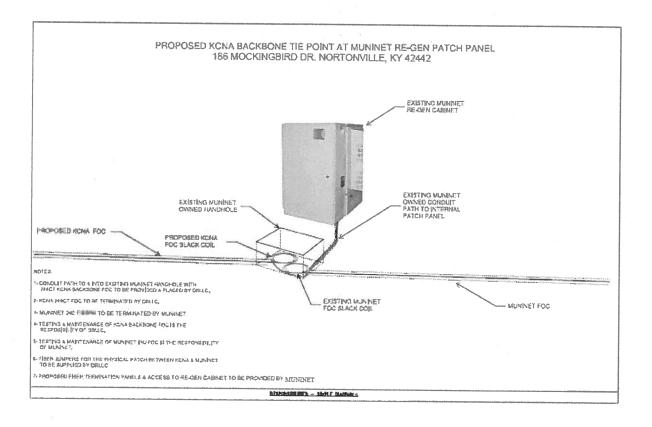
EXHIBIT E

Interconnection Procedures and Fiber Handoff

1.A. The diagrams in this Exhibit E show the Connecting Points between the Parties networks at Nortonville and Princeton. These are depicted in Exhibit A – Segments as "Backbone "Meet" Point" Interconnection point at Princeton Electric Plant Board



Connecting Point at Nortonville:



B. Permitted Connecting Points. Commonwealth may request that MuniNet establish Connecting Points with other telecommunications facilities ("Interconnect Facilities") at Commonwealth's sole expense, which shall be equal to MuniNet's cost, at (i) points where the Cable is spliced along the System, (ii) fiber distribution panels at the Cable end points, or (iii) fiber distribution panels at Transmission Sites ((i) (ii) and (iii) collectively, "Connecting Points"). Commonwealth shall have no right to establish any connection to the System other than at such locations. Commonwealth may request the right to establish connections to the System at other locations. Subject to any underlying agreements, MuniNet shall not unreasonably withhold permission for such additional connections. A determination by MuniNet of the existence of any of the conditions described in Subsection 2.B of this Exhibit C shall not be deemed an unreasonable denial of permission for additional connections.

2. Requests for Interconnections

A. <u>Connection Requests</u>. Commonwealth shall provide MuniNet at least sixty (60) days' prior written notice (the "**Interconnect Notice**") of the date it requests that a connection be completed or sixty (60) days' prior written notice if the connection requires installation of Commonwealth Equipment at a Transmission Site. The Interconnect Notice shall set forth a description of the work required to be performed including:

- (i) the connection location (which shall be at a permitted Connecting Point as set forth in **Subsection 1.B** of this Exhibit);
- (ii) a copy of Commonwealth's construction design drawings including a diagram of the desired location of the Interconnect Facilities and Commonwealth Equipment;
- (iii) identification of all Interconnect Facilities and Commonwealth Equipment to be installed;
- (iv) Commonwealth's requested installation schedule;
- (v) any excess cable storage requirements;
- (vi) the space, power, environmental and other requirements for the Interconnect Facilities and Commonwealth Equipment;
- (vii) the estimated in-service and termination dates for the interconnection; and
- (viii) all other information reasonably required by MuniNet.
- B. Response to Requests. Within twenty-one (21) days of receiving the Interconnect Notice, MuniNet shall respond with its acceptance or objections to the proposed interconnection. MuniNet shall use commercially reasonable efforts to accommodate the request, but may restrict such work to the planned system work periods set forth in **Exhibit H**. MuniNet may decline to make a requested connection if MuniNet determines, in its reasonable discretion, that there is a significant likelihood that (i) Commonwealth's use of a proposed connection would cause a material and adverse effect on the System or the use thereof; (ii) use of a particular location will cause a significant technical impediment; (iii) the making or existence of the connection presents a risk of creating an interruption of transmission; (iv) MuniNet has no rights to interconnect to the Cable at such point due to restrictions existing in the underlying rights or an inability to obtain other required permits, authorizations or approvals; or (v) there are unreasonable costs and/or logistics required to make such interconnection.

3. Demarcation and Ownership

- A. <u>Demarcation Points</u>. MuniNet shall designate an installation demarcation point and a maintenance demarcation point (which may be a different point) for each interconnection in order to safeguard and maintain sole control over the System. MuniNet shall perform all installation work on facilities on its side of the installation demarcation point and shall perform all post-installation work on facilities on its side of the maintenance demarcation point. Commonwealth shall pay the costs of such installation and post-installation work as set forth in this Exhibit. Installation by MuniNet of the Interconnect Facility shall extend no further than the boundary of MuniNet's right of way or other property unless otherwise mutually agreed to by the parties.
- B. Ownership. Commonwealth shall retain ownership of Interconnect Facilities during the Term. At the end of the Term, title to any portion of an Interconnect Facility located MuniNet premises or right of way not removed by Commonwealth within one-hundred and eighty (180) days shall pass to MuniNet unless the Parties agree otherwise.

4. Installation of New Interconnect Facilities

- A. <u>Spur Cable</u>. Commonwealth or its contractors shall, prior to the requested connection date, provide a spur cable adequate to reach the Connecting Point with an additional length (minimum 100 feet) sufficient for MuniNet to perform splicing.
- B. Rights of Way and Equipment. Commonwealth shall provide, at its sole cost and expense, any and all necessary rights of way, permits, access rights and/or any required consents or authorizations, and MuniNet-approved materials and equipment (including cables and conduit) necessary for the construction, use, operation, maintenance and repair of each Interconnect Facility. At Commonwealth's request, to the extent permitted under MuniNet's lease or other agreements relating to a co-location facility, and if space is available, MuniNet shall at its sole discretion provide to Commonwealth access to building entrances, conduits and risers at the co-location facility or use of MuniNet's rights to install such building entrances, conduits or risers necessary in connection with constructing an Interconnect Facility. Such access or use of rights shall be at such additional charges to which MuniNet and Commonwealth may agree. Commonwealth shall be subject to all limitations and restrictions for conduits, risers and building entrances imposed by the applicable underlying owner. Commonwealth shall be solely responsible for placement, construction and installation of all Commonwealth facilities required to interconnect at the Connecting Point designated by MuniNet.

If necessary, and where applicable, MuniNet shall assist Commonwealth, at Commonwealth's sole expense, in obtaining from any third-party building owner or MuniNet lessor access to existing building entrance facilities, if available, to access and exit Transmission Sites. Otherwise, Commonwealth shall be solely responsible for obtaining all necessary rights for the Interconnect Facility, as described in the first sentence of this Subsection, and MuniNet does not make and hereby disclaims any warranties or representations that such rights are available at any particular location or regarding the cost or availability of such rights.

5. Maintenance of New Interconnect Facilities

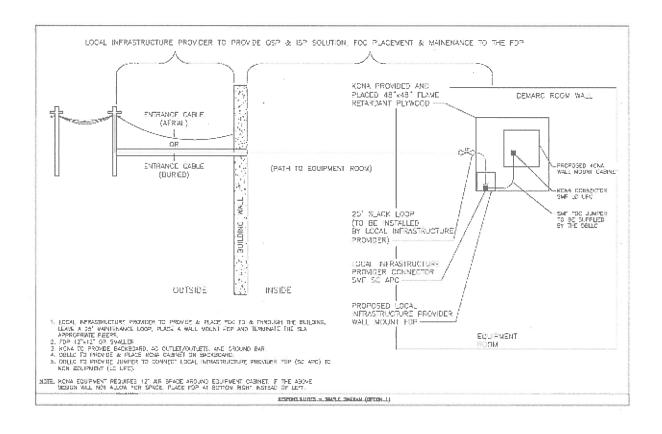
- A. <u>Maintenance and Changes</u>. Commonwealth shall provide all maintenance and repair of the Interconnect Facility on Commonwealth's side of the maintenance demarcation point. Any improvement, modification, addition to, relocation, or removal of, the Interconnect Facility by Commonwealth at Transmission Sites or other MuniNet premises shall be subject to MuniNet's prior review and written approval. Commonwealth shall pay the cost of such improvement, modification, addition to, relocation, or removal of, the Interconnect Facility and of the cost of repairing any damage due to Commonwealth's actions. MuniNet's maintenance responsibility shall be limited to the Interconnect Facilities on its side of the maintenance demarcation point and the associated cross connect or other connection at that point.
- B. <u>Unusual Costs</u>. MuniNet may submit a request to Commonwealth to pay additional costs incurred in maintaining any connection that requires MuniNet to obtain additional Required Rights, and Commonwealth shall pay such costs.
- C. <u>Standards</u>. Commonwealth shall (except to the extent MuniNet has installation or maintenance responsibility) ensure that any Interconnect Facilities are installed, operated, and maintained to meet or exceed any reasonable requirements of MuniNet, any requirements of MuniNet's building management or insurance underwriters, and any applicable local, state and

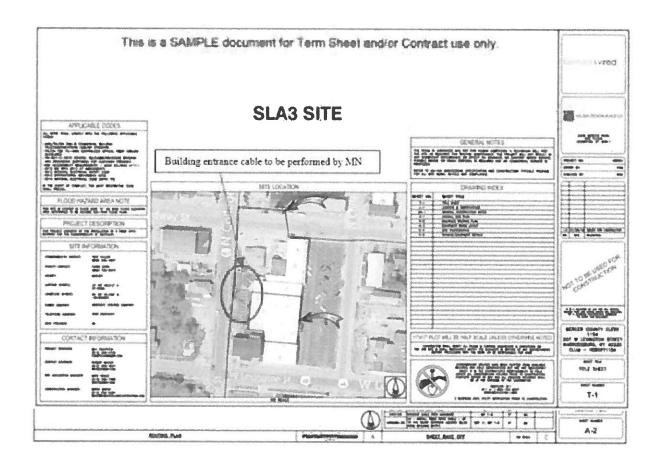
federal codes and public health and safety laws and regulations (including fire regulations and the National Electric Code).

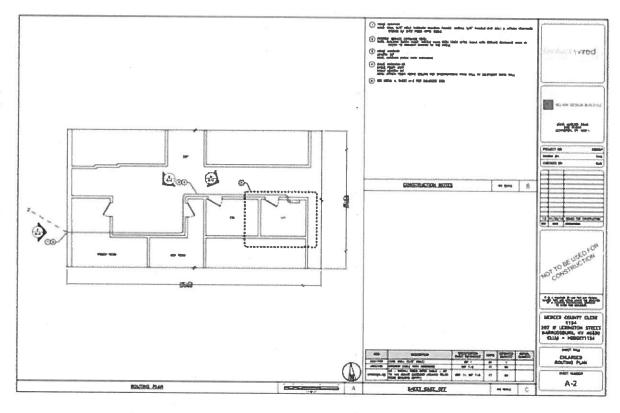
6. Additional Requirements for Connections at Splice Points

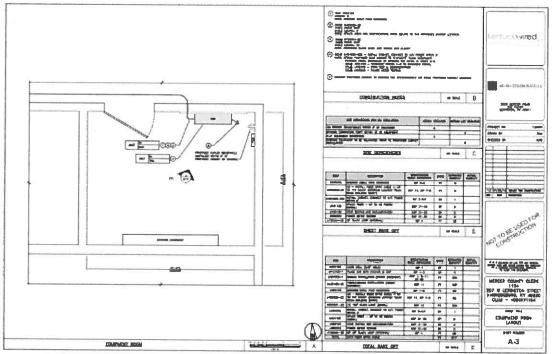
- A. At any time there is cable activity (including initial installation of the splice, repair of cable cuts or other cable damage, and relocation of the cable) on the Span where the splice is located (the "Spliced Span"), Commonwealth or its Contractors shall (a) at MuniNet's request (written, oral or electronic), promptly provide a trained and qualified technician with an optical time-domain reflectometer ("OTDR") at its fiber distribution panel ("FDP") to aid in the cable activity, or (b) if Commonwealth cannot provide the technician and an OTDR, then Commonwealth shall provide MuniNet access to Commonwealth's FDP for the duration of the cable activity.
- B. MuniNet's NOC shall remain the central point of contact and shall control all Cable activity. MuniNet's NOC will maintain an open line to Commonwealth's NOC during Cable activity.
- C. The restoral times and liquidated damages stated in **Exhibit H** of this Agreement, for the services MuniNet is providing, do not apply to the mid-span interconnection splice(s).
- D. During a cable emergency situation, MuniNet shall proceed with "blind" fiber splicing of the Commonwealth Fibers along the Spliced Span (i.e. splicing without the ability to test the Spliced Span) in order to make initial temporary repairs. MuniNet may defer blind splicing until all other fibers in the damaged cable are spliced. Commonwealth shall make reasonable efforts to coordinate with a MuniNet technician in the performance of permanent repairs to the Commonwealth Fibers along the Spliced Span.
- E. The operation and maintenance specifications set forth in the Maintenance Agreement do not provide for fiber rolls to dark fiber to restore Commonwealth's service. However, if MuniNet does elect to provide fiber rolls, it may elect not to allow fiber rolls on the Spliced Span.
- F. If Commonwealth reports a damaged fiber on the Spliced Span and MuniNet is not aware of any continuity problems on its System, Commonwealth shall have the burden of demonstrating that the problem is a result of damage to a Commonwealth Fiber. Commonwealth must use an OTDR to demonstrate that the problem is not a result of conditions off the System and beyond the Splice.
- G. The provisions of **Paragraphs 7(C), 7(D), 7(E) and 7(F)** of this **Exhibit E** shall apply (a) only to the Commonwealth Fibers having a mid-span interconnection splice and (b) only to the extent such Commonwealth Fibers are on a Spliced Span.
- H. Commonwealth may only have MuniNet perform a mid-span interconnection splice at existing MuniNet splice points and then only with MuniNet's prior written consent.
- I. MuniNet is not obligated to perform any maintenance, repair, or restoration on the Commonwealth interconnection beyond the splice point.

EXHIBIT F Building Entrance Cable









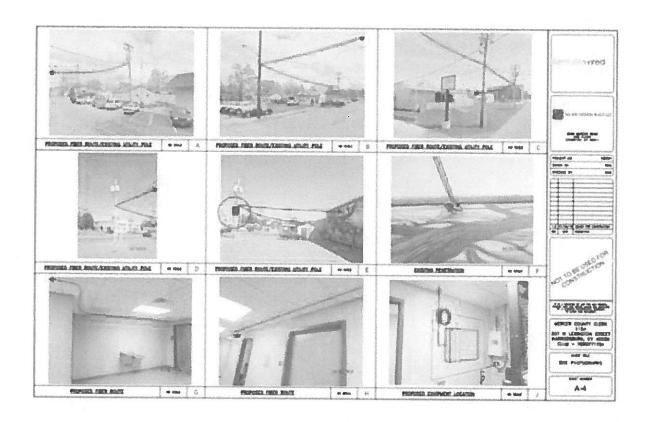


EXHIBIT G

Project Records

1. As-Built Drawings and Specifications

- A. MuniNet shall provide updated route (OSP) drawings and specifications in an approved ESRI ArcGIS compatible format.
 - (1) The drawings shall include all geospatial details, including but not limited to, length of cable, fiber count, slack coils, vaults, splice closures, butt splices, riser transitions, poles or other details identified in the Data Dictionary.
 - (2) The drawings shall be in a known coordinate system, including but not limited to a Kentucky State Plane system, WG884, Web Mercator or UTM (which includes Kentucky).
- B. MuniNet shall provide updated site (ISP) drawings and specifications in AutoCAD or with Customer's approval a different approved electronic format. These drawings shall include, but not be limited to, Fiber routes inside buildings, the location of Fiber Distribution Panels, slack coils, and fiber jumpers.
- C. MuniNet shall submit all information required by this Exhibit through the KentuckyWired Document Management System (Aconex).

2. Reports and Test Results

MuniNet shall provide and maintain in Aconex official reports and certified test results of all inspections and tests which were undertaken as a part of construction or are otherwise required by this Agreement.

3. Data Dictionary

Fiber	9
Field Name	Description
CLLI	Standard Kentucky Telco CLLI code Ex. DAVLKY0185
	To and From CLLI plus the fiber count Ex. LXTOKY0253-
CABLE_NAME	DAVLKY0185-288
PLACEMENTTYPE	Aerial or underground
FROM_STRUCTURE	Start location of structure for Backbone Ex. Paintsville
TO_STRUCTURE	Finish location of structure for Backbone E. Prestonsburg
CABLETYPE	Cable Type- Loose Tube or Ribbon
BUFFERCOUNT	Count of Buffer Tubes
FIBERSPERBUFFER	Number of fibers per buffer
FIBERCOUNT	Count of fiber Ex. 288
INSTALLATIONDATE	Date the fiber is installed. If exact date is not known estimate by

decade

Name of the manufacture for the fiber MANUFACTURER

PARTNUMBER The Fiber part number

BUILD PRIORITY DBLLC Design Priority Ex. 1A, 1B, 2, 3, 4,5 SITE ID Segment ID corresponds to the building Site ID

Site Categ Is the fiber serving a school, government bldg or other

SLA Service Level Agreement **ISP OSP** Inside Plant or Outside Plant

Location of easement to property such as front, rear, undeveloped

EASEMENT land

Entity other than DBLLC responsible for design feature **ThirdParty**

Slackloop

Field Name **Description**

> **LENGTH** Length of slackloop Ex. 25ft, 75ft, 150ft

Standard Kentucky Telco CLLI code Ex. DAVLKY0185 CLLI

ISP OSP Inside plant or outside plant **OWNER** Who owns the slackloop

BV Design Priority Ex. 1A, 1B, 2, 3, 4,5 **BUILD PRIORITY** SITE ID Segment ID corresponds to the building site ID

ThirdParty Entity other than DBLLC responsible for design feature

Structure

Field Name Description

To and From CLLI plus the fiber count Ex. LXTOKY0253-DAVLKY0185-288

STRUCTURE_NAME

Type of structure Ex. handhole, cable marker, small vault,

SUBTYPECODE medium-light vault

Size of the structure Ex. Large, small, extra large, medium light,

STRUCTURE SIZE medium heavy, large light, large heavy **BUILD PRIORITY**

BV Design Priority Ex. 1A, 1B, 2, 3, 4,5 SITE ID Segment ID coresponds to the building site ID

ISP OSP Inside plant or outside plant

ThirdParty Entity other than DBLLC responsible for design feature

EXHIBIT H Maintenance Agreement

Throughout the Term, MuniNet shall have the obligation to maintain and repair the System, at its costs, including the Commonwealth Fibers, in accordance with the following requirements and procedures:

1. <u>Maintenance</u>.

- (a) <u>Scheduled Maintenance</u>. Routine maintenance and repair of the System ("Scheduled Maintenance") shall be performed by or under the direction of MuniNet and shall include at a minimum the following activities:
- (i) Patrol of the System on a regularly scheduled basis, in accordance with MuniNet's then current procedures for maintenance;
- (ii) MuniNet will subscribe to each and all One-Call Agencies that affect one or more of the Commonwealth Fiber Routes;
- (iii) Assignment of fiber maintenance technicians to serve locations along the Route of the System.
- (b) <u>Unscheduled Maintenance</u>. Non-routine maintenance and repair of the System, which is not included as Scheduled Maintenance ("Unscheduled Maintenance"), shall be performed by or under the direction of MuniNet and shall consist of:
- (i) "Emergency Unscheduled Maintenance" in response to (i) an identification of a failure, interruption or impairment in the operation of Commonwealth Fibers by MuniNet's Operations Center; (ii) notification of MuniNet's NOC by any third party of any failure, interruption or impairment in the operation of Commonwealth's Fibers; or (iii) any event imminently likely to cause the failure, interruption or impairment in the operation of Commonwealth Fibers.
- (ii) "Non-Emergency Unscheduled Maintenance" in response to any potential service-affecting situation to prevent any failure, interruption or impairment in the operation of Commonwealth Fibers of which MuniNet's NOC had actual knowledge.

MuniNet shall report the need for Emergency Unscheduled Maintenance to Commonwealth within 30 minutes of learning of same and shall report the need for Non-Emergency Unscheduled Maintenance to Commonwealth within 24 hours of MuniNet learning of same. MuniNet will log the time of the report to Commonwealth, verify the problem, and dispatch personnel to assess and commence corrective action within four hours of notification to MuniNet of the service-affecting situation or any potential service-affecting situation.

2. <u>Network Operations Center.</u>

MuniNet shall operate and maintain a Network Operations Center ("NOC") which is staffed twenty-four (24) hours a day, seven (7) days a week by trained and qualified personnel whose responsibility it is to receive notification of and assess and respond to service-affecting or potential service-affecting situations. MuniNet's designated maintenance employees, personnel, or contractors ("Maintenance Support") shall be available for dispatch twenty-four (24) hours a day, seven (7) days a week. MuniNet shall have its first Maintenance Support at the Site requiring Unscheduled Maintenance activity within four (4) hours after the time MuniNet becomes aware of an event requiring Unscheduled Maintenance, unless delayed by circumstances beyond the reasonable control of MuniNet. MuniNet shall maintain a toll-free telephone number to contact personnel at the NOC. MuniNet's NOC personnel shall dispatch maintenance and repair personnel along the System to handle and repair problems detected in the System (i) through MuniNet's remote surveillance equipment or (ii) upon notification by a third party.

3. <u>Cooperation</u> and Coordination.

- (a) In performing its services hereunder, MuniNet shall take workmanlike care to ensure signal continuity and performance of the Commonwealth Fibers, at a minimum, in accordance with prevailing industry standards.
- (b) MuniNet shall notify Commonwealth at least ten (10) business days prior to the commencement date of any Scheduled Maintenance and, with respect to any Unscheduled Maintenance within 30 minutes after receiving notice of the need for Unscheduled Maintenance. Commonwealth shall have the right to be present during the performance of any Scheduled Maintenance so long as Commonwealth's presence does not interfere with MuniNet's ability to perform its obligations under this Agreement. In the event that Scheduled Maintenance is cancelled or delayed for any reason, MuniNet shall notify Commonwealth within 24 hours of the cancellation of such Scheduled Maintenance. MuniNet will comply with the provisions of this subsection in rescheduling any cancelled Scheduled Maintenance.

4. <u>Facilities</u>.

- (a) MuniNet shall maintain the System in a manner which will permit Commonwealth's full use of the Commonwealth Fibers and in accordance with the terms and conditions of the Agreement,
- (b) Except to the extent otherwise expressly provided in the Agreement, Commonwealth will be solely responsible for providing and paying for any and all maintenance of all electronic, optronic and other equipment, materials and facilities owned and used by Commonwealth in connection with the operation of Commonwealth Fibers, none of which is included in the maintenance services to be provided hereunder.

5. <u>Cable/Fibers</u>.

- (a) MuniNet shall perform appropriate Scheduled Maintenance on the Cable in accordance with MuniNet's then current preventative maintenance procedures, which procedures shall meet or exceed standard industry practice.
- (b) MuniNet shall maintain sufficient capability to teleconference with Commonwealth during Emergency and Non-Emergency Unscheduled Maintenance during the repair process. When correcting or repairing discontinuity or damage to the Cable, including but not limited to in the event of Emergency and Non-Emergency Unscheduled Maintenance, MuniNet shall repair traffic-affecting discontinuity within twelve (12) hours of notification to MuniNet of the service-affecting situation or the

potential service-affecting situation. The repairs so affected may be temporary in nature. In such event, within twenty-four (24) hours after completion of any such Emergency and Non-Emergency Unscheduled Maintenance, MuniNet shall commence its permanent repair and shall notify Commonwealth of such plans. Notwithstanding the foregoing, restoration of open fibers on fiber strands not immediately required for service shall be completed on a mutually agreed-upon schedule.

(c) MuniNet's Maintenance Support shall carry on their vehicles the typically appropriate equipment and testing devices that would enable a temporary splice to restore a cut Cable so that operating capability can reasonably expected to be restored within four hours after arrival of MuniNet's Maintenance Support at the problem site.

6. <u>Planned Service Work Period</u>.

Scheduled Maintenance which is reasonably expected to produce any signal discontinuity must be coordinated between the Parties. Generally, this work should be scheduled after midnight and before 6:00 a.m. local time. Major system work, such as fiber rolls and hot cuts, will be scheduled for weekends. A calendar showing approved Scheduled Maintenance will be agreed upon by MuniNet and Commonwealth in the last quarter of every year for the following year and shall be scheduled to avoid work on the first and last weekends of the month and high-traffic holidays.

7. Restoration.

When restoring a cut Cable in the System, MuniNet, promptly upon arriving on the site of the cut, shall determine the course of action to be taken to restore the Cable and shall begin restoration efforts. MuniNet shall splice Fibers tube by tube or ribbon by ribbon or fiber bundle by fiber bundle, first splicing the Commonwealth Fibers and then splicing the Fibers of other interest holders in the System; provided that, lit Fibers in all buffer tubes or ribbons or fiber bundles shall have priority over any dark fibers in order to allow transmission systems to come back on line; and provided further that, MuniNet will continue such restoration efforts until all lit Fibers in all buffer tubes or ribbons are spliced and all traffic restored. Commonwealth shall be given priority among all interest holders affected by a cut.

8. <u>Contracting.</u>

MuniNet may subcontract any of the maintenance services hereunder, provided that MuniNet shall require the subcontractor(s) to perform in accordance with the requirements, standards and procedures set forth herein.

9. <u>Performance Reporting.</u>

Except as otherwise permitted or excused by the terms and conditions of the Agreement, during the Term, the Commonwealth Fibers shall be fully operational and shall continue to meet the prevailing industry standards and the Acceptance Standards as described in Exhibit B. MuniNet will, on or before the fifteenth of each month during the Term, provide Commonwealth with a written report of each Commonwealth Fiber Outage or maintenance request by Commonwealth for the previous calendar month, which report shall include at a minimum (a) the MuniNet response and restoration times, rounded up to the nearest minute; (b) the location of the Commonwealth Fiber Outage by Core Segment or Lateral Segment; and (c) the response times and mean restoration times for the subject month.

The Parties acknowledge that MuniNet's failure to respond and restore Outages will cause Commonwealth damages and losses of a type and degree which is impossible to compute and ascertain with any certainty as a basis for recovery by Commonwealth of actual damages, and that the following liquidated damages ("LDs") represent a fair, reasonable and appropriate estimate thereof:

Time to First Maintenance Responder on Lateral Segments 1 and 2

Up to 4 hours:	-\$0-
4 hours to 4 hours 30 minutes	\$500
4 hours 31 minutes to 5 hours:	. \$750
Over 5 hours	\$1,000

For the avoidance of doubt, the LDs for the Time to First Maintenance Responder on Lateral Segments standard will apply to each Outage during a calendar month. For example, if a unique Site is impacted by two separate Outages in a given month, and the respective response times to the affected Lateral Segment(s) for said Outages are 4 hours 20 minutes and 6 hours, the LD for Time to First Maintenance Responder on Lateral Segments for the month would be \$500 + \$1,000 = \$1,500. The LDs for Time to First Maintenance Responder to Site on Core Segment (below) shall be calculated in a like manner.

Mean Time to Restore each Lateral Segment (Per Average Number of Sites Impacted)

Up to 12 hours:	- \$0-
12 hours 1 minute to 16 hours:	\$250
16 hours 1 minute to 20 hours	\$600
20 hours 1 minute to 24 hours	\$1,150
24 hours 1 minute to 36 hours	\$1,750
Over 36 hours	\$2,350

The LDs for Mean Time to Restore the Lateral Segments will be calculated on an average number of Sites impacted by a particular Outage. For example, if there are 10 Outages in a given month, 5 of which impact 5 Sites and 5 of which impact 3 Sites, and the Mean Time to Restore is 14 hours, the total LDs payable by MuniNet for the month as regards restoration of Lateral Segments will be $$250 \times 4 = 1000 .

Time to First Maintenance Responder to Site on Core Segment

Up to 4 hours :	-\$0-
4 hours 1 minute to 4 hours 30 minutes	\$500
4 hours 31 minutes to 5 hours:	\$750
Over 5 hours	\$1000

Mean Time to Restore the Core Segment (Per Average Number of Sites Impacted)

Up to 12 hours:	-\$0-
12 hours 1 minute to 16 hours:	\$250
16 hours 1 minute to 20 hours	\$600
20 hours 1 minute to 24 hours	1,150
24 hours 1 minute to 36 hours	1,750
Over 36 hours	2,350

The LDs for Mean Time To Restore the Core Segment for a given calendar month will be calculated as follows: Average Number of Sites Impacted *multiplied by* the Mean Time to Restore *multiplied by* the applicable Month Multiplier.

For purposes of this Exhibit H, the following definitions shall apply:

- (i) "Average Number of Sites Impacted" for a given calendar month shall be the product of the number of unique Core Segment Outages in the calendar month and the number of Sites impacted by such Outage *divided by* the total number of unique Core Segment Outages for the month.
- (ii) "Mean Time to Restore" for a given calendar month shall be the sum of the duration of each Outage for the month, calculated in minutes, divided by the total number of unique Outages in such calendar month, where the duration of an Outage will be calculated as the number of minutes from the point at which MuniNet's NOC is notified of Sites not being Available until all Sites impacted by such Outage are Available; provided, however, that in the event that MuniNet requires access to a Site that is under the control of Commonwealth or a third party in order to correct an outage, the duration of such Outage shall only include the period of time after MuniNet actually receives access to such Site and MuniNet was able to begin corrective measures with respect to such Outage; provided, further, that in the event that correction of the Outage requires a joint effort between MuniNet and either Commonwealth or any third party, any period of time during which Commonwealth or third party delayed such joint effort shall not be included in the duration of such Outage.
 - (iii) "Month Multiplier" shall be determined as follows:

Month 1:1

Month 2: 2.5

Month 3: 5

Month 4: 7.5

Month 5: 10

where, the Month Multiplier is only applicable if Outages occur on the Core Segment in two or more consecutive calendar months. As soon as a single calendar month passes without an Outage on the Core Segment, the Month Multiplier resets to "Month 1".

For the avoidance of doubt, the following examples of calculation of the LDs for Mean Time to Restore the Core Segment are provided.

- Example 1: 1st month Outage: If there are 10 Outages in month 1, 5 of which impact 5 Sites and 5 of which impact 3 Sites, and the Mean Time to Restore is 14 hours, the total LDs payable by MuniNet for the month as regards restoration of the Core Segment will be \$250 x 4 x 1 = \$1000.
- Example 2: 3rd month Outage: If there are 10 Outages in month 3 (with at least one Outage having occurred in both month 1 and month 2), 5 of which impact 5 Sites and 5 of which impact 3 Sites, and the Mean Time to Restore is 14 hours, the total LDs payable by MuniNet for the month as regards to restoration of the Core Segment will be \$250 x 4 (Average Number of Sites Impacted) x 5 (Month Multiplier) = \$5,000.

The total liquidated damages that MuniNet could be required to pay with respect to any given calendar month will equal the sum of the LDs payable with respect to (i) the Time to First Maintenance Responder on Lateral Segments (up to a maximum of \$1,000 per event); (ii) the Mean Time to Restore each Lateral Segment; (iii) the Time to First Maintenance Responder to Site on Core Segment (up to a maximum of \$1,000 per event); and (iv) the Mean Time to

Restore the Core Segment. Notwithstanding anything to the contrary contained in this Exhibit H or the Agreement: (y) in no event may the total LDs assessed against MuniNet during any calendar month that includes an Outage of the Core Segment exceed Twenty-Three Thousand and Five Hundred Dollars (\$23,500.00); and (z) in no event may the total LDs assessed against MuniNet during any calendar month that does not include an Outage of the Core Segment exceed \$5,650.00.

For purposes of clarity, the maintenance and repair obligations of MuniNet set forth in this Maintenance Agreement and the foregoing liquidated damages provisions do not apply to damage to the Fiber, Cable, System, or Building Entrance Cable or to an Outage, interruption of service, or degradation of service caused by or attributable to damage to or interference with the portion of the Building Entrance Cable running from its penetration into the designated structure at a particular Site to said Building Entrance Cable's termination at the fiber termination panel at such Site by a third party (including the owner or occupant of the Site) or the Commonwealth.

10. <u>Erroneous Callout</u>. In the event that more than three (3) Erroneous Callouts occur during any rolling three-month calendar quarter during the term, Commonwealth shall promptly pay to MuniNet \$250.00 per Erroneous Callout occurring during such quarter. The term "Erroneous Callout" means those instances where Commonwealth or any other person or entity requests that MuniNet provide restoration or maintenance services and, upon MuniNet's inspection with respect to such request, MuniNet determines in good faith that no Outage exists.

Exhibit I – Change Form

	iwealth of Kentucky] [MuniNet]		
To: [MuniNet	Fiber Agency] [Commonwealth	of Kentucky]	
Date of Change R	Request:	V 2	
CC:	•		•
Detailed Descrip	otion of Proposed Change:		
•			
	₹		
(attach additional	pages as may be necessary)		1
(attaon additional	pages as may be necessary)		
Reason for Prop	osing the Change:		
ixeason for 1 top	osing the Change:		
	.0		N
D 1			
Proposed	Change in Contract Price:		
			·
Proposed	Change in Construction Comp	pletion Date(s):	
Core Sean	nont:		
Loteral Co	nent:		
Lateral Sc	gment 1:		
Lateral Se	gment 2:		
D.,,			
By:	n behalf of requesting party)		
(signature of	n behalf of requesting party)		
(þ.	rinted name)		
Title:			
Filone			
E-mail:			
Amendment of P	roposed Change (after meeting	gs of parties and/or info	rmation exchange):

Exhibit I – Change Form

(attach additional pages as may be necessary)	
Proposed Amended Change in Contract Price	• • • • • • • • • • • • • • • • • • •
	,
Proposed Amended Change in Construction (Completion Date(s):
Core Segment:	
Lateral Segment 1: Lateral Segment 2:	
Ву:	
By: (signature on behalf of requesting party)	
(printed name)	
Title	
Title:Phone:	
E-mail:	
Date Amended Change Proposal Submitted:	
The foregoing Change Request datedAmendment of Proposed Change submitted	, as amended by the foregoing
Amendment of Proposed Change submitted	(if any) is hereby ACCEPTED.
Ву:	
By: (signature on behalf of party accepting change)	
(printed name)	
Title	
Title: Phone: F-mail:	
D man.	
Date of Change Acceptance:	
The foregoing Change Request datedAmendment of Proposed Change submitted for the reasons set forth below.	, as amended by the foregoing (if any) is hereby REJECTED
Detailed Description of Reasons for Rejection of Prop	oosed Change:

Exhibit I – Change Form

940	29
· · · · · · · · · · · · · · · · · · ·	
	-
(attach additional pages as may be necessary)	
D	
By:	
(signature on behalf of party rejecting Change)	
(printed name)	
Trial	
Title:	
Phone:	
E-mail:	
Date of Change Rejection:	

EXHIBIT J Corning Certificate of Compliance

DATA SHEET

Page: 1 / 1

Date: 2017/09/28

CERTIFICATE OF COMPLIANCE

This Optical Cable meets industry & agreed upon customer supplied specifications Quality Manager, Hickory Cable Facility

Corning Optical Communications

800 17th Street NW

Hickory, NC 28601-3336

Cable Batch Number: 0010443942

Customer: GRAYBAR ELECTRIC COMPANY

Corning Cable ID No: WO36R336646

Mark For:

Order Number/Line : 2742149/000020

P.O. #: 4516086060

Cable Product :024EWP-T4101D20

Shipped:

10128 - 05064

5,064.000 F 1,543.507 M

Ordered:

1,524.000 M

	SingleMode	Atten	(dB/Km)
	_	1310nm	1550nm
BLUE		0.32	0.18
ORANGI	Ξ	0.33	0.19
GREEN		0.32	0.18
BROWN		0.32	0.18
SLATE		0.32	0.18
WHITE		0.32	0.18
RED		0.32	0.18
BLACK		0.32	0.18
YELLOW	V	0.32	0.18
AIOFE	E .	0.32	0.18
ROSE		0.32	0.18
AQUA		0.32	0.18
BLUE		0.32	0.18
ORANGE	E	0.33	0.19
GREEN		0.32	0.18
BROWN		0.32	0.18
SLATE		0.32	0.18
WHITE		0.32	0.18
RED		0.32	0.18
BLACK		0.32	0.18
YELLOW	ī	0.32	0.18
VIOLE		0.32	0.18
ROSE		0.32	0.18
AQUA		0.32	0.18