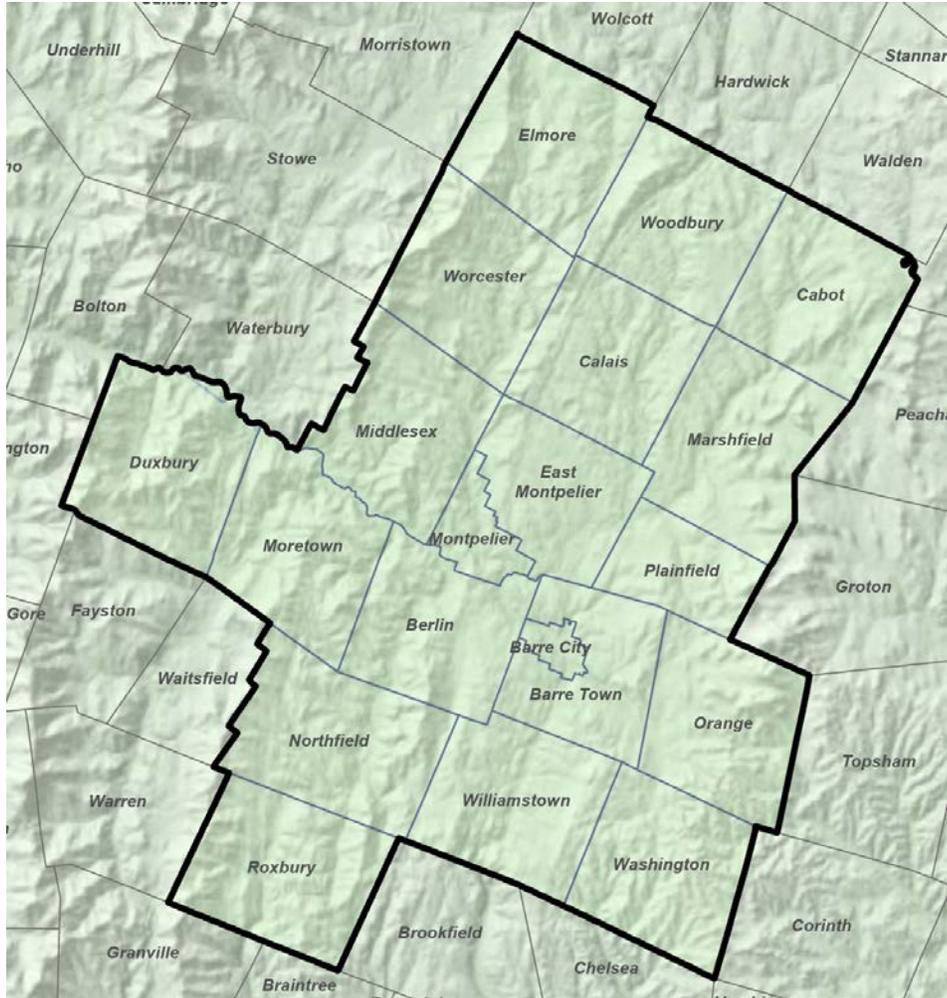




Request for Proposals FTTP Developer and Operator



July 21, 2021

29 Main St. #4 | Montpelier | VT 05602 | 802.279.6054
info@cvfiber.net | <https://facebook.com/CVFiber> | <http://cvfiber.net>

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Executive Summary

CVFiber seeks proposals from a firm or jointly from a group of firms to be our operator, construction manager, internet service provider (ISP) and business manager of our fiber-to-the-premises (FTTP) network, which is being constructed initially to serve the over 6,800 underserved locations (less than 25/3 Mbps speeds), and eventually to all 24,175 locations in CVFiber's twenty-member communities in Central Vermont having a total population of 56,759.

Our plans are for a complete buildout over 5 years with an ambitious goal of completing construction of 310 miles to serve 3,400 underserved premises by the end of 2022.

This Request for Proposals (RFP) details a vision for the relationship, including the specific roles and responsibilities of CVFiber and Operator, and describes in detail the scope of work, the provisional schedule, and the technical, operational, and pricing standards and guidelines that shall guide contract execution. This document also outlines the process and timeframe for interaction between CVFiber and RFP respondents, including when and how questions may be asked and answered, and how CVFiber will select proposals for further discussion and potential contract negotiation.

All submissions must use a separate **RFP Response Form** in MS Word format that can be downloaded at this link:

https://drive.google.com/file/d/1Y8Al1NBsI9J5277o8Y_RMJwXhBq7RiQY/view?usp=sharing

Respondents may also provide additional descriptive material to detail or supplement information provided in the RFP Response Form.

Proposals are due August 20, 2021, by 5:00 PM ET to CVF-Operator-RFP@googlegroups.com.

Vision and Current Status

CVFiber seeks proposals from a firm or groups of firms working jointly to be our operator, construction manager, internet service provider (ISP) and business manager (Operator) of the CVFiber Community Network. When completed, the CVFiber Community Network will consist of a 1,200+ mile fiber-to-the-premises (FTTP) network passing 24,175 premises in 20 Central Vermont communities.

CVFiber intends to fund and own all capital equipment and pay for the construction and maintenance for getting the network operational over a 3-to-6-year timeframe. A portion of the middle mile network is expected to be leased from our partner Washington Electric Coop (WEC), who is currently seeking Rural Utility Service (RUS) financing to build middle mile fiber throughout its territory.

High-Level Design for the entire CVFiber Community Network and detailed engineering for approximately 300 miles serving ~4,242 premises in five Central Vermont communities is expected to be completed by September 2021. Figure 1 illustrates Area A.

CVFiber plans to deliver FTTP to all 6,811 underserved and unserved premises, and eventually all premises in the District. Phase 1 construction is to deliver FTTP to underserved and unserved premises. Phase 2 construction is to deliver FTTP to the remaining premises in each community.



The selected Operator will be responsible for getting Area A's 150-mile Phase 1 routes built and operational in 2022, connecting the 1,700 underserved premises as it is being built; as well as Area B's 160-mile Phase 1 routes, serving seven communities and 1,800 underserved premises.

These Phase 1 projects represent 50% of the underserved premises in the district.

The District's high-level design is expected to be completed in the fall of 2021. A detailed engineering and construction plan for Area A's 300 miles is expected to be completed in October 2021.

Concurrently, CVFiber is partnering with WEC and Vermont Electric Power Company (VELCO) to link 100 addresses in Area A during the late fall of 2021 based on a fiber extension VELCO is building to link two WEC substations.

CVFiber has a very clear view of its public service mission, vision, and principles that it expects to achieve in this agreement with our Operator. See Appendix A – CVFiber History and Mission for the complete statement. CVFiber will evaluate proposals to determine how closely they align with these objectives. Respondents are encouraged to be creative in developing operational concepts that will achieve these objectives as quickly as possible, while providing sufficient short and long-term commercial opportunities.

Operator Roles and Responsibilities

CVFiber envisions a publicly-owned infrastructure, privately-serviced operator relationship model, in which both CVFiber and our Operator have a shared interest in delivering universal, affordable, high-quality Internet and Voice service to locations that are not served adequately by incumbent providers. CVFiber and Operator shall collaborate to ensure that the relationship is orderly, transparent, mutually beneficial, and sufficiently flexible to enable responsive adaptation to environmental changes or operating contingencies.

Internet and Voice are expected to be the initial Core Services to be offered. CVFiber shall collaborate with Operator to generate interest and enthusiasm to promote these services, and obtain pre-subscriptions and subscriptions, particularly during the initial roll-out of service.

CVFiber shall represent the Operator to governmental and regulatory bodies for the purpose of influencing regulatory policy.

Operator shall have primary responsibility to accomplish the scope of work by overseeing the future detailed engineering, construction, marketing, operating, monitoring, maintaining, and administering of an FTTP network that provides Internet and Voice services under an exclusive contract with CVFiber. Operator shall provide, or contract to provide, all labor, materials, software, expertise, processes, tools, equipment, and any other resources necessary to fulfill these responsibilities. Operator shall coordinate all interactions with governmental authorities and public utilities that are necessary to accomplish the scope of work, except that CVFiber shall arrange with municipal authorities or private interests for easements for and access to suitable sites for central hubs and local hubs for the distribution network.

Operator shall provide all points of contact that will enable CVFiber customers to order service, coordinate installation, obtain technical support, and receive and pay invoices.

Respondents to this RFP must propose on all the required scope of work summarized below. CVFiber will consider proposals in which:

- a. one respondent fulfills the entire scope of work,
- b. two or more respondents join forces (“Team”) to fulfill the entire scope of work.

For proposals in which two or more respondents join forces to perform the entire scope of work, the respondents shall designate a lead respondent that will represent the Team and with which CVFiber may negotiate and sign a comprehensive Operator agreement. The respondents shall identify prior respondent Team experiences in municipal and commercial environments, the nature of the working relationship, such as partnership, contractor-subcontractor, etc., and describe how the working relationship functions.

Required Scope of Work

The required scope of work is divided into categories below. The minimum required scope of work is outlined for each category. Any work that is reasonably necessary to accomplish the minimum scope is included in the scope even if it is not described specifically. Such additional “reasonably necessary” work should be identified in the response with an explanation as to the rationale as to why such work is necessary for inclusion in the scope of work. Likewise, any work thought desirable, but not necessary, should be identified, described, and justified for its additional expense.

Design and Engineering

Preliminary Route Identification

CVFiber has identified a route through five towns for Area A’s 300 miles of construction to provide service to 150 miles of unserved and underserved addresses. Area A’s Phase 1 routes are the basis for current planning to procure funds and follow through on further design and construction activities.

High-Level Design

As part of our partnership with WEC and two other CUDs within the WEC service territory, it is expected that a High-Level Design will be completed by fall 2021. In addition, it is considered likely that the same design firm will complete the High-Level Design and detailed design for the non-WEC portions of the CVFiber Community Network during the same period. These designs are the basis for completing our FTTP network. At this time, CVFiber does not believe it will need any additional high-level design work from our Operator. All material from the high-level design will be made available to the Operator.

Detailed Engineering Construction Design

A detailed engineering construction design will be completed for Area A’s 300-miles of roads. The selected Operator is expected to continue to work with and oversee the detailed engineering work from this firm for all future construction work. The Operator will be responsible for:

- a. reviewing the Area A’s detailed engineering construction design,
- b. seeking bids for construction,
- c. overseeing Area A’s Phase 1 construction, and
- d. Phase 2 construction work.

Appendix F contains a description of our statement work for the detailed engineering construction design.

Fiber Distribution Network Construction

Operator shall construct the network infrastructure that conforms with the network design and engineering specifications. The Operator will be responsible for soliciting bids and recommend selection and seek contract approval by the CVFiber Board. Operator may offer addition specifications that would improve operational efficiency. In the WEC territory, the Operator may need to work closely with WEC and the two other CUDs to coordinate the construction of their dark fiber. Construction may include:

- Procurement of materials and labor required to construct fiber distribution network.
- Applications for utility make-ready as required.
- Pole review with utilities.
- Pole make-ready coordination.
- Application for pole licensing.
- Application for highway and railroad permits.
- Traffic control.
- Exterior construction of fiber distribution network.
- Construction and installation of physical infrastructure and environmental systems for network electronics including cabling connections.
- Physical installation of network electronics.
- Validation and Optical Testing.

Customer Premises Installations

Operator shall install, or cause to install, at each customer premises the fiber connection, customer premises equipment, and inside wiring that are necessary to connect the customer premises equipment (ONT and, optionally, phone) in full conformance with the network design and engineering specifications and the Technical and Operational Standards herein.

As needed, the Operator shall install at a subset of customer premises the customer premises equipment and inside wiring that are required to provide Voice service as described in the Appendix F - Technical Standards.

Installation shall include:

- Processes and systems for accepting, processing, executing, and tracking customer service orders.
- Procurement of all materials, equipment and labor required to complete customer premises installations.
- Receipt of customer service order and coordination of installation with customer.
- Exterior and interior site survey at customer location.
- Obtaining customer's understanding and approval of the installation plan.
- Completion of standard installation -- aerial drop, customer site electronics, inside wiring.

- Completion of non-standard installation as required by customer, which may be an additional cost to the customer. Non-standard installation may include but is not limited to longer than standard aerial drop, installation of drop through customer-provided conduit, and/or installation of separate exterior and interior electronics. Note: non-standard installation may or may not include provision of conduit.
- Assure quality of completed installation.
- Conformance with technical and operational standards.

Project Management Support

Operator shall plan, schedule, budget, and obtain approval from the CVFiber Governing Board or its designee to execute the design, construction, installation, operation, monitoring, technical support, customer support, and administrative support scope of work described above. Operator shall provide leadership and supervision to all resources performing the work to ensure that the work is completed according to plan. Operator shall report at regular intervals progress to completion, spending against budget, and issues requiring approval, resolution, or tradeoffs to the Governing Board or its designee.

Network Operations

Operator's network operations responsibilities shall include systems integration, operation, monitoring, maintenance, and coordination of unexpected repairs of all network infrastructure, systems, and electronics and periodic replacement of components that are end of life or no longer operate reliably.

Network operations shall include, but are not limited to:

- Technical integration and end-to-end testing of network electronics and customer premises equipment before live service is initiated.
- Coordination with WEC facilitate their AMI and outage needs.
- Network monitoring, incident and problem management system, trouble reporting, and dispatch.
- Subscriber usage monitoring and service level agreement (SLA) tracking and reporting for capacity planning, rate planning, and traffic optimization.
- Maintenance and replenishment of spare component and materials inventory for network operations center.
- Staffing or contraction for repairs and emergency services, etc.
- Second and third level technical support.
- Periodic reporting of network performance and operational performance, including conformance with technical and operational standards established by the CVFiber in consultation with Operator.
- The operator is expected to use the most efficient system management tools available.
- The Operator's back-office system is required to have a GIS foundation to support smart networks.

Customer Support

Operator shall provide multiple points of contact and an online dashboard through which CVFiber customers can identify and use self-help resources, report operational problems, be engaged in the resolution process, and be informed about the timeframe and status of the problem resolution.

Operator shall:

- Provide telephone, chat, web, email, and paper mail points of contact for customers to report operational problems.
- Provide timely responses to inquiries as specified in Technical Service Standards.
- Execute first level diagnostic and remedial routines.
- Escalate non-routine issues to Operations staff.
- Inform customers about the process, timeframe, and status of problem resolution.
- Provide field service to accomplish outside plant and customer site troubleshooting and service restoration.
- Maintain spare components and materials for outside plant and customer sites.
- Provide monthly reports of incidents and their resolution and amount of time to resolve each incident.
- Provide monthly reports of high impact or persistently repetitive problems and recommendations for their resolution.

Business Development

Operator shall provide multiple means, online and other, through which CVFiber can promote its services, distribute information, receive, and process service requests, issue invoices and receive payments, resolve customer's non-technical issues, and publicize special offers and events.

Operator shall:

- Collaborate and coordinate with CVFiber to develop and execute marketing and sales campaigns to generate customer awareness, commitment, and satisfaction.
- Collaborate and coordinate with CVFiber to determine pricing strategies, which may consider annual costs, minus capital grants, and municipal bonds for future completion of the network, etc.
- Provide telephone, chat, email, and paper mail points of customer contact.
- Coordinate marketing initiatives with regular monthly invoicing.

Business Processes

The Operator will be responsible for the following business processes:

- Receive and process service requests.
- Provide timely responses to inquiries as specified in Customer Service Standards.
- Issue invoices and receive payments monthly as specified in Billing Standards.
- Have a process for delinquent payment by arranging for concessions and/or coordinating cessation of service according to policies established by CVFiber and implemented by the Operator.

Administrative Support

Operator shall designate a senior strategic coordinator and an administrative coordinator to work with CVFiber’s Governing Board or its designee to provide authoritative input to CVFiber’s strategic and governance decisions and to coordinate interaction between Operator’s operational resources and the Governing Board.

Operator shall:

- Anticipate environmental, technical, operational, financial, and marketing opportunities and risks.
- Inform CVFiber’s Governing Board on technical developments, marketing opportunities, competitive challenges, logistical issues, and other topics requiring strategic planning and decision making.
- Advise CVFiber’s Governing Board on major subcontracting choices and recommendations.
- Request Governing Board approval of all financial choices that may affect costs, revenues, and payments.
- Respond to any other relevant operational information requested by or brought to the Governing Board.
- Provide input to annual budgets and report planned actual expenditures on a regular monthly schedule agreed upon with CVFiber’s designee.

Provisional Deployment Schedule

CVFiber intends to deliver service to all underserved areas of all member towns as soon as possible, preferably by the end of 2024. We believe service can be delivered in the three underserved Areas A, B, and C, with Area A’s and possibly Area B’s Phase 1 routes being completed within one year after the start of the contract with the Operator while understanding the current issues with material and construction limitations. We will work with Operator to refine a deployment schedule that will provide service to the unserved/underserved as quickly as possible. Following the completion of the underserved premises, we plan on connecting many of the remaining premises. We will request Operator input to assist with future build strategies. Estimated total fiber route miles and premises to be served in Phase 1 Areas are provided in Appendix B – District Size and Demographic Characteristics.

CVFiber will collaborate with Operator to review and finalize the selections of our sequential construction plan. The final selections of routes included in each Area will be driven by:

1. Prioritizing and delivering service to the underserved within the District,
2. Optimizing the take-rate,
3. Providing an operational, maintainable, sustainable, and upgradeable network, and
4. Ensuring the economic stability and sustainability of the CVFiber Community Network.

RFP Response Process

Communications / Contact

Questions regarding the RFP should be directed to CVF-Operator-RFP@googlegroups.com. Responses to the RFP should be sent by email to the address above. Questions and responses to this RFP **should not** be sent by US Mail.

Questions and Answers

Questions regarding the RFP should be submitted by email to the address above on or before July 30 at 5:00 PM EDT. By August 4th CVFiber will post online at <https://cvfiber.net/rfps-contracts/> and send by email to all RFP respondents all answers to all questions received. CVFiber will not identify the names of those who submit questions in writing in its email or online.

Proposal Submission Deadline

To be considered, the **CVFiber FTTP Developer and Operator RFP Response Form and Related Materials** must be received by CVFiber at CVF-Operator-RFP@googlegroups.com on or before August 20th, 2021 at 5:00 PM EDT.

Proposal Selection Process

After reviewing the respondent's *CVFiber FTTP Developer and Operator RFP Response Form* and supporting materials submitted, CVFiber will determine which proposals to select for further consideration. CVFiber will advise respondents within approximately one month whether their proposals remain under active consideration. CVFiber may contact client references provided by respondents at any time after proposals are received. CVFiber may contact respondents at any time after proposals are received to obtain additional information, conduct a video conference, or to suggest modifications to the proposals as submitted. Upon completing all due diligence, CVFiber may proceed to negotiate a contract with respondent(s) that are selected.

Respondents that are not selected for further consideration will be notified by email and/or regular mail sent to the address provided in the RFP response.

The vendor selection process is anticipated to follow this timeline:

July 21, 2021	RFP Issued
July 30, 2021 @ 5:00 PM ET	Last day of respondent submission of questions via email
August 4, 2021	Answers to all questions distributed and posted
August 20 @ 5:00 PM ET	RFP responses submitted via email
September 15, 2021	Operator selection

Operator Selection

Operator selection will be made to the respondent or respondents whose offer(s) is/are the most advantageous to CVFiber in its sole judgment and discretion.

CVFiber will take into consideration the scope of work to be provided; technical, operational, and pricing standards to be achieved; vendor qualifications; proposed cost; history of working as an Operator for other community based FTTP networks; Operator requirements; or for any other reason deemed by CVFiber to be in its best interest.

CVFiber reserves the right to accept or reject any or all the responses received.

All costs associated with responding to this RFP are the exclusive responsibility of the respondent.

Responses are the property of CVFiber and are expected to be valid for a period of six months from date of submission.

Public Information, Confidentiality and Disclosure

The information in this solicitation does not contain confidential information.

CVFiber is a municipal organization that must conduct its business subject to existing laws and regulations. Accordingly, the following principles will apply to the Proposal, negotiations, Phase 1 contract, MSA and Work Order(s):

The names of all Vendors submitting Proposals may be announced publicly, but the Proposals and individual negotiations with Vendors will not be public.

Any Agreement negotiated with a Vendor will be made public after execution except trade secrets of CVFiber and Apex under 1 V.S.A. § 317(c)(9) and 30 V.S.A. § 3084.

Miscellaneous

CVFiber reserves the right to modify terms, specifications, and quantities prior to entering into a definitive Agreement. CVFiber's decision to enter contract negotiations with one or more respondents does not constitute a binding agreement with respondent. A binding Agreement will only be created once final terms are agreed to and CVFiber and respondent enter into a definitive Agreement. The Agreement requires approval by the CVFiber Governing Board and may be reviewed by the State of Vermont.

All contracts for construction will need to be consistent with ARPA Treasury Department guidance and grant agreements with the State of Vermont.

RFP Response Requirements

Respondent shall complete the separate **RFP Response Form** in full and may provide additional descriptive material to amplify or detail information provided in the **RFP Response Form**.

Respondent shall agree to the terms and conditions stated below which will govern responses to this Request for Proposals and any contract to which the District and Respondent may agree. However, if respondent does not agree with any of these terms and conditions, respondent should state its objection and propose an alternative. Additional terms and conditions may be included in the definitive Agreement.

Terms and Conditions

A. Contract Duration

The initial contract term shall be for a period of five (5) years.

The contract may be extended (“Extensions”) in writing for additional terms of three (3) years thereafter by mutual consent of the Parties

Details regarding Notice of Termination by either party and Transition Period and Services shall be subjects for contract negotiation.

B. Expenses

All costs and expenses incurred by respondent(s) to prepare, develop, and/or submit a proposal or participate in any presentation or negotiation leading to a definitive agreement shall be borne exclusively by respondent(s) regardless of whether any respondent’s proposal is accepted. No such costs or expenses may be included in any costs quoted for the scope of work that is proposed.

C. Response Preparation

Respondent’s proposal must contain all the information specifically required by this RFP or must acknowledge any information that is not applicable or is otherwise omitted or assumed.

A cover letter accompanying your proposal must be signed by an authorized representative of your organization.

CVFiber reserves the right not to consider any additional information or materials not included in or submitted with your proposal. CVFiber also reserves the right to consider any additional information relevant to the project, this RFP, and the respondent.

CVFiber may, from time to time, issue errata or one or more addenda to this RFP. Any such addenda and errata shall be posted at <https://cvfiber.net/rfps-contracts/>. All proposals must include an acknowledgment of the receipt of any addendum and errata that has been issued by CVFiber.

Response should clearly state the ability of the respondent organization to satisfy the requirements defined in this document.

In addition, respondent should provide their most aggressive pricing related to the various components of this RFP. It is the intent of CVFiber to use this pricing both as a criteria in the ultimate decision regarding the selection of an Operator and as a part of the determination of the budget for the project.

D. Proposal Evaluation

This RFP is designed to enable CVFiber to determine which proposal(s) will best align with CVFiber's mission and requirements. Each proposal will be evaluated against the same set of criteria. The categories associated with the evaluation are

- 1) scope of work proposed;
- 2) conformance with CVFiber technical, operational, and pricing standards;
- 3) vendor qualifications.;
- 4) experience providing similar services;
- 5) proposed capital and operating costs;
- 6) value to CVFiber and its subscribers; and
- 7) alignment with CVFiber's mission, values, and priorities.

Based on this evaluation, CVFiber will select the respondent(s) for further consideration as described in the RFP Response Process section above.

E. Proposal Effectiveness

Your response to this RFP will constitute a firm offer to provide the services described at the price that is proposed.

All responses must be accompanied by a cover letter signed by a company officer who is authorized to extend the offer.

CVFiber may choose to accept the offer as provided or negotiate with one or more selected respondents to reach an agreement.

If CVFiber accepts the offer as provided, the parties shall enter into a definitive Agreement with the terms of that offer.

F. Acceptance or Rejection

Nothing contained in this RFP or implied by the proposed evaluation process outlined in this document creates any obligation on the part of CVFiber to select any proposal for the requested services.

CVFiber reserves the right at its sole discretion to select any proposal on any basis that it deems appropriate (whether or not such basis is price), to decide not to select a proposal, or to otherwise modify its approach to the project. Cost is not the only nor determinative criteria for CVFiber.

G. Other Required Contract Provisions

The following provisions required by the state of Vermont shall be included in the contract awarded to the selected respondent:

1. False Claims Act: The Respondent acknowledges that it is subject to the Vermont False Claims Act as set forth in 32 V.S.A. § 630 et seq. If the Respondent violates the Vermont False Claims Act it shall be liable to the State for civil penalties, treble damages and the costs of the investigation and prosecution of such violation, including attorney's fees, except as the same may be reduced by a court of competent jurisdiction. The Respondent's liability to the State under the False Claims Act shall not be limited notwithstanding any agreement of the State to otherwise limit Respondent's liability.

2. Whistleblower Protections: The Respondent shall not discriminate or retaliate against one of its employees or agents for disclosing information concerning a violation of law, fraud, waste, abuse of authority or acts threatening health or safety, including but not limited to allegations concerning the False Claims Act. Further, the Respondent shall not require such employees or agents to forego monetary awards as a result of such disclosures, nor should they be required to report misconduct to the Respondent or its agents prior to reporting to any governmental entity and/or the public.

3. Fair Employment Practices and Americans with Disabilities Act: Respondent agrees to comply with the requirement of 21 V.S.A. Chapter 5, Subchapter 6, relating to fair employment practices, to the full extent applicable. Respondent shall also ensure, to the full extent required by the Americans with Disabilities Act of 1990, as amended, that qualified individuals with disabilities receive equitable access to the services, programs, and activities provided by the Respondent under this Agreement.

4. Taxes Due to the State:

- A. Respondent understands and acknowledges responsibility, if applicable, for compliance with State tax laws, including income tax withholding for employees performing services

within the State, payment of use tax on property used within the State, corporate and/or personal income tax on income earned within the State.

- B. Respondent certifies under the pains and penalties of perjury that, as of the date the proposal is signed and the date any definitive Agreement is signed, the Respondent is in good standing with respect to, or in full compliance with, a plan to pay all taxes due the State of Vermont.

5. Child Support: (Only applicable if the Respondent is a natural person, not a corporation or Operator.) Respondent states that, as of the date this Agreement is signed, he/she:

- A. is not under any obligation to pay child support; or
- B. is under such an obligation and is in good standing with respect to that obligation; or
- C. has agreed to a payment plan with the Vermont Office of Child Support Services and is in full compliance with that plan.

Respondent makes this statement regarding support owed to any and all children residing in Vermont. In addition, if the Respondent is a resident of Vermont, Respondent makes this statement regarding support owed to any and all children residing in any other state or territory of the United States.

6. No Gifts or Gratuities: Respondent shall not give title or possession of anything of substantial value (including property, currency, travel and/or education programs) to any officer or employee of the State (as defined in 32 V.S.A. § 630(8)) during the RFP process or the term of the definitive Agreement.

7. Certification Regarding Debarment: Respondent certifies under pains and penalties of perjury that, as of the date that this Agreement is signed, neither Respondent nor Respondent's principals (officers, directors, owners, or partners) are presently debarred, suspended, proposed for debarment, declared ineligible, or excluded from participation in Federal programs, or programs supported in whole or in part by Federal funds.

Respondent further certifies under pains and penalties of perjury that, as of the date that this Agreement is signed, Respondent is not presently debarred, suspended, nor named on the State's debarment list at: <http://bgs.vermont.gov/purchasing/debarment>

8. Additional Requirements

Respondent shall provide details of location of how provisioning of services will occur. The selected operator will need to have a facility located in Central Vermont. We understand that many back office and operational management functions can happen remotely. We would like customer service and maintenance operations to be based locally with staffing that have local knowledge.

9. COVID-19: During the declared State of Emergency for COVID-19, the respondent shall comply with all applicable federal, State, and local rules and guidelines. See Appendix I,

10. Indemnification: It is expressly understood that the respondent shall indemnify and hold CVFiber harmless from any claims, suits, actions, damages, and costs of any kind arising out of, or resulting from, the respondent's acts or omissions in its performance of the work to be performed under the definitive Agreement.

11. Requirements Pertaining Only to State-Funded Grants:

- A. Certification Regarding Use of State Funds: If Respondent is an employer and the services provided under the terms of a definitive Agreement are supported by a State-funded grant in excess of \$1,001, Respondent certifies that none of these State funds will be used to interfere with or restrain the exercise of Respondent's employee's rights with respect to unionization.

(End of Standard Provisions)

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Appendix A: CVFiber History and Mission

History

- Vermont established Communications Union Districts (CUDs) as legal municipalities through legislation in 2015 (Title 30 V.S.A. Chapter 82). The legislation provided a clear outline for CUD formation and management, based on the experience of ECFiber, which until 2015 had operated as an interlocal cooperative.
- Additional legislation in 2019 provided for planning grants, start-up financing, and technical support resources.
- Following this enabling legislation, CVFiber was the second CUD formed in 2018. CVFiber is one of nine CUDs in Vermont. ECFiber was the first and oldest. This RFP is formulated to the similar relationship ECFiber has with their Operator, ValleyNet.
- Sixteen towns voted to form the Central Vermont Internet Communications Union District (trade name: CVFiber) in March 2018. CVFiber has now grown to include twenty towns in three counties.
- A map of all Vermont CUDs can be found at <https://publicservice.vermont.gov/content/vermont-communications-union-districts> .
- CVFiber has received planning grants from the Vermont Department of Public Service, the Vermont Community Foundation, and USDA Rural Development. Additional grant applications are pending.
- To date, CVFiber has been managed entirely by a Governing Board of unpaid Delegates and Alternates from member towns and additional volunteers, all of whom contribute substantial business, technical, political, and non-profit management experience to the enterprise. In the long term, the Governing Board will act as a Board of Directors to set broad policy, establish budgets, award contracts, and monitor execution.
- In 2021, the Vermont Legislature passed H.360 creating Vermont Community Broadband Fund (30 V.S.A. Chapter 91A) that further supports the funding of CUD's to provide broadband to the underserved premises in Vermont. The law provides funding for preconstruction and construction for FTTP in those areas with CUDs.
- Please refer to Appendices B, C, D, and E for detailed information about the District, including the intended geographic scope of service, district size and demographic characteristics, proposed hub locations, and take rate indicators.

Mission, Vision, and Principles

Mission

To deploy affordable, reliable high-speed Internet service that will provide access to all residents, businesses, and government entities, expand educational, remote working, and telehealth opportunities, as well as supporting economic development within the district.

Vision and Principles

Overview: The Internet is an essential service for every Vermonter. The future of our communities' health depends on closing the digital divide and driving economic diversity. Our vision and principles are our core beliefs in setting a course to provide access to not just some but to all.

Principles

Equity: No one should face a barrier based on where they live. Priority installation will be given to unserved and underserved areas.

Performance: The Internet should be fast and reliable, and the quality and speeds should improve over time as uses of the Internet continue to evolve. Our network should be capable of at least gigabit-per-second service to all fixed locations, with substantial additional capacity for future demand and flexibility to support rapid deployment of new technologies.

Affordability: Cost should not be a barrier for any Vermonter who wants to connect to the Internet. The network design minimizes construction, capital, and operating costs, has a long, useful lifespan, and provides low-cost upgrade paths to meet future demands or accommodate new technologies. The system should provide diverse service level options for residential and business connectivity.

Reliability: The network design should reflect the best industry practices for Vermont's unique topography, partnering networks, and requirements of users. The infrastructure will be reliable and resilient, designed to withstand equipment failures, power outages, natural disasters, or man-made disasters.

Privacy: Vermonters must be able to determine how their data are or are not used. Our network will support net neutrality. The network's components will be secured against physical and electronic threats.

Note: Full details of CVFiber's history and mission can be found at <https://cvfiber.net> .

Appendix B: Geographic Scope of Service

CVFiber exists to provide affordable, reliable, high-speed service to every area of our member towns.

- CVFiber has grown from 16 towns initially to 20 towns today, including Barre City, Barre Town, Berlin, Cabot, Calais, Duxbury, East Montpelier, Elmore, Middlesex, Marshfield, Montpelier, Moretown, Northfield, Orange, Plainfield, Roxbury, Washington, Williamstown, Woodbury, and Worcester.
- CVFiber intends to extend service to member towns over multiple years. Our construction plan is designed to hit as large a percentage of underserved premises as possible while still maintaining financial viability given a set amount of startup capital. As capital available expands we intend to broaden that scope over time to include all locations according to a set plan.
- In most cases, the construction program within each member town, including building the distribution network and extending service to customer premises, shall be completed in a single phase or in closely contiguous phases so that the count of underserved or unserved premises in that town is reduced to zero within a realistically short time window.
- Some segments of the distribution network will incidentally and unavoidably run through areas that already have fiber, are cabled, and/or are planned for the same.

This image represents CVFiber’s ambitious plan to deliver service in 17 of the 20 communities in the District. The plan is contingent upon fund, material, and contractor availability.

	Preconstruction				Construction: Phase 1					Construction: Phase 2				
	Miles Total	Pole Inventory	High Level Design	Detailed Engineering	Phase 1 Miles	Under-served Premises	Make-Ready	Construction	Service	Phase 2 Miles	Under-served Premises	Make-Ready	Construction	Service
Area A	300				150		2021			150		2023		2025
						1,594	96%				69	4%		
Area B	475			2021	160			2022		315				2024
						1,795	65%				984	35%		
Area C	300				300			2023						
	1,075				610	2,102	100%			465				

Appendix C: District Size and Demographic Characteristics

Key Demographic & Education Facts							
2019							
Community	Demographics			Education			
	Population	Median Age	Household Size	No HS Diploma	HS Graduat	Some College	BA/BS +
Barre City	8,972	40.8	2.2	13%	34%	28%	26%
Barre Town	7,787	46.8	2.4	5%	37%	27%	31%
Berlin	2,891	50.9	2.3	7%	36%	28%	29%
Cabot	1,599	44.5	2.5	5%	29%	25%	41%
Calais	1,747	49.7	2.4	3%	25%	24%	49%
Duxbury	1,380	44.8	2.4	3%	22%	25%	50%
East Montpelier	2,625	49.8	2.4	4%	20%	23%	53%
Elmore	903	44.8	2.3	7%	27%	30%	36%
Marshfield	1,613	44.3	2.5	5%	33%	23%	40%
Middlesex	1,716	48.3	2.5	3%	25%	21%	52%
Montpelier	7,944	45.4	2.0	5%	18%	17%	61%
Moretown	1,743	47.8	2.4	4%	24%	22%	50%
Northfield	6,090	28.7	2.4	7%	32%	26%	35%
Orange	1,121	49.0	2.5	10%	51%	25%	15%
Plainfield	1,232	46.1	2.3	7%	26%	26%	41%
Roxbury	716	47.8	2.3	10%	31%	26%	33%
Washington	1,145	49.9	2.3	9%	42%	28%	20%
Williamstown	3,489	44.8	2.4	6%	50%	30%	14%
Woodbury	1,047	49.7	2.3	3%	33%	27%	37%
Worcester	999	46.4	2.5	4%	25%	24%	47%
CVFiber	56,759	44.5	2.3	6%	31%	25%	38%

Source: Esri, Census ACS, and Infogroup
 Prepared by David Healy for CVFiber, healy.david.j@gmail.com, 1/13/2020

Population Density			
2019			
Community	2019 Population	Area (Sq.Mi.)	Population Density/ Sq.Mi.
Barre City	8,972	3.98	2,256
Barre Town	7,787	30.71	254
Berlin	2,891	36.94	78
Cabot	1,599	38.53	42
Calais	1,747	38.56	45
Duxbury	1,380	43.10	32
East Montpelier	2,625	32.11	82
Elmore	903	39.58	23
Marshfield	1,613	43.42	37
Middlesex	1,716	39.87	43
Montpelier	7,944	10.25	775
Moretown	1,743	40.21	43
Northfield	6,090	43.63	140
Orange	1,121	39.01	29
Plainfield	1,232	21.04	59
Roxbury	716	42.03	17
Washington	1,145	38.88	29
Williamstown	999	40.45	25
Woodbury	3,489	39.09	89
Worcester	1,047	38.82	27
CVFiber	56,759	700.22	81

Key Economic Facts

2019

Community	Income			Unemployment	Employment			Businesses	
	Median Household	Per Capita	Median Net Worth		White Collar	Blue Collar	Services	Total	# of Employees
Barre City	\$ 40,587	\$ 23,479	\$ 21,177	3.5%	66%	19%	15%	523	4,642
Barre Town	\$ 68,076	\$ 34,636	\$ 230,994	2.7%	67%	20%	13%	240	2,504
Berlin	\$ 64,537	\$ 36,544	\$ 204,457	4.0%	67%	19%	14%	310	6,790
Cabot	\$ 50,087	\$ 28,858	\$ 129,633	2.4%	63%	23%	14%	54	209
Calais	\$ 63,650	\$ 33,729	\$ 189,971	1.4%	70%	15%	15%	39	166
Duxbury	\$ 78,998	\$ 39,931	\$ 176,480	10.8%	73%	18%	9%	48	535
East Montpelier	\$ 63,543	\$ 37,293	\$ 232,498	0.9%	81%	11%	8%	102	736
Elmore	\$ 60,705	\$ 32,753	\$ 176,014	3.0%	61%	25%	14%	20	92
Marshfield	\$ 58,378	\$ 28,787	\$ 143,566	1.2%	65%	22%	14%	64	327
Middlesex	\$ 73,489	\$ 34,539	\$ 253,221	1.1%	68%	16%	16%	67	660
Montpelier	\$ 60,581	\$ 38,332	\$ 75,718	1.7%	83%	8%	9%	930	10,522
Moretown	\$ 76,529	\$ 44,798	\$ 255,648	2.1%	67%	18%	15%	59	450
Northfield	\$ 72,733	\$ 25,501	\$ 111,932	1.1%	60%	22%	18%	191	2,617
Orange	\$ 61,550	\$ 28,241	\$ 193,505	1.7%	65%	22%	13%	12	54
Plainfield	\$ 57,251	\$ 32,519	\$ 146,852	5.3%	63%	18%	10%	47	322
Roxbury	\$ 52,376	\$ 28,931	\$ 125,730	3.3%	53%	27%	20%	27	123
Washington	\$ 59,102	\$ 33,135	\$ 206,367	11.4%	59%	31%	10%	18	76
Williamstown	\$ 56,320	\$ 27,549	\$ 130,759	1.1%	58%	26%	16%	92	640
Woodbury	\$ 70,812	\$ 36,940	\$ 206,306	5.0%	69%	23%	8%	26	115
Worcester	\$ 59,670	\$ 30,141	\$ 183,807	1.4%	69%	19%	11%	27	102
CVFiber	\$ 54,154	\$ 31,738	\$ 120,656	2.3%	68%	18%	14%	2,830	31,071

Source: Esri, Census ACS, and Infogroup

Prepared by David Healy for CVFiber, healy.david.j@gmail.com, 1/13/2020

CVFiber Broadband Speeds													
Town	Buildings	<25/3	% 25/3	100/100	% 100/100	25/3	% 25/3	10/1	% 10/1	4/1	% 4/1	Under-served	% Under-served
Barre City	2,903	-	-	13	0.4%	2,890	99.6%	0	0.0%	0	0.0%		0.0%
Barre Town	3,357	89	3%	8	0.2%	3,260	97.1%	0	0.0%	72	2.1%	17	0.5%
Berlin	1,389	259	19%	27	1.9%	1,103	79.4%	0	0.0%	152	10.9%	107	7.7%
Cabot	875	490	56%	16	1.8%	369	42.2%	2	0.2%	434	49.6%	54	6.2%
Calais	896	539	60%	0	0.0%	357	39.8%	2	0.2%	482	53.8%	55	6.1%
Duxbury	686	259	38%	73	10.6%	354	51.6%	3	0.4%	101	14.7%	155	22.6%
East Montpelier	1,172	309	26%	6	0.5%	857	73.1%	0	0.0%	275	23.5%	34	2.9%
Elmore	566	566	100%	0	0.0%	97	17.1%	0	0.0%	414	73.1%	152	26.9%
Marshfield	769	396	51%	9	1.2%	364	47.3%	4	0.5%	338	44.0%	54	7.0%
Middlesex	849	384	45%	0	0.0%	465	54.8%	0	0.0%	173	20.4%	211	24.9%
Montpelier	2,900	6	0%	53	1.8%	2,841	98.0%	0	0.0%	6	0.2%	0	0.0%
Moretown	855	198	23%	319	37.3%	338	39.5%	0	0.0%	87	10.2%	111	13.0%
Northfield	1,954	561	29%	3	0.2%	1,390	71.1%	0	0.0%	550	28.1%	11	0.6%
Orange	557	469	84%	0	0.0%	88	15.8%	2	0.4%	337	60.5%	130	23.3%
Plainfield	588	295	50%	3	0.5%	290	49.3%	0	0.0%	229	38.9%	66	11.2%
Roxbury	505	432	86%	73	14.5%	0	0.0%	0	0.0%	428	84.8%	4	0.8%
Washington	619	417	67%	0	0.0%	202	32.6%	5	0.8%	261	42.2%	151	24.4%
Williamstown	1,490	517	35%	4	0.3%	969	65.0%	3	0.2%	360	24.2%	154	10.3%
Woodbury	775	392	51%	0	0.0%	383	49.4%	0	0.0%	309	39.9%	83	10.7%
Worcester	470	233	50%	0	0.0%	237	50.4%	0	0.0%	140	29.8%	93	19.8%
TOTALS	24,175	6,811	28%	607	2.5%	16,854	69.7%	21	3.5%	5,148	21.3%	1,642	6.8%
Removing Barre, Barre Town, Berlin, Montpelier, Northfield													
TOTALS	11,672	5,896	51%	503	4.3%	5,370	46.0%	21	4.2%	4,368	37.4%	1,507	12.9%
Source: Vermont Public Service Department													
david healy 6/18/2021													
C:\Users\david\Documents\CVFiber\Data\BroadbandStatistics_2020_02202020CIn.xlsx													

Appendix D: Potential Hub Locations

Initial List Provided to High Level Design Contractor

Substations in CVFiber Territory			
Town	Address	Owner	NAME
MORETOWN	7510 VT ROUTE 100B MORETOWN VT 05660	GMP	SUB_2
BARRE CITY	128 RAILROAD ST BARRE CITY VT 05641	GMP	SUB_63
BARRE CITY	121 S MAIN ST BARRE CITY VT 05641	GMP	SUB_37
BARRE CITY	45 BURNHAM ST BARRE CITY VT 05641	GMP	SUB_26
BARRE TOWN	564 GRANITEVILLE RD BARRE TOWN VT 05641	GMP	SUB_82
BARRE TOWN	97 WETMORE HILL RD BARRE TOWN VT 05678	GMP	SUB_58
BARRE TOWN	321 WEBSTERVILLE RD BARRE TOWN VT 05641	GMP	SUB_61
BARRE TOWN	719 GRANITEVILLE RD BARRE TOWN VT 05654	WEC	Graniteville
BARRE TOWN	411 UPPER PROSPECT ST BARRE TOWN VT 05641	VELCO	<Null>
BERLIN	2072 VT ROUTE 12 BERLIN VT 05663	GMP	SUB_62
BERLIN	115 NELSON DR BERLIN VT 05602	GMP	SUB_5
BERLIN	1549 BERLIN STATE HWY BERLIN VT 05602	GMP	SUB_40
BERLIN	183 NELSON DR BERLIN VT 05602	VELCO	Berlin Gas
CALAIS	417 KENT HILL RD CALAIS VT 05648	WEC	Maple Corner
DUXBURY	200 POWER PLANT RD DUXBURY VT 05676	GMP	Bolton Falls
DUXBURY	42 STATE FARM RD DUXBURY VT 05676	GMP	SUB_60
EAST MONTPELIER	128 QUAKER RD EAST MONTPELIER VT 05651	WEC	East Montpelier
EAST MONTPELIER	955 VT ROUTE 214 EAST MONTPELIER VT 05667	GMP	SUB_48
MARSHFIELD	78 POWER PLANT RD MARSHFIELD VT 05658	GMP	SUB_6
MONTPELIER	311 MILL RD MONTPELIER VT 05602	WEC	Wrightsville
MONTPELIER	50 MOUNTAINVIEW ST MONTPELIER VT 05602	GMP	SUB_27
MONTPELIER	203 RIVER ST MONTPELIER VT 05602	GMP	SUB_3
MORETOWN	3136 MORETOWN COMMON RD MORETOWN VT 05660	WEC	Moretown
MORETOWN	226 MORETOWN MOUNTAIN RD MORETOWN VT 05660	GMP	SUB_66
MORETOWN	183 HENNING RD MORETOWN VT 05660	VELCO	<Null>
NORTHFIELD	181 UNIVERSITY DR NORTHFIELD VT 05663	Northfield	Norwich University Substation
NORTHFIELD	158 KING ST NORTHFIELD VT 05663	Northfield	King Street Substation
WILLIAMSTOWN	3047 BAPTIST ST WILLIAMSTOWN VT 05679	WEC	Jackson Corners
WILLIAMSTOWN	936 BAPTIST ST WILLIAMSTOWN VT 05679	VELCO	<Null>

Public Buildings in CVFiber's Communities					
Town	Address	Public Building Type	Town	Address	Public Building Type
BARRE CITY	155 AYERS ST BARRE CITY VT 05641	SCHOOL K / 12	MONTPELIER	15 E STATE ST MONTPELIER VT 05602	GOVERNMENT
BARRE CITY	75 SUMMER ST BARRE CITY VT 05641	SCHOOL K / 12	MONTPELIER	145 CONNOR RD MONTPELIER VT 05602	GOVERNMENT
BARRE CITY	153 AYERS ST BARRE CITY VT 05641	SCHOOL K / 12	MONTPELIER	170 MAIN ST MONTPELIER VT 05602	SCHOOL K / 12
BARRE CITY	50 PARKSIDE TER BARRE CITY VT 05641	SCHOOL K / 12	MONTPELIER	1 GALLISON HILL RD MONTPELIER VT 05602	GOVERNMENT
BARRE CITY	151 AYERS ST BARRE CITY VT 05641	SCHOOL K / 12	MONTPELIER	135 MAIN ST MONTPELIER VT 05602	LIBRARY
BARRE CITY	6 WASHINGTON ST BARRE CITY VT 05641	LIBRARY	MONTPELIER	783 DOG RIVER RD MONTPELIER VT 05602	GOVERNMENT
BARRE TOWN	70 WEBSTERVILLE RD BARRE TOWN VT 05641	SCHOOL K / 12	MONTPELIER	149 STATE ST MONTPELIER VT 05602	GOVERNMENT
BARRE TOWN	67 CAPITOL QUARRY RD BARRE TOWN VT 05654	GOVERNMENT	MONTPELIER	58 BARRE ST MONTPELIER VT 05602	SCHOOL K / 12
BARRE TOWN	134 MILL ST BARRE TOWN VT 05641	LIBRARY	MONTPELIER	811 DOG RIVER RD MONTPELIER VT 05602	GOVERNMENT
BARRE TOWN	105 CHURCH HILL RD BARRE TOWN VT 05678	GOVERNMENT	MONTPELIER	155 STATE ST MONTPELIER VT 05602	GOVERNMENT
BARRE TOWN	84 PINE HILL RD BARRE TOWN VT 05641	SCHOOL K / 12	MONTPELIER	39 MAIN ST MONTPELIER VT 05602	CITY / TOWN HALL
BARRE TOWN	579 S BARRE RD BARRE TOWN VT 05641	SCHOOL K / 12	MONTPELIER	5 GREEN MOUNTAIN DR MONTPELIER VT 05602	GOVERNMENT
BERLIN	186 INDUSTRIAL LN BERLIN VT 05602	GOVERNMENT	MONTPELIER	46 BARRE ST MONTPELIER VT 05602	SCHOOL K / 12
BERLIN	363 FISHER RD BERLIN VT 05602	GOVERNMENT	MONTPELIER	11 E STATE ST MONTPELIER VT 05602	GOVERNMENT
BERLIN	1480 PAINE TPKE N BERLIN VT 05602	GOVERNMENT	MONTPELIER	33 SCHOOL ST MONTPELIER VT 05602	GOVERNMENT
BERLIN	3212 BROOKFIELD RD BERLIN VT 05602	GOVERNMENT	MONTPELIER	26 TERRACE ST MONTPELIER VT 05602	GOVERNMENT
BERLIN	126 SHED RD BERLIN VT 05602	GOVERNMENT	MONTPELIER	10 WHEELLOCK ST MONTPELIER VT 05602	GOVERNMENT
BERLIN	578 PAINE TPKE N BERLIN VT 05602	GOVERNMENT	MONTPELIER	13 GREEN MOUNTAIN DR MONTPELIER VT 05602	GOVERNMENT
BERLIN	617 COMSTOCK RD BERLIN VT 05602	GOVERNMENT	MONTPELIER	56 E STATE ST MONTPELIER VT 05602	GOVERNMENT
BERLIN	571 US ROUTE 302 BERLIN VT 05641	GOVERNMENT	MORETOWN	1115 VT ROUTE 100B MORETOWN VT 05602	GOVERNMENT
BERLIN	372 PAINE TPKE N BERLIN VT 05602	SCHOOL K / 12	MORETOWN	994 VT ROUTE 100B MORETOWN VT 05660	GOVERNMENT
CABOT	25 COMMON RD CABOT VT 05647	SCHOOL K / 12	MORETOWN	1320 VT ROUTE 100B MORETOWN VT 05602	GOVERNMENT
CABOT	50 GYM RD CABOT VT 05647	SCHOOL K / 12	MORETOWN	940 VT ROUTE 100B MORETOWN VT 05660	SCHOOL K / 12
CABOT	56 GYM RD CABOT VT 05647	SCHOOL K / 12	MORETOWN	897 VT ROUTE 100B MORETOWN VT 05660	GOVERNMENT
CABOT	52 GYM RD CABOT VT 05647	SCHOOL K / 12	MORETOWN	1147 VT ROUTE 100B MORETOWN VT 05660	GOVERNMENT
CABOT	3432 ROUTE 215 N CABOT VT 05647	GOVERNMENT	NORTHFIELD	495 GARVEY HILL RD NORTHFIELD VT 05663	GOVERNMENT
CABOT	47 GYM RD CABOT VT 05647	SCHOOL K / 12	NORTHFIELD	51 S MAIN ST NORTHFIELD VT 05663	CITY / TOWN HALL
CABOT	49 GYM RD CABOT VT 05647	SCHOOL K / 12	NORTHFIELD	69 DOG RIVER DR NORTHFIELD VT 05663	GOVERNMENT
CABOT	3123 MAIN ST CABOT VT 05647	GOVERNMENT	NORTHFIELD	93 S MAIN ST NORTHFIELD VT 05663	LIBRARY
CABOT	51 GYM RD CABOT VT 05647	SCHOOL K / 12	NORTHFIELD	51 GOULD RD NORTHFIELD VT 05663	GOVERNMENT
CABOT	26 GYM RD CABOT VT 05647	SCHOOL K / 12	NORTHFIELD	27 CROSS ST NORTHFIELD VT 05663	SCHOOL K / 12
CABOT	3084 MAIN ST CABOT VT 05647	GOVERNMENT	NORTHFIELD	10 CROSS ST NORTHFIELD VT 05663	SCHOOL K / 12
CALAIS	6011 VT ROUTE 14 CALAIS VT 05650	GOVERNMENT	NORTHFIELD	90 HILL ST NORTHFIELD VT 05663	GOVERNMENT
CALAIS	12 BATTEN RD CALAIS VT 05650	GOVERNMENT	NORTHFIELD	23 UNIVERSITY DR NORTHFIELD VT 05663	LIBRARY
CALAIS	1662 KENT HILL RD CALAIS VT 05648	GOVERNMENT	NORTHFIELD	37 CROSS ST NORTHFIELD VT 05663	SCHOOL K / 12
CALAIS	3120 PEKIN BROOK RD CALAIS VT 05650	GOVERNMENT	ORANGE	164 RESERVOIR RD ORANGE VT 05641	GOVERNMENT
DUXBURY	458 VT ROUTE 100 DUXBURY VT 05676	SCHOOL K / 12	ORANGE	87 RESERVOIR RD ORANGE VT 05641	GOVERNMENT
DUXBURY	5672 VT ROUTE 100 DUXBURY VT 05676	SCHOOL K / 12	ORANGE	357 US ROUTE 302 ORANGE VT 05641	SCHOOL K / 12
DUXBURY	541 HART RD DUXBURY VT 05676	GOVERNMENT	ORANGE	145 RESERVOIR RD ORANGE VT 05641	GOVERNMENT
DUXBURY	5536 VT ROUTE 100 DUXBURY VT 05676	GOVERNMENT	PLAINFIELD	151 HIGH ST PLAINFIELD VT 05667	LIBRARY
DUXBURY	456 VT ROUTE 100 DUXBURY VT 05676	SCHOOL K / 12	PLAINFIELD	18 HIGH ST PLAINFIELD VT 05667	GOVERNMENT
EAST MONTPELIER	2290 VT ROUTE 14 N EAST MONTPELIER VT 05651	SCHOOL K / 12	PLAINFIELD	99 CAMERON RD PLAINFIELD VT 05667	GOVERNMENT
EAST MONTPELIER	2284 VT ROUTE 14 N EAST MONTPELIER VT 05651	SCHOOL K / 12	ROXBURY	1559 ROXBURY RD ROXBURY VT 05669	SCHOOL K / 12
EAST MONTPELIER	21 COBURN RD EAST MONTPELIER VT 05651	SCHOOL K / 12	ROXBURY	1567 ROXBURY RD ROXBURY VT 05669	CITY / TOWN HALL
EAST MONTPELIER	2282 VT ROUTE 14 N EAST MONTPELIER VT 05651	SCHOOL K / 12	ROXBURY	1491 ROXBURY RD ROXBURY VT 05669	GOVERNMENT
EAST MONTPELIER	1876 VT ROUTE 214 EAST MONTPELIER VT 05651	GOVERNMENT	WASHINGTON	72 SCHOOL LN WASHINGTON VT 05675	SCHOOL K / 12
EAST MONTPELIER	665 VINCENT FLATS RD EAST MONTPELIER VT 05651	SCHOOL K / 12	WASHINGTON	573 CYR HTS WASHINGTON VT 05675	GOVERNMENT
EAST MONTPELIER	3268 VT ROUTE 14 N EAST MONTPELIER VT 05651	GOVERNMENT	WASHINGTON	2964 VT ROUTE 110 WASHINGTON VT 05675	LIBRARY
ELMORE	1175 VT ROUTE 12 ELMORE VT 05680	GOVERNMENT	WILLIAMSTOWN	2632 VT ROUTE 14 WILLIAMSTOWN VT 05679	GOVERNMENT
MARSHFIELD	106 NASMITH BROOK RD MARSHFIELD VT 05667	SCHOOL K / 12	WILLIAMSTOWN	85 ROOD POND RD WILLIAMSTOWN VT 05679	GOVERNMENT
MIDDLESEX	187 LOWER SUNNY BROOK RD MIDDLESEX VT 05602	GOVERNMENT	WILLIAMSTOWN	100 BRUSH HILL RD WILLIAMSTOWN VT 05679	SCHOOL K / 12
MIDDLESEX	1170 US ROUTE 2 MIDDLESEX VT 05602	GOVERNMENT	WILLIAMSTOWN	461 FALLS BRIDGE RD WILLIAMSTOWN VT 05679	GOVERNMENT
MIDDLESEX	1078 US ROUTE 2 MIDDLESEX VT 05602	GOVERNMENT	WILLIAMSTOWN	120 HEBERT RD WILLIAMSTOWN VT 05679	SCHOOL K / 12
MIDDLESEX	5 CHURCH ST MIDDLESEX VT 05602	CITY / TOWN HALL	WILLIAMSTOWN	2470 VT ROUTE 14 WILLIAMSTOWN VT 05679	GOVERNMENT
MIDDLESEX	481 SHADY RILL RD MIDDLESEX VT 05602	GOVERNMENT	WILLIAMSTOWN	459 FALLS BRIDGE RD WILLIAMSTOWN VT 05679	GOVERNMENT
MIDDLESEX	433 SHADY RILL RD MIDDLESEX VT 05602	SCHOOL K / 12	WILLIAMSTOWN	77 BROCKWAY HILL RD WILLIAMSTOWN VT 05679	GOVERNMENT
MONTPELIER	51 EASY ST MONTPELIER VT 05602	GOVERNMENT	WILLIAMSTOWN	201 VT ROUTE 64 WILLIAMSTOWN VT 05679	GOVERNMENT
MONTPELIER	58 E STATE ST MONTPELIER VT 05602	GOVERNMENT	WOODBURY	3655 VT ROUTE 14 WOODBURY VT 05650	GOVERNMENT
MONTPELIER	1 PARK AVE MONTPELIER VT 05602	SCHOOL K / 12	WOODBURY	63 VALLEY LAKE RD WOODBURY VT 05681	SCHOOL K / 12
MONTPELIER	5 HIGH SCHOOL DR MONTPELIER VT 05602	SCHOOL K / 12	WOODBURY	524 DOG POND RD WOODBURY VT 05681	GOVERNMENT
MONTPELIER	1437 TERRACE ST MONTPELIER VT 05602	GOVERNMENT	WOODBURY	3675 VT ROUTE 14 WOODBURY VT 05681	GOVERNMENT
			WOODBURY	1672 VT ROUTE 14 WOODBURY VT 05681	GOVERNMENT
			WORCESTER	24 CALAIS RD WORCESTER VT 05682	SCHOOL K / 12

Appendix E: Take Rate Indicators

CVFiber expects to achieve take rates illustrated in the following table. Penetration is projected to grow 3% annually in cabled and uncabled areas after year 4.

Year	Cabled	Uncabled
1	15 %	40 %
2	20 %	50 %
3	25 %	55 %
4	30 %	60 %

These estimates are defined as percentages of E911 addresses that are occupied premises. This subset of total E911 addresses is the same as used by the Vermont Public Service Department when reporting broadband penetration by town. Note that a multi-family address at one E911 address is counted as one occupied premise.

The take rate is influenced by the service/price tiers that are offered. CVFiber assumes that the CVFiber will offer rates significantly lower than ECFiber because of grant funding and partnership with WEC. The table below provides the service/price tiers offered by ECFiber, the prices charged by ECFiber, and the percentages of customers currently consuming each tier.

ECFiber reports that customers are choosing higher service/price tiers now, during the Covid-19 health crisis, than they did in recent years. Customers have found the lower tiers to be less useful in households that are conducting concurrent sessions of distance learning, telehealth, remote workplace, and streaming entertainment. ECFiber believes that customers on average will not revert to lower service/price tiers when the COVID-19 health crisis is over.

ECFiber Price Rates			
Option	Speed	Price	Percent of Customers
Basic	50/50Mbps	\$72/mo	61.0%
Standard	200/200Mbps	\$104/mo	29.0%
Ultra	800/800Mbps	\$164/mo	10.0%

Survey Result Information

In December 2020, CVFiber’s canvassing consultant Last Mile Community Connections contacted 4,500 households in the 20-town district to survey their broadband situations. The results of their efforts provided a picture of their broadband needs, uses and interests.

CVFiber Delegates also placed notices in their respective Front Porch Forums to further encourage households to complete the survey. More than 1,300 households completed the survey from our twenty communities.

One of the critical questions each household was asked about their interest in subscribing to CVFiber’s planned highspeed broadband. More than 81% of respondents said that they would either “definitely” or “probably” subscribe to the CVFiber service. In addition, of 870 households who answered this question, 64% said that they would be willing to pre-subscribe for two years, and 17% indicated that they would donate money to help build the network.

Only 66% of households said they had heard of CVFiber, which tells us that there is work to do in reaching out to our 20 communities.

More than 94% of households stated they had Internet service, however, of those, only 15% indicated that it met their needs. This underscores CVFiber’s mission to bring highspeed broadband to everyone in our district.

Only 24% of CVFiber households were aware of the various broadband subsidies available to them. The Department of Public Service’s web page maintains a comprehensive list of resources. <https://publicservice.vermont.gov/content/new-connectivity-resources-support-you-during-covid-19-state-emergency-vermont>

The next set of survey questions asked about the household’s use of internet. The results provide a glimpse into home schooling and remote working needs. The survey revealed that an average of 1.77 persons in each household are using the internet for online classes or professional learning. Of 433 respondents, their households are on the internet an average of 6.8 hours/day.

When asked about online chatting with friends, entertainment, or gaming, over 90% responded with an average of 2.6 persons using the internet for 7 hours a day.

When asked about remote workers, 69% of respondents indicated they were doing remote work from home. In these households, there are an average of 1.5 persons remotely working and households are spending an average of 10.8 hours/day on the internet.

Appendix F: Technical Standards

CVFiber intends that the Operator will deliver fiber to the premises at every on-grid location in all member towns as the network gets built out, with rare exceptions as described below.

High-Level Design / Engineering Plan

CVFiber expects the Operator will oversee CVFiber's Detailed Engineering contractor's work for the District. The High-Level Design contractor is using the following standards:

- a) Include all communities in the CVFiber District
- b) Include excess fiber strands to accommodate whole town design.
- c) Without sacrificing future performance growth, the high-level design shall minimize build and operating costs and shall optimize use of existing aerial routes but may include limited lengths of underground routes.
- d) Incorporate available existing fiber assets including First Light, VELCO etc., where their use is feasible, and any known passive infrastructure that could be leased rather than built new.
- e) To the degree possible, situate electronics in proximity to government buildings or near areas of greater population density.
- f) Clearly describe a strategy and rationale for design architecture.
- g) Describe anticipated required permits and civil works, along with estimated costs.
- h) Include OLTs and ONTs in quantities and locations that are consistent with technology capabilities, strand counts, and population densities. The design shall also specify the proposed service area and capacity for each OLT.
- i) Divide the initial service territory into Fiber Service Areas and provide approximate types, costs, and locations of other gear needed to provide services such as splice cases, MSTs, splitters, hand holes, and other types of material that may be required.
- j) Be expandable in a manner as efficient and effective as possible to increase capacity and to accommodate advances in technology as may reasonably be expected to become available over the life of the network (at least 20 years). The design should include sufficient fiber capacity in the backbone and distribution routes to accommodate potential future expansion.
- k) Adhere to all current and generally accepted technical standards, building codes, construction practices, and other regulations, specifications, and standards as may apply in the broadband networking industry.
- l) Clearly indicate strand counts for each discrete cable specified.
- m) Provide an estimated bill of materials including labor, and materials, and including all active and passive equipment with quantities and capacities (where applicable) provided for each item, along with one-time and recurring expenses, such as maintenance, repair, and replacement.

The WEC-CUD High Level Design is expected to be completed by Summer 2021, as is the CVFiber High-Level Design. The following is the technical specification that our contractor is using:

1. Ten-Gigabit Symmetrical Passive Optical Network (XGSPON) architecture for residential and small business use.
2. Pole location data and substation locations will be provided in a GIS format. The high-level design should attempt to follow pole paths to the extent possible with potential underground segments where there are no usable pole lines. Premise locations will also be provided in a GIS format.
3. Four or more spare fiber strands set aside for future direct connections from local hubs to serve large commercial businesses or to provide service to cell towers.
4. Sharing of optical feeder and port on the Optical Line Terminal (OLT) among as many subscriber terminals as possible, typically 28 subscribers per OLT port plus 4 spares.
5. Attachment of distribution fiber and customer drops on existing utility poles located at the roadside or in easements on private property.
6. Passive optical splitters to terminate the fiber and provide the optical connection to the Optical Network Terminal (ONT) at the customer premises.
7. Not less than two (three would be better) central hub locations to provide routing redundancy, one each in Southern and Northern areas of the District.
8. Local hub locations in many member towns as determined by distance requirements and the number of required local connections. If desirable, hub can co-locate at the electrical substation.
9. Generator availability at hub location and not less than 8 hours of battery back-up in each hub.
10. Optical line terminals (OLT) in each hub connecting to splitters in the field and connecting to each other in a ring topology.
11. Diverse and redundant connections to backhaul providers and concentration to ensure resilient connection to the internet.
12. Ensure the electrical substations are on the network.
13. Diverse backhaul connections to major co-location centers in two to three cities with sufficient upstream capacity and peering arrangements to support the peak load of fiber customers plus 20%.
14. To the extent possible, the design should provide for connections to the premises and installation inside each premises at nominal cost, provided that the connection from the nearest utility pole is aerial and up to 400 feet in length.
15. The network design will have sufficient flexibility to support substantial economic growth and a corresponding increase in the number of occupied premises by overlashing additional fiber from the hub to the additional locations and/or shortening the distance between splitters.

Detailed Engineering Design Specifications

The same engineering firm that completed the high-level design for the entire district will complete a detailed engineering for Area A. We anticipate that the CVFiber/Operator will

continue to contract with the same engineering contractor to incrementally develop detailed network engineering plans for the remaining areas in the CVFiber District, as funds become available, in a series of Work Orders pursuant to CVFiber Request for Bids.

The detailed engineering elements provided to the contractor are as listed below. The Design/Engineering plans includes all necessary elements for the construction team to build the network. We are anticipating Area A's Phase 1 routes Detailed Engineering Design will be completed by October 2021.

Respondent should indicate what other elements should be added to this list and the reason therefore:

- Hub Agreements,
- Detailed Engineering construction specification, drawings, maps ,and splice charts
- Network electronics.
- Physical infrastructure and environmental systems necessary to house and support the network electronics.
- Connections to customer premises ("drops").
- Customer premises equipment and cabling.
- Provide network documentation of failure scenarios (e.g., fiber cuts, etc.

Identify Hub Locations

The detailed engineering design contains a detailed plans and costs for hub locations (optical line terminals (OLT), power supply, and battery back-up, possibly including an emergency generator) that meet the regulations of the Vermont Public Utility Commission need of the and that achieves the overall goal of reaching every premise in every town within the District. The Central Hubs will also include details on internet routers and/or network switches.

Hub Agreements and Easements

The selected contractor will be responsible for developing the leasing and easement agreement between CVFiber and each town/school/public safety and other relevant network to put hub equipment in their buildings.

Detailed Construction Drawings and Maps

The selected engineering contractor is responsible for the creation of detailed construction drawings and maps in an electronic (preferably in an ArcGIS format) and paper format for the Construction team and for long term system management.

IP Addresses

Operator shall have the ability to provide each customer with a dynamic IP address by default or a static IP address if requested as part of a value-added service tier. Both addressing types

shall have automatic redundancy provided by at least two properly sized high availability servers in different physical locations. IP address servers shall be sized so that any one of the servers can handle the entire worst-case demand alone. IP address servers should be configured to ensure automatic fail-over without manual intervention. ISP/NO shall institute automatic monitoring and notification of problematic IP address servers to ISP/NO staff/employees so that issues may be resolved promptly. During essential maintenance windows, at least one IP address server shall be always on-line and available. The ISP/NO shall manage domain name resolution so that assigned IP addresses have fully consistent forward and reverse lookups. The network will not exclude access to any Internet content or block any network ports, except when required to deal with network security incidents.

Net Neutrality

CVFiber supports Net Neutrality. Operator shall not prioritize or deprioritize any class of network traffic including value-added services provided by Operator.

Network Operations

Operator shall provide continuous network operations, including monitoring, troubleshooting, and dispatch 24/7/365 services from diverse network operations centers (NOCs). Each NOC premises shall have as a minimum, security controls and environmental systems that provide physical security, continuous power, climate control, and fire suppression.

Operator shall take all necessary measures using best available standards and practices to prevent network security breaches and to detect, mitigate, and report security threats to its systems or the network including denial of service attacks to or from customers. Operator shall report potential and actual security breaches to CVFiber as soon as practical and not later than seventy-two (72) hours after any recorded incident.

Operator shall maintain spare equipment and up-to-date backups of all operating systems, software, and data to enable full recovery from any service interruption.

Operator shall prepare an annual report on the previous years' operational accomplishments, as well as plans for the next two years including recommended improvements.

Operator shall hold individual customer data in confidence and may use such data only for the purpose of providing service and invoicing and collecting payments for service. Operator shall not sell or disclose customer information to any third party without the explicit written permission of the CVFiber Governing Board and the explicit written permission of the customer, which must be obtained through an opt-in process approved by the CVFiber Governing Board.

Operator shall also hold aggregate customer data in confidence and may use such data only for the purpose of providing system management services and reporting to the CVFiber Board.

Operator shall not sell or disclose aggregate customer information to any third-party without the explicit written permission of the CVFiber Governing Board.

Voice Services

Operator shall have the ability to manage routing of telephone calls throughout the public switched telephone network (PSTN) and interconnection points of the PSTN with the Internet Protocol (IP) realm.

Voice service shall include the provision of an adapter for connection of analog telephones. Voice Services battery backup will be needed to be based on the time period as per Vermont PUC rules.

Appendix G: Operational Standards

CVFiber expects the Operator to deliver a consistently high-quality customer experience. The customer experience will be measured by the design and implementation of the technical infrastructure, the capability, the delivery, and the culture of the service organization that will interact with customers. Respondent should propose a method for soliciting customer feedback to gauge and improve service experience.

The dimensions of our customers' experience include ease of order placement, timely installation, consistent speed at the contracted speed tier, uninterrupted uptime, timely resolution of reported problems, and ease of interaction with customer service and technical service representatives.

The respondent's proposal should indicate agreement to conform with the specific standards of performance outlined below or shall propose alternative standards of performance that the Operator believes will be more beneficial to customers.

Normal Performance Standards

Busy Hour Period: The Busy Hour period shall be defined as the continuous four hours of peak usage by all CVFiber customers combined in the average week for the previous 26 weeks. The FCC designated 19:00-23:00 as the peak usage period before the COVID-19 pandemic. Operator shall use the most recently designated FCC period until a different Busy Hour Period is identified for CVFiber customers.

Performance Measurement: At minimum, performance shall be measured for a statistically significant number of customer locations chosen by CVFiber based on rotating, randomly selected customers, broken down by customer type, or usage tier. Operator agrees to use the management systems that are embedded within their fiber distribution management system to measure, analyze, and report performance or a third-party system that has similar functionality. Customer site performance shall be measured at the endpoint of the Optical Network Terminal (ONT). Performance WiFi connectivity between the ONT and the customer's devices may also be monitored and reported.

Minimum Speed: Operator shall always provide symmetrical download and upload speeds at or above (not up to) the contracted speed in each speed/price tier.

Speed Variation: The consistent download and upload speeds achieved by at least 80% of customers 80% of the time shall be n% of the contracted speed, where n% is the percentage reported during the Busy Hour period for all fiber providers combined in the most recent FCC Measuring Broadband America survey ("FCC survey," "survey"). In the most recent survey of performance in 2018, n was 94.8% for download speeds and 105.8% for upload speeds.

Latency: Median UTP latency shall be not more than the upper bound of the 95% confidence interval for latency during the Busy Hour period reported for all fiber providers combined in the most recent FCC survey. In the most recent survey, the 95% upper bound was 11.56ms.

Packet Loss: Average packet loss shall be not more than the upper bound of the 95% confidence interval for packet loss during the Busy Hour period reported for all fiber providers combined in the most recent FCC survey. In the most recent survey, the 95% upper bound was 0.11%.

Normal Service Standards

Operator shall post hours of normal operation for technical and non-technical customer support.

At minimum, Operator shall provide methods for customers to contact technical and customer service agents by secure online customer portal, telephone, email, and postal mail.

The secure customer portal shall enable customers to log in, add or delete services, make payments, report technical problems, or make other requests. The portal should include a chat function during normal business hours defined as Monday through Friday from 8:00 AM to 6:00 PM, and may include the function after hours from 6:00 AM to 9:00 PM.

For incoming telephone calls, Operator shall provide a toll-free number that will be answered 24 hours a day, 7 days a week. During posted hours of operation, all calls shall be answered in person; after hours, calls may be answered by an answering service. All incoming telephone calls shall be answered by persons located in the US or Canada.

All incoming calls shall be answered within 30 seconds after the connection is made, including wait time. If the call is transferred, the transfer time may not exceed 30 seconds. Customers shall receive a busy signal no more than three percent of the time. These standards must be met at least 90 percent of the time, measured quarterly, under "normal operating conditions," e.g., those conditions under control of the Operator.

Standards for responding to incoming customer chat requests on the secure customer portal shall be analogous to standards for response to telephone calls except that an automated acknowledgement shall be provided outside of posted business hours and that acknowledgement shall direct customers to either make contact by other available means or to initiate a new Chat request during the next available hour of operation.

All incoming emails shall be acknowledged immediately. The acknowledgement shall state the standard for timely response and shall direct customers to make contact by other available means if a more rapid response is required.

Installation, Service Interruption, and Service Call Standards

1. Standard Internet installations – Installations which are those located up to 400 feet from the existing distribution system.

a. During the period when the network is being constructed in the vicinity of the customer a standard installation shall be completed as rapidly as possible, but not later than ten (10) business days,

b. If the network has been constructed in the vicinity of the customer but a connection to the customer's premises does not yet exist, a standard installation shall be completed as rapidly as possible, but not later than five (5) business days.

c. After the network has been constructed in the vicinity of the customer and a connection to the customer's premises has been installed previously, a standard installation shall be completed within two (2) business days after an order has been placed.

Operator may propose alternate standards for Standard Internet Installations, provided that the alternate standards have a similar intent of expediting installations and commencing customer service.

2. Standard Voice installations – The provision of Voice Over Internet Protocol (VOIP) service over an Internet connection. Voice service shall not be provided exclusive of Internet service.

a. If both orders are placed simultaneously Voice service shall be completed concurrently with Internet service

b. If an order for Voice service follows successful installation of Internet service, Voice service shall be installed within two (2) business days after an order has been placed.

Operator may propose alternate standards for Standard Voice Installations, provided that the alternate standards have a similar intent of expediting installations and commencing customer service.

3. Planned Service Interruptions:

a. Operator shall minimize the number and duration of planned service interruptions that are necessary for the purpose of system maintenance or improvement and shall schedule these interruptions on days and times when network traffic is lowest.

b. Operator shall inform CVFiber in advance of any planned interruption and shall not proceed without CVFiber's written consent, which shall not be unreasonably withheld.

c. Operator shall communicate to all customers by postal mail and email the date, approximate time, duration, and impact of any planned service interruption.

4. Unplanned Service Interruptions:

- a. The operator shall develop and maintain a Business Continuity Plan (BCP) including Disaster Recovery Plans (DRPs) which includes electrical service or broadband network failures.
 - 1. Establish a BCP/DRP team including inhouse and external members. The team will establish a suite of DRP scenarios prioritized based on likelihood and severity.
 - 2. At least annually or after major system changes, conduct DRP scenario "tabletop" exercises where all required parties from all associated organizations meet to "walk through" how the team will respond to a relevant and timely DRP scenario.
 - 3. At least annually the operator should take the opportunity during planned outages to test recovery procedures when feasible.

- b. Urgent Outages: Operator shall mobilize resources and begin work to diagnose and resolve Urgent outages immediately after notification. Operator shall aim to resolve Urgent outages within four hours. The targeted resolution time shall be extended to include any electrical utility repair work that must precede the network repair work. Trouble ticket records shall include information about the impact of electrical utility repairs.

- c. High Priority Outages: Operator shall mobilize resources and begin work to diagnose and resolve within one hour and shall aim to resolve within eight hours, with extensions to include necessary preceding electrical utility repair. Trouble ticket records shall include information about the impact of electrical utility repairs.

- d. Normal Priority Outages: Operator shall mobilize resources and begin work to diagnose and resolve within four hours and shall aim to resolve within twenty-four hours, with similar allowable extension for utility repair. Trouble ticket records shall include information about the impact of electrical utility repairs.

Operator may propose alternate standards for categorizing and resolving outages, provided that the alternate standards have a similar intent of triaging problems and expediting resolution.

5. Service Calls:

- a. Operator shall schedule appointments for installations and other service calls either at a specific time or, at a maximum, during a two-hour time block during normal business hours. Operator may schedule service calls outside of normal business hours for the convenience of the customer.

- b. Operator may not cancel an appointment with a customer after the close of business on the business day prior to the scheduled appointment. Exception: Operator may cancel an appointment due to inclement weather. If Operator's installer or technician is running late or is delayed by inclement weather and will not meet the specified appointment time, he or she

must contact the customer and reschedule the appointment at the convenience of the customer.

c. The standards described above for installations, outages and service calls must be met under normal operating conditions at least 95 percent of the time, measured quarterly and reported monthly.

6. Value-Added Service Standards

a. CVFiber requires Operator to provide standard Internet and Voice services. All other services shall be designated generally as Value-Added services.

b. Value-Added services may include a Business Class of service for Internet and Voice services.

c. Consumer and business services shall have identical speeds and identical traffic priority.

d. Business class service may have an uptime percentage guarantee and a guaranteed service restoration time, both backed with financial penalties. Business class service may be priced higher than consumer class service.

e. Operator shall not market, sell, or provide any Value-Added service without the express written consent of the CVFiber Governing Board, which consent shall not be withheld unreasonably. CVFiber may attach reasonable conditions to its consent.

7. Billing Practice Standards

a. Any changes in subscription rates must be approved by the CVFiber Governing Board and provided to customers in writing by mail and email at least 3 months before they take effect.

b. Operator shall provide monthly invoices to each customer through an online portal, by email, or by postal mail at the customer's option. All charges shall be clearly itemized.

c. Operator shall enable payment by online bank or credit card payment, by check, and by accepting credit card payment by telephone. Operator may increase billing efficiency with CVFiber approval by providing incentives for online invoicing and payment and/or service charges for invoicing by mail or payment by credit card.

d. Refunds must be issued no later than either the customer's next billing cycle or 30 days following resolution of the request, whichever is earlier, or upon the return of equipment when service is terminated. Credits must be issued no later than the billing cycle following the determination that a credit is warranted.

8. Other Customer Communication Standards

a. Operator shall inform CVFiber of any planned marketing communications to CVFiber customers and shall not present marketing communications to CVFiber customers without the prior written consent of the CVFiber Governing Board, which consent shall not be withheld unreasonably.

b. The following information shall be provided to customers at the time of installation, at least annually to all subscribers, and at any time upon request:

- (1) products and services offered.
- (2) prices of each product and service.
- (3) installation, maintenance, and service policies.
- (4) instructions on how to use the service.
- (5) billing and complaint procedures.

Operator shall give 30 days' notice to all customers in advance of any significant changes in this information.

Appendix H: Proposed Financial Elements of a CVFiber–Operator Contract

The CVFiber-Operator contract is a contract for services.

CVFiber expects to pay and will negotiate a reasonable, competitive fee to the Operator that can deliver these services in a professional manner in accordance with the standards in the contract and CVFiber's mission and values.

CVFiber is open to considering proposed methods and means for determining a reasonable, competitive fee that recognizes the need for the Operator to scale to meet the challenges of managing the construction of a network, connecting and servicing customers, and maintaining and enhancing a network.

CVFiber is a municipality. CVFiber is a nonprofit. CVFiber's responsibilities are to its communities, its neighbors, its customers. CVFiber will deliver a reliable, high speed, and affordable Internet service.

CVFiber's subscriber rates will be driven by its expenses and informed by the Operator's services, plan, assumptions, and costs to fulfill the contract.

Operator services include:

1. Project Management over ongoing and future pre-construction, construction, and other Outside Plant operations, including oversight of all contractors and sub-contractors, which services will fluctuate over time until ending.
2. Network Operations which will need to scale to meet buildout and customer acquisition, as well as harness technology enhancements as appropriate.
3. Service Operations in support of customer connectivity and support.
4. Business Operations including billing, marketing, and administrative tasks.

CVFiber invites respondents to propose an Operator service fee structure that meets the challenges and needs of the Operator, CVFiber and its community residents.

APPENDIX I: State of Vermont- Federal Terms Supplement (Non-Construction) for All Contracts and Purchases of Products and Services Connected with 2020 Pandemic

STATE OF VERMONT- FEDERAL TERMS SUPPLEMENT (Non-Construction)

**for all Contracts and Purchases¹
of Products and Services Connected with 2020 Pandemic**

BYRD ANTI-LOBBYING AMENDMENT

Contractors who apply or bid for an award of \$100,000 or more certify that each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier, up to the recipient who in turn will forward the certification(s) to the awarding agency

PROCUREMENT OF RECOVERED MATERIALS

In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated Items unless the products cannot be acquired-

1. Competitively within a time frame providing for compliance with the contract performance schedule;
2. Meeting contract performance requirements; or
3. At a reasonable price

Information about this requirement, along with the list of EPA-designated items, is available at the EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.

The Contractor also agrees to comply with all other applicable requirements of section 6002 of the Solid Waste Disposal Act.

CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

1. The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
2. The contractor agrees to report each violation to the State of Vermont and understands and agrees that the State of Vermont will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
3. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.
4. The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
5. The contractor agrees to report each violation to the State of Vermont and understands and agrees that the State of Vermont will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
6. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA. **a.** Standard. Non-Federal entities and contractors are subject to the debarment and suspension regulations implementing Executive Order 12549, *Debarment and Suspension* (1986) and Executive Order 12689, *Debarment and Suspension* (1989) at 2 C.F.R. Part 180 and the Department of Homeland Security's regulations at 2 C.F.R. Part 3000 (Nonprocurement Debarment and Suspension).

CONTRACTOR BREACH, ERRORS AND OMISSIONS

1. Any breach of the terms of this contract, or material errors and omissions in the work product of the contractor must be corrected by the contractor at no cost to the State, and a contractor may be liable for the State's costs and other damages resulting from errors or deficiencies in its performance.

¹ These terms, developed by the Vermont Attorney General's Office, are to be included, without any changes, in all contracts, and any amendments to contracts, intended or expected to be used in connection with the State of Vermont's response to the 2020 Pandemic. THESE TERMS ARE ALSO TO BE USED AND ADDED FOR **ANY TRANSACTIONS**, SUCH AS BUT NOT ONLY PURCHASE ORDERS, TAKING PLACE UNDER AN EXISTING CONTRACT, IF THE PURCHASE IS FOR THE PANDEMIC AND IF THERE IS ANY POTENTIAL DOUBT AS TO WHETHER THE OVERLYING CONTRACT HAS THESE TERMS. These terms and conditions shall also be added in instances in which a purchase without formal contract is otherwise duly authorized.

2. Neither the States' review, approval or acceptance of nor payment for, the services required under this contract shall be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract.
3. The rights and remedies of the State provided for under this contract are in addition to any other rights and remedies provided by law or elsewhere in the contract.

TERMINATION FOR CONVENIENCE

1. General

- a. Any termination for convenience shall be effected by delivery to the Contractor an Order of Termination specifying the termination is for the convenience of the Agency, the extent to which performance of work under the Contract is terminated, and the effective date of the termination.
- b. In the event such termination occurs, without fault and for reasons beyond the control of the Contractor, all completed or partially completed items of work as of the date of termination will be paid for in accordance with the contract payment terms.
- c. No compensation will be allowed for items eliminated from the Contract.
- d. Termination of the Contract, or portion thereof, shall not relieve the Contractor of its contractual responsibilities for work completed and shall not relieve the Contractor's Surety of its obligation for and concerning any just claim arising out of the work performed.

2. Contractor Obligations

After receipt of the Notice of Termination and except as otherwise directed by the State, the Contractor shall immediately proceed to:

- a. To the extent specified in the Notice of Termination, stop work under the Contract on the date specified.
- b. Place no further orders or subcontracts for materials, services, and/or facilities except as may be necessary for completion of such portion(s) of the work under the Contract as is (are) not terminated.
- c. Terminate and cancel any orders or subcontracts for related to the services, except as may be necessary for completion of such portion(s) of the work under the Contract as is (are) not terminated.
- d. Transfer to the State all completed or partially completed plans, drawings, information, and other property which, if the Contract had been completed, would be required to be furnished to the State.
- e. Take other action as may be necessary or as directed by the State for the protection and preservation of the property related to the contract which is in the possession of the contractor and in which the State has or may acquire any interest.
- f. Make available to the State all cost and other records relevant to a determination of an equitable settlement.

3. Claim by Contractor

After receipt of the Notice of Termination from the state, the Contractor shall submit any claim for additional costs not covered herein or elsewhere in the Contract within 60 days of the effective termination date, and not thereafter. Should the Contractor fail to submit a claim within the 60-day period, the State may, at its sole discretion, based on information available to it, determine what, if any, compensation is due the Contractor and pay the Contractor the determined amount.

4. Negotiation

Negotiation to settle a timely claim shall be for the sole purpose of reaching a settlement equitable to both the Contractor and the State. Settlement shall be based on actual costs incurred by the Contractor, as reflected by the contract rates. Consequential damages, loss of overhead, loss of overhead contribution of any kind, and/or loss of anticipated profits on work not performed shall not be included in the Contractor's claim and will not be considered, allowed, or included as part of any settlement.