

**NEVADA COUNTY LAST MILE BROADBAND GRANT
FY 2019/20 GRANT AGREEMENT
(BANNER MOUNTAIN SOUTH/DEER CREEK PROJECT)**

THIS GRANT AGREEMENT is made and entered into as of the ____ day of _____, 2020 by and between the COUNTY OF NEVADA, a political subdivision of the State of California ("COUNTY"), and the Nevada County Fiber, Inc., a C-Corporation ("ORGANIZATION"), and is effective as of the 28th day of April 2020 ("Effective Date").

WHEREAS, the Nevada County Board of Supervisors adopted Resolution 18-324 outlining its support to promote the expansion, access and usage of broadband networks and advanced communication services throughout Nevada County to positively impact areas of healthcare, public safety, school, colleges, libraries, community support organization, businesses, social-networking, and economic development; and

WHEREAS, the Nevada County Board of Supervisors adopted Resolution 19-429 approving the Personal Services Contract with the Sierra Business Council (PROJECT ADMINISTRATOR) for the solicitation, facilitation, and administration of a Nevada County Last-Mile Broadband Grant and approved the total maximum grant(s) amount of \$225,000 for FY 2019/20 as a Pilot Program; and

WHEREAS, on February 25, 2020 Project Administrator presented and recommended to the Nevada County Board of Supervisors its recommendation awarding two of the three Broadband Grant applications for FY2019/20 to Exwire, Inc. and Nevada County Fiber in the amount of \$52,900 and \$124,209, respectively; and

WHEREAS, on February 25, 2020 the Board of Supervisors directed staff to develop Grant Award agreements with Exwire, Inc. and Nevada County Fiber in the amount of \$52,900 and \$124,209, respectively; and

WHEREAS, COUNTY has determined that ORGANIZATION is qualified, willing and able to provide the resources necessary to ensure timely and successful completion of the proposed Banner Mountain South/Little Deer Creek Project as submitted to Project Administrator for the FY 2019/20 Last-Mile Broadband Grant Program (incorporated herein as Exhibit B).

NOW, THEREFORE, in consideration of the mutual promises, covenants and agreements set forth below, the parties hereto agree as follows:

1. ORGANIZATION shall perform all services and provide all staffing, equipment and materials, funding and other resources necessary to design, permit, make purchases for, construct and/or install the Project as set forth in Exhibit "A" attached hereto and incorporated herein by reference. ORGANIZATION has represented that the total estimated costs for the proposed Project will not exceed ONE HUNDRED TWENTY-FOUR THOUSAND TWO HUNDRED NINE DOLLARS

AND NO CENTS (\$124,209.00). ORGANIZATION shall pay for all costs and expenses necessary to complete the Project, subject to reimbursement from as provided in this Agreement.

2. ORGANIZATION shall obtain all approvals for and shall execute the Project so that within twenty-four (24) months after the Effective Date of this Agreement, the Project shall be completed to the satisfaction of, and accepted by, the COUNTY, and shall be ready and available fixed service within the proposed project area; provided, however, that said timeframe may be extended by mutual written agreement of the parties. Any funds not utilized by ORGANIZATION within this timeframe shall be retained by COUNTY and may be reallocated to other qualifying projects.
3. COUNTY shall allocate up to a maximum of ONE HUNDRED TWENTY-FOUR THOUSAND TWO HUNDRED NINE DOLLARS AND NO CENTS (\$124,209) from the Information General Services Administration Budget, as allocated per Resolution 19-429, to be used for the proposed Project ("Grant Funding").
4. The sole source of funding by COUNTY for this disbursement is Fund No. 0101-11003-531-1000/521520. No other County funding source shall be held liable for any obligations set forth in this Agreement.
5. COUNTY shall issue reimbursements to ORGANIZATION from the Information General Services Administration Budget, as follows:
 - a. ORGANIZATION shall submit to PROJECT ADMINISTRATOR and COUNTY written requests for reimbursement pursuant to this Agreement. Each request shall specifically identify the item(s) for which reimbursement is sought and the amount of reimbursement requested for each such item and shall certify that the ORGANIZATION has complied with all terms and conditions of this Agreement. ORGANIZATION shall be reimbursed only for eligible expenses as identified in Exhibit "A" and in the estimated amounts set forth in Exhibit "A". However, the Information General Services Agency Director, in his/her discretion, may reallocate estimated amounts between eligible expenses once actual project costs are known provided that the expenses qualify under the same expenditure category and that the total

award amount remains the same. Each reimbursement request shall be accompanied by receipts, invoices, proof of payment and other such written documentation as PROJECT ADMINISTRATOR and/or COUNTY may deem necessary to substantiate and support ORGANIZATION's claim for reimbursement.

- b. COUNTY shall issue reimbursements to ORGANIZATION within thirty (30) days after all of the following events have occurred: (i) the portion of the Project for which reimbursement is sought has been completed to the satisfaction of the PROJECT ADMINISTRATOR and COUNTY and (ii) COUNTY has received a written request for payment and copies of all written documentation with the approval from the PROJECT ADMINISTRATOR required pursuant to Paragraph 5, as noted above.
- c. ORGANIZATION shall submit to PROJECT ADMINISTRATOR and COUNTY a final written request for up to, but not to exceed the amount of any amounts remaining, as allocated in this agreement, in the Information General Services Administration Budget, within thirty (30) days after: (i) the PROJECT ADMINISTRATOR and COUNTY has determined the Project has been satisfactorily completed and the Project has passed a final PROJECT ADMINISTRATOR inspection, (ii) ORGANIZATION has accepted the Project as complete, and (iii) the fixed broadband service within the proposed project area is available ("Completion Date"). The final reimbursement request shall comply with all requirements and conditions set forth under Paragraph 5.a., above.
- d. COUNTY may withhold all or any portion of a reimbursement payment if it determines, in its sole discretion, that: (i) the reimbursement request includes ineligible activities, services or items, (ii) the reimbursement request is untimely or inaccurate, (iii) PROJECT ADMINISTRATOR has not approved the reimbursement request for insufficient documentation or project progress or completion, (iv) the ORGANIZATION has failed to provide receipts or other appropriate documentation to support the reimbursement request, (v) the ORGANIZATION has not complied with applicable federal, state or local laws, ordinances or regulations in connection with its activities under this Agreement, (vi) the ORGANIZATION has failed to obtain or maintain a necessary license or permit in connection with its activities under this Agreement, or (vii) the ORGANIZATION has otherwise failed to comply with a material term or condition of this Agreement.
- e. If ORGANIZATION fails to satisfactorily execute or complete the Project in accordance with the terms and conditions of this Agreement, then COUNTY may, in its discretion, require ORGANIZATION to repay all or any portion of the grant funds provided under this Agreement. Any funds paid to, but not expended by, ORGANIZATION for the purposes stated or in accordance with the terms and conditions of this Agreement shall be refunded to COUNTY. ORGANIZATION shall repay all such sums within thirty (30) days after ORGANIZATION receives a written

repayment request from COUNTY.

- f. Any portion of the Information General Services Administration Budget which COUNTY does not pay to ORGANIZATION and any grant funds returned to COUNTY shall be retained by COUNTY and reallocated to the COUNTY's Economic Development Infrastructure Assignment.
6. The Project to be funded pursuant to this Agreement shall remain property of the ORGANIZATION and shall be used for purposes of PROJECT as set forth herein for a minimum of three (3) years after the Completion Date. If the Project or any portion thereof is closed, materially damaged, destroyed or otherwise made unavailable for purposes of PROJECT prior to the expiration of this three (3) year period, the three (3) year period shall be extended by the amount of time the Project or portion thereof is not available for public use; provided, however, that closures for brief periods to perform routine maintenance and repairs shall not extend this three (3) year period. ORGANIZATION shall notify COUNTY in writing in the event of any such closures, whether temporary or permanent. In the event that the Project or any portion thereof is permanently closed to the public before the expiration of the three (3) year period and any extension thereof, ORGANIZATION shall refund a pro-rata share of COUNTY's contribution under this Agreement based upon the percentage of the three (3) year period that the Project will not be available.
7. COUNTY is a funding source only, and has no right, title, obligation or interest in the Project, nor any control over the design, permitting, purchases, construction and/or installation, operation or maintenance of the Project. ORGANIZATION shall be solely responsible for the proper execution of and on-going operation and maintenance of the Project, and for full compliance with all legal requirements including, but not limited to, safety codes, accessibility laws, development regulations and permitting requirements, CEQA/NEPA, and legal requirements relating to public contracting and construction, public bidding, and prevailing wages.
8. ORGANIZATION shall pay all costs and expenses associated with maintenance and operation of the Project and shall keep the Project and all portions thereof in a good, safe and useable condition.
9. ORGANIZATION shall hold COUNTY, its agents, employees, officers and volunteers harmless from and save, defend and indemnify them against any and all claims, losses, liabilities, and damages from every cause, including but not limited to injury to person or property or wrongful death, with the indemnity to include reasonable attorneys' fees, and all costs and expenses, arising directly or indirectly out of any act or omission of ORGANIZATION, or its agents, officers, employees, or volunteers relating to or during the performance of its obligations under this Agreement. ORGANIZATION's obligation to defend, indemnify, and hold COUNTY harmless under the provisions of this Paragraph 9 shall survive the termination of this Agreement and is not limited to or restricted by any requirement that ORGANIZATION procure and maintain a policy of insurance.

10. ORGANIZATION shall procure and maintain insurance against claims for injuries to persons or damages to property which may arise from or in connection with this Project and the results of that work by the ORGANIZATION, his agents, representatives, employees or subcontractors. Coverage shall be at least as broad as:

- a. Commercial General Liability (CGL) insurance services office form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal and advertising injury with limits no less than \$1,000,000 per occurrence and \$2,000,000 general aggregate. The COUNTY, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to the Project; coverage shall be at least as broad as ISO form CG 20 10 11 85 or through the addition of both CG 20 10, CG 20 26, CG 20 33, or CG 20 38 and CG 20 37. For claims related to this Project, ORGANIZATION's insurance coverage shall be primary coverage at least as broad as ISO CG 20 01 04 13 as respects the COUNTY, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, officials, employees, or volunteers shall be excess of the ORGANIZATION's insurance and shall not contribute with it.
- b. , Commercial automobile liability ISO Form Number CA 00 01 covering any auto (Code 1), or if ORGANIZATION has no owned autos then hired (Code 8) and non-owned autos (Code 9) with limit no less than \$1,000,000 per accident of bodily injury and property damage.
- c. Worker's compensation coverage as required by the State of California, with statutory limits, and employer's liability insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
- d. If the ORGANIZATION maintains broader coverage and/or higher limits than the minimums shown above, the COUNTY requires and shall be entitled to the broader coverage and/or higher limits maintained by the contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the COUNTY.
- e. ORGANIZATION hereby grants to COUNTY a waiver of any right to subrogation which any insurer of said ORGANIZATION may acquire against the COUNTY by virtue of the payment of any loss under such insurance. ORGANIZATION agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the COUNTY has received a waiver of subrogation endorsement from the insurer.

ORGANIZATION shall furnish to COUNTY original Certificates of Insurance including all required amendatory endorsements (or copies of the applicable policy language effecting coverage required by this clause) and a copy of the Declarations and Endorsement Page of the CGL policy listing all policy endorsements to the COUNTY before work begins. However, failure to obtain the required documents prior to the work beginning shall not waive the ORGANIZATION's obligation to provide them. The COUNTY reserves the right to require complete, certified copies of all required insurance policies,

including endorsements required by these specifications, at any time.

11. Throughout the term of this Agreement, ORGANIZATION shall possess or secure all licenses, permits, qualifications and approvals legally required to design, make purchases for, construct and/or install the Project and shall comply with all applicable federal, state, and local laws, ordinances and regulations. Prior to commencement of construction, ORGANIZATION shall obtain any and all land use and building entitlements necessary to complete the Project, including without limitation all zoning, development and site plan approvals, rights of entry, and appropriate building, environmental health or other permits. Upon COUNTY's request, ORGANIZATION shall provide COUNTY with copies of all final permits, documents or other approvals required to design, make purchases for, construct and/or install the Project.
12. Upon request, COUNTY or its authorized representative shall have access to and the right to examine all records, books, papers or documents of ORGANIZATION related to the Project and use of COUNTY funds provided under this Agreement. ORGANIZATION shall retain such records, books, papers and documents for a period of not less than three (3) years from the Completion Date.
13. The Parties to this Agreement hereby certify that they are acting independently and not as agents, employees, or joint ventures with each other. Neither Party nor its officers, employees or volunteers are employees of the other.
14. The terms and conditions of this Agreement, including any exhibits hereto, may not be amended except in writing, signed by both parties. Any amendment or addendum to this Agreement shall expressly refer to this Agreement.
15. The waiver of any provision of this Agreement shall be in writing, signed by the party granting the waiver, and such waiver shall not operate or be construed as a waiver of any other provision of the Agreement.
16. ORGANIZATION warrants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with performance of its obligations under this Agreement, or with the expenditure of Information General Services Budget as provided in this Agreement. ORGANIZATION further warrants that it will not employ or contract with any person or entity having such interest and that it will adopt appropriate safeguards to prohibit members, officers, employees, agents, contractors or volunteers from (a) having any interest, direct or indirect, in any agreement or sub-agreement, or the proceeds thereof, for work to be performed in connection with the Project or (b) using their positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business or other ties.
17. Any notices that either Party desires to or is required to give to the other Party or to any other person shall be in writing and either served personally or sent by prepaid first class mail. Such notices shall be addressed to the other Party

at the address set forth below. Either Party may change its address by notifying the other Party of the change of address. Notice shall be deemed received within seventy-two hours from the date of mailing, if mailed as provided in this Paragraph.

To Project Administrator:

Kristin York
Sierra Business
Council
P.O. Box 2428
Truckee, CA 96160

To County:

Elise Strickler
Information General
Services
950 Maidu Avenue,
Suite 130
Nevada City, CA
95959

To Organization

Andrew Wilkinson,
President & CEO
Nevada County Fiber, Inc.
17347 Dusty Drive
Nevada City, CA 95959

18. The language of all parts of this Agreement shall, in all cases, be construed as a whole, according to its fair meaning, and not strictly for or against either Party. This Agreement is to be deemed to have been prepared jointly by the parties hereto and shall not be interpreted or construed against either party as the drafter.
19. This Agreement contains the entire agreement and understanding between the Parties concerning the subject matter hereof and supersedes all prior discussions, agreements, proposed agreements, or conditions, whether written or oral.
20. Should all or any portion of any provision of this Agreement be held unenforceable or invalid for any reason, but the remainder of the Agreement can be enforced without failure of material consideration to any Party, then the remaining portions or provisions shall be unaffected.
21. This Agreement may not be assigned by either party. This Agreement is made and entered into for the sole protection and benefit of COUNTY and ORGANIZATION and their respective successors. No other person or entity shall have any right of action based upon any provision of this Agreement.
22. This Agreement shall be governed by the laws of the State of California and venue shall be in the appropriate Superior Court in Nevada County, California.
23. Each person executing this Agreement on behalf of a Party represents and warrants to the other Party that he or she has authority to bind and commit each such Party to this Agreement.
24. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereunto have executed this Agreement on the dates hereinafter set forth.

Dated: _____

COUNTY OF NEVADA

ATTEST:

By: _____
Chair, Board of Supervisors

By: _____
Julie Patterson-Hunter,
Clerk of the Board

Dated: _____

Nevada County Fiber, Inc.

By: _____
Andrew Wilkinson, President &
CEO

APPROVED AS TO FORM:

By: _____
County Counsel

Exhibit "A"

Project Overview

Organization is a new Internet Service Provider (ISP); however, the President and CEO has extensive experience in broadband development. The Banner Mountain South/Deer Creek Project proposes the deployment of 100% underground fiber (with backhaul purchased from AT&T) as a first phase of a much larger and scalable

model. The service area is considered underserved and is located 4.5 miles east of Nevada City and 2 miles southwest of Scotts Flat reservoir. The entire project area includes 260 parcels. The project provides underground fiber optic technology that is preferred for long-term sustainability and scalable to other areas of the county where existing fiber can be deployed. Organization estimates that the beginning of the first phase of Project will provide fixed underground fiber optic internet to sixteen (16) households/businesses.

The Project includes 1) installation of underground communication utilities by deploying 12/10 2 Way Duraline Future path conduit suitable for micro bore fiber optic cable, 2) installation of a communication cabinet for Central Office fiber distribution electronics and electrical connections (also referred to as a Central Office), 3) installation of electrical service to the Central Office, 4) placing fiber conduit under County maintained roadways as applicable, and 5) providing last-mile fiber optic broadband connections to sixteen (16) households/businesses.

Total Project is estimated to cost approximately two hundred forty-eight thousand four hundred eighteen dollars (\$248,418) to connect sixteen (16) households/businesses. Up to but not more than a 50% match of Project's total cost of one hundred twenty-four thousand two hundred nine dollars (\$124,209) shall be eligible for reimbursement.

Reimbursement Schedule

County shall provide reimbursement of a maximum of one hundred twenty-four thousand two hundred nine dollars (\$124,209) for equipment, materials, labor, fees, permits, and other costs which represent approximately 41% and no more than a maximum of 50% match reimbursement of total project cost of approximately two hundred ninety-nine thousand seven hundred eighty-seven dollars (\$299,787) in four installments upon the completion of each four (4) phases of Project. Costs eligible for reimbursement shall include all identified costs as provided in the Budget outlined supplement documents of Exhibit B. Below provides an estimated cost for each project phase and the eligible reimbursement based on the connection of four (4) households/business.

Expense / Reimbursement Summary

	Expense	Reimbursement Request	Households/Business Connections	Reimbursement %
2020 Q2	\$27,149	\$9,977	-	37%
2020 Q3	\$90,879	\$28,558	4	31%
2020 Q4	\$90,879	\$42,837	6	47%
2021 Q1	\$90,879	\$42,837	6	47%

Total	\$299,787	\$124,209	16	41%
-------	-----------	-----------	----	-----

Expense Reimbursement Schedule

	Expense	Eligible Reimbursement
Phase 1	\$118,029	\$38,535
Phase 2	\$60,586	\$28,558
Phase 3	\$60,586	\$28,588
Phase 4	\$60,586	\$28,558
Total	\$299,787	\$124,209

Reimbursement Documentation and Reporting

Upon the completion of each project phase, Organization shall submit an invoice to County and Project Administrator that includes documentation for all expenses of project including labor, equipment, materials, permits, studies and any other administrative costs. Organization shall provide a summary report that includes the following sections:

- 1. Project Overview Narrative:** This section shall provide an overview update of the total project progress, including the number of unserved and underserved households or businesses eligible to be served, the number of households or businesses being served, and any unexpected challenges, delays, or other unanticipated impacts to the project.
- 2. Project Phase Narrative:** This section shall provide a detailed narrative on the work completed for the invoiced project phase including detailed information for all expenses of project phase including labor, equipment, materials, permits, studies and any other administrative costs.
- 3. Project Financial Reporting:** This section shall provide detailed financial documentation on the overall project and project phase that includes 1) Project Operating Statement, 2) Project Balance Sheet, and 3) Labor Expenses. Back-up documentation may include but is not limited to project receipts, accounts payable and any other applicable documentation that may be requested by County and/or Project Administrator.
- 4. Project Phase Invoice:** All invoices shall include a) breakdown of total project phase costs, b) total project phase equipment costs, c) total project phase labor costs, and d) total eligible labor costs being requested for reimbursement.
- 5. Invoice Submittal:** All Invoices shall be submitted to County and Project Administrator on the same day. Project Administrator will review each invoice within 15 days and will notify Organization if any additional information is needed. Organization will work directly with project Administrator to answer any questions or provide any additional documentation requested by Project Administrator or County necessary for the approval of an invoice. Project Administrator will provide County with signed and dated invoice within 15 days of approval and shall cc: Organization. County shall process invoice within 15

days of receipt of approved invoice. County will provide grant reimbursement directly to Organization and will work directly with Organization on any administrative processes related to payment or processing of payment.

Organization shall submit invoices/reports to:

County:

Attn: Elise Strickler

Nevada County Information General Services Agency

950 Maidu Avenue, Suite 130

Nevada City, CA 95959

Elise.strickler@co.nevada.ca.us

Project Administrator:

Attn: Kristin York

Sierra Business Council

P.O. Box 2428

Truckee, CA 96160

kyork@sierrabusiness.org

If County has already advanced funds for eligible labor reimbursement activities and later determines that eligible activities have not been provided, Organization shall refund said amounts within five (5) days of demand of County. County at no time shall make payments for any amount in excess of the total of this agreement.

Exhibit “B”

1. Applicant Information

1.1 Applicant Contact Information

Name: Andrew Wilkinson

Company: Nevada County Fiber, Inc

Title: President & CEO

Email: Andrew@NevCoFiber.com

Phone: (530) 263 5014

1.2 What type of legal entity is applicant? California Corporation C4288603

Page !2 of !26

1.3 Describe applicant’s history with other Broadband deployment projects.

May 2017 and Nov 2017 Andrew Wilkinson was part of the leadership team at Spiral Internet Fiber Project. Assuming the Chief Financial Officer role as an unpaid volunteer he worked on various financial models to move the project into planning and construction. The project was transitioned to Race Communications and is now being built.

April 2018 – July 2019 Andrew Wilkinson completed the Tahoe Basin Feasibility Study for Tahoe Prosperity Center. The feasibility study was funded by a grant from the Economic Development Agency with three priority areas:

- 1) An analysis of the Tahoe Basin region to identify opportunities for industry diversification and how Broadband can be the catalyst for that evolution.
- 2) A business analysis for the financing and management of Tahoe Basin Broadband infrastructure. This business analysis will include a (i) market analysis; (ii) estimated capital and operating costs; (iii) estimated revenues; (iv) potential regulatory and other barriers; and (v) potential funding structures. This deliverable will essentially help the Tahoe Prosperity Center obtain answers for issues pertaining to who pays for Broadband infrastructure and how.
- 3) An analysis determining an appropriate entity to manage Broadband infrastructure and related efforts in the Tahoe Basin. More specifically, a comprehensive analysis will be conducted to identify an appropriate entity, already existing or to be created, to manage Broadband infrastructure expansion, operations, and maintenance.

2. Project Overview

2.2 Project Name: Banner Mountain South/ Deer Creek

2.3 Project Technology:

The project will be 100% underground fiber to the premise. Initially, the service will be a synchronous 100Mbs connection, meaning 100Mbs download and 100Mbps upload. As subscriber demands grow the service will readily expand to synchronous 1Gbps without any additional construction or equipment. The infrastructure could easily deliver an astounding 10Gbps and beyond with minor updates in the electronic equipment using the same fiber optic. Much of today's Fiber to the Premise (FTTP) is currently using GPON technology. One of the benefits if GPON was that it allowed providers to use a single strand of fiber which could be passively split to serve unto 128 subscribers. This helped reduce the cost of fiber and avoided the need for an electrical supply outside of the central office. In today's market, the cost of fiber has continued to decline due to manufacturing efficiency and growing global demand. One of the limitations of GPON is that it is shared bandwidth and its upstream capability is 50% of the downstream speed.

The project will provide a dedicated fiber to each subscriber from the central office which will future proof the design to allow for synchronous connections that can be easily upgraded over time to 10Gbps and beyond that will meet the needs of the community for the foreseeable future and beyond. This will allow the greatest flexibility as it will accommodate both a GPON and Active Ethernet solution.

See Appendix B Professional Independent Review for project design and construction review.

Page !3 of !26

2.4 Proposed Service Area

The project area is located approximately 4.5 miles east of Nevada City, and 2.0 miles south

west of Scotts Flat reservoir. The area is heavily forested with significant changes in elevation, steep slopes and a year round creek passing from north east to south west.

The project area is 2,179 acres of which 520 acres are zoned TPZ (forest preserve) resulting in a net area of 1,659 acres. There are a total of 260 parcels with an average size of 6.4 acres.

Attach a .shp or .kml/.kmz/Shape File format or File GO Database format file showing the map of the proposed service area showing boundary data for each contiguous area. **Note: If submitting multiple applications, do not combine multiple project areas into one file.**

Submit a separate mapping file for the project area with each application.

See attachment: [Banner Mountain South/ Little Deer Creek.kmz](#)

Page !4 of !26

2.5 Project Permitting

Include a schedule of all required permits for the project including permit type, fee, permitting agency or regulatory board and status of the permit. Ensure that the application is complete and that all of the required local/city/county/state approvals necessary for this project to proceed been considered (planning commission, zoning, route and road authorities, railroad crossing, etc.) Indicate clearly what remains to be done and what is required for completing the process of obtaining approvals. Include this information in the project timeline/schedule

1. Installation of underground communication utilities

The project is expected to deploy 12/10 2 Way Duraline Future path conduit which has cross section dimensions of 0.60" x 1.10" suitable for micro bore fiber optic cable, or similar.

With reference to Nevada County Building Code Sec. L-V 13.3 Permits Required

*Section B. Except in flood plains as regulated in section L-II 4.3.10 of the Land Use and Development Code, a **grading permit is not required** for the following, provided no unstable or erodible slopes are created and no encroachment onto sewage disposal systems, water supply systems or hazardous material sites, areas or setbacks is created.*

5. Excavations for wells or tunnels or **utilities**

Determination: The project plan has been reviewed by Nevada County Building Control and it is determined that a permit not required as fiber optic conduit is classified as a utility.

2. Installation of a communications cabinet for Central Office fiber optic distribution electronics and connect to a new PG&E electrical service.

The project plan requires the installation of a 36"x 24"x 60" telecom cabinet on a concrete plan and the install a PG&E meter pedestal and underground conduits to the communications cabinet for electrical service

With reference to Sec.L-V2.31. Section105.2: Work Exempt From Permit

One-story detached accessory buildings without electrical, mechanical or plumbing not intended for habitation, provided the projected roof area does not exceed 200 square feet. One structure per parcel. In additional the location for the telecoms cabinet is currently zoned TPZ-40 and with reference to Sec. L-V 2.4 Section 105.2: Work Exempt from Permit section 15 4) Pump Houses. Limited in size to 100 square feet

Determination: A building permit for cabinet not required as less than 200 sq. ft and similar to a pump house

3.Install an electrical service to the communications cabinet as described in (2) above.

Determination: All new or revised electrical service require an electrical permit. This is available over the counter

Page !5 of !26

4. Placing a fiber optic conduit under a County Road

The project plan may require a fiber optic conduit to pass under a county road to provide service to a subscriber. The technique will be to use a horizontal direction drill (HDD) to bore under the county road.

Determination: An Encroachment Permit will be required from the Department of Public Works The cost will be \$364.52 and will require a \$1M General Liability Certificate with Nevada County Public Works named as Certificate Holder.

3. Is CEQA review required?

CEQA, or the California Environmental Quality Act, is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible.

CEQA applies to certain activities of state and local public agencies. A public agency must

comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity which must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency which may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

Determination: With reference to the above the local agency cannot deny the request to install communication conduits as they are exempt from permitting per "Sec. L-V 13.3 Permits Required" hence it is determined that no CEQA review would be required.

Additional supporting information

1. California Environmental Quality Act (CEQA) Compliance [Rule 2.4]

Pursuant to CEQA and Commission Rule 2.4, the Commission (CPUC) examines projects to determine any potential environmental impacts in order that adverse effects are avoided and environmental quality is restored or enhanced to the fullest extent possible under CEQA. In Rule 2.4(b), the Commission recognizes that the Secretary for Resources has exempted certain classes of projects from CEQA. The following are the classes of projects that are exempt from CEQA and for which neither an EIR nor a Negative Declaration is required:

Class 1 Exemption: operation, repair, maintenance, leasing or minor alteration of existing public or private structures and facilities, with negligible or no expansion of an existing use. This includes existing facilities used to provide public utility services. 14 CCR §15301.

Class 3 Exemption: construction including water main, sewage, electrical, gas and other utility extensions of reasonable length to serve such construction. This includes the construction of limited numbers of new small facilities or utility extensions. 14 CCR §15303.

Determination: The communication conduits would be classified a new small facility

Page 16 of 126

2. The Spiral Internet Fiber Project.

As a condition of the grant application the CPUC was required to complete a CEQA review as part of the grant application process as it covered 26 square miles. The project was similar underground service using a combination of horizontal direction boring and cable plowing. The study cost of the study was approximately \$170,000 and the outcome was a negative declaration.

The permitting section above has been reviewed with:

2.6 Service and Pricing Levels

Provide the service and pricing levels to be offered in the grant project area:

* 1 Gigabit service will be offered when total number of subscribers exceeds 75, or upon request

The fiber optic equipment and infrastructure installed will easily support 1 Gbps. The ability to offer a 1Gbps subscription is dependent on the growth of subscribers which needs to reach approx. 100 to make this economically feasible. In the interim 100Mbps is at least 30 times faster than the current bandwidth provided by AT&T DSL

Are there any limitations on data usage?

No, and no content filtering or prioritization. Commercial hosting of servers, streaming, sharing etc. will require a business service plan which has yet to be defined.

County Department Head

Building Department Director Craig Griesbach

Planning Director Brian Foss

Public Works Director Trisha Tillotson

Subscription Level Cost Additional services

10Mbps Down 10Mbps Up \$60/month • Home Wi-Fi set up & management

- Extended Wi-Fi mesh set up
- Internet security threat management
- Internet telephone set up
- Parental controls
- Streaming media set up
- Remote management
- Smarthome advice

50Mbps Down 50Mbps Up \$75/month

100Mbps Down 100Mbps Up \$90/month

1Gbps Down 1Gbps Up Available*

10Gbps Down 10Gbps Up Upon request

Additional information:

The service offering will offer customer premise equipment that will allow Nevada County Fiber to offer managed Wi-Fi service and additional security, content filtering and parental controls to deliver a world-class internet experience.

Voice service. Nevada County Fiber does not intend to offer dedicated voice service. There has been a growing trend of subscribers terminating their wired landline and using mobile-only, and the ILECS are already starting to make the case with the FCC to sunset the traditional phone service. Last year AT&T reported that landlines are down 76% between 2007 and 2017 with a further decline between Jan 2018 and November 2018.

As an alternative to AT&T land lines Nevada County Fiber will provide easy to follow guides to set up VoiP services such as Ooma & Vonage, and offer a subsidized service to set up these systems for subscribers who are not familiar to technology. Typically, subscribers can see significant cost savings, when compared to their traditional telephone service. Recent local experiences from the PG&E PSPS have shown that the once reliable traditional telephone is no longer as reliable as behind the scenes the ILEC's have migrated to VoIP. Once the batteries are exhausted in the remote cabinets providing the last mile connect the phone service is not available

Media It is common for broadband providers to provide television service over the broadband connections, however the industry is in the midst of significant change. With the popularity of 'unbundling' and 'cord cutting' subscribers are now choosing which service and programming meets their needs which typically saves significant costs. Nevada County Fiber will be offering guides and videos showing subscribers how to access popular streaming services such as Netflix, Amazon, Hulu etc., and for those who are intimidated by technology, they will offer in-home support and training.

Home Wi-Fi Subscribers often equate their Wi-Fi experience as their broadband experience which is not an issue when performance is high and latency is low. However, many perceived broadband issues can originate from the home network, for example an older smartphone can slow the Wi-Fi performance, unexpected big downloads can impact other users. Many subscribers do not yet have the experience or skills to resolve such issues and Nevada County Fiber, Inc will be evaluating two leading home Wi-Fi solutions and be able to offer deep support and offer managed services to ensure subscribers have the very best broadband experience.

Law Enforcement Agencies & CALA (Communications Assistance for Law Enforcement) Lawful intercept orders at the U.S. federal level have increased 72 percent over the last decade, and 11 percent over the last year and costs for non-compliance for service providers can be as high as \$10,000 per day, whilst many of the lawful intercepts were related to mobile devices provisions have been made by Nevada County Fiber for rapid compliance with lawful request for their subscribers. Any lawful intercept activity will be able to be conducted without effecting subscriber-facing services, while at the same time maintaining the highest level of security and protection for network data. It is not anticipated that there will be any such requests for lawful intercepts, but if such a request is made Nevada County Fiber will be able to offer a fast and reliable response to the requesting agency.

2.7 Project Schedule

Provide a detailed project schedule outlining the individual tasks and their timing for the overall project including broadband deployment tasks and activities necessary to complete the project. Include expected completion date (month and year) of the activity. The last task on the project schedule should indicate the date upon which service to the last location will be turned up.

Q1-2020: Begin Construction of central office facility, provisioning of fiber optic backhaul from AT&T. Parcel level planning and survey for the first 7 connections. Application for electrical and encroachment permits.

Q2-2020: Construction of primary distribution conduits, installation of fiber optic cable and connection to the first 7 properties. Central Office facility remote monitoring and automation complete. Operation support process defined implemented.

Q3-2020: Survey and planning for the next group of 10 properties, continued expansion of primary distribution conduits and fiber optic deployment of ONT (Optical Network Terminals) and customer support

Q4-2020: Survey and planning for the next group of 5 properties, continued expansion of primary distribution conduits and fiber optic to additional 5 properties.
Depending on the allocation of Nevada County Last-Mile Broadband Grant fund the program would continue as follows

Q1-2021: Survey and planning for the next group of 2 properties, continued expansion of primary distribution conduits and fiber optic to additional 2 properties.

Q1-2021: Survey and planning for the next group of 8 properties, continued expansion of primary distribution conduits and fiber optic to additional 8 properties.

Last property expected to be connected on or before June 30th, 2021

List any factors that would change or delay this schedule

The primary factor influencing the schedule is the weather. During periods of heavy rain, or snow underground construction will not be possible. If the area was subject to a wild-land fire that a significant impact on the schedule would occur.

The project schedule reflects this factor as the number of connections expected during the first quarter of each year (Jan-March) is low, with most connections being completed during the spring and summer months.

Page !9 of !26

3. Level of Service Verification

Please provide evidence of current service levels which may include but is not limited to:

- Statistically significant survey of residents from grant area
- Documentation of area's existing infrastructure demonstrating existing service area
- Documentation from website of reported service provider stating that service is not available in this area
- Testimonials and commitments from residents, businesses or institutions in project area are strongly encouraged

Note: With cellular and satellite few are truly unserved, the details provided are assuming served by wireline

Much of the project area is covered by AT&T DSL, however its widely known that AT&T has an active desire to sunset their copper line services. There are several properties in the project area who used to be able to obtain AT&T DSL, but during the change of ownership, the original owner notified AT&T that they no longer needed service which is the established practice when selling a home to notify the utility companies such as PG&E, NID, Waste Management. What has been happening with AT&T DSL is that the new owner's request for service is being denied, consequently, they are having to rely on Satellite service which is expensive, or wireless service if there is a reasonable line of sight to a local provider.

The fastest AT&T service is advertised as 6Mbps download and 1.5Mbps upload. The further the distance that the property is located from the distribution facility the lower the broadband performance will be. With the growth in popularity of streaming media has resulted in a significant oversubscription in the bandwidth needed. During the peak, early evening hours of 7pm to 10pm the bandwidth is typically less than 3Mbps

The above speed test was taken December 4th at approximately 9:15pm with one device streaming Netflix. The advertised AT&T DSL service level is 6Mbps download, and is currently \$61.00/month. In addition to the very low bandwidth, the Ping, which is the time it takes for a server to reply to a request, is very high, typical response times should be 10-20ms or less.

PASSINGS TALLY HOUSEHOLDS BUSINESSES COMMUNITY INSTITUTIONS

Currently UNSERVED

Number of passings expected to improve to at least 25/3 as a result of the project

Phase 1 wireline 6-8*

Phase 1 wireline 2*

1 see "Public Safety Pod" in section 6

Currently UNDERSERVED

Number of passings expected to improve from between 25/3 & 100/20 to 100/20 and above as a result of the project

Phase 1 40

Future Phase 2 80*

Future phase 3 100*

* estimated

Phase 1 8

Phase 2 12*

Phase 3 20*

Page 1! 0 of 2! 6

Typical download/upload speeds within project area

See Appendix A- Community.pdf for additional community feedback

Provider Download Mbps Upload Mbps Location

AT&T DSL 3.17 0.58 Deep Creek Rd

0.30 0.53 Dusty Drive

1.23 0.52 Banner Lava Cap Rd

Satellite 0.73 2.24 Lolos Echo Rd

0.97 1.23 Lolos Echo Rd

Wireless 11.69 1.93 Caroline Rd

Page !11 of !26

3.1 List in the box below the total number of passing's proposed in your project by type of location:

Phase 1 would connect 32 households with a projected total passing of 40 based on a projected connection rate of 80%. As community confidence grows it is expected that the connection rate will continue to grow and likely that subsequent phases will see 80%+. The main factor influencing the connection rate is the household profile.

Typically, the least likely to subscribe are the elderly with limited internet usage, as more telemedicine applications become available it is projected that this will have one of the largest impacts in stimulating the demographic to subscribe. The most likely profile to subscribe are those with younger families, who are more likely to stream media, work remotely or have a home business.

3.2 Describe the methodology used to determine the number of locations (e.g. number of meters, existing customers, address points)

Extensive use of Nevada County GIS parcel data has been used to analyze the project area.

The inclusion of building footprint details made available by Alex Friant Nevada County GIS Analyst II has been very helpful in evaluating distribution routes.

3.3 With respect to density, what is the average number of homes, businesses and institutions per square mile within the proposed service area?

The total project area is 2,179 acres, of which 520 acres are zoned TPZ (Timber Preserve Zone) leaving an effective project area of 1,659 acres or 3.4 square miles. The initial Nevada County Grant funding will allow for some 22-34 homes to be connected to high-speed underground fiber optic. The total number of properties in the defined project area is 260 which is an average property size of 6.4 acres. It is also noted that there are several large undeveloped areas and a number of smaller lots which may attract developers and homeowners with the availability of world class gigabit fiber optic.

3.4 In terms of infrastructure installation, explain why this area was chosen for the grant and is unlikely to be served without grant funding. Include an explanation of terrain, population density, or other factors contributing to the overall cost of the project.

The project area is located within my own local neighborhood and having personally experienced the continued degraded performance from AT&T DSL which is the only fixed-wire broadband connection available I have realized that there is a big opportunity to improve the quality of life and public safety for more those who are also using the same DSL service in my community.

I have become aware that some properties which used to have access to AT&T DSL have been

unsuccessful in asking AT&T to allow them to continue access after purchasing their home. Having evaluated many options I have determined that the best long term solution is to install conduits to each home and provide every home with the ability to connect to the internet using fiber optic. The heavily forested area and significant undulations in terrain are not suitable for point to point wireless which works best with an uninterrupted line of sight for optimal performance.

Page 1! 2 of 2! 6

If necessary, provide any additional information on the grant area that may be helpful during the scoring process that was not asked on the application.

3.5 Anticipated Improvements

Using the “**Anticipated Improvements**” table below, please provide the **number** of households, businesses, and community institutions that will be able to receive improved broadband services as a result of the proposed project. Please identify the speeds currently available for each type of location, using the ranges provided on the table, and the speeds that will be offered if the project is awarded grant funding.

To the extent possible, please identify location types by household, business (including homebased business or telecommuter, farm, etc.) and community anchor institutions.

Anticipated Improvements in Broadband Service

Based on the Broadband Project Investments

Note: As the number of personal discussions take place with homeowners, it is apparent that a much higher percentage than originally expected have some form of business or home based business than originally anticipated.

Note: The project build will be immediately capable of 1Gbps, but the financial model requires approx. 75 subscribers to be a viable service offering due to scale, hence the above chart reflect the initial build and the expansion that allows for the offering of 1Gbps. The build also provides 10Gbps should a business or residence, or cellular provider extreme bandwidth.

3.6 Include a description of the business model and plan to sustain operation of the network.

Include estimated take-rate in grant area

The business model is to offer underground fiber-optic to each property as an alternative to AT&T DSL or Hughes Satellite. The subscriber will be provided with the ONT (optical network terminal) which provides a standard Ethernet connection for the more technology-enhanced subscribers who already have a home network that includes Wi-Fi, servers, video surveillance etc.

100Mbps available for Phase

1 project build

1Gbps available with 75+ subscribers

of

Passings

Speed Now: 0/0 ≤10/1 0/0 ≤10/1 25/3 0/0 ≤25/3 <100/20

Speed After Build: 25/3 25/3 100/20 100/20 100/20 1G/1G 1G/1G 1G/1G

Households 8 32 8 32 32

Businesses 2 8 2 8 8

Community 1 1 1 1 1

TOTAL 10 41 10 41 41

Page 1! 3 of 2! 6

Each subscriber will have the option to purchase a high performance Wi-Fi 6 access point and mesh network extenders to provide world-class Wi-Fi experience. This will also allow Nevada County Fiber to provide high-quality support by understanding the operation of devices that are on the home network, offer advice on ensuring the very best internet performance and the option to configure parental controls, network intrusion detection, and virus prevention, content filtering, and guest network access.

Telephone support will be available during normal business hours, with 24x7 automated system monitoring and alerts for broad issues effecting multiple subscribers. As the number of subscribers grows Nevada County Fiber will expand its support capability by initially partnering and eventually hiring dedicated support staff. A business decision has been made to invest in ‘carrier-class’ equipment and cloud-based support solutions to reduce the cost of ‘truck rolls’ and support calls which will greatly improve the customer experience and ensure lower support

costs.

4. Project Cost Analysis

A full project budget must be completed as part of this application. Please use the template supplied in Appendix A and provide a summary in section 4.3 below.

4.1 What are the total eligible project costs?

Remember to figure in both time and expenses for the required local and state environmental reviews and permits.

Total eligible expenses include the construction of the central office facility to distribute & manage fiber optic broadband, the installation of underground conduits, fiber optic cable, vaults, and optical network termination at each property.

4.2 How much grant money are you seeking from the Nevada County Last-Mile Grant program for this project?

**up to 50% of the total broadband development cost is eligible to be reimbursed the county broadband grant, to a maximum of \$225,000. Points will be awarded to projects that leverage greater local match funding – more than 50% -- from alternative sources.*

The project is requesting \$223,889. Please note that the project is structured to accommodate lesser amounts depending on how the funds are allocated between different applicants. For the project to viable it needs to connect at least 20 homes which will require a grant match of \$124,209, and can be readily adjusted for up to 32 homes if not other projects are funded, or additional funds are available.

In comparison to similar underground projects, the cost per parcel is approx. 50% less expensive than the recent estimate provided by Race Communications when they assumed the CASF Grant from Bright Fiber in January 2019. The updated cost provided to the CPUC in Jan 2019 was \$27,477 per parcel.

The project is a similar cost to the Bright Fiber project that was approved by the CPUC in 2015 of \$13,873, however that cost in 1995 did not include the prevailing wage requirement.

Construction costs have risen significantly since 2015 which is portrayed in the updated costs described above.

Page 1! 4 of 2! 6

It is notable that in the past five years that the majority of funded CASF projects are entirely aerial, with an average grant value of \$6,682/connection. The majority of CASF grants cover 60% of project costs, when adjusted to the Nevada County Last-Mile Broadband grant rate of 50% the average CASF grant would be \$5,050 which is only 28% less per parcel than Nevada County Fiber is requesting for an underground solution.

Why is Nevada County Fiber, Inc confident that it can build an underground fiber-optic network a significantly lower cost than other similar CASF approved projects?

Strategy The traditional approach is to build underground networks along public roads which is costly with reinstating the road surface to County or State requirements. Nevada County Fiber is focused on building on private property, along parcel boundaries or to the rear of properties in forested areas that mostly do not have existing underground utilities. The most efficient construction techniques will be used which may include horizontal direction drilling for sensitive areas and road/driveway crossing, and minimal disturbance plowing in more open forested areas.

Lower overhead Equipment maintenance and repairs will be facilitated in house with only occasional need for dealer support. Network management, and customer support is locally based with cloud-based solution to improve automation and response times.

Locally based The project is located within a couple of miles of the Nevada County Fiber location which results in lower travel costs, and lower overhead for equipment and material handling & storage. If an onsite truck roll is required to support a subscriber, the travel time is minimal.

Efficiency & Automation Specialized equipment will be used to prepare the access, install the conduits and fiber optic cable that will minimize the need to staff a traditional crew of 3-5 people or utilize specialized resources located outside of the County.

Page 1! 5 of 2! 6

4.3 Fill out the PROJECT BUDGET TABLE below indicating the sources, uses, and amounts of all funds that will be used for eligible broadband development costs as defined in the guidelines. Use the recommended Use of Funds categories where possible, creating other categories

where anticipated expenses do not fall within one of the recommended categories. Attach your full project budget to the grant application using the supplied template. Be sure to include a contingency for project completion.

Sources and Uses of Broadband Grant Funds and Local Match for the Project

PROJECT BUDGET

EXPLANATION OF BUDGET TABLE ITEMS:

!Use of Funds (Activity-Category) – Use the recommended categories where possible, creating other categories where anticipated expenses do not fall within one of the recommended categories. You can also add additional rows as necessary

!Amount – Total cost of the budget line item

Use of Funds (Activity-Category)

Amount Costs

Incurr
ed (Y/
N)

Date

Incurred

Source of Funds (Local
portion/County grant)

Date Funds

Committed

Equipment/materials \$5,000 Y 3/31/2020 Nevada County Fiber, Inc 1/28/2019

Prevailing Rate Labor \$12,000 Y 3/31/2020 Nevada County Fiber, Inc 1/28/2019

Fees/permits/GPS Survey \$2,500 Y 3/31/2020 Nevada County Fiber, Inc 1/28/2019

Equipment/materials \$39,200 Y 6/30/2020 Nevada County Fiber, Inc 1/28/2019

Prevailing Rate Labor \$58,385 Y 6/30/2020 Nevada County Fiber, Inc 1/28/2019

Fees/permits/GPS Survey \$4200 Y 6/30/2020 Nevada County Fiber, Inc 1/28/2019

Equipment/materials \$56,000 Y 9/31/2020 Nevada County Fiber, Inc 1/28/2019

Prevailing Rate Labor \$83,407 Y 9/31/2020 Nevada County Fiber, Inc 1/28/2019

Fees/permits/GPS Survey \$6,000 Y 9/31/2020 Nevada County Fiber, Inc 1/28/2019

Equipment/materials \$9,140 Y 12/31/2020 Nevada County Fiber, Inc 9/31/2020

Prevailing Rate Labor \$28,000 Y 12/31/2020 Nevada County Fiber, Inc 9/31/2020

Fees/permits/GPS Survey \$3,000 Y 12/31/2020 Nevada County Fiber, Inc 9/31/2020

Equipment/materials 10,870 Y 3/31/2021 Nevada County Fiber, Inc 12/31/2020

Prevailing Rate Labor \$14,179 Y 3/31/2021 Nevada County Fiber, Inc 12/31/2020

Fees/permits/GPS Survey \$1,100 Y 3/31/2021 Nevada County Fiber, Inc 12/31/2020

Equipment/materials \$43,480 Y 6/30/2021 Nevada County Fiber, Inc 3/31/2021

Prevailing Rate Labor \$56,717 Y 6/30/2021 Nevada County Fiber, Inc 3/31/2021

Fees/permits/GPS Survey \$4,400 Y 6/30/2021 Nevada County Fiber, Inc 3/31/2021

Page 1! 6 of 2! 6

!Costs Incurred – Has work on this activity started?

!Date Incurred – When was this work done?

!Source of Funds – Who is paying for this activity? Please note if it will be included in an invoice for reimbursement from the Nevada County Last-Mile Broadband Grant Program.

!Date Funds Committed – When were the funds secured from this source?

!

4.4 Attach all written funding commitments from all project funding partners, including public, private, and non-profit or philanthropic sources.

[See Appendix C for evidence of matching funds being held by Nevada County Fiber, Inc](#)

4.5 If the grant request was approved for this project, is the remainder of the financing (the local match) in place for building this project? **Yes**

[] NO, the local match funds are not yet in place. If funds are not secured yet, what is the process to secure the funds and what is the timeline in which they will be obtained?

[] YES, all of the local match is in place. If yes, you must attach evidence that local match funds secured.

[See appendix C for evidence of matching funds being held by Nevada County Fiber, Inc](#)

4.6 Are there additional costs related to this project that are not eligible costs that will be incurred as part of the overall project costs for deploying broadband to this area? If yes, what

are those costs?

Yes: ETA International Fiber Optic Installer Certification BICSI: 30 ITS CEC \$1,850.

Page 1! 7 of 2! 6

4.7 Is this project part of a larger build for which the applicant is not requesting grant funds? Is there any additional relevant information regarding the investment in the area surrounding the grant project area?

If yes, please explain and/or attach proof of leveraged financing.

This is first phase of a continued expansion to the south and western areas of Banner Mountain as identified on page 10 in the Nevada County Broad as Deer Creek Strategy. Additional funding may be obtained from California Advanced Services Fund (CASF) as an alternative to Nevada County Last-Mile Broadband Grant. The preference is to utilize local Nevada County funding over the long lead time and complex CASF Grant process.

The long term vision for Nevada County Fiber, Inc is to first validate the approach to deploying affordable underground fiber optic, motivate, collaborate and support similar project areas in the County, and eventually transition Nevada County Fiber, Inc to a community owned entity that has the goal of connecting every property in the County at an affordable price to ensure the long term prosperity and public safety for Nevada County.

5. Financial and Governance Plan

5.1 Describe the need for funding from the Nevada County Last-Mile Grant fund and why the project could not proceed without this funding. Refer to your stand-alone financial plan/budget and demonstrate the financial model with and without grant funding. Be as specific as possible.

Nevada County Fiber has determined that the best long term method for high-speed broadband in our community is to use underground fiber optic. Our community is located in a heavily forested area with significant changes in elevation which makes wireless connections very challenging. In addition, we can be at the risk of heavy winter snow and significant risk of wildland fire which can damage above ground facilities impacting public safety and impact economic resilience as seen in other areas of the state that were impacted by wild-land fire.

It is widely understood that single-mode fiber optic has the highest bandwidth available, currently a single fiber can deliver 40 Gigabits per second for 6+ miles. In addition, fiber optic cable has a very long lifespan. According to Corning, one of the leading manufacturers there are fiber optic cables still in service since the 1980's. When the time comes to replace a fiber optic cable the costs are one of lowest as its relatively simple to remove the cable from the conduit and replace with a new one, no groundworks are required. The only downside to underground fiber optic is the capital cost of installing the underground conduits.

The reason why AT&T, Comcast, Wave have not continued to build out high-speed broadband is the high capital cost when compared the return on investment. Subscribers are often unable or unwilling to make large capital contributions of \$12,000-\$14,000 which is the cost after the providers own subsidy based on their projected subscriber rates. In general providers remain unwilling to invest capital in areas with an ROI that may take 10+ years when there are higher density areas with a lower capital cost per home.

The Nevada County Last-Mile Broadband Grant will allow Nevada County Fiber, Inc to accelerate the construction of the fiber-optic network, deploy operations with carrier-class electronics and make a significant difference to the community. The matching investment from Nevada County Fiber, Inc will likely see a return on investment of 5-6 years provided the network reaches at least 100 subscribers. Projections indicate that as we approach 200 subscribers we will have the choice of expanding deployment to cover more subscribers in this

Page 1! 8 of 2! 6

project area, or another area, or we may have the choice of lowering the monthly cost to subscribers, or increasing bandwidth. DillonBeachInternet.com is a great example of this where they have been able to provide higher bandwidth at a lower cost after they reached 300 subscribers.

Without the grant funding, the project would not be required to use prevailing wage which will reduce labor costs, but the construction will take significantly longer to complete and the return on investment is projected to be 8-10 years for the 25-35 subscribers addressed by the proposal.

5.2 Provide an organizational chart, applicant's history including experience relevant to the proposed project, and an indication of readiness to build, manage, and operate the proposed

broadband project. Include resumes of key officers and management personnel.

Nevada County Fiber, Inc is a newly formed California Corporation. For the initial projects the primary officer will be Andrew Wilkinson supported by a network of advisors and consultants. As the number of subscribers grows the organization will evolve accordingly.

Andrew Wilkinson has a unique combination of skill sets which is an ideal combination for rural fiber-optic broadband. He obtained a degree in Mechanical Engineering in 1984, has designed and built 5 homes with skills in all trades. He has constructed 12KV one-mile long PG&E line extension to bring primary PG&E to his property and neighbors never failing to pass a single PG&E construction inspection. The PG&E inspector was so impressed that he made the comment 'You could probably teach Hansen Bros a few tricks!'

After emigrating from the UK, he joined the Hewlett Packard Networking Business in 1996 and worked in various roles in the Ethernet switching and Wi-Fi business for almost a decade. In 2000 he obtained US Patent 6,108,310 which HP used in their Network Management Software. Before taking a corporate-level role across all the HP business units and was involved in mergers and acquisitions, and business & financial planning. Prior leaving HP he was a sales operations function leader for the splitting of the Hewlett Packard Corporation into HP, Inc and Hewlett Packard Enterprise and worked for a short time in Beijing, China supporting the creation of the partnership with prestigious Tsinghua University to create the new H3C delivery solution to the China enterprise market.

Prior to starting Nevada County Fiber, Inc he held the volunteer role of Chief Financial Officer for Spiral Internet and explored several financial and business models to move the \$35M project into construction. During the same period, he was also the Vice President of Sales and Marketing for Tallac Networks, a cloud networking startup focused on Software Define Branch Automation and cloud networking.

He has two California Contractor License: A General Engineering and Class B Building and has a large well-equipped workshop and numerous pieces of construction equipment including an excavator, tracked loader, tracked chipper, direction drill and many attachments and will be fully dedicated to Nevada County Fiber, Inc.

In June 2019 he completed a broadband feasibility study for the Tahoe basin that was funded by the Economic Development Agency and administered by the Tahoe Prosperity Center.

He is an active member of the Citizens Oversight Committee for the Measure B Bond approved for Nevada Union Joint High School District in 2016, and the Vice President and acting Treasurer for Friends of Banner Mountain.

Page 1! 9 of 2! 6

The long term vision is to demonstrate that our rural community can obtain high-speed fiberoptic broadband and develop this into a community-owned model that can continue to grow and deliver broadband to the entire community, and ensure long term economic development, resiliency and public safety during periods of extreme winter or wild -and fire.

6. Community & Economic Development Impact

6.1 Describe the economic and community development potential of the project, including how the project will provide opportunities for existing business retention and expansion, new business attraction, increased jobs, and/or other expanded business and community opportunities such as improve public safety, health care delivery, service to economically distressed area, and improved educational access.

*This question is intended to understand how the applicant worked with the local community in identifying areas of greatest need and determining specific community impacts of broadband connectivity. **Narrative here should explain the expected results the project will have on the specific community, not just a general explanation of the positive impact of broadband.***

There is overwhelming need for a significant improvement in local broadband and to demonstrate this I will provide short examples of real stories in my local community, this is a sampling from the more than sixty homeowners who have expressed interest.

Please see www.NevCoFiber.com for video testimonials from Jeff Peach, retired teacher and active with the Firewise Coalition, and John Paye both of whom are active community members (a) Marcy: She is looking to purchase a home in our community, but has yet to find a home that has adequate and robust reliability. Her realtor sent her a picture of the sign I posted at the Red

Dog Rd mailboxes about my plan to offer fiber optic and she was so motivated to tell her story as she felt it would help with my grant application. She works remotely in healthcare as an Infection Prevention Manager, and her husband is a videographer and their #1 need is fast and robust access.

Quote: *"I have to believe there are plenty of people like us who could positively contribute to the community but are constrained by the lack of internet infrastructure. It seems like being part of the 21st century economy requires connectivity....Anyway, if there is any way our experience with being thwarted in moving to Nevada City is helpful to your application, please let me know"*

(b) Diane: Dianne and her husband are both retired, and Dianne has some well-managed health challenges. They have known about my strong desire to improve broadband for our local community. Their concerns are more focused on safety, which has been compounded by the recent PSPS power cuts where they found that their once reliable traditional phone line stopped working. They are finding their AT&T DSL service to be slow and unreliable and concerned that this could impact their ability to stay in the home if the emerging telemedicine solutions are not available to them due to their weak broadband connection

Quote: *We're seniors with some medical issues so it's important to have access to everything. With the recent PSPS we didn't have any service at all even though we have a generator.*

That's the first time that's happened and it was unnerving. We couldn't get any info regarding

Page 2! 0 of 2! 6

fires or emergencies in our area. For the first time our landline didn't work either... We sending positive thoughts that this happens. We will be the first to sign up for it for sure!"

(c) Jeff: He moved here with his family three years ago from the Bay area to Nevada County to enjoyed an early retirement in the peace and tranquility of the forest just off Red Dog Rd. Unfortunately, he was one of the people that was denied access to AT&T DSL even though the prior owner had service. He was eventually able to obtain wireless service after making a significant capital investment.

(d) Zach: He was born and raised locally, works in elderly care and is a musician in his spare time. He has taken the bold step of creating an impressive sound studio, and the missing ingredient is high-speed broadband that will allow his 21st studio to be on the world stage.

(e) Christo: He recently became aware of the project and is a professional network engineer who is willing to offer his help.

Quote *"I am a fellow network engineer....If there is any way I can help with the fiber internet project, feel free to call. I work from home, so this project is incredibly important to me"*

(f) Erina: Frustratingly they did not realize that local broadband was so problematic before purchasing their home on Banner. Her husband is a professional musician and has to drive to town to upload and download large files. They are active internet users with several smart home devices but are growingly frustrated with the poor bandwidth and lack of options.

Quote *"We are beyond excited at the prospect of having high-speed internet...I have looked into every other possibility, which right now is only satellite internet, though my understanding from people who have had it, is that it is barely an improvement from DSL. This has been the single most frustrating situation in regards to choosing to live outside of the city limits"*

See Appendix A for more details and community feedback

Opportunity to improve Public Safety

Having studied the details of last year's Paradise Fire my observation is that one of the major factors that contributed to the chaotic evacuation was the ability for the various emergency services to monitor what was happening on the roads in real-time. If they had the ability to monitor real-time and ensure clear communications with the community where available it seems apparent that the evacuation os likely to have been less problematic.

As an additional benefit to the community, I am proposing that consideration is given to the following proposal that can be achieved with the availability of high-speed underground fiberoptic network.

Public Safety Pods

These would be located at major atrial road intersections. They would contain high-resolution video cameras that could be remotely powered on during a wild-fire event to monitor traffic in high resolution. For example, the intersection of Quaker Hill Cross Rd and Banner Quaker Hill Rd which is a primary evacuation route from Cascade Shores, a second location would be

Banner Lava Cap and Idaho Maryland which is major evacuation route off Banner Mountain & Cascade shores. I anticipate that the capital cost of such a solution would be relatively low with a high value to the community.

Page 2! 1 of 2! 6

The concept could be enhanced with remote powering on a series Code Red Wi-Fi access points along major evacuation routes which would allow community to connect directly to a local network for direct communications with the public which ultimately could provide residents with evacuation routes which can be dynamically adapted according to wire conditions and traffic volume.

Ultimately having a dedicated independent fiber optic loop that covers major evacuation routes which operates independently of the traditional telecommunications companies would position Nevada County as having the best public safety infrastructure available and a model for others to follow.

Page 2! 2 of 2! 6

6.2 Describe any partners or subcontractors associated with the project's deliverables related to deployment and service delivery. Please describe each party's role in the project. Please include copies of any applicable executed contracts or anticipated contractual language and/or insurance requirements.

AT&T: The master contract has been signed with AT&T Enterprise Fiber Optic to provide backhaul service to the internet with managed router and security. The lead enterprise sales rep and his manager are aware that Nevada County Fiber, Inc will be using the fiber optic service to provide broadband to the local community many of whom are currently DSL customers. They shared that DillonBeachInternet has been very successful with a similar approach. I have also briefed Alice Perez and Bryant Miles from AT&T External Affairs. AT&T Engineering has completed a site visit and are currently developing the construction plan, for an assumed spring deployment.

Nevada County Clerk-Recorder With many easements to be recorded for parcels that the fiber optic network crosses I will be collaborating with Gregory Diaz to find ways to optimize the submission and recording process to save project costs and the County staff time.

Ground Penetrating Radar: Rich Soto will provide advice, consulting and when needed ground scans to identify underground utilities. This will supplement the 811 Dig Alert program that will be used extensively during periods of construction.

CPA/Accountant: Scott Robertson of RWS Certified Public Accountants will be the CPA for Nevada County Fiber and provide financial advice and guidance.

Construction Advice & Consulting: Stan Eckdahl retired VP of Engineering from Wave Broadband has been providing advice during the planning for the grant application and will continue to support the project during construction and operations.

Nevada County Contractors Association: The Executive Director Barbara Bashall has a wealth of resources to help navigate the prevailing wage requirement.

GIS Assistance The project planning is based on GIS (Geographic Information Systems) data with assistance being provided by Lisa Lackey who provided parcel data for use within Autocad for planning and data visualization.

GPS/Survey Tim Schad Licensed Surveyor #6021 owner Initial Point will provide survey advice and consulting when required and assist as needed with the GPS data from as-built conduits and facilities location. Tim is one of the leading surveyors for major cellphone providers and has surveyed hundreds of locations for new cellphone towers, including locations for 5G expansion

USA North 811 Nevada County Fiber will become a member of USA North 811 and provide location assistance when required. During construction, USA North 811 will be utilized as required to avoid damage to existing underground utilities

Networking design & configuration: Professional services from the equipment manufacturer will be available as required to ensure a robust and reliable network design. The backhaul provider will provide network security management to mitigate potential DDoS attacks and similar network issue that could impact subscribers. The equipment manufacturer has 24x7 support staff available for any unexpected issues.

Page 2! 3 of 2! 6

Middle Mile Praxis Associates Michael Ort has developed several important middle mile projects including Digital 395 and are willing to provide advice regarding options and considerations

when engaging with middle mile providers. The current project is constrained by only one backhaul provider, but as the subscriber base expands the need to have a second backhaul provider will grow to ensure that there is fail over for moments when the primary backhaul is temporarily not available, or when the need arises for load balancing across multiple networks.

Collaboration with similar local networks

(a) Beckville Networks: Mike McLaughlin who created and runs Beckville Networks is an active collaborator and happy to provide advice and assistance with network design and seek areas of mutual support. For example, Nevada County Fiber can provide assistance with underground construction needed to expand the point to point Beckville Network.

(b) Dillon Beach Internet: I was introduced to Brandt Kuykendall who like myself was not satisfied with the availability of high-speed broadband. He also approached AT&T and was able to obtain an enterprise-class connection which he has now expanded to more than 300 subscribers using Mimosa point to point wireless. <https://www.dillonbeachinternet.com/>

(c) Local wireless service providers: There are several elevated locations within the project areas that could be used to provide additional/improved wireless foot print to subscribers further to the south. As an additional community benefit, I will happily collaborate the company's such as Smarter Broadband and Exwire to help make bandwidth available.

(d) Cellular Carriers: One of the many challenges that cellular carriers have when expanding their cellular coverage is access to robust fiber optic backhaul. I will be approaching organizations like Crown Castle who specialize in identifying locations for major carriers to make them aware that in the project area we will have the capability of providing dedicated backhaul, and local introduction to property owners.

Community Broadband Advocates

Our community has many broadband advocates. These include people like Andrew Haley who used to live in the Sherwood Forrest community and now is in the Willow Valley area, both of which are in need of improved broadband, he is keen to hear how this project proceeds and is willing to assist in working with the community. Michael Anderson worked for many years helping to be the \$16M CASF Grant approved which is now being constructed by Race Communications, and is very supportive of all activities that can improve broadband, especially community models. Tim Corkins is a local business owner and active with the Nevada County ERC and a strong advocate for the economic development benefits that high-speed broadband enables. John Lorance is an active community member willing to provide support and collaboration to help deliver on the Nevada County Broadband Strategy.

Page 2! 4 of 2! 6

6.3 Attach evidence of community support for the project. This may include resident surveys, local government resolutions, and/or letters from residents, businesses, government officials, other stakeholders or the partners listed above. Note: the upcoming public comment period is not designed to extend the application period. Members of the public may comment during this time, but all community support intended for application must be included at time of submission.

Appendix A Community Support

Selection Criteria & Weights

Grants will be awarded to projects that provide the highest return in public benefits for the public costs incurred and meet all of the statutory requirements. To fulfill this requirement of reviewing applications in an objective and fair manner, applications will be reviewed and evaluated by a team compiled by Sierra Business Council and Nevada County and using the following criteria and point values to assist in systematically awarding grants. These criteria reflect information sought via the grant application questions. To ensure that your application receives its maximum point total, be sure to provide complete responses to the information requested in the application.

120 Points Possible

Household and businesses passed: 1-20 points

!Amount of increase in speed from current service to reach speed goals and above combined with number of passings determines points awarded

Grant request amount: 0-10 points

!Percent of grant request compared to eligible project costs (a higher local match percentage above 50% will result in a higher application score in this category)

Readiness & Strength of Team: -0-20 points

!Demonstration of project readiness. Examples include a solid engineering and design plan, financing secured, other approvals or permits secured or in process, project schedule thorough and complete, and evidence of readiness to build, manage, and operate the project.

!Comprehensive proposal: partners in place, application complete and well-prepared, budget table complete with planned contingency.

Sustainability: 0-20 points

!Financial soundness and efficiencies. Examples include identification of eligible costs, leveraging existing broadband, financing is secured, additional costs identified, need for funding clearly identified, financial plan, financial strength demonstrated.

!Organizational capability. Examples include quality/experience of partners and project manager, organizational charts, company history and resumes

!Technical demonstration. Examples include a clear and concise project description, a realistic project schedule that syncs with broadband infrastructure to be provided and the budget table, a clear documentation of areas to be served.

Page 2! 5 of 2! 6

Community Support & Engagement/Partnership: 0-20 points

!Evidence of community support, including project partners and demonstration of customer interest such as potential/current customer surveys and/or canvasses as to desire/need for improved service, letters of support, and take-rate estimates

!Benefits to community anchor institutions (CAIs). Provide a list of significant CAIs and how they would benefit.

Economic Development & Community Impact Review: 0-30 points

!Does the project demonstrate economic development impacts and how? This might include documenting via specific impact statements from businesses as to business retention, expansion, and attraction impact, including home-based businesses and telecommuting. Also, evidence of education, health, and public safety benefits and general quality of life improvements.

!Is project area economically distressed? This would include documentation that in the proposed project area, unemployment, poverty, or population loss are significantly greater than statewide average and/or would reference median household income and/or percent of students eligible for free or reduced school lunches.

!Does the project support the goals of any particular county specific plan, area plan, economic development plan or the energy action plan?

!Will the project ultimately support an increase in living wage jobs?

GRANT REQUESTER AMOUNT SCORING TABLE

!Percent of grant request compared to eligible project costs. A higher local match percentage (above 51%) will result in a higher application score in this category

Percent of eligible project costs requested Points

Less than 30% 10

30 to 39% 7

40-45% 4

46-48% 2

49-50% 0

Page 2! 6 of 2! 6

Nevada County Last-Mile Broadband Grant Project Details

	2020	2021	Total
	\$	\$	\$
Total Project Cost	320,941	135,976	456,916

	\$	\$	\$
Av Cost/parcel	14,588	13,598	14,279
	\$	\$	\$
Requested Grant Amount	157,261	66,628	223,889
Number of parcels passed	28	12	40
Connection rate %	79%	83%	80%
Number of parcels connected	22	10	32
Percentage Match	49%	49%	49%
Contingency %	4%	4%	4%

	2020				2020
	Q1	Q2	Q3	Q4	Total
Equipment/Materials	\$ 5,000	\$ 39,200	\$ 56,000	\$ 9,140	\$ 109,340
Labor (Prevailing Wage)	\$ 12,000	\$ 58,385	\$ 83,407	\$ 28,000	\$ 181,792
Fees/Permits/GPS Survey	\$ 2,500	\$ 4,200	\$ 6,000	\$ 3,000	\$ 15,700
Contingency (5%)	\$ 780	\$ 4,241	\$ 6,059	\$ 3,029	\$ 14,109
Qtlly Expenses	\$ 20,280	\$ 106,026	\$ 151,465	\$ 43,169	\$ 320,941
# Connected parcels	0	7	10	5	22
Grant Reimbursement	\$ 9,937	\$ 51,953	\$ 74,218	\$ 21,153	\$ 157,261

2021				2021
Q1	Q2	Q3	Q4	Total
\$ 10,870	\$ 43,480			\$ 54,350
\$ 14,179	\$ 56,717			\$ 70,896
\$ 1,100	\$ 4,400			\$ 5,500
\$ 1,046	\$ 4,184			\$ 5,230
\$ 27,195	\$ 108,780			\$ 135,976
2	8			10
\$ 13,326	\$ 53,302			\$ 66,628

Nevada County Last-Mile Broadband Grant

Project Details

Updated April
2020

Summary	2020
Total Project Cost	\$ 299,787
Last-Mile Broadband Grant	\$ 124,209
Est Number of parcels passed	21
Connection rate %	76%
Number of parcels connected	16
Percentage Grant Match	41%
Contingency %	4%

	2020				2021	
	Q1	Q2	Q3	Q4	Q1	
Equipment/Materials		\$ 15,916	\$ 33,600	\$ 33,600	\$ 33,600	
Labor (Prevailing Wage)		\$ 6,910	\$ 50,044	\$ 50,044	\$ 50,044	
Fees/Permits/GPS Survey		\$ 1,200	\$ 3,600	\$ 3,600	\$ 3,600	
Contingency		\$ 3,123	\$ 3,635	\$ 3,635	\$ 3,635	
Qtly Expenses		\$ 27,149	\$ 90,879	\$ 90,879	\$ 90,879	\$ 299,787
# Connected Parcels		0	4	6	6	16
# Central Office Facility		1	0	0	0	1
Grant Reimbursement		\$ 9,977	\$ 28,558	\$ 42,837	\$ 42,837	\$ 124,209
						41%

Proposed Grant Payment Schedule

Phase 1 Central Office Facility + 4 homes		\$ 38,535
Phase 2 Additional 4 homes		\$ 28,558
Phase 3 Additional 4 homes		\$ 28,558
Phase 3 Additional 4 homes		\$ 28,558
		\$ 124,209