COCHISE COUNTY
PROCUREMENT DEPARTMENT

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22-05-ITD-01

Attachment 2-Scope of Work

In accordance with 22-05-ITD-01 the Contractor shall provide all labor, materials, transportation and expertise in order to accomplish a Broadband Feasibility Study to the satisfaction of the County.

1.0 OBJECTIVE

Cochise County ("COUNTY") is issuing a Request for Proposals seeking the services of a consultant/firm to perform a Broadband Feasibility Study for the entirety of the County. A selection committee will review and select the best proposal from those bids. The party awarded the bid ("CONTRACTOR") shall provide all labor, materials, transportation, equipment, and technical expertise in order to complete the study to the satisfaction of the COUNTY.

Broadband connectivity is crucial for the growth and security of our community in Cochise County, both now and in the future. We are living in an unprecedented time and broadband infrastructure will be critical in shaping our rural county. We saw this demonstrated with COVID-19 when students were unable to connect to classes and employees were not able to work remotely because of insufficient internet connectivity.

Like water and electricity, broadband has become essential infrastructure that can improve education, remote healthcare and economic growth. It will help bridge the digital divide between high and low-income as well as urban and rural Americans. Deploying broadband will require significant financial investment and partnerships between various organizations.

The selected consultant will be commissioned to design and conduct a study to determine the optimal way to provide enhanced and reliable Broadband Internet Service to rural areas lacking appropriate coverage, as well as urban centers requiring increased speed and access. While fiber optics will be the preferred transmission medium, other media and technologies will be considered based on cost and speeds. The COUNTY will work in tandem with the consultant to ensure the

completion of the study to the satisfaction of the review committee, as well as provide any technical assistance that might be necessary. Upon completion, the COUNTY will pursue the implementation goals outlined in the Study and seek further funding to do so.

2.0 REQUIREMENTS

2.1 General Requirements

The CONTRACTOR will perform a broad range of services and activities to create a plan which will include but not be limited to the following:

2.1.1 **Service and Infrastructure Analysis.** Complete an analysis of incumbent Internet service providers (ISPs) and existing broadband infrastructure currently serving the county. Provide a clear picture of the state of broadband in the study area and how any forthcoming network will fit into that landscape. Analysis should identify service models that could be utilized in the region. Outcomes will include GIS maps detailing the physical extent of fiber-optic lines, service areas, incumbency, and levels of services provided. The GIS maps should provide overlays of served, underserved and unserved areas based on FCC's definition of broadband (i.e., ≥ 25 Mbps download and ≥ 3 Mbps upload speeds).

2.1.2 **Needs Assessment and Outreach.** Complete a needs assessment for large-scale use of broadband for county businesses including industrial, manufacturing, and other institutions in the county. Obtain stakeholder input using online surveys, community anchor interviews, enterprise business interviews, and small and medium sized business interviews. The information gleaned from this outreach effort will then be considered alongside a review of broadband improvement efforts that have already occurred regionally.

2.1.3 **Site Analysis.** Complete a site analysis to discover whether existing public assets and/or land can be used to better facilitate network construction and operation.

2.1.4 **Market Analysis.** Complete a market analysis to serve as the basis for determining penetration and adoption rates, foreseeable competition, and sensible pricing for services provided.

2.1.5 **Broadband Provider Business Model and Partnership Evaluation.** Insights from the mapped asset inventory and local needs assessment with gap analysis will be used to develop a business model that can service the targeted areas within the community.

2.1.6 **Identify, Map, and Analyze current broadband infrastructure assets.** Mapping of current regional assets includes Anchor Institutions, public utilities, and public right of ways, conduit, fiber, antennas, poles, towers, abandoned facilities, active facilities and other infrastructure to determine their usefulness for expanding broadband within the region.

2.1.7 **Conceptual Network Design.** Development of a conceptual network design(s) that provides a high-level design for components of broadband infrastructure

including fiber optic routes, network buildings and equipment. The conceptual routes will be critical when applying for future grant funding and will be based on leveraging existing infrastructure for cost efficiency and to meet current and projected service requirements throughout the county.

2.1.8 **Project Identification and Prioritization.** Develop a set of initial middle mile (Phase 1, 1a, 1b. etc...) and last mile (Phase 2, 2a, 2b, etc…) projects for the region to embark upon to begin the creation of the network. These projects will consider all the information gathered so far concerning the existing fiber-optic infrastructure, any gaps in the same, and the overall landscape of broadband in the region. A result of which is a comprehensive determination of how these projects may be deployed, financed, and sustained.

2.1.9 **Technology and Trends Review.** Conduct a review of current trends in telecommunication technologies and the industries they support. The analysis should include assessments of material lifespan of any recommended broadband network technologies to safeguard against obsolescence and also consider alternatives.

2.1.10 **Policy Analysis.** A review of the current and forthcoming legislative and regulatory policy will also be performed to ensure that the proposed public network and service complies with and accounts for any statutes that govern how public broadband is regulated.

2.1.11 **Programming and Finance Evaluation.** Evaluate financing options that are available to the COUNTY for network engineering, post-engineering, construction, implementation, and subsequent operation of the network. Develop a cost model for the network, including one-time and ongoing capital expenditures, operations, network operations, field services, staffing, billing, and customer service. Delineate items such as customer growth rates, competitive pricing schedules, and overall financial sustainability. It is important to note that all programming and financing evaluations should be focused on the operation by eligible entities including units of government, co-operatives, non-profits, private companies, and colleges for example. Investigate and recommend funding sources that include local, state, federal, and private opportunities.

2.1.12 **Final Report.** Develop a final report. As a result, the COUNTY will be equipped with the impetus and tools necessary to proceed with more concrete and actionable steps toward the implementation of fiber-optic broadband throughout the county.

3.0 Deliverables/Milestones

The CONTRACTOR shall provide all deliverables outlined within this document to the COUNTY for approval. The COUNTY shall inspect and approve all work performed, in writing, and provide to the CONTRACTOR prior to final payment.

The CONTRACTOR shall provide to the COUNTY invoices for each sub-line item completed or monthly with an estimate of sub-line completion percentages. The CONTRACTOR shall include the written acceptance provided by the COUNTY to the Procurement Department at the time of invoicing for routing and approval of payment.

- Final Broadband Feasibility Study Report
  - Service and Infrastructure Analysis
  - Needs Assessment and Outreach
  - Site Analysis
  - Market Analysis
  - Broadband Provider Business Model and Partnership Evaluation
  - Identify, Map, and Analyze current broadband infrastructure assets
  - Conceptual Network Design with multiple technology and cost options
  - Project Identification and Prioritization
  - Technology and Trends Review
  - Policy Analysis
  - Programming and Finance Evaluation