

**ATTACHMENT E  
TECHNICAL CAPABILITY STATEMENT**

**5a. A description of the applicant's experience providing broadband and whether they currently provide broadband at the minimum 100Mbps/100Mbps speeds.**

Eastern Nebraska Telephone Company dba Fastwyre Broadband (the "Company") provides rural telecommunications products and services, including internet, video, local telephone, E911, and toll calling services to tens of thousands of Nebraskans, many over Fiber-to-the-Home ("FTTH") technology. The Company's commitment to and experience with multiple technologies makes it uniquely qualified to provide high speed broadband service to this proposed area with fiber. The Company's understanding of the Nebraska terrain, combined with decades of experience with aerial and buried plant will ensure a high-quality, cost-effective solution.

The Company currently offers symmetrical speeds to residential and business customers where fiber is available and will expand service offerings in the proposed area in alignment with the requirements of this grant application, offering at least 100 Mbps symmetric speeds to all locations in the project area with no data caps or contracts. The proposed project area will be served with XGS-PON technology and additional capacity (up to 10 Gbps symmetric speeds) will be provided in the future.

American Broadband Holding Company ("ABHC"), the ultimate parent company of Eastern Nebraska Telephone Company dba Fastwyre Broadband, has an internal workforce of approximately 270 employees that manage and operate the Company and its affiliates. ABHC operates a national telecom network and has substantial financial backing, decades of operational and marketing experience, and expertise in new market access/development to connect rural areas. Moreover, ABHC is focused on upgrading networks with high-speed, symmetrical FTTH and bringing gig-speeds to rural, unserved/underserved areas. ABHC provides management in the form of General Operations, Network Operations, Outside Plant Operations, Customer Service, Accounting, Marketing and Regulatory. The Company's staff and management are well trained and work to maintain a quality network to ensure high customer satisfaction. The Company can manage most operations internally but rely on external assistance when needed to manage operations utilizing contractors and engineers licensed in the state. The Company is planning to use a licensed professional engineering firm to complete the engineering design in direct coordination with the Company's Network Operations Leadership team.

The key Network Operations management team who will oversee this project have collectively worked in the telecommunications industry for over 135 years. This team has successfully managed numerous copper and fiber construction projects for the Company, delivering the projects on time and within budget. They have demonstrated the ability to successfully complete projects of a similar or larger size than the proposed project.

**5b. The useful life of the facilities to be built and how the service area will be maintained throughout the useful life of the facilities.**

The Company proposes to build a fiber-based network with a useful life of twenty years, which utilizes FTTH equipment that has a useful life of twelve years. The routers will have a useful life of ten years and will provide up to 100 Gbps of bandwidth to manage current speeds and future growth. The Company's proposed project will be maintained in accordance with Attachment G.

**5c. How the project will be resilient and sustainable in the long-term. This statement should also include the number and skill level of technical staff that will be dedicated to serving the project area once the project is complete.**

The Company was incorporated in 1949 and is a multi-service communication provider operating in eight exchanges across Northeast Nebraska, covering 2,849 homes. The Company currently provides service to 2,853 voice, broadband and video services utilizing 358 miles of fiber and 577 miles of copper plant. The Company provides residential broadband customers with up to 1 Gbps symmetrical service.

The Company started offering broadband service in 1997 with dial-up service, began rolling out DOCSIS service in 2003, and expanded to Digital Subscriber Line ("DSL") service over copper lines to every Nebraska telephone exchange in 2008. The Company currently utilizes FTTH, Asymmetric Digital Subscriber Line (ADSL2+) and Very high-speed Digital Subscriber Line (VDSL) technologies to provide broadband service. The Company has 73 employees in Nebraska and supports residential, business, and corporate network services through a help desk. Three field technicians will be designated to support the proposed project area with additional resources being available from nearby Walthill and Wayne, NE.

Currently, the Company's leadership team is managing project(s) to upgrade and/or build new infrastructure in various locations throughout its footprint. Over the past few years, this management team has led the Company's affiliates as they have completed several buildouts as part of their ACAM and Alaska Plan obligations, meeting annual buildout milestones for multi-million-dollar projects. In addition, an affiliate of the Company is in the process of a project to replace covered equipment under the Secured Network Reimbursement Program at total project cost of approximately \$26.5 million. This is similar or greater in size and scope to the Company's proposed Winnebago project. With over 135 years of combined experience in telecommunications, the Company's management team has the experience and dedication to successfully deliver this project.

**5d. The expected useful life of the facilities to be built including a statement as to the technological components used, and, if applicable, which components may require more frequent repair or replacement.**

The Company has multiple redundant connections to the Tier 1 Internet backbone through its recently constructed 100 Gbps ring out of its Walthill Central Office. The Company monitors network usage through a 24-hour automated alert system. The Company also runs routine speed and latency tests to the customer gateway to ensure key performance indicators are met. The Company proposes to build a fiber-based network with a useful life of twenty years, which utilizes FTTH equipment that has a useful life of twelve years. The routers will have a useful life

of ten years and will provide up to 100Gbps of bandwidth to manage current speeds and future growth. The Company proposed project will be maintained in accordance with Attachment G.

**5e. A detailed description of the proposed network architecture including homes passed, fiber miles, and the specific technology to be used to provide service to end users.**

**and**

**5f. Describe their technical capability to meet the requirement to provide a minimum 100/100 Mbps in all locations that receive grant funding, and their plans to meet the minimum statutory technical and speed requirements in place for the NBBP throughout the fifteen- year period.**

Where fiber is available, the Company currently offers symmetrical speeds to residential and business customers in their exchanges. In alignment with the requirements of this grant application, the Company will offer at least 100 Mbps symmetrical speeds to all locations in the proposed project area with no data caps or contracts. The Winnebago project will pass 26 homes and ~3.4 miles of mainline fiber will be constructed to provide high speed broadband service to every location. The proposed network is designed in a centralized Passive Optical Network (“PON”) configuration with 1 X 32 splitters.

The project area will be served with Next Gen XGS-PON technology and additional capacity (up to 10 Gbps symmetric speeds) will be provided in the future. The Optical Network Terminal (“ONT”) will provide 1 Gbps service which can be upgraded to provide 10 Gbps. The transport network from Winnebago, NE to Walthill, NE will also be upgraded to 100 Gbps links with the addition of routers. The Company will have access to a 100 Gbps network from the Winnebago CO to the handoff point of the internet traffic to Tier 1 providers.