

### TOWN OF ELIZABETH

PATRICK G. DAVIDSON, TOWN ADMINISTRATOR

TO: Honorable Mayor, Mayor Pro Tem, and Board of Trustees

FROM: Patrick Davidson, Town Administrator

DATED: July 23, 2024

SUBJECT: Update on ARPA Funds – Maverix Broadband Installation

#### **BACKGROUND**

On November 14, 2023, the Town of Elizabeth entered into an agreement with Maverix Broadband to provide fiber internet services to Town Hall and to the Elizabeth Police Department. Additionally, the agreement called for the installation of WI-FI hotspots along Main Street in order to provide WI-FI for events such as "Elizabash," the Friday Night Markets, and the Mayor Tree Lighting. The contract called for a seven (7) week timeline for permitting, construction, installation and testing. In keeping with the Town's financial policies and budget protocols, an initial payment of \$73,930.00 was tendered to Maverix for fiber, tracer wire, conduit, and related materials. <sup>1</sup>

Since the execution of the agreement, problems have arisen with regard to the completion of the project. The project should have been completed by February 22, 2024. However, Maverix's first call for a line location was not until March 19, 2024. A request for a right-of-way (ROW) permit was not sought until March 20, 2024. The request for the first ROW was twenty-seven (27) days beyond the contract expiration date. On March 27, 2024, Staff reached out to Maverix to determine a start date for boring of lines, with the assurance the project would be completed *before the end of April 2024*. An additional email was received on March 28, 2024, stating that the end of April 2024 included "padding for the unexpected".

In the months that followed, Staff have pressured Maverix to complete the project as soon as possible, knowing that they were already far beyond their negotiated completion timeline. On May 30, 2024, Maverix made inquiry after another round of emails, asking for the specifics of summer events for which we needed WI-FI to be installed, and the location of events.

Maverix failed to have the WI-FI network operational in time for the June 8, 2024 "Elizabash", meaning that they were at least one hundred eight (108) days late on the original contract, and at least forty (40) days late for the "end of April" assurances. During the following week (June 10-14, 2024) Maverix was then in regular contact with the Town to have WI-FI available for the first Friday Night Market. WI-FI installation for Running Creek Park was completed on Friday, June 14, 2024, during the actual event – at least one hundred fourteen (114) days late.

<sup>&</sup>lt;sup>1</sup> November 14, 2023, was the acceptance date for the contract. However, for purposes of calculations contained in this memo, the date of January 4, 2024, is used. This is the date the initial payment was made to Maverix and provides Maverix all reasonable interpretations in their favor.

On July 10, 2024, the fiber turn-over occurred wherein the transition from regular cable to fiber was completed at both the Town Hall and at the Elizabeth Police Department. Under the terms of the Agreement, this partial completion under the agreement was 140 days late. Additional restoration work must be completed within the rights-of-way, and additional information must be provided regarding location and depth of the lines installed prior to final payment. Lastly, Maverix has asserted that "upgraded" equipment was installed for the benefit of the Town. Staff has requested technical data regarding the nature of the "upgrades" to ensure the Town has received – at a minimum – what was originally the basis of the agreement. These documents have yet to be provided.

#### ADDITIONAL BACKGROUND FACTORS

Through the Agreement with Maverix, the Town of Elizabeth is the owner of the fiber installed under the contract. The fiber may not be used to service third parties under any circumstances. Should Maverix seek to install additional fiber within the Town, a ROW agreement is required. It has come to the Staff's attention that businesses on Main Street have received "free fiber for life" in exchange for the location of WI-FI radios on their property. This is fine, and not the Town's issue, unless it is being fed through any line owned by the Town of Elizabeth. While Maverix has stated the service is provided by other means, they have not confirmed that the Town's own fiber is not assisting in this matter.

Second, early in the Town's discussions with Maverix, the idea of additional ROW requests were discussed. While commonly referred to as "franchise agreements" they really are a ROW license to allow private industry to make use of the Town's land. Conceptually, private industry should pay to make use of taxpayer owned property; particularly when it may not be to the benefit of the residents of the community. Maverix has refused to provide offers to Elizabeth as to terms to consider and have asserted they are not required to make any payments to the Town. Any future ROW requests have been denied pending a resolution of the outstanding construction issues and the willingness of Maverix to enter into an agreement for future ROW.

Lastly, there are concerns with regard to the on-going legality of whether franchise agreements may now be required under existing Federal Communications Commission (FCC) regulations. In April 2024, the FCC voted 3-2 to reclassify broadband as a public utility and allow for the regulations of the internet. Maverix has asserted that Colorado law dictates this decision, but it is unclear how Maverix's position is supported under the Supremacy Clause of the US Constitution. Assuredly, this issue must likewise be resolved in advance of the Town issuing any additional ROW permits to Maverix.

#### **ANALYSIS**

The purpose of the memo is to provide an update to the Board of Trustees on the current status of this specific ARPA funding request, and to inform the Board of possible upcoming agenda items that will need to be resolved.

#### STAFF RECOMMENDATION

The memo is advisory only at this time. Further direction will be sought regarding a ROW license agreement with Maverix which will require Board approval. Staff anticipates withholding the

balance of contractual funding until such time as all punch-list items are finalized and proper public notice has been provided for payment.

## **BUDGET CONSIDERATIONS**

None contemplated at this time.

## **ATTACHMENTS**

Copy of Maverix Agreement dated November 14, 2023.



# **Project Overview**

## Goals & Objectives

Our proposal aims to achieve the following objectives:

## Deploy a fiber optic network to key municipal buildings

We will design, construct, and implement a fiber optic network across a subsection of Downtown Elizabeth, ensuring comprehensive coverage for town hall, the police station, the Chamber of Commerce, and City Park.

### Provide high-speed wireless internet to common areas

The fiber optic infrastructure will deliver blazing-fast wireless internet speeds, enabling merchants and visitors alike seamless online experiences, whether it be for education, work, entertainment, or communication.

### Enhance economic development

By providing a robust internet infrastructure, we will attract new businesses and encourage entrepreneurship in Elizabeth, fueling economic growth and job creation.

#### Establishment of foundational infrastructure

We are committed to ensuring that every resident of Elizabeth has equal access to high-quality internet services. The work outlined in this proposal helps us extend our footprint for future expansion and needs of Elizabeth.

## Scope of the Project

The scope of the fiber optic network project in the town of Elizabeth encompasses several key areas and deliverables.

#### Network Design and Infrastructure

The scope involves the design and deployment of a robust and scalable fiber optic network infrastructure. This includes planning the network architecture, determining optimal routes for fiber optic cables, and strategically placing network equipment such as switches, routers, and distribution points. Our plan includes a redundant path to connect downtown Elizabeth with two separate and geographically diverse fiber optic routes, ensuring critical infrastructure will stay online in the event of an outside fiber cut.

### Fiber Optic Cable Installation

The project will involve the installation, testing, and splicing of fiber optic cables across the town, following a carefully planned route that ensures efficient coverage and minimal disruption to the community. This includes underground installations, aerial installations, and any necessary permissions or agreements for accessing private properties or rights-of-way.



## Wireless Connectivity along Main St & vicinity

In addition to the comprehensive fiber optic network, we engineered the inclusion of wireless connectivity via access points along Main St. This wireless infrastructure will cater specifically to events, providing seamless internet access to event attendees, merchants, and visitors. Additionally, this FREE public wifi option can be offered to locals and visitors throughout the year.

#### Testing and Quality Assurance

The project scope includes thorough testing and quality assurance procedures to ensure that the network is functioning optimally. This includes testing connectivity, measuring data transfer speeds, and identifying and resolving any technical issues that may arise during or after the deployment of the fiber optic network.

### Ongoing Maintenance and Support

The scope extends to providing ongoing maintenance and support for the fiber optic network. This includes monitoring the network, performing routine maintenance tasks, addressing any service disruptions promptly, and ensuring uninterrupted internet connectivity for the service area detailed in this proposal. All systems will be monitored 24/7/365 for uptime and our local technicians will be notified and dispatched at the first sign of a problem.

## **Proposed Timeline**

#### 1. Permitting Phase

- a. Week 1: Engage in discussions and negotiations with the Town of Elizabeth to address any questions or concerns they may have. Drafting of Traffic Control Plans, finalizing and marking route, and Initiating the permitting with the Town of Elizabeth. 811 utility locate requests will be submitted for the entire route. Necessary labor will be scheduled and material orders will be finalized.
- Week 2-3: Provide additional documentation or modifications to the plans if necessary. Receive all necessary permits and approvals from the Town of Elizabeth.

### 2. Construction Phase

- a. Week 1-2: Mobilize the construction team and equipment to the site. Begin the process of trenching / boring and laying conduit for fiber optic cables according to the approved plans.
- b. **Week 3-4:** Carry out the installation of fiber optic cables along the designated routes, including underground and aerial installations as required.



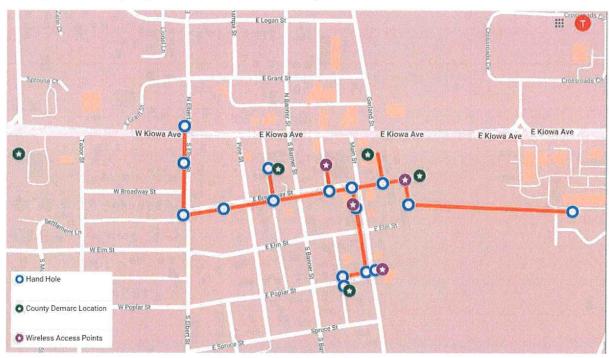
- c. **Week 5:** Complete the fiber optic cable installation, including any necessary splicing and termination. Installation of Wi-Fi radios at designated points.
- d. Week 6: Conduct quality checks and inspections to ensure that the installed fiber infrastructure meets the required standards.

### 3. Testing & Validation Phase

a. Week 1: Conduct comprehensive testing and validation to verify the reliability, speed, and overall performance of the fiber optic & wireless network. The network will be active and available for use immediately.

# Proposed Fiber Optic Infrastructure

Design and deployment plan for fiber optic network in Elizabeth



#### Redundant Network Architecture

- These dual fiber lines, running in parallel, ensure that even in the event of a disruption or failure on one side, the other line seamlessly takes over, guaranteeing uninterrupted connectivity. This redundancy not only enhances the reliability of the network but also provides a robust infrastructure that can handle high volumes of data traffic, effectively meeting the demands of today's digital world.
- High-end enterprise grade wireless for secure public usage, prioritized for business access through private vendor logins



# Cost estimation for fiber optic & wireless network deployment

Description	Rate	Units	Quantity	Construction Cost	Materials Rate	Materials Cost	Total Cost
Bore 1x conduits	\$13.00	LF	4,150	\$53,950.00	\$0.30	\$1,245.00	\$55,195.00
Install 17x30	\$350.00	EA	17	\$5,950.00	\$600.00	\$10,200.00	\$16,150.00
Install 13x24	\$300.00	EA	0	\$0.00	\$275.00	\$0.00	\$0.00
Hydro excavate utility and install conduit	\$225.00	EA	30	\$6,750.00	\$0.00	\$0.00	\$6,750.00
Excavate and couple dis-continuous conduit	\$150.00	EA	5	\$750.00	\$5.00	\$25.00	\$775.00
Place Fiber in conduit	\$1.00	LF	4,565	\$4,565.00	\$1.00	\$4,565.00	\$9,130.00
Splicing	\$300.00	EA	15	\$4,500.00	\$300.00	\$4,500.00	\$9,000.00
Tracer Wire	\$0.10	LEF	4,150	\$415.00	\$0.20	\$830.00	\$1,245.00
Wireless Access Points	\$1,250.00	EA	4	\$5,000.00	\$1,500.00	\$6,000.00	\$11,000.00
Building Installations	\$1,250.00	EA	5	\$6,250.00	\$500.00	\$2,500.00	\$8,750.00
				\$88,130.00		\$29,865.00	\$117,995.00

# Monthly Service Pricing

Description	Rate	Quantity	Monthly Cost
Primary Buildings (TH, PD, PW)	\$299.99	3	\$899.97
Secondary / Support Buildings (Water Treatment)	\$49.99	2	\$99.98
			\$999.95

## Conclusion

In conclusion, the implementation of a fiber optic network in the town of Elizabeth holds immense potential to revolutionize the community's connectivity and propel it into a new era of digital advancement. By choosing to partner with Maverix Broadband for this project, a local company utilizing local contractors, the town can benefit from additional economic opportunities,



cutting-edge technology, reliable high-speed internet, and widespread access to public WiFi. This fiber optic proposal presents an opportunity for Elizabeth to enhance economic growth, attract businesses, and improve the overall quality of life for its residents. By embracing this forward-thinking infrastructure, Elizabeth can establish itself as a technologically progressive town that prioritizes digital inclusion and embraces the limitless possibilities of the digital age. The benefits of this proposal extend beyond the immediate future, promising a foundation for long-term sustainable development and positioning Elizabeth as a leader in connectivity and innovation.

By:

David Lindayer

Name:

**David Lindauer** 

Title:

CEO, Maverix Broadband

Date Signed: 11/8/2023

Ву:

Name:

Nick Snively

Title:

Mayor, Town of Elizabeth

Date Signed: 14

## References

### Arrow Electronics

Mark Endry CTO mark.endry@arrow.com 720-739-3420

#### Rattlesnake Fire

Cass Kilduff Fire Chief cass.kilduff@rsfpd.org 720 371 0818

#### Elizabeth Stampede

Lea Anne Russell rodeo2022@gmail.com

#### Craft Company

Jim Yates 303.803.7036 Jim@CraftCompaniesLLC.com

# Smoky Hill Engineering

Randall A. Lopez



Civil and Structural Engineer (256) 975-7861 rlopez@smokyhilleng.com