

2019 No Tax Increase Bond Issue Project Information

Project Name: Network Infrastructure Priorities Phase I

Estimated Project Costs: \$975,000

Project Timeframe: 1 – 2 years

Project Scope/Details:

Replace existing aerial fiber with new buried fiber:

- Along Douglas from fire station one, to police headquarters.
- From The intersection of Hamblen Rd and Bailey Rd to Public Works operations.

Lay new fiber network to complete network connectivity to all city facilities.

- Connect Water via 3rd, Ward and Persels
- Connect Fire Station 2, via Scruggs and Colbern Rd.
- Connect Harris Park via Jefferson
- Longview Rec Center, via 3rd St.

Project Narrative (describe project value to public):

There are two components to these projects. Those include replacement of aging existing infrastructure, and development of new infrastructure.

The City currently owns aerial fiber runs that connect several critical facilities, including Police Headquarters, City Hall, Animal Control and Public Works Operations. These lines are showing their age and we have been notified by our contractors that repairs and splices are now difficult because the glass fibers have become brittle, and will soon reach a point where a repair might not be able to be made. The lines are also aerial, attached to existing telecommunication and power poles. These aerial lines run in areas where there is significant tree cover, increasing the likelihood of downed limbs severing the network connections. The first component of this would be to bury fiber optic in the following locations:

- Along Douglas from fire station one, to police headquarters.
- From The intersection of Hamblen Rd and Bailey Rd to Public Works operations.

City Hall is the hub of the City's communications network, and connectivity between City Hall and Fire, Police and other facilities to maintain public safety is the primary motivation to undertake these communications improvements.

Communication interconnectivity among the numerous City facilities (all types including City Hall, water facilities, public works facilities, fire, police, parks) is critical to a reliable communications network for public safety, both in terms of every-day public safety operations and in crisis situations resulting from serious weather events, natural disasters, fires, terrorism, public violence, shooting incidents and other life-threatening situations that require an immediate response and reliable communications.

Much of the network communications improvements relate directly to the other items in the combined question, including (1) communications improvements to the new fire stations, (2) enhanced

communications with the Police Station, and (3) improved wireless networked communications throughout the entire system to operate the new Police car video systems and body worn cameras. For example, this allows for watching live-time video at City facilities for personnel with in-vehicle or body-worn cameras that are out on an emergency call.

The Longview Recreation Center network improvements have a public safety component because that facility also serves as a storm shelter.

The City currently leases fiber network from the LS R7 school district to connect several of its facilities. The balance of phase of I is to implement city owned fiber to connect city facilities for IT needs, as well as support the growing need for fiber networks in other departments. Including Public Works, Police, and Fire.