Lehigh County Authority

# Suburban SCADA Upgrade Project (2022-2025)

LCA Board of Directors

May 9, 2022

# What Is SCADA?

- **SCADA** – Supervisory Control And Data Acquisition
  - A control system that uses computers, network communication (internal, cellular and dial up) and GUIs (graphical user interfaces) for supervision and control of assets and processes.
  - This includes the monitoring of sensors and PLCs (programmable logic controllers) that interface directly with the assets.

# Current SCADA Challenges

- Inconsistent Communications
    - Dial up internet and radio communications
- Multiple software systems
- Multiple points of alarms and notification
- Lack of internal expertise
- Aged infrastructure
- Lack of remote access
    - Increased response time (traveling to facility)
    - Delayed responses can lead to regulatory noncompliance (boil advisories)

# Project Overview

- Captures 42 Suburban water field assets
  - Well Stations
  - Pumping Stations
  - Meter Stations
  - Reservoirs
- Develop standardized build-outs for five common facility types
- Contractor must have their own cabinet shop on premises
- Project will be phased by priority over 4 years (2022-2025)

# Project Phasing

- Phase 1 - 2022
    - Highest Priority Water Facilities
    - 1 – Central Lehigh Division
    - 4 – Satellite Systems

- Phases 2-4 – 2023-2025

# Project Benefits

- LCA staff development & training

- Standardized approach to increase ease of use

- Single platform for
  - Alarming
  - Reporting
  - Historian

- Secure remote access

- Scalable for future growth

- Increased response times
  - Improved service to customers
  - Potential to lower regulatory compliance risk

# Suburban SCADA Upgrade Project

- Questions?