

CHARLOTTE  
WATER

 CITY OF  
CHARLOTTE



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# Upcoming Select WT Plant and Pipe Projects Forum

**PUBLIC MEETING**

**DECEMBER 15, 2025**

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# Today's Outline

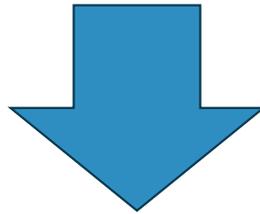
- ◁ **Welcome and Aspirations**
- ◁ **Charlotte Water**
  - Background
- ◁ **Opportunities**
  - Water Treatment Plant Projects
  - Pipeline Projects
- ◁ **Questions**

# Objectives for Today

- ◁ **Share upcoming infrastructure plans**
- ◁ **Foster a collaborative dialogue**
- ◁ **Expand professional networks**

# Objectives for Today

- ◁ **Share upcoming infrastructure plans**
- ◁ **Foster a collaborative dialogue**
- ◁ **Expand professional networks**



**Increased engagement and interest in contract opportunities**

# Presenters

- ◁ **Chuck Bliss** - Chief Engineer for Capital Projects and Operations Support
- ◁ **Nicole Bartlett** – Engineering Division Manager for Capital Projects
- ◁ **Samantha Hovis** – Sr. Engineering Project Manager for Rehabilitation and Operations Support Group



# Charlotte Water

# Charlotte Water



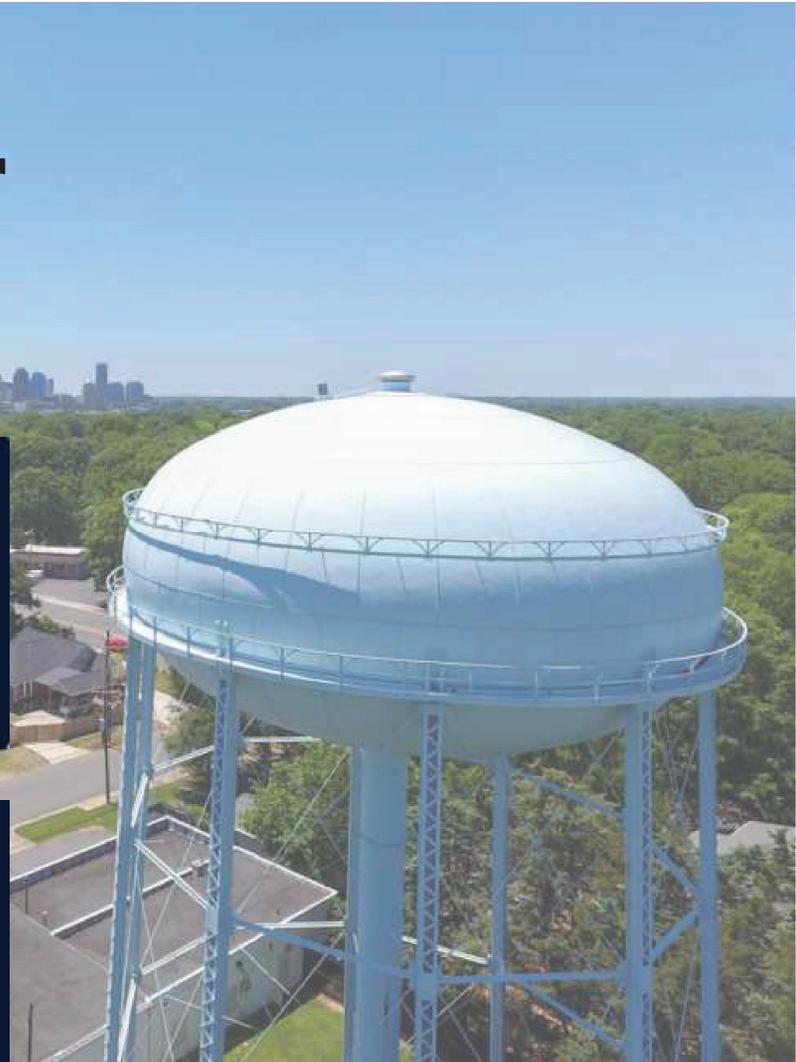
## Vision

To be a leading utility, recognized for excellence, and dedicated to our people, community, region, and environment.



## Mission

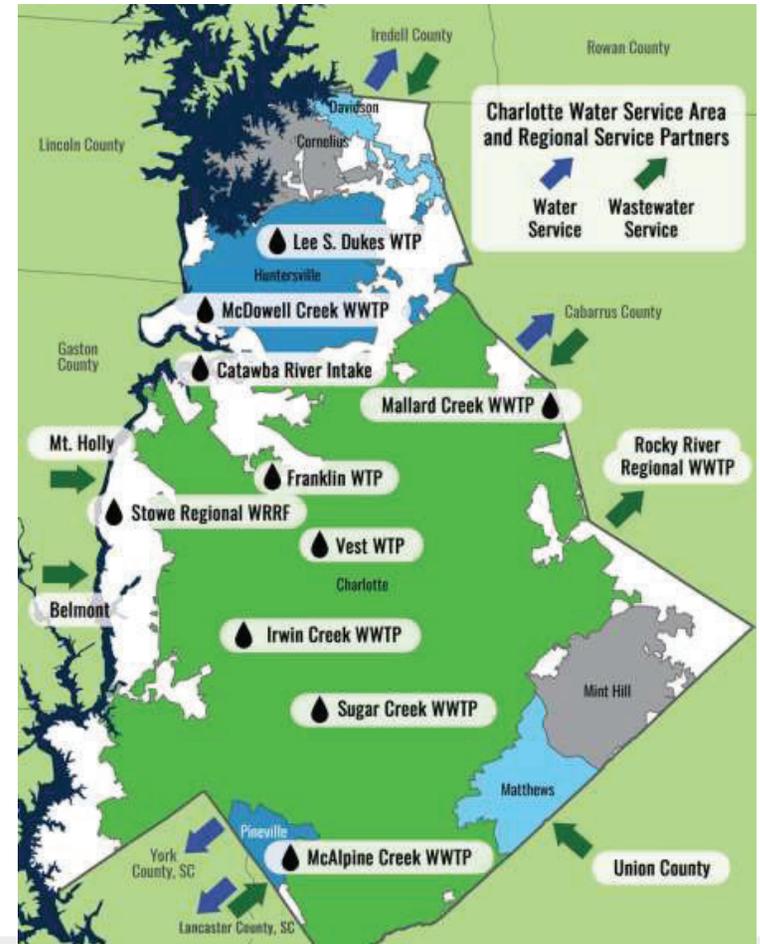
To consistently provide the highest quality water and wastewater services to our community.



# Regional Water and Sewer System

## High Quality & Resilient Utility

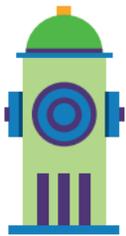
- ◁ Water supply from 2 Catawba River impoundments
- ◁ Potable Treatment - 3 plants; 242 MGD total capacity
  - 124.6 M Gallons of Water Pumped (Daily Average FY25)
- ◁ Wastewater Collection - ~4,595 miles of 8"-78" sewer mains and 74 sewer lift stations
- ◁ Regional Wastewater Treatment - 6 treatment plants with permitted capacity of 123.1 MGD
  - 86.1M Gallons of Wastewater Treated (Daily Average FY24)



# WT Plant and Pipeline



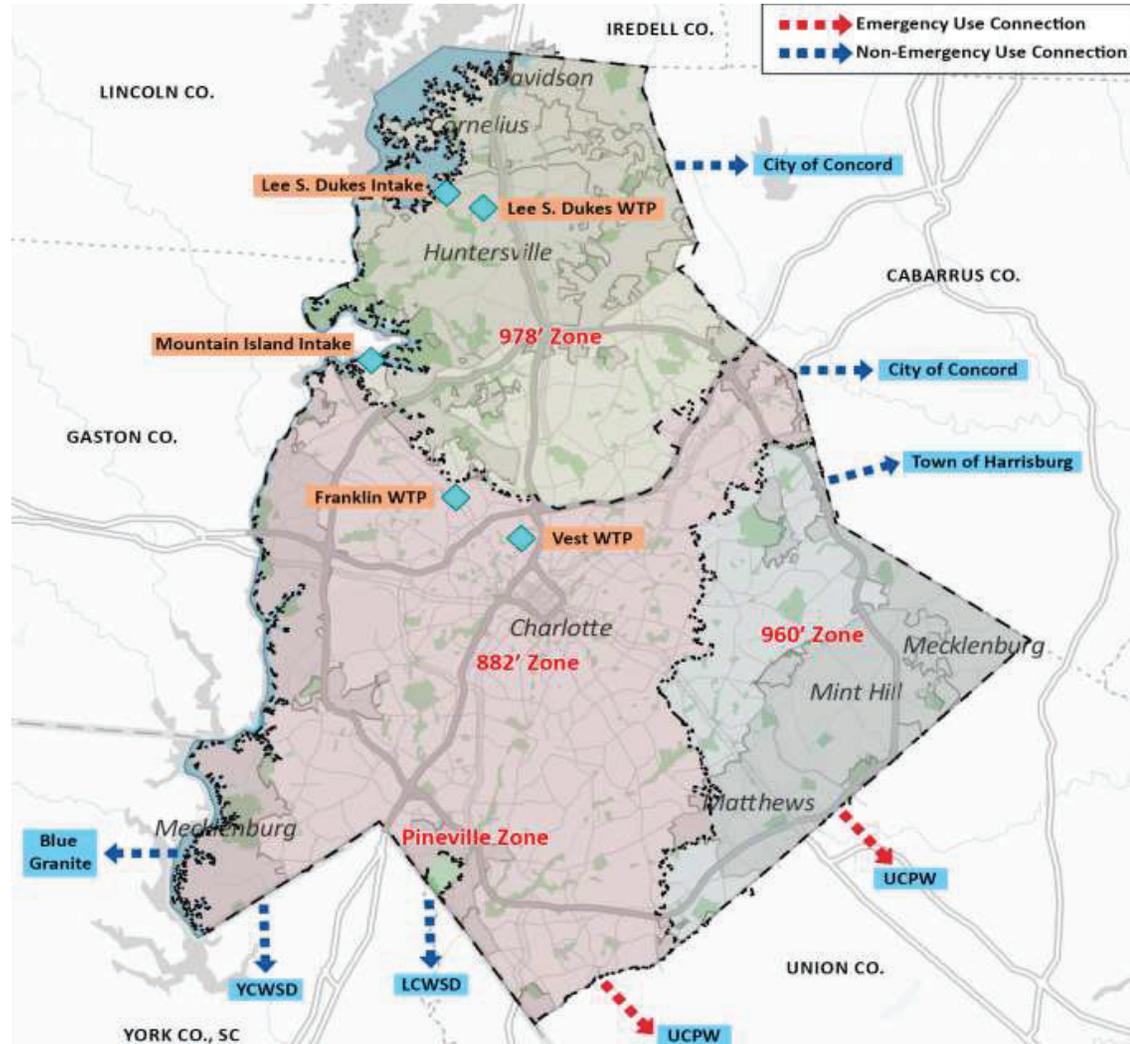
93,447 valves maintained



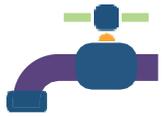
18,797 hydrants maintained



4,664 miles of water mains maintained



# Fiscal Year 2025 Statistics



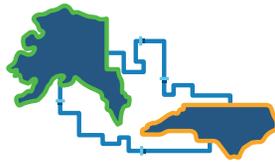
124.6

Million Gallons of Water Pumped on Average Each Day



87.6

Million Gallons of Wastewater Treated on Average Each Day



9,205

Miles of Water and Wastewater Pipes Maintained



776

Water Main Leak Repaired



328,048

Total Active Water Service Connections



295,747

Total Wastewater Service Connections

AAA Rated

\$448 Million invested in capital project improvements (FY25)

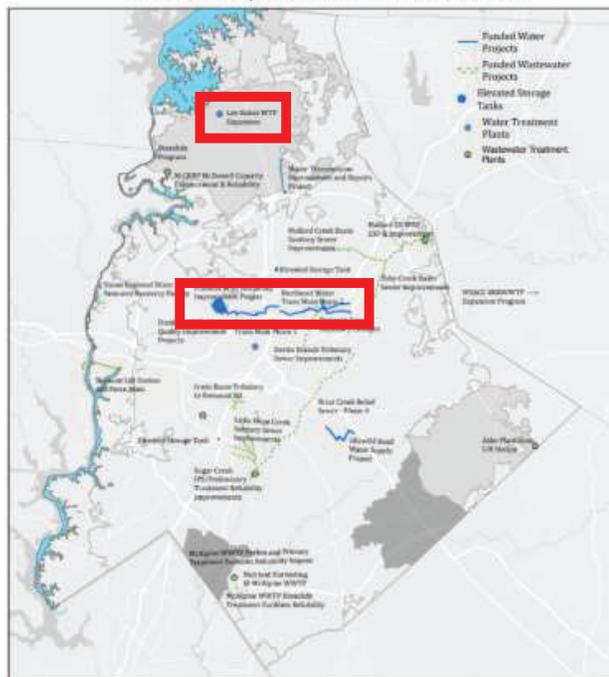
A gallon of water costs less than \$0.045

Serves a regional customer base of > 1,206,285

# Opportunities

# WT Plant and Pipeline Program

Fiscal Year 2026-2030 Capital Improvement Plan  
Funded Projects Water & Wastewater



CHARLOTTE  
WATER

0 1 2 4 6 8  
Miles

Locations are approximate.  
Map indicates funding status only.  
Construction status may differ.

- ◁ Increased system demands
  - Per capita usage assumptions
  - Incoming population
  - Non-revenue water
  - New resale customers
- ◁ Fast-tracked plant and pipeline expansion projects
- ◁ Program Goals:
  - Increase system capacity and in the 978 zone

# Opportunity Types



- ▷ **Progressive Design Build RFQ**
- ▷ **Professional Services RFQs**
- ▷ **Services, Equipment and Materials RFPs**
- ▷ **Hard Bid Construction**
- ▷ **Subcontractor Opportunities**

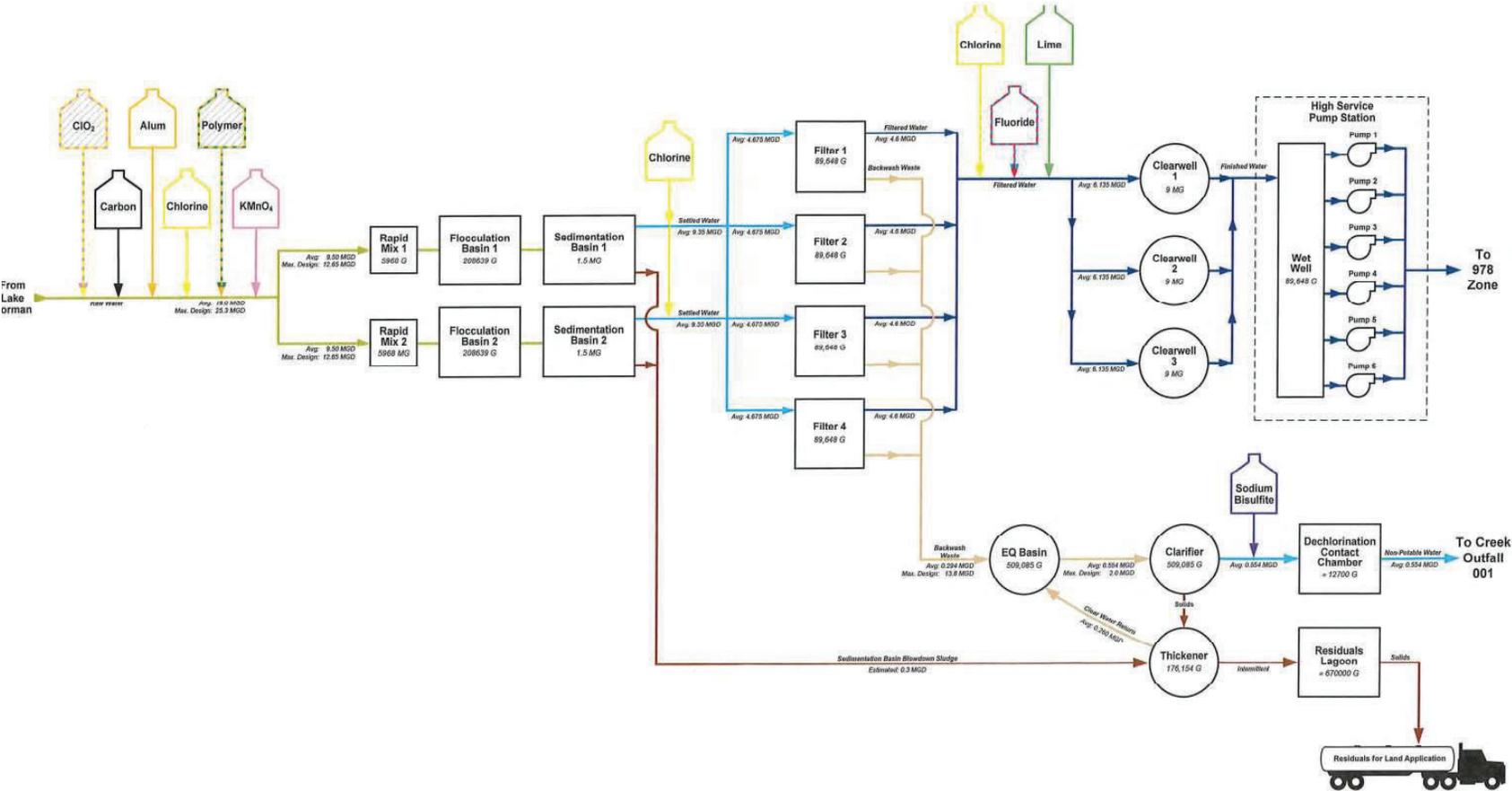
# Water Treatment Plant Opportunities

# Lee S. Dukes WTP

- ◁ **Conventional 18 MGD WTP constructed in 1998**
- ◁ **Expanded in 2000 and approved to high-rate filters (5.5 gpm/sf)**
  - Total max treatment capacity of 25 MGD
- ◁ **Minor improvements / rehab since 2000**



# Lee S. Dukes WTP



# Lee S. Dukes WTP – Current Projects

## ▽ Lee S. Dukes WTP Expansion Preliminary Engineering Report (PER)

- Engineer: Black & Veatch
- Completion date: April 2026

## ▽ Lee S. Dukes WTP High-Rate Study and Sedimentation Basin Improvements

- Scope:
  - *Request high-rating filters over previously approved rate of 5.5 gpm/sf*
    - Complete testing to determine feasibility
  - *Complete design of Commodities ITB package to add plate settlers in existing sed basins*
- Engineer: Black & Veatch
- **Commodities ITB Advertisement: April 2026**



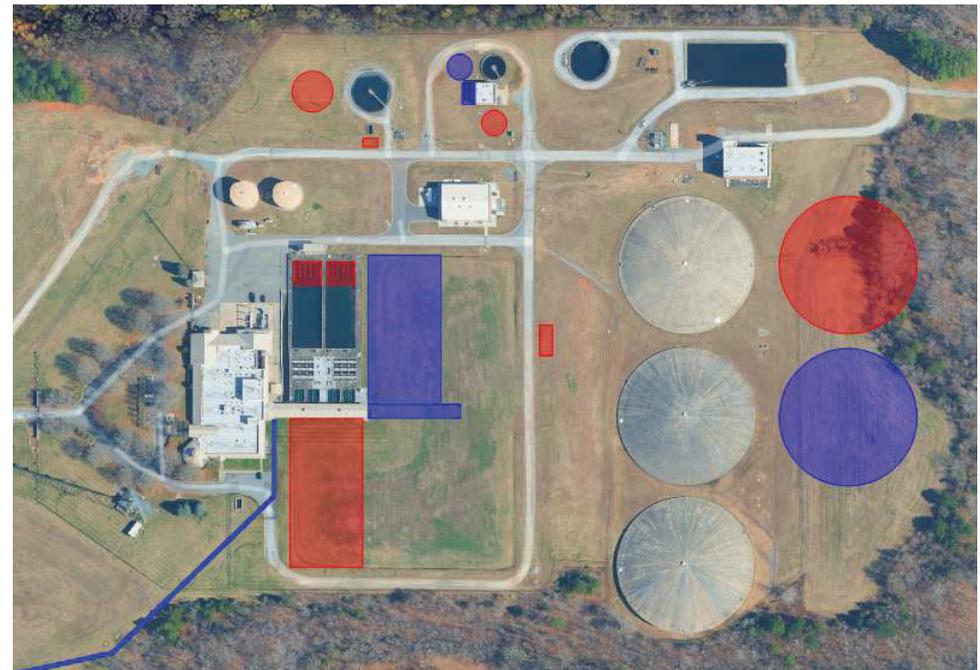
# Lee S. Dukes WTP Expansion

## ◁ Two RFQs:

- Owner's Advisor (OA) Services for the Lee S. Dukes WTP Expansion and Associated Infrastructure
- Progressive Design-Build (PDB) Services for the Lee S. Dukes WTP Expansion

## ◁ Timing:

- OA Services RFQ – Jan. 2026
- PDB Services RFQ – April 2026



# Lee S. Dukes WTP Expansion

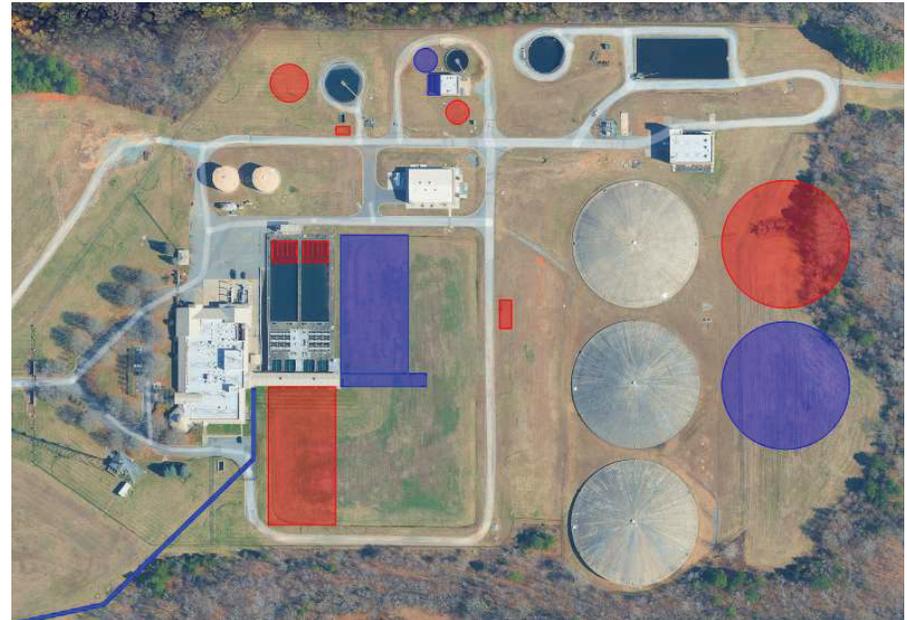
## ◀ Scope:

### • OA Services:

- *Professional services from procurement of the PDB team through construction/warranty phases of the Dukes WTP Expansion project and associated infrastructure.*

### • PDB Services:

- *Design and construction of the Dukes WTP Expansion project. Includes two phases:*
  - **Phase 1** – 18 MGD conventional treatment train and additional associated structures, processes, and appurtenances.
    - Including residuals basins, high service pumping, clearwell storage, standby power.
    - Installation of plate settlers procured by CLTWater
  - **Phase 2** – Second 18 MGD conventional treatment train and additional associated structures, processes, and appurtenances.
    - Including high service pumping, clearwell storage, chemical feed additions, raw water intake and conveyance improvements, and residuals process modifications.



# Lee S. Dukes WTP Expansion

## Subcontractor Opportunities:

### OA Services:

- ◁ Cost estimating



### PDB Services:

- ◁ Hauling
- ◁ Testing and Sampling (CMT)
- ◁ Paving
- ◁ Electrical
- ◁ E&SC
- ◁ Landscaping / restoration
- ◁ Surveying
- ◁ Grading
- ◁ Concrete
- ◁ HVAC
- ◁ Design Services
- ◁ Plumbing
- ◁ Masonry
- ◁ Roofing
- ◁ Geotechnical boring

# Water Pipeline Opportunities

# NEWT Phase I – Transmission Main

## ◁ Scope:

- Roughly 33,000 LF of large diameter transmission main from Franklin WTP to Statesville Road BPS
  - *Pipeline diameters = 48" up to 84"*

## ◁ Engineering Services RFQ:

- Scope:
  - *Cost estimating,*
  - *Constructability reviews of design documents,*
    - CLTWater is designing project in-house
  - *Construction administration support.*
- Timing: Q4 FY26



# NEWT Phase I – Transmission Main

## ◁ Scope:

- Roughly 33,000 LF of large diameter transmission main from Franklin WTP to Statesville Road BPS
  - *Pipeline diameters = 48" up to 84"*

## ◁ Construction Contract(s) – Hard Bid

- Timing: Q1 FY28
- Subcontractor Opportunities:
  - *Testing and Sampling (CMT)*
  - *Paving*
  - *E&SC*
  - *Landscaping/restoration*



# NEWT Phase I – Statesville Rd BPS

- ◁ **Scope:** 25 MGD (firm) BPS and decommission Starita BPS
- ◁ **Engineering Services RFQ:**
  - Scope: Design, permitting, and construction administration services.
  - Timing: Proposal deadline 01/15/26
  - Subcontractor Opportunities:
    - *Surveying*
    - *Geotechnical borings*
    - *Cost estimating*
    - *Misc. engineering services*



# NEWT Phase I – Statesville Rd BPS

- ◁ **Scope:** 25 MGD (firm) BPS and decommission Starita BPS
- ◁ **Construction Contract – Hard Bid:**
  - Timing: Q2 FY28
  - Subcontractor Opportunities:
    - *Electrical*
    - *E&SC*
    - *Landscaping/restoration*
    - *Grading*
    - *Tree clearing*
    - *Concrete*
    - *Paving*
    - *Masonry*
    - *Testing and Sampling (CMT)*



# Questions

# Contact Information

- ◁ **Chuck Bliss** –  
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- ◁ **Nicole Bartlett** –  
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