

# CAPITAL IMPROVEMENT PROGRAM FY 2024

#### ACSA Board Meeting – April 20, 2023

The projects in this Capital Improvement Program reflect the intent of the Albemarle County Service Authority at the date of adoption. Any number of factors could change the viability of any proposed project and projects not listed in the program may be undertaken.



# FY 2024 CIP BUDGET TOTAL - \$11,552,000

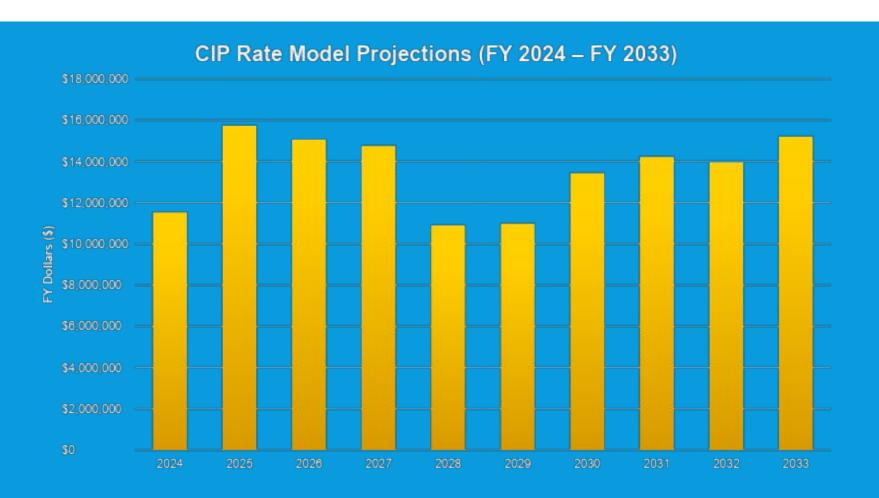
Water vs. Sewer Percentages



Existing vs. New Projects



#### CIP RATE MODEL PROJECTIONS



### RISK ASSESSMENT IMPROVEMENTS

- Vulnerability Assessment Recommendations
- Priority 1 Fencing and Door Hardening
- Priority 2 Creation of SterileZones
- Priorities 3 & 4 New Fencing and Lightening Protection
- FY 2024 \$0
- Total Budget \$871,950





### DATA MANAGEMENT AND DASHBOARDING

- 2023-2025 Strategic Plan Data Optimization
- It Security Assessment Recommendation
- Allows ACSA to inventory all data that is being collected and stored. Data is then categorized, and policies established on maintenance and usage.
- FY 2024 \$20,000 (split between water and sewer)
- Total Budget \$60,000



# CUSTOMER INFORMATION SYSTEM (CIS)

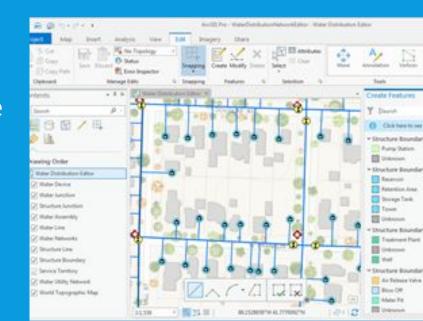
- 2023-2025 Strategic Plan Customer Experience
- Billing System Replacement
- Website Redesign
- Phone System Replacement
- Integration with AMI and ERP
- FY 2024 \$150,000 (split between water and sewer)
- Total Budget \$400,000



### ESRIUTILITY NETWORK IMPLEMENTATION

- Plan Development and Implementation of the Utility Network
- Access the utility network from any device, updated in real time
- Model assets with greater detail over larger datasets
- Identify valves to close to isolate break
- Identify customers impacted by outage
- FY 2024 \$150,000 (split between water and sewer)
- Total Budget \$225,000



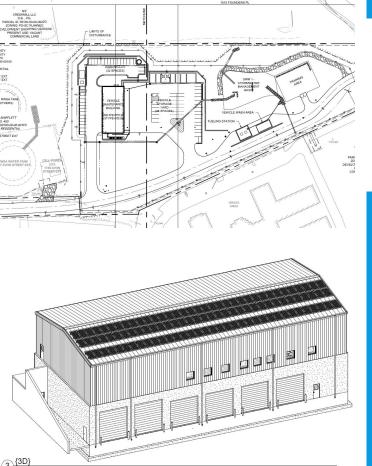


#### **ENERGY AUDIT**

- 2023-2025 Strategic Plan Business Resilience
- Comprehensive Energy Audit of Operations Center and all Pump Stations.
- Vehicle Charging Stations Programmed for FY 2024
- FY 2024 \$50,000 (split between water and sewer)
- Total Budget \$390,000









### AVON OPERATIONS CENTER

- 2023-2025 Strategic Plan Business Resilience
- Additional Maintenance and Storage Facilities to accommodate continued growth
- Training Area for Equipment Operators
- Construction in FY 2024-2025
- FY 2024 \$4,400,000 (split between water and sewer)
- Total Budget \$11,990,000

### ACSA FACILITIES – FIRE SUPPRESSION SYSTEM REPLACEMENT

- Complete system replacement due to severe internal pipe corrosion
- System beyond useful life
- Design/Build Contract
- Construction in FY 2024
- FY 2024 \$750,000 (split between water and sewer)
- Total Budget \$750,000



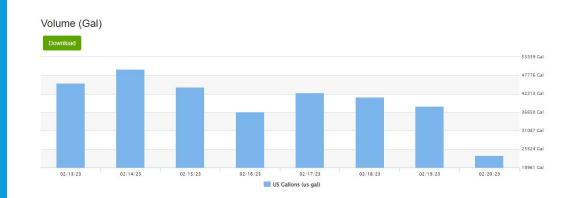
### RECORDS MANAGEMENT PROJECT

- 2023-2025 Strategic Plan Data Optimization
- Improve record compliance and retention
- Reduce physical storage needs
- Scanning of paper documents for improved access and efficiency
- FY 2024 \$300,000 (split between water and sewer)
- Total Budget \$325,000



#### ADVANCED METERING INFRASTRUCTURE (AMI)

- 2023-2025 StrategicPlan DataOptimization
- 2,200 Functioning Meters
- Full Deployment Underway
- FY 2024 \$800,000 (split between water and sewer)
- Total Budget \$8,500,000







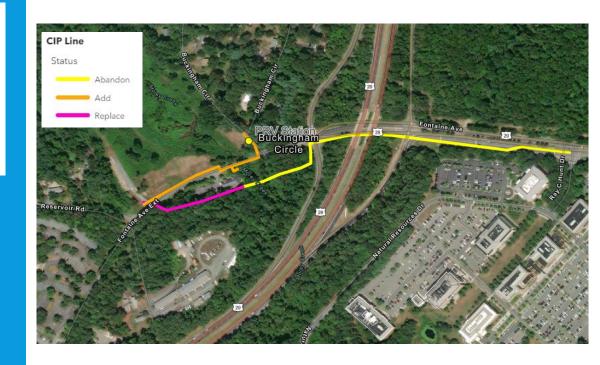
## SCOTTSVILLE PHASE 4 WATER MAIN REPLACEMENT



- Replace Cast Iron and Asbestos Cement Water Mains
- Coordination with RWSA
- Easement Acquisition in FY 2024
- Construction FY2025-2026 timeframe
- FY 2024 \$0
- Total Budget \$6,804,900

#### RAGGED MOUNTAIN PHASE 1 WATER MAIN REPLACEMENT

- Replace 90+ Year-Old Cast Iron Water Main
- Coordination with VDOT on Bridge Replacement Project
- Construction FY 2024-2025 timeframe
- FY 2024 \$342,000
- Total Budget \$1,218,400

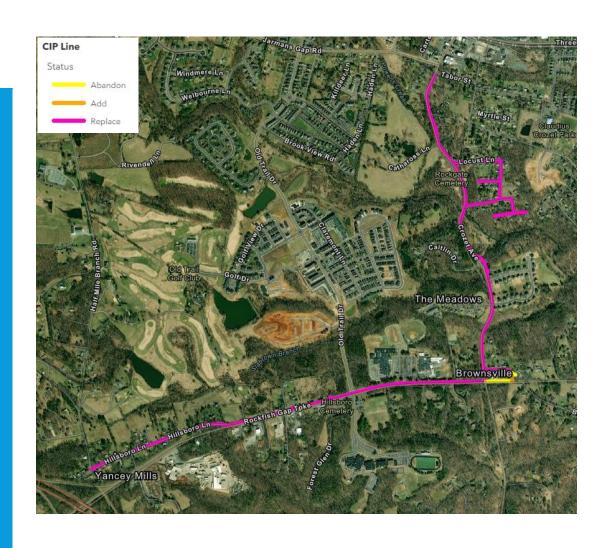


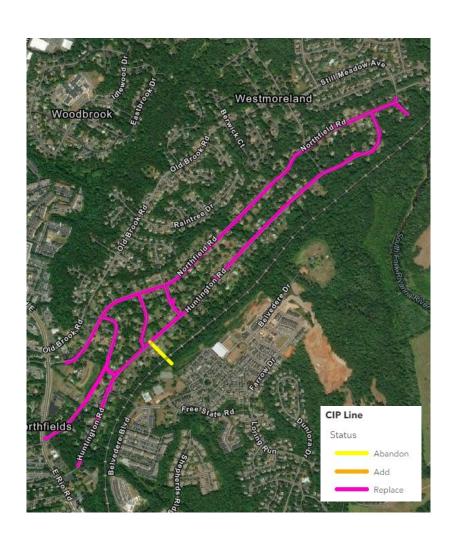




#### CROZET PHASE 4 WATER MAIN REPLACEMENT

- Replaces Asbestos Cement and older PVC Water Mains
- Construction FY 2024-2025 timeframe
- FY 2024 \$2,175,000
- Total Budget \$6,534,400





#### NORTHFIELDS WATER MAIN REPLACEMENT

- Replaces Asbestos Cement Water Mains (former well system) from the 1960's.
- Construction FY 2026-2027 timeframe
- ■FY 2024 \$0
- ■Total Budget \$8,530,000

### HUNTINGTON VILLAGE WATER CONNECTION

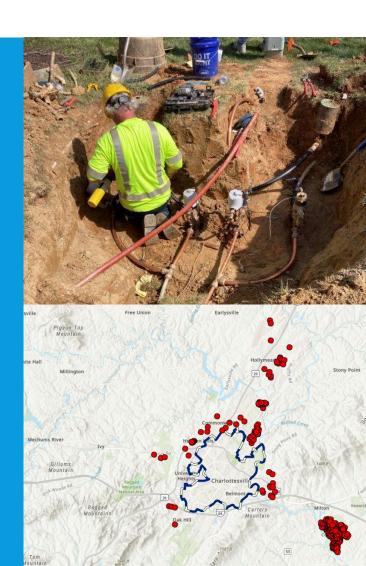
- Provides 2<sup>nd</sup> Water Feed into Huntington Village (135 residential customers)
- Anticipate utilizing the Annual Water Repair and Replacement Contract
- Construction FY 2024
- FY 2024 \$0
- Total Budget \$60,700





### EXCLUSION METERS REPLACEMENT

- Private Exclusion Meters introduced in the mid 1990's
- Initial Program Goal Eliminate All Remaining Private Exclusion Meters
- ACSA Staff Exploring Alternative Approaches to Address Remaining Private Exclusion Meters
- FY 2024 \$0
- Total Budget \$527,500



### PIPE SADDLES REPLACEMENT

- Replace Saddle
   Connection where
   Service Line Meets
   PVC Water Main
- In-house CIP Crew or Annual Services Contractor
- ■FY 2024 \$0
- Total Budget\$150,000





#### BRIARWOOD WATER MAIN REPLACEMENT

- Replaces olderPVC Water Mains
- Construction FY2027
- ■FY 2024 \$0
- Total Budget\$2,220,000



### BARRACKS WEST WATER MAIN REPLACEMENT



- Replaces Cast Iron and Galvanized Water Mains
- Existing Water Mains from the 1960's
- Improve Fire Protection
- Construction FY2024-2025
- FY 2024 \$450,000
- Total Budget \$3,402,000

### TOWNWOOD WATER MAIN REPLACEMENT

- Replaces older PVC Water Mains
- 3 Main Breaks in Past 2 Years
- Construction FY 2028
- FY 2024 \$30,000
- Total Budget \$1,300,000





### BROADWAY STREET WATER MAIN REPLACEMENT



- Replaces aging Cast Iron Water Main
- Construction FY 2024
- FY 2024 \$625,000
- Total Budget \$1,417,800

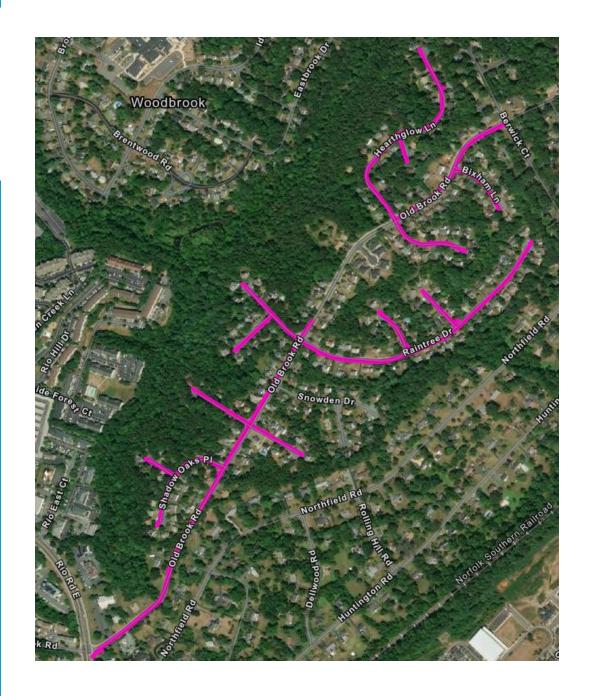
The Broadway Blueprint Study seeks to leverage public and private investment associated with the Woolen Mills site redevelopment and the relocation of the WillowTree corporate campus to encourage economic vitality, connectivity and placemaking along the Broadway Street corridor.

Project Description from Albemarle County Economic Development office.



#### RAINTREE AND FIELDBROOK PVC WATER MAIN REPLACEMENT

- Replaces older PVC
   Water Mains
   installed in the early
   1980's
- Construction FY 2027-2028 timeframe
- FY 2024 \$0
- Total Budget \$6,432,300









### ANNUAL WATER REPAIR AND REPLACEMENT

- Annual Services Contract (similar to Sewer Find and Fix)
- Provides support to Maintenance Department
- Addresses smaller projects less conducive to normal Design-Bid-Build Process
  - Huntington Water Connection
  - Lewis Hill-West Leigh Interconnect
- FY 2024 \$200,000

#### PUMP STATIONS - REHABILITATION

- Climate Control Upgrades in FY 2024
- Water Pump Stations
  - Mill Creek
  - Mosby Mountain
  - Northfields
- Sewer Pump Stations
  - Glenmore
  - Crozet
  - Old Forge
  - Georgetown Green
  - Briarwood
- FY 2024 \$120,000



### AIRPORT TRUNK SEWER UPGRADE



- Additional Sewer
   Capacity Needed to
   Handle Places29
   Comprehensive Plan
- Easement Acquisition Underway
- Construction FY 2026-2027 timeframe
- FY 2024 \$0
- Total Budget \$6,183,800

#### NORTHFIELDS PHASE 5 SEWER

- Areas identified during Northfields Water Main Replacement Design
- Extend service to customers on private drainfields
- FY 2024 \$0
- Total Budget\$650,000



#### MADISON OFFICE PARK PUMP STATION UPGRADE

- Existing Station Built in early 1980's
- Building is Undersized, Equipment Needs to be Replaced
- Contract underway with Anderson Construction
- Construction Summer 2023
- ■FY 2024 \$390,000
- Total Budget \$1,940,000





#### MISCELLANEOUS SEWER REHABILITATION

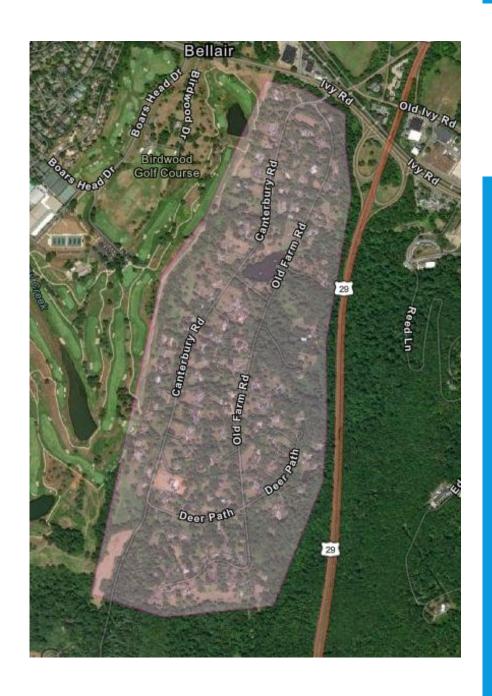
- Annual Services
   Contract (Sewer Find and Fix)
- Sanitary Sewer issues discovered by ACSA staff
- Work Orders issued to Rehabilitation Contractor
- FY 2024 \$500,000 (increase from \$400,000 annually)











#### BELLAIR – LIBERTY HILLS SEWER

- Community Interest in Public Sewer Based on Survey Feedback
- Portion of Neighborhood has Access to Sewer along Western Side
- Construction FY 2025-2026 timeframe
- FY 2024 \$0
- Total Budget \$6,393,715

### DEVELOPER PARTICIPATION

- Allows ACSA to
   Oversize Water and
   Sewer Utilities for
   New Developments
- Recent Example: Southwood Village Block 1 Oversizing from 8-inch to
   12-inch
- FY 2024 \$100,000 (split between water and sewer)

