



WORK WITH ALEXRENEW

Industry Open House

June 26, 2024



Today's Agenda

Presentation Outline

- AlexRenew Overview
- Current and Upcoming Initiatives
- Procurement Next Steps

Networking

Site Tour



ABOUT ALEXRENEW

Purifies 13 billion gallons of
wastewater at its facility each year

Serves over 300,000 customers in
Alexandria and Fairfax County

\$1 billion 10-year Capital
Improvement Program

Independent authority

Governed by a 5-member citizen Board



ALEXRENEW STRATEGIC GOALS

Operational Excellence

Taking proactive steps to meet current and future challenges

Thriving Workforce

Investing in our staff and fostering a culture of belonging

Environmental Sustainability

Being good stewards of our resources to minimize our impact on the environment

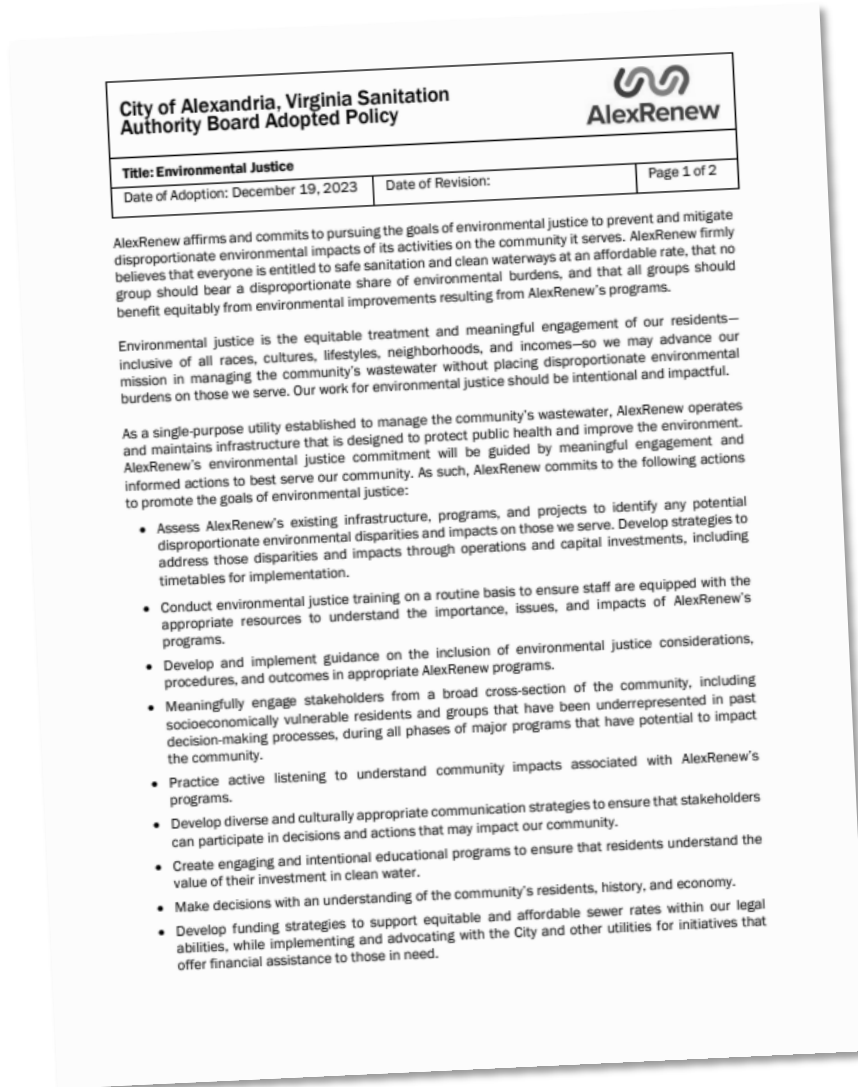
Commitment to Community

Strengthening connections with the public and providing affordable service

Strategic Partnerships

Promoting watershed-level thinking through collaboration and advocacy

AlexRenew's Commitment to Environmental Justice



- Assess AlexRenew's existing infrastructure and programs—develop strategies to address any disparities
- Develop guidance and conduct training
- Meaningfully engage stakeholders
- Develop diverse communication strategies
- Make decisions with an understanding of the community's history
- Develop strategies to support equitable rates
- Coordinate with the City to provide community benefit
- Continuously improve

<https://alexrenew.com/environmental-justice-policy>

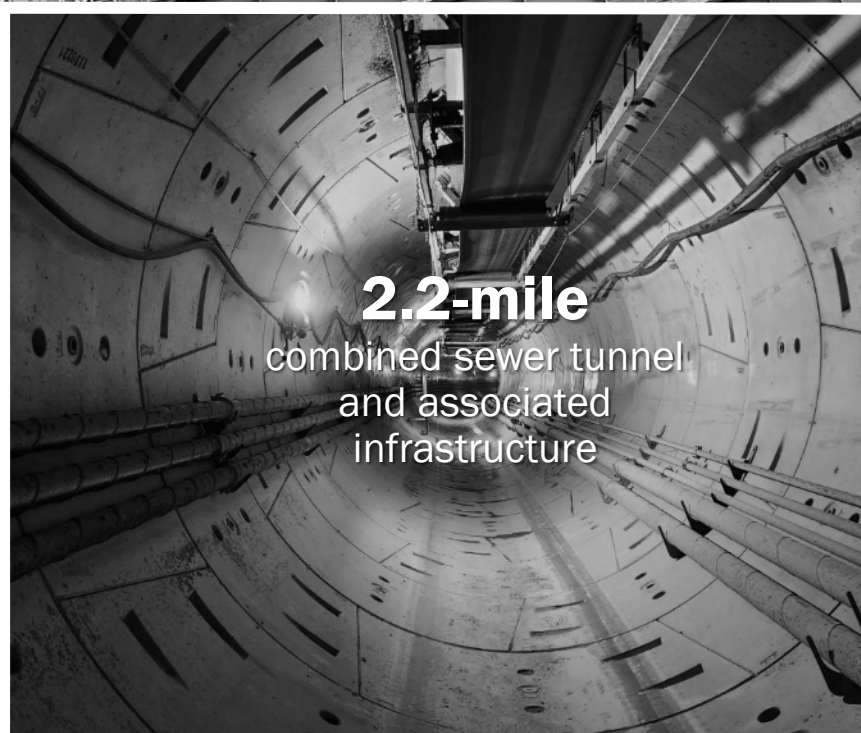
AlexRenew's
\$1.2 billion of
assets



54-million-gallon-per-day
wastewater treatment plant



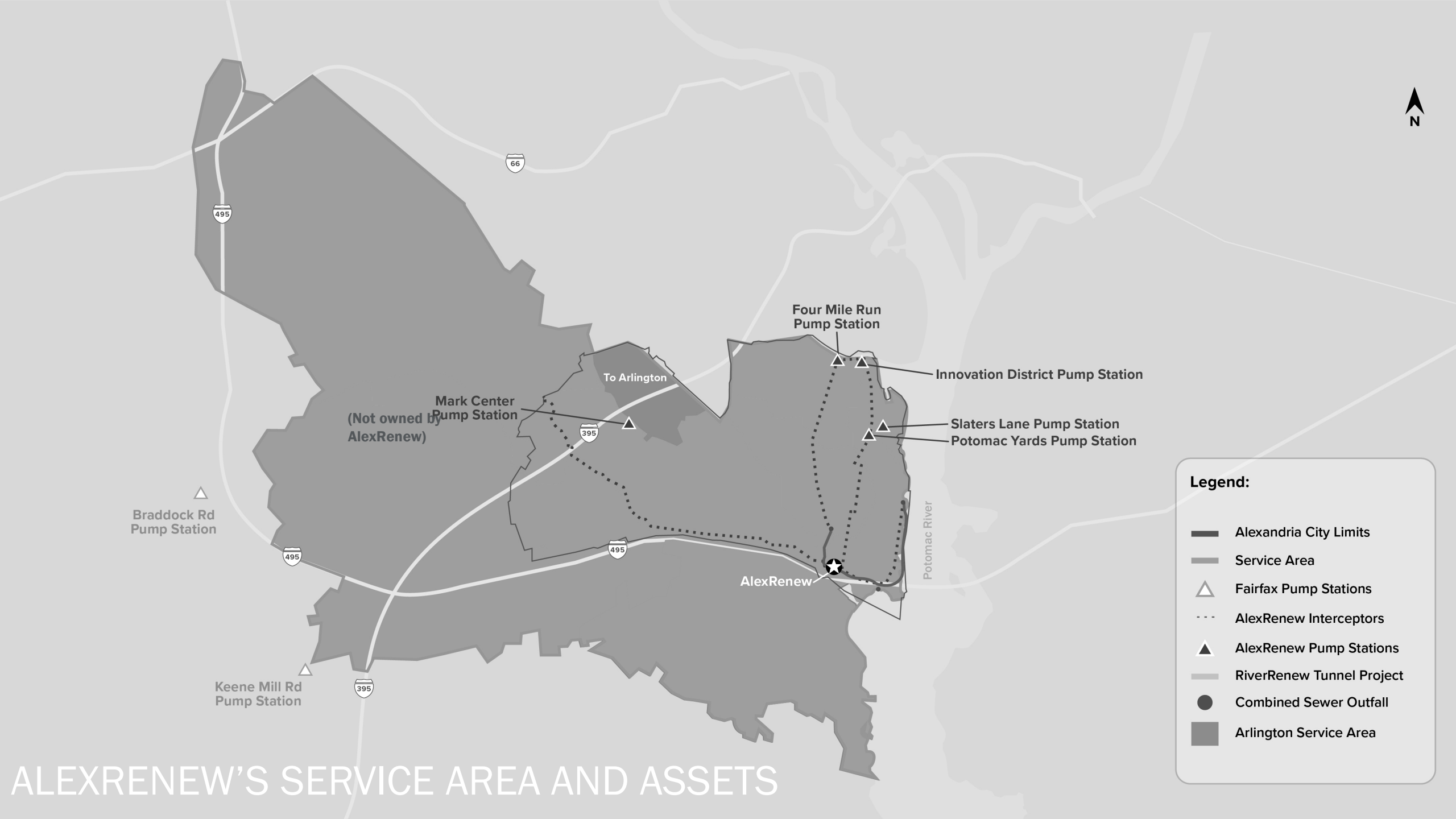
20-miles
of intercepting sewers



2.2-mile
combined sewer tunnel
and associated
infrastructure



Five
sewage pumping
stations



ALEXRENEW'S SERVICE AREA AND ASSETS



CURRENT AND UPCOMING PROJECTS AT ALEXRENEW

**Tertiary
Systems
Upgrade**

**Centrate
Pretreatment
Upgrade Project**

**RiverRenew
Tunnel
Project**

**Environmental Center
5th Floor Buildout**

**Preliminary and Primary
Systems Upgrade
Project**

**Solids
Upgrade
Program**

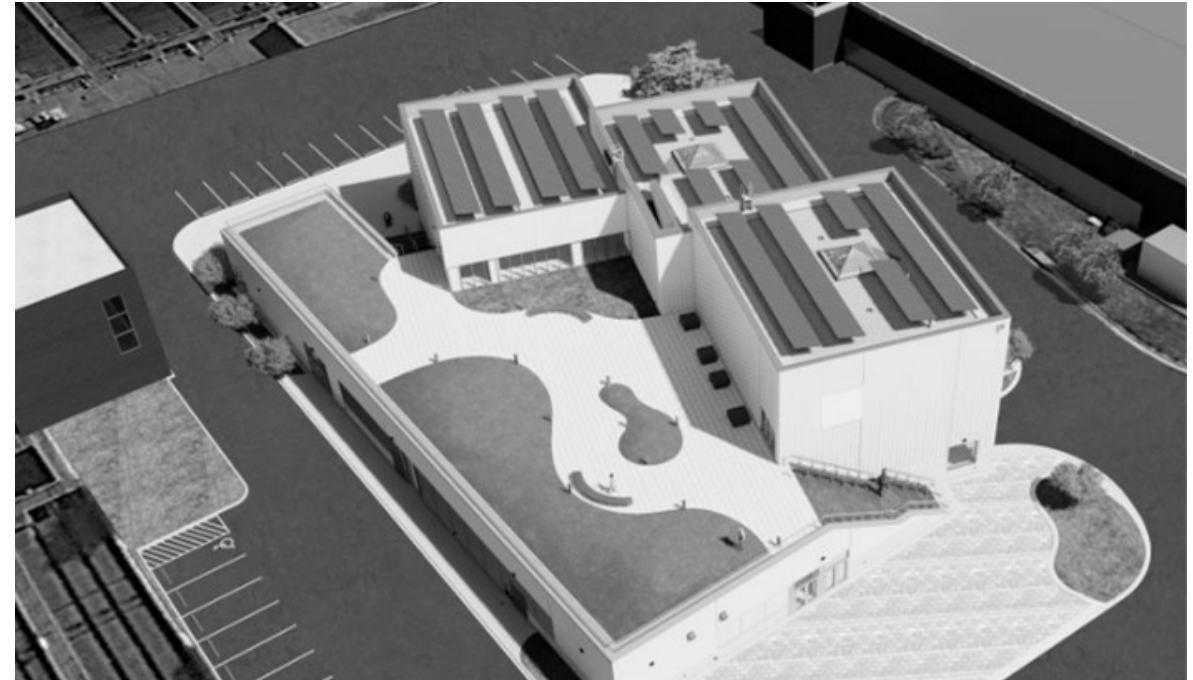
RIVERRENEW TUNNEL PROJECT UPDATE

OVERVIEW

- In December 2020, AlexRenew contracted with Traylor-Shea Joint Venture to construct a tunnel, pumping stations, and sewer infrastructure
- Project will be operational July 2026

REMAINING WORK

- Pumping station – Mechanical, Electrical, Plumbing, Instrumentation, and Controls (MEPIC)
- Superstructure – Architecture, MEPIC



Future Pumping Station Superstructure at AlexRenew

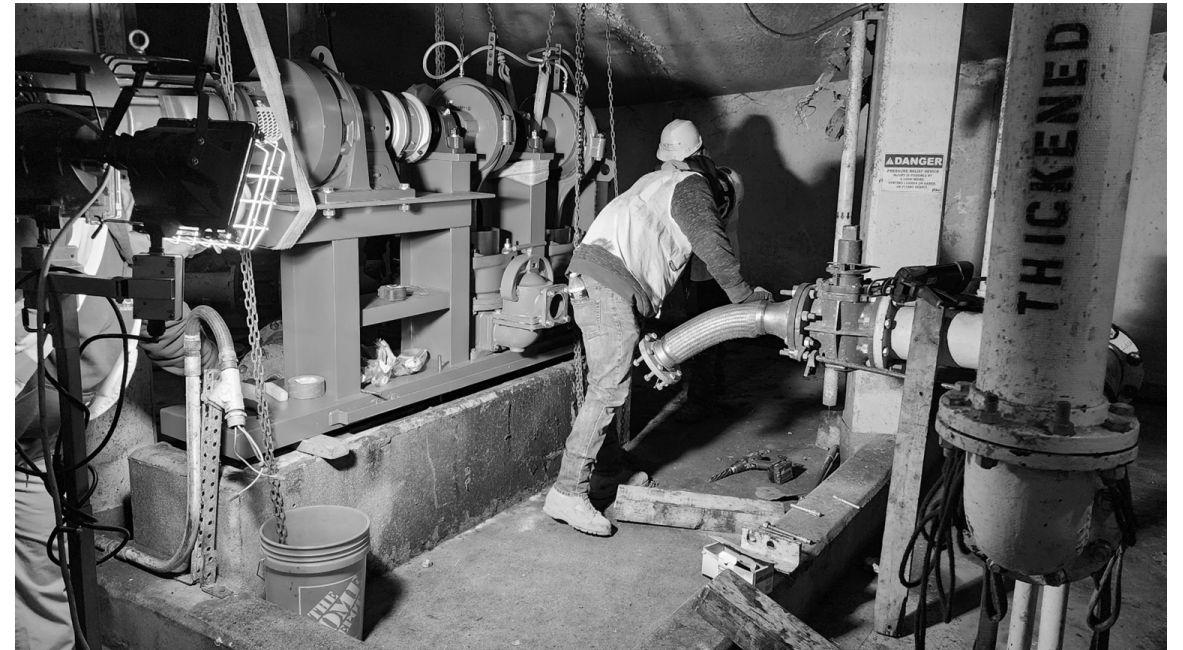
JOB ORDER CONTRACTS UPDATE

OVERVIEW

- In July 2023, AlexRenew awarded job order contracts (JOC) to F. H. Paschen (FHP), PC Construction, and American Contracting and Environmental Services (ACE)
- Task orders are ongoing and support AlexRenew's Improvement, Renewal, and Replacement program

EXAMPLE TASK ORDERS

- Four Mile Run Pumping Station Valve Modifications
- Tertiary Settling Tank Valve Replacement
- WRRF Safety Improvements
- Biological Reactor Basin Mixing Improvements



Pump Rehabilitation at AlexRenew

SOLIDS UPGRADE PROGRAM

SCOPE OF WORK

- Thickening and dewatering equipment replacement
- Gravity thickener system overhaul (includes electrical)
- Pasteurization decommissioning
- Digester heat exchanger and mixing replacement
- Solids dryer construction

DELIVERY METHOD

- Construction Management At-Risk (PC Construction)

ESTIMATED CONSTRUCTION COST

- \$175 million (Class V estimate)

SCHEDULE

- Notice to Proceed: May 2024

UPCOMING SOLICITATIONS

- Subcontract work (PC Construction)
- Construction Management Services (AlexRenew)



Gravity Thickeners at AlexRenew

The **Solids Upgrade Program** is being implemented to upgrade solids processes to improve reliability and plan AlexRenew's solids future



- New thickening and dewatering equipment
- Replacement of sludge mixers

- Gravity thickener system overhaul
- Installation of solids dryer and building

- Digester heat exchanger replacement
- Digester mixing replacement

- Pasteurization decommissioning

Payne St

PRELIMINARY AND PRIMARY SYSTEMS UPGRADE

SCOPE OF WORK

- Coarse and fine screening, scum, and grit systems upgrade
- Coarse screen building expansion
- Pump replacement and wet well refurbishment
- Primary weir observation house roof replacement

DELIVERY METHOD

- Construction Management At-Risk

ESTIMATED CONSTRUCTION COST

- \$60 million (Class V estimate)

SCHEDULE

- Notice to Proceed: July 2024

UPCOMING SOLICITATIONS

- Subcontract work (Construction Manager)
- Construction Management Services (AlexRenew)



Preliminary and Primary Processes at AlexRenew

The **Preliminary and Primary Systems Upgrade Project** is being implemented to improve equipment reliability and process performance



Payne St

Refurbish roof, steel supports, lighting, electrical, and other appurtenances

Weir House

Primary Settling

Pipe Gallery

K

Upgrade fine screening, scum, and grit systems

Inspect conduits

A

- Construct new coarse screen channel
- Upgrade coarse screens and raw sewage pumps
- Refurbish wet well and pump room

Replace baffles, slide gates, scum skimmer, and handrails

- Upgrade sludge pumping
- Refurbish pipe gallery

TERTIARY SYSTEMS UPGRADE PROJECT

SCOPE OF WORK

- Filter media replacement
- Tertiary settling tank equipment upgrades
- Valve replacement
- Chemical dosing system upgrades

DELIVERY METHOD

- Progressive design-build

ESTIMATED CONSTRUCTION COST

- \$30 million (Class V estimate)

SCHEDULE

- Request for Qualifications: February 2025
- Notice to Proceed: November 2025

UPCOMING SOLICITATIONS

- Progressive Design-Build (AlexRenew)
- Construction Management Services (AlexRenew)



Tertiary Settling Tanks at AlexRenew

The **Tertiary Systems Upgrade Project** is being implemented to improve equipment reliability and process performance



- Filter rehab
- Media and valve replacement

Filters

Tertiary Settling
Tanks

- Tertiary settling tank equipment upgrades
- Chemical dosing system upgrades

CENTRATE PRETREATMENT (CPT) UPGRADE PROJECT

SCOPE OF WORK

- Decant system replacement
- Aeration system replacement
- Pump replacement
- Piping and control modifications (Building L)

DELIVERY METHOD

- Design-bid-build

ESTIMATED CONSTRUCTION COST

- \$10 million (rough order of magnitude)

SCHEDULE

- Invitation for Prequalification: Fall 2024
- Notice to Proceed: January/February 2025

UPCOMING SOLICITATIONS

- Construction (AlexRenew)
- Construction Management Services (AlexRenew)



Building 69 – Centrate Pretreatment

ENVIRONMENTAL CENTER 5TH FLOOR BUILDOUT

SCOPE OF WORK

- Office buildout
- HVAC
- Electrical
- Furniture, fixtures, and accessories

DELIVERY METHOD

- Design-bid-build

ESTIMATED CONSTRUCTION COST

- \$3.0 million (rough order of magnitude)

SCHEDULE

- Invitation for Prequalification: July 2, 2024
- Notice to Proceed: October 2024

UPCOMING SOLICITATIONS

- Construction (AlexRenew)



Environmental Center 5th Floor

CONSTRUCTION MANAGEMENT SERVICES

SCOPE OF WORK

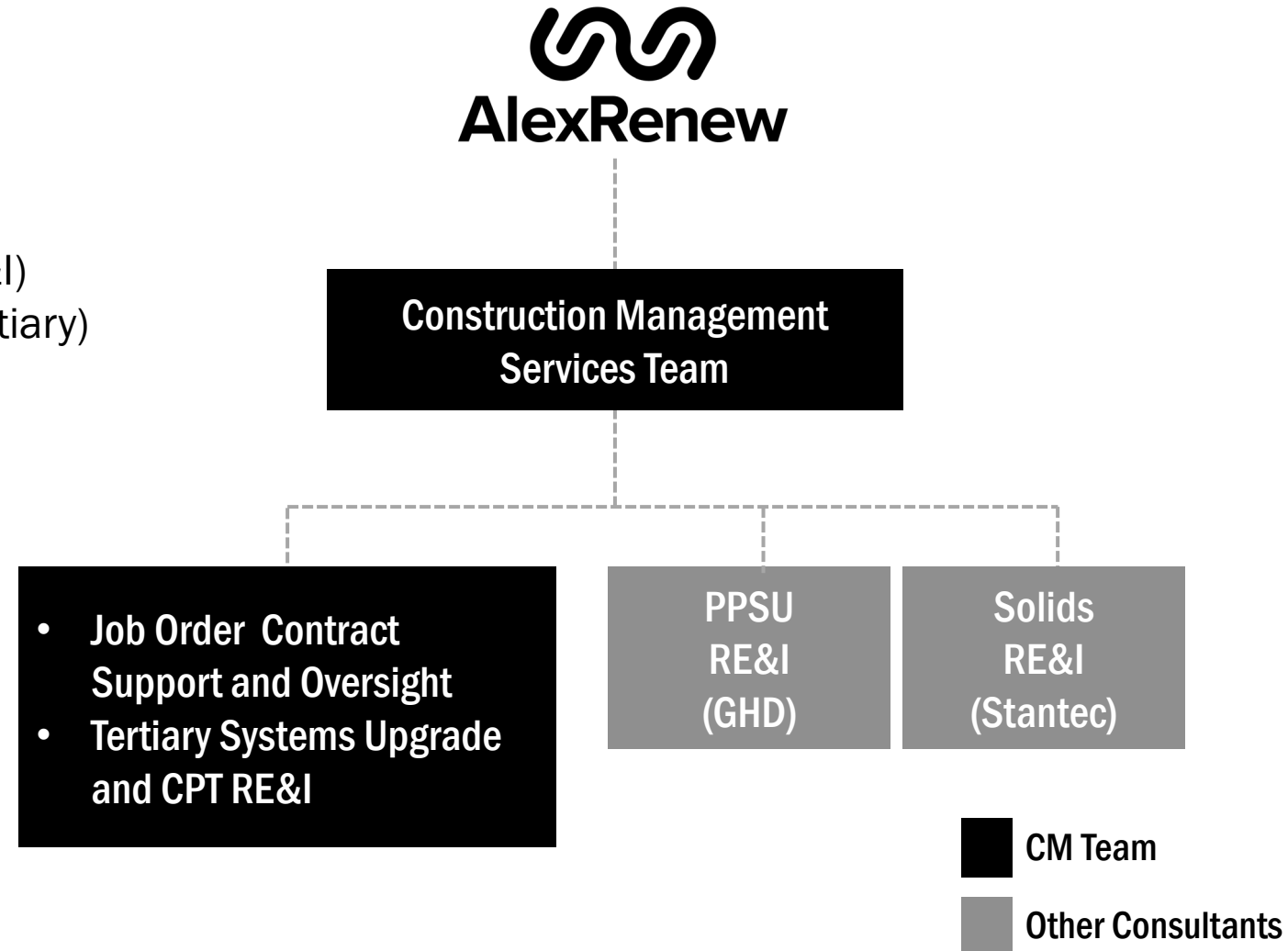
- Management of the resident engineer for Solids and PPSU projects
- Job Order Contract support and oversight
- Resident Engineering and Inspection (RE&I) services for Tertiary Systems Upgrade (Tertiary) and Centrate Pretreatment (CPT) projects

CONTRACT TYPE

- Professional engineering services

SCHEDULE

- Request for Proposals: July 23, 2024
- Notice to Proceed: November 2024



CONSTRUCTION MANAGEMENT SERVICES SCOPE

| Solids Upgrade Program and Preliminary and Primary System Upgrade Oversight | Tertiary and Centrate Pretreatment Resident Engineering and Inspection | Job Order Contract Support and Oversight |
|---|---|--|
| <ul style="list-style-type: none">• Construction management Information System (CMIS) software implementation and management (including software selection)• Change management• Monthly reporting to Owner on cost and schedule• Coordination across projects (i.e. traffic, safety, space, plant impacts, etc.) | <ul style="list-style-type: none">• Progress meetings• Submittal review• Contractor schedule review• Contractor payment application reviews• Risk monitoring• Permit compliance and coordination• Non-conformance notices, requests for information, etc.• Owner training• Commissioning and closeout | <ul style="list-style-type: none">• Scoping coordination• Pricing review• Independent cost estimates• Inspection• Payment application review |

ENGINEERING BASIC ORDERING AGREEMENTS

ANTICIPATED TASK ORDERS

- Owner's Advisor (OA) for Tertiary Systems Upgrade Project
- Design to support Job Order Contracts' work
- Analyze options to expand WRRF capacity by 4MGD
- Support on implementing AlexRenew's environmental justice policy and sustainability goals

CONTRACT TYPE

- Professional engineering services

CONTRACT LIMITS

- \$2.5 million for any single project
- \$10 million per year

SCHEDULE

- Request for Proposals: August 13, 2024
- Notice to Proceed: December 2024

- Planning and design for electrical and HVAC upgrades
- Enhance CIP planning and reporting
- Pilot artificial intelligence, robotic process automation, machine learning, and other smart utility technologies

ALEXRENEW'S SUSTAINABILITY INITIATIVES

Integrate sustainability into infrastructure, investments, and operations

- Develop Sustainability Plan
- Develop specifications for capital projects to audit and reduce resource consumption, where practical
- Update sustainable purchasing policies

Strive towards net zero carbon operations

- Conduct power monitoring study
- Investigate opportunities for onsite renewable energy generation

Recover and beneficially reuse resources from wastewater

- Maximize reclaimed water usage
- Optimize use of biogas

PROCUREMENT TIMING AND PRECLUSIONS FOR UPCOMING WORK

TERTIARY PROGRESSIVE DESIGN-BUILD

- **October 2024.** AlexRenew selects Construction Management (CM) Services Team. **CM Services Team is precluded from pursuing Tertiary Systems Upgrade Project Progressive Design-Build (PDB).**
- **December 2024.** AlexRenew selects the Engineering BOA's and names Tertiary Owner's Advisor (OA). **OA is precluded from pursuing Tertiary PDB.**
- **February 2025.** AlexRenew issues the Tertiary PDB Request for Qualifications.

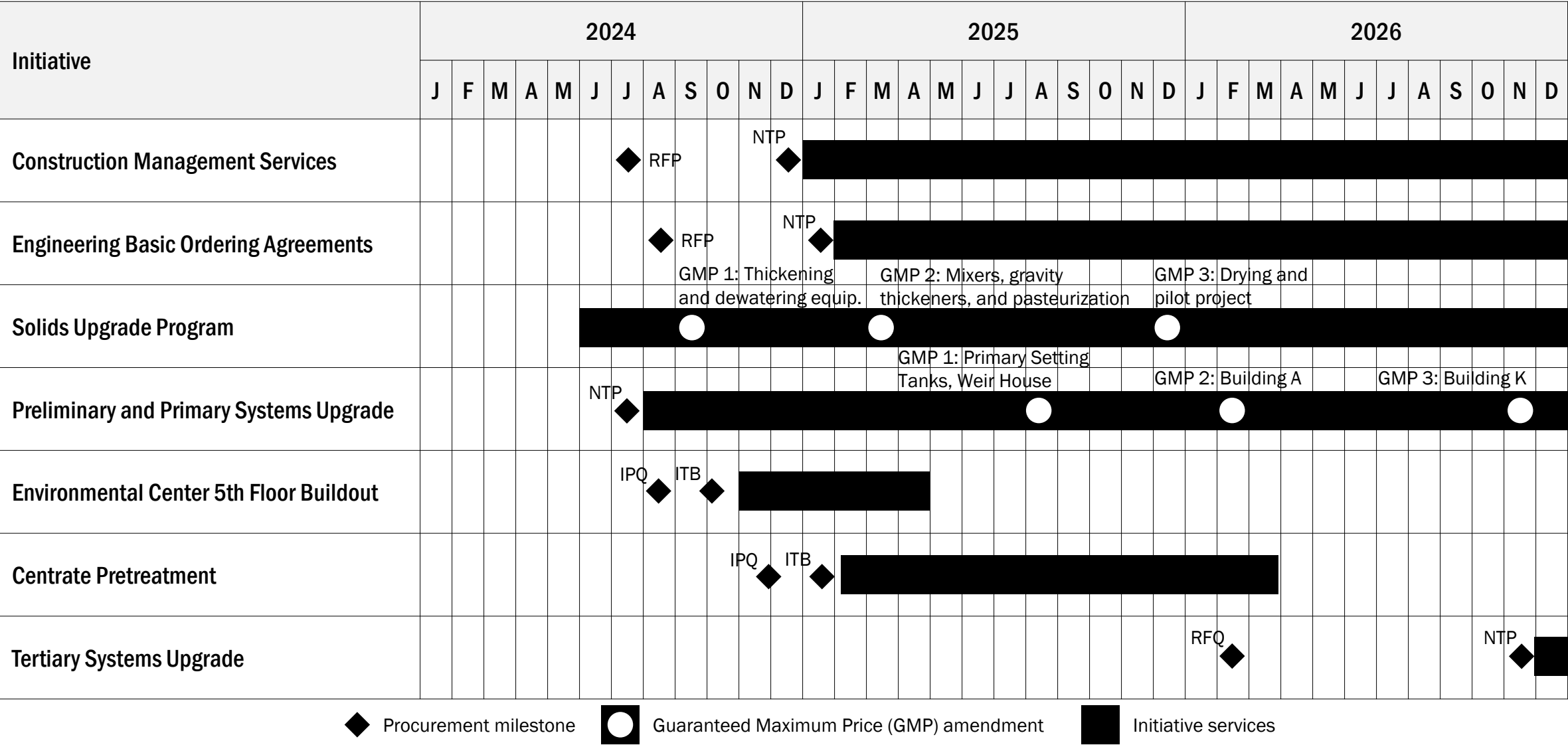
ENGINEERING BASIC ORDERING AGREEMENTS

- No precluded entities.

CONSTRUCTION MANAGEMENT SERVICES

- Tertiary Designer under the Tertiary Design-Builder is precluded from pursuing the CM Services.

SCHEDULE OF UPCOMING INITIATIVES



PROCUREMENT NEXT STEPS

ALEXRENEW WILL POST ALL UPCOMING SOLICITATIONS ON:

- AlexRenew's website: alexrenew.com/procurement
- eVA: eva.virginia.gov

QUESTIONS AND ANY FEEDBACK FROM TODAY:

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AlexRenew

To learn more, visit www.alexrenew.com