



AlexRenew

TERTIARY SYSTEMS UPGRADES PROJECT

INFORMATION SESSION AND SITE TOUR | APRIL 15, 2025

TODAY'S PRESENTERS



Chief Engineering Officer
Felicia Glapion

Felicia joined AlexRenew in 2019 and serves as the Chief Engineering Officer, responsible for AlexRenew's Engineering, Maintenance, and Asset Management Departments.



Owner's Advisor
Jason Garside

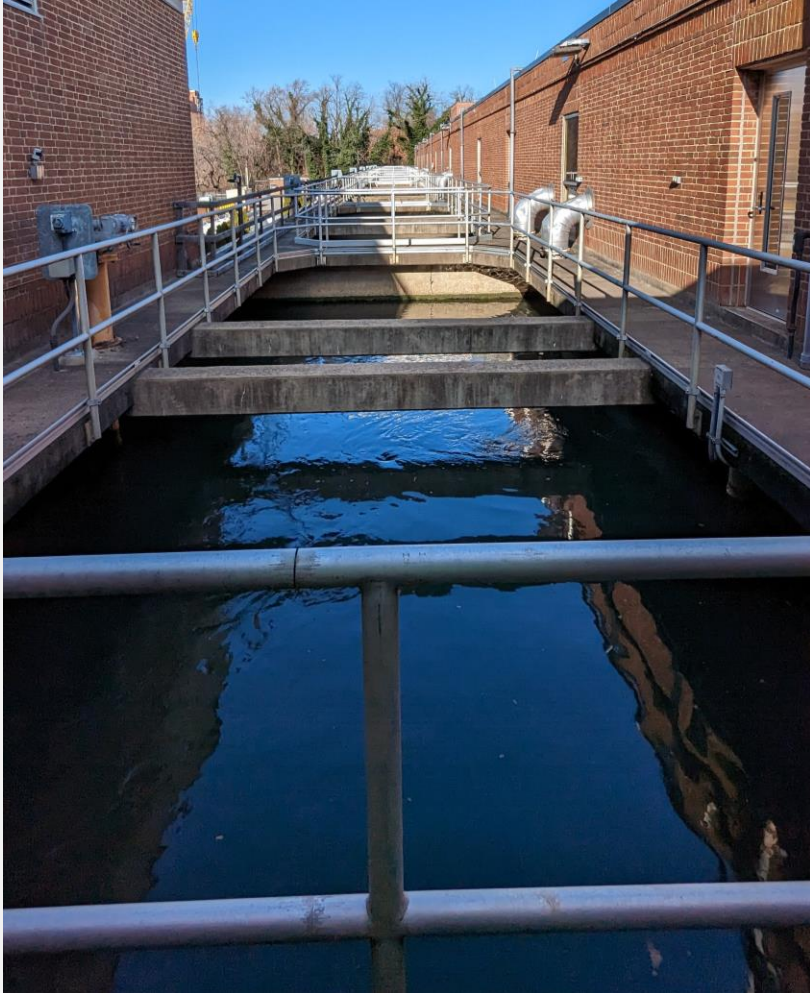
Jason is the OA Services Group Lead for Carollo. He has more than 25 years of experience in water/wastewater design and collaborative project delivery.



Chief Administrative Officer
Caitlin Feehan

Caitlin joined AlexRenew in 2018 and serves as the Chief Administrative Officer, responsible for AlexRenew's Communications, Procurement, and Finance Departments.

OUTLINE



- 01 AlexRenew Overview**
General & PhaseForward
- 02 Tertiary Systems Upgrade Project Scope**
Discussion of major scope items
- 03 Procurement Process**
- 04 Next Steps**
- 05 Tour**

ALEXRENEW AT-A-GLANCE

MISSION

Treat wastewater to protect public health and the waterways that connect us

VISION

Every drop of water contributes to a thriving community and healthy environment for all

FAST FACTS

- Independent, wastewater-only authority
- Treats 13 billion gallons of wastewater annually
- Serves Alexandria, VA and portions of Fairfax County
- Governed by 5-member citizen Board
- One of three water providers in Alexandria, VA



ALEXRENEW MAJOR CURRENT AND UPCOMING PROJECTS

Tertiary
Systems
Upgrade
Project

Centrate
Pretreatment
Upgrade Project
(CPT)

RiverRenew
Tunnel Project

Preliminary and Primary
Systems Upgrade Project
(PPSU)

Job Order
Contracts

Tertiary

Solids Upgrade
Program
(SUP)

phaseforward

Building a Resilient Wastewater Future



Solids Upgrade Program

Type: CMAR
CMAR: PC Construction
Engineer: Stantec
Inspections: Stantec



Preliminary and Primary Systems Upgrade Project

Type: CMAR
CMAR: Ulliman Schutte
Engineer: GHD
Inspections: GHD



Centrate Treatment Project

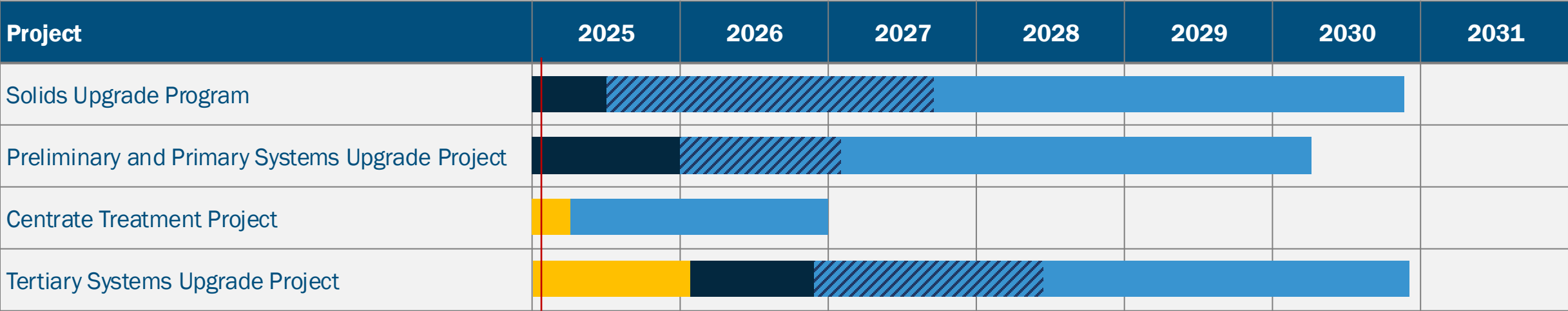
Type: Design-Bid-Build
Contractor: ACE
Engineer: Jacobs
Inspections: Brown & Caldwell (CM)



Tertiary Systems Upgrade Project

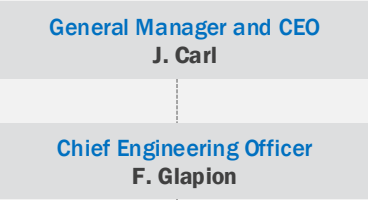
Type: Progressive Design-Build
Design-Builder: TBD
Owner's Advisor: Carollo
Inspections: Brown & Caldwell (CM)

PHASEFORWARD SCHEDULE



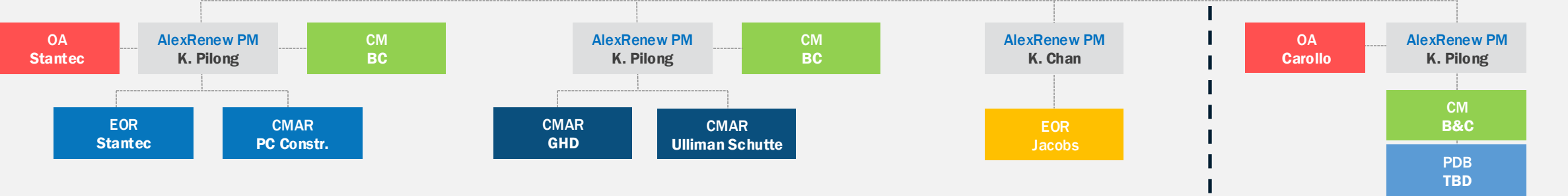
Procurement Design Construction

PHASEFORWARD ORG CHART

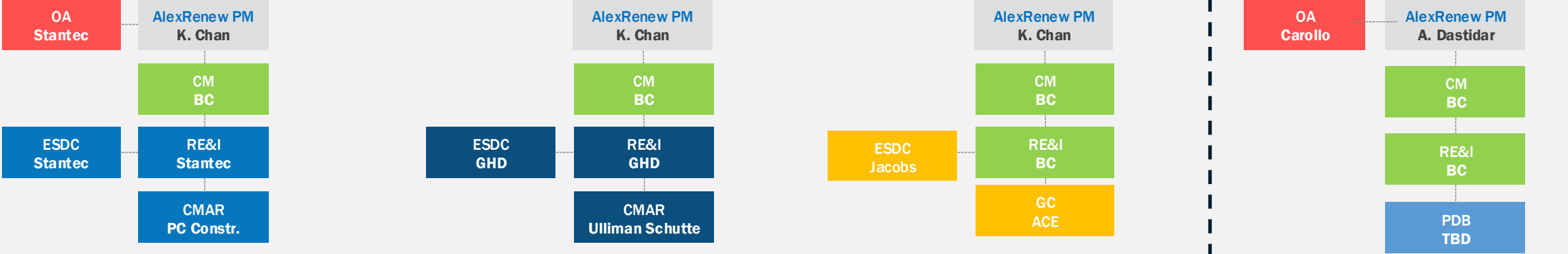


- AlexRenew
- CM Team (B&C)
- Centrate (DBB)
- Owner's Advisor
- PPSU (CMAR)
- Tertiary (PDB)
- Solids Upgrade Project (CMAR)

Preconstruction Phase



Construction Phase



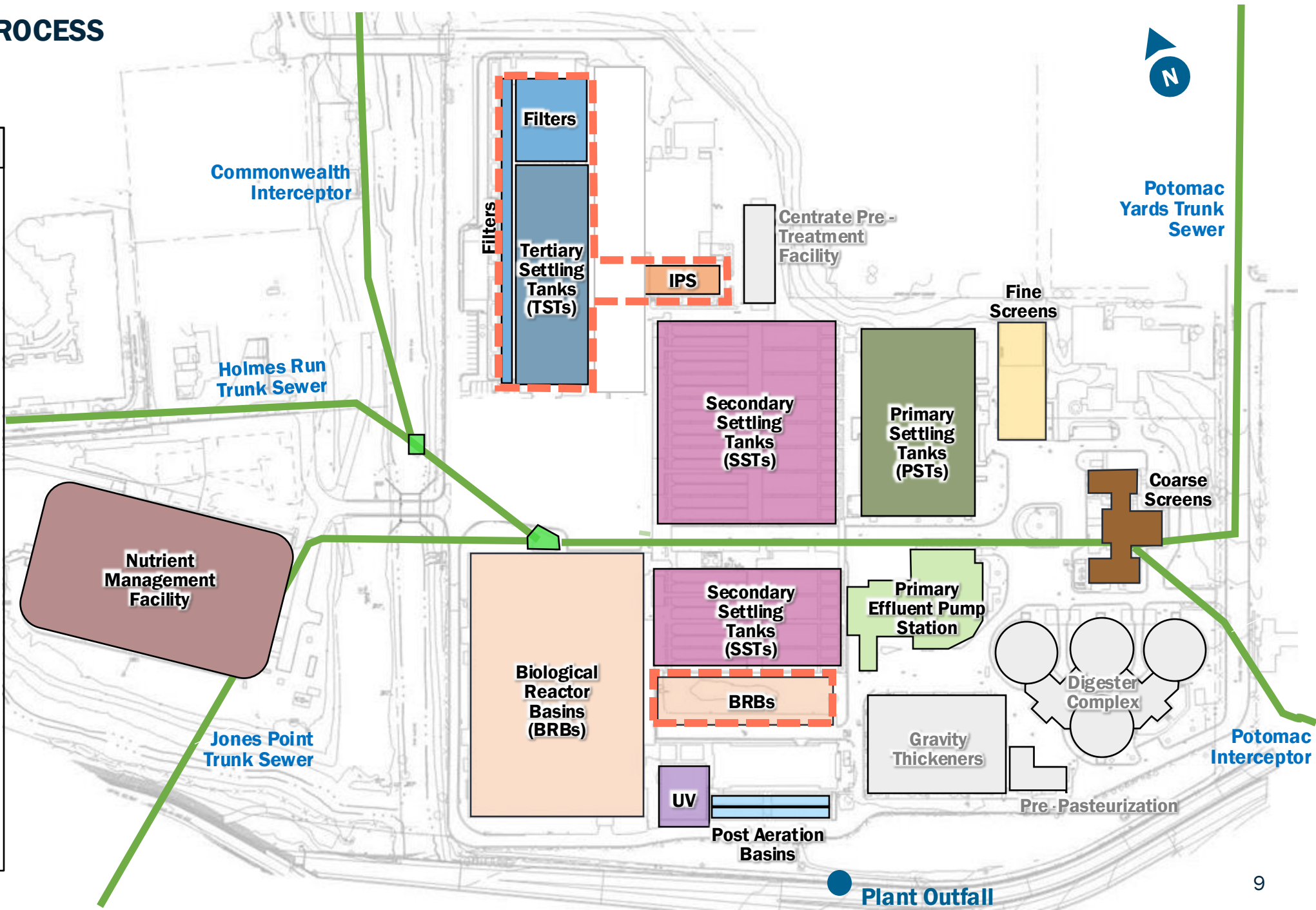
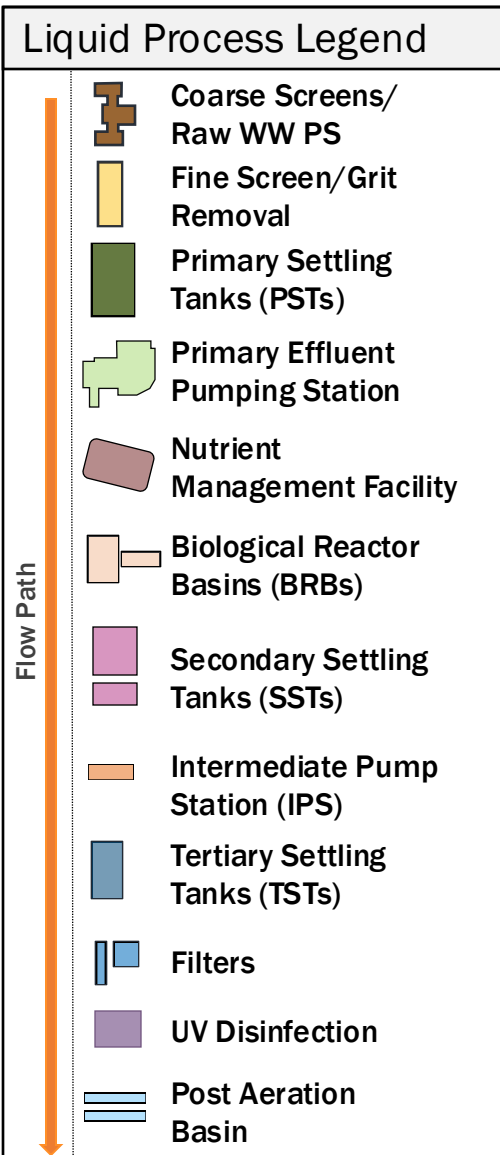
Solids Upgrade Program

Preliminary and Primary
Systems Upgrade Project

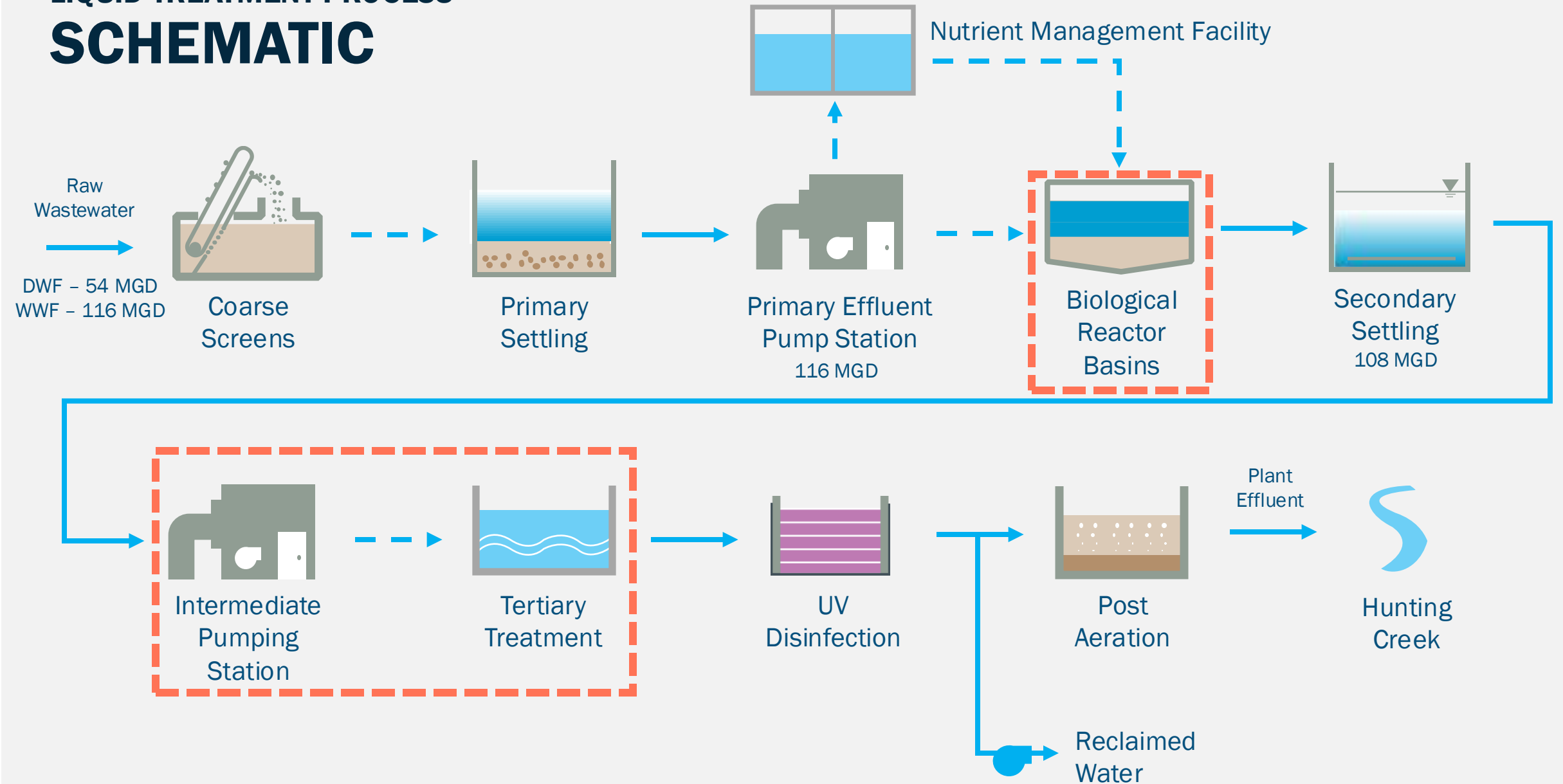
Centrate Treatment Project

Tertiary Systems Upgrade
Project

LIQUID TREATMENT PROCESS PLAN



LIQUID TREATMENT PROCESS SCHEMATIC



TERTIARY SYSTEMS UPGRADE PROJECT

PROJECT SNAPSHOT

1 Filter rehabilitation and conversion to denitrification

2 Tertiary settling tank equipment upgrades

3 New denitrification filters

4 Biological Reactor Basin No. 6 conversion

DELIVERY METHOD

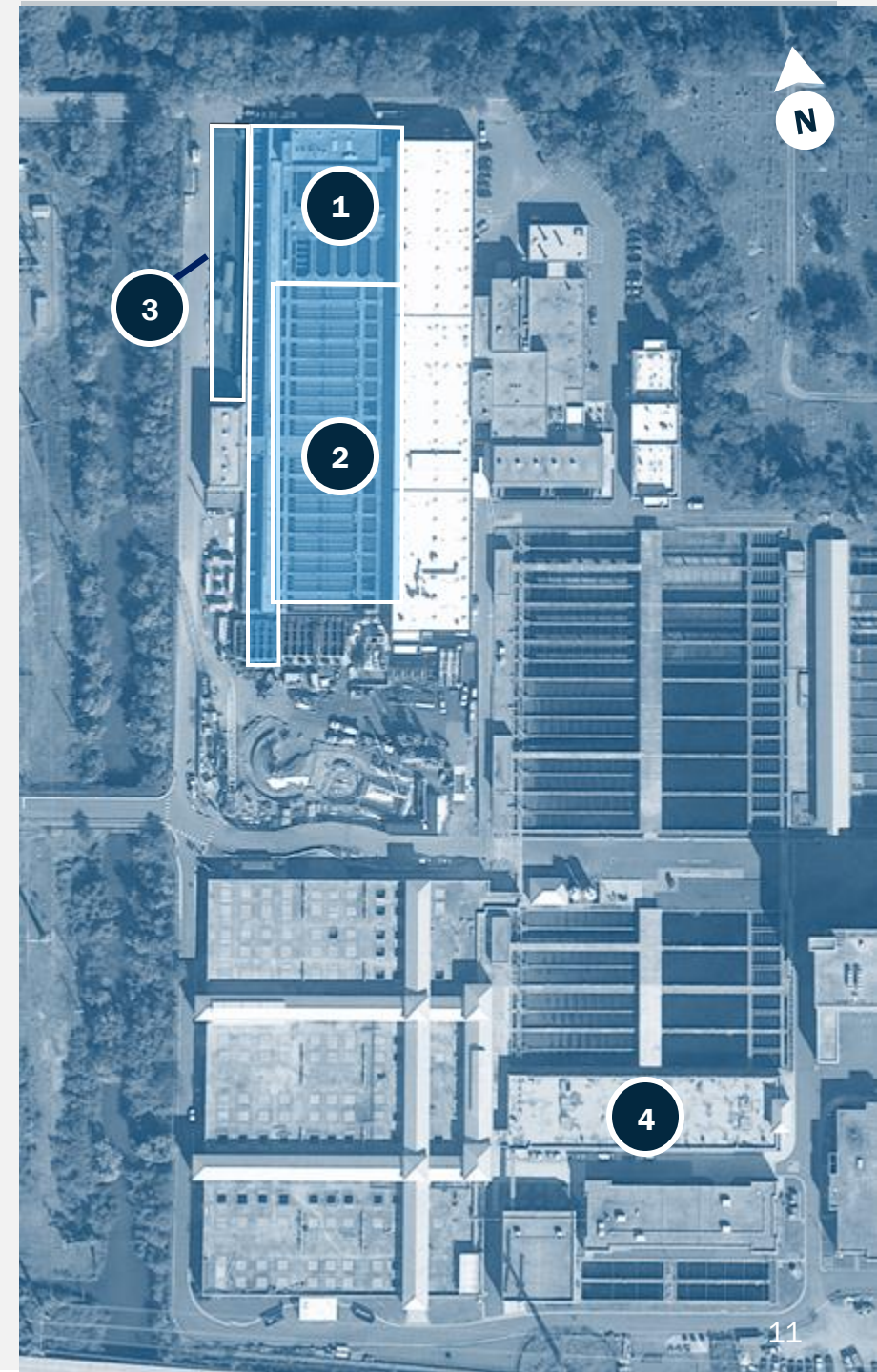
- Progressive Design-Build

ESTIMATE CONSTRUCTION COST

- \$120 million (ROM estimate)

SCHEDULE

- Notice to Proceed: January 2026
- Completion: September 2030



FILTER REHABILITATION AND CONVERSION

AlexRenew's 22 filters require rehabilitation to address ageing infrastructure and conversion to denitrification.

Project scope includes:

- / Replace media and gravel support for conversion to denitrification
- / Replace valves and actuators
- / Replace air piping, pumps, and blowers
- / Structural inspection and repairs
- / Filter trough refurbishment
- / Replace underdrains
- / Provide improvements to filter backwash recycle system



An AlexRenew filter

TERTIARY SETTLING TANK UPGRADES

AlexRenew's existing 8 tertiary settling tanks require upgrades to improve the reliability of the system

Project scope includes:

- / Clean settling plates and weirs
- / Repair or replace degraded concrete in and around tanks
- / Replace effluent stop plates and TST drain gates and manual actuators
- / Replace baffle walls, rapid mixers, and flocculators
- / Replace influent flow meters
- / Replace alum tank level sensors with pressure level sensors
- / Provide new controls for all equipment
- / Provide new on-line TSS monitoring sensors
- / Install new sludge collector mechanism
- / Modification to the tertiary sludge recycle system



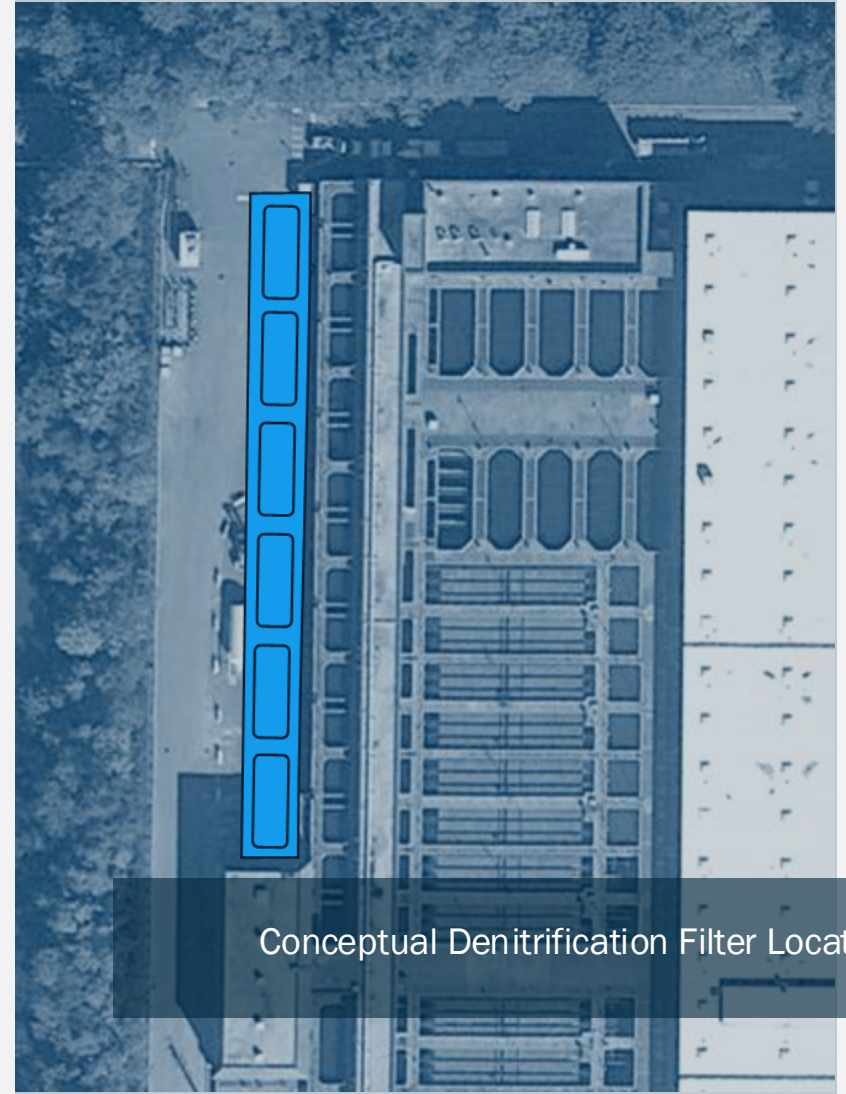
An AlexRenew tertiary setting tank

NEW DENITRIFICATION FILTERS

To support plant expansion and remove additional nitrogen load associated with additional flow, up to six (6) new denitrification filters will be constructed.

Project scope includes:

- / Construct concrete structure to house new denitrification filters, pipe gallery, and associated appurtenances
- / Provide new controls for all equipment
- / Site improvements (i.e., piles)



Conceptual Denitrification Filter Location

Project Scope

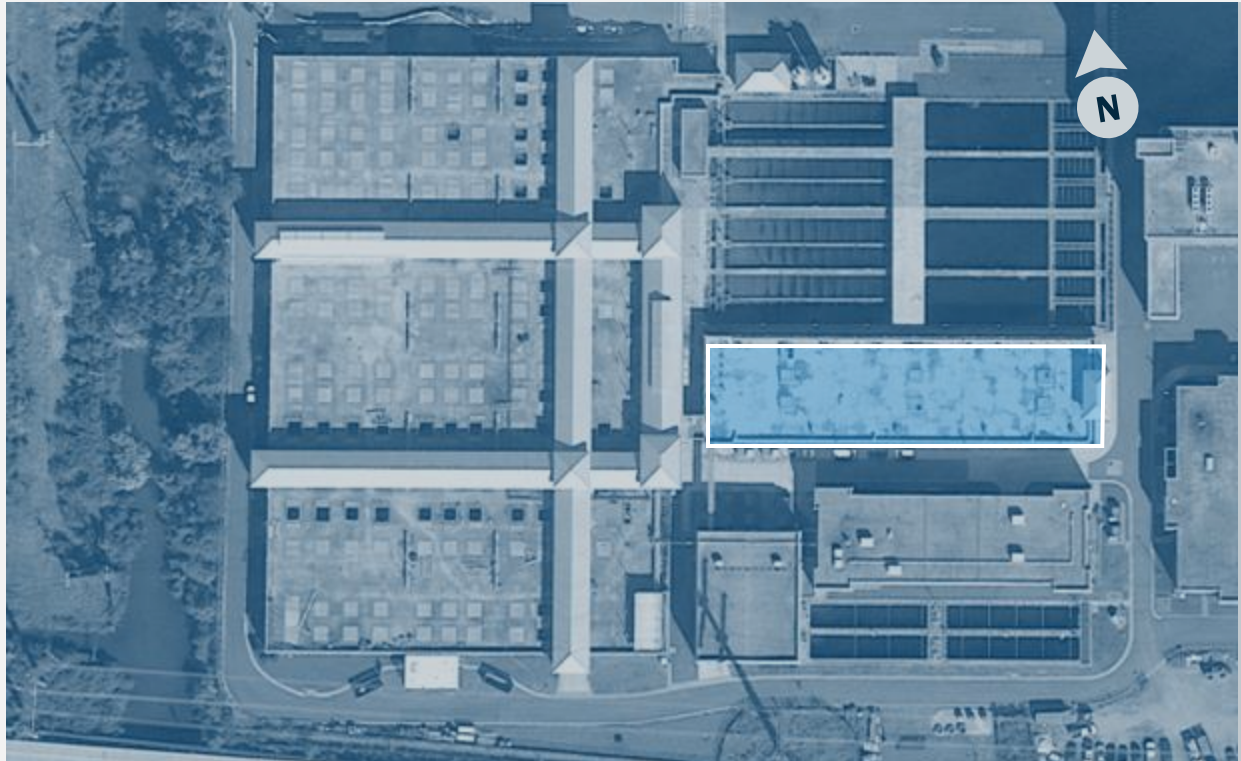
BRB6 CONVERSION

4

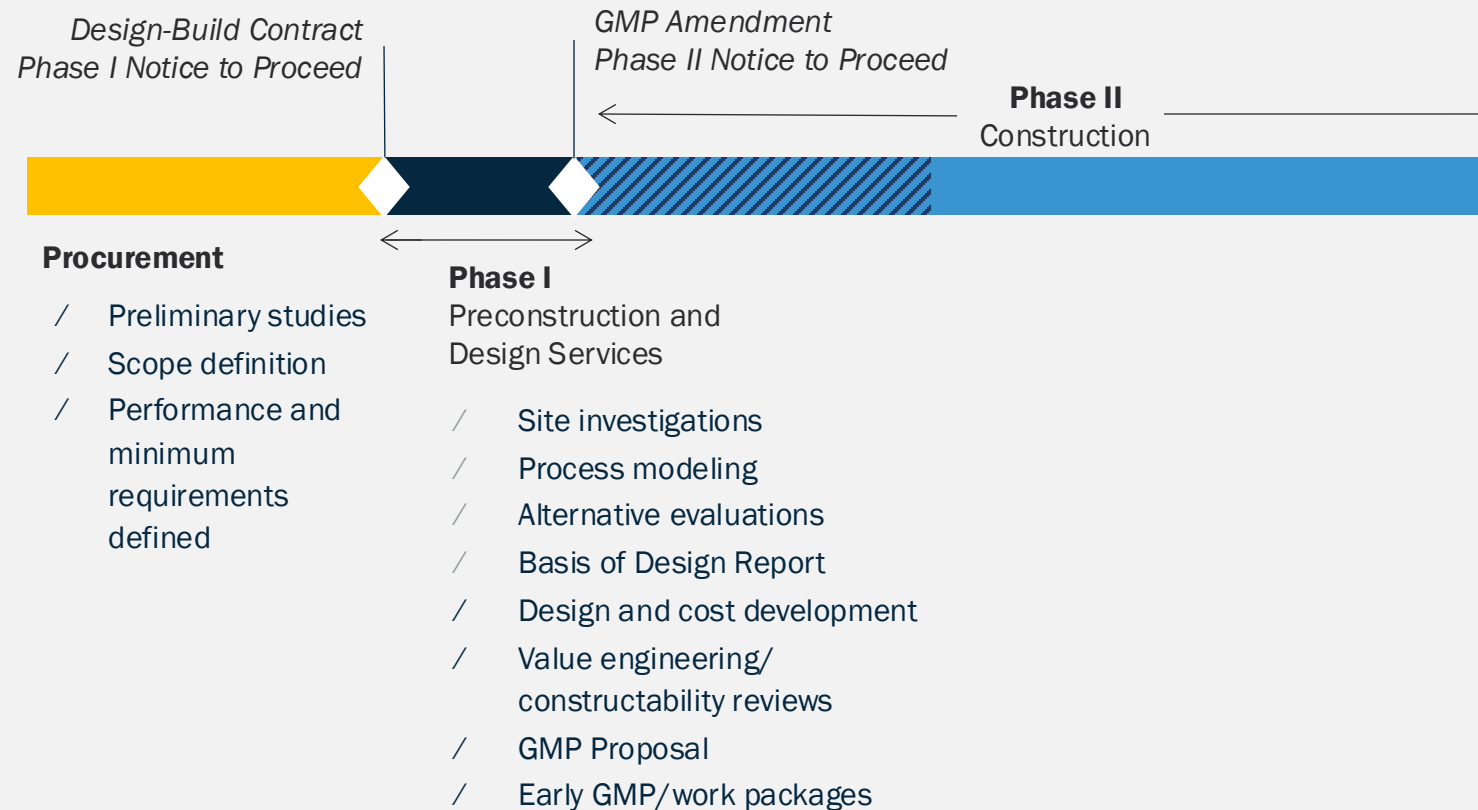
Biological Reactor Basin No. 6 (BRB6) is currently anaerobic. This basin needs to be converted to an aerated basin.

Project scope includes:

- / Cleaning of basin & disposal of contents
- / Installation of process air (turbo) blowers
- / Installation of aeration diffusers, piping, and associated appurtenances



PHASING AND ANTICIPATED SCOPE



PROCUREMENT OVERVIEW

PROCUREMENT

- / Two-Step Process (RFQ/RFP)
- / Shortlist to three (3) respondents
- / Technical/Management and Sealed Price proposals
- / Two (2) confidential meetings anticipated

PRECLUSIONS

- / Brown & Caldwell and Schnabel (PhaseForward Construction Management Team)
- / Carollo (Tertiary Systems Upgrade Project Owner's Advisor)

RFQ REQUIREMENTS

- / Contractor-led Design-Build Team (no joint ventures)
- / Ability to self-perform at least 50% of work
- / Required licenses – Virginia Class “A” contractor and Virginia registered engineer
- / Bonding Capacity - \$120M

ANTICIPATED CONTRACT PROVISIONS

**Mutual Waivers of
Consequential Damages**

Partnering

**Change Process/Delegation
of Authority**

Liquidated Damages

Design-Builder Self-insures

Tertiary Systems Upgrade Project

RFP-25-004 EVALUATION CRITERIA

Team Organization and Key Personnel

Narrative, team structure, and the following key personnel:

 **Project Manager**

 **Construction Manager**

 **Design Manager**
Licensed PE in Virginia

 **Lead Process Engineer**

 **Preconstruction Manager**

 **Tertiary Treatment SME**

50

Related Project Experience

The following reference projects within the last ten (10) years of similar size and scope to the Project:

30


- 3

Construction reference projects
- 3

Design reference projects

Key Personnel Involvement in Reference Projects

Narrative and the following table



Key Personnel on Reference Projects

15

Safety Program and Record

Summary of Lead Contractor’s safety program and the following:

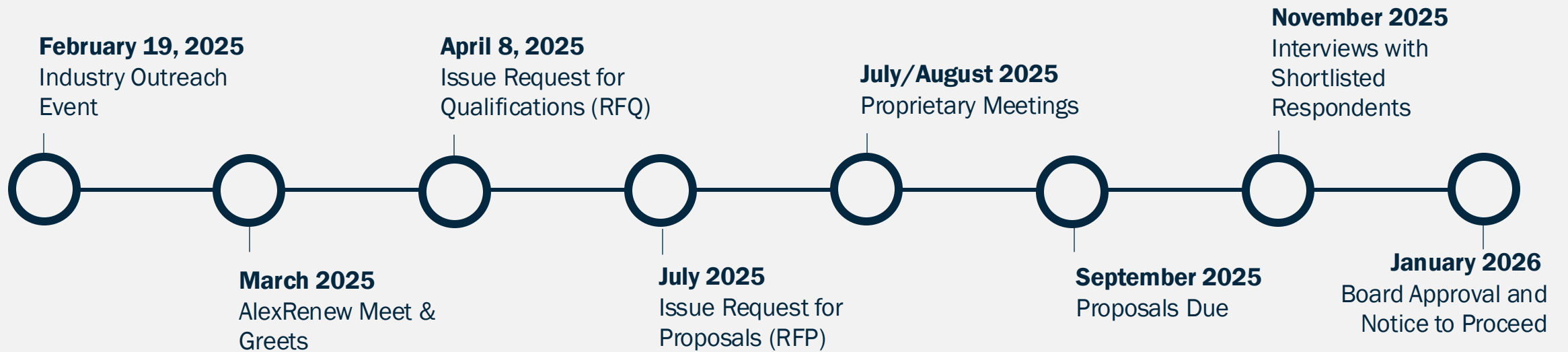
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Current EMR/EMF
- 

Three (3) most recent OSHA Form 300A

PROCUREMENT TIMELINE



NEXT STEPS

- / **Today.** RFQ Information Session Presentation will be posted on [AlexRenew.com/procurement](https://alexrenew.com/procurement) and [eVA.virginia.gov](https://eva.virginia.gov)
- / **May 6.** Last day for questions.
- / **May 13.** Last day for addenda.
- / **May 22.** SOQs due.

FOR REFERENCE DOCUMENT ACCESS AND TO ASK QUESTIONS

AlexRenew Point of Contact for RFQ-25-004

Igor Scherbakov

Procurement Manager

Tertiary-25-004@alexrenew.com



ALEXRENEW SITE TOUR



-  **Environmental Center**
-  **BRB No. 6**
-  **Methanol building**
-  **G-2 Gallery**
-  **TSTs**
-  **G-5**
-  **Filters**
-  **G-6**

