



Southeast Plant (SEP) Nutrient Reduction Project

August 7, 2025
LBE Advisory Committee Meeting

Introduction



San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

- Grew up in remote parts of India without access to running water, sanitation, power
- Chemical Engineering degrees, PE in State of California and numerous Professional Certifications along the way.
- Board of Director for Design-Build Institute of America
- 26 years with SFPUC / 5 years at SFO
- Live in SF Bayview, 7 minutes away from Southeast Plant





Reliable Services All Day, Every Day

Investing in our water and sewer systems to protect public health, improve seismic safety, and adapt to climate change.



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Our Core Services

Water



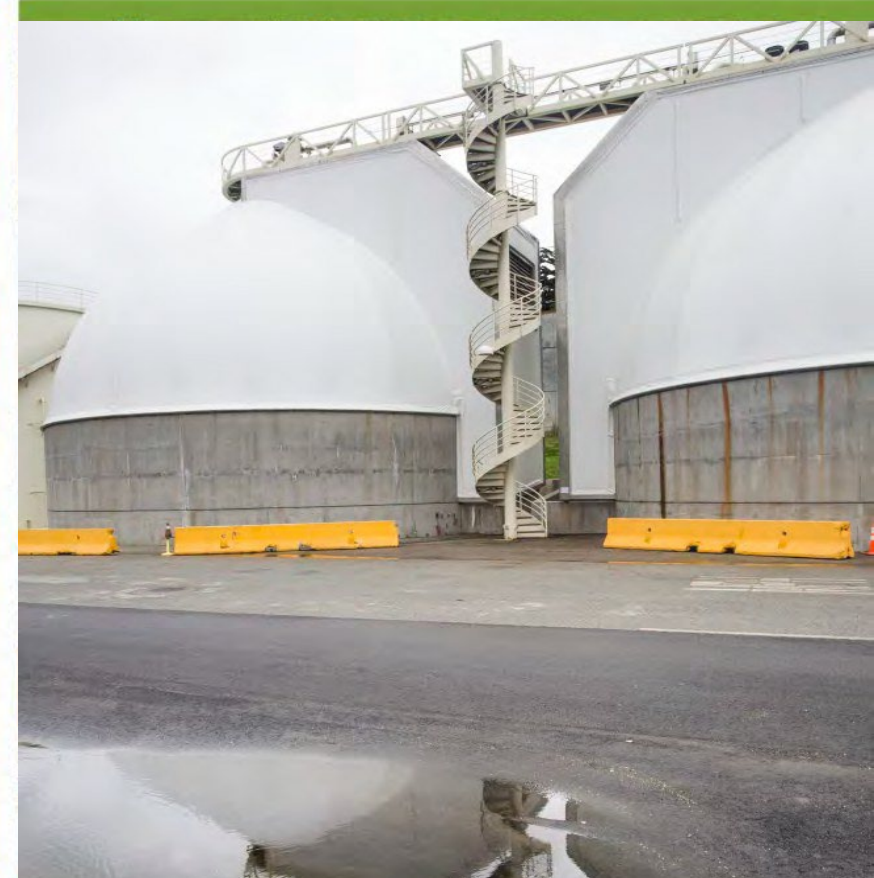
DELIVERING HIGH QUALITY WATER
EVERY DAY

Power



GENERATING CLEAN ENERGY FOR
VITAL CITY SERVICES

Sewer



PROTECTING PUBLIC HEALTH AND
THE ENVIRONMENT

We live in a Watershed

3 Treatment Facilities
27 Pump Stations
1,000+ Miles of Pipes
40 Billion Gallons Treated/Year
100+ -Year-Old System

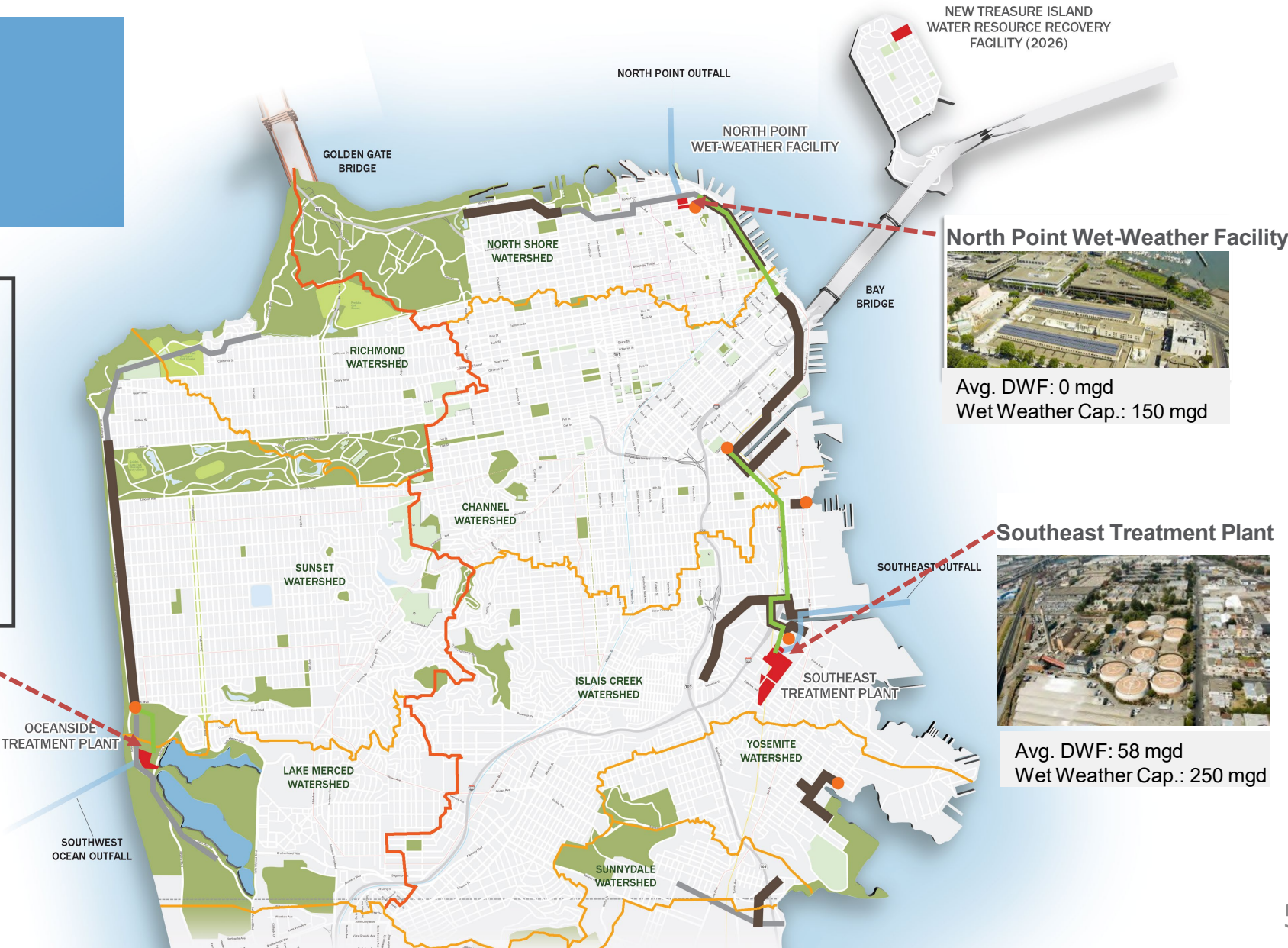
LEGEND

- Pump Stations
- Treatment Facilities
- Deep Water Outfalls
- Transport/Storage Structures
- Tunnels
- Force Mains
- Ridgeline
- Watershed Boundaries

Oceanside Treatment Plant



Avg. DWF: 12 mgd
Wet Weather Cap.: 175 mgd



Aging Infrastructure



Seismic Reliability



Localized Flooding



Outdated Facilities

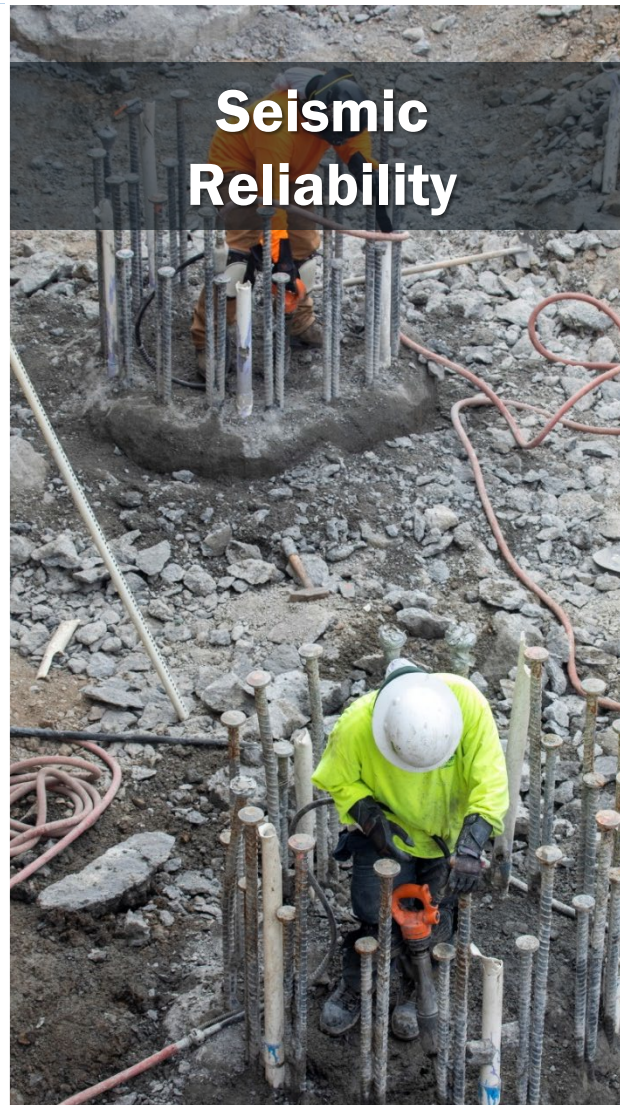


Climate Change



Maintaining Water Quality

Capital Plan – Project Drivers



Southeast Wastewater Treatment Plant Projects

LEGEND

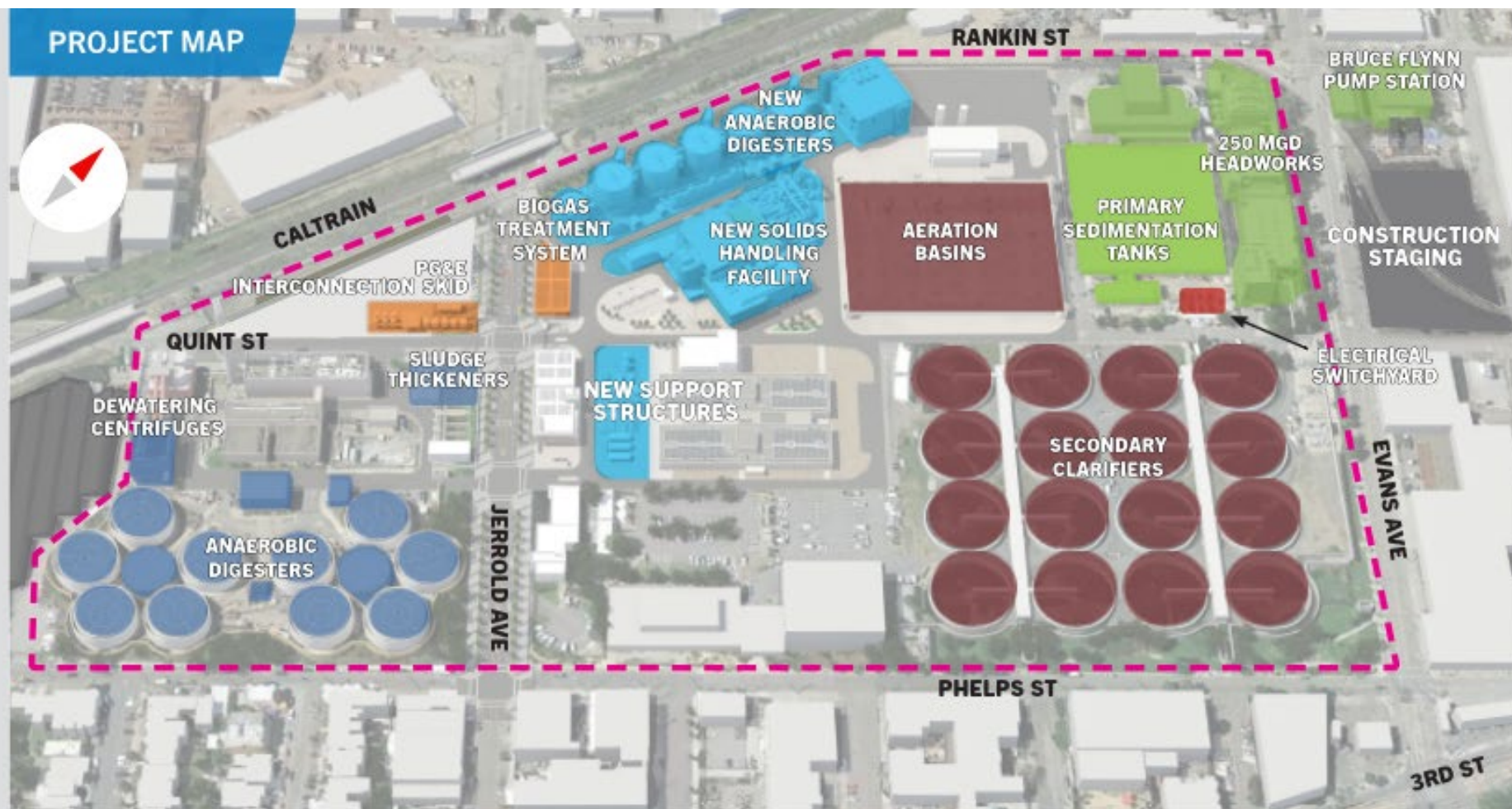
----- Southeast Plant Property Line

Projects Underway

- Biosolids Digester Facilities Project
- SEP Power Feed Project
- Biogas Utilization Project
- 250 MGD Headworks Project

Completed Projects

- Disinfection Upgrades
- Oxygen Generation Plant
- Primary and Secondary Clarifier Upgrades
- Existing Digester Gas Handling Upgrades
- Primary Sedimentation Building Seismic Retrofit & Rehabilitation
- New Southeast Community Center 1550 Evans



Nutrient Watershed Permit (NWP) Reduction Timeline



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2024 NWP Renewed

- *NWP Adopted w/ Seasonal TIN Load Limits*
- *Commitment Letter to RWQCB to meet concentration-based limit*

2029 NWP Renewal

- *More stringent limits?*
- *Longer compliance timeline?*

Algal
Blooms

INTERIM
SEASONAL LOAD
LIMIT
(11,000 kg/day)

FINAL NWP
SEASONAL LOAD
LIMIT COMPLIANCE
(3,300 kg/day)

CIP COMPLETION
YEAR

COMMITMENT LETTER
(15 MG/L)
COMPLIANCE YEAR



Progressive DB Procurement



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Request for Information

- Notify of **upcoming opportunity** (PDB, OA)
- Gauge **market interest**
- Seek **market feedback**

- **10** respondents (12/2024)
- **PDB** preferred delivery

Request for Qualification

- Establish **essential requirements** for firms
- Define **minimum qualifications** for firms

- **2** respondents (04/2025)

Request for Proposal

- **Team qualifications**
- **Approach** to technical and management
- **Price**
- **Agreement**

- Work-in-progress

Best Value Progressive Design-Build

RFQ Respondents

1. Jacobs Project Management Company & PCL Construction Joint Venture
Contact:

simonette.white@jacobs.com

2. Sundt Corporation, Inc. & Carollo Engineers, Inc.
Contact:

rdfedrick@sundt.com

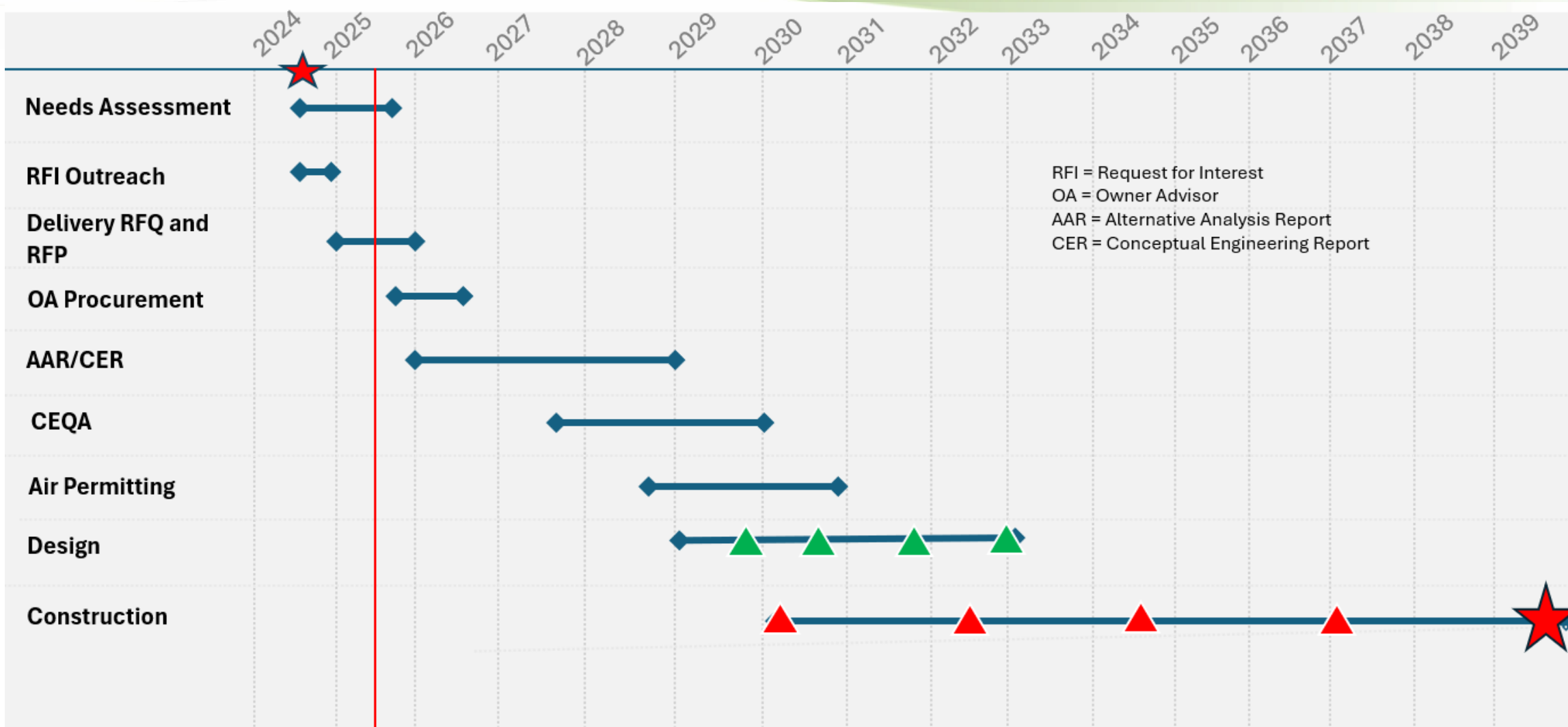
Relevant Firm Experiences

- ☒ Nutrient treatment
- ☒ SFPUC Wastewater Capital Projects
- ☒ Progressive Design-Build delivery

Overview of Project Schedule



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\$1 B Nutrient Reduction Regulatory Driven Design-Build Project

Baseline concept

- Retrofit and/or replace existing high-purity oxygen (HPO)
- Retrofit and/or new biological nutrient removal (BNR) process

Performance Requirement

- Reliably meet or exceed nutrient watershed permit limits
- Construct within existing SEP site with minimal disruption to O&M
- Proven technology



Nutrient Project LBE Potential Areas



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- Pre-construction / Design
 - Civil Engineering / Geotechnical / Potholing
 - HVAC
 - Mechanical
 - Structural Rehab
- Construction Opportunities
 - Misc Utilities – plant air, water, sewer etc
 - Site Civil and Concrete
 - Steel
 - Plumbing
 - Trucking/Hauling

LBE Participation at Southeast Plant

- SFPUC appreciates LBE community to help us build major upgrades at Southeast Plant
 - Biosolids CMGC - \$424 Million Dollars Participation Amount
 - Headworks CMGC - \$106 Million Dollars Participation Amount
- Nutrient Project Opportunities
 - Higher level of LBE Community Engagement due to Progressive Design Build Process
 - Requirement - 10 % Pre-Construction/Design and 13% Construction
 - Anticipated up to \$127 Million Dollars towards LBE Participation

SFPUC Contractors Assistance Center

- Services include technical assistance and classroom training to networking events and one-on-one counseling
- The CAC is FREE and open to the public at 150 Executive Park Blvd, Suite 1300, San Francisco, CA 94134
- Operating hours between 9am to 5pm, Monday to Friday, excluding legal holidays
- 415-467-1040 or acp@sfwater.org.



CAC Website

