

Central Reservoir Replacement Project

Draft Environmental Impact Report

Public Meeting



December 4, 2019

Agenda



- Introduction
- EBMUD Background
- Project Location and Setting
- Project Need and Scope
- Construction Sequence
- EIR Analysis of Impacts and Mitigations
- Next Steps

Project Team



- EBMUD
 - Laura Luong, Community Affairs
 - Mona Favorite-Hill, Community Affairs
 - Aaron Hope, P.E., Project Manager
 - David Rehnstrom, P.E., Division Manager
 - Bill Maggiore, P.E., Senior Engineer
- Consultants
 - ESA, Specialty CEQA Consultants

What is an EIR?



- EIR
 - Environmental Impact Report
- Purpose:
 - To inform the public & other agencies of the environmental consequences of a project

Volume I

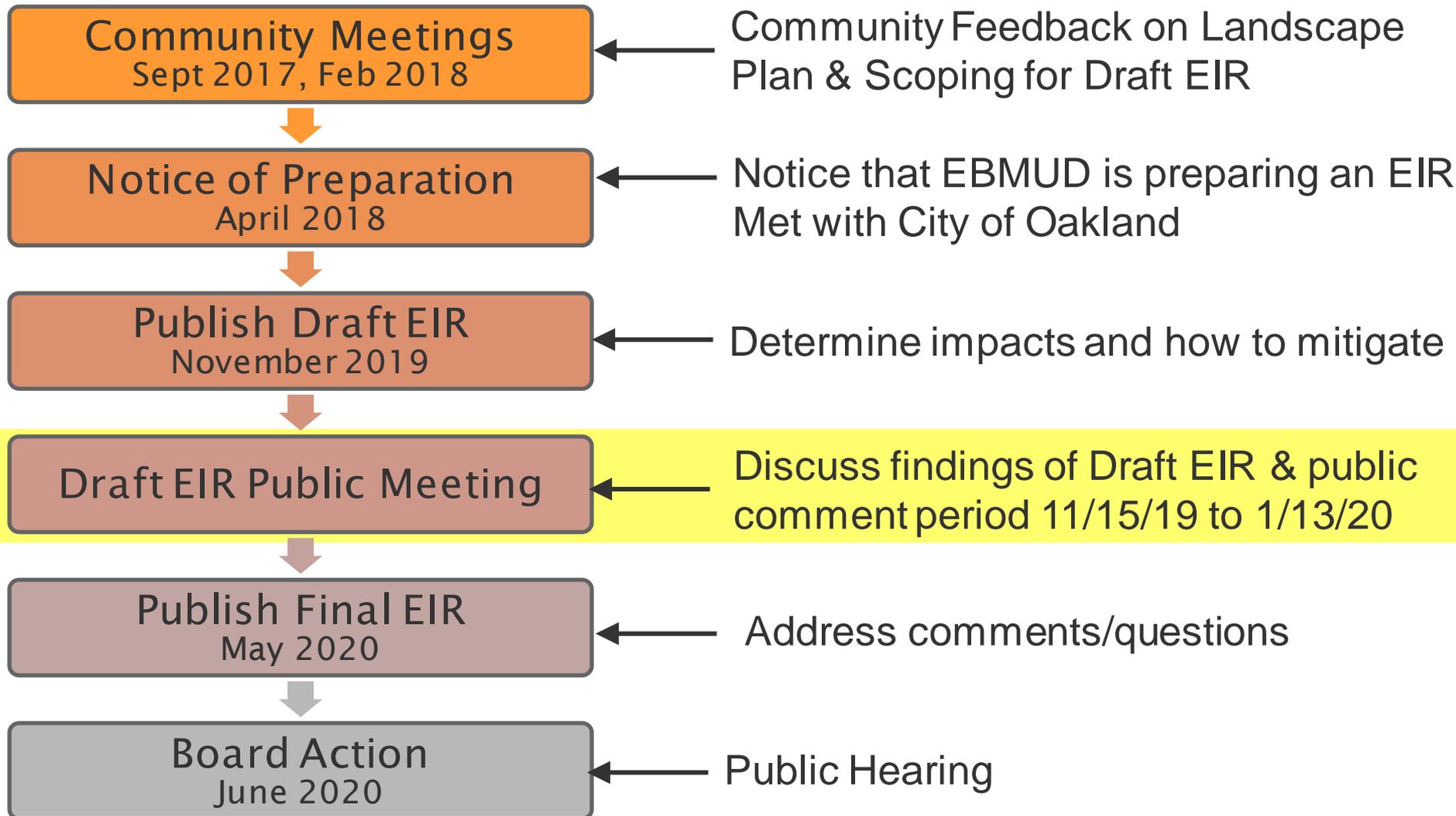
CENTRAL RESERVOIR REPLACEMENT PROJECT
Draft Environmental Impact Report
SCH #2018042078

Prepared for
East Bay Municipal Utility District

November 2019



EIR Process



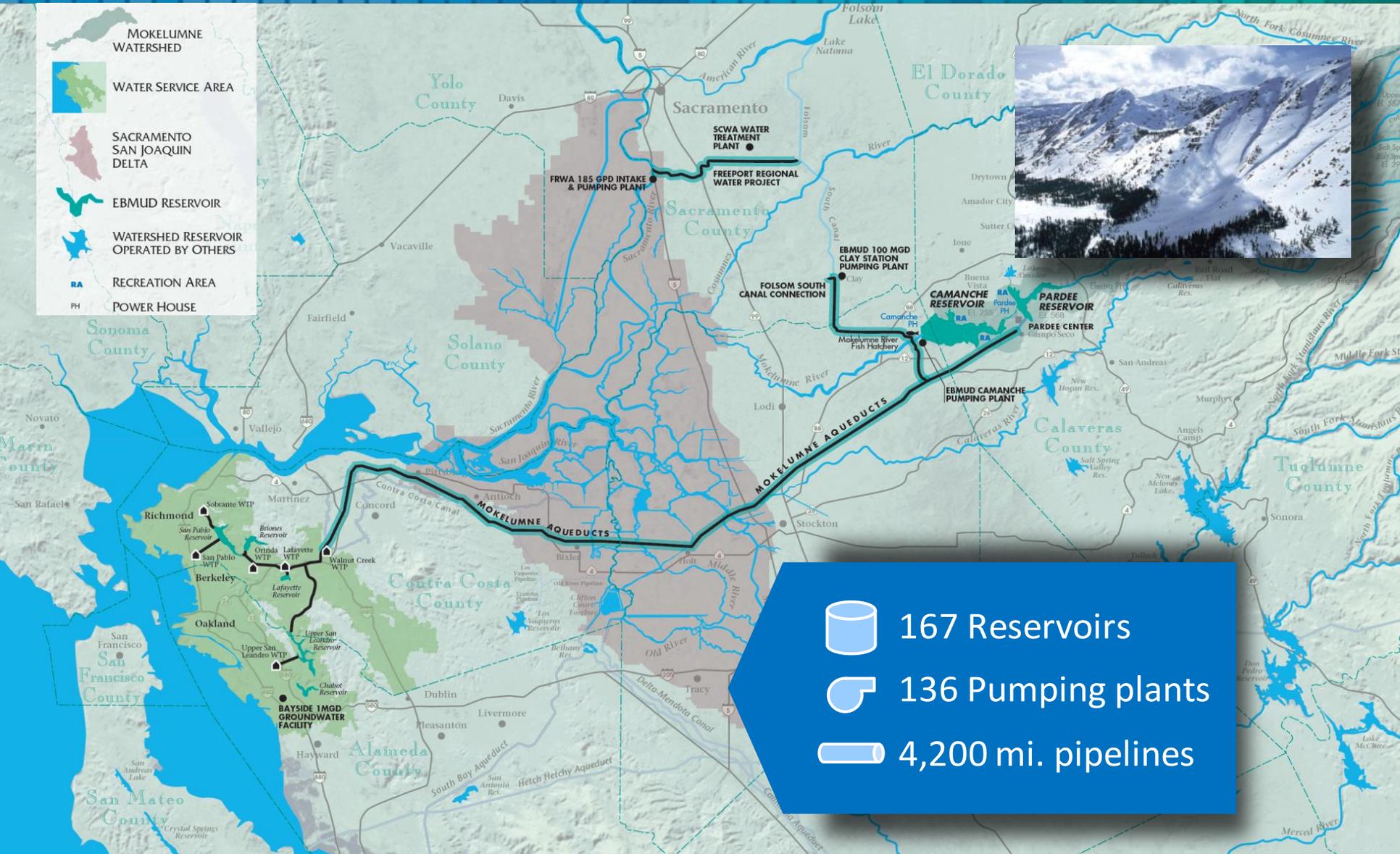
EBMUD Water System



- MOKELUMNE WATERSHED
- WATER SERVICE AREA
- SACRAMENTO SAN JOAQUIN DELTA
- EBMUD RESERVOIR
- WATERSHED RESERVOIR OPERATED BY OTHERS
- RA RECREATION AREA
- PH POWER HOUSE



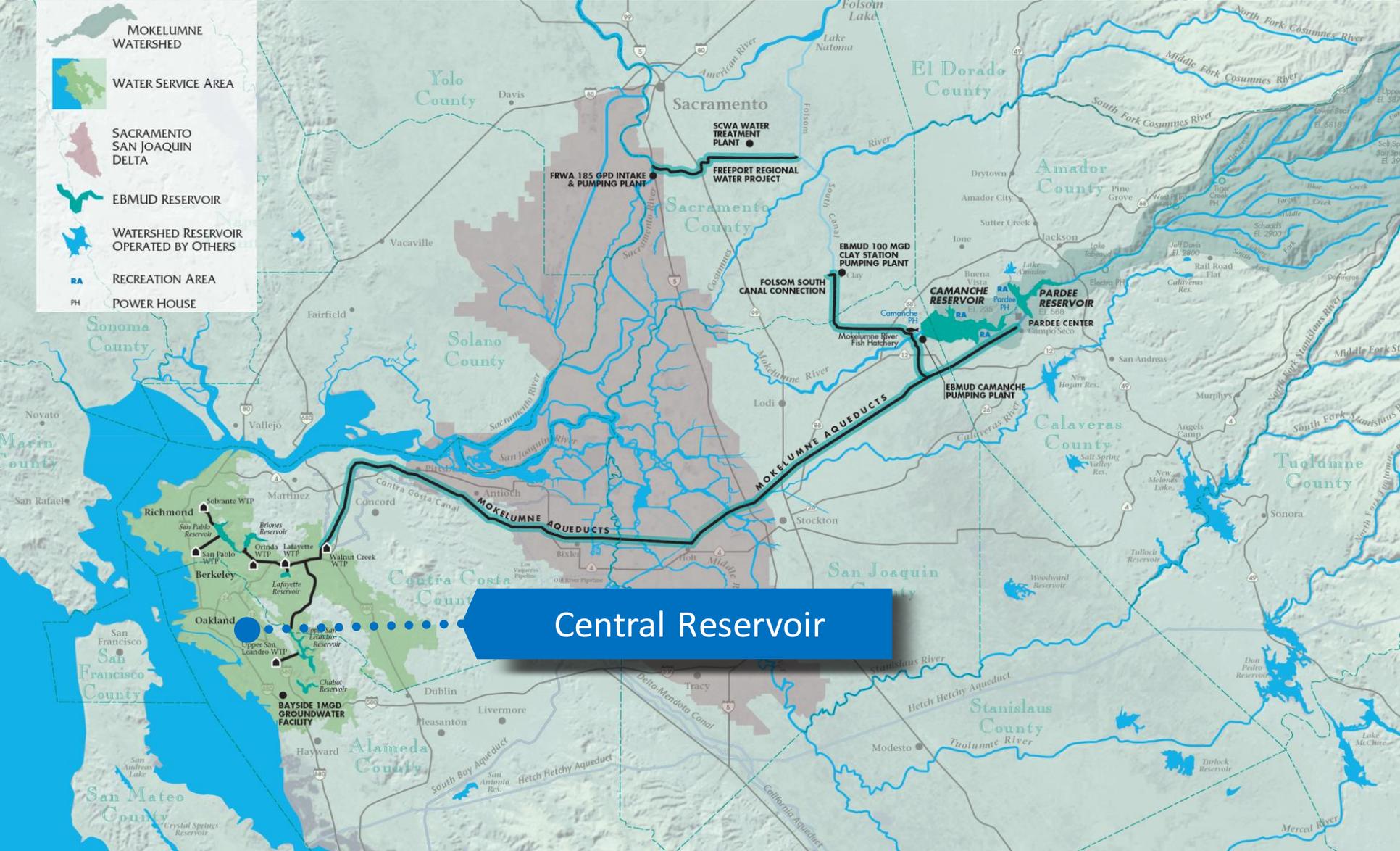
- 167 Reservoirs
- 136 Pumping plants
- 4,200 mi. pipelines



EBMUD Water System



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- EBMUD RESERVOIR
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- RECREATION AREA
- POWER HOUSE



Central Reservoir

Project Setting



Redwood Day School

- EBMUD's largest distribution reservoir
- 154 million gallons
- 27 acre site
- Provides emergency and operational storage from Emeryville to San Leandro
- Open cut reservoir will be replaced with three 17 million gallon reservoirs

1580

Ardley Ave

E, 29th St.

8

Central Reservoir Construction



- Built in 1910 by the People's Water Company
- Originally constructed to distribute water from Lake Chabot



Central Reservoir Modifications

- Major modifications in the early 1960s
- North embankment (auxiliary dam) modified to make room for I580.
- Liner in 1961



Central Reservoir Modifications



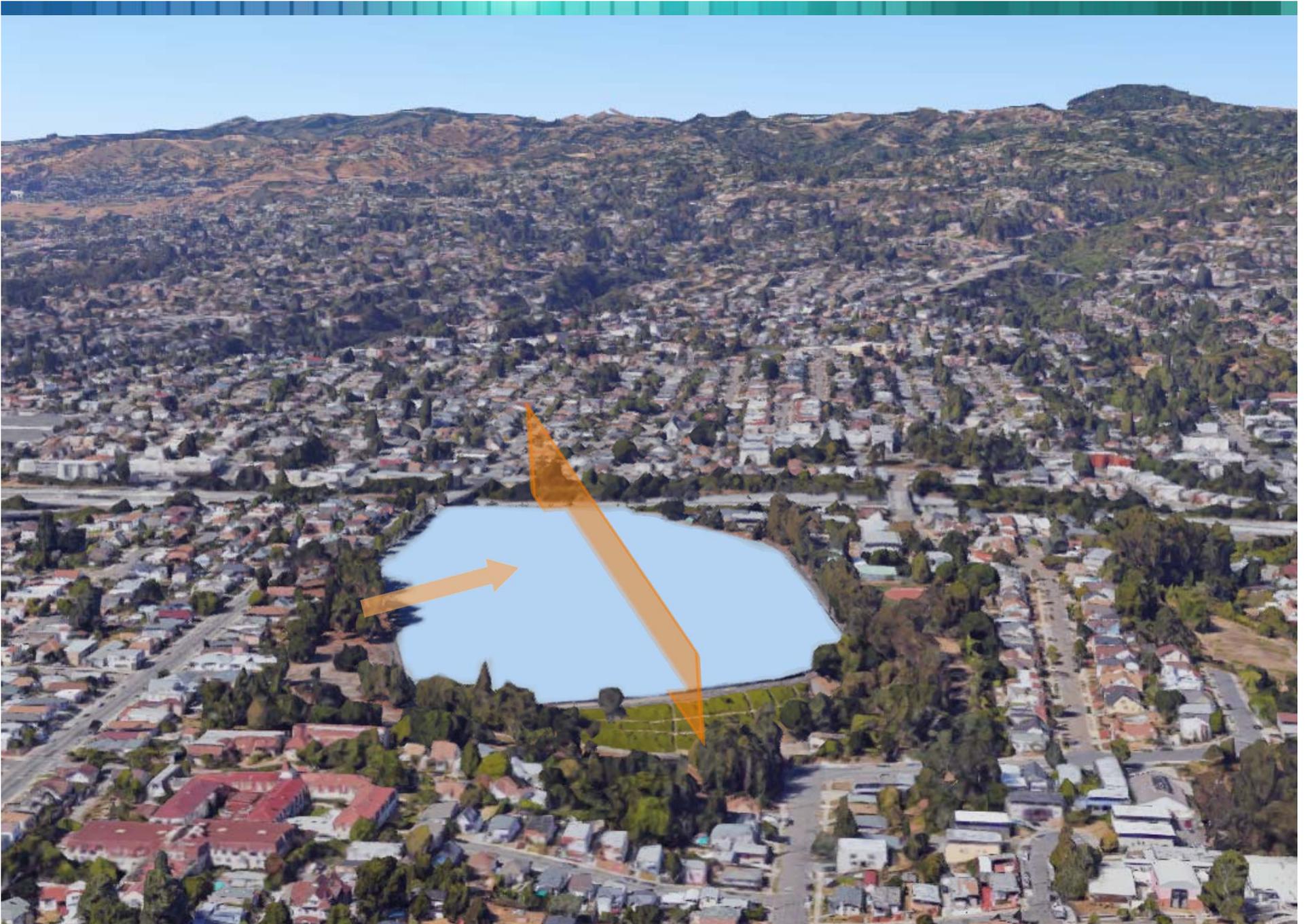
- Roof in 1961
- Encapsulate Roof in 2004



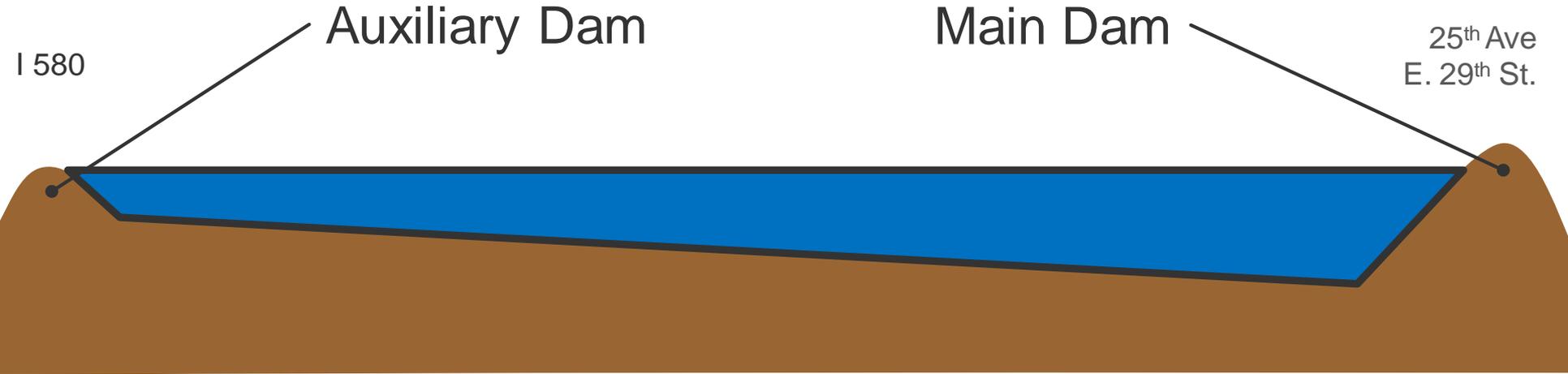
Project Benefits



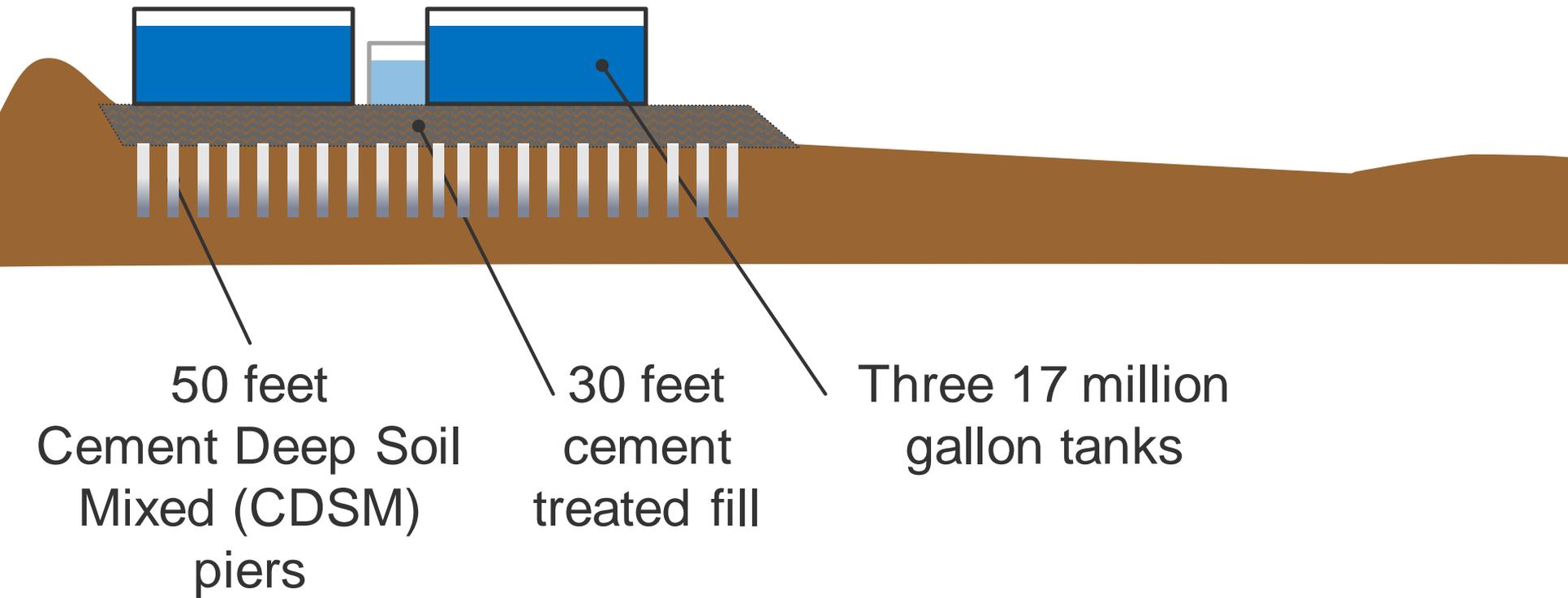
- Replace the reservoir that is over 100-years old
- Remove Polychlorinated Biphenyls (PCBs) in the liner
- Reduce water loss through the liner
- Resize to meet existing & future demands
- Raise the reservoir 20-feet to improve operational flexibility & emergency preparedness



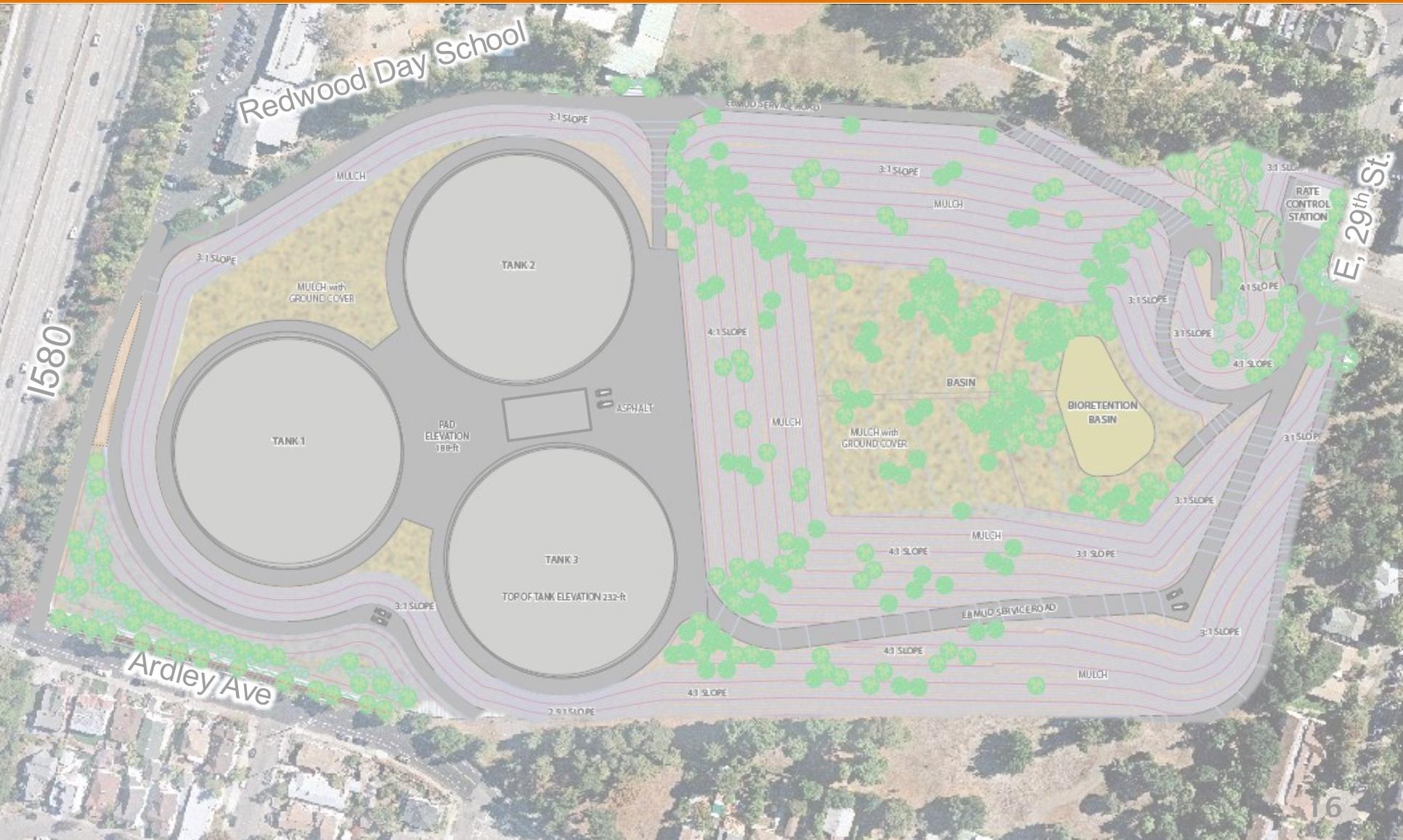
Project Scope



Project Scope



Site Plan & Scope



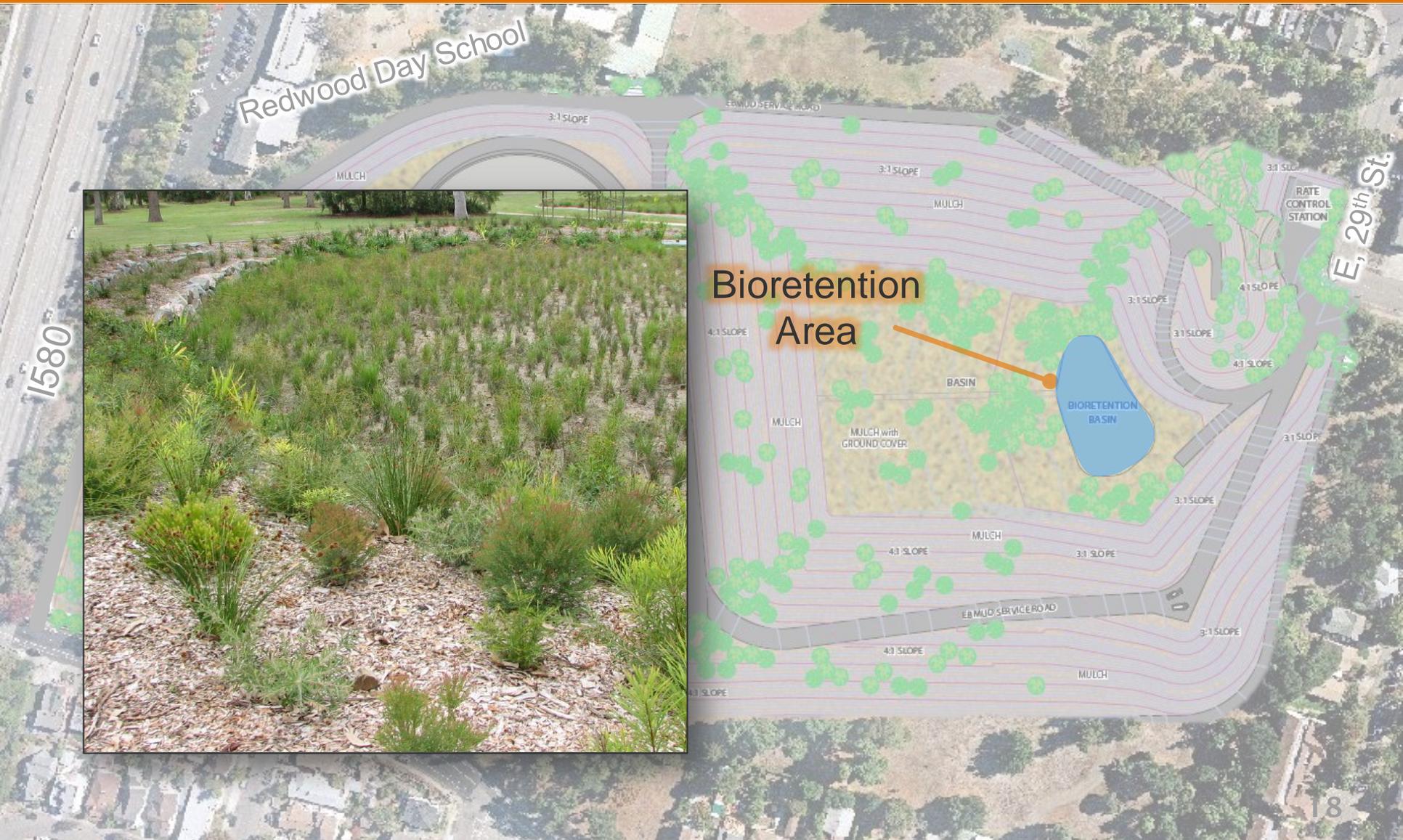
Site Plan & Scope



Three 17 Million
Gallon Concrete
Tanks



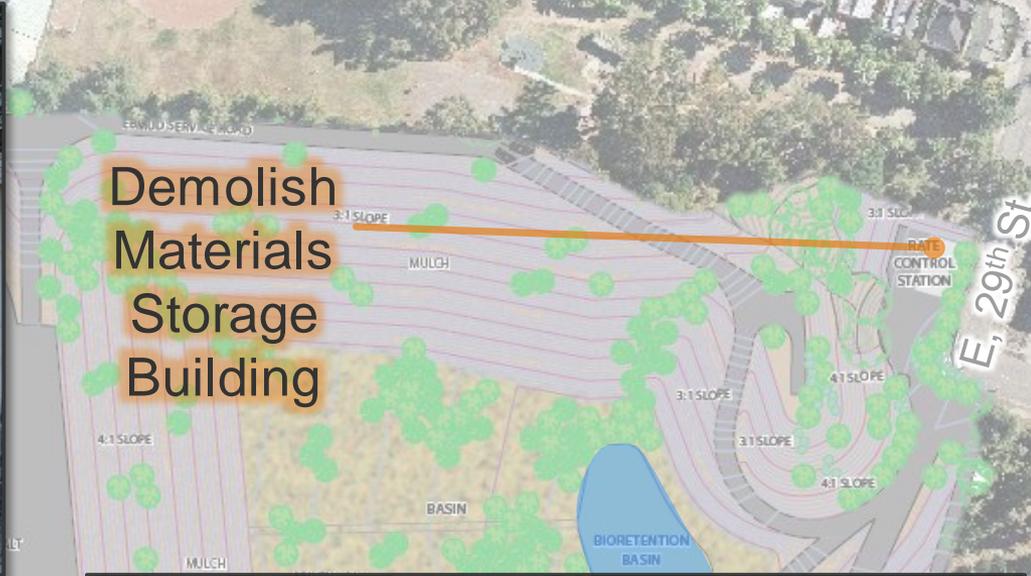
Site Plan & Scope



Bioretention Area



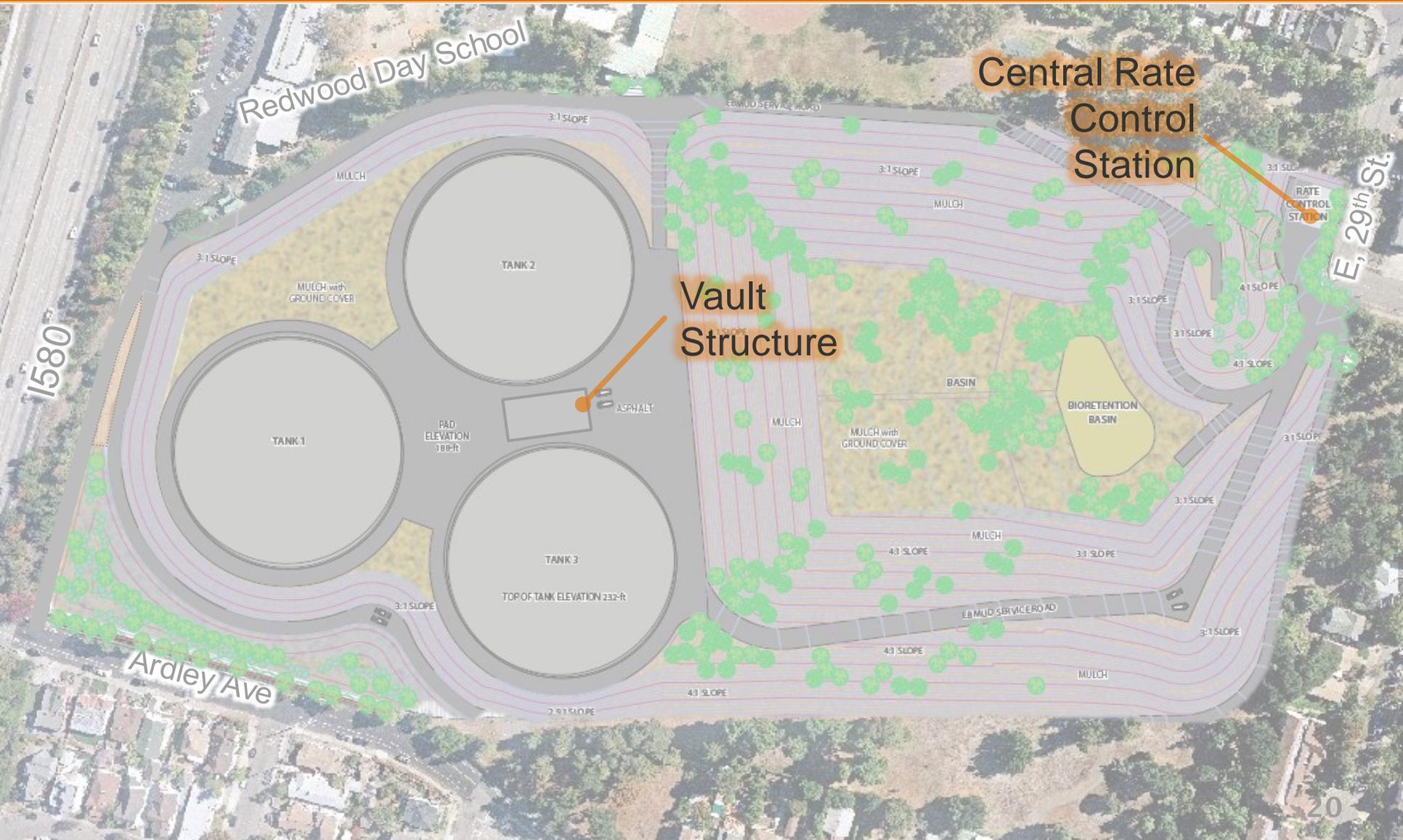
Site Plan & Scope



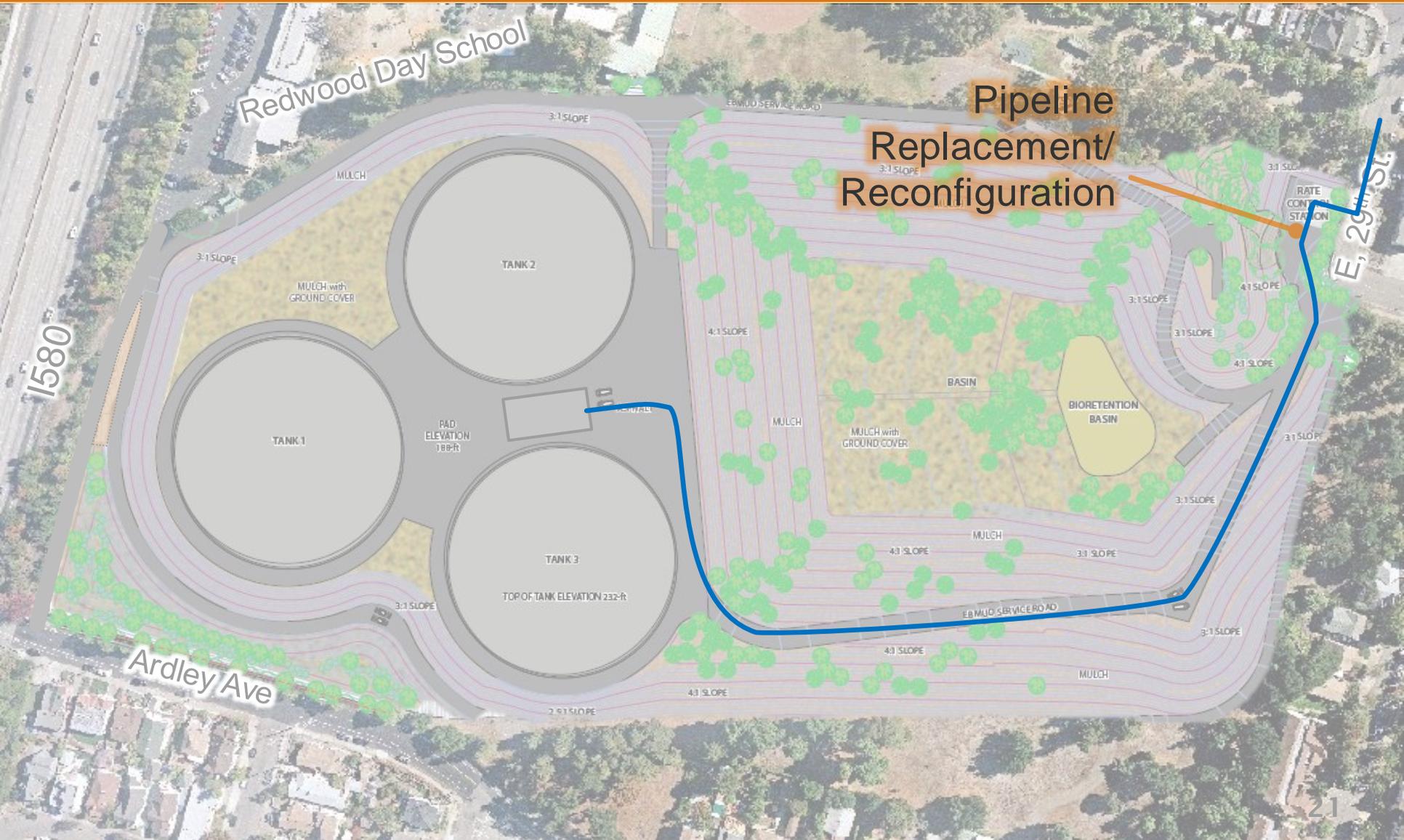
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Site Plan & Scope



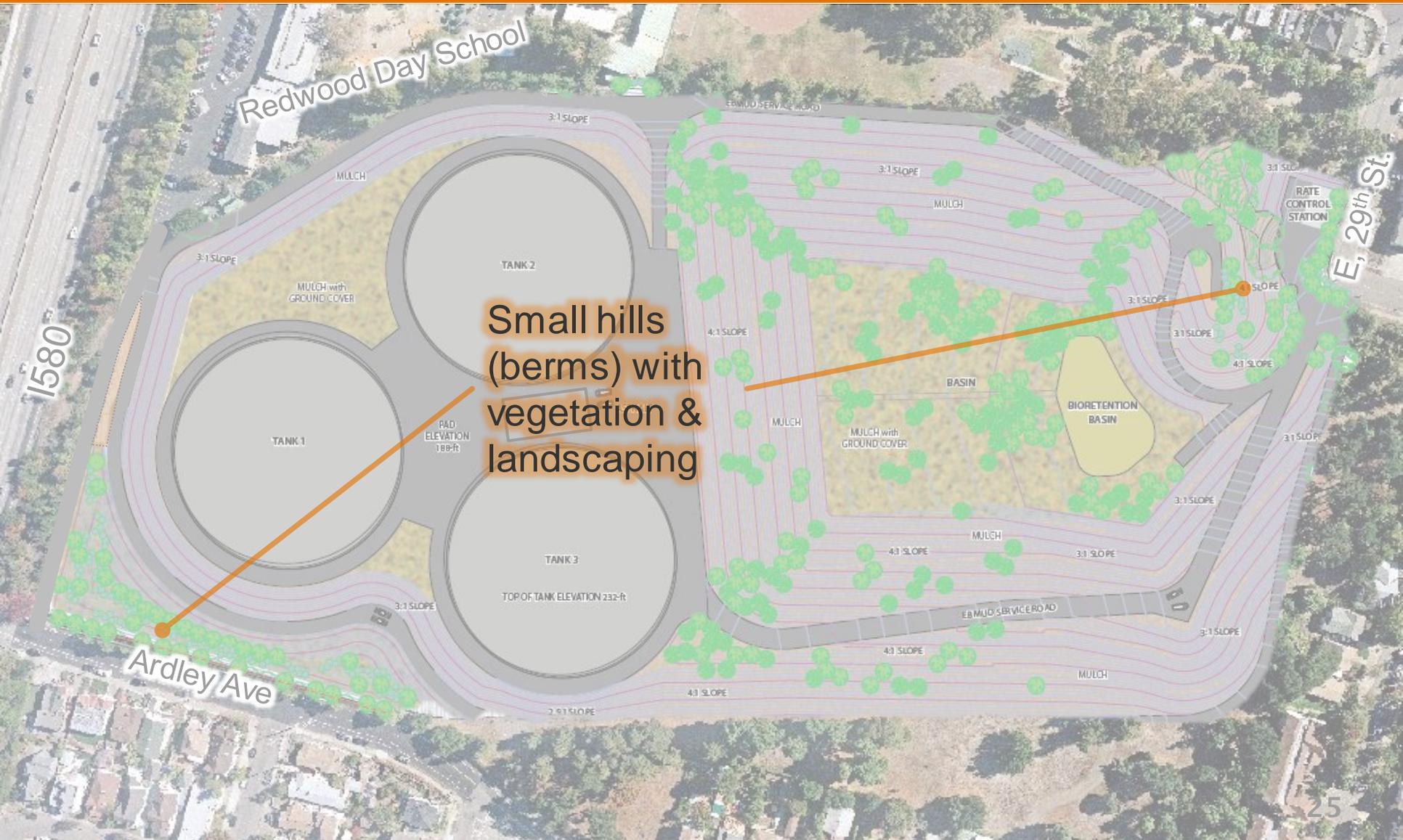
Site Plan & Scope



Site Plan & Scope



Site Plan & Scope



Small hills (berms) with vegetation & landscaping

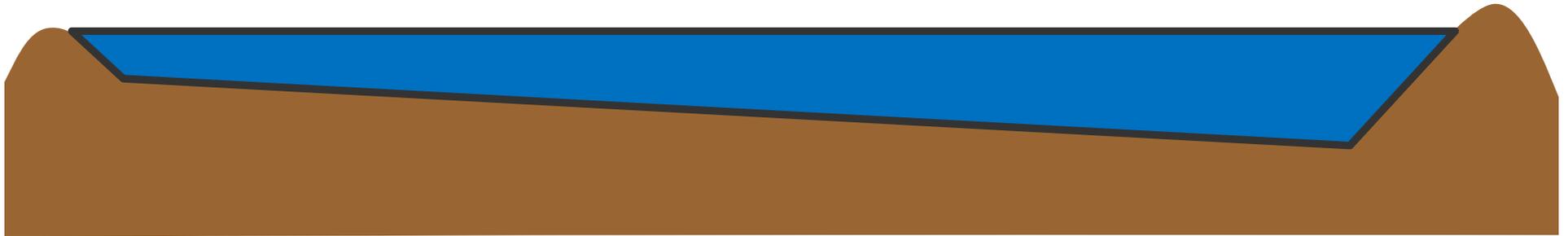
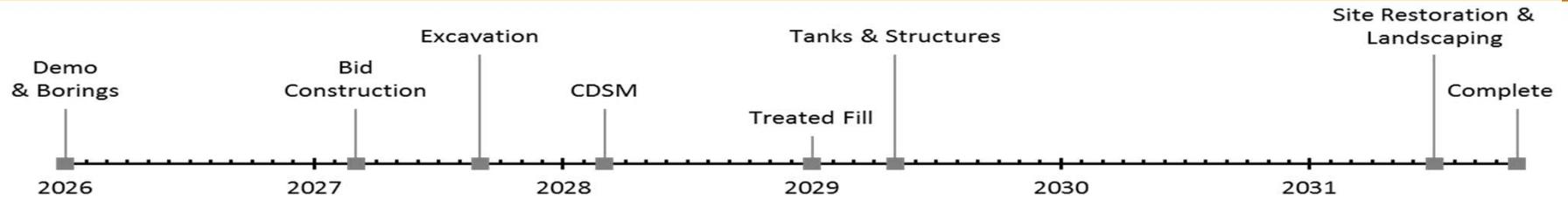
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Redwood Day School

E, 29th St.

25

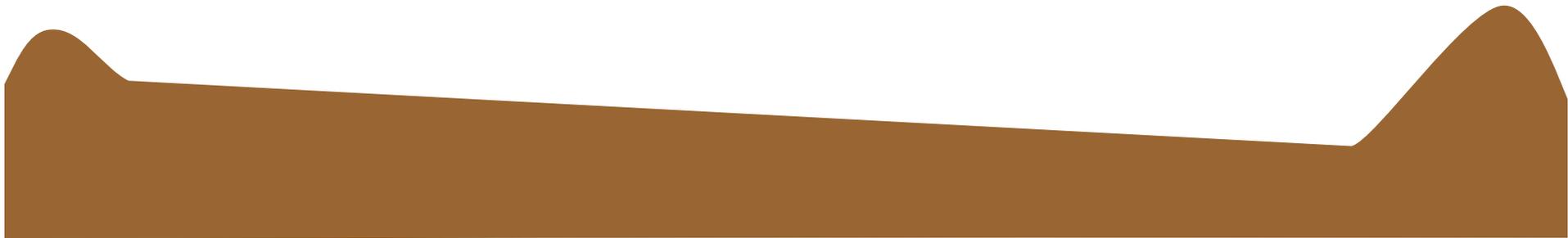
Construction Sequence



Construction Sequence



Construction Sequence

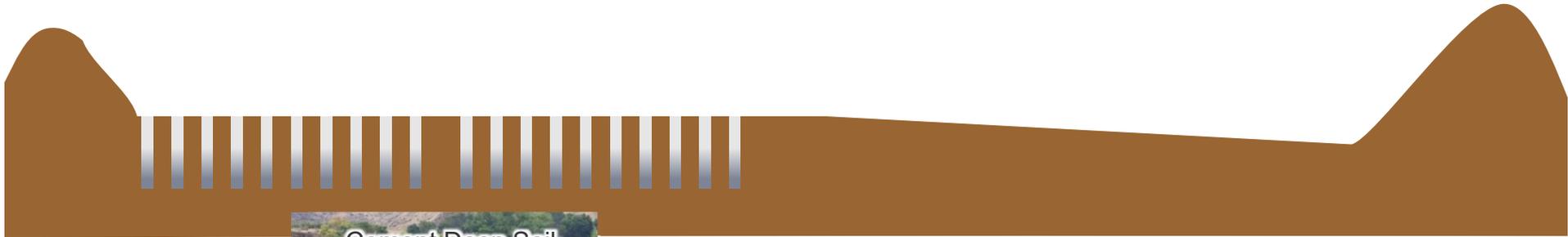
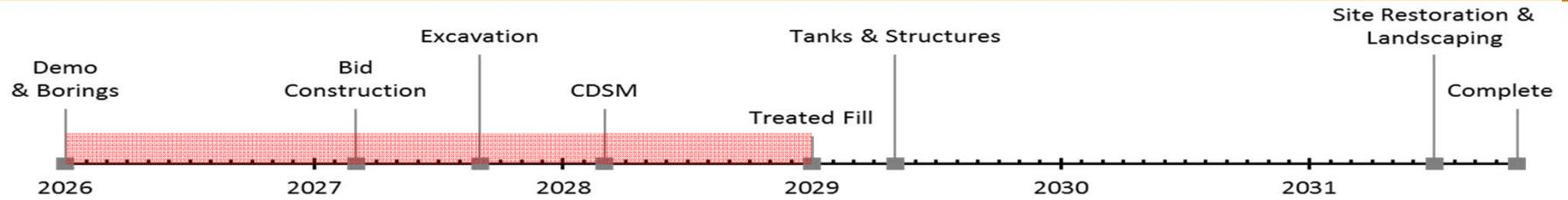


Construction Sequence

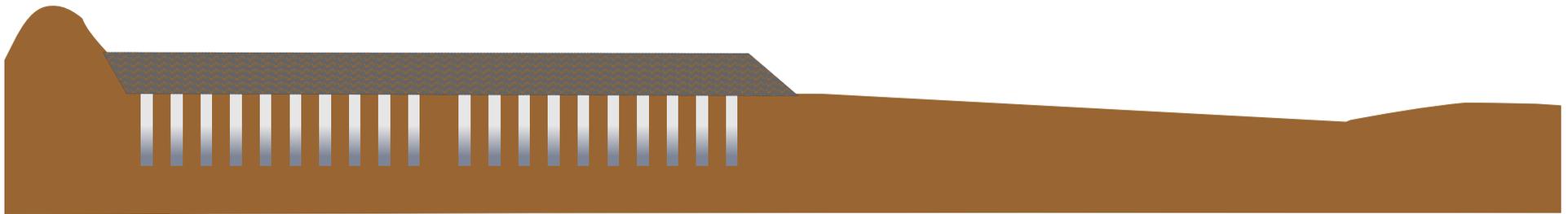
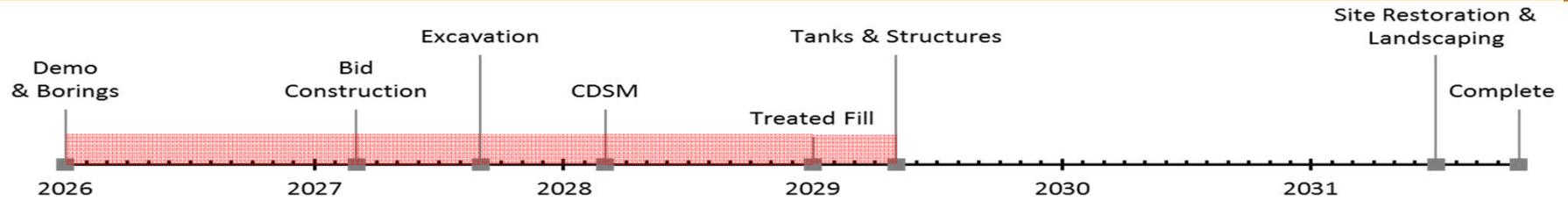


Excavation at Summit Reservoir in Kensington/Berkeley

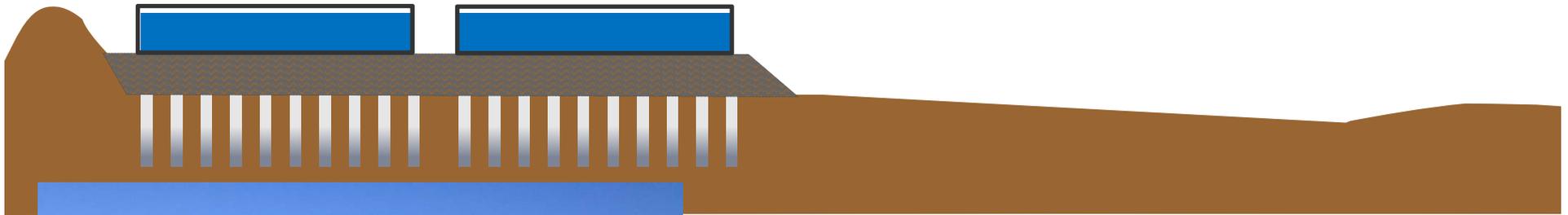
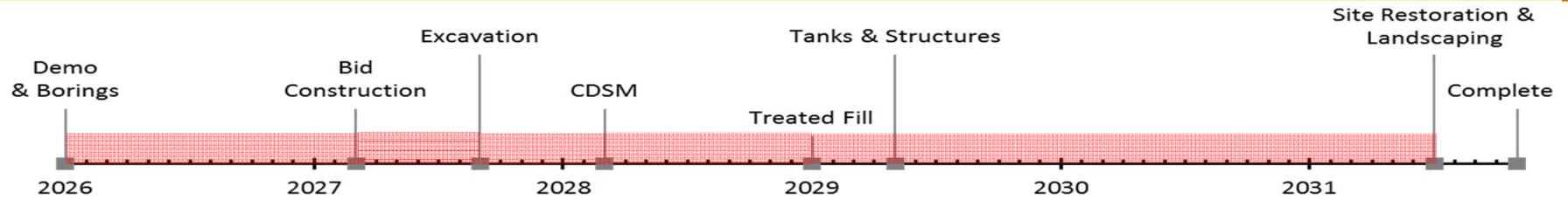
Construction Sequence



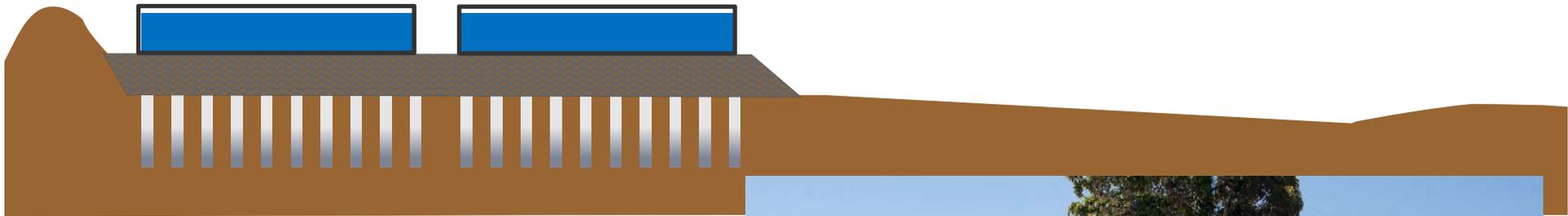
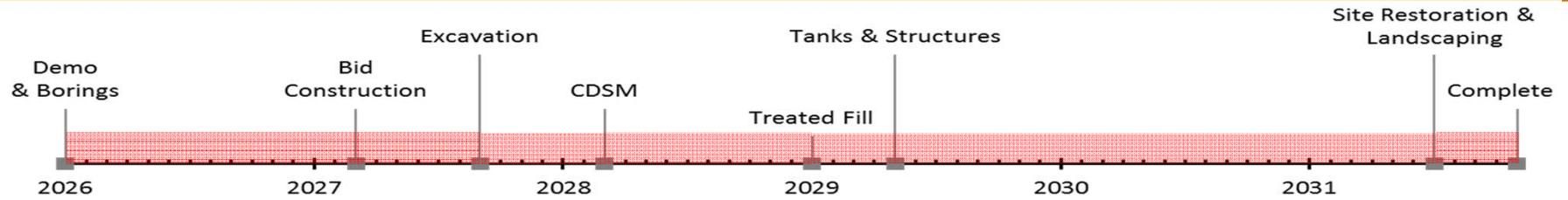
Construction Sequence



Construction Sequence



Construction Sequence



- Meetings with City of Oakland
- 2 community meetings in 2017 & 2018
 - Landscaping: earthen berms along with new and existing trees and shrubs
 - EIR Scoping: traffic, aesthetics, hydrology, and noise during construction

EBMUD Standard Practices & Procedures



- **Project Safety Requirements.** Provisions for the safety of the public and construction workers regarding hazards and hazardous materials
- **Environmental Requirements.** Provisions related to water quality, dust and emissions control, noise monitoring, hazardous materials control, and protection of biological and cultural resources
- **Work Restrictions.** Limits on construction hours and on noise generating activities
- **Traffic Regulation.** Provisions for the regulation of traffic during construction and compliance with applicable traffic regulations
- **Maintain Clean Site.** Compliance with local ordinances and anti-pollution laws and that the construction site be kept free of waste materials and rubbish
- **Asbestos Control Activities.** Requirements for the monitoring and handling, removal, and proper disposal of asbestos-containing materials

EIR Analysis Results



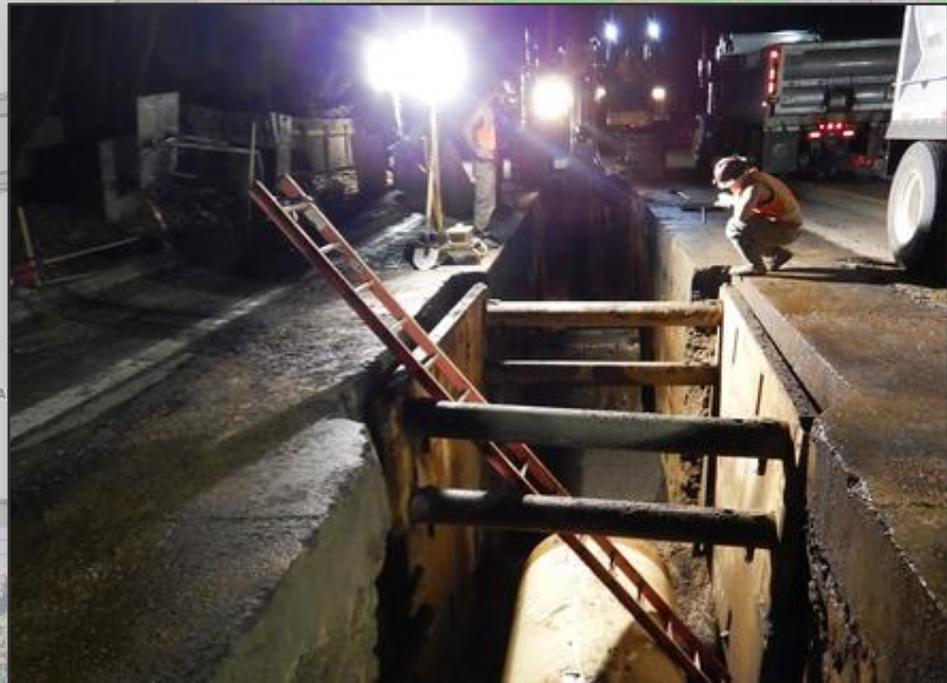
Environmental Factors	Less than Significant	Less than Significant with Mitigation	Significant and Unavoidable with Mitigation
Aesthetics		✓	
Air Quality	✓		
Biology		✓	
Cultural	✓		
Energy	✓		
Geology	✓		
GHGs	✓		
Hazards	✓		
Hydrology	✓		
Noise			✓
Recreation	✓		
Transportation		✓	

Aesthetics & Biology



Mitigation Measure:
Direct and shield night lighting

Potential Night Work



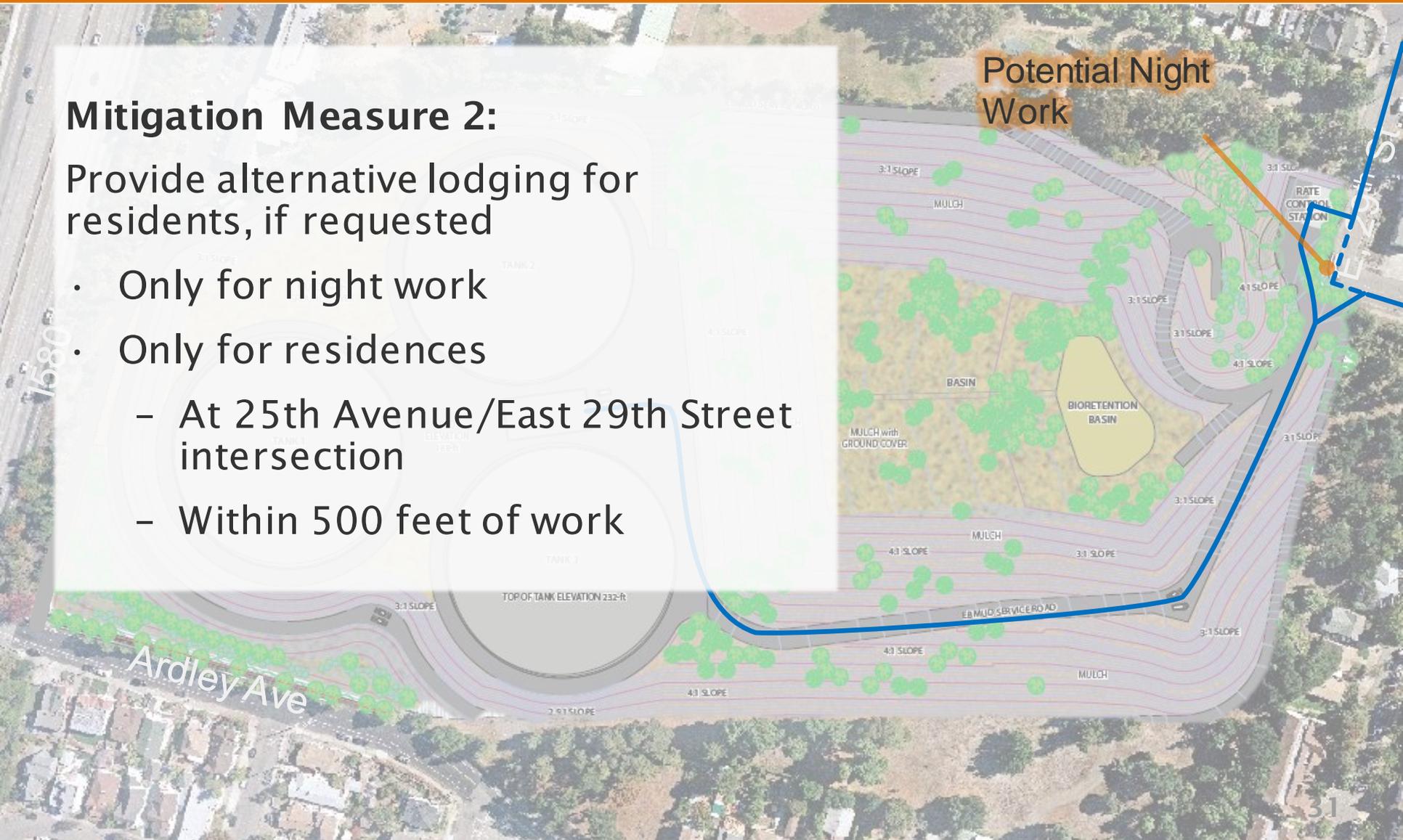
Noise – Night Construction



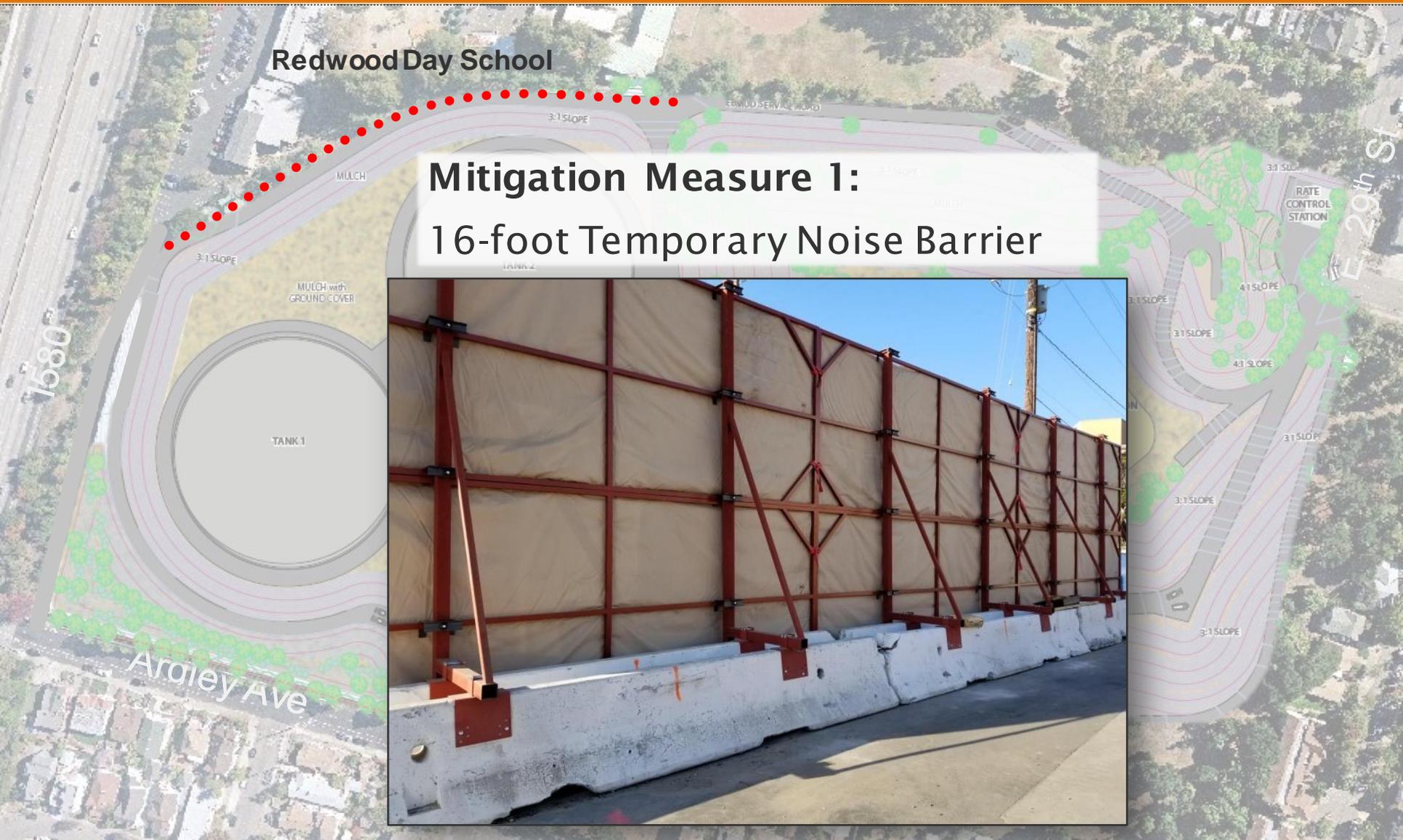
Mitigation Measure 2:

Provide alternative lodging for residents, if requested

- Only for night work
- Only for residences
 - At 25th Avenue/East 29th Street intersection
 - Within 500 feet of work



Noise – Daytime Construction



Redwood Day School

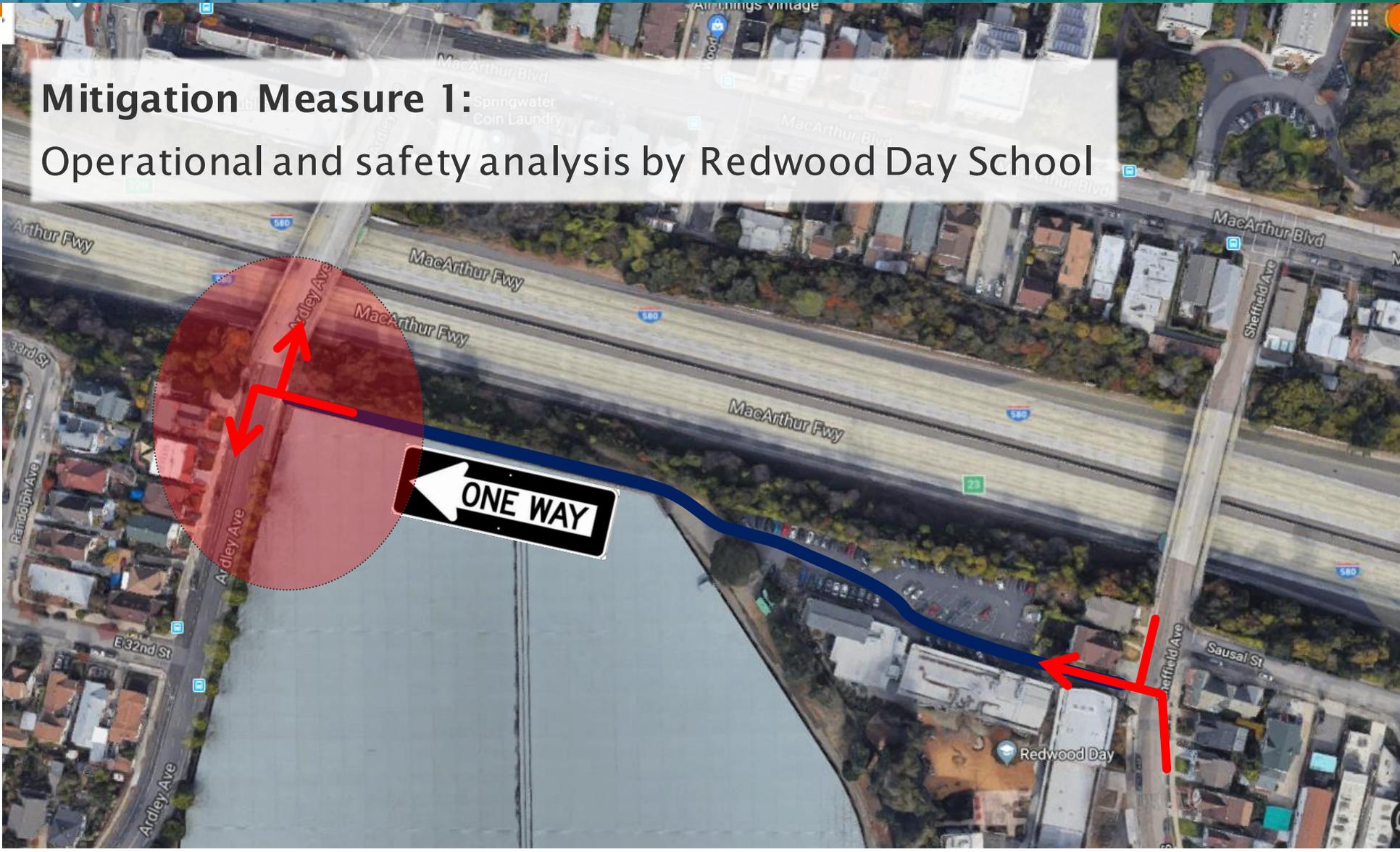
Mitigation Measure 1:
16-foot Temporary Noise Barrier



Transportation



Mitigation Measure 1:
Operational and safety analysis by Redwood Day School

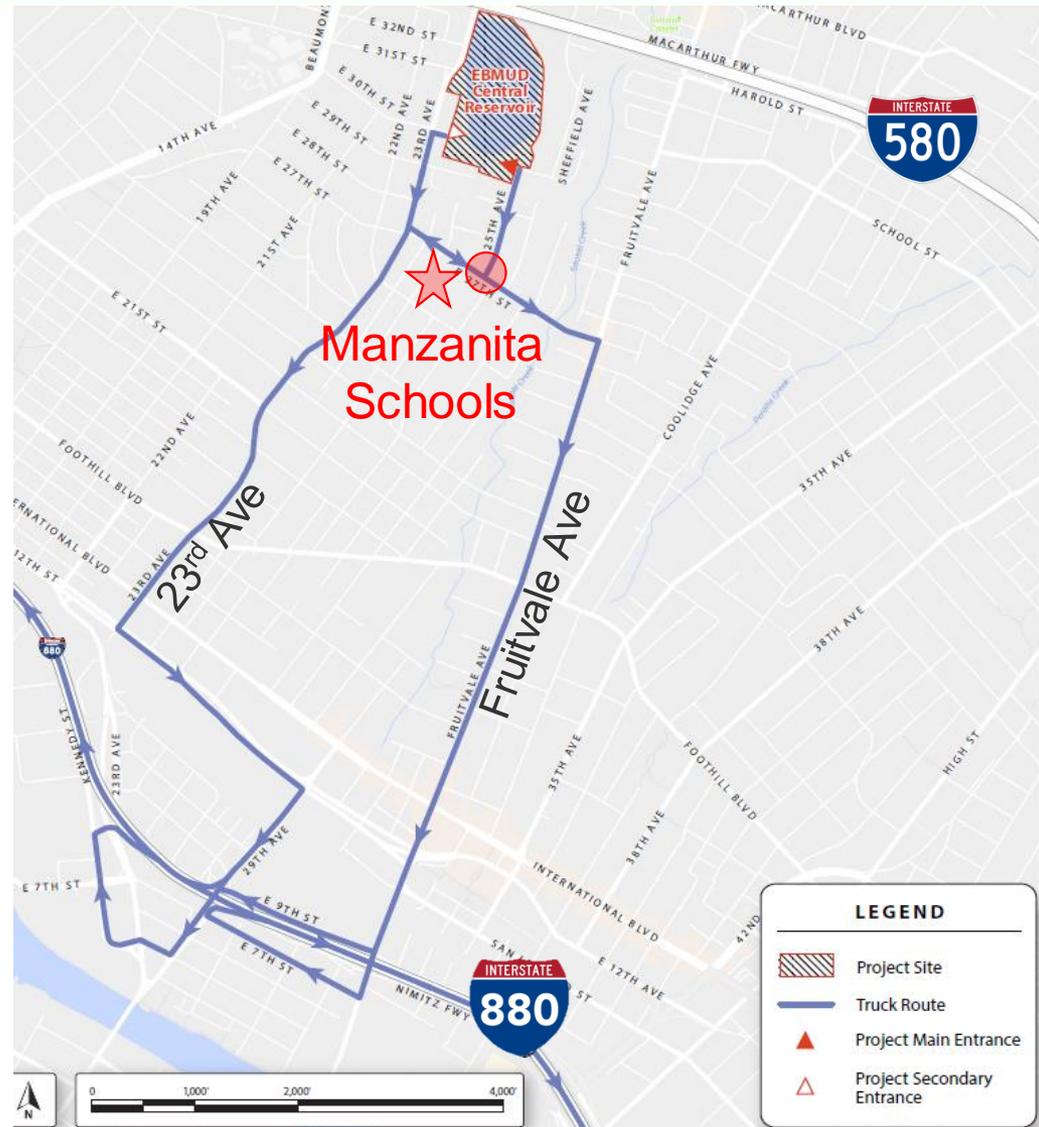


Transportation



Mitigation Measure 2:

- Traffic control measures for trucks traveling along East 27th Street (near Manzanita School)
- Avoid drop off & pick up times
- Flaggers at intersection



Next Steps

- Draft EIR Public Review: **Nov 15, 2019 to Jan 13, 2020**
- Publish Final EIR: **May 2020**
- Board Certify Final EIR: **June 2020**
- Complete Design: **2026**
- Construction: **2026 to 2031**

Ardley at E. 32nd St



Existing

5 years after construction

10 years after construction

Central Reservoir Replacement Project

The East Bay Municipal Utility District (EBMUD) is replacing its 154-million-gallon Central Reservoir. Constructed in 1910 on a 27-acre site, the Central Reservoir is EBMUD's largest distribution reservoir and provides emergency and operational storage to about 52,000 metered services from Oakland and Emeryville to the Oakland/San Leandro border, including most of the City of Alameda.

Central Reservoir has reached the end of its useful life and will be demolished and replaced with new tanks that are approximately 20 feet higher than the existing reservoir. The project includes demolition of the existing reservoir and materials storage building, three new 17-MG concrete tanks, a new rate control station, a valve structure, service road and site paving, a bioretention area, and security fencing, all within the existing reservoir property. The project may also include an access driveway to connect the Redwood Day School parking area to Ardley Avenue.

Construction for this project is expected to occur over a six-year period, from 2026-2031.

EBMUD prepared a final site plan based on input from community meetings held in September 2017 and February 2018. Using the final site plan, EBMUD initiated the environmental review process including preparation of an EIR that will evaluate project impacts and identify ways to reduce and/or eliminate environmental impacts. On November 15, 2019, EBMUD will publish the Draft Environmental Impact Report (EIR). EBMUD will also hold a public meeting in early December to discuss the results of the EIR with the community.

Workplan and schedule

The overall work plan and schedule is as follows:

CENTRAL RESERVOIR REPLACEMENT
OAKLAND, CA



Published studies and other resources

Document

[EBMUD Central Reservoir Draft EIR, Volume I](#)

[EBMUD Central Reservoir Draft EIR, Volume II](#)

[Central Reservoir DEIR Notice of Availability](#)

[Central Reservoir Map](#)

[Notice of Preparation April 26, 2018](#)

[Frequently Asked Questions April 2018](#)

[Powerpoint Slides at Community Meeting #2 on February 13, 2018](#)

[Powerpoint Slides at Community Meeting #1 on September 28, 2017](#)

[Display Boards at Community Meeting #1 on September 28, 2017](#)

EIR Availability and Comment Period Deadline



- EIR is available:
 - www.ebmud.com/central
 - Oakland Public Library (Dimond Branch)
- Draft EIR comments due by **January 13, 2020**:
 - centralreservoir@ebmud.com
 - Aaron Hope, Project Manager
375 Eleventh Street, MS 701
Oakland, CA 94607-4240
- Send general questions about EBMUD
 - Laura Luong, Community Affairs Representative
laura.luong@ebmud.com
(510) 287-0140