



Pine Mountain Tunnel Replacement Project Update

Operations Committee

September 17, 2021



Pine Mountain Tunnel Replacement Project

Update - Outline

- Project Background
- Description and Location
- 30% Design Update
- Environmental Review
- Project Schedule
- Funding Alternatives
- Next Steps

Pine Mountain Tunnel Replacement Project Background

- Staff and regulatory representatives conducted internal inspections of the tunnel in 1993 and 2009. Both inspections revealed cracks and groundwater infiltration
- For the past 19 years the District has been working with regulatory agencies on how best to operate and flush the tunnel to ensure water quality while the District devised a plan to either repair or decommission the tunnel



2009 Internal Inspection Photos

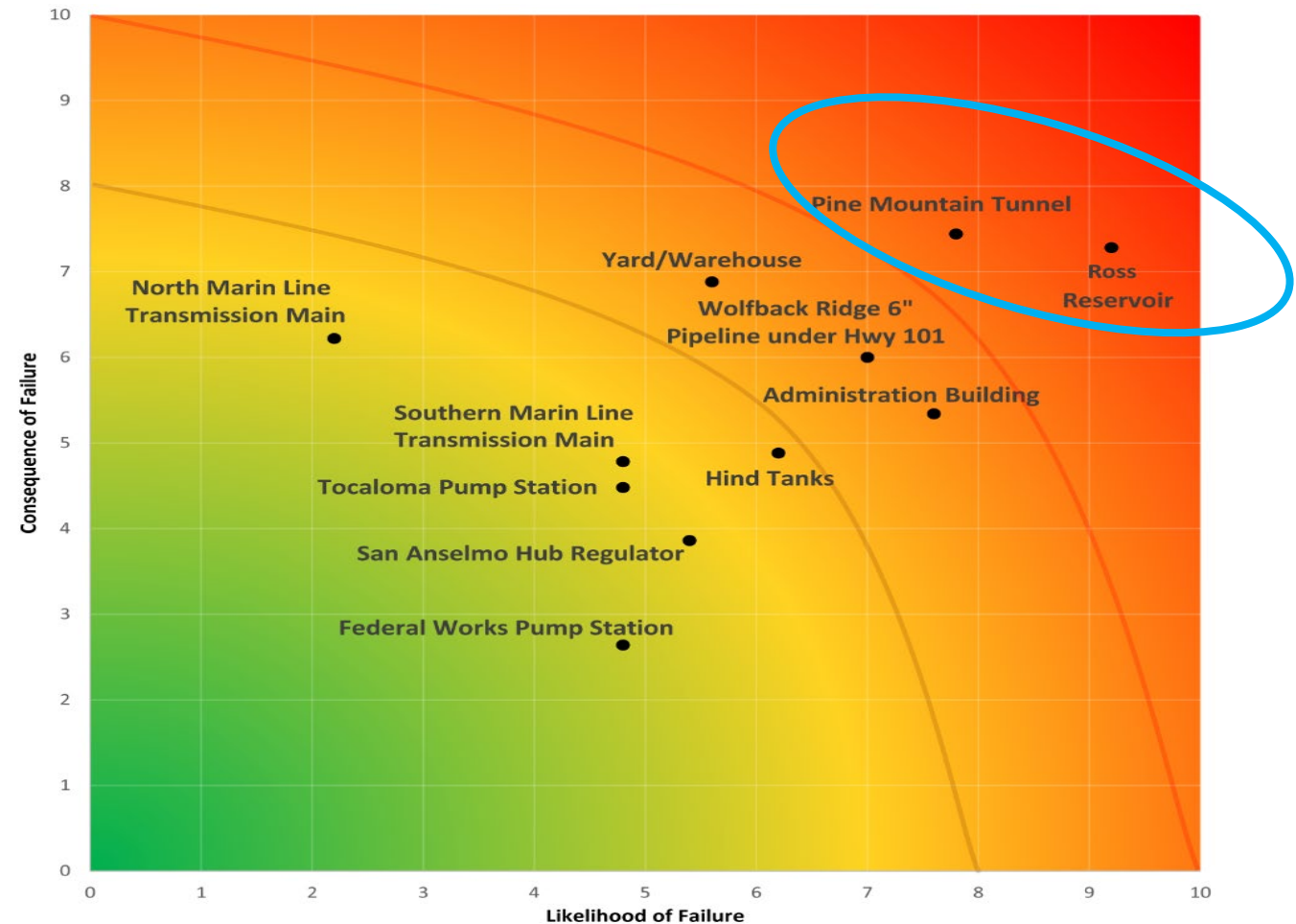


Evidence of groundwater infiltration, cracks, calcium deposits, and holes in the tunnel wall

2019 Risk Assessment on Ross Valley Storage & Pine Mountain Tunnel

■ Main Issues

- Water quality concern in PMT zone
- Limited emergency storage in Ross Valley
- Water Loss from Tunnel Leakage



Critical Asset risk profile

Asset Management presentation, DOC January 2019

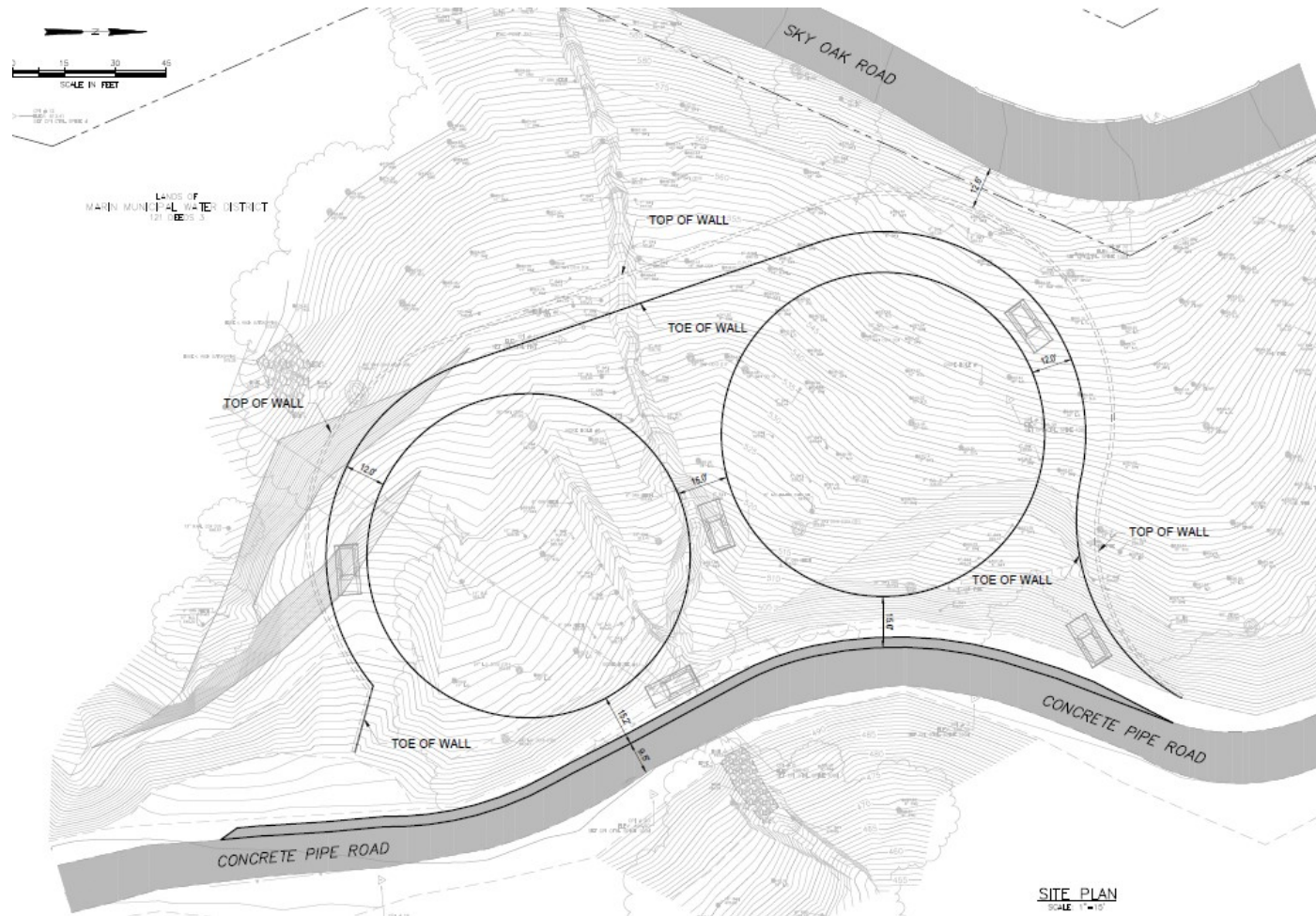
Project Description

- **Project Description:** Marin Water proposes to cease using the existing Pine Mountain Tunnel for water storage, and to replace the existing storage by building two, 2-million-gallon concrete water storage tanks on Marin Water's Watershed property on Concrete Pipe Road. The main Project components include:
- Two, 2-MG concrete water storage tanks, including concrete foundation slabs, concrete walls and roofs, and site drainage facilities,
- Steel pipes up to 30-inches in diameter and valves that are to be located within a new, buried, concrete vault structure, would connect each of the new tanks with the existing 30-inch diameter pipe in Concrete Pipe Road,
- Perimeter fencing and motion-sensor lighting, and
- Materials and spoils storage at Bullfrog Quarry and other currently developed or disturbed sites on Marin Water's watershed property.

Preferred Project Location – Concrete Pipe Fire Road (CP5)



30% Design Ongoing

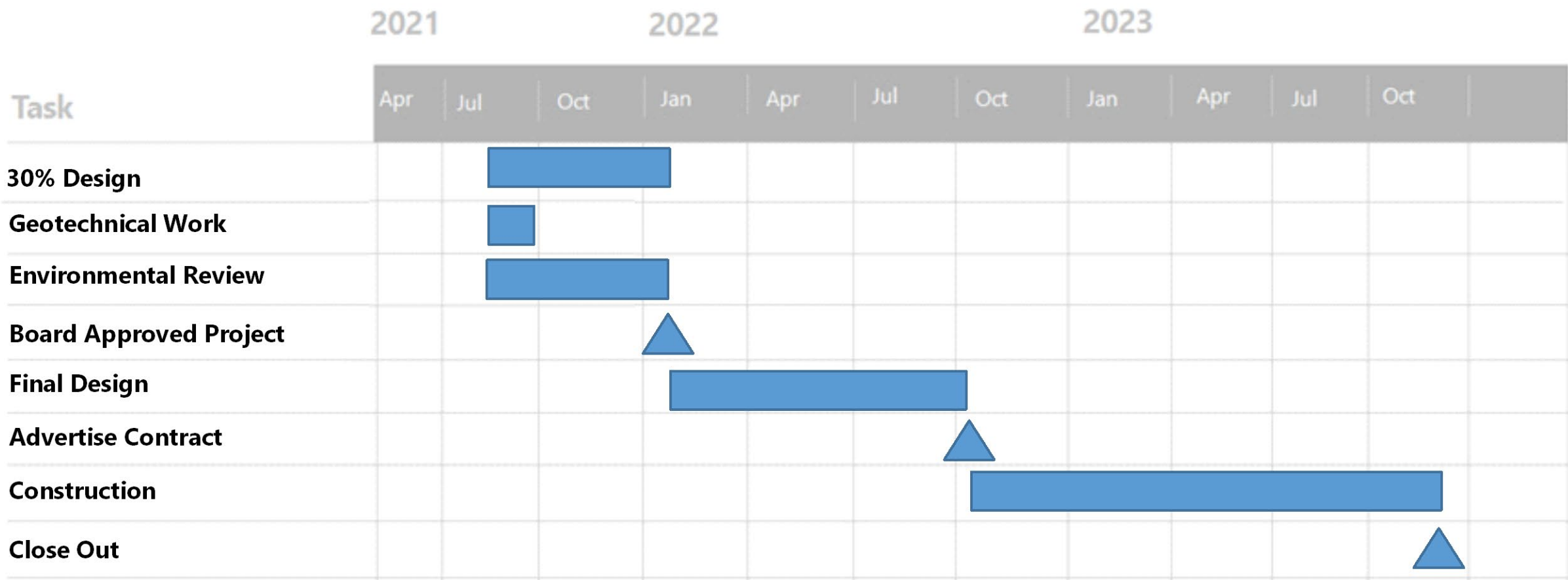


- Geotech borings complete
- Best geological conditions are determined to be located 800' south of Bolinas Road at CP-5 culvert
- Two tanks measuring 95' in diameter and 45' tall
- 2 million gallons each
- There will be a retaining wall around the tanks
- Working on piping alignment
- Finalizing 30% design

Environmental Review

- Staff will file the Notice of Availability, Notice of Intent and Initial Study/ Mitigated Negative Declaration with the Marin County Clerk and the State Clearinghouse on September 17, 2021
- Staff will also mail notification to neighbors on September 17, 2021 and post the Notice of Availability and Notice of Intent on the District website.
- Public review period will run from September 21 thru October 21, 2021
- Final IS/MND & MMRP draft is scheduled to be completed by November 24, 2021
- Board to consider approving the Final IS/MND & MMRP at the December 14 Board meeting
- Pending approval, District staff will post the Notice of Determination on December 15

Board Approved Preliminary Design Contract in July 2021



Potential Funding Opportunities

FEMA/ Hazard Mitigation Grant (Fall 2021)

- Notice of Funding Availability (NOFO) comes out this month for FEMA's Hazard Mitigation Grant (HMG) program. Requires adoption of LHMP by November. If awarded, funding would be available mid-2022.

Urban and Multi-Benefit Drought Relief Program (DWR) (Fall 2021)

- The Department of Water Resources is administering \$100M for Community Drought Relief, and \$200M for Multi-benefit projects. PMT will likely be a candidate for both programs.

State Budget Appropriations

- MMWD has been allocated \$1M from the State budget for PMT after getting some help from Asm. Levine's office.

Revenue Bond Financing

- Staff will be bringing a proposal for board consideration at a future board meeting.

Considering Tank Names

- Pine Mountain Tank 1 and 2
- Sky Oaks Tank 1 and 2
- Concrete Pipe Road Tank 1 and 2
- Gibson Tank 1 and 2
- Suggestions?



Next Steps

- IS/MND Public Comment Review – Sept 21 – Oct 21, 2021
- Finalize IS/MND – December 2021
- Final Design– Spring-Summer 2022
- Secure Funding – Spring 2022
- Advertise for Construction – Summer 2022
- Begin Construction – Fall 2022