

# San Francisco Creek Bridge

## Emergency North Bank Stabilization

JPB Finance Committee  
July 22, 2024

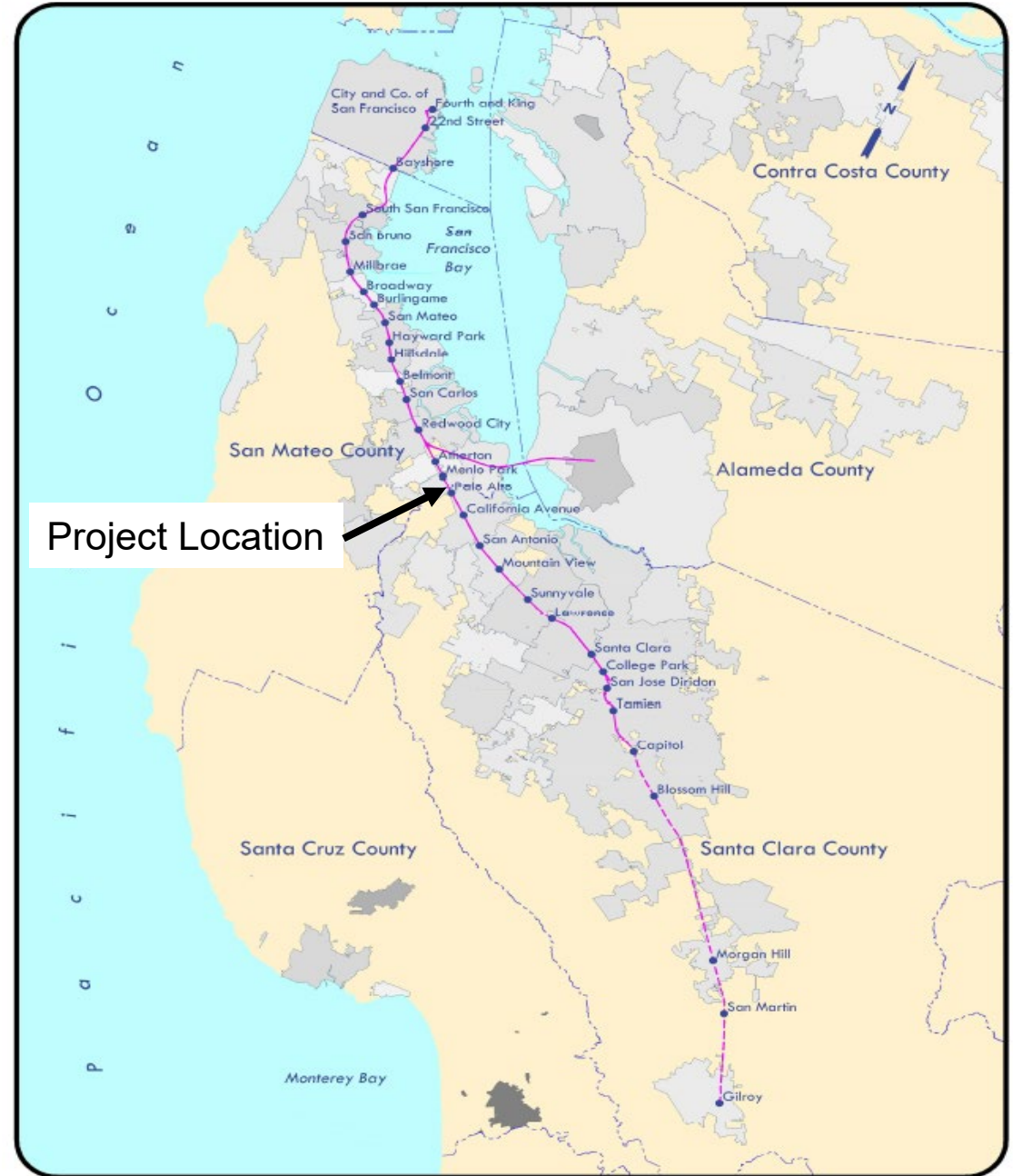


# San Francisquito Creek Bridge

## Emergency North Bank Restoration

## Project Location

### CALTRAIN CORRIDOR



# Purpose and Recommended Action

Staff recommends that the Board:

**Terminate the declaration of an emergency at the San Francisco Creek Bridge**, which was based on findings previously adopted by the Board pursuant to California Public Contract Code section 22050(c)(2) (Resolution No. 2023-19) on March 29, 2023, and renewed at each of its subsequent meetings, the most recent of which occurred on June 6, 2024 (Resolution 2024-34), that an emergency existed at the north channel embankment of the San Francisquito Creek Bridge due to erosion and scouring caused by winter storms, and that immediate action was necessary to respond to the emergency.



# Geographic Location Overview





# Winter 2023: Erosion Posed Risk to Assets

In 2023, erosion threatened to undermine (from left to right):

- **Rail bridge** owned by JPB
- **Drain outfall** owned by City of Menlo Park
- **Alma Street Bicycle Bridge** owned by City of Palo Alto



January 2023

# Spring and Summer 2023: Stabilization Design and Permitting

During the Spring and Summer of 2023, the JPB:

- **Prepared** a permanent stabilization **design** to protect assets of the JPB, the City of Menlo Park, and the City of Palo Alto
- **Executed** a joint project funding **agreement** with the Cities of Menlo Park and Palo Alto
- **Executed** a construction **contract** for the permanent, joint stabilization project
- **Obtained permits** from the Regional Water Quality Control Board, the California Department of Fish and Wildlife, the City of Menlo Park, and the City of Palo Alto
- Was **unable to obtain** the last necessary permit from the U.S. Army Corps of Engineers

# Fall 2023: Risk of 2023-2024 Winter Storms

On November 16, 2023:

- A team of three registered California professional engineers, including a fluvial geomorphologist experienced with the San Francisquito Creek, completed a technical memorandum titled "Overview of Temporary Emergency Stabilization Measures," which stated that, in regard to the creek bank supporting the north abutment of Caltrain's rail bridge, **"the existing bank is likely to erode and would not be stable during/after a large storm event."**

# Fall 2023: Emergency Declaration

On November 18, 2023, the Executive Director **issued an emergency declaration**, which concluded:

- The situation at that time necessitated **immediate action** because anticipated winter storms threatened the integrity of the bridge, creating the potential for a catastrophic failure of the bridge and the subsequent risks to public safety, infrastructure, and the environment; and
- The **dry condition** of the creek bed created a **narrow window** during which the JPB could implement emergency stabilization repairs to ensure the integrity of the bridge without risking the safety of workers or endangering aquatic life; and



# Fall 2023: Emergency Declaration

(cont.)

- Given a **prediction of severe winter storms** and a risk of flash flooding and high creek flows at the San Francisquito Creek, attempting any work during the rainy season would have **presented a substantial risk** to the safety of workers, threatened endangered species, and increased the risk of a failed stabilization effort and a catastrophic failure of the bridge; and
- The situation at that time **required that Caltrain take action** within a time period less than the normal time needed to process regulatory applications under standard procedures.

# Fall 2023: Emergency Stabilization

Under the emergency declaration:

- The Executive Director **directed** that all necessary **actions be taken** to address the emergency, including the mobilization of resources and implementation of temporary creek bank stabilization measures.
- From **November 20 - 22, 2023**, before the onset of forecasted winter rains, Caltrain's contractor undertook and **completed emergency stabilization efforts**.

# 2023-2024 Winter and Spring: Continued Risk

Throughout the 2023-2024 Winter and Spring, JPB staff:

- Determined that the temporary stabilization measures **ameliorated the risk** of the immediate collapse of the embankment
- Determined that, in light of long-term predictions of a “strong” El Nino winter for 2023-2024, a continued risk existed, and therefore **monitored the bridge** and embankment **throughout the wet season** ending June 15, 2024.



# Summer 2024: Risk Mitigated

Upon the conclusion of the wet season, staff determined that the current measures are **adequate to protect the bridge** until permanent repairs can be undertaken in 2025.

Based on the success of the emergency stabilization measures, staff recommends that the Board **terminate the emergency declaration** at the San Francisquito Creek Bridge.



# Preparation for the Joint Permanent Stabilization Project

In the months ahead, JPB staff will:

- Continue to **coordinate with the U.S. Army Corps of Engineers** to facilitate the issuance of the Section 404 permit for the permanent, joint stabilization project with the City of Menlo Park and City of Palo Alto during the 2025 dry season.
- Update the project **cost estimate, funding plan, and contracts** to reflect the planned implementation of permanent stabilization measures in 2025.
- Present any required **amendments to the joint agreement** with the City of Menlo Park and City of Palo Alto and a proposed **budget amendment** to the Board at a future meeting or meetings.

# Implementation of the Joint Permanent Stabilization Project

In 2025, the JPB will:

- Continue to **monitor the bridge** and creek bank during the wet season to ensure that the temporary repairs **protect the integrity** of the bridge
- During the dry season
  - Remove the **temporary bank stabilization materials**, which will be **100% reused** for the permanent stabilization project
  - **Implement the permanent bank stabilization** measures designed under the joint project between JPB, the City of Menlo Park, and the City of Palo Alto.



# Staff Recommendation

Staff recommends that the Board:

- **Terminate the declaration of an emergency** at the San Francisco Creek Bridge, which was based on findings previously adopted by the Board pursuant to California Public Contract Code section 22050(c)(2) (Resolution No. 2023-19) on March 29, 2023, and most recently renewed on June 6, 2024 (Resolution 2024-34), that an emergency existed at the north channel embankment of the San Francisquito Creek Bridge due to erosion and scouring caused by winter storms, and that immediate action was necessary to respond to the emergency.
- **Terminate the delegation to the Executive Director**, or designee, the authority to take action pursuant to California Public Contract Code section 22050(c)(2).

# Questions

