

Ocean Beach Projects and Transportation System Updates

Virtual Community Webinar – April 20, 2022



MEETING FORMAT

We want to hear from you! Please enter all questions, comments or feedback into the Q&A at any point during the presentation - Q&A is located at the bottom of your screen.

Questions will be read and answered aloud during the Q&A period which will immediately follow the presentation.

There will be an opportunity during the Q&A for people calling in to ask questions.

A summary of the Q&A, and any questions that we are not able to answer this evening, will be posted to the project website following this meeting.

This meeting is being held in a webinar format and only the panelists and moderators can be seen and heard. This meeting is being recorded and will be posted to the project website following this meeting.



Ocean Beach Climate Change Adaptation Project

Community Meeting #2 | April 20, 2022



Agenda

Welcome

- Logistics and Introductions 5 MINUTES

Ocean Beach Climate Change Adaptation Project

- Project Overview: Anna Roche, SFPUC Project Manager 10 MINUTES
- Recreational & Open Space Elements: Monica Scott, SFRPD Project Manager 10 MINUTES

Westside Pump Station Reliability Improvements Project

- Vince Mazzaferro, SFPUC Communications 5 MINUTES

Westside Transportation System Updates

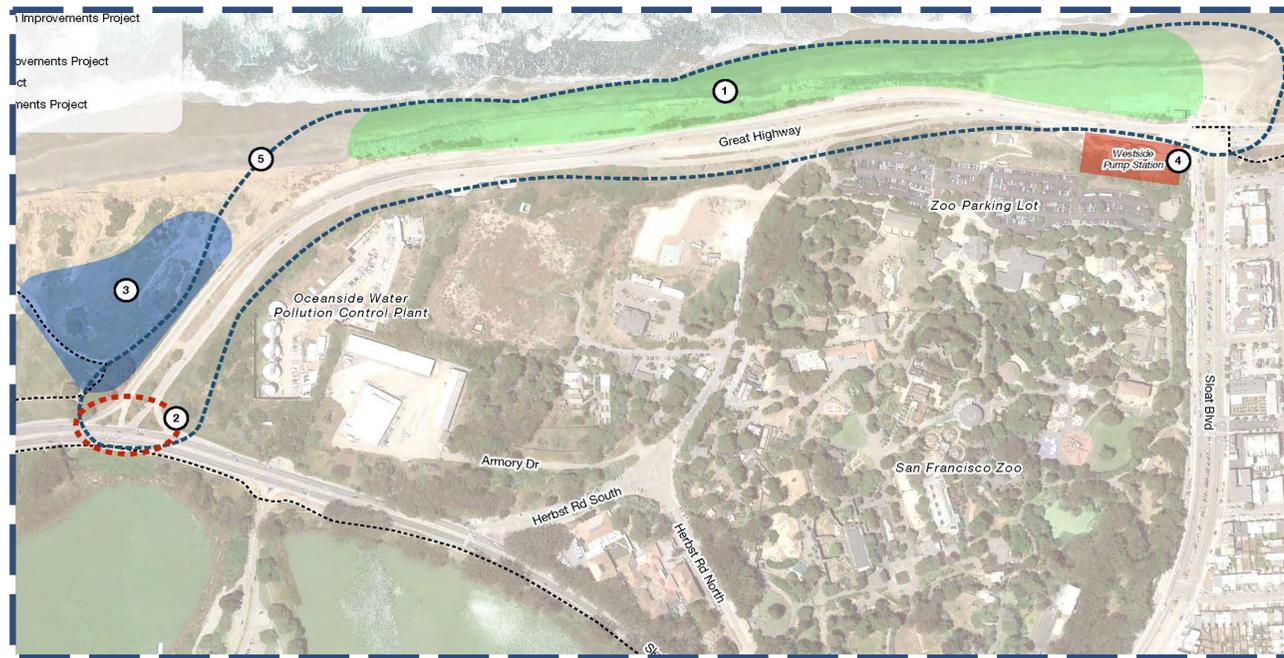
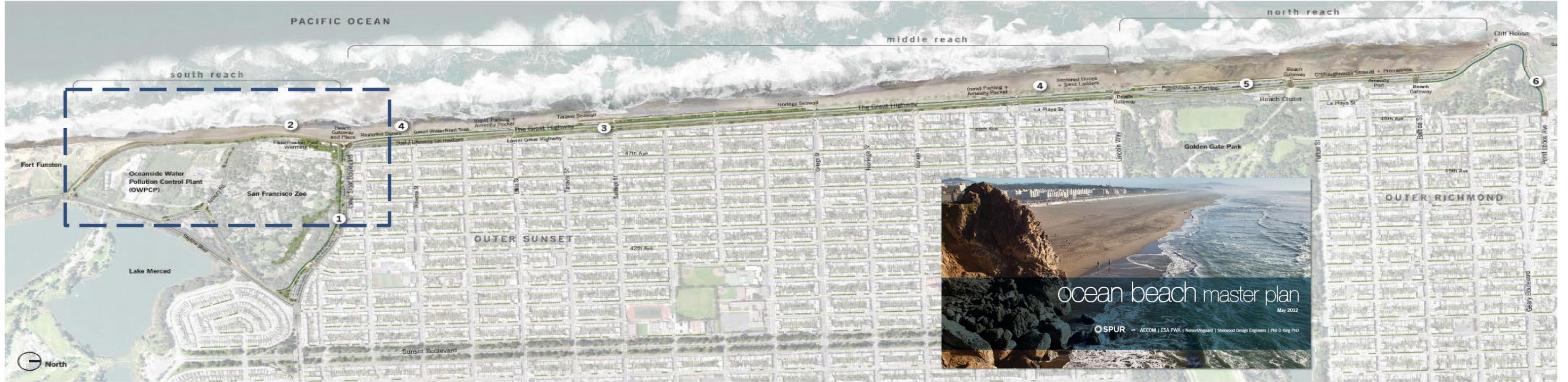
- Timothy Doherty, SFMTA Policy and Long-Range Planning Manager 5 MINUTES

Q&A and Next Steps

25 MINUTES



Project Area





Ocean Beach Climate Change Adaptation Project

**3 Phases: Short-term, Army Corps of Engineers, & Long-term
City and County of San Francisco Project – SFPUC Lead Agency**

Anna M. Roche, SFPUC Project Manager



Key Project Take-Aways

One of SF's first large, cross-agency climate change adaptation projects

Envisioned in the 2012 Ocean Beach Master Plan (OBMP)

Project will develop and implement 2 of the 6 OBMP key moves along South Ocean Beach

1. Implement managed retreat by permanently closing/rerouting the Great Highway between Sloat and Skyline Boulevards
2. Protect the existing Lake Merced Tunnel (LMT) in place and introduce a multipurpose coastal protection/restoration/access system

Will provide short-term projection via phases

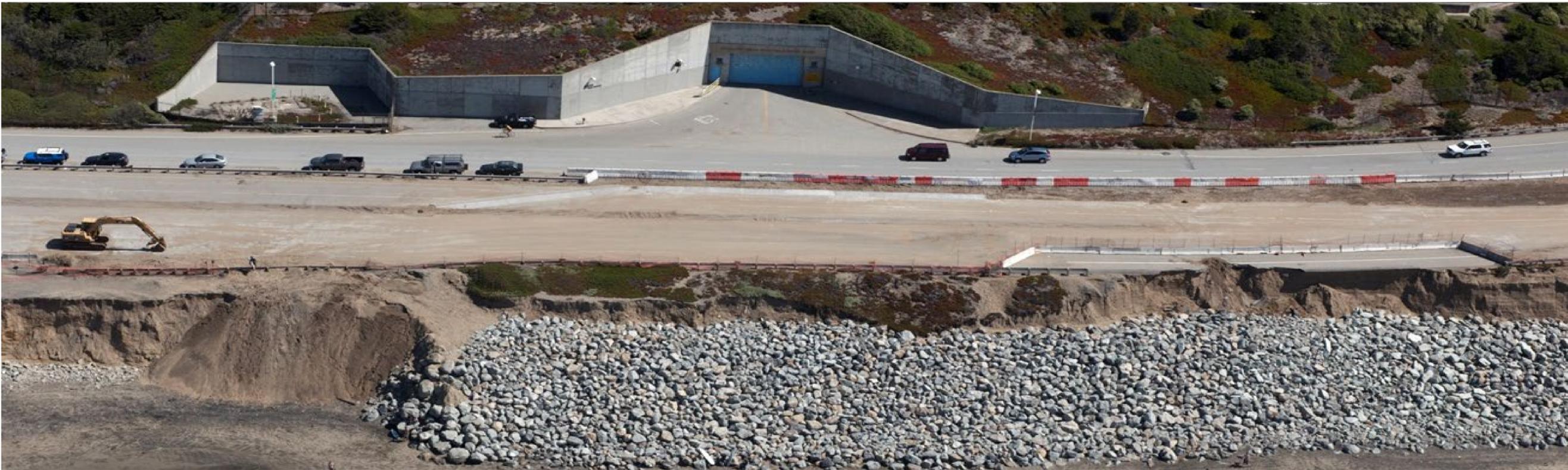
Result in permanent changes in traffic flow

New, publicly accessible open space elements

Remove previously placed shoreline armoring from the bluff/beach



Project History: Historic Approaches to Erosion

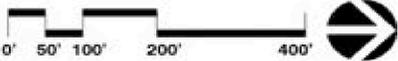


Project Drivers: Infrastructure at Risk due to Erosion



Legend

- lake merced tunnel
- westside transport box
- westside force main
- sewer outfall
- pump station
- oceanside treatment plant



Project Drivers: Adopted Policy & Litigation

2012 Ocean Beach Master Plan - Guiding Principles

- Adapt to Climate Change via Managed Retreat/Adaptive Management
- Beach Nourishment
- Structural Protection (WWE Assets)
- Access & Recreation

Terms of 2014 Litigation Settlement

- Implement short-term improvements to enhance recreation
- Implement long-term adaptive management project

SF Planning Adopts Local Coastal Program Update

- Adopts policy supporting OBMP guiding principles

Stakeholder Involvement

- Technical Advisory Committee



Phases I & 2: Protect LMT & Safe Access

2012 Sand Placement

– 77,000 cubic yards

2014 Sand Placement (with current permit)

– 22,500 cubic yards

2016 Sand Placement

– 70,000 cubic yards

2017 Sand Placement

– 65,000 cubic yards + 300 sandbags

2019 Sand Placement

– 60,000 cubic yards & sandbag maintenance

2021 ACOE Sand Placement

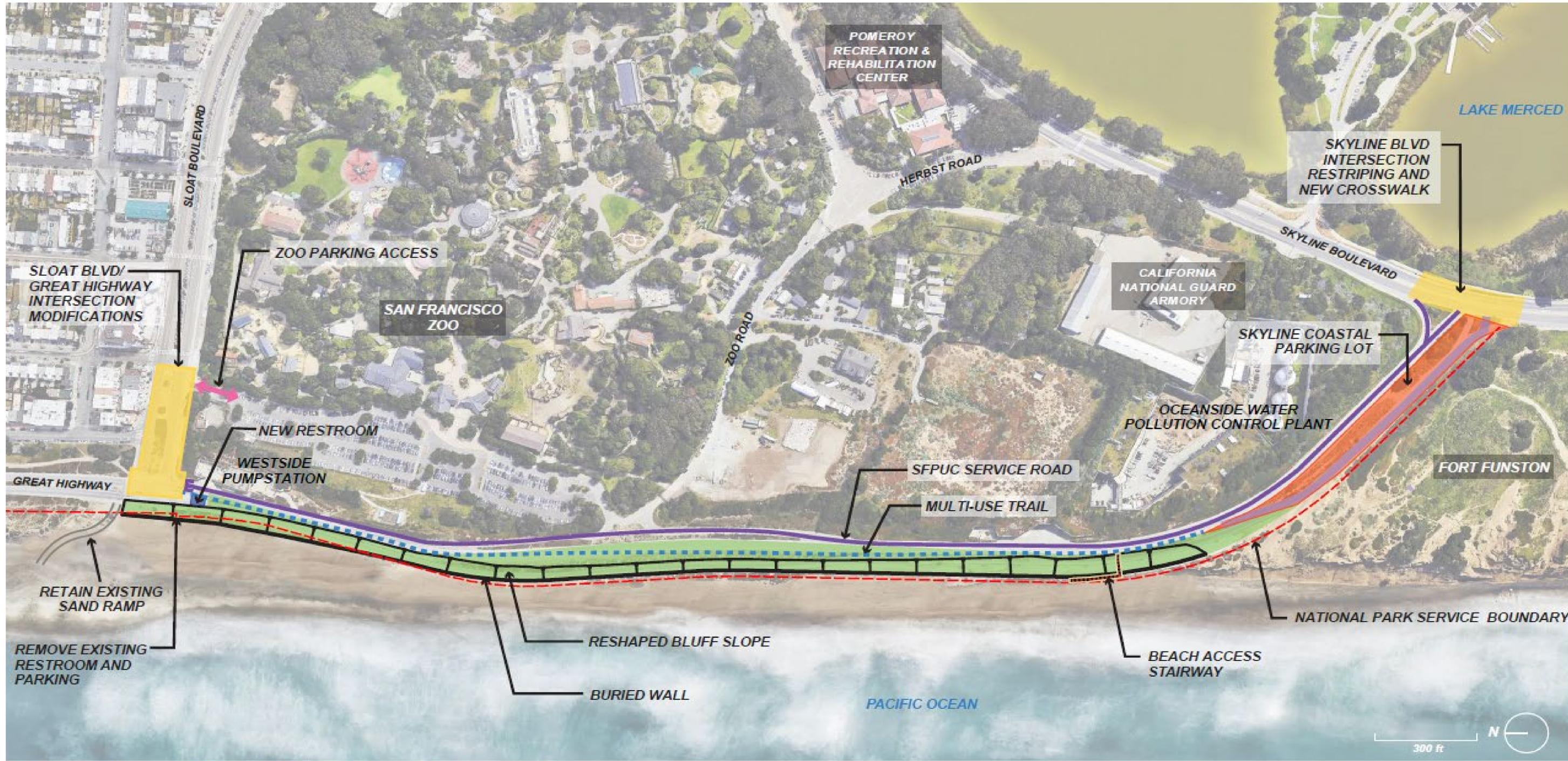
– ~ 275,000 cubic yards



2021 ACOE Sand Placement



Phase 3 - Long-term Improvements



Phase 3: Major Project Elements

Structural Protection & Wastewater Infrastructure Access

- Low-profile wall
- SFPUC Service Road (shown in Coastal Access & Recreation)
- Remove Great Highway & Recontour bluff
- Remove shoreline armoring

Coastal Access & Recreation

- Coastal Access Trail & Beach Access
- Public Bathroom
- Coastal Parking
- Intersection Improvements + Access to Zoo Parking Lot
- Revegetate bluff + Bioretention Basins



Wastewater Infrastructure Protection: Low Profile Wall Design

Key Objective

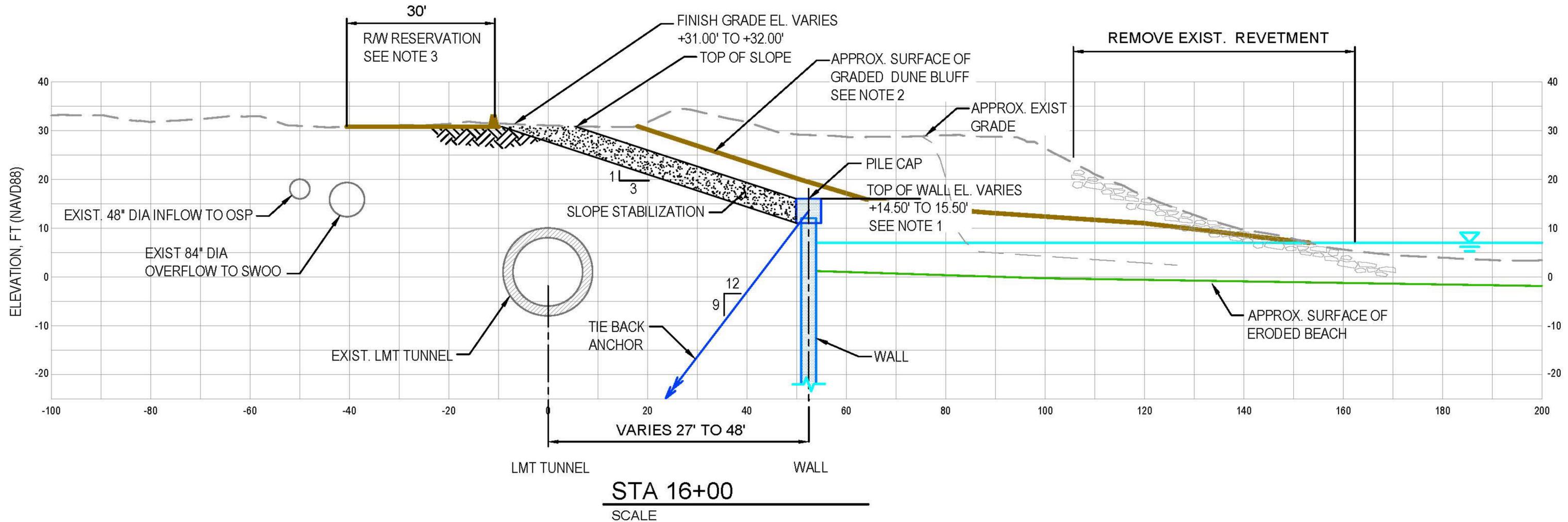
- Protect LMT & associated infrastructure

Design Criteria

- Seismic
- Geotechnical Considerations
- Climate Change (sea level rise + storm surge)
- Placement of Low-profile wall allows for LMT Protection, Open Space Elements, and Ocean Beach access



Wastewater Infrastructure Protection – Cross Section



NOTES:

1. TOP OF WALL IS 6 FT ABOVE THE CROWN OF EXIST LMT TUNNEL.
2. SURFACE OF GRADED DUNE BLUFF IS 4 FT MIN. ABOVE SLOPE STABILIZATION.
3. RW RESERVATION FOR INFRASTRUCTURE ACCESS & COASTAL TRAIL



Wastewater Infrastructure Protection: Low Profile Wall Design Elements

Approximately 3000 feet in length

Consists of 36” diameter piles

- Primary piles 30’ below grade
- Secondary piles 60’ below grade

Tie backs

Slope stabilized with in-situ soil cement

Special design at existing outfall & low-profile wall terminus



Removal of Previously Placed Shoreline Armoring



Schedule

Environmental Review	Late 2022
100% Design	Spring 2023
Contract Advertisement and Award	Late 2023
Construction	2023-2027 (Trail est. 2027)



Participating City Agencies and Design Team

City Agencies:



Project Partners:



Design Team:



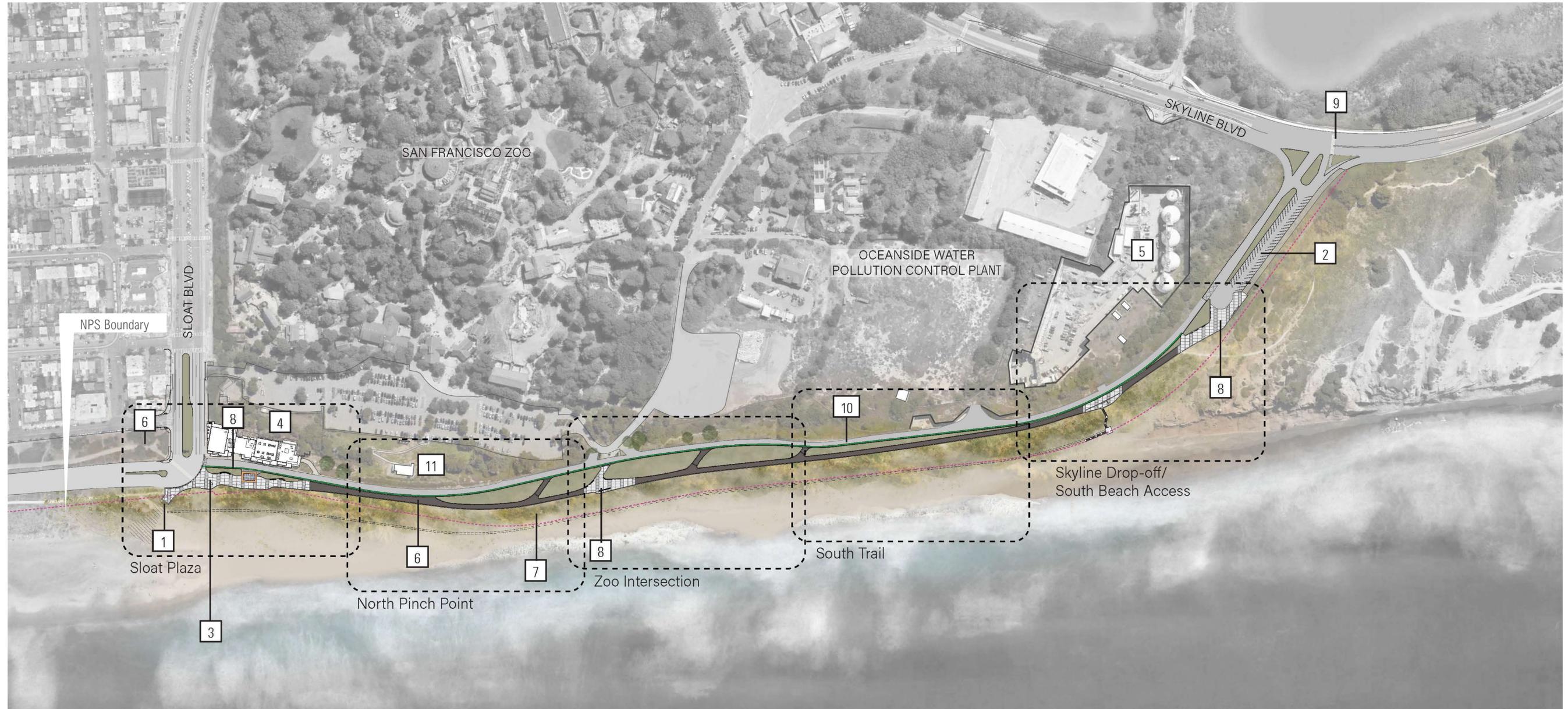


Ocean Beach Climate Change Adaptation Project Recreational & Open Space Elements

Monica Scott, SFRPD Project Manager



Project Overview: Recreational & Open Space Elements



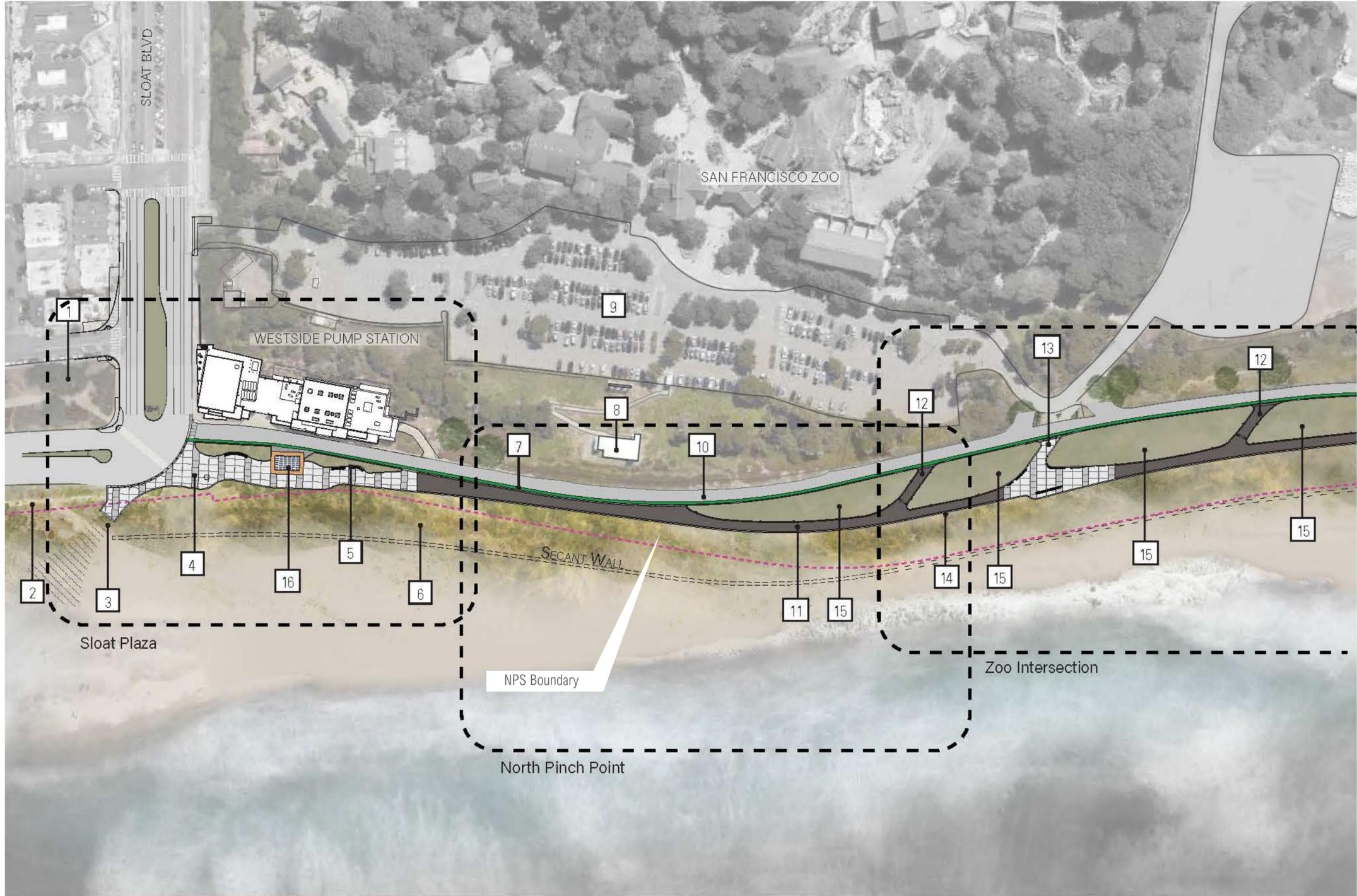
KEY

- | | | |
|---|--|---------------------------------------|
| 1 SAND RAMP MAINTENANCE VEHICLE ACCESS | 5 OCEANSIDE WATER POLLUTION CONTROL PLANT | 9 CROSSWALK TO LAKE MERCED |
| 2 SKYLINE PARKING LOT | 6 LOWER GREAT HIGHWAY SHARED USE TRAIL | 10 SERVICE ROAD (ONE-WAY) |
| 3 SLOAT PLAZA | 7 STABILIZATION NATIVE REVEGETATION | 11 COASTAL CONSERVATION CENTER |
| 4 WESTSIDE PUMP STATION | 8 SKYLINE DROP OFF AREA | |

SCALE
1"=300'




Northern End of Project Site

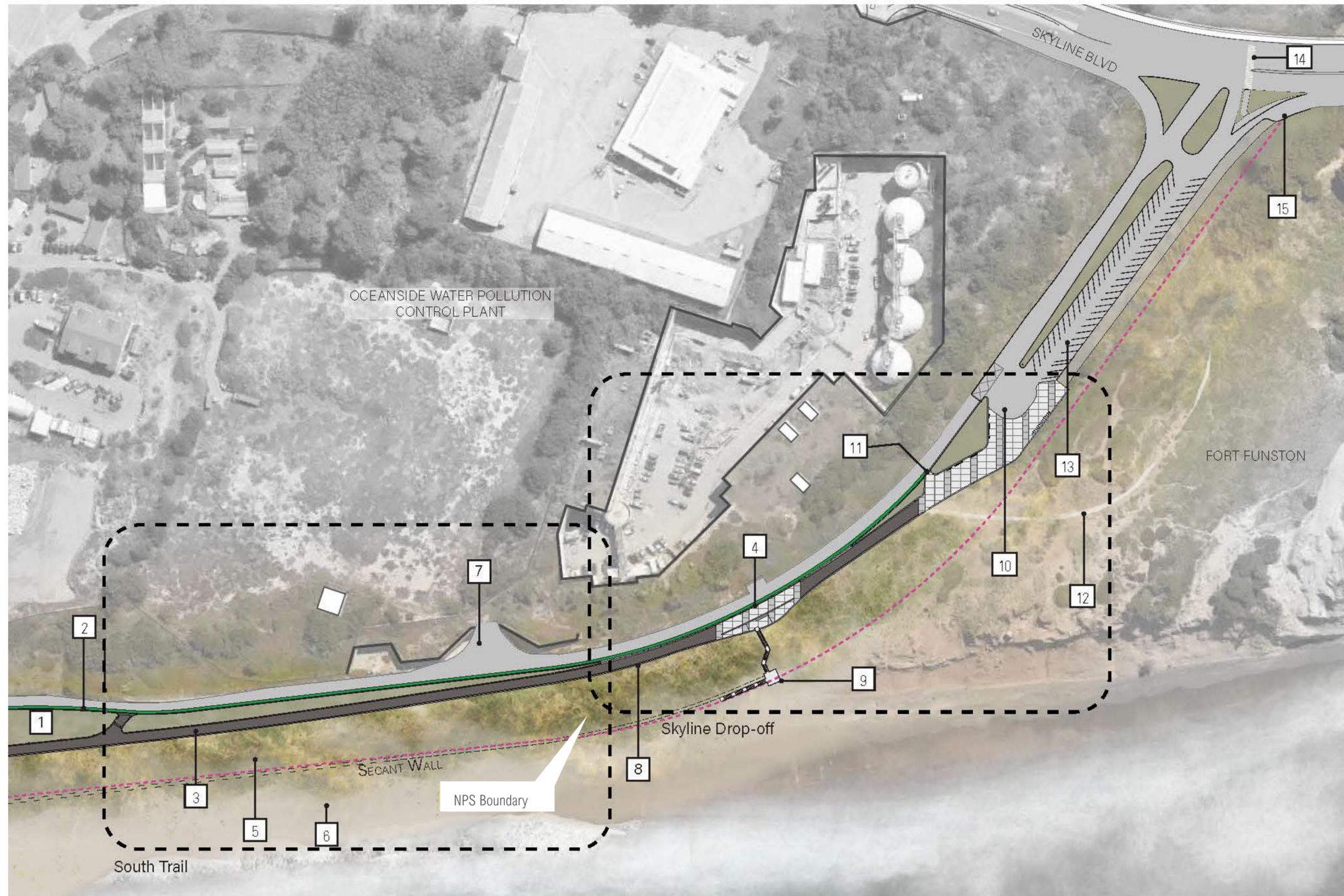


- KEY**
- 1 LOWER GREAT HIGHWAY SHARED USE TRAIL
 - 2 OCEAN BEACH DUNES TRAIL
 - 3 SAND RAMP VEHICULAR MAINTENANCE ACCESS
 - 4 SLOAT PLAZA
 - 5 PLANTING AND SEAT WALLS
 - 6 STABILIZATION | REVEGETATION
 - 7 BARRIER AT PINCH POINT
 - 8 COASTAL CONSERVATION CENTER
 - 9 (E) ZOO PARKING
 - 10 SERVICE ROAD (ONE-WAY) & COMMUTER BIKE LANE (TWO-WAY)
 - 11 MULTI-USE TRAIL (15'-0" MIN)
 - 12 MAINTENANCE ACCESS POINT
 - 13 ZOO INTERSECTION
 - 14 SEAT WALL AT TRAIL EDGE
 - 15 BIORETENTION PLANTING
 - 16 RESTROOM & MAINTENANCE

SCALE
1" = 150'




Southern End of Project Site



KEY

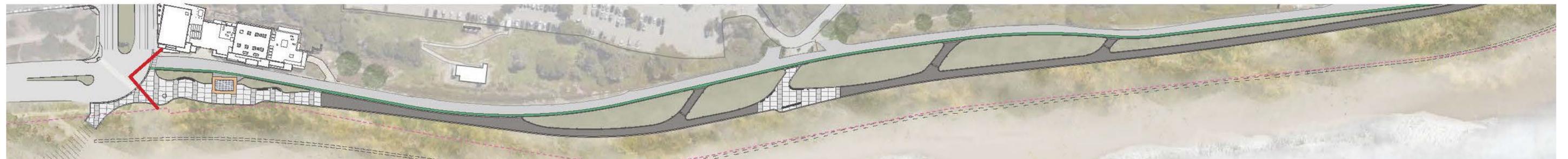
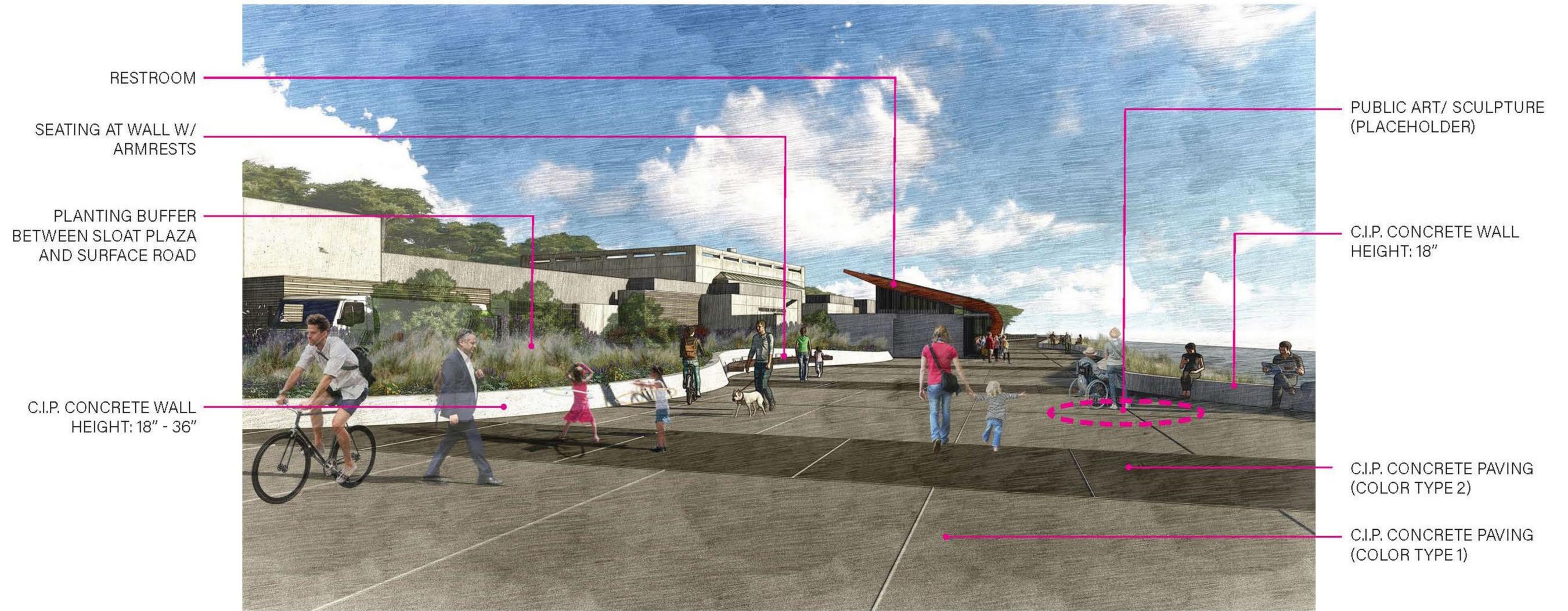
- 1 BIORETENTION PLANTING
- 2 SERVICE ROAD (ONE-WAY) AND COMMUTER BIKE LANE (TWO-WAY)
- 3 SHARED USE TRAIL (15'-0" MIN)
- 4 BARRIER AT PINCH POINT
- 5 STABILIZATION | REVEGETATION
- 6 SACRIFICIAL ZONE (BEACH)
- 7 ACCESS TO OCEANSIDE WATER POLLUTION CONTROL PLANT
- 8 SEATWALL
- 9 BEACH ACCESS
- 10 SKYLINE TRAIL HEAD & PARKING DROP OFF ZONE
- 11 BIKE ACCESS TO COMMUTER LANE
- 12 TRAIL TO FORT FUNSTON | N.I.C.
- 13 SKYLINE PARKING LOT
- 14 (N) CROSSWALK TO LAKE MERCED
- 15 BIKE TRAIL TO SKYLINE BLVD.



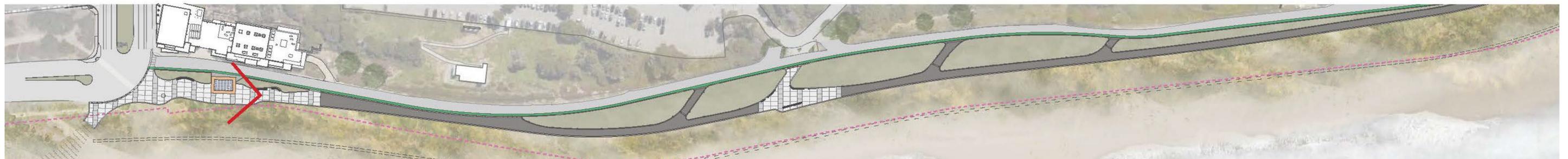
Sloat Plaza



Sloat Plaza – Looking South



Sloat Plaza – Looking North



Trail – Looking South

PLANTING BUFFER
BETWEEN SLOAT PLAZA AND
SURFACE ROAD

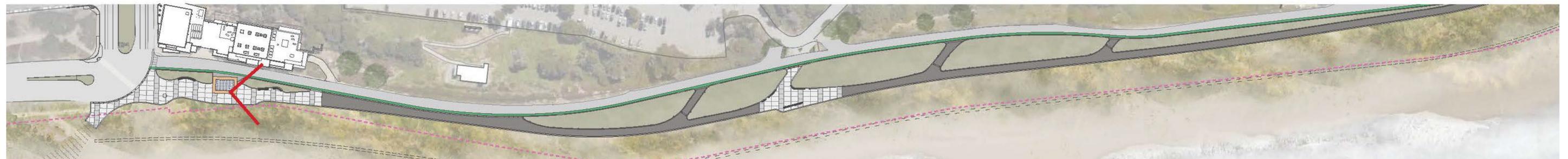
C.I.P. CONCRETE
WALL HEIGHT: 18" - 36"



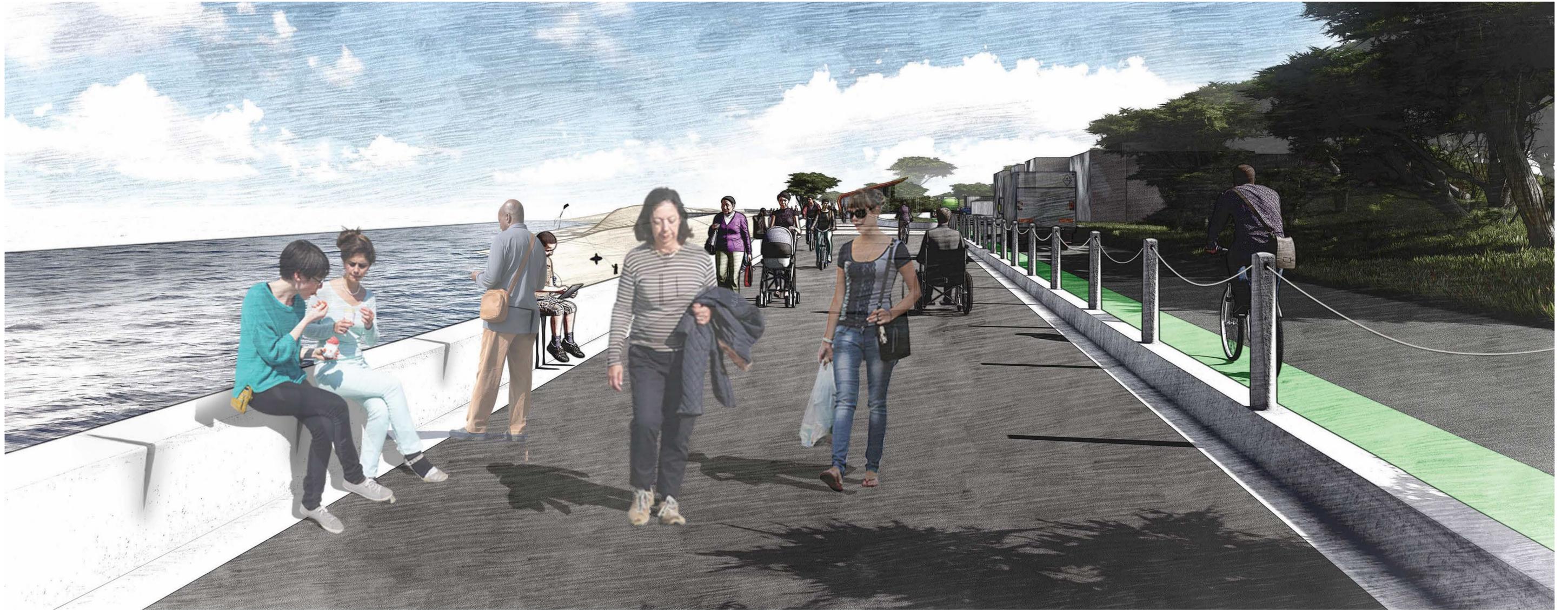
C.I.P. CONCRETE WALL
HEIGHT: 18"

C.I.P. CONCRETE PAVING
(COLOR TYPE 2)

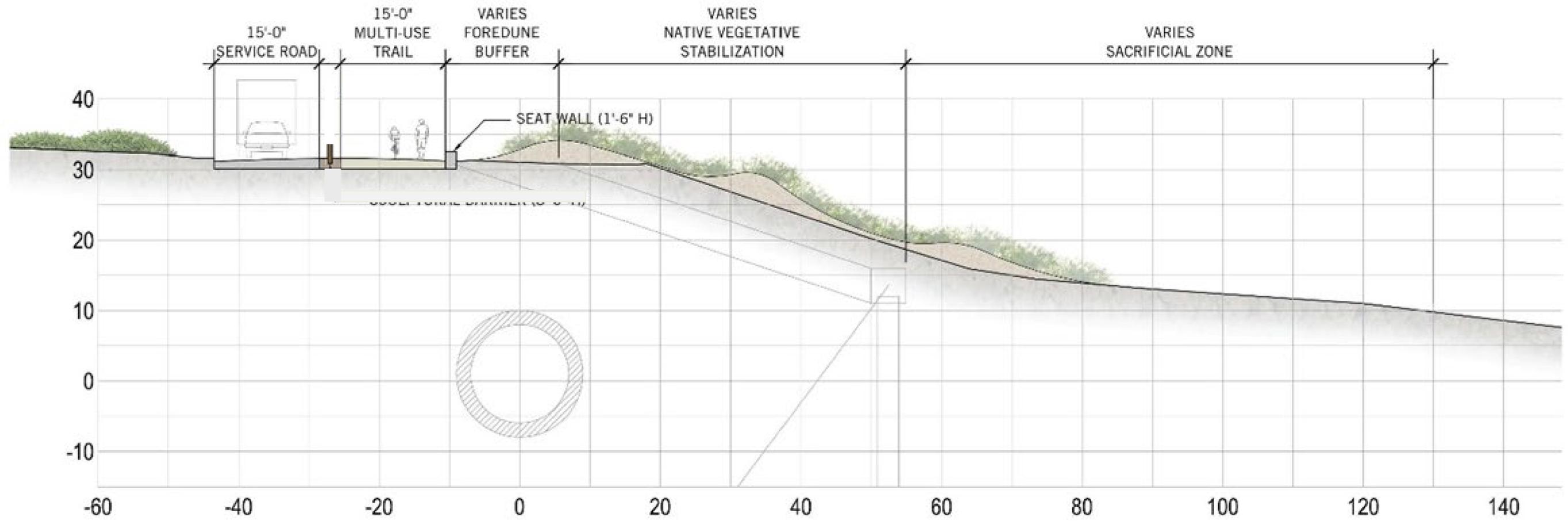
C.I.P. CONCRETE PAVING
(COLOR TYPE 1)



Trail Pinch Point



Trail Pinch Point - Section



Zoo Intersection



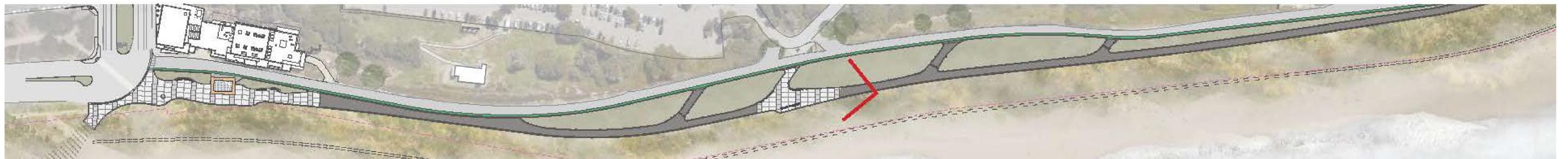
KEY

- 1 SHARED USE TRAIL
- 2 BIKE TRAIL
- 3 BOLLARDS
- 4 BENCH SEATING
- 5 STABILIZATION | REVEGETATION
- 6 OVERLOOK
- 7 MAINTENANCE ACCESS
- 8 SERVICE ROAD (ONE-WAY) & COMMUTER BIKE LANE (TWO-WAY)
- 9 BIORETENTION PLANTING

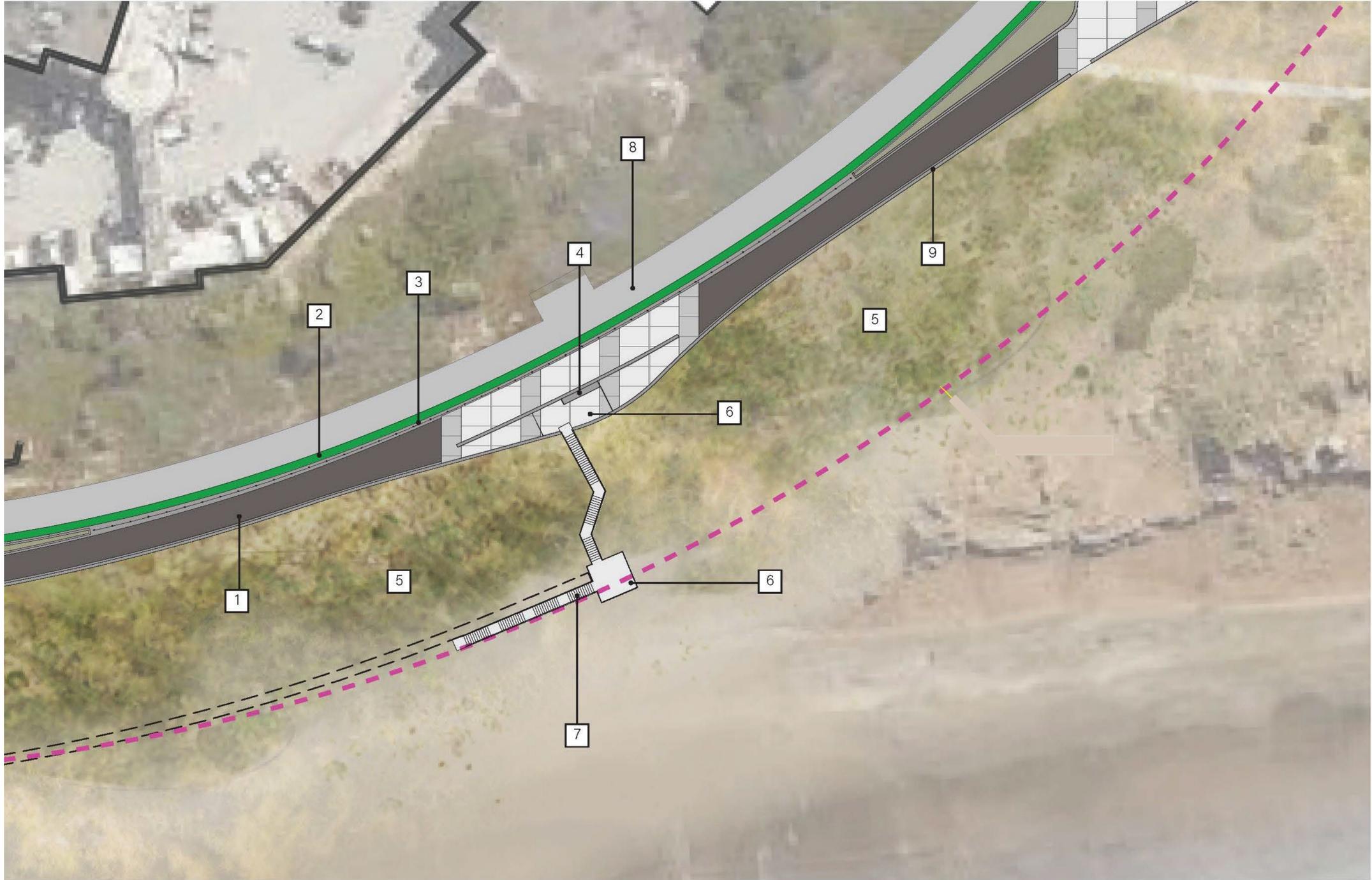
SCALE
1" = 50'



Trail – Zoo Intersection



Southern Beach Access



KEY

- 1 SHARED USE TRAIL
- 2 BIKE TRAIL
- 3 PINCH-POINT BARRIER
- 4 BENCH SEATING
- 5 STABILIZATION | REVEGETATION
- 6 OVERLOOK
- 7 BEACH ACCESS
- 8 SERVICE ROAD (ONE-WAY) & COMMUTER BIKE LANE (TWO-WAY)
- 9 SEATWALL

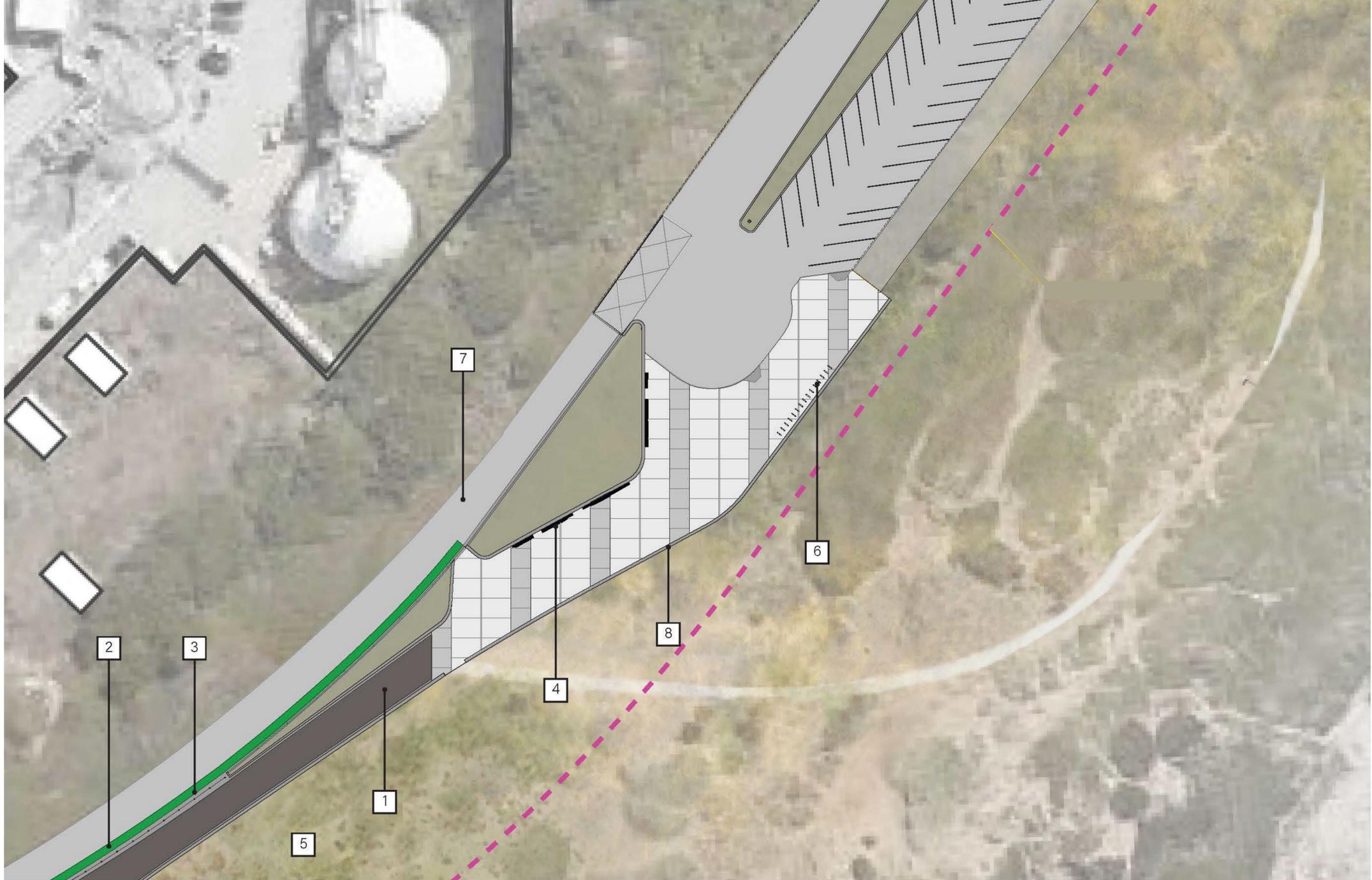
SCALE
1" = 50'




Southern Beach Access - Below 30' Elevation



Skyline Drop Off



- KEY**
- 1 SHARED USE TRAIL
 - 2 BIKE TRAIL
 - 3 PINCH-POINT BARRIER
 - 4 BENCH SEATING
 - 5 STABILIZATION | REVEGETATION
 - 6 BIKE PARKING
 - 7 SERVICE ROAD (ONE-WAY) & COMMUTER BIKE LANE (TWO-WAY)
 - 8 SEATWALL

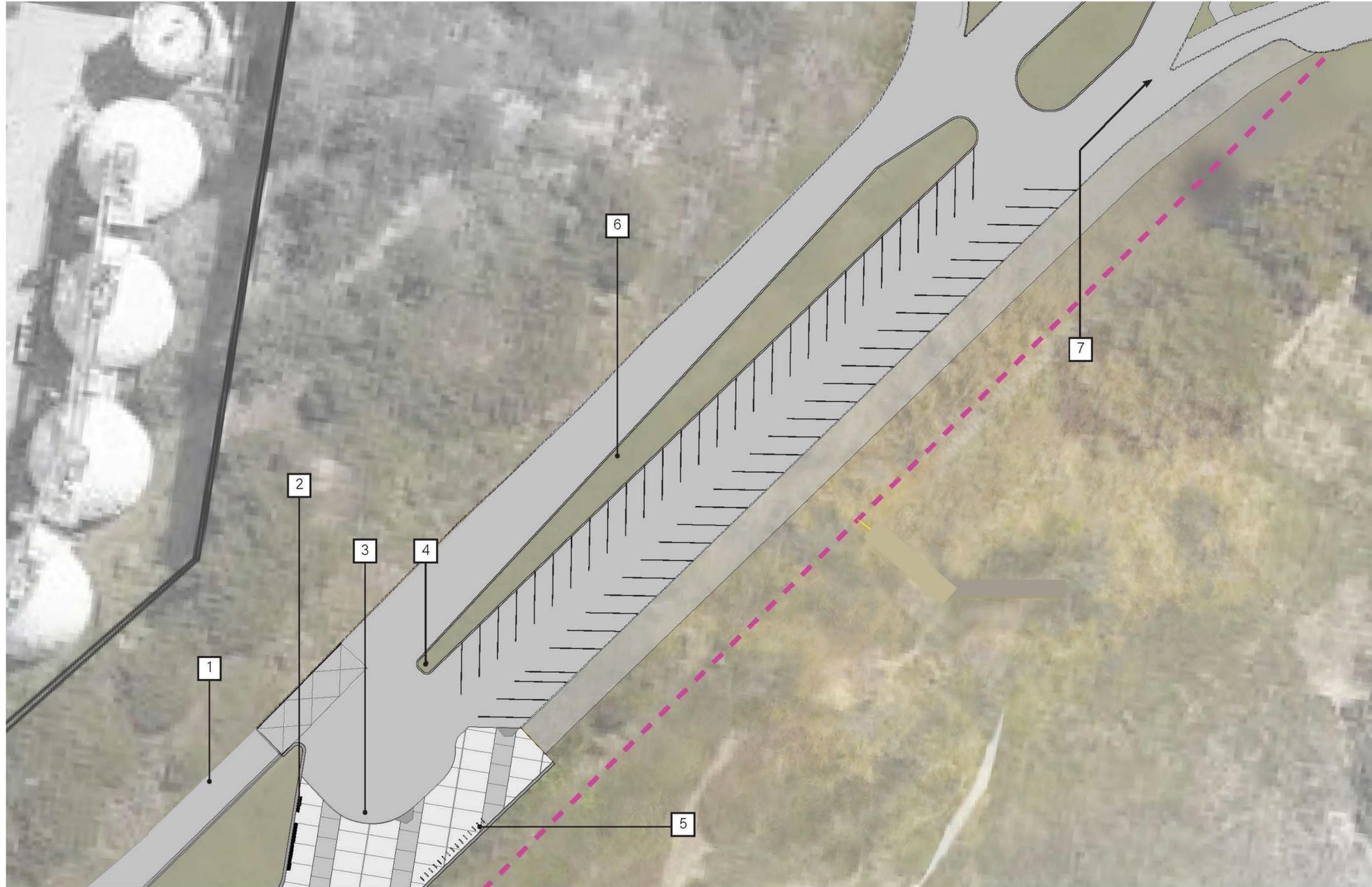
SCALE
1" = 50'




Trail – Skyline Entrance



Skyline Coastal Parking Lot



- KEY
- 1 SERVICE ROAD (ONE-WAY) & COMMUTER BIKE LANE (TWO-WAY)
 - 2 BENCH SEATING
 - 3 DROP-OFF ZONE
 - 4 POLE LIGHT
 - 5 BIKE PARKING
 - 6 PLANTED MEDIAN
 - 7 ACCESS TO SKYLINE BLVD

SCALE
1" = 50'




Public Art Opportunity - San Francisco Arts Commission

Current Status:

- RFQ closed March 25th
- 91 applications submitted
- Qualification Panel will be held Monday, April 25th
- Now scheduling Artist Review Panel 1 (slated for mid-May)

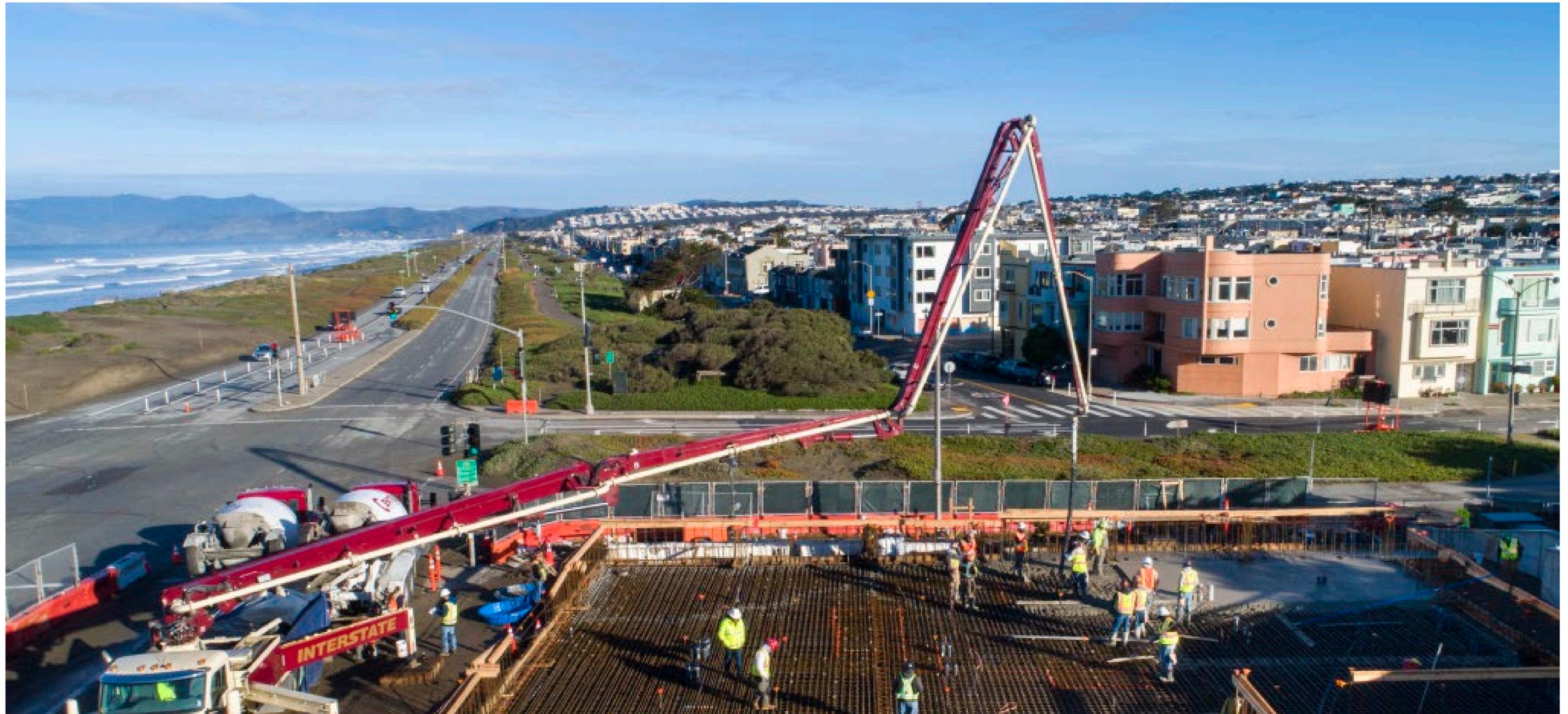


Ways to get involved!

- Attend artist review panels to observe selection process
- Attend SFAC public meetings to provide public comment related to the Ocean Beach Climate Change Adaptation Public Art Opportunity
- Review finalists' proposals and provide feedback

If you have questions or would like more information, please contact Project Manager, Aleta Lee (aleta.lee@sfgov.org).





Westside Pump Station Reliability Improvements Project

Vince Mazzaferro, SFPUC Communications



Ocean Beach Climate Change Adaptation Project

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Facility Improvements

Main Wet Weather Pumps

- Lack of redundancy, reduced efficiency

Bar Screens

- Lack of redundancy, frequent repair, inefficient screenings disposal process

Discharge Force Main Improvements

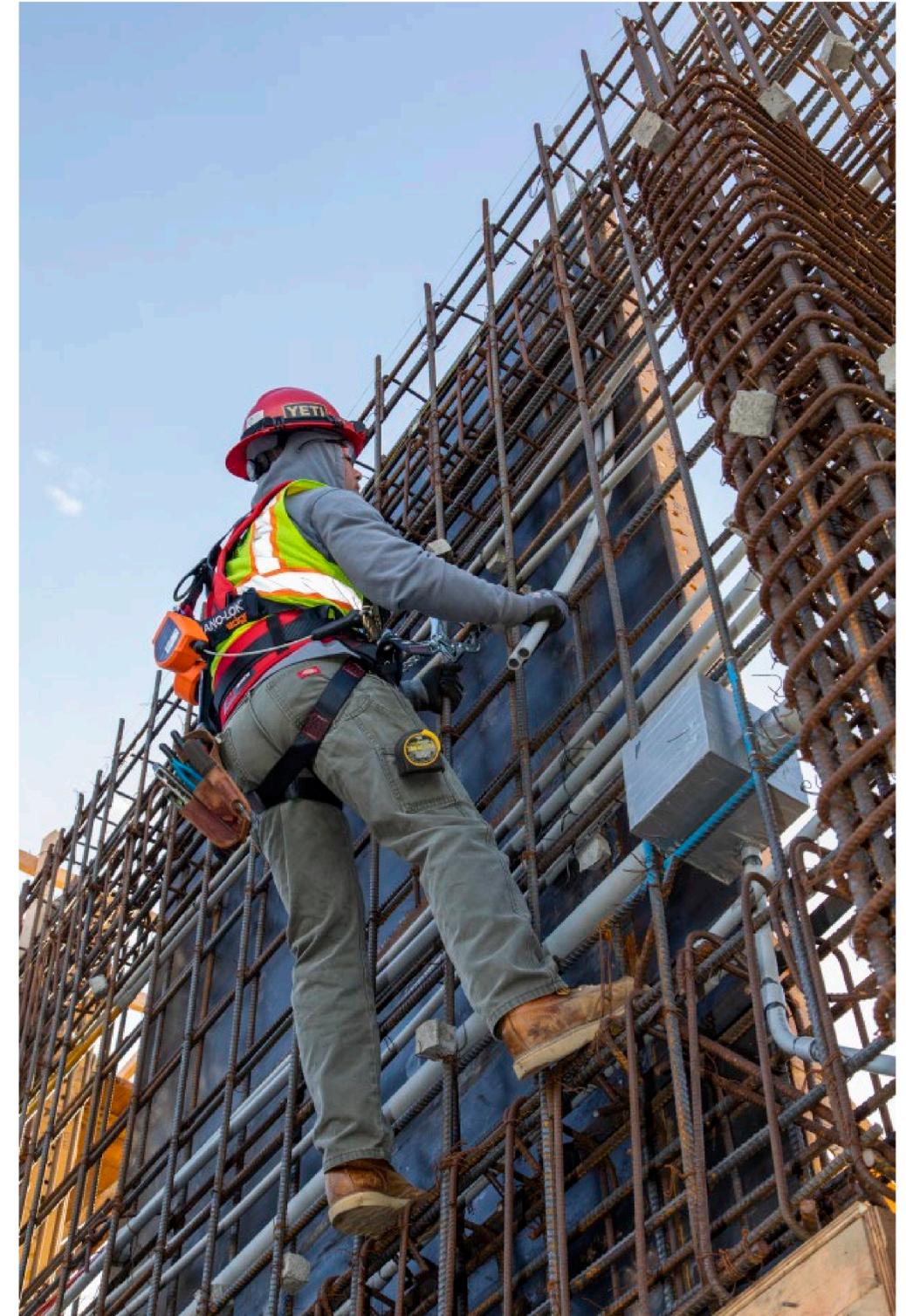
- Lack of flow capacity / reliability / redundancy

Electrical Power

- Single feed from PG&E is prone to outages, and has limited power capacity

Ventilation System Improvements

- Odor control system is unused, ventilation fans require frequent repair



Traffic Control Measures



Construction Schedule

Estimated Construction Schedule

2021	2022	2023	2024
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TARGET START SPRING 2021 – WINTER 2024
(SUBJECT TO CHANGE)





Westside Transportation System Updates

Timothy Doherty, SFMTA Policy and Long-Range Planning Manager



Ocean Beach Climate Change Adaptation Project

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Westside Transportation Projects

Golden Gate Park Access & Safety Program

Co-lead: SFMTA, Rec Park

Great Highway

Lead: Rec Park

Partner: SFMTA

Wawona & Vicente Stormwater & Water Main Replacement

Lead: PUC

Westside Pump Station

Lead: PUC

Ocean Beach Climate Adaptation Project

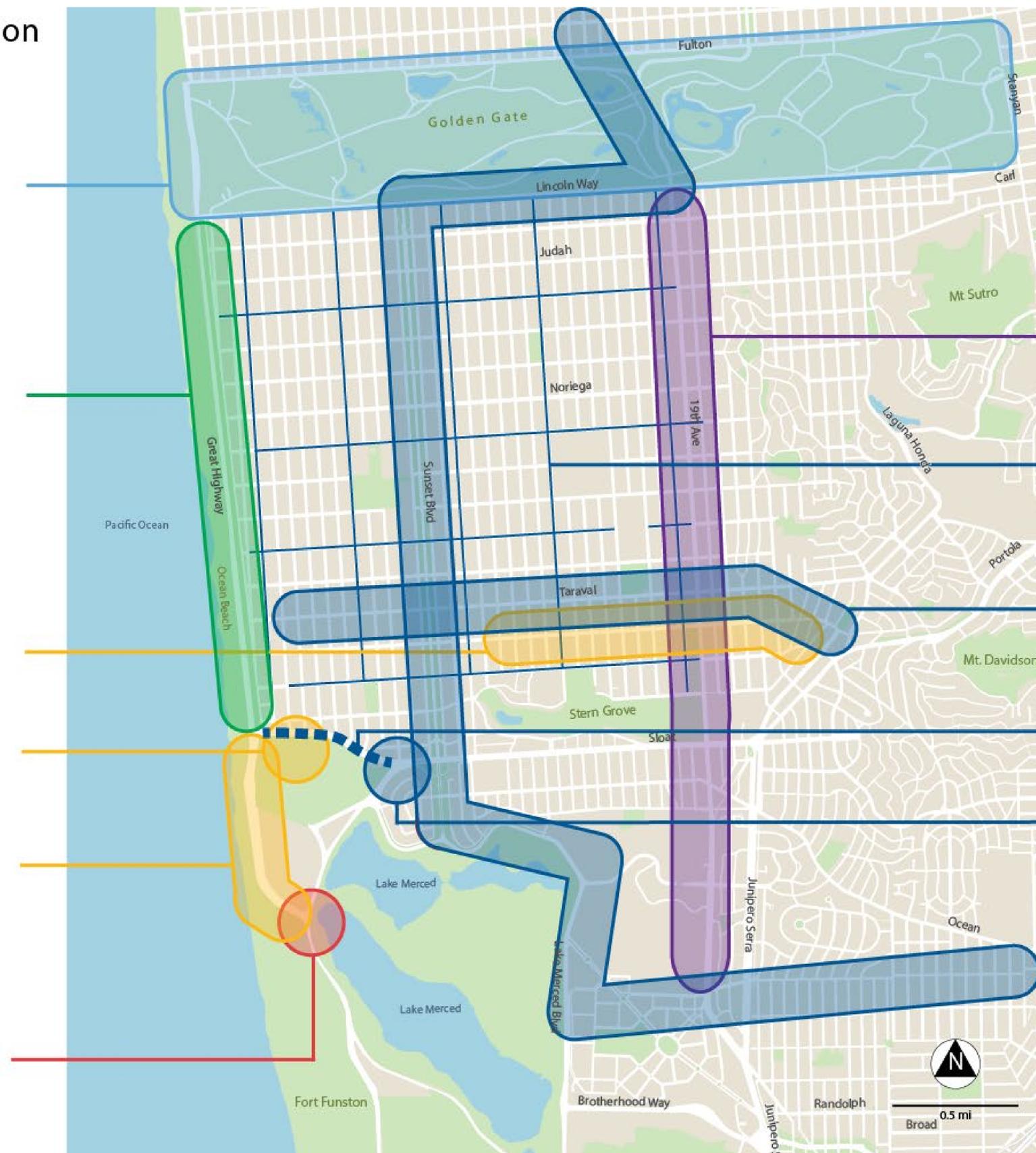
Lead: PUC

Partners: Rec Park, SFMTA, Public Works

Skyline Blvd - Great Hwy Signalization Project

Lead: Caltrans

Partners: SFMTA, Public Works



19th Avenue Improvements

Co-Lead: Public Works, Caltrans

Sunset Neighborways (Planned & Proposed)

Lead: SFMTA

L Taraval Improvement Project

Lead: SFMTA

Sloat Blvd Quick Build

Lead: SFMTA

Sloat-Skyline Intersection

Lead: SFMTA

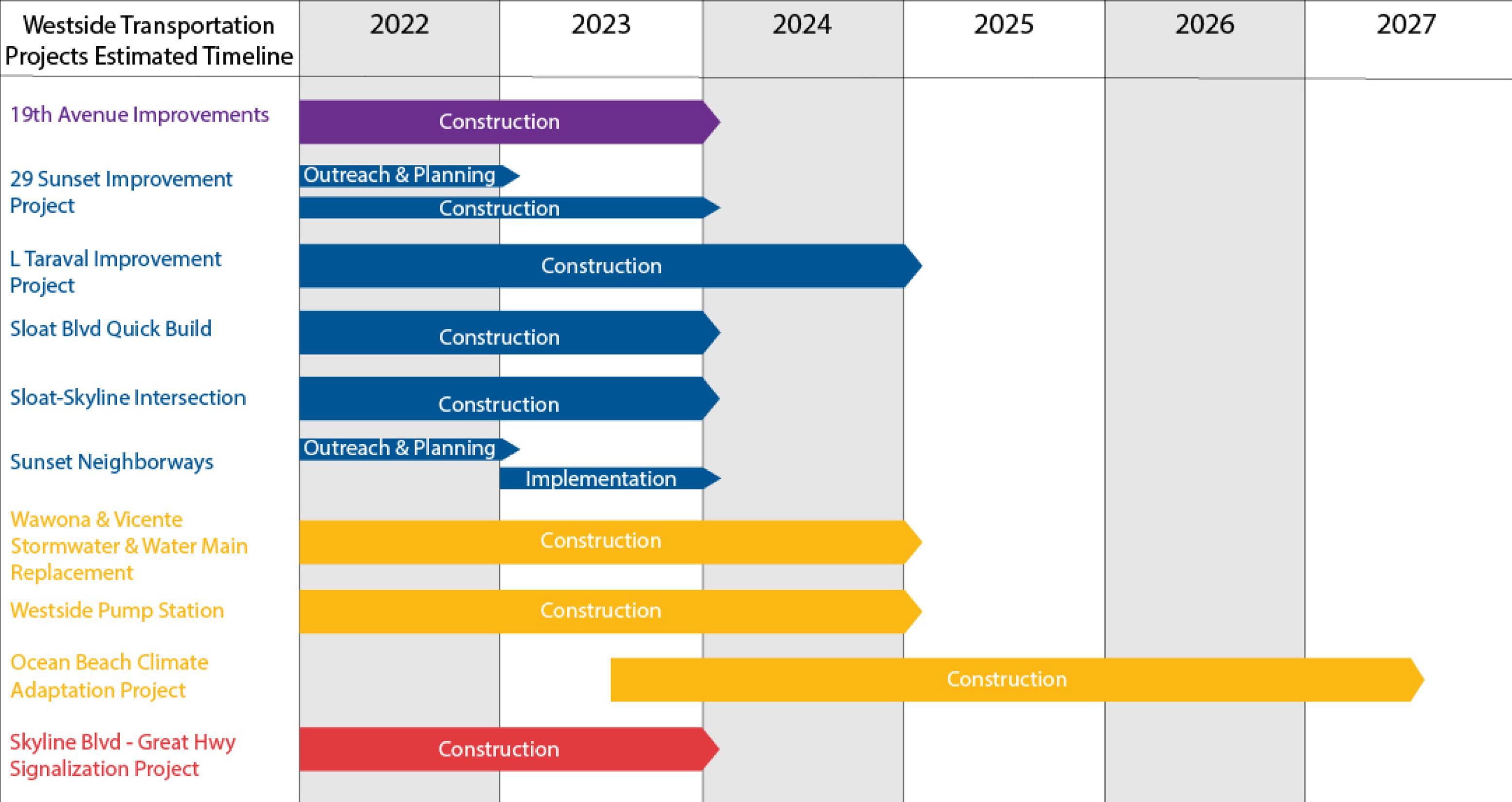
Partner: Caltrans

29 Sunset Improvement Project

Lead: SFMTA

Partner: Public Works





Q&A and Next Steps



Q&A Located at Bottom of Your Screen

Please enter all questions, comments, or feedback into the Q&A. Panelists will read and answer questions verbally as time permits.

If you are calling in by telephone:

- **Press *9** to raise your hand if you have a question or comment.
- The moderator will call on you to unmute.
- You will be prompted to **Press *6** to confirm unmute. Please limit questions to 2 minutes.

A summary of the Q&A, including questions that we are not able to answer this evening, will be posted on the SFPUC and Rec Park Ocean Beach Climate Change Adaptation Project websites.

Connect With Us

To receive updates on projects, or leave additional comments, connect with us at info@sfwater.org or (415) 554-3233

Information about the Climate Change Adaptation Project can be found at: sfpuc.org/oceanbeach

Information about the recreational and open space elements can be found at: bit.ly/soobproject

Information about the coordinated City effort to address erosion and climate change at Ocean Beach can be found at: sfplanning.org/ocean-beach

