Corte Madera Creek Flood Risk Management Project, Phase 1: Project Update

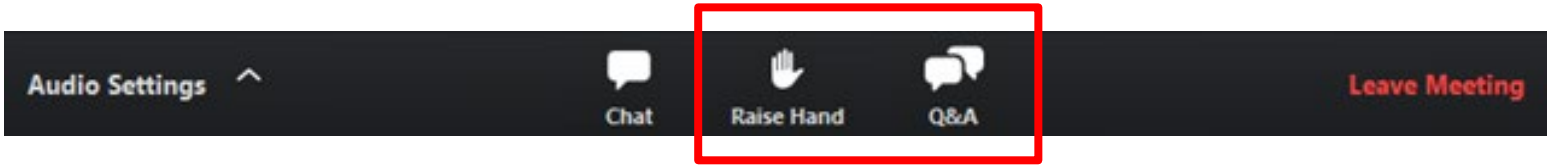
Town of Ross Workshop

June 30, 2020

MARIN COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT

How to Participate in the Workshop

- All attendees will be on mute until we open up the line for comments and questions
- To comment or ask questions, type your question into the question bar
- Only use the question bar to ask questions, the chat box has been disabled during this webinar
- To speak during the comment and question period, please click the hand icon to virtually raise your hand, and we will unmute you



How to Participate in the Workshop

- We will first address questions and comments received via the question bar. We will then open the line to comments and questions for individuals who have their hands raised.
- After the meeting you may email any comments/questions to cortemaderacreek@marincounty.org
- This meeting is being recorded and will be available at:

https://www.marinwatersheds.org/resources/projects/corte-madera-creek-flood-risk-management-project

Introduction

AGENDA

- How to Participate
- Project History
- Project Update
- Overview of Project Concepts – Focus on Ross Features
- Project Schedule
- Questions/Comments

MARIN COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT

Presenters

Joanna Dixon
Associate Engineer, Marin Flood Control and Water Conservation District
Project Manager for the Corte Madera Creek Flood Risk Management Project

Liz Lewis
Water Resources Manager, Marin Flood Control and Water Conservation District

Susanne Heim
Principal, Panorama Environmental, Inc.
Moderator and CEQA expert for the Corte Madera Creek Flood Risk Management Project

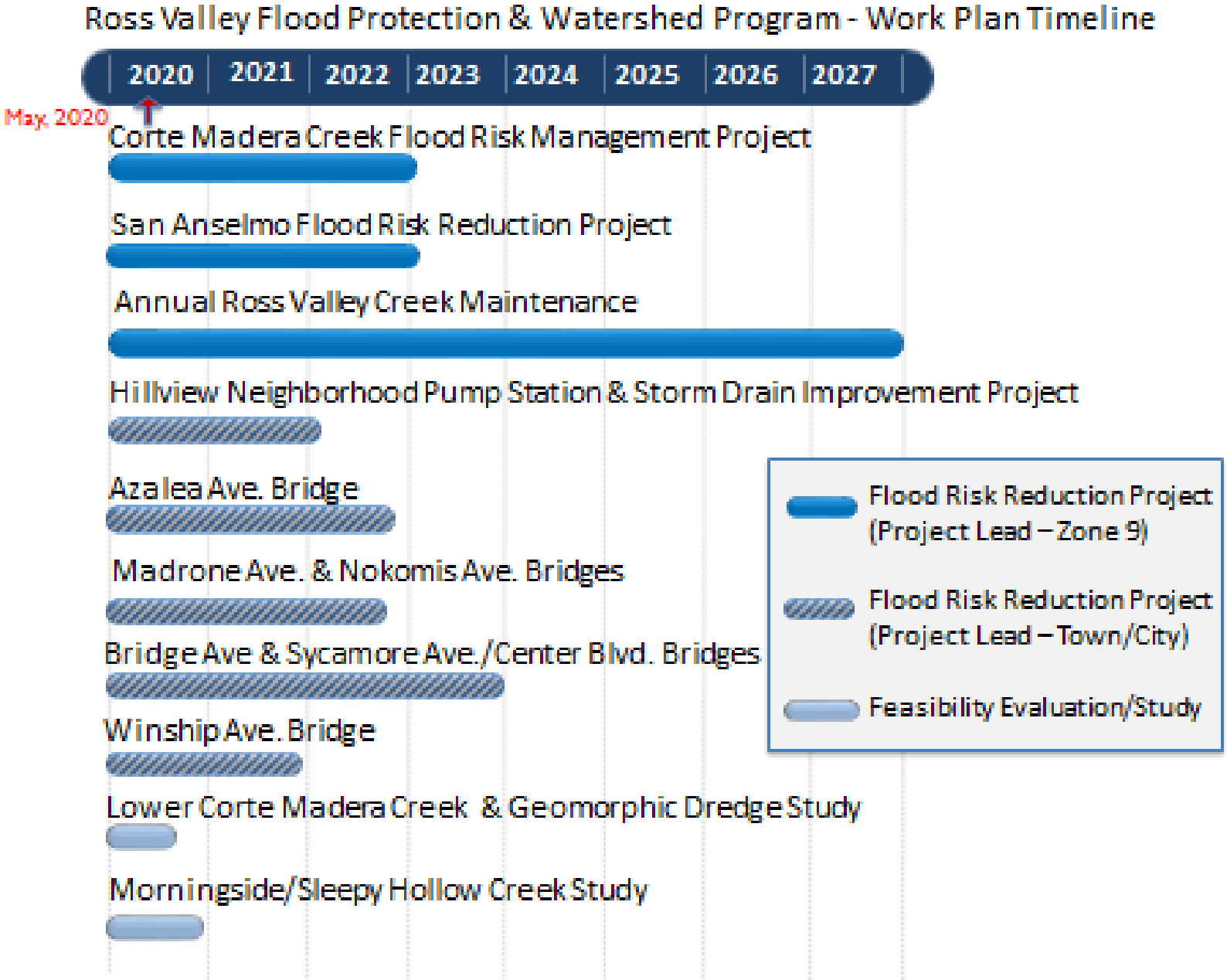
Raymond Wong
Senior Project Manager, GHD, Inc.
Design Engineer for the Corte Madera Creek Flood Risk Management Project

Jessica Hall
Landscape Architect, GHD, Inc.
Landscape Architect/Geomorphologist for the Corte Madera Creek Flood Risk Management Project

Purposes of Meeting

- Provide an update to the Corte Madera Creek Flood Risk Management Project and District activities in 2019 and 2020
- Introduce the project components currently in consideration in the Town of Ross
- Preview the Frederick Allen Park potential design concepts
- Solicit public input before starting the EIR process
- Provide a schedule on the project next steps

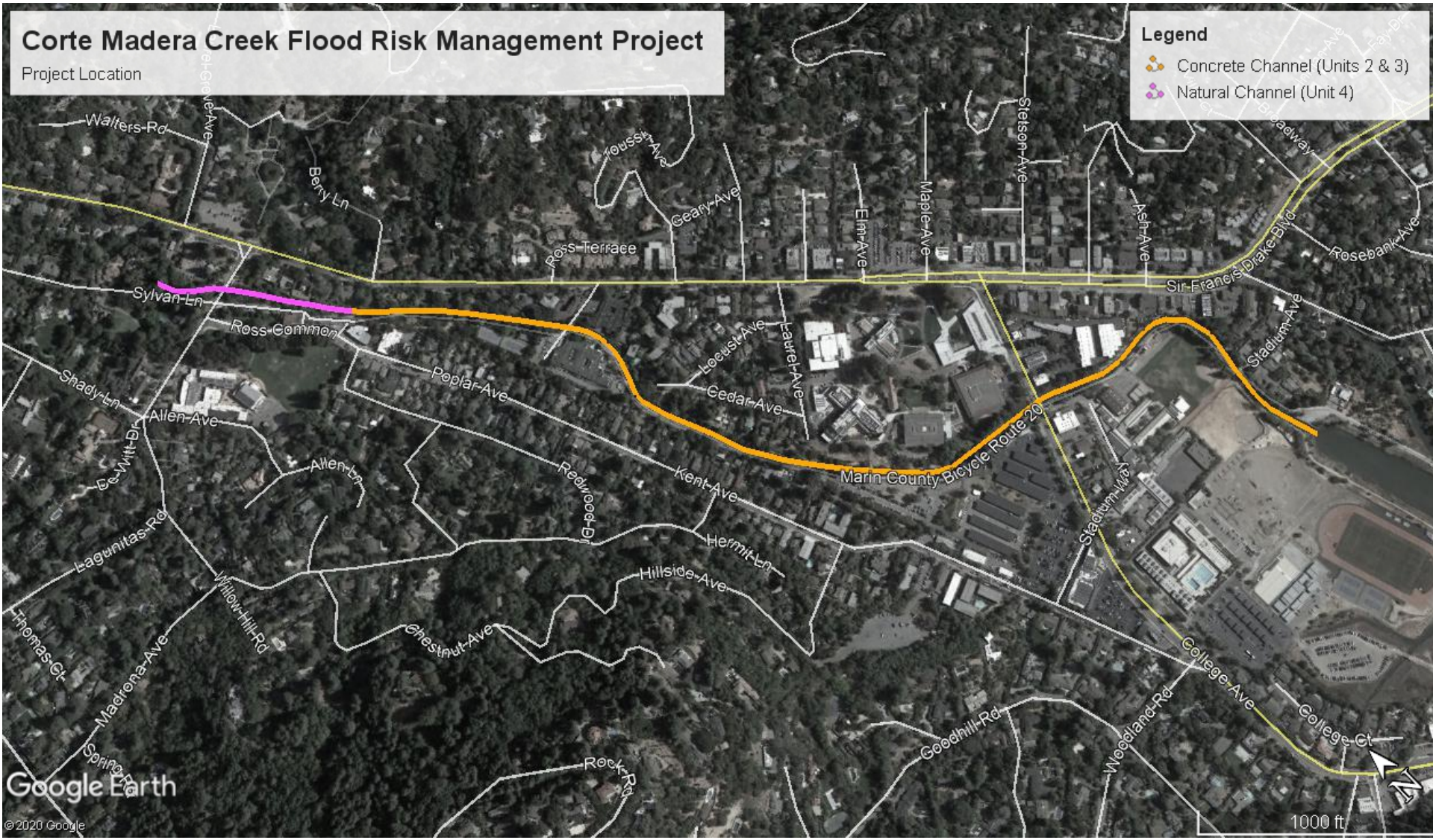
Ross Valley Watershed Program



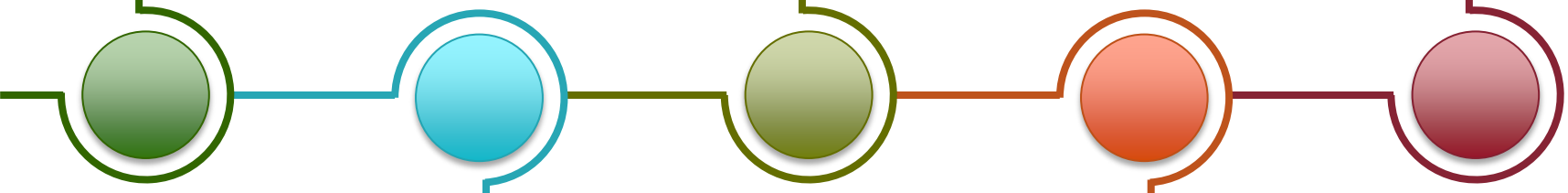
Project Update

MARIN COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT

Corte Madera Creek Flood Risk Management Project



Project History and Timeline



2018

Draft EIS/EIR

USACE publishes Draft EIS/EIR. Substantial public comments are filed.

2019

District-Led Project

District and USACE cancel the agreement. The District conduts new studies and revises design

2020

Project Design and EIR

Conduct project outreach; continue design refinement and studies; begin EIR process

2021

Project Permits and Approvals

Obtain permits from state and federal agencies; publish Draft and Final EIR; County and Town approve project

2022

Construct Project

Draft Project Objectives

- **FLOOD RISK REDUCTION**

Reduce overall flood inundation extent and depth in the Town of Ross and Kentfield areas.

- **ENVIRONMENTAL BENEFITS**

Improve fish passage, natural creek processes, and fish and riparian habitat adjacent to the creek.

- **PUBLIC ACCESS AND RECREATIONAL QUALITY**

Maintain public access along the creek via the multi-use path and enhance the recreational experience and amenities along the creek corridor to meet Town of Ross and Kentfield area community needs.

- **OPERATIONAL RELIABILITY**

Improve operational reliability and reduce long-term maintenance costs through increasing maintenance access, improving channel stability, and protecting existing utilities.

- **REGULATORY COMPLIANCE**

Comply with local, state, and federal environmental laws and regulations.

- **FISCALLY RESPONSIBLE**

Implement a flood risk reduction project that can be accomplished with currently available local and grant funding and reasonably foreseeable grant funding opportunities.

Recent Work Completed by the District

Property Boundaries & Preliminary Hydraulic Modeling

- Surveys confirmed private property and public right of way boundaries
- Flood plain inundation mapping updated flood reduction benefits

Granton Park Drainage

- Pump station design was created to address interior drainage issues

Concrete Channel Material Testing

- Material testing demonstrated modifications can be made

Improve fish passage for endangered and threatened species

- Fish passage assessment revealed additional investment in improved resting pools required

Recent Work Completed by the District

Construction Planning

- Construction methods, schedule, and planning level estimate
- Lower COM concrete channel removal design updated
- Utilities constraints analysis updated costs and planning

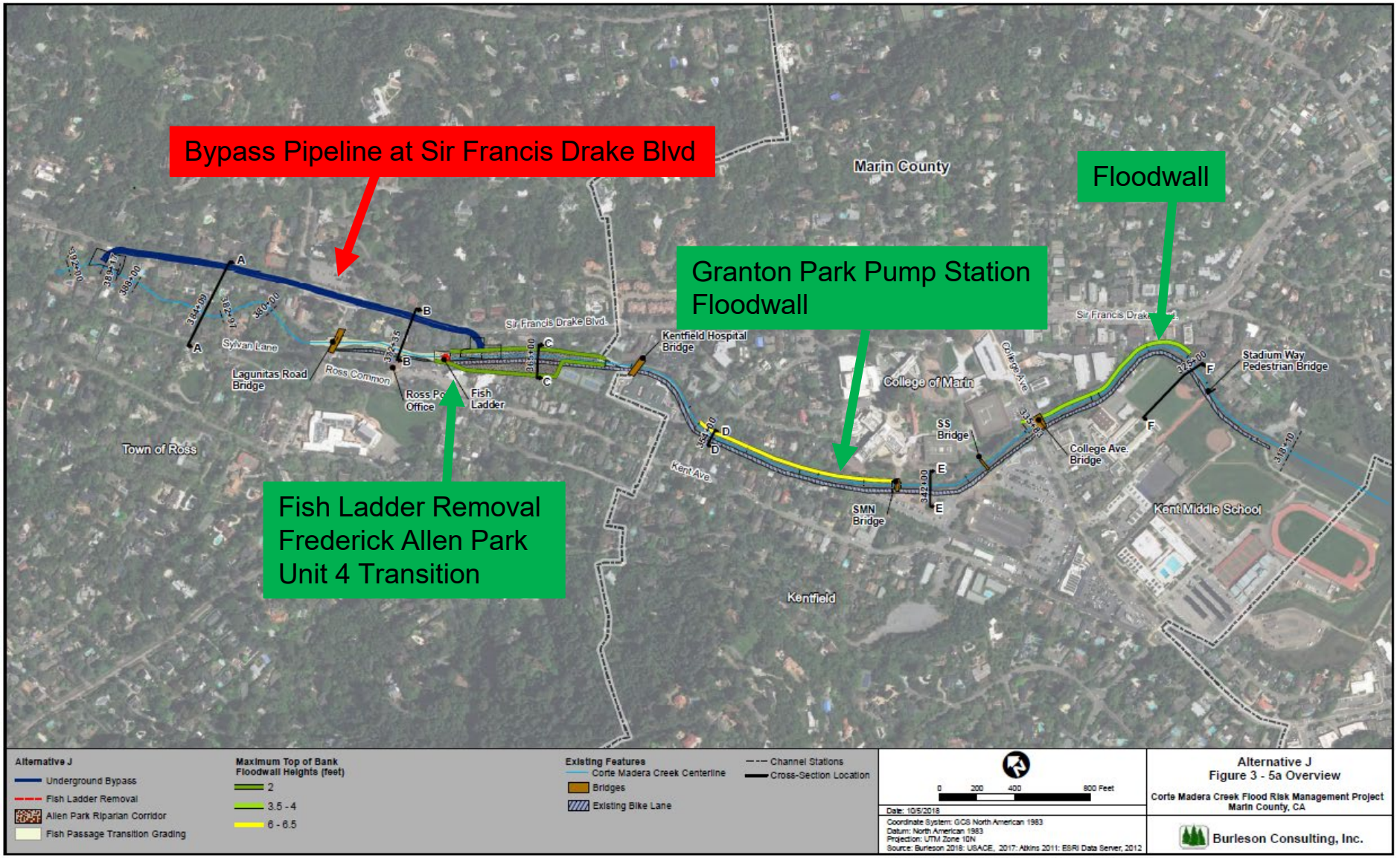
Channel Construction and Maintenance Access

- Concrete channel access ramp preliminary design completed to improve maintenance practices and reduce construction costs for all future projects

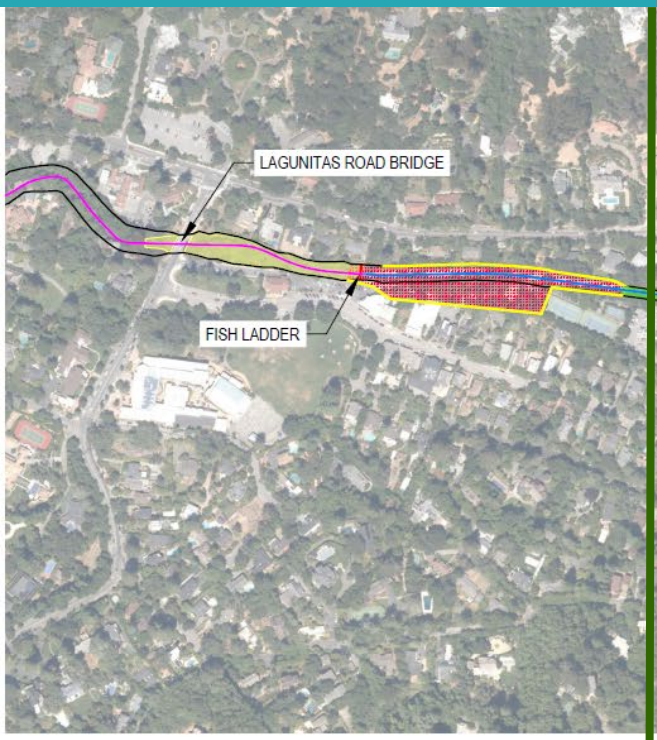
Frederick Allen Park Design Concept

- Tree survey cataloged health of existing trees
- Based on stakeholder feedback created improved Allen Park flood plain design concepts

Previous USACE-led Project (CLOSED) – Alternative J

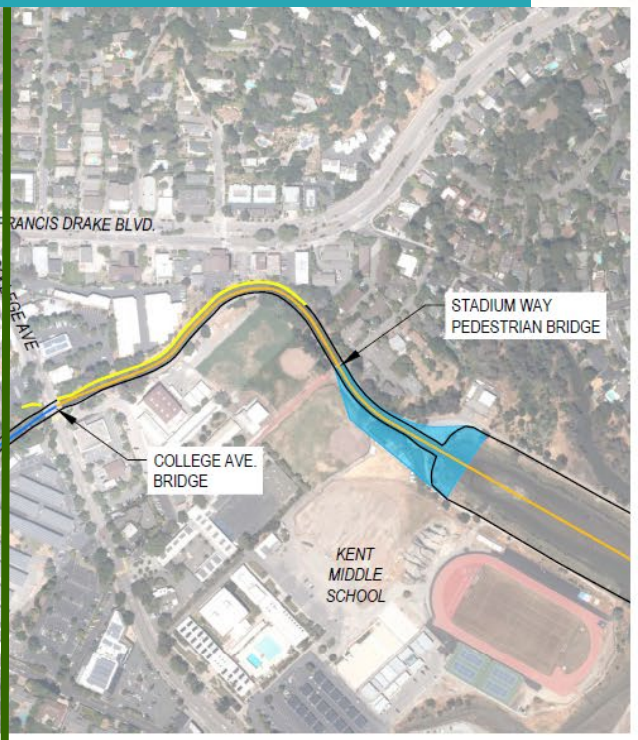


Overview of Project



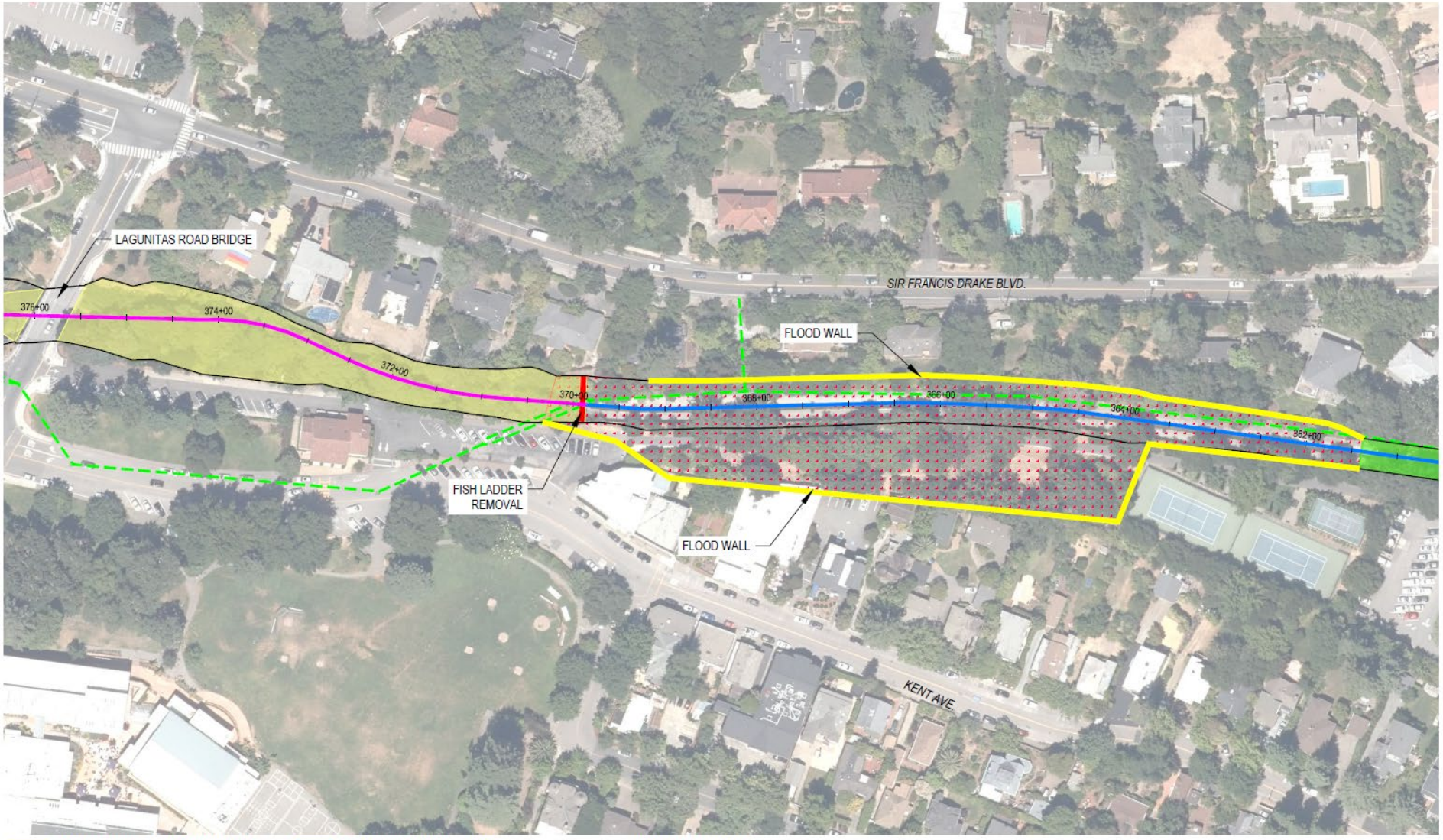
- Unit 4 channel improvements and fish ladder removal
- Frederick Allen park floodplain restoration

- Granton park floodwall
- Maintenance access ramp
- Granton park stormwater pump station
- Concrete channel fish pool improvements



- College Ave and downstream floodwall
- Lower College of Marin Reach Concrete Channel Removal

Unit 4 and Frederick Allen Park



FISH PASSAGE TRANSITION GRADING
ALLEN PARK RIPARIAN CORRIDOR
NEW FISH POOLS
LOW CHANNEL CONCRETE REMOVAL
STORM DRAIN PUMP STATION
CHANNEL ACCESS RAMP
(E) RVSD SAN. SEWER
FLOOD WALL
USACE PROJECT UNIT 2
USACE PROJECT UNIT 3
USACE PROJECT UNIT 4
CHANNEL BANK

1"=100'

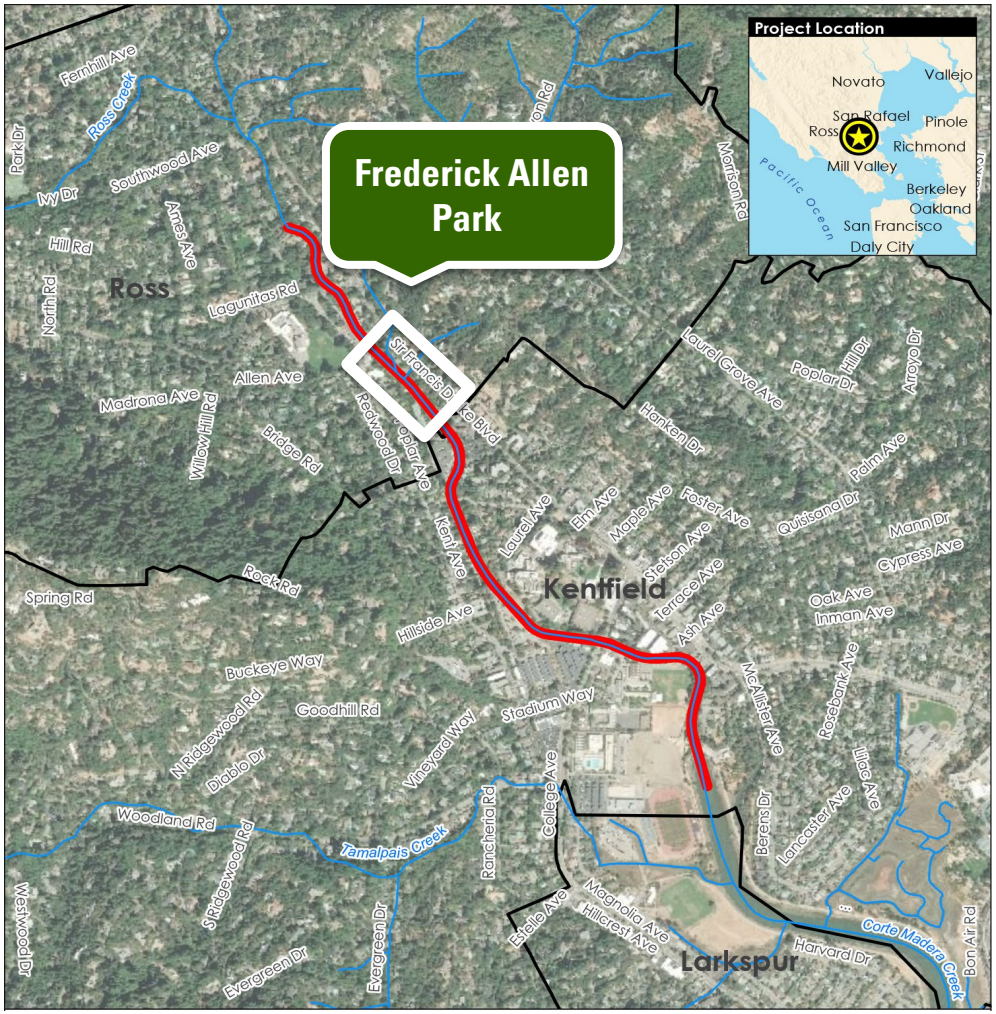
PLAN NORTH

GHD

MARIN COUNTY FLOOD CONTROL
Corte Madera Creek
Flood Risk Management Project - Phase 1
Project Components
Allen Park Area

Job Number 11188581
Revision
Date Nov. 2019
Figure 01b

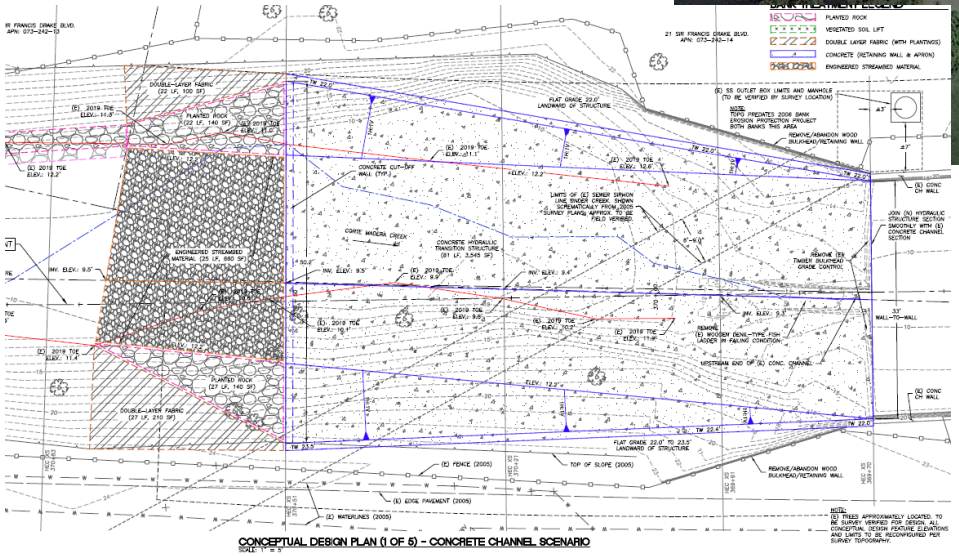
Current Project: Frederick Allen Park Design Concepts



MARIN COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT

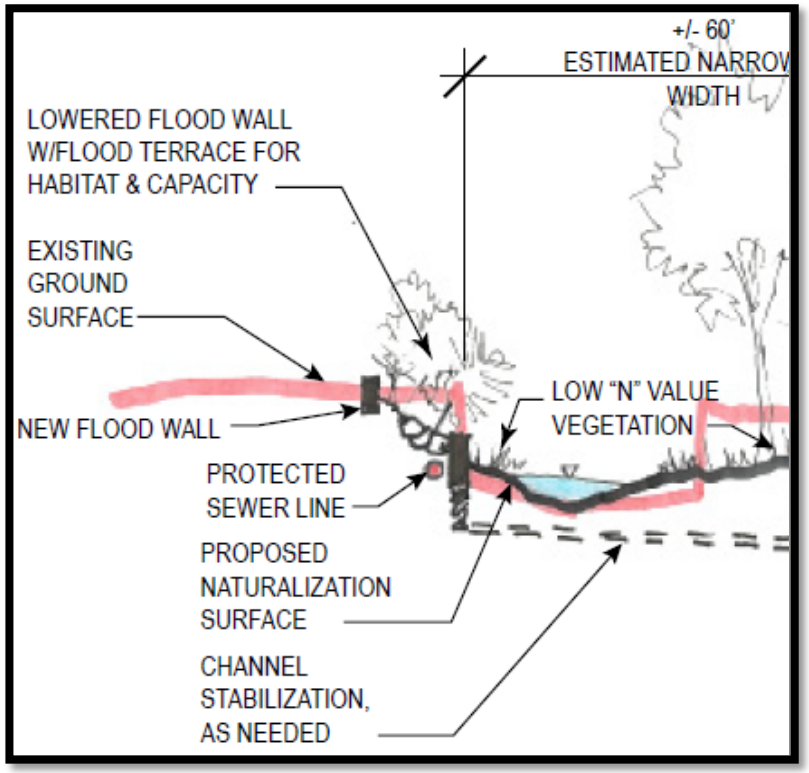
Range of options in consideration at Frederick Allen Park

- Remove Unit 4 fish ladder

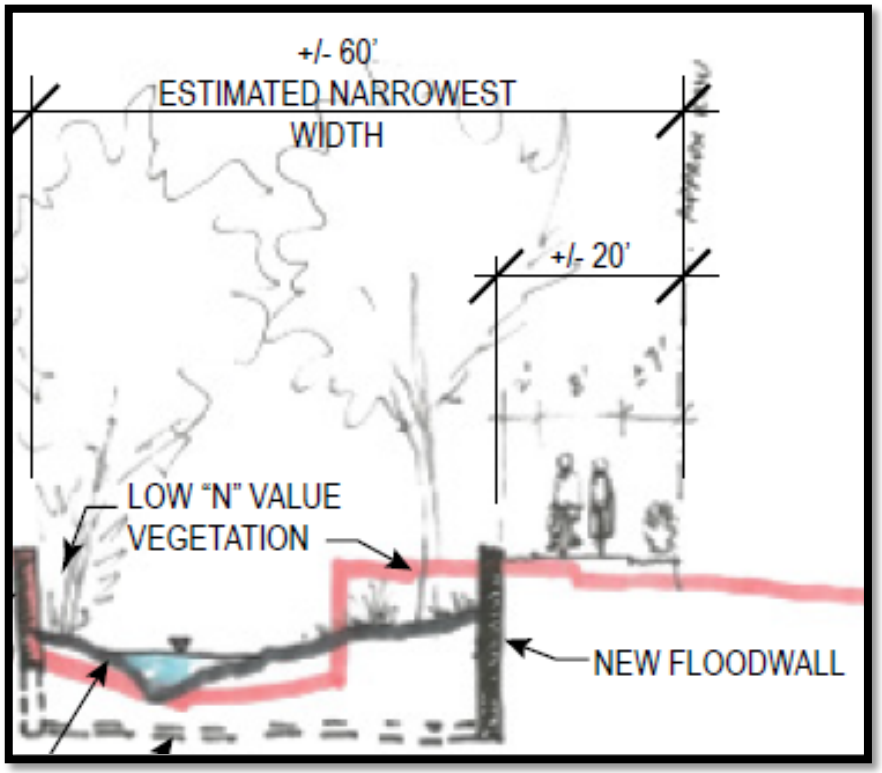


Range of options in consideration at Frederick Allen Park

- Restore left bank and right bank to natural creek bank



Left Bank restoration option

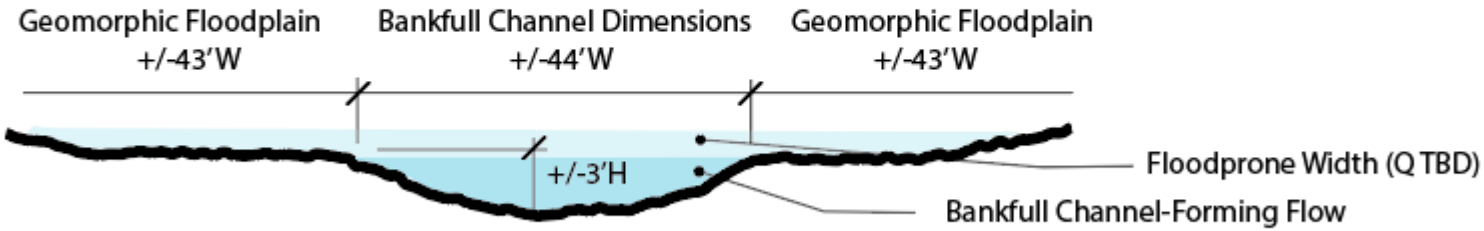


Right Bank restoration options

Range of options to be considered at Frederick Allen Park

Design Standard: Geomorphic Criteria

Dynamically stable channel: erosion and deposition are approximately balanced
Reduced instability/scour



Basis of Design - Collins, Laurel and Leventhal, Roger. Regional Curves of Hydraulic Geometry for Wadeable Streams in Marin and Sonoma Counties, San Francisco Bay Area Data Summary Report, 2013.

Relocated Left Bank - Bankfull Channel

Sewer line vulnerable
No Geomorphic Floodplain
Higher Water Surface Elevation

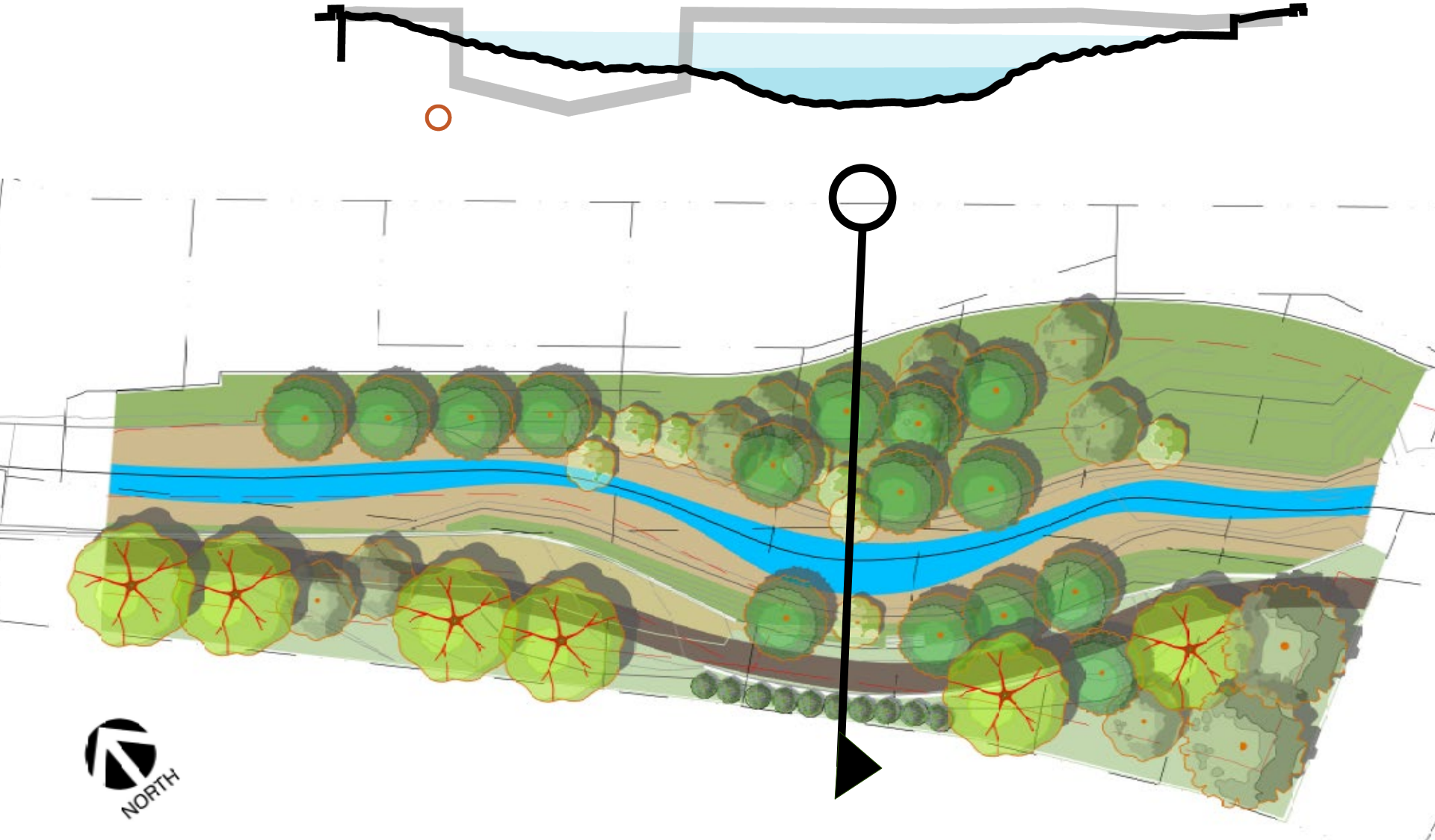
Relocated Left Bank - Reduced Channel Width

Reduced Bankfull channel capacity
Higher Water Surface Elevation
Potentially Unstable (Erosion)

Range of options in consideration at Frederick Allen Park

Relocated Left + Right Bank - Bankfull Channel + Floodplain

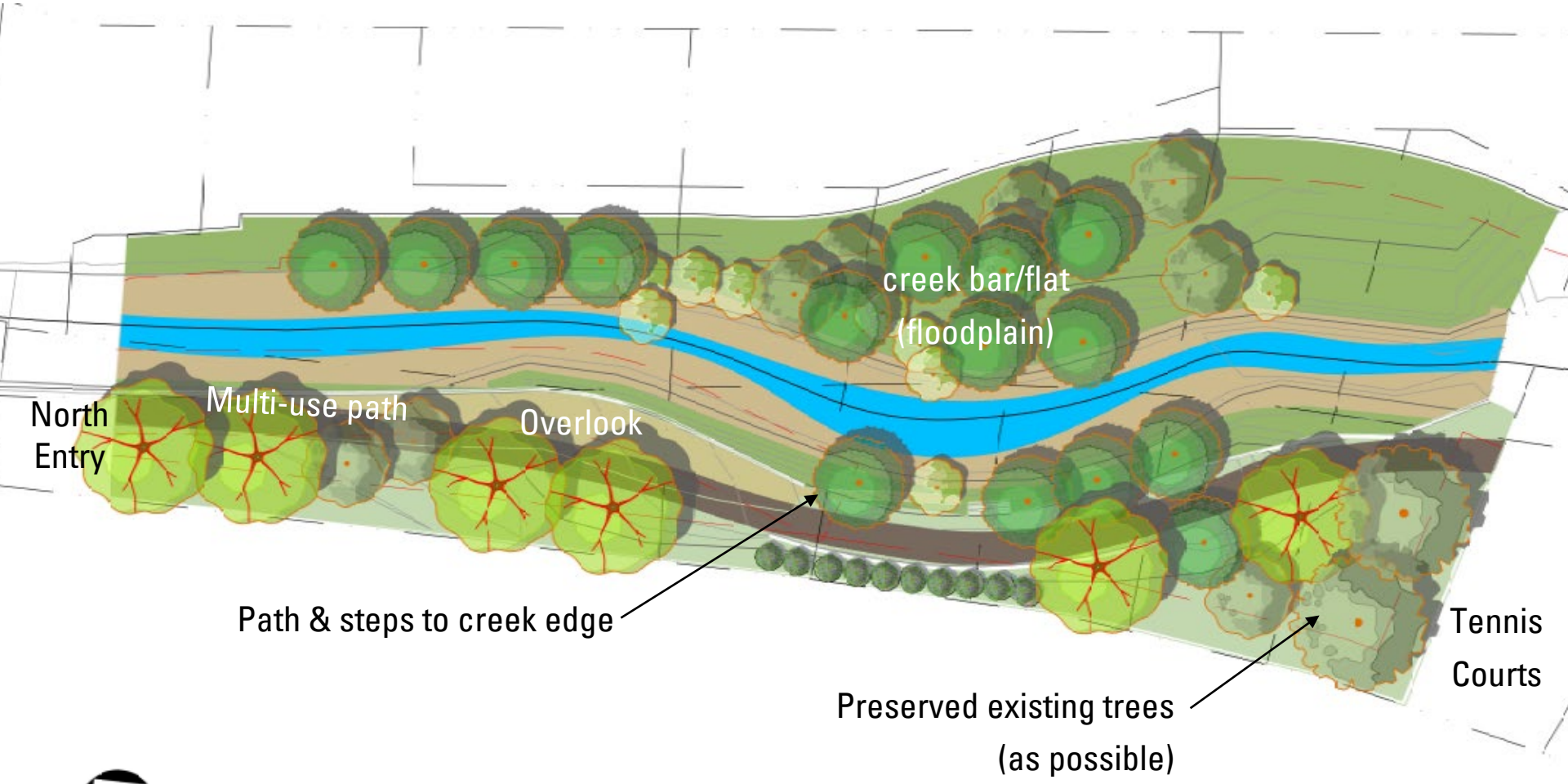
More stable channel
Sewer line protected



Frederick Allen Park

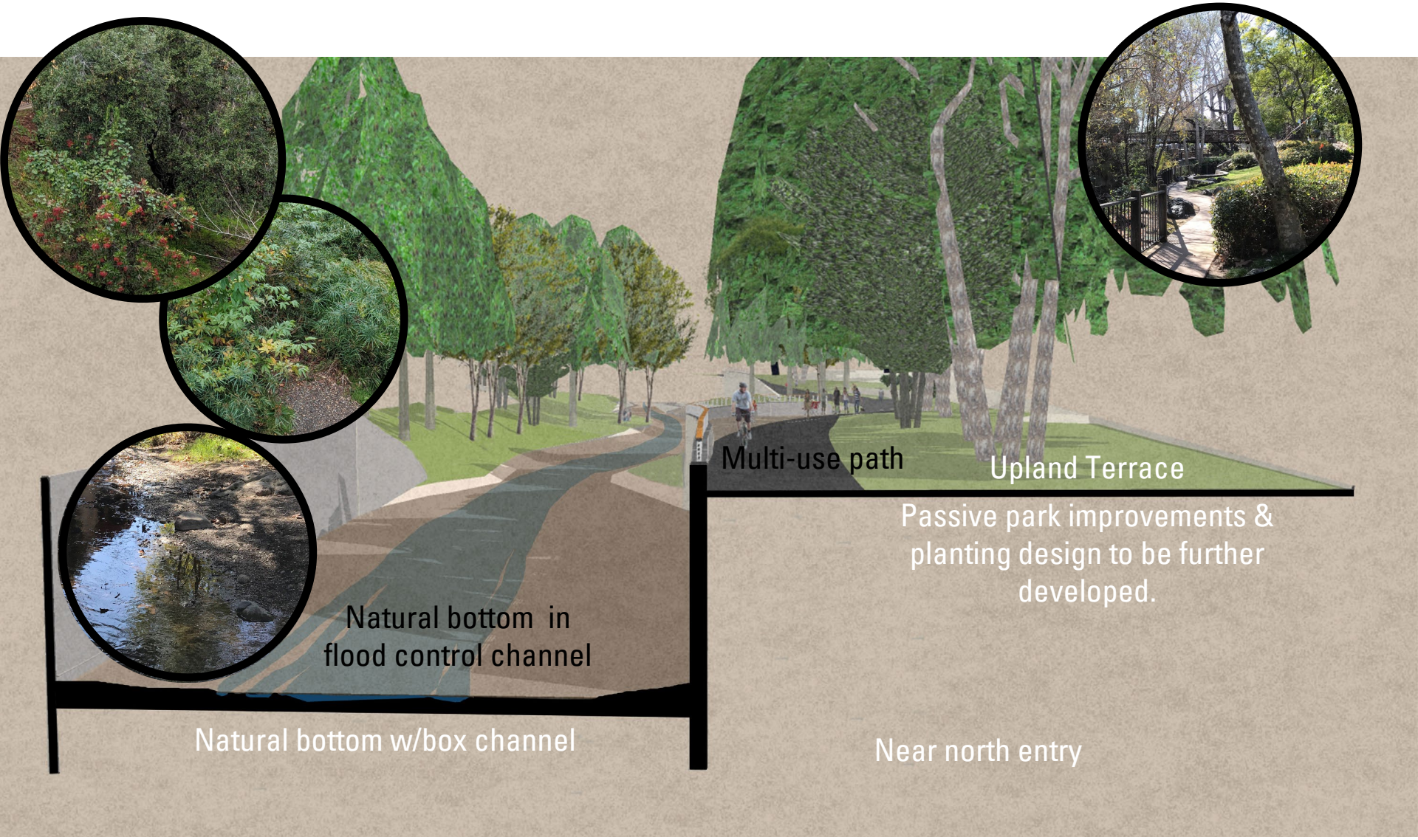
ALLEN PARK / CORTE MADERA CREEK CONCEPT

Bringing park and creek together



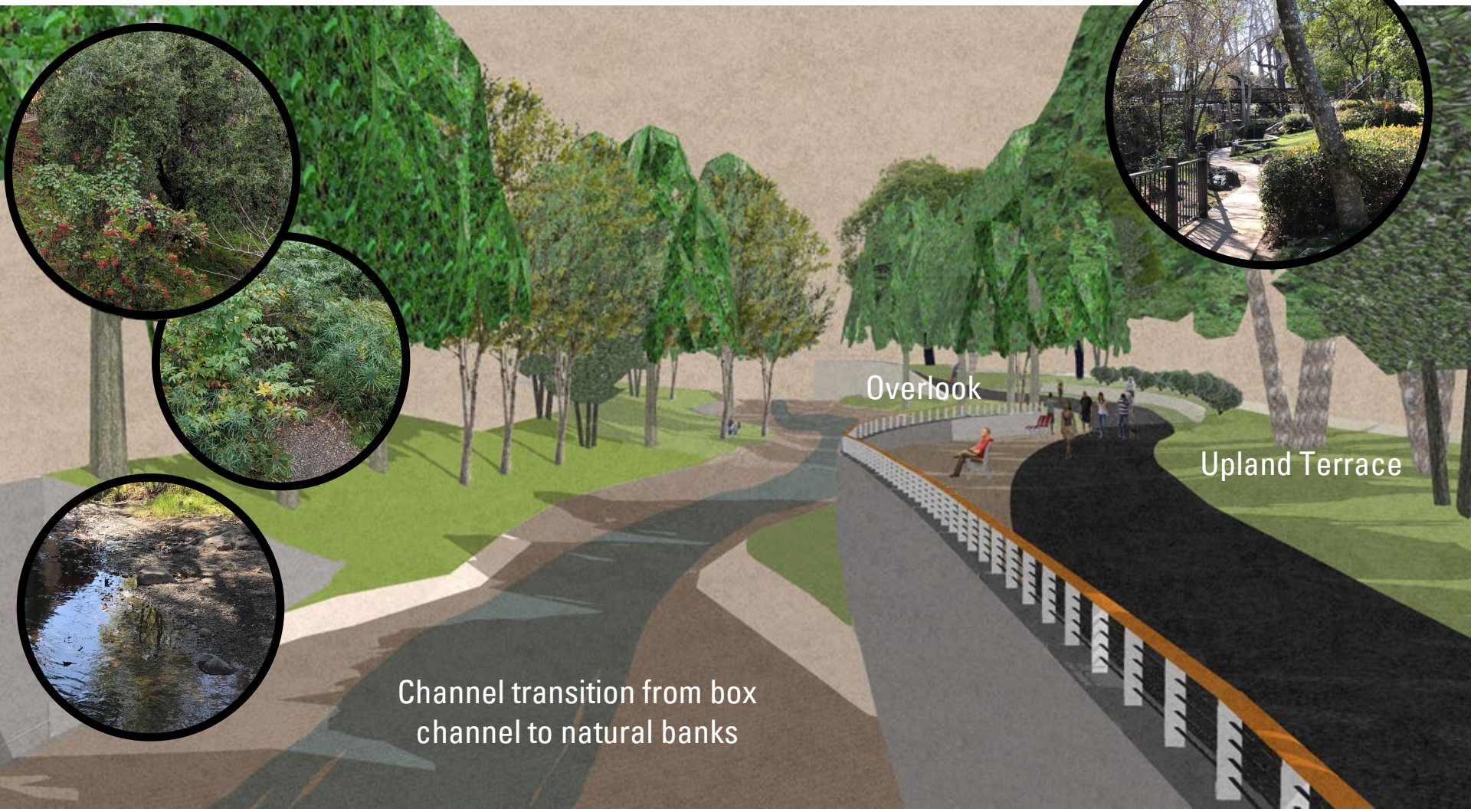
Frederick Allen Park

A walk through the park: sectional view at north entry



Frederick Allen Park

Approaching the overlook, looking downstream

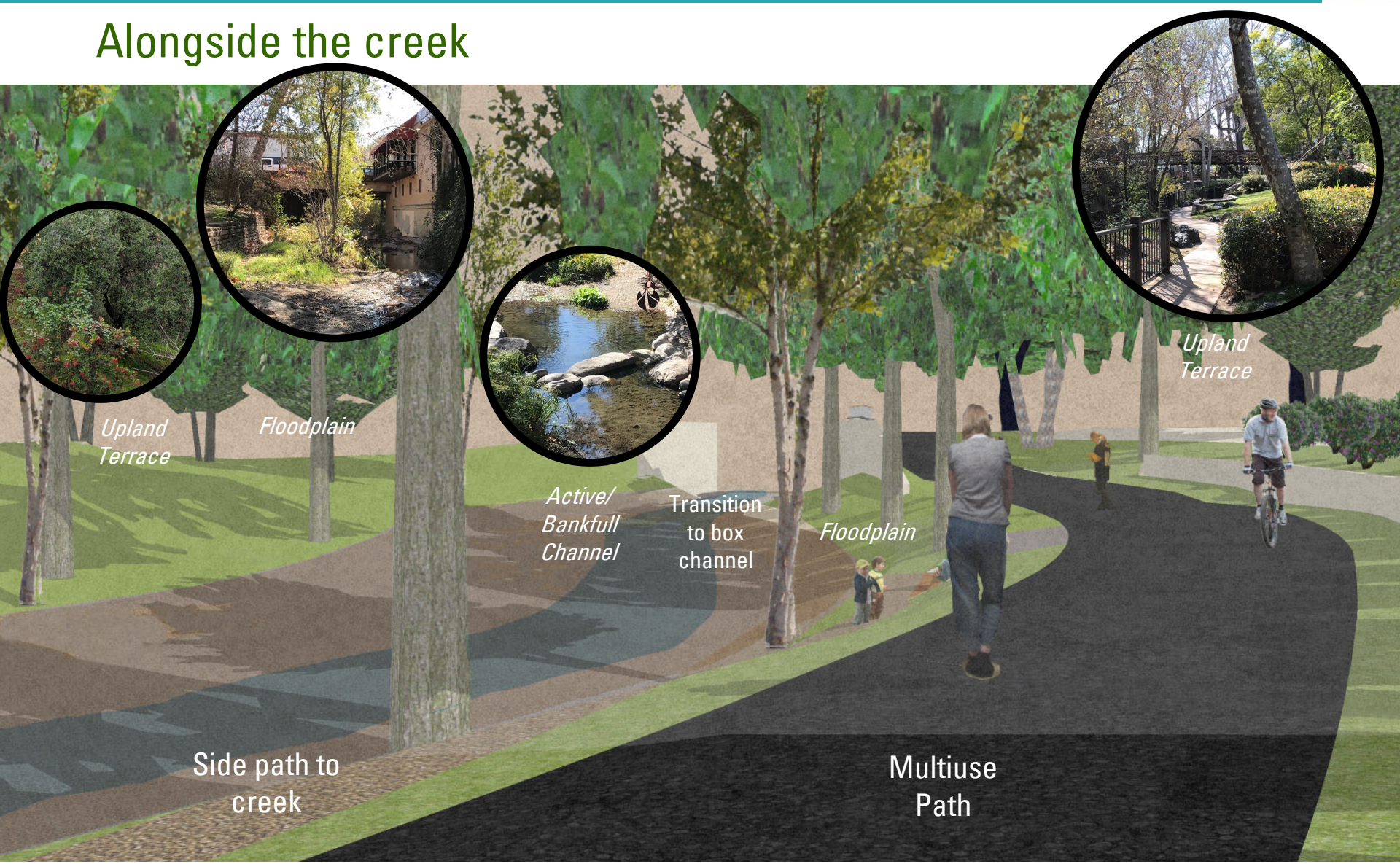


Frederick Allen Park

At the overlook

Frederick Allen Park

Alongside the creek



Frederick Allen Park

Section at widest part of creek

Frederick Allen Park

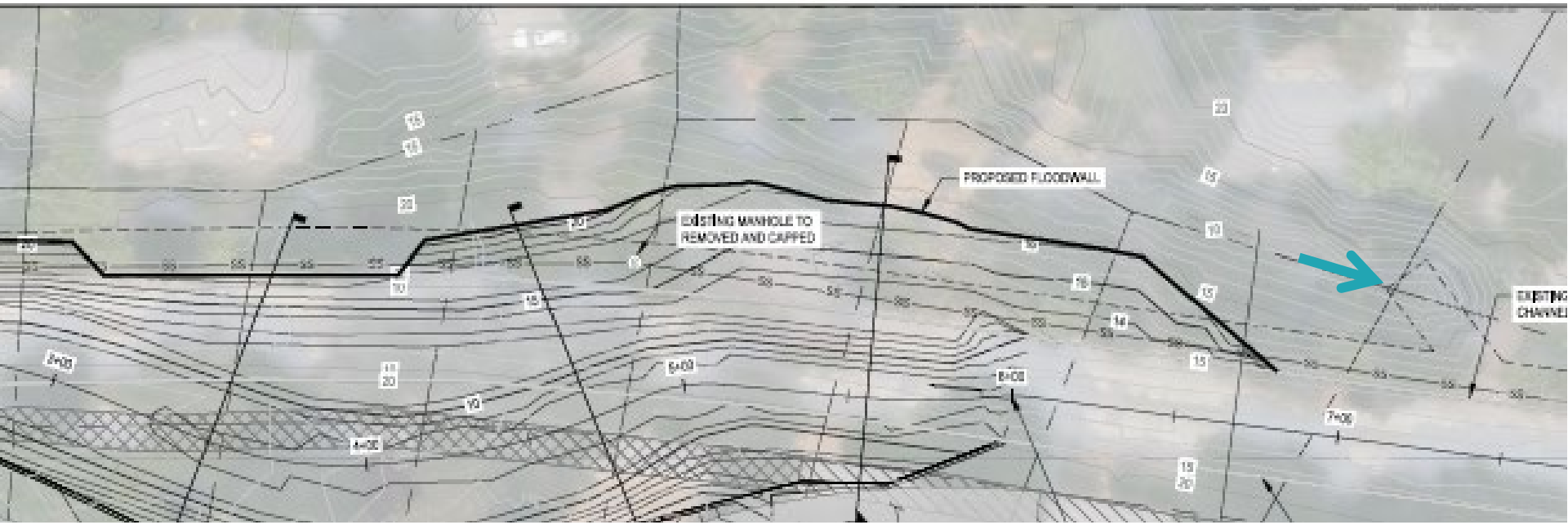
Looking back upstream

Frederick Allen Park

South end of park, looking upstream

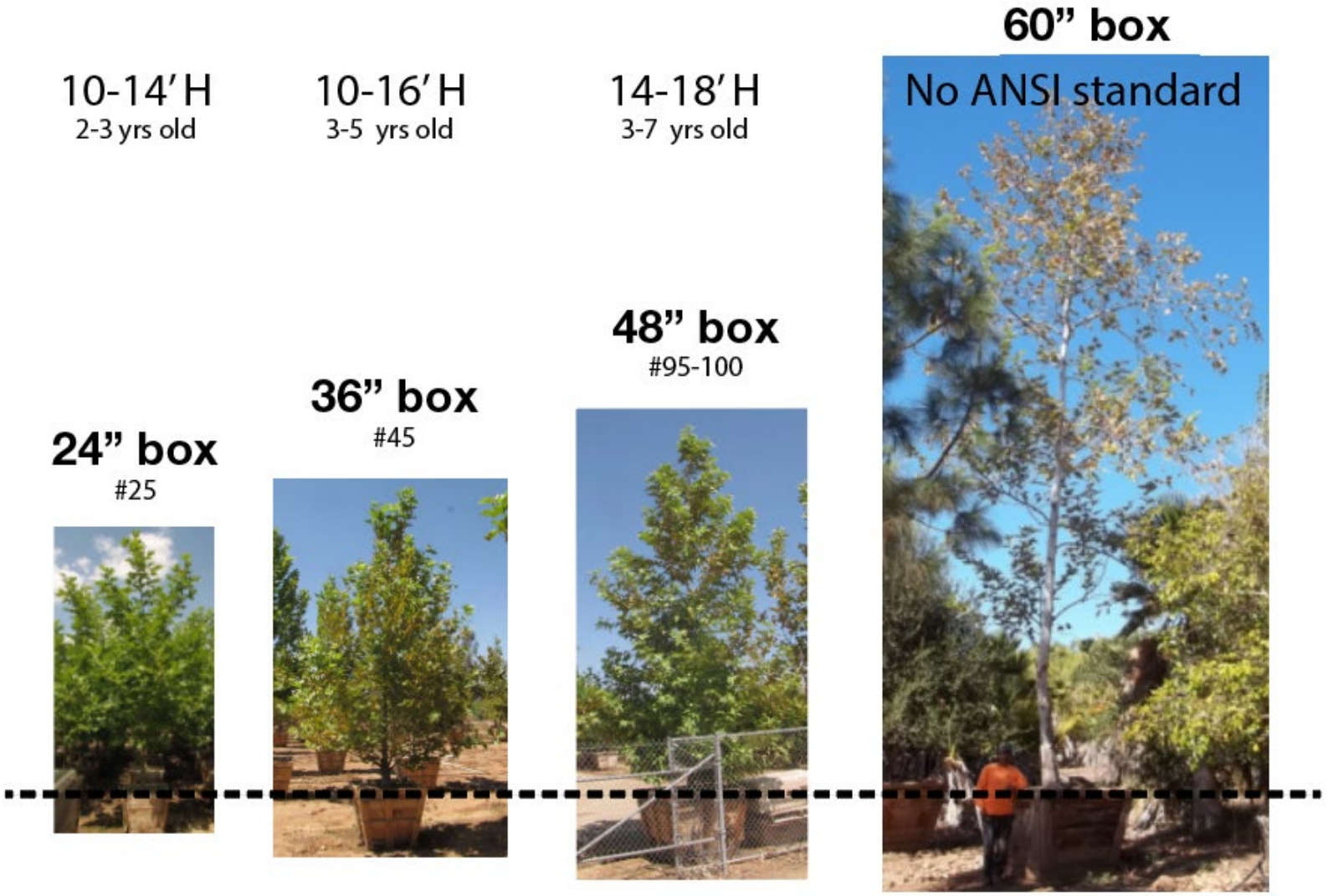
Frederick Allen Park

Left bank improvements



Frederick Allen Park

SHADE: Tree container sizes and initial heights



Frederick Allen Park

SHADE option: Interim or permanent shade structures

Frederick Allen Park

SHADE: Year 0, on an August afternoon

Frederick Allen Park

SHADE: Year 5, on an August afternoon

Frederick Allen Park

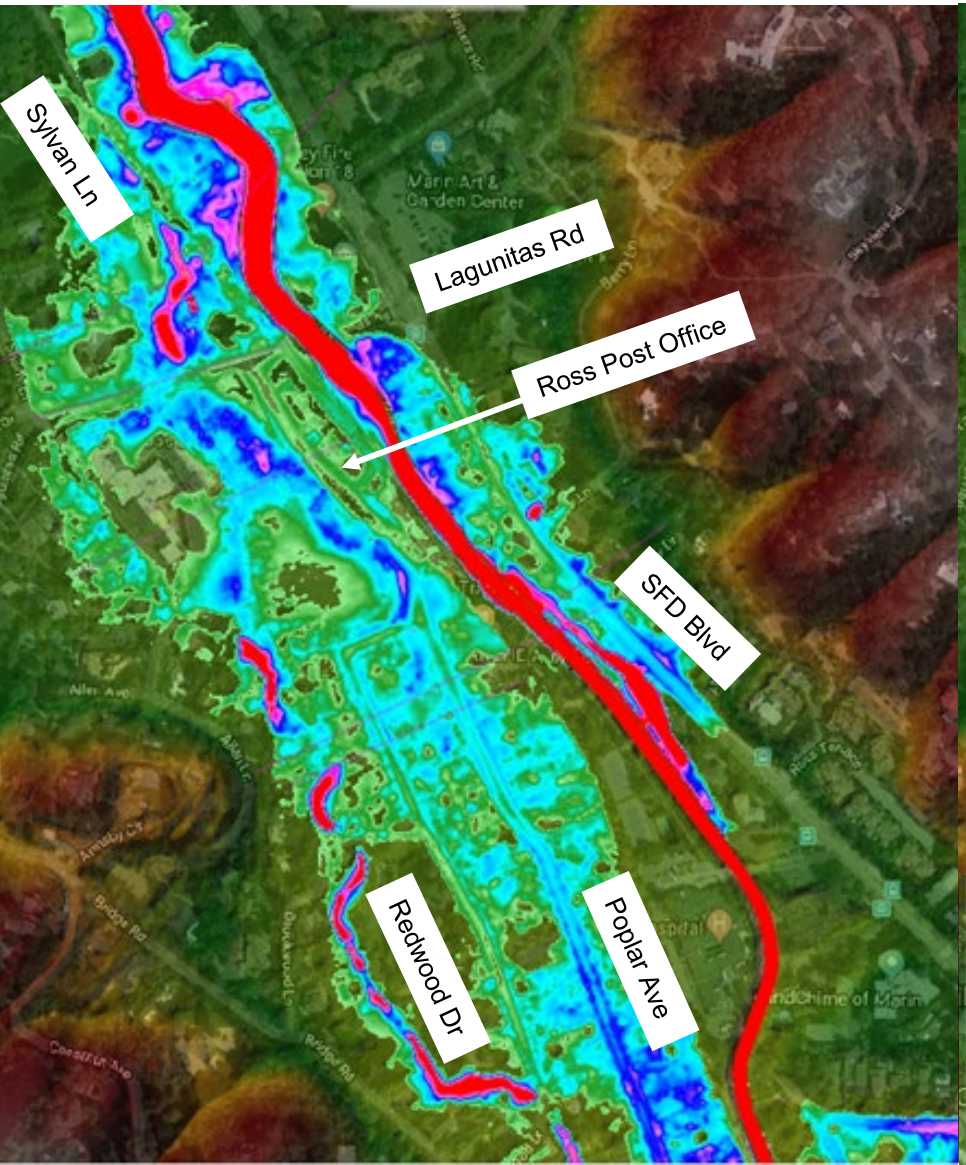
SHADE: 10+ years, on an August afternoon

Frederick Allen Park

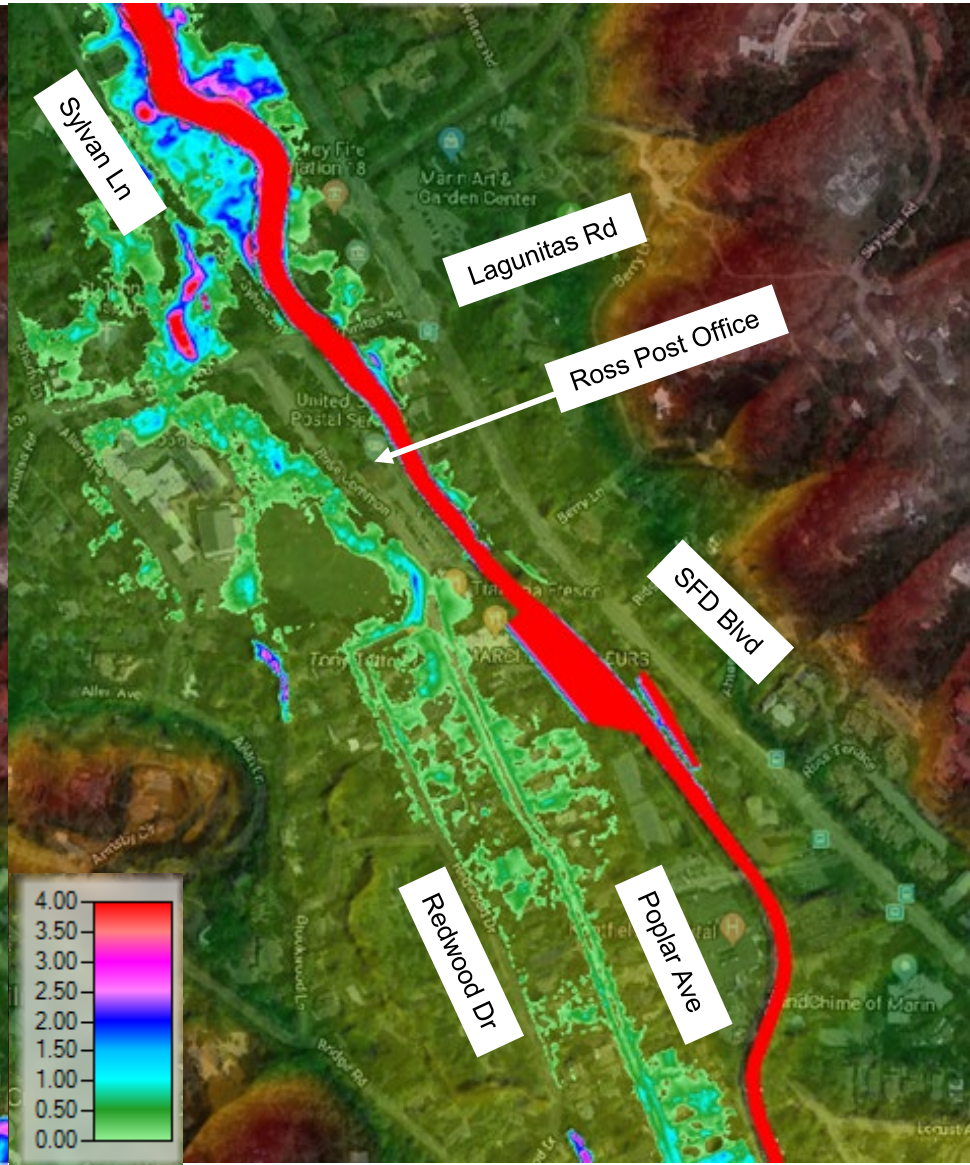
SHADE: 10+ years, on an August afternoon

Preliminary Floodplain Analysis (Work-in-Progess)
25-Year Event - Downtown Ross

No Project



With Project

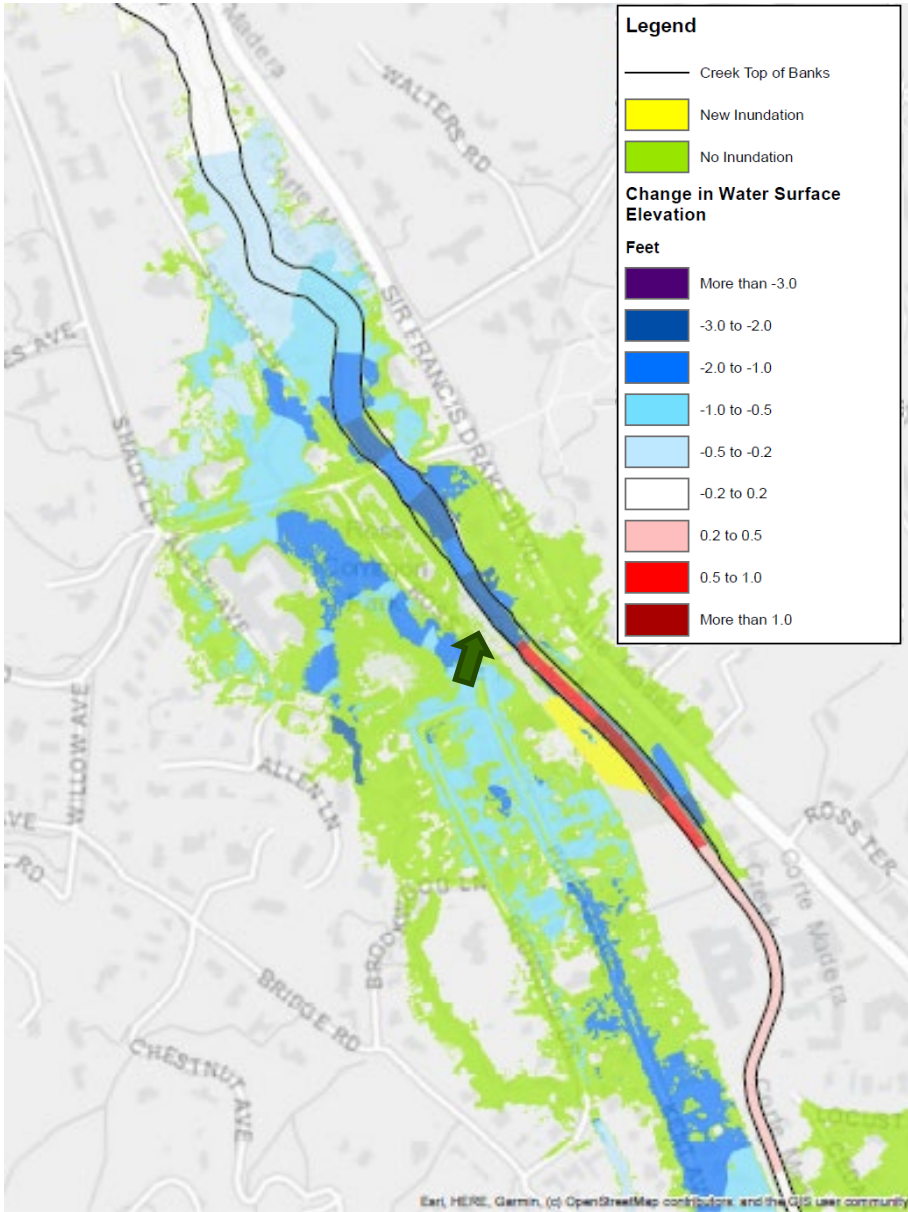


Preliminary Floodplain Analysis (Work-in-Progress)
25-Year Event - Downtown Ross

25-Year Event Future Condition	Allen Park Action	Water Depth
No Project	No Action	12" to 14"
With Project*	Left Bank Improvement	8" to 10"
	Right Bank Improvement	6" to 8"
	Full Improvement	6" to 8"
	Fish Ladder Removal Only	6" to 8"

* Fish passage improvement is currently in concept design and will be added into the analysis.

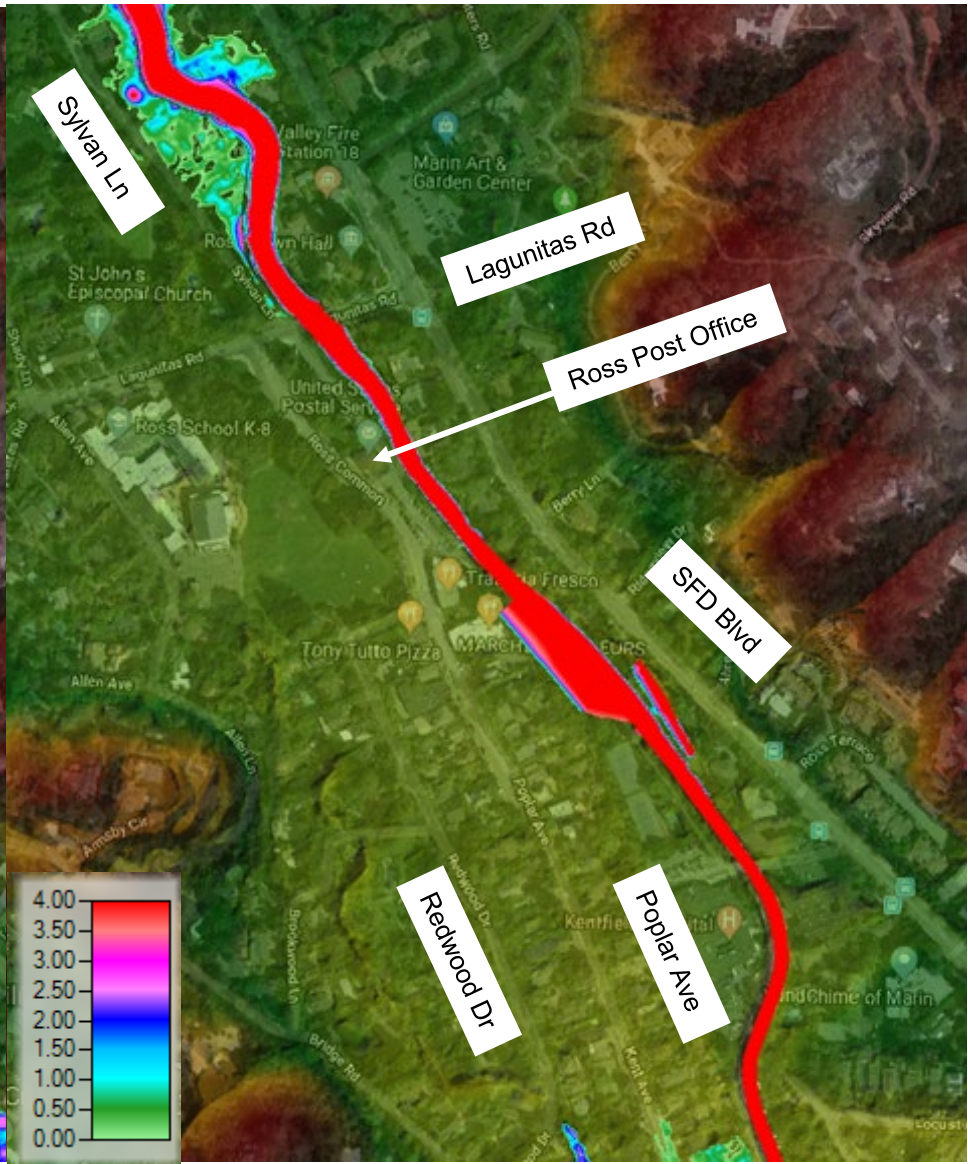
25-Year Event Flood Depth Change Map



Preliminary Floodplain Analysis (Work-in-Progess)
10-Year Event - Downtown Ross

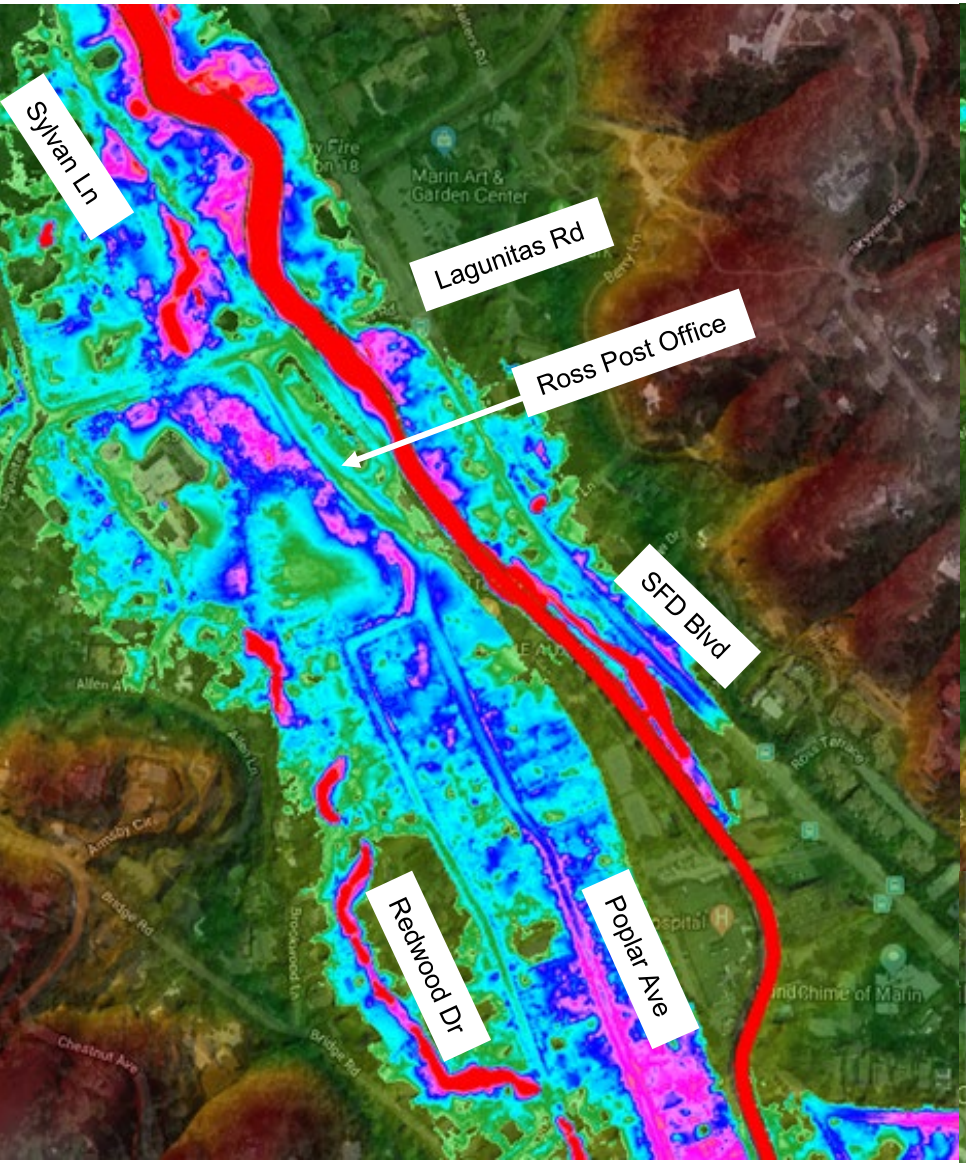
No Project

With Project

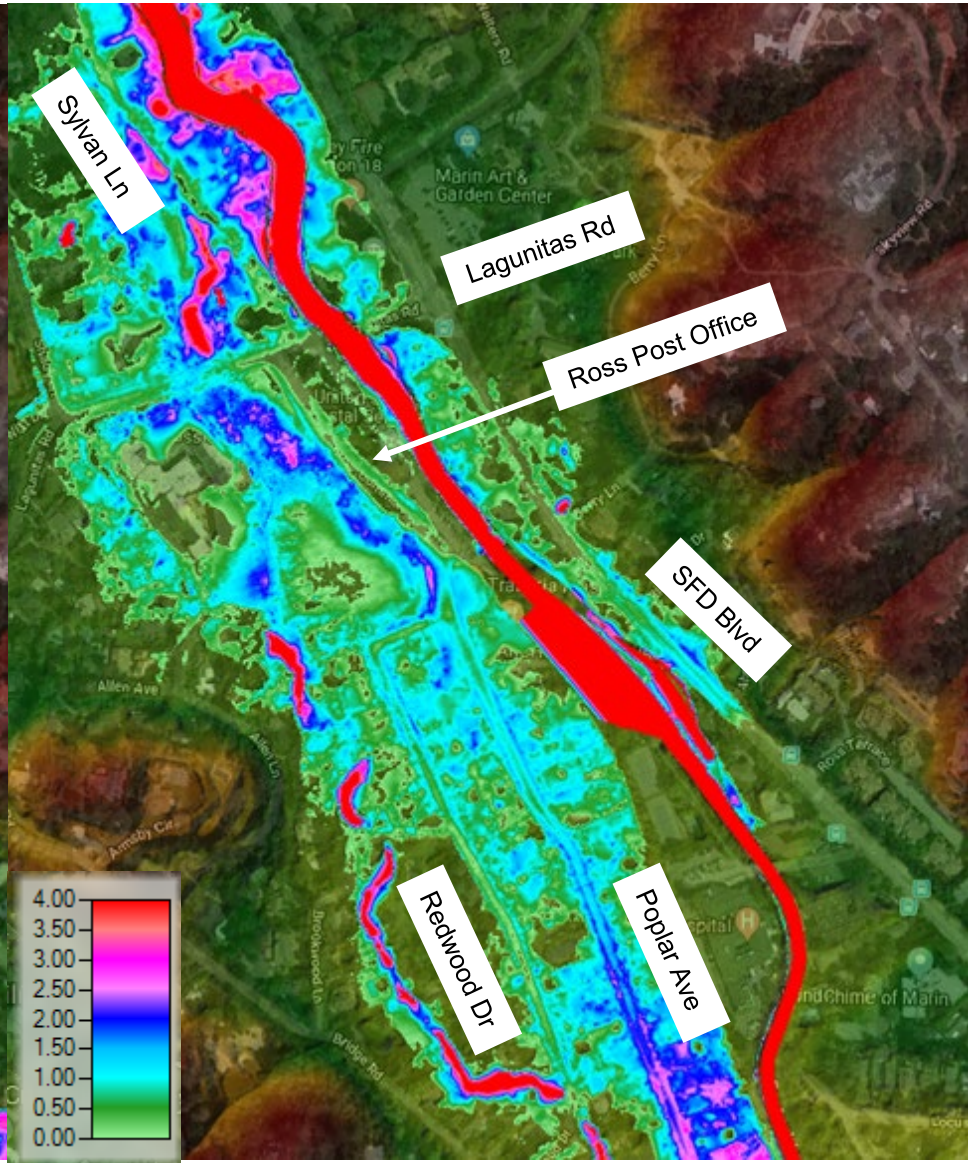


Preliminary Floodplain Analysis (Work-in-Progess)
100-Year Event - Downtown Ross

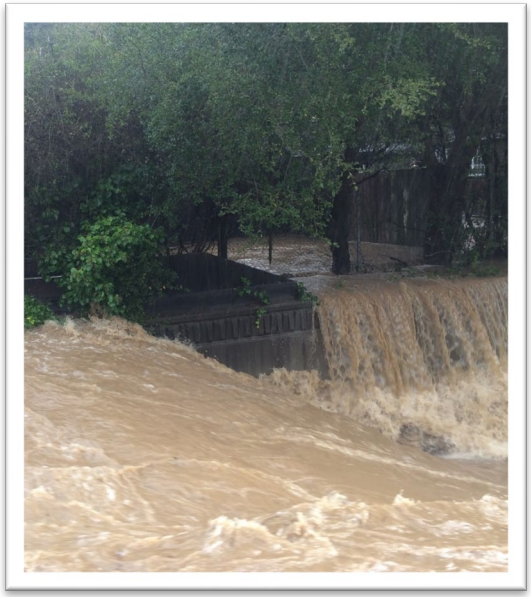
No Project



With Project



Project Schedule



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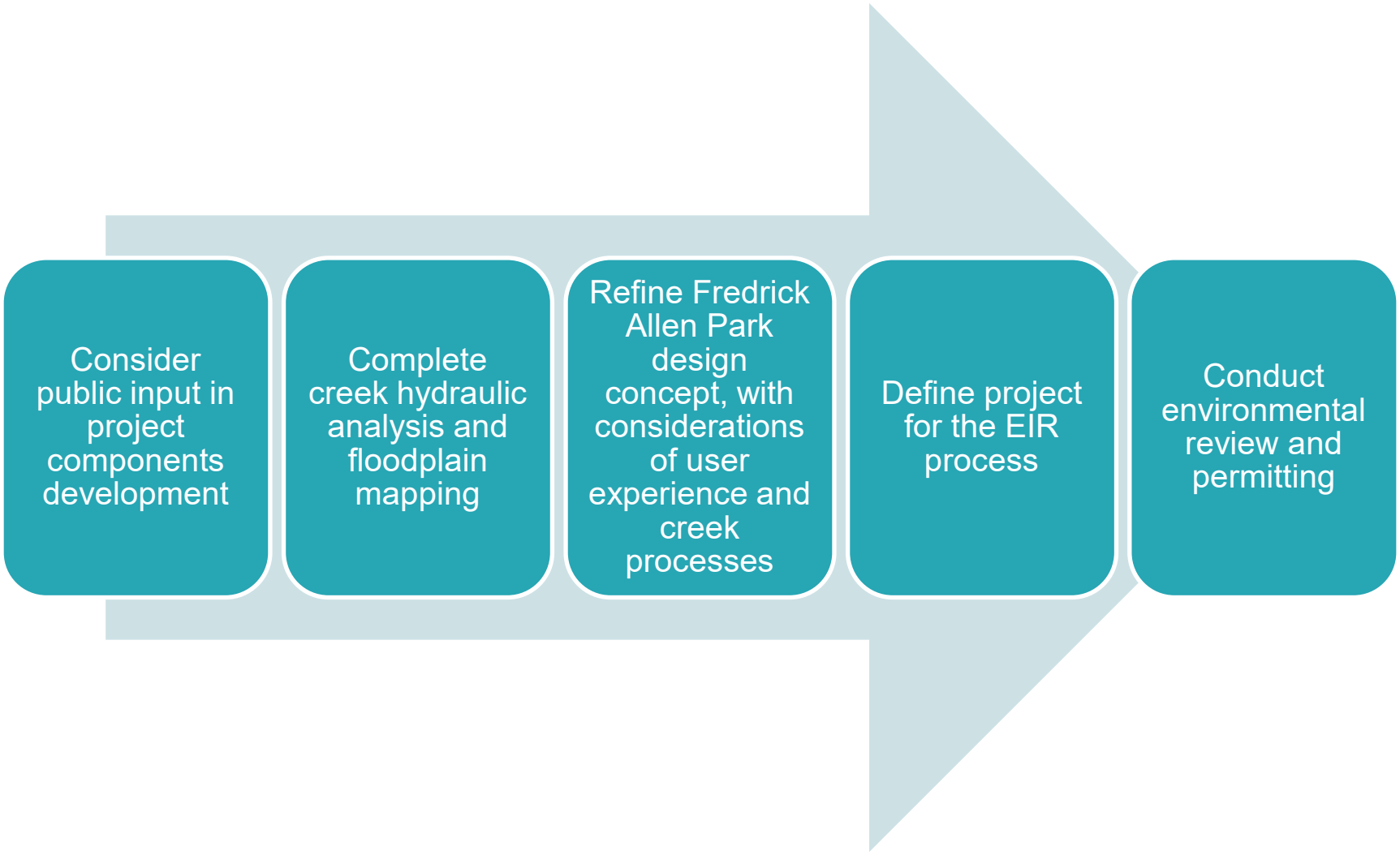
Next Steps


Consider public input in project components development
Complete creek hydraulic analysis and floodplain mapping
Refine Fredrick Allen Park design concept, with considerations of user experience and creek processes
Define project for the EIR process
Conduct environmental review and permitting

Project Schedule

CEQA / Public Comment

Milestone	Timing
Public Scoping/Publish NOP	August 2020
Draft EIR Published	February 2021
Final EIR Published	June 2021
Town of Ross Meeting	August 2021
District Hearing	September 2021

CEQA and Permitting to be completed by end of 2021 for construction to start in April 2022*.

Permitting

Item	File / Initiate Date	Issue / Approval Date
404 Permit	October 2020	October 2021
Section 7 Consultation	November 2020	June 2021
Section 106 Consultation	December 2020	January 2021
401 Water Quality Certification Application	November 2020	June 2021
1600 Permit Application	November 2020	June 2021
Section 408 Authorization	June 2021	September 2021

Project Construction Schedule

Phase	Timeline
Construction Start	April 1, 2022
In-creek Construction Work	June 15 – October 15
Flood Wall (Segment #1) Construction	April 1 – July 7
Flood Wall (Segment #2) Construction	July 8 – August 25
Flood Wall (Segment #3) Construction	April 1 – July 14
Lower Channel Concrete Removal	June 8 – September 6
Fish Pool Construction	June 15 – October 11
Granton Park Storm Drain Pump Station Construction	April 1 – May 26
Channel Access Ramp Construction	April 1 – July 14
Frederick Allen Park Construction	June 1 – October 25
Fish Passage Transition Grading	June 15 – August 30
Construction End	October 25, 2022

All construction tied to the DWR grant funds must be completed by December 31, 2022.

More Information

Send comments or questions to:
cortemaderacreek@marincounty.org

Sign up for GovDelivery

Project webpage
https://www.marinwatersheds.org/resources/projects/corte-madera-creek-flood-risk-management-project

Coffee Talk with the District in July

Survey after this meeting

Comment during EIR process

MARIN COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT

Questions / Comments

Joining by computer or mobile device: Type your question into the question bar OR use the “Raise Hand” button to ask your question, and we will unmute you

Joining by phone: Press *9 to inform the moderator that you would like comment and we will unmute you