

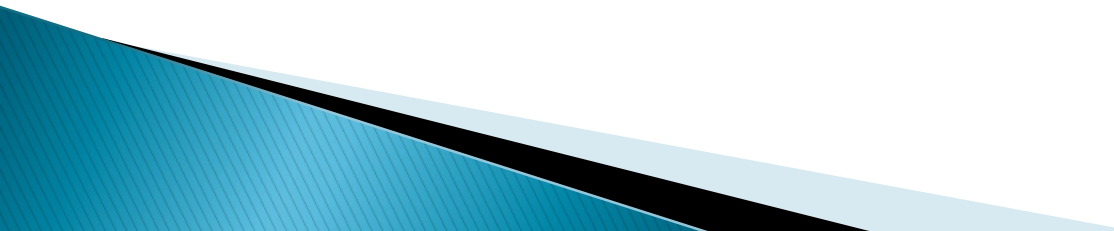
Petaluma River Flood Management Project— Denman Reach Phase 4

Presented to:
SCWA Zone 2A Flood Control
Advisory Committee

Presented By:
Ken Eichstaedt, P.E./Senior Engineer
Jason Beatty, P.E.
Assistant Director of Public Works

December 5, 2019

Agenda

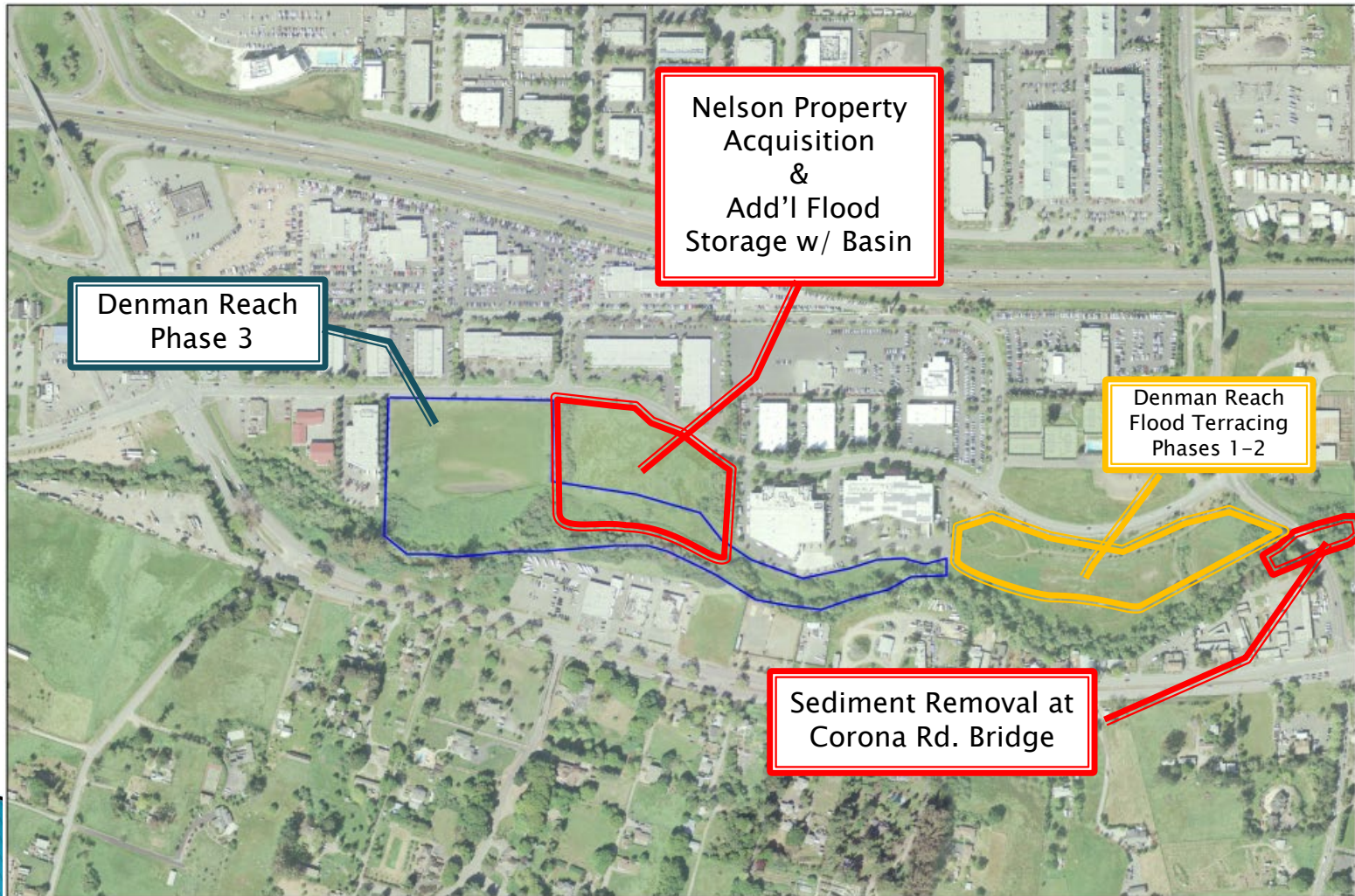
- ▶ Project Background
 - ▶ Project Goals
 - ▶ Hydraulic Analysis Results
 - ▶ Design/Construction Overview
 - ▶ Project Completion Update
- 

Project Background

- ▶ Flood mitigation projects with public access trails
 - 1996 City of Petaluma River Access Plan
 - 2008 General Plan
- ▶ 3 vacant parcels
 - 2 purchased and terraced in Denman Phase 3
 - Lacked funds to purchase 3rd
- ▶ Fall 2016, SCWA brought opportunity for funding for project
 - \$1.9M in DWR Prop 1E Grant
 - \$881k in Zone 2A funding

Petaluma River Flood Management Project – Denman Reach Phase 4

Denman Reach
Phase 4



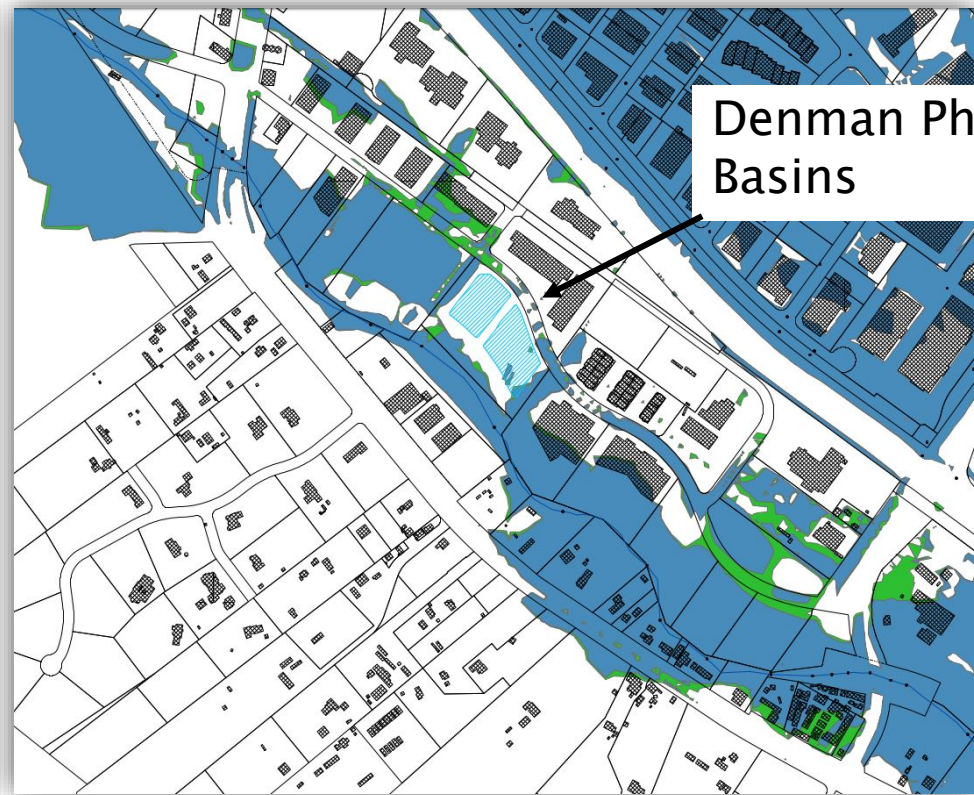
Completion of Project Goals

- ▶ Funding/Grant Agreement Completed Goals
 - 5.47 acre flood-prone parcel acquired
 - 9.3 acre-feet of flood storage
 - 2,000cy sediment removal at Corona Bridge
- ▶ Additional Completed Goals
 - Creation of wetland and riparian habitat
 - Installation of public access trails
 - Scour/erosion protection at Corona Road bridge

Hydraulic Evaluation



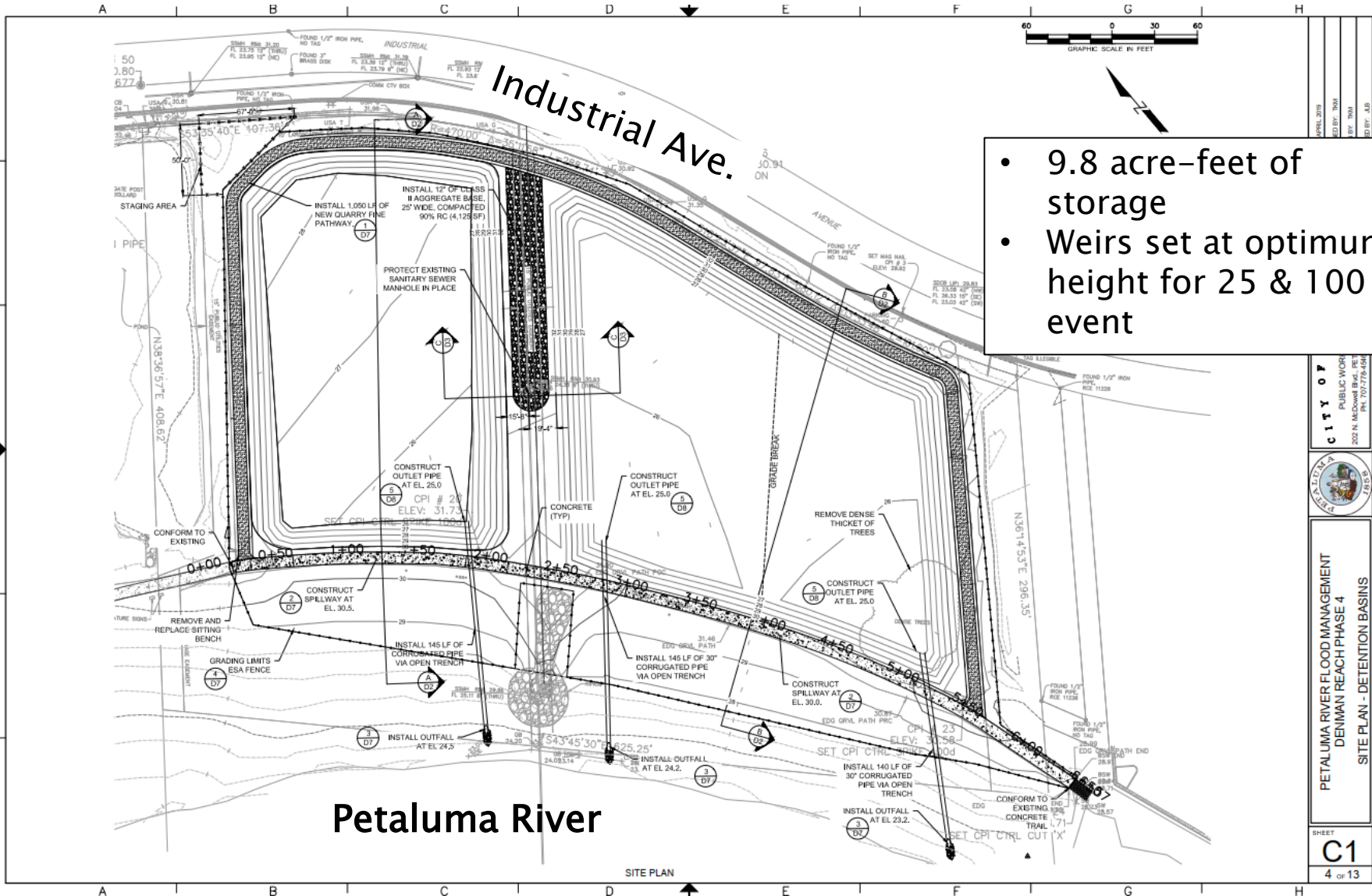
Denman Phase 3
100 year flood plain reduction
(Red)



Denman Phase 4
100 year flood plain reduction
(Green)

Note: over 1 foot reduction in 100 year
flood elevation in Denman Reach

Flood Detention Basins

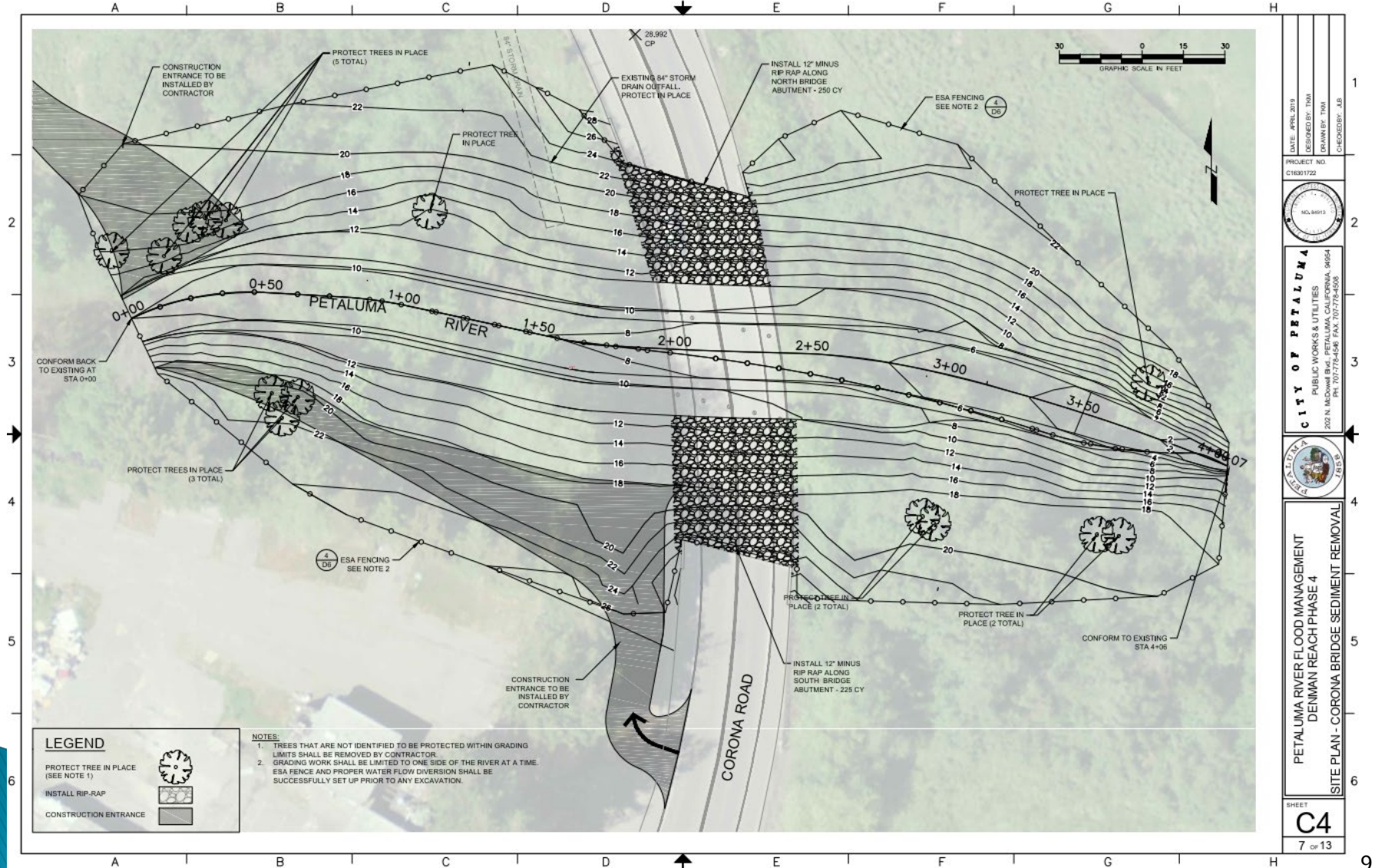


- 9.8 acre-feet of storage
- Weirs set at optimum height for 25 & 100 yr event

Flood Detention Basins



Corona Bridge - Sediment Removal



Corona Bridge



North-side looking downstream

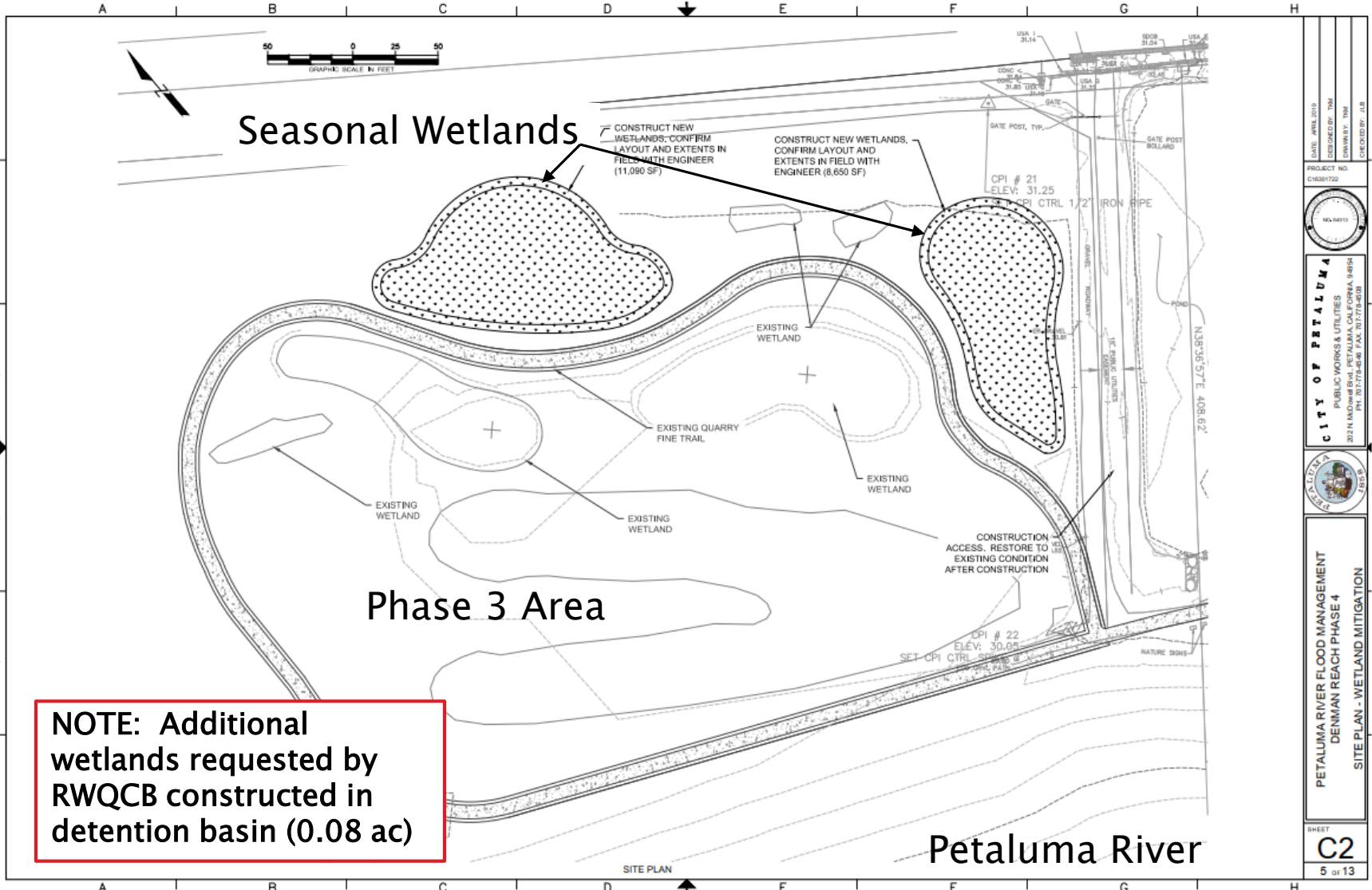


North-side looking upstream

Corona Bridge



Mitigation Wetlands



NOTE: Additional wetlands requested by RWQCB constructed in detention basin (0.08 ac)

DATE: APRIL 2019
 PROJECT NO: C186722
 DESIGNED BY: TM
 DRAWN BY: TM
 CHECKED BY: JLB

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**PETALUMA RIVER FLOOD MANAGEMENT
 DENMAN REACH PHASE 4
 SITE PLAN - WETLAND MITIGATION**

SHEET
C2
 5 of 13

Mitigation Wetlands



Project Timeline & Status

- ▶ Finalized funding agreement- February 2018
- ▶ Hydraulic analysis - July 2018
- ▶ City property acquisition - August 2018
- ▶ CEQA Final MND/Initial Study - February 2019
- ▶ Permits(NOAA, RWQCB, ACOE, CDFW) - May 2019
- ▶ Design - Completed May 2019
- ▶ NTP July 2019
- ▶ Construction - Mostly complete @ end of 2019
- ▶ *NOTE: Installation of Weir and Flap gate remaining*