Madera County

Sycamore Island

Pond (Pit 46e)

Project Location

Fresno County

Berm Breach

San Joaquin River

Borrow Site

Breach Fill

Project Location
- Construct Temporary Crossing
- Provide Public Safety and Environmental Protection Measures
- Excavate Existing Embankment for Equalization Saddle
- Strengthen Existing Berm
- Construct Equalization Saddle
- Construct Madera Floodplain
- Remove Temporary Crossing
- Perform Fresno Grading (Including Fresno Floodplain)
- Remove Two Buried Cars and Other Deleterious Material Encountered
- Fill Berm Breach on Fresno County Side
- Construct a French Drain at the Breach Fill
- Backfill Borrow Site
- Install Articulated Concrete Mats
- Construct Aggregate Base Road
- Hydroseed Constructed Floodplains and Disturbed Areas
Project Schedule & Cost

- Bid Opening Date: 05/11/16
- Bids Received: 6, Bid Range $1,974,650 to $3,673,610
- Lowest Bid: $1,974,650 Steelhead Constructors, Inc.
- Department Estimate: $3,350,000
- Notice to Begin Work: 06/07/16
- Site Work Completed: 04/28/17
- Contract Closeout Date: 10/14/18
- Total Contractor Payments: $2,329,498
- Total Project Cost: $3,759,163
  - San Joaquin River Conservancy and Wildlife Conservation Board Funding: $1,774,726
  - SJRRP (Reclamation) Funding: $1,984,437
Extra Work

- **Directives**
  - MD #01 - Provide Silt Fencing and Orange Construction Fencing
  - MD #02 - Provide “River Closed” and “Detour” Signage
  - MD #03 - Provide a Single Pipe Gate
  - MD #04 - Provide a Single Pipe Gate
  - MD #05 - Construct a Second Cobble French Drain in Madera Floodplain
  - MD #06 - Install an 18-inch Diameter Perforated Pipe at the Breach Fill
  - MD #08 - Perform Main Berm Mound Removal

- **Request For Information**
  - RFI #06 - Establish Project Control
  - RFI #12 - Remove Bollards
  - RFI #24 - Over-Excavate Borrow Pit
Material Movement

H & F - Topsoil Pile
G - Overburden Pile
- Topsoil
- Overburden
- Random Fill

Borrow site to be graded smoothly for pond access
Borrow pit

Madera floodplain
San Joaquin River
Fresno floodplain
Haul route
Temporary crossing
Material Movement

H & F - Topsoil Pile
G - Overburden Pile
- Topsoil
- Overburden
- Random Fill

Borrow site to be graded smoothly for pond access

Breach fill

Madera floodplain
San Joaquin River
Fresno floodplain
Haul route
Temporary crossing

Borrow pit
Public Safety

Construction Warning Sign

Orange Safety Fence

Buoy Line Installation
Temporary Crossing
Temporary Crossing Construction

Abutment Subgrade Preparation

Abutments
Temporary Crossing Construction

Bent Footing Installation

Beam Placement
Temporary Crossing Construction

Crane Mat Installation

Guardrail Installation
Embankment Excavation For Saddle Construction
Berm Compacted Fill
Berm Compacted Fill

Side Slope Compaction

Top of Berm Compaction
Berm Compacted Fill

Grading Side Slope

Performing Compaction Test
Equalization Saddle
Equalization Saddle Construction

River Gravel Placement

Saddle Footing Construction
Equalization Saddle Construction

Boulder Key and Cobble Apron

Grade Checking
Equalization Saddle Construction

- Gabion Rock Placement
- Cobble Placement
- River Gravel Placement
- Geotextile Fabric Placement
Concrete Mat Installation

Transporting Mat

Placing Mat
Concrete Mat Installation

Attaching Mats

Driving Anchors

Anchored Mats
Borrow Site
Topsoil Removal

Overburden Removal
Borrow Excavation

Random Fill Excavation

Loading Random Fill

Borrow Pit Survey
Madera Floodplain
Madera Floodplain Construction

Unloading Random Fill

Grading Random Fill
Madera Floodplain Construction

Turbidity Curtain Installation

Water Quality Monitoring

Fine Grading Floodplain
Fresno Floodplain
Fresno Floodplain Construction

Topsoil Removal

Excavation and Loading
Grading Side Slope

Re-Grading Side Slope to Generate More Material
Breach Fill
Unloading Random Fill

Filling Breach With Random Fill Below Water Surface
Breach Fill

French Drain Installation

Compaction Test

Compaction
Cars and Deleterious Material Removal

Car Removal

Loading Deleterious Materials
French Drain Cobble Excavation

Perforated Pipe Placement

Cobble Backfill
Borrow Backfill

Unloading Fill Material from Fresno Floodplain and Overburden Stockpile

Compaction

Grading and Compaction
Temporary Crossing Demolition

Removing Beams

Removing Bent Footing

Demolished Abutment
Gravel Base Road
Gravel Base Road Construction

- Gravel Base Placement
- Gravel Base Grading
- Gravel Base Compaction
- Gravel Base Placement on Top of Concrete Mat
Erosion Control

- Fiber Roll Placement
- Fiber Roll Installation
- Hydroseeding
- Straw Application
Drilling Hole for Gate Post

Gate Post Installation

Gate Installation

Gate Post Installation

Safety Reflector Installation
MD#05

Trench Excavation and Gravel Placement

Gravel Placement

Back Filling Random Fill
Pond Side High Mound Removal

River Side High Mound Removal

River Side High Mound Removal
Post-Construction Condition

Equalization Saddle

Gravel Base Road on the Berm

Borrow Site

Madera Floodplain
Post-Construction Condition

Fresno Floodplain

Breach Fill With French Drain
THANK YOU