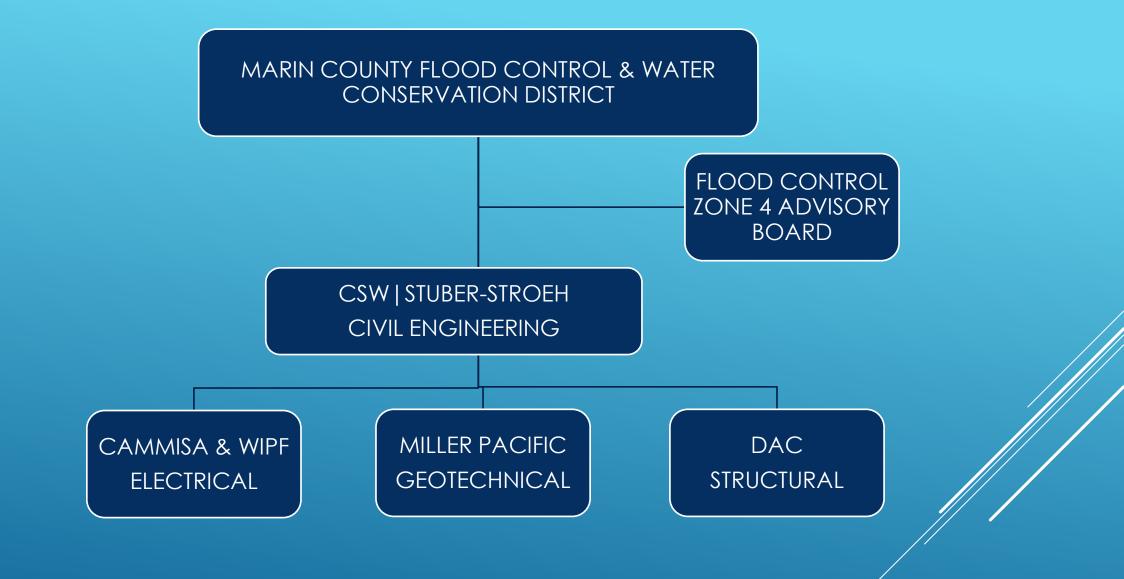
COVE STORMWATER PUMP STATION UPGRADES

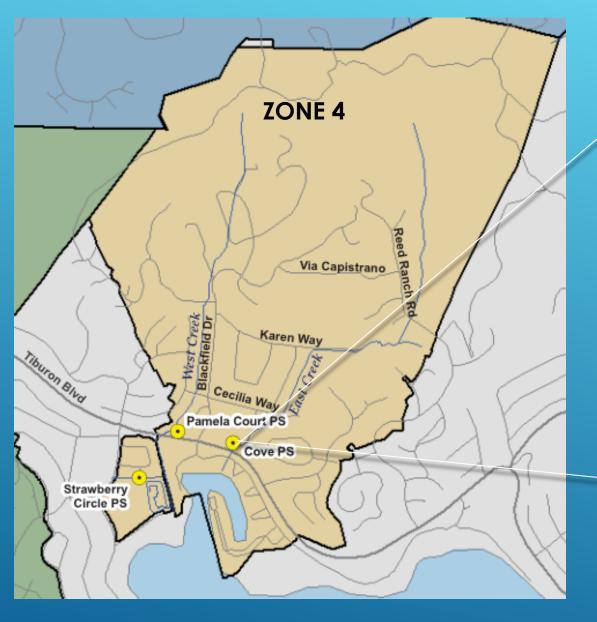


MARIN COUNTY FLOOD CONTROL & CONSERVATION DISTRICT

FLOOD CONTROL ZONE No. 4



TEAM ORGANIZATION CHART



Cove Shopping Center



PROJECT VICINITY MAP

COVE STORMWATER PUMP STATION Purpose of Upgrade: UPGRADES

Increase pumping capacity to meet potential future 100-year Inflows (21,100 gpm – Alternative Recommended by Advisory Board)

Provide onsite back-up generator to power entire pump station

Increase trash rack effectiveness

Improve wet well layout

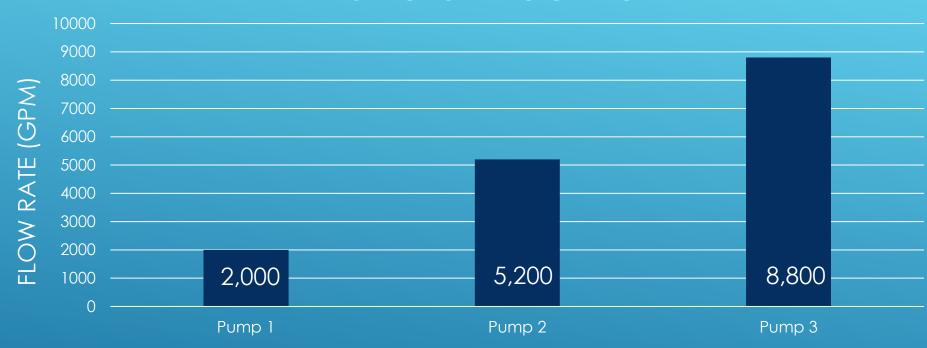
Upgrade controls & electrical system

Improve seismic stability of existing building

Install SCADA for Remote Monitoring



EXISTING PUMPING CAPACITY

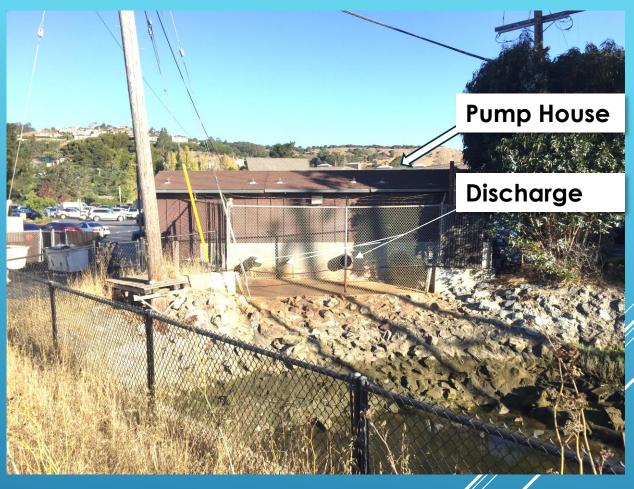


Total Capacity = 16,000 gpm

HYDROLOGY & HYDRAULIC STUDY

Schaaf & Wheeler





COVE PUMP STATION EXISTING CONDITIONS



Wet Well Inspection

- Visual Inspection of Wet Well
- Delimination Survey
- Rebound Hammer
- Reinforcing Steel Survey (GPR)
- Concrete Coring
- Chloride Content Testing
- Concrete Comprehensive Strength Testing

Wet Well Inspection Summary

- Concrete Comprehensive Strength Exceeds Original Design
- Replace Corroded Ladder Rungs
- No Signs of Corrosion in Reinforcing Steel
- Overall Concrete Condition was Acceptable

WET WELL OBSERVATION FINDINGS

Voss Laboratories





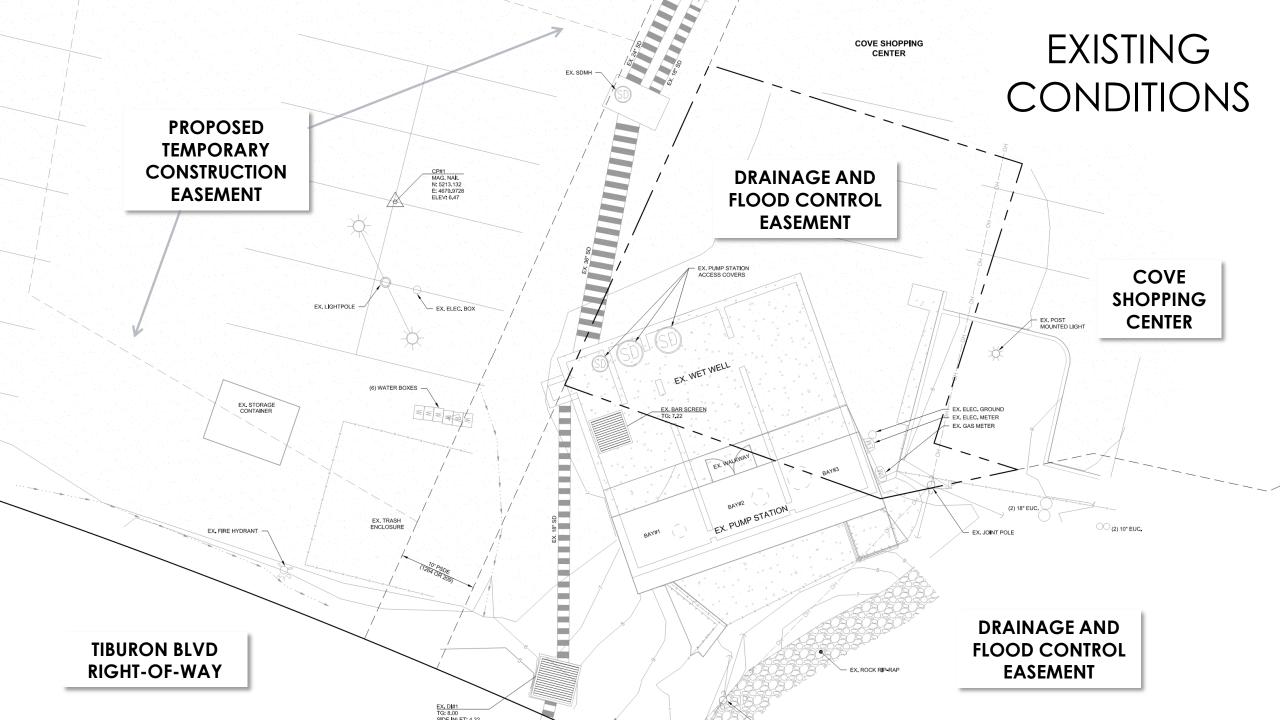
Gas Engine



Motor Control Center

Vertical Pump

COVE PUMP STATION EXISTING CONDITIONS



COVE SHOPPING CENTER 2 SDMH#2 RIM: 6.53 18" INV. IN (NE & SW): 2.3± 24" INV. IN (NE): 2.3± 48" INV. OUT (SE): -0,5 **PROPOSED DRAINAGE AND TEMPORARY** SD FLOOD CONTROL **CONSTRUCTION EASEMENT EASEMENT** TOP PAD 7.95 FS 7.27 (CONFORM) CP#1 MAG, NAIL TOP PAD 7.95 FS 7.38 (CONFORM) N: 5213.132 (EX) FS 7.57 4)-48" INV. (IN): -1.4± 18" INV. IN (S): 2.9± 18" INV. OUT (NE): 2.8 (EX) FS 7.19 TOP PAD 7.95 FS 7.55 (CONFORM) (6) WATER BOXES Sp (EX) TC 8.32 (EX) FL 7.15 (CONFORM) EX. ELEC. GROUND EX. STORAGE CONTAINER (CONFORM) EX. ELEC. METER FS 7.23 (CONFORM) FS 7.18 FS 7.53 (CONFORM) EX. PUMP STATION BUILDING STATION 8.14 (EX) TC 7,92 (2) 18" EUC. EX. TRASH EX JOINT POLE FLOOD CONTROL EASEMENT (2004 OR 614) **TIBURON BLVD RIGHT-OF-WAY** EX. ROCK RIP-RAP TG: 7.96 FL SIDE INLET: 4.3 EX. JOINT POLE

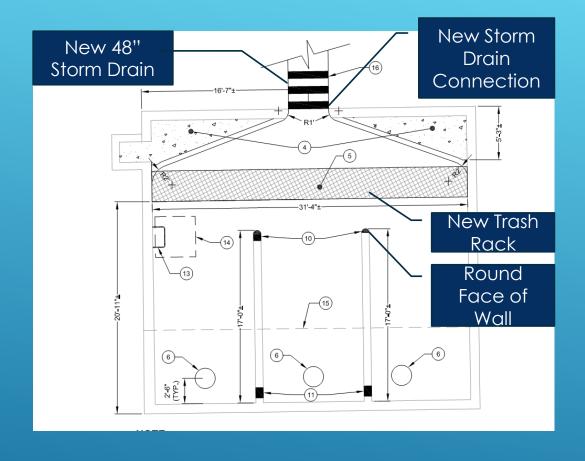
PROPOSED CONDITIONS

COVE SHOPPING CENTER

DRAINAGE AND FLOOD CONTROL EASEMENT



WET WELL EXISTING CONDITIONS





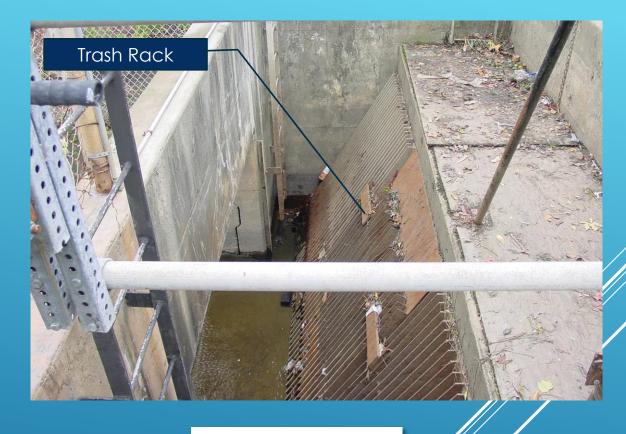
WET WELL PLAN VIEW

EXAMPLE OF NEW STORM DRAIN CONNECTION

WET WELL PROPOSED IMPROVEMENTS



North Francisco Blvd Pump Station



Kerner Blvd Pump Station

PUMP STATION IMPROVEMENTS EXAMPLES

PUMP STATION UPGRADE SCOPE

ITEM No.	DESCRIPTION
1	Mob/Demob
2	New Motor Control Center
3	Standby Generator and Automatic Transfer Switch
4	New Pumps, Tubes, Discharges
5	Misc. Electrical Improvements
6	Modify Wet Well
7	New Wet Well Hatches
8	New Trash Rack, Fence, Etc.
9	New Storm Drain Pipes (100-year inflow)
10	Misc Site Items

- ► SCHAAF & WHEELER \$2.4 MILLION
- ► CSW | ST2 \$1.9 MILLION

OPINION OF PROBABLE CONSTRUCTION COST

- □ DESIGN COMPLETE WINTER 2017
- PERMITTING, CEQA, TEMPORARY CONSTRCUTION EASEMENT WINTER 2017-18
- □ BIDDING WINTER 2017-18
- □ AWARD PROJECT SPRING 2018
- □ CONSTRUCTION SPRING TO FALL 2018

PROJECT SCHEDULE

□ Questions?