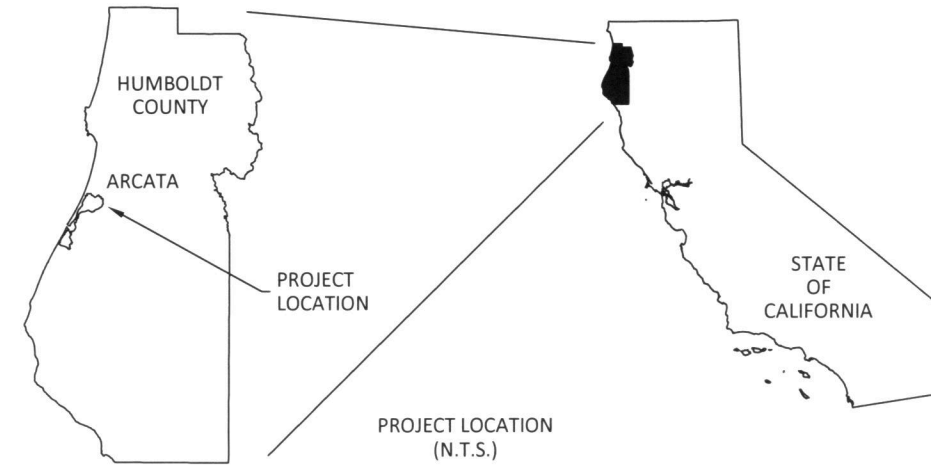


SOUTH JACOBY CREEK PROJECT AREA
GENERAL LOCATION MAP
SOURCE: USGS 7-1/2' QUADRANGLE MAP
SOUTH ARCATA, CA



SHEET	TITLE
1	TITLE SHEET AND LOCATION MAP
2	EXISTING CONDITIONS
3	EXISTING TOPOGRAPHY
4	EXISTING HYDROLOGY AND HYDRAULIC CONTROLS
5	PLAN OVERVIEW AND EARTHWORK SUMMARY
6	RIPARIAN BERM
7	PROPOSED TOPOGRAPHY AND FEATURES BRACKISH MARSH COMPLEX AND WETLANDS
8	INUNDATION ZONES - MARSH COMPLEX AND WETLANDS
9	PROPOSED TOPOGRAPHY AND FEATURE FRESHWATER CAPTURE CHANNELS

**SOUTH JACOBY CREEK WETLAND AND
RIPARIAN HABITAT ENHANCEMENT PROJECT
65% DESIGN PLANS - REVISED SEPTEMBER 25, 2017
(NOT FOR CONSTRUCTION)**



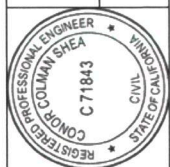
USACE File #2017-00477N
S. Jacoby Creek Wetland Restor.
Enclosure 2
March 27, 2018



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736 F. ST., ARCATA, CA 95521
707-822-8184

NOTES:
REVISED SEPTEMBER 25, 2017. REPLACES FEBRUARY 1, 2017 VERSION.

SOUTH JACOBY CREEK WETLAND AND
RIPARIAN HABITAT ENHANCEMENT PROJECT
65% DESIGN PLANS - FEBRUARY 1, 2017
PROJECT LOCATION AND TABLE OF CONTENTS



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DATE: Rev. 9/25/2017

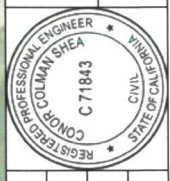
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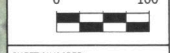
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NOTES:
 (1) IMAGE SOURCE: 2014 USDA NATIONAL AGRICULTURAL IMAGERY PROGRAM (NAIP).
 UNDERGROUND UTILITY LINES SHOWN ARE APPROXIMATE. FIELD VERIFY LOCATION BEFORE CROSSING WITH HEAVY EQUIPMENT OR EXCAVATING.
 (2)

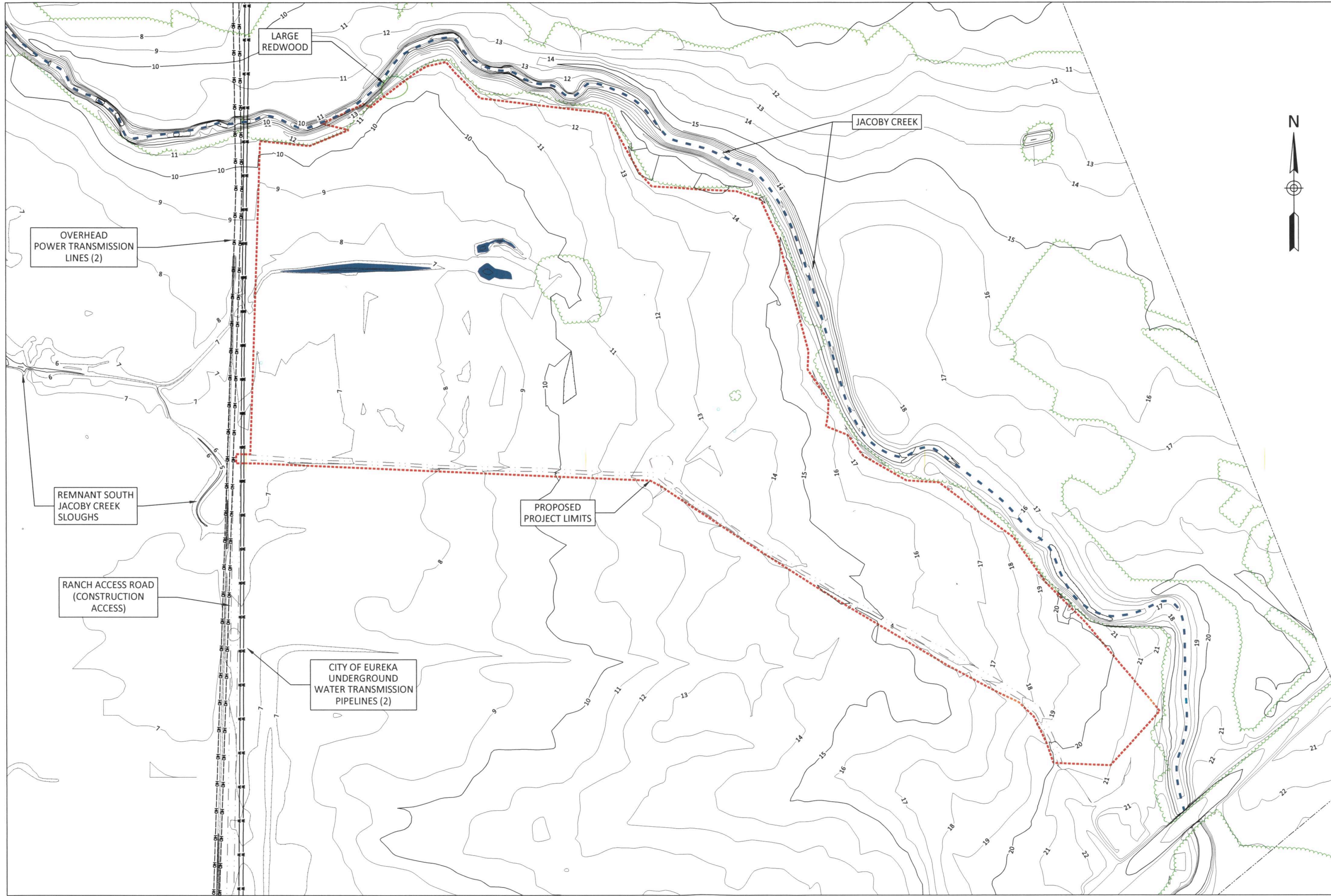
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 65% DESIGN PLANS - FEBRUARY 1, 2017
 EXISTING CONDITIONS



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SHEET NUMBER:
2



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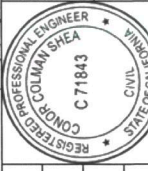
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NOTES:

- (1) AREA WITHIN PROJECT BOUNDARY SURVEYED BY USFWS 2015 AND 2016. TOPOGRAPHY FOR AREAS OUTSIDE PROJECT BOUNDARY SUPPLIED BY CITY OF ARCATA.
- (2) CONTOUR INTERVAL 1 FOOT. VERTICAL DATUM NAVD 1988.

SOUTH JACOBY CREEK WETLAND AND
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65% DESIGN PLANS - FEBRUARY 1, 2017
EXISTING TOPOGRAPHY



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SCALE: 

SHEET NUMBER: **3**



APPROXIMATE UPSTREAM LIMIT OF SALT/BRACKISH WATER

PROPOSED PROJECT LIMITS

LOCATION OF PROPOSED LEVEE BREACH

APPROXIMATE LIMIT OF TIDAL INFLUENCE

SEASONALLY FLOODED DEPRESSIONS

JACOBY CREEK

PRIVATE LAND

SOUTH JACOBY TIDAL CHANNEL:
 - HISTORICALLY CONNECTED TO HUMBOLDT BAY
 - TIDAL FLOW NOW RESTRICTED BY CALTRANS TIDE-GATE
 - PRIMARY DRAIN FOR DISTRIBUTARY FLOWS

MAXIMUM FLOW DOWNSTREAM OF DISTRIBUTARY: APPROX. 180 CFS

FLOW DISTRIBUTARY THROUGH CREVASSE:
 - MAXIMUM FLOW APPROX. 30 CFS;
 - DISTRIBUTARY FLOW OCCURRED GREATER THAN 80 DAYS CUMULATIVELY IN WINTER 2015-2016;
 - DISTRIBUTARY ACTIVATED AT FLOW OF 82 CFS
 - SILL ELEVATION 19.1 FEET

EPHEMERAL FLOW PATHS:
 - TRANSMIT DISTRIBUTARY FLOWS TO CALTRANS TIDE-GATE
 - NO DEFINED CHANNELS - FLOW TRANSMITTED BY SHALLOW SHEET FLOW THROUGH PASTURE, ALONG RANCH ROAD, AND AREAS OF SHALLOW, PONDED WATER

DRAINAGE FROM PRIVATE PROPERTY:
 - SOURCE: SURFACE GROUNDWATER EXFILTRATION

FLOW DISTRIBUTARY FROM CHANNEL BANK OVERTOPPING:
 - MAXIMUM FLOW APPROX. 20 CFS

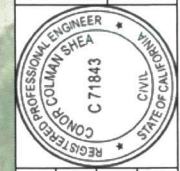
JACOBY CREEK:
 MAXIMUM FLOW BELOW OLD ARCATA ROAD APPROXIMATELY 235 CFS (2015-2017 OBSERVATIONS)



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NOTES:
 (1) IMAGE SOURCE: 2014 USDA NATIONAL AGRICULTURAL IMAGERY PROGRAM (NAIP).
 (2) HYDRAULIC AND HYDROLOGIC ANALYSIS BASED ON FFILIED OBSERVATIONS, STAGE AND STREAM GAGING CONDUCTED 2012, 2015-2017, AND HYDRAULIC MODELING.

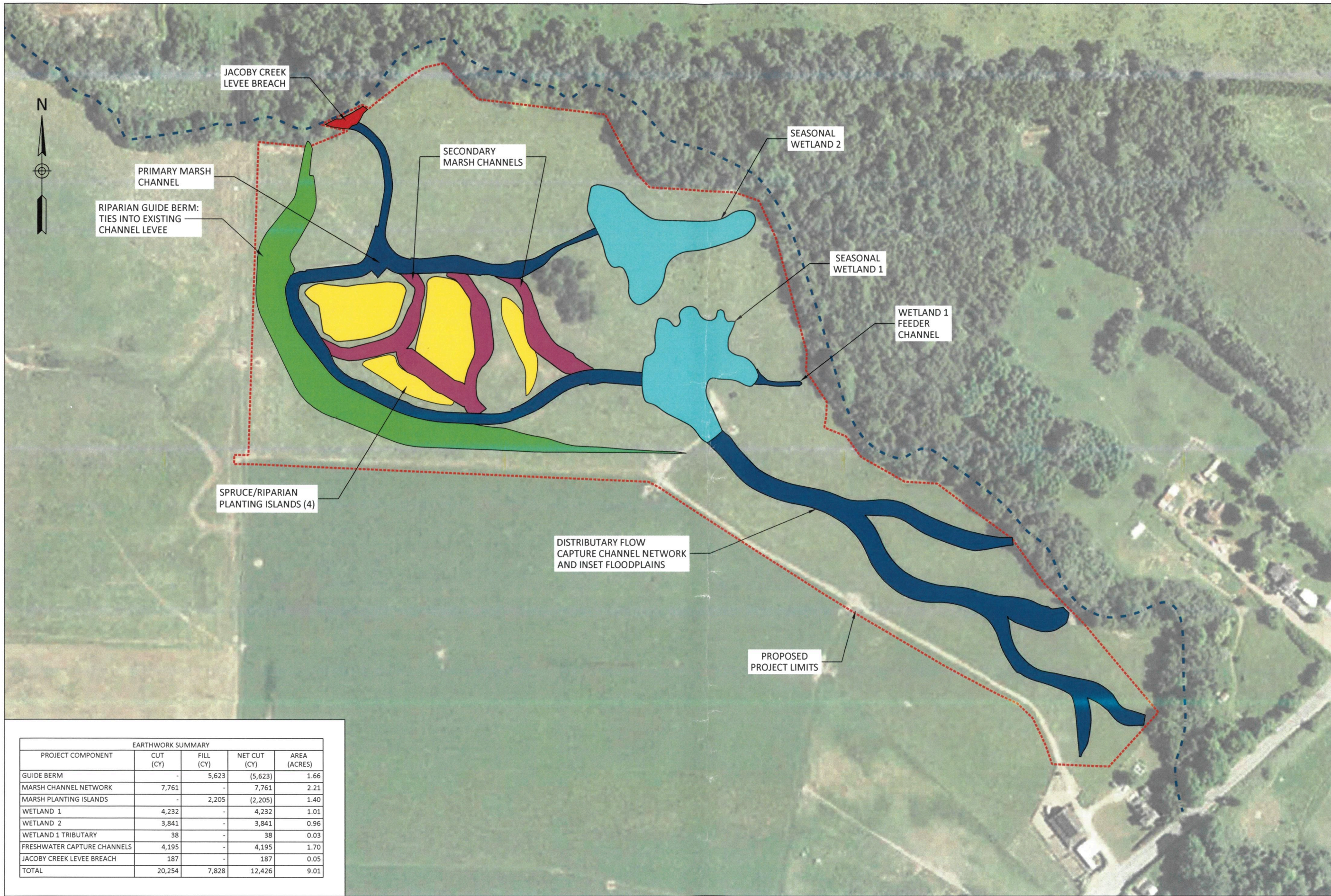
SOUTH JACOBY CREEK WETLAND AND RIPARIAN HABITAT ENHANCEMENT PROJECT
 65% DESIGN PLANS - FEBRUARY 1, 2017
 EXISTING HYDROLOGY AND HYDRAULIC CONTROLS



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4



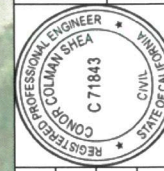
EARTHWORK SUMMARY				
PROJECT COMPONENT	CUT (CY)	FILL (CY)	NET CUT (CY)	AREA (ACRES)
GUIDE BERM	-	5,623	(5,623)	1.66
MARSH CHANNEL NETWORK	7,761	-	7,761	2.21
MARSH PLANTING ISLANDS	-	2,205	(2,205)	1.40
WETLAND 1	4,232	-	4,232	1.01
WETLAND 2	3,841	-	3,841	0.96
WETLAND 1 TRIBUTARY	38	-	38	0.03
FRESHWATER CAPTURE CHANNELS	4,195	-	4,195	1.70
JACOBY CREEK LEVEE BREACH	187	-	187	0.05
TOTAL	20,254	7,828	12,426	9.01



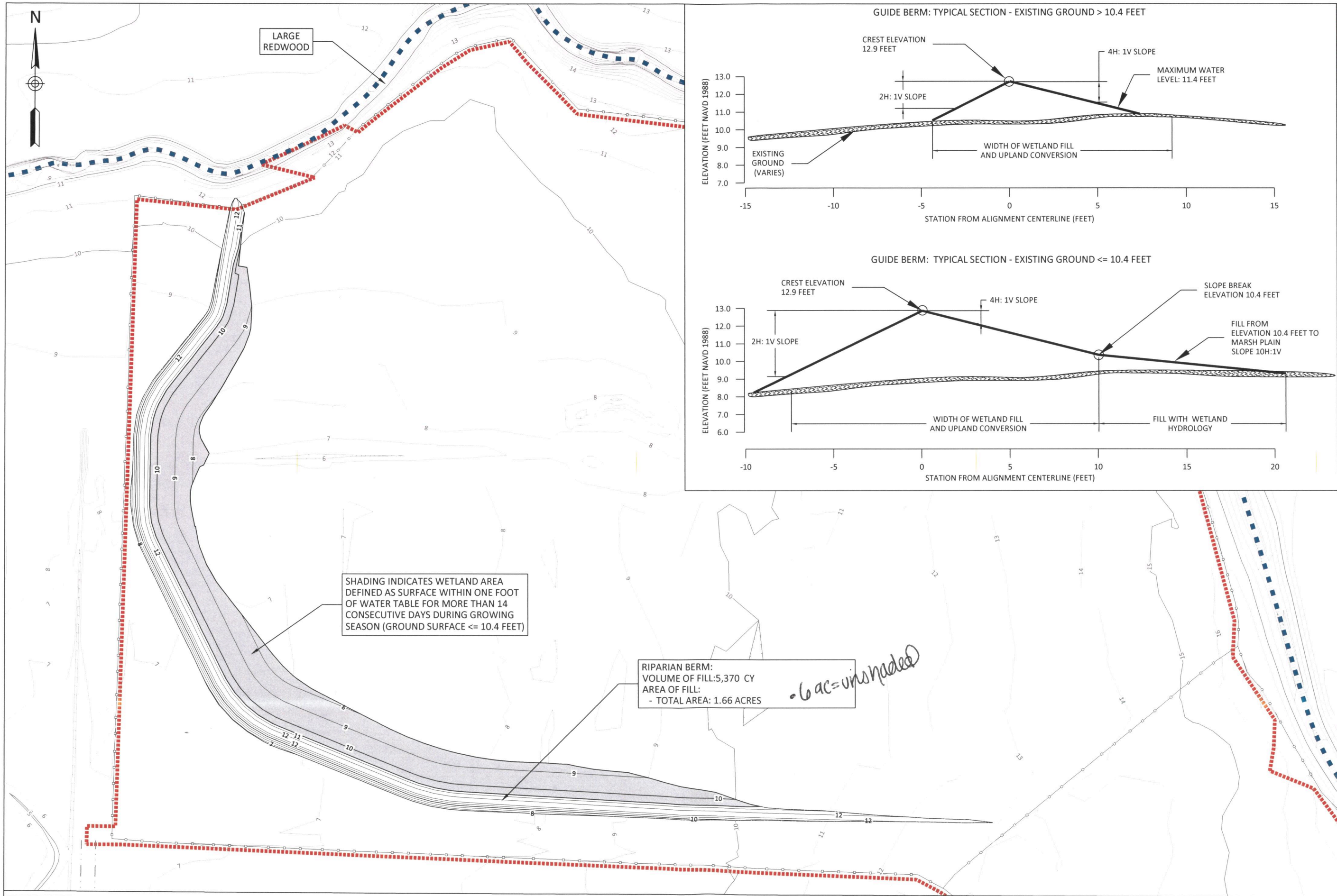
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NOTES:
 (1) IMAGE SOURCE: 2014 USDA NATIONAL AGRICULTURAL IMAGERY PROGRAM (NAIP).
 UNDERGROUND UTILITY LINES SHOWN ARE APPROXIMATE. FIELD VERIFY LOCATION BEFORE CROSSING WITH HEAVY EQUIPMENT OR EXCAVATING.
 (2)

SOUTH JACOBY CREEK WETLAND AND RIPARIAN HABITAT ENHANCEMENT PROJECT
65% DESIGN PLANS - FEBRUARY 1, 2017
PROJECT OVERVIEW AND EARTHWORK SUMMARY



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 DATE: 9/25/2017
 SCALE: 0 100'
 SHEET NUMBER: **5**



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NOTES: (1) CONTOUR INTERVAL 1 FOOT. VERTICAL DATUM NAVD 1988.

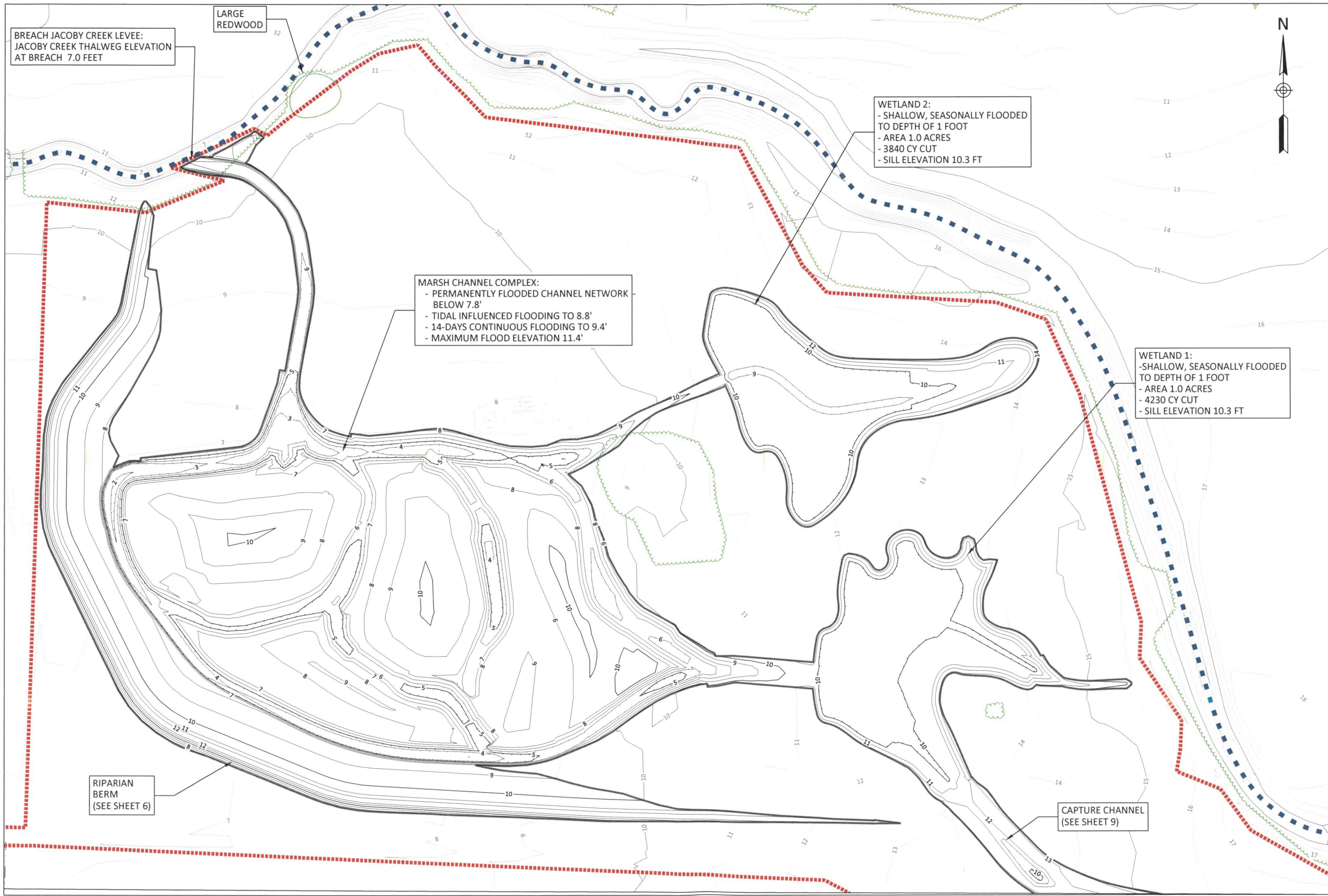
SOUTH JACOBY CREEK WETLAND AND
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65% DESIGN PLANS - FEBRUARY 1, 2017
RIPARIAN BERM



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SCALE: 0 50'

SHEET NUMBER: 5



BREACH JACOBY CREEK LEVEE:
JACOBY CREEK THALWEG ELEVATION
AT BREACH 7.0 FEET

LARGE
REDWOOD

WETLAND 2:
- SHALLOW, SEASONALLY FLOODED
TO DEPTH OF 1 FOOT
- AREA 1.0 ACRES
- 3840 CY CUT
- SILL ELEVATION 10.3 FT

MARSH CHANNEL COMPLEX:
- PERMANENTLY FLOODED CHANNEL NETWORK
BELOW 7.8'
- TIDAL INFLUENCED FLOODING TO 8.8'
- 14-DAYS CONTINUOUS FLOODING TO 9.4'
- MAXIMUM FLOOD ELEVATION 11.4'

WETLAND 1:
- SHALLOW, SEASONALLY FLOODED
TO DEPTH OF 1 FOOT
- AREA 1.0 ACRES
- 4230 CY CUT
- SILL ELEVATION 10.3 FT

RIPARIAN
BERM
(SEE SHEET 6)

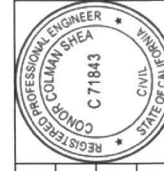
CAPTURE CHANNEL
(SEE SHEET 9)



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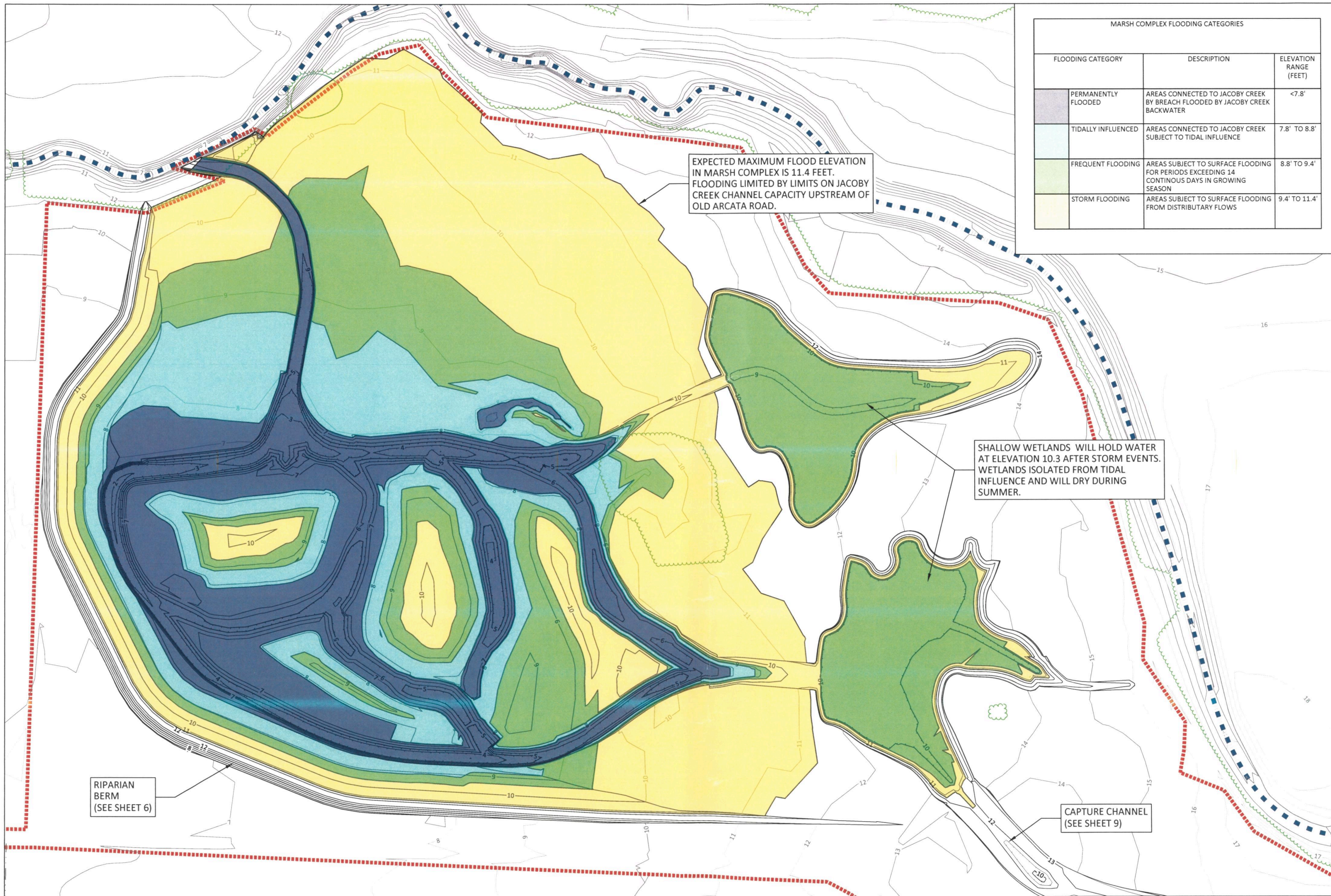
NOTES: (1) CONTOUR INTERVAL 1 FOOT. VERTICAL DATUM NAVD 1988.

SOUTH JACOBY CREEK WETLAND AND
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65% DESIGN PLANS - FEBRUARY 1, 2017
PROPOSED TOPOGRAPHY AND FEATURES
MARSH COMPLEX AND WETLANDS



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SCALE: 0 50'

SHEET NUMBER:
7



MARSH COMPLEX FLOODING CATEGORIES		
FLOODING CATEGORY	DESCRIPTION	ELEVATION RANGE (FEET)
PERMANENTLY FLOODED	AREAS CONNECTED TO JACOBY CREEK BY BREACH FLOODED BY JACOBY CREEK BACKWATER	<7.8'
TIDALLY INFLUENCED	AREAS CONNECTED TO JACOBY CREEK SUBJECT TO TIDAL INFLUENCE	7.8' TO 8.8'
FREQUENT FLOODING	AREAS SUBJECT TO SURFACE FLOODING FOR PERIODS EXCEEDING 14 CONTINUOUS DAYS IN GROWING SEASON	8.8' TO 9.4'
STORM FLOODING	AREAS SUBJECT TO SURFACE FLOODING FROM DISTRIBUTARY FLOWS	9.4' TO 11.4'

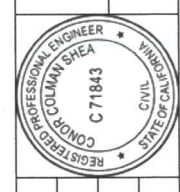


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NOTES:
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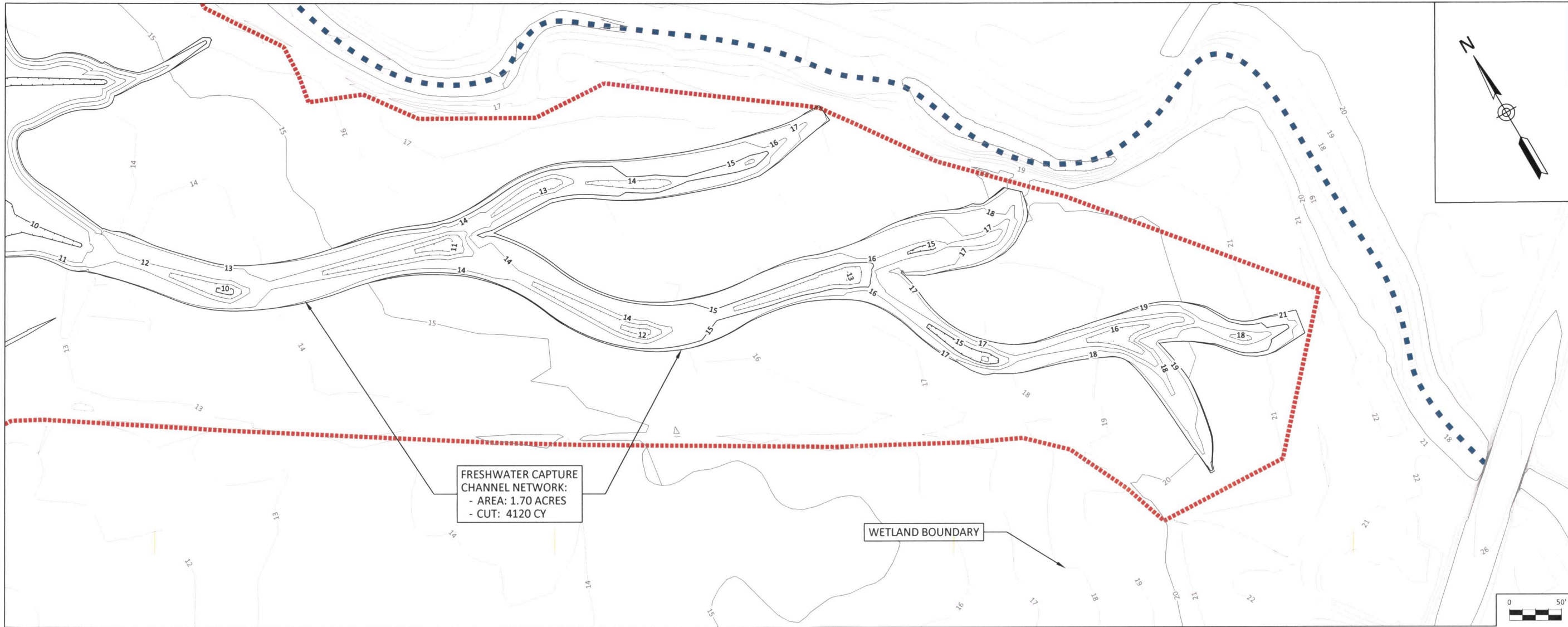
SOUTH JACOBY CREEK WETLAND AND
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INUNDATION ZONES
MARSH COMPLEX AND WETLANDS



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FRESHWATER CAPTURE CHANNEL NETWORK:
 - AREA: 1.70 ACRES
 - CUT: 4120 CY

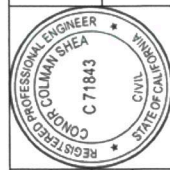
WETLAND BOUNDARY

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NOTES: (1) CONTOUR INTERVAL 1 FOOT. VERTICAL DATUM NAVD 1988.

SOUTH JACOBY CREEK WETLAND AND
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 65% DESIGN PLANS - FEBRUARY 1, 2017
 PROPOSED TOPOGRAPHY AND FEATURES
 FRESHWATER CHANNELS AND WETLAND MITIGATION



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 REV. 9/25/2017

SCALE:
AS INDICATED

SHEET NUMBER:
9

