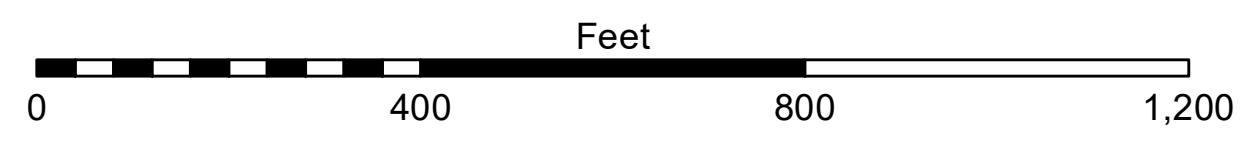
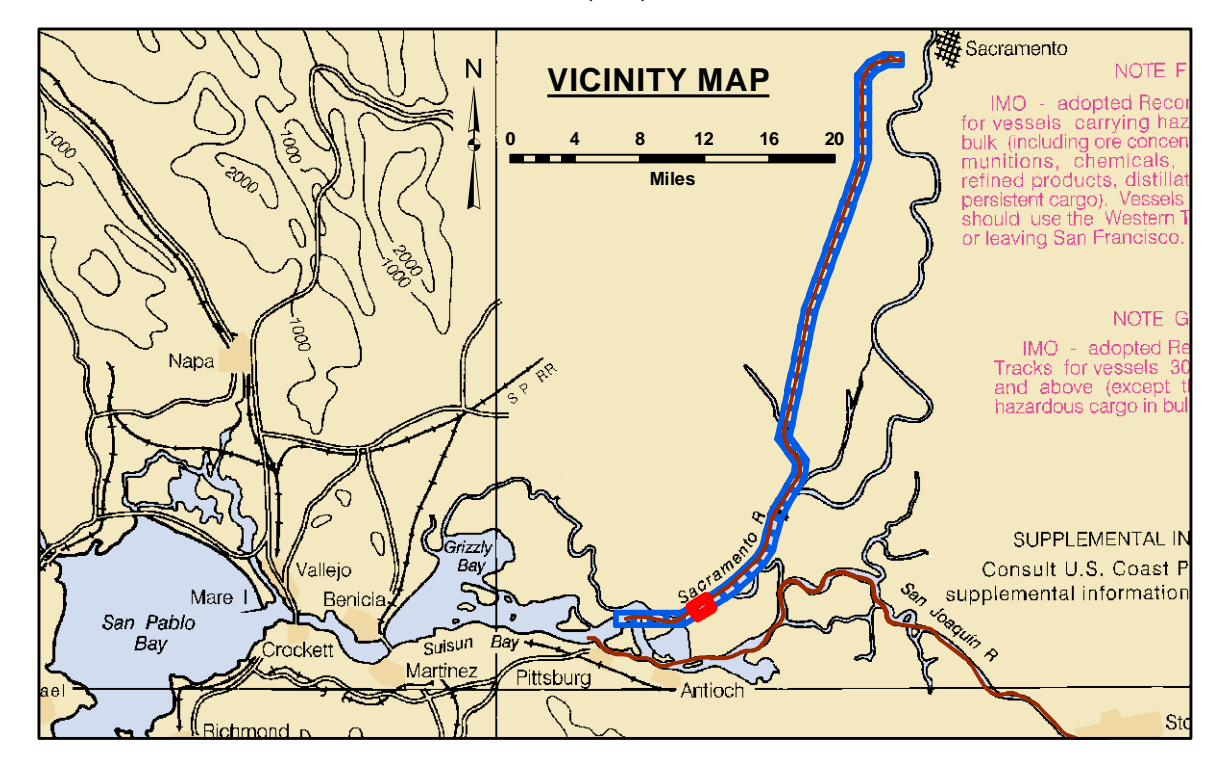
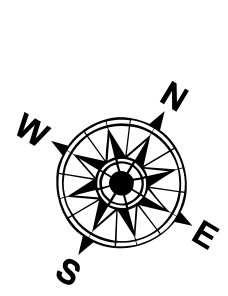


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Chart Date:	Nov 18, 2021
Designed By:	PDT
Drawn By:	PDT
Surveyed By:	KEVIN P. ARNETT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Hydro Survey Section
Approved:	Chief, Construction Branch



LEGEND		Shoaling Area	Contours
--- Federal Navigation Channel	▨ Cable Area	● Shoalest Sounding within Channel Quarter**	— -30
— Federal Navigation Center Line	□ Placement Area	⬇ Beacon, General	— -29
⋯ Cable Submarine	⊠ Anchorage Area	⬆ Red Navigation Buoy	— -28
- - - Cable Overhead	⊗ Obstruction Point	⬇ Green Navigation Buoy	— -27
— Contour Line	✈ Wrecks-Submerged		— -26

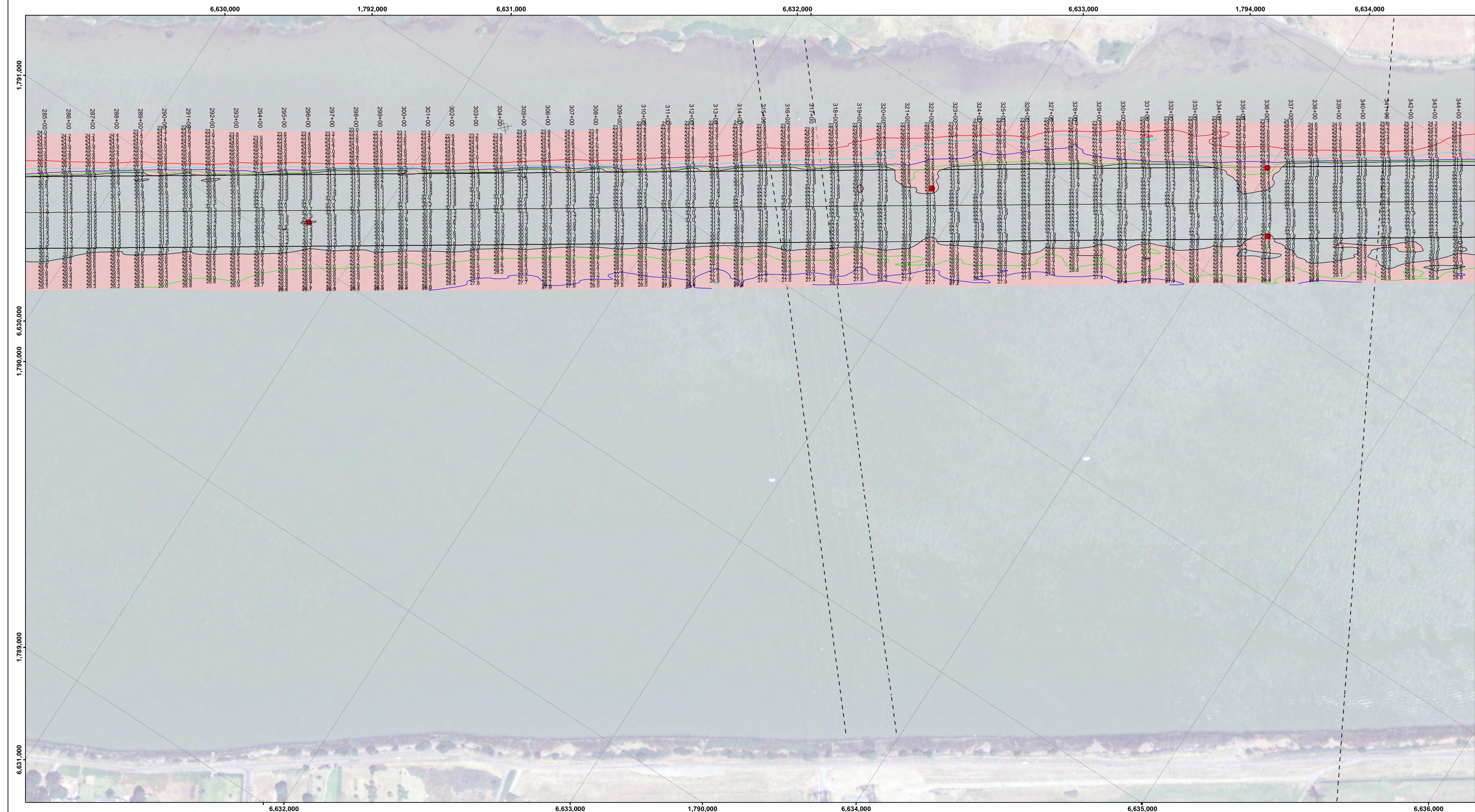


NOTES:
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 SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.
 SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.
 NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CA ZONE II (0402). DISTANCE UNITS IN U.S. SURVEY FEET.
 PLANE GRID AND COORDINATES ARE BASED ON LAMBERT PROJECTION, NAD 83, ZONE II CALIFORNIA AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY THE NATIONAL OCEAN SURVEY.
 PROJECT DEPTH: -30'
 VERTICAL DATUM: MLLW
 THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 9415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014
 LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416151
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014
 ALL HORIZONTAL POSITIONS AND MLLW ELEVATIONS WERE POST-PROCESSED USING PUBLIC GPS REFERENCE STATIONS IN THE AREA.

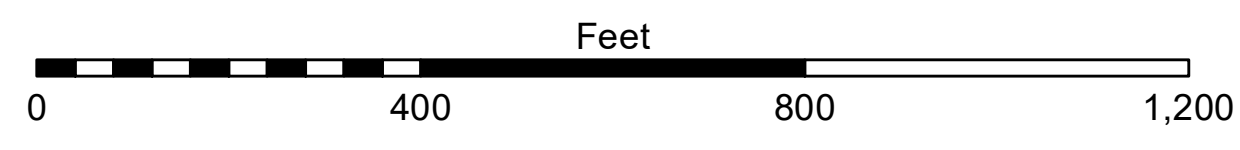
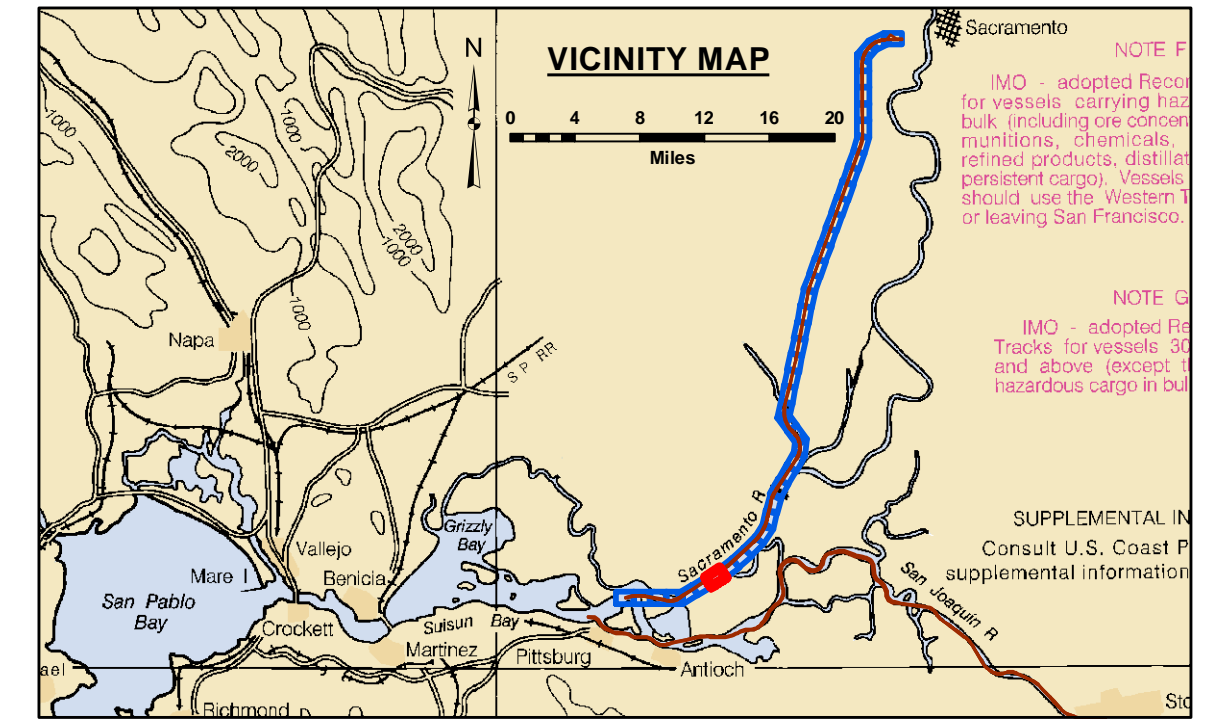
CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 REACH 1-9
 POST-DREDGE SURVEY
 20 AUGUST - 23 SEPTEMBER
 3,5,8,15,17 & 25 OCTOBER 2021

Sheet Reference Number
6 of 45

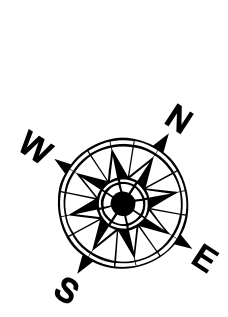


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Chart Date:	Nov 18, 2021
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Surveyed By:	KEVIN P. ARNETT
Plotted By:	PDT
Prepared Under the Direction of:	LT COLONEL C.E. DISTRICT ENGINEER
Staged:	Hydro Survey Team Leader
Recommended:	Chief, Hydro Survey Section
Approved:	Chief, Construction Branch



LEGEND		Contours	
--- Federal Navigation Channel	▨ Cable Area	— -30	
— Federal Navigation Center Line	□ Placement Area	— -29	
⋯ Cable Submarine	⊞ Anchorage Area	— -28	
- - - Cable Overhead	⊗ Obstruction Point	— -27	
— Contour Line	✦ Wrecks-Submerged	— -26	
		● Shoalest Sounding within Channel Quarter**	
		⊥ Beacon, General	
		◆ Red Navigation Buoy	
		◆ Green Navigation Buoy	

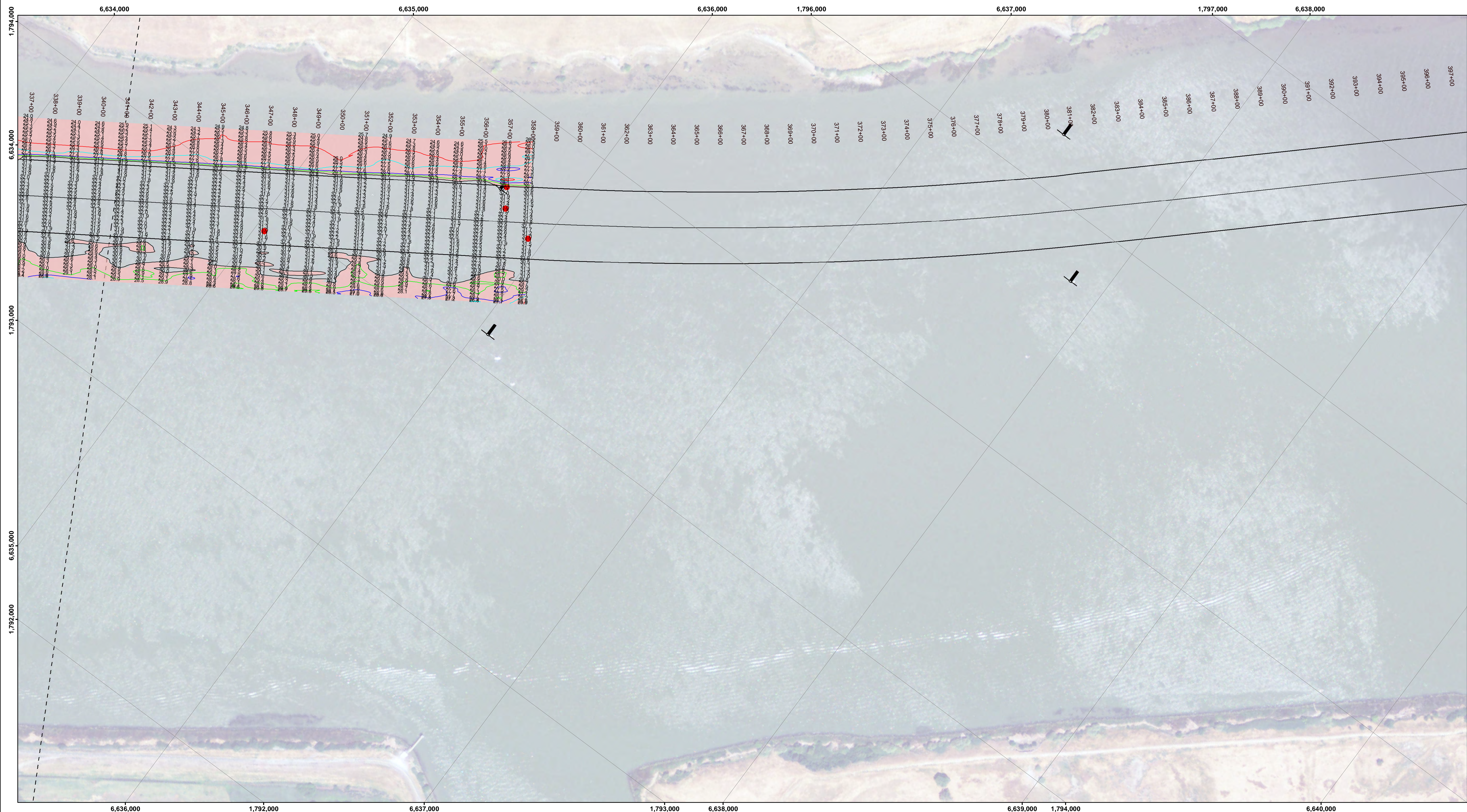


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 PROJECT DEPTH: -30'
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 THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 9415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014
 LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416151
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014
 ALL HORIZONTAL POSITIONS AND MLLW ELEVATIONS WERE POST-PROCESSED USING PUBLIC GPS REFERENCE STATIONS IN THE AREA.

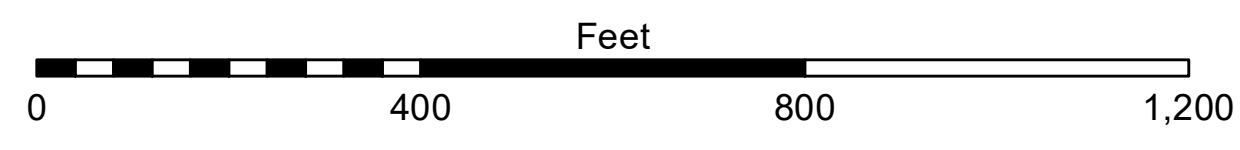
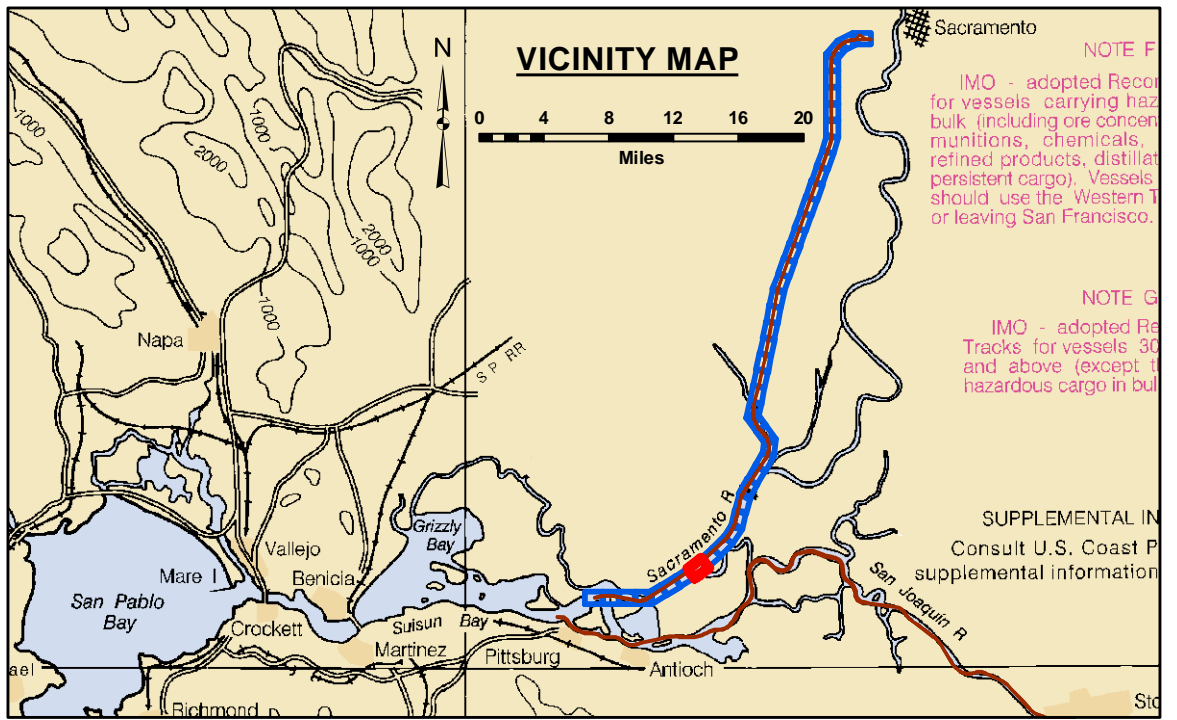
CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 REACH 1-9
 POST-DREDGE SURVEY
 20 AUGUST - 23 SEPTEMBER 2021
 3,5,8,15,17 & 25 OCTOBER 2021

Sheet Reference Number
7 of 45

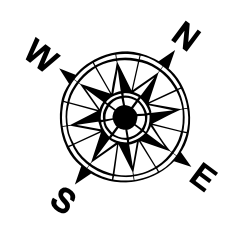


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Chart Date:	Nov 18, 2021
Designed by:	
Drawn by:	PDT
Surveyed By:	KEVIN P. ARNETT
Plotted By:	PDT
Checked By:	PDT
Prepared Under the Direction of:	LT COLONEL C.E. DISTRICT ENGINEER
Stationed:	Hydro Survey Team Leader
Recommended:	Chief, Hydro Survey Section
Approved:	Chief, Construction Branch



LEGEND		Contours
--- Federal Navigation Channel	▨ Cable Area	— -30
— Federal Navigation Center Line	□ Placement Area	— -29
⋯ Cable Submarine	⊠ Anchorage Area	— -28
- - - Cable Overhead	⊗ Obstruction Point	— -27
— Contour Line	✈ Wrecks-Submerged	— -26
	● Shoaling Area	
	● Shoalest Sounding within Channel Quarter**	
	⌄ Beacon, General	
	◆ Red Navigation Buoy	
	◆ Green Navigation Buoy	



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PROJECT DEPTH: -30'

VERTICAL DATUM: MLLW

THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

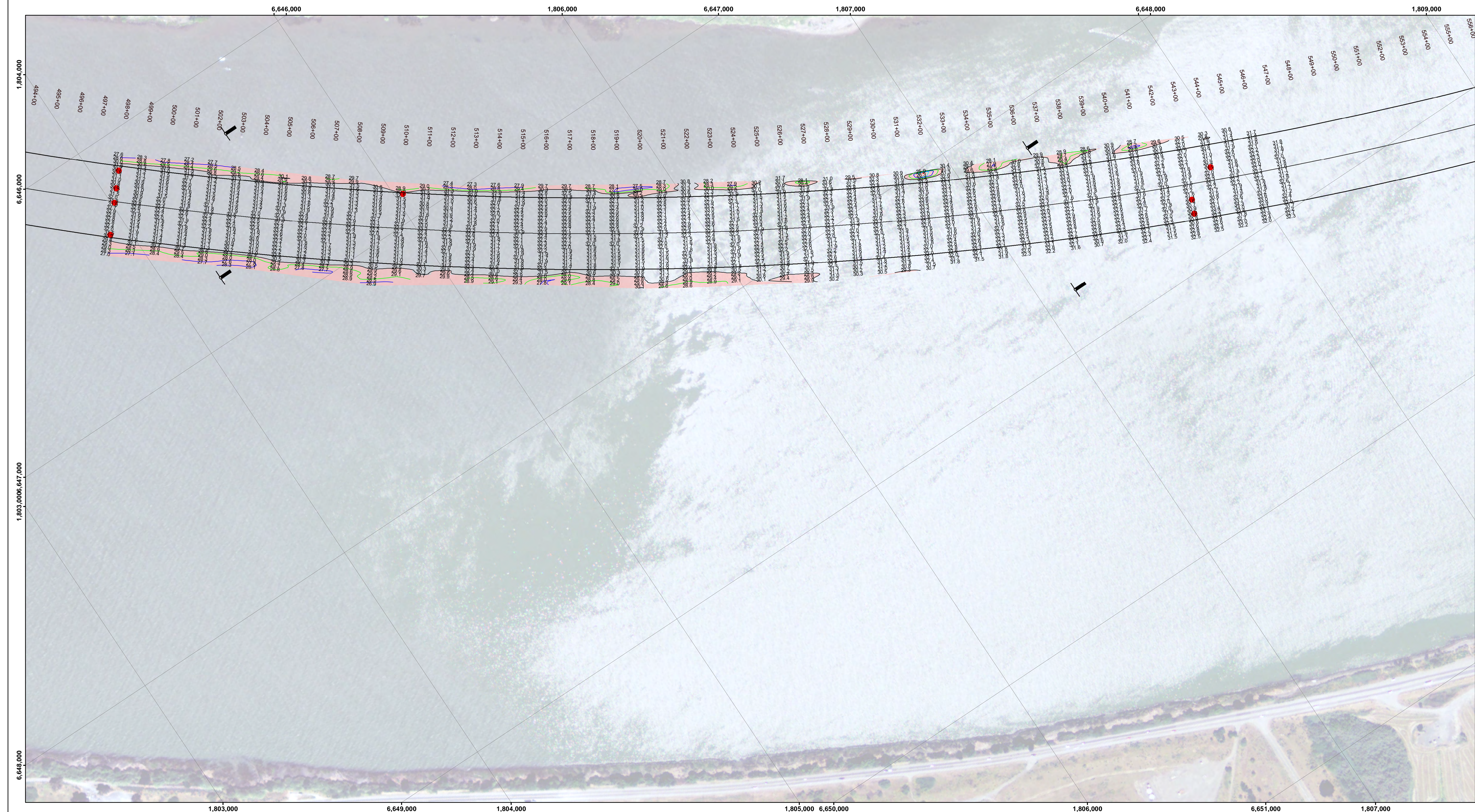
CONTROLS:
 LOCATION: RIO VISTA
 NOOA STATION: 9415131
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
 NOOA STATION: 9415131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014

ALL HORIZONTAL POSITIONS AND MLLW ELEVATIONS WERE POST-PROCESSED USING PUBLIC GPS REFERENCE STATIONS IN THE AREA.

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 REACH 1-9
 POST-DREDGE SURVEY
 20 AUGUST, 23 SEPTEMBER
 3,5,8,15,17 & 25 OCTOBER 2021

Sheet Reference Number
8 of 45

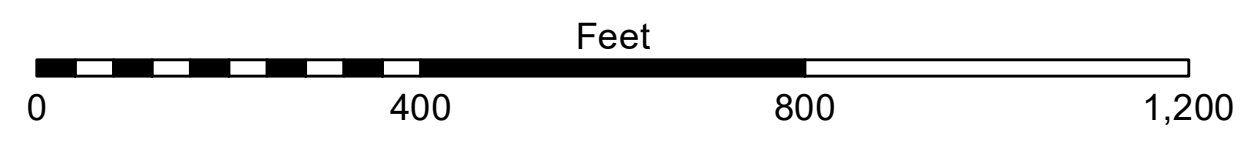
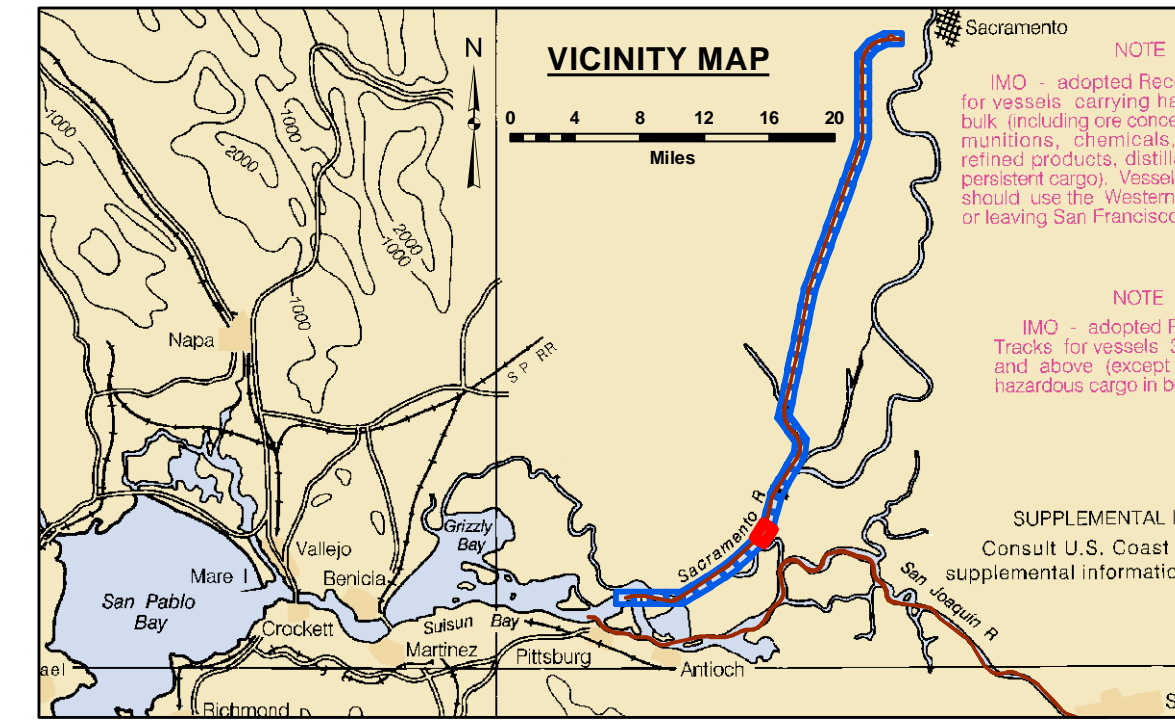


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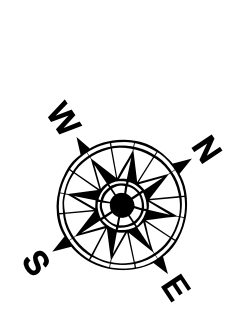
Prepared Under the Direction of KEVIN P. ARNETT LT Colonel, C.E., District Engineer	Chart Date: Nov 18, 2021
Stipulated: Hydro Survey Team Leader	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Drawn by: PDT
Approved: Chief, Construction Branch	

CALIFORNIA
SACRAMENTO RIVER
 REACH 1-9
 POST-DREDGE SURVEY
 20 AUGUST - 23 SEPTEMBER
 3,5,8,15,17 & 25 OCTOBER 2021

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 Number
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LEGEND		Shoaling Area	Contours
--- Federal Navigation Channel	▨ Cable Area	● Shoalest Sounding within Channel Quarter**	— -30
— Federal Navigation Center Line	□ Placement Area	⬇ Beacon, General	— -29
⋯ Cable Submarine	⊠ Anchorage Area	♦ Red Navigation Buoy	— -28
- - - Cable Overhead	⊗ Obstruction Point	◆ Green Navigation Buoy	— -27
— Contour Line	✦ Wrecks-Submerged		— -26



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PROJECT DEPTH: -30'

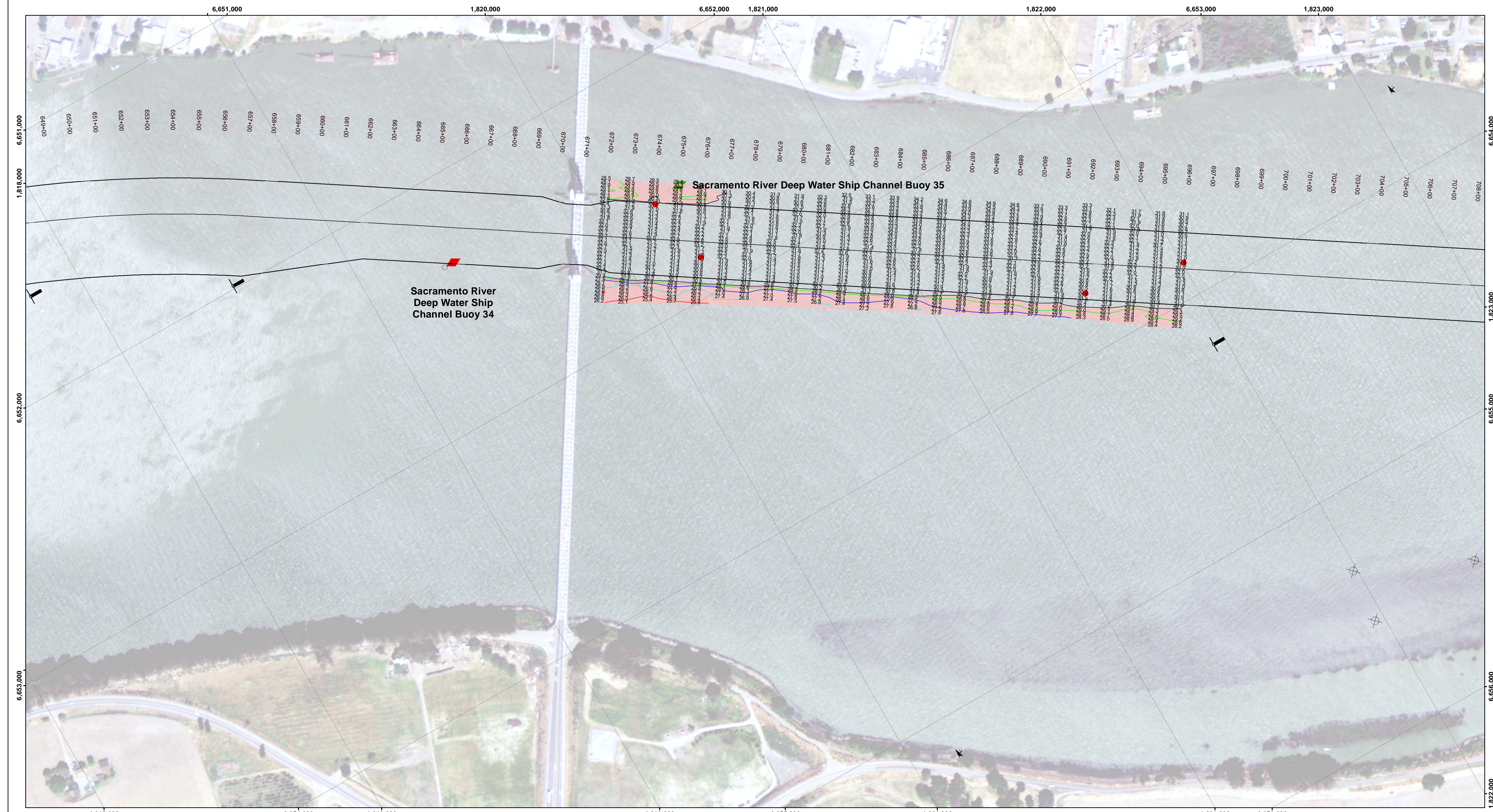
VERTICAL DATUM: MLLW

THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
 LOCATION: RIO VISTA
 NOOA STATION: 941531
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
 NOOA STATION: 941511
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014

ALL HORIZONTAL POSITIONS AND MLLW ELEVATIONS WERE POST-PROCESSED USING PUBLIC GPS REFERENCE STATIONS IN THE AREA.

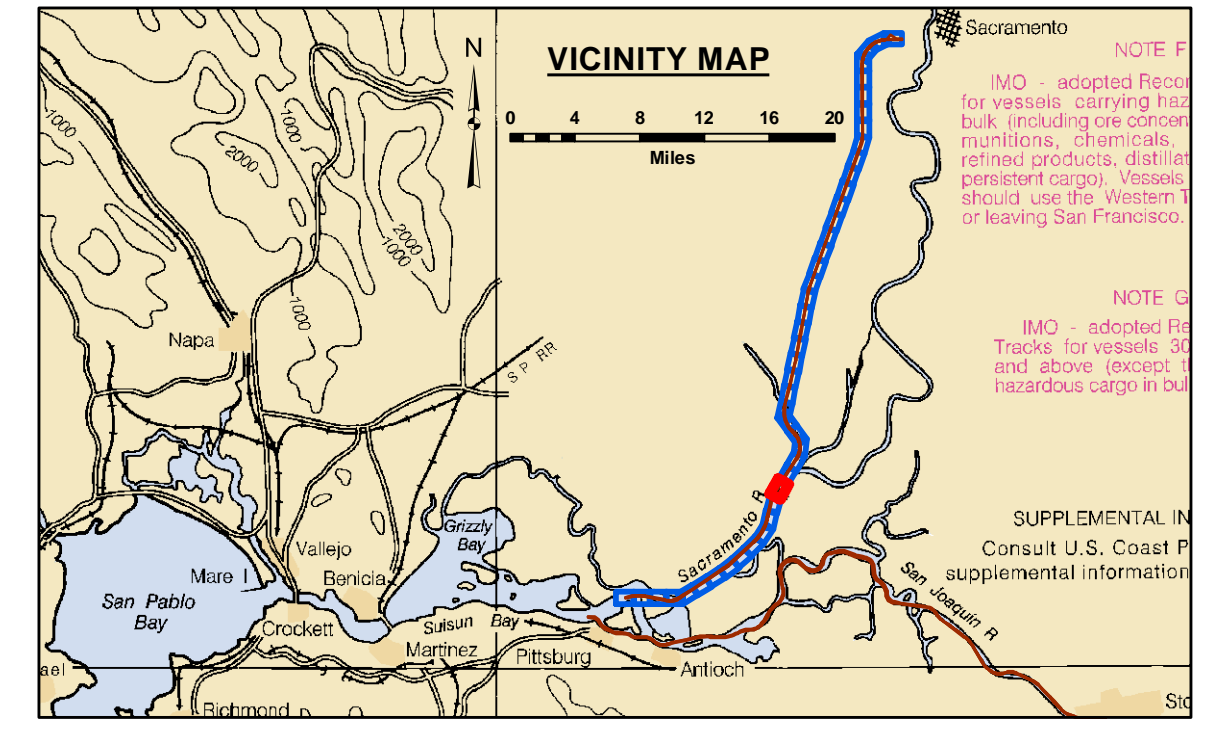


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Chart Date:	Nov 18, 2021
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	
Plotted By:	PDT
Checked By:	PDT
Approved:	
Chief, Construction Branch	

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 REACH 1-9
 POST-DREDGE SURVEY
 20 AUGUST - 23 SEPTEMBER 2021
 3,5,8,15,17 & 25 OCTOBER 2021



LEGEND

--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— Contours
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding within Channel Quarter**	— -30
..... Cable Submarine	▭ Anchorage Area	⬇ Beacon, General	— -29
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy	— -28
— Contour Line	✦ Wrecks-Submerged	◆ Green Navigation Buoy	— -27
			— -26

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PROJECT DEPTH: -30'

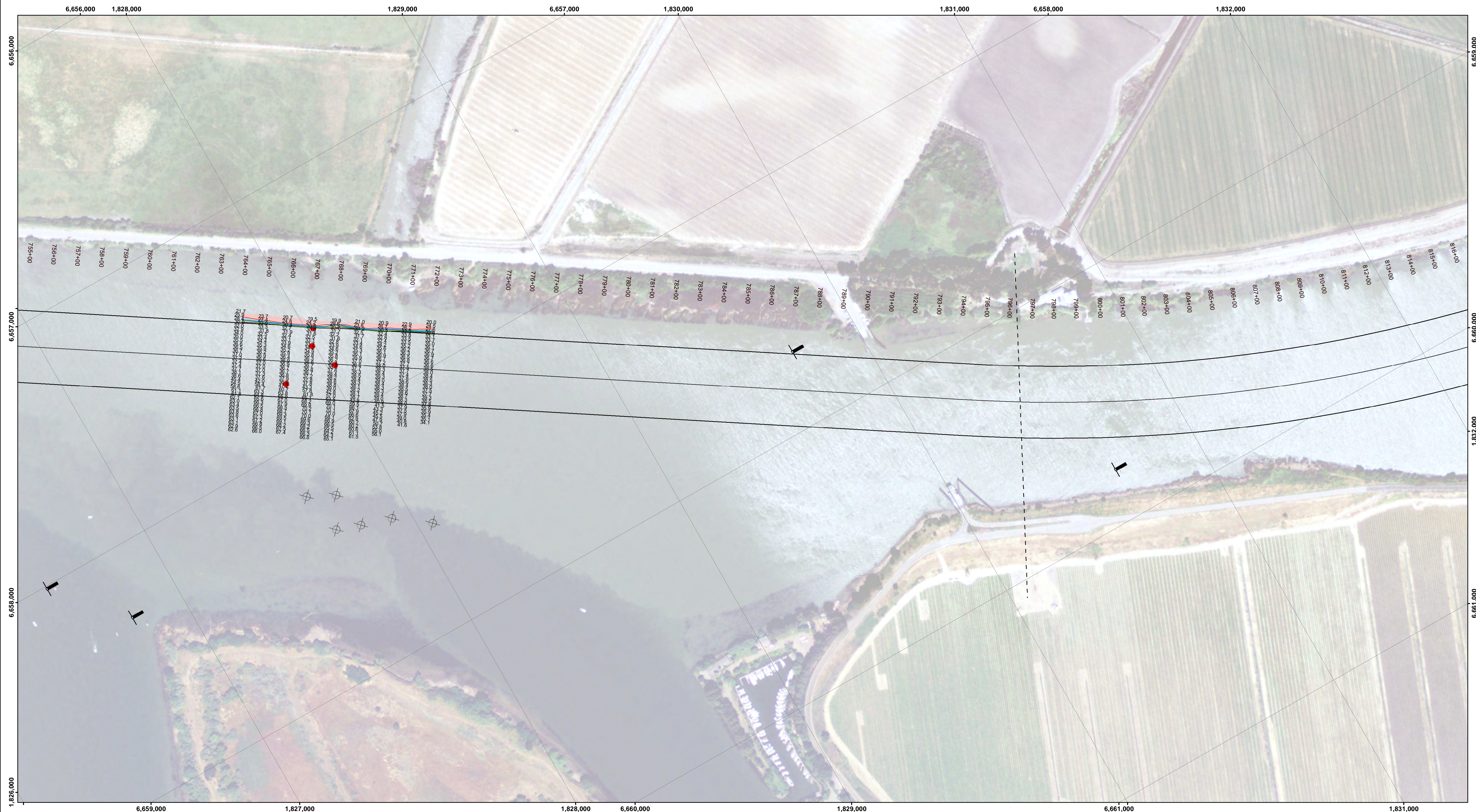
VERTICAL DATUM: MLLW

THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 9415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9415151
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014

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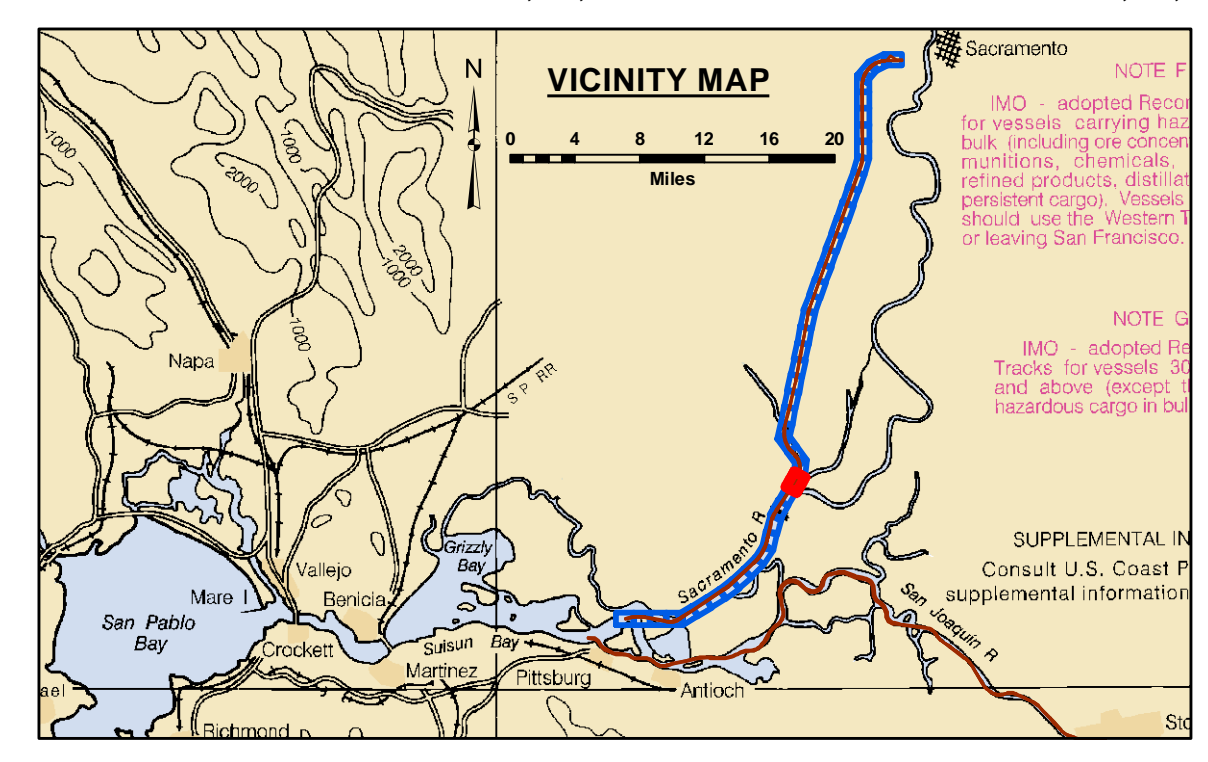


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Chart Date:	Nov 18, 2021
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 REACH 1-9
 POST-DREDGE SURVEY
 20 AUGUST - 23 SEPTEMBER 2021
 3,5,8,15,17 & 25 OCTOBER 2021



LEGEND

--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— Contours
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding within Channel Quarter**	— -30
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -29
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PROJECT DEPTH: -30'

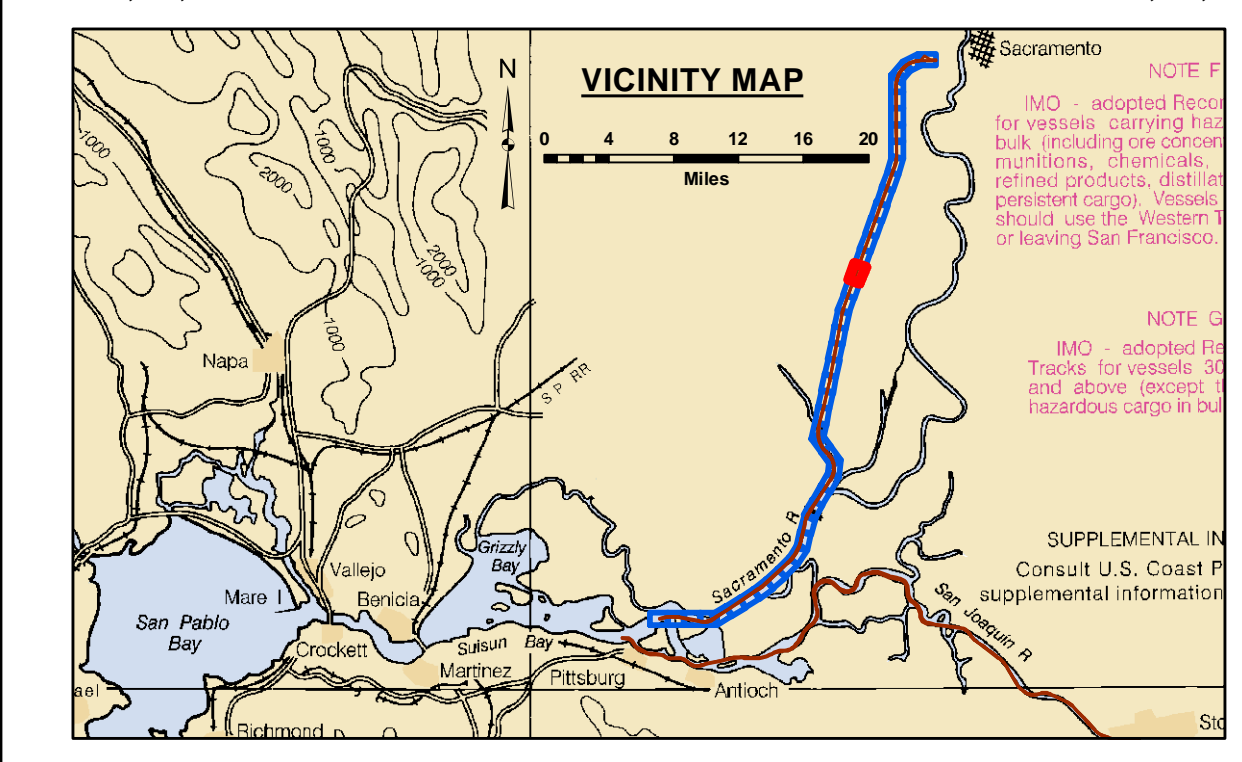
VERTICAL DATUM: MLLW

THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 9415131
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

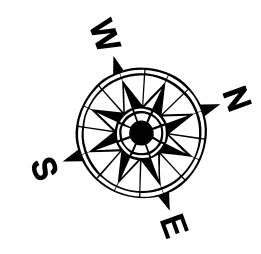
LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9415131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
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LEGEND

--- Federal Navigation Channel	▨ Cable Area	▭ Shoaling Area	— Contours
— Federal Navigation Center Line	▭ Placement Area	● Shoalest Sounding within Channel Quarter**	— -30
⋯ Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -29
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PROJECT DEPTH: -30'

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CONTROLS:
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NOAA STATION: 9415316
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BENCHMARK: POWS1 (NO PID)
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Chart Date:	Nov 18, 2021
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	KEVIN P. ARNETT
Plotted By:	PDT
Checked By:	PDT

PREPARED UNDER THE DIRECTION OF
KEVIN P. ARNETT
LT COLONEL, C.E., DISTRICT ENGINEER

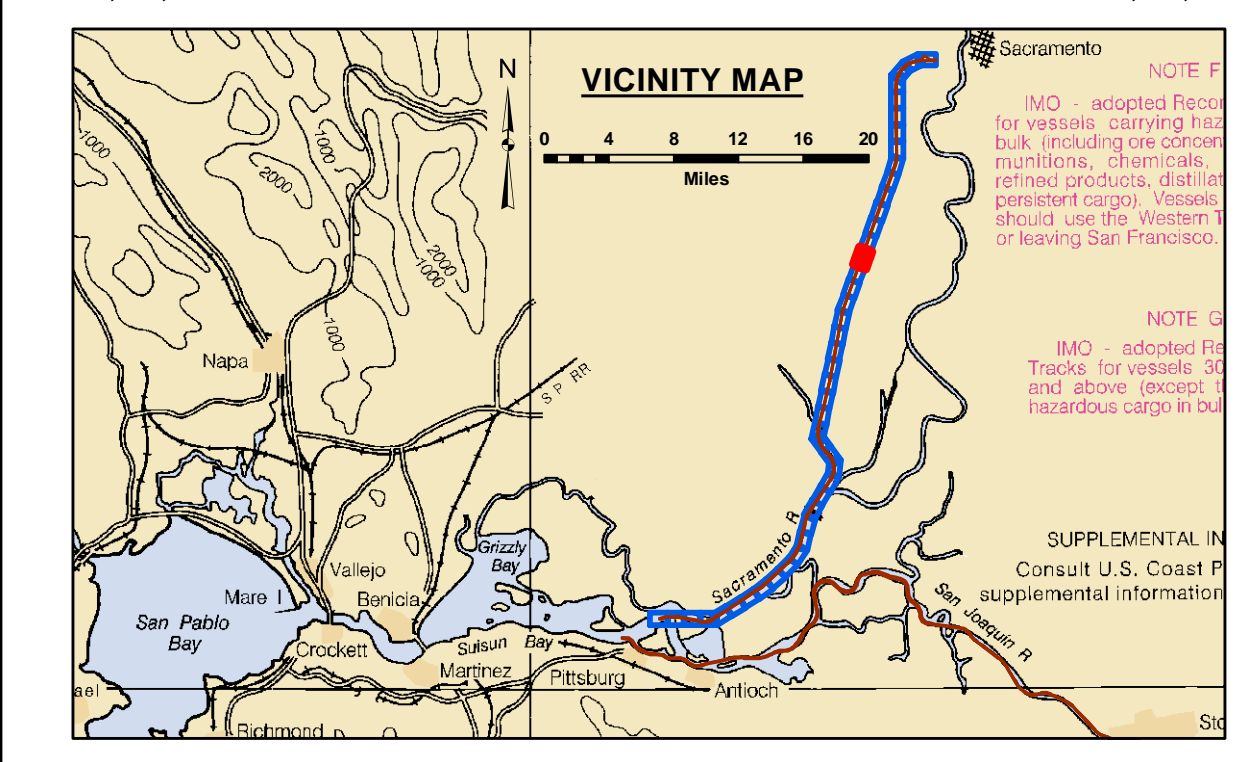
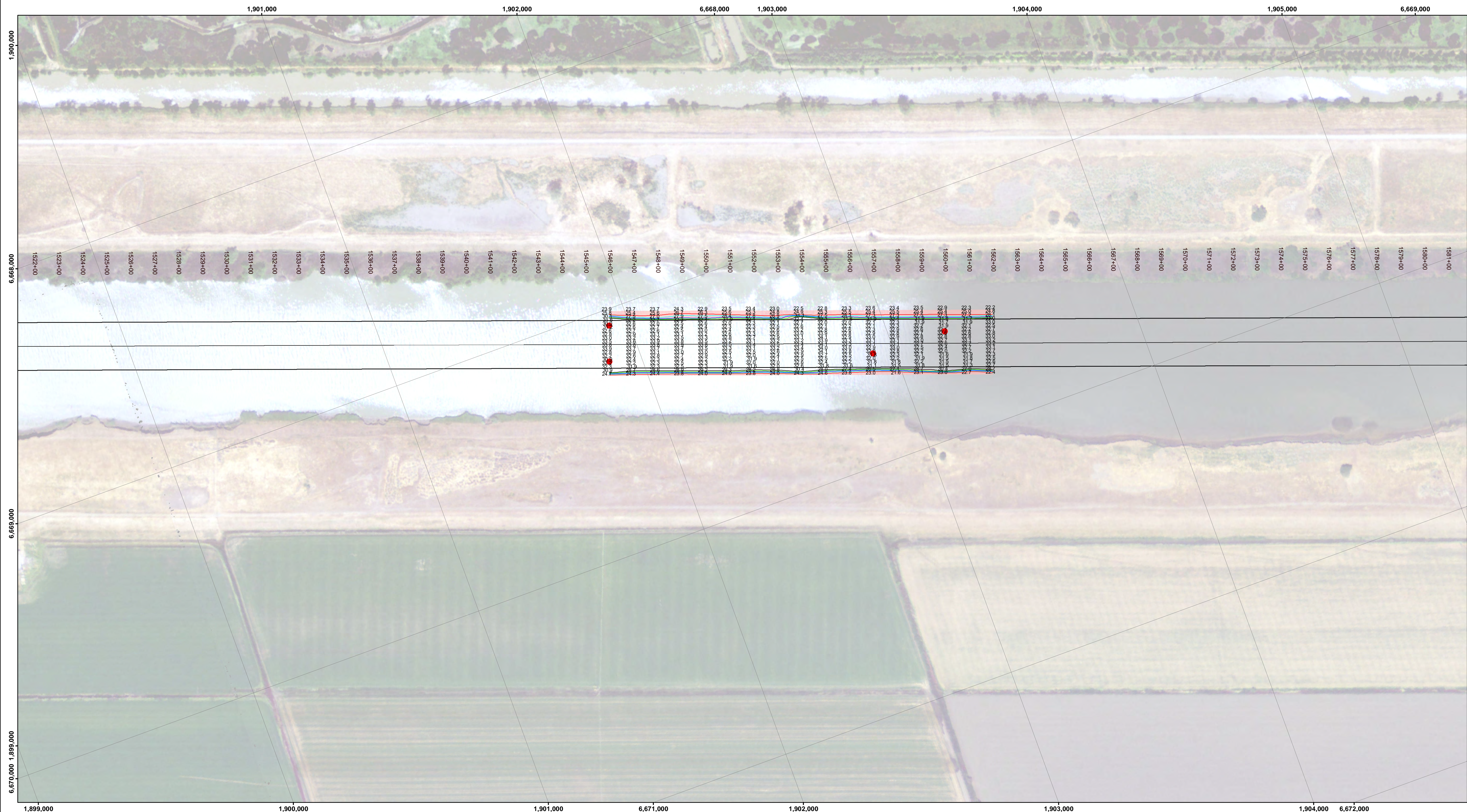
Staged by:
Hydro Survey Team Leader

Recommended:
Chief, Hydro Survey Section

Approved:
Chief, Construction Branch

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
REACH 1-9
POST-DREDGE SURVEY
20 AUGUST, 23 SEPTEMBER
3, 5, 8, 15, 17 & 25 OCTOBER 2021

Sheet Reference Number
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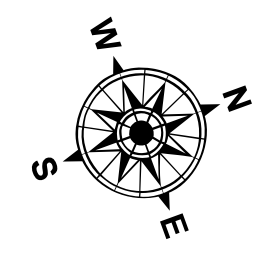


LEGEND

- Federal Navigation Channel
- Federal Navigation Center Line
- Cable Submarine
- - - Cable Overhead
- Contour Line
- ▭ Cable Area
- Placement Area
- ⊗ Obstruction Point
- ✈ Wrecks-Submerged
- Shoaling Area
- Shoalest Sounding within Channel Quarter**
- ⊥ Beacon, General
- ◆ Red Navigation Buoy
- ◆ Green Navigation Buoy

Contours

- -30
- -29
- -28
- -27
- -26



NOTES:
DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY, THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.

SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.

SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.

NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CA ZONE II (0402). DISTANCE UNITS IN U.S. SURVEY FEET.

PLANE GRID AND COORDINATES ARE BASED ON LAMBERT PROJECTION, NAD 83, ZONE II CALIFORNIA AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY THE NATIONAL OCEAN SURVEY.

PROJECT DEPTH: -30'

VERTICAL DATUM: MLLW

THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
LOCATION: RIO VISTA
NOAA STATION: 9415316
BENCHMARK: 5316 B 1996 (NO PID)
TIDE GAUGE: NAIL @ 8.2 FT MLLW
METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
NOAA STATION: 9415131
BENCHMARK: POWS1 (NO PID)
TIDE GAUGE: NAIL @ 10.0 FT MLLW
METADATA: NAIL SET BY USACE 8 APRIL, 2014

ALL HORIZONTAL POSITIONS AND MLLW ELEVATIONS WERE POST-PROCESSED USING PUBLIC GPS REFERENCE STATIONS IN THE AREA.

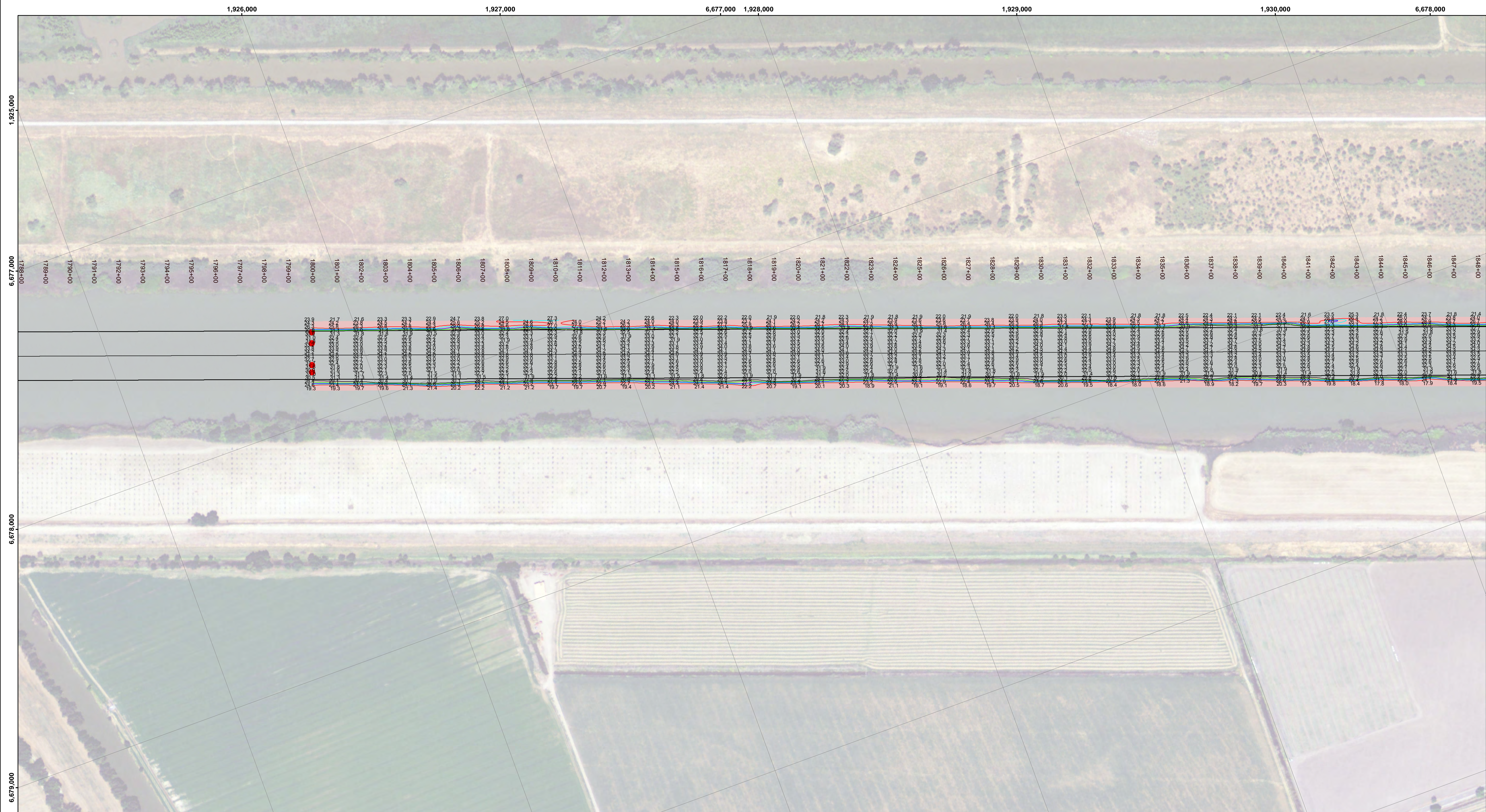


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Chart Date:	Nov 18, 2021
Prepared Under the Direction of:	KEVIN P. ARNETT
Surveilled:	Hydro Survey Team Leader
Recommended:	Chief, Hydro Survey Section
Approved:	Chief, Construction Branch
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Drawn By:	PDT

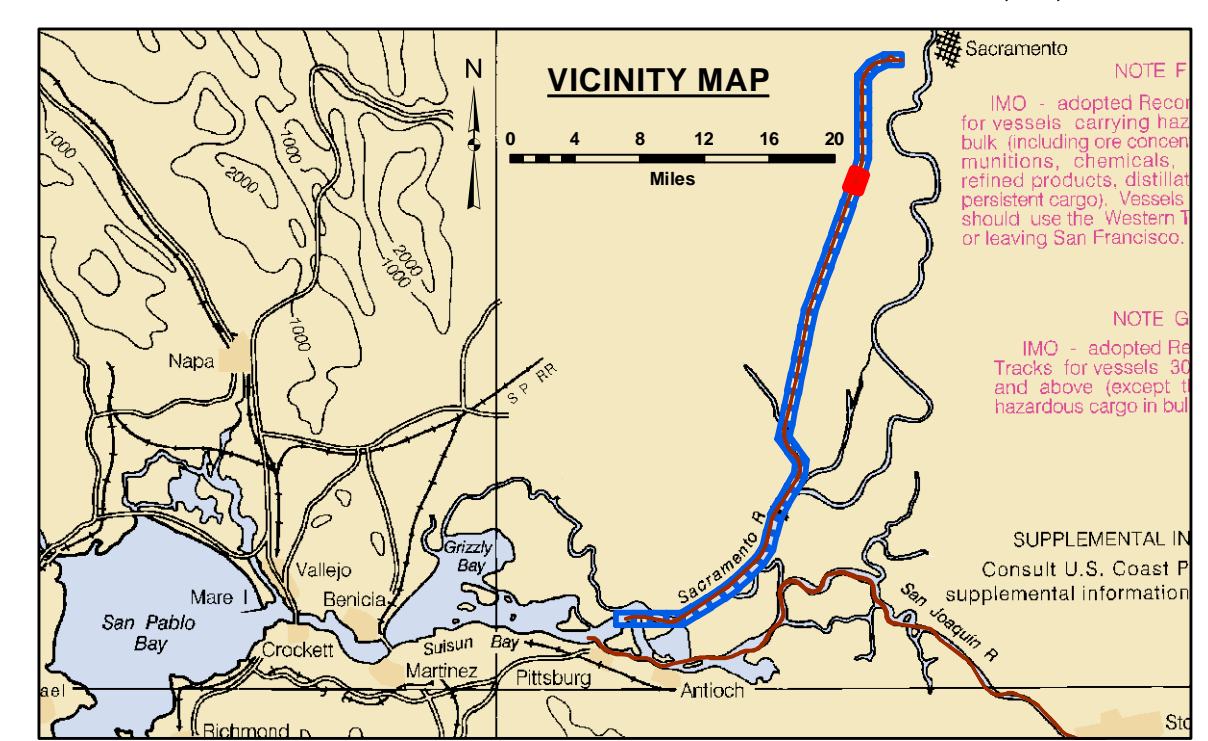
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SAN JOAQUIN COUNTY
SACRAMENTO RIVER
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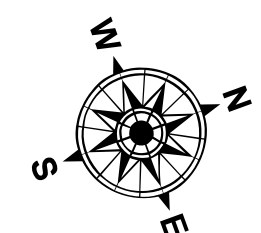
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Prepared Under the Direction of KEVIN P. ARNETT LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: Nov 18, 2021
Surveyed By: PDT	Designed by: PDT
Plotted By: PDT	Drawn by: PDT
Checked By: PDT	
Approved: Chief, Construction Branch	



LEGEND

--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— Contours
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding within Channel Quarter**	— -30
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -29
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy	— -28
— Contour Line	✶ Wrecks-Submerged	◆ Green Navigation Buoy	— -27
			— -26



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PROJECT DEPTH: -30'

VERTICAL DATUM: MLLW

THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
LOCATION: RIO VISTA
NOAA STATION: 9415316
BENCHMARK: 5316 B 1996 (NO PID)
TIDE GAUGE: NAIL @ 8.2 FT MLLW
METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
NOAA STATION: 9416151
BENCHMARK: POWS1 (NO PID)
TIDE GAUGE: NAIL @ 10.0 FT MLLW
METADATA: NAIL SET BY USACE 8 APRIL, 2014

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CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
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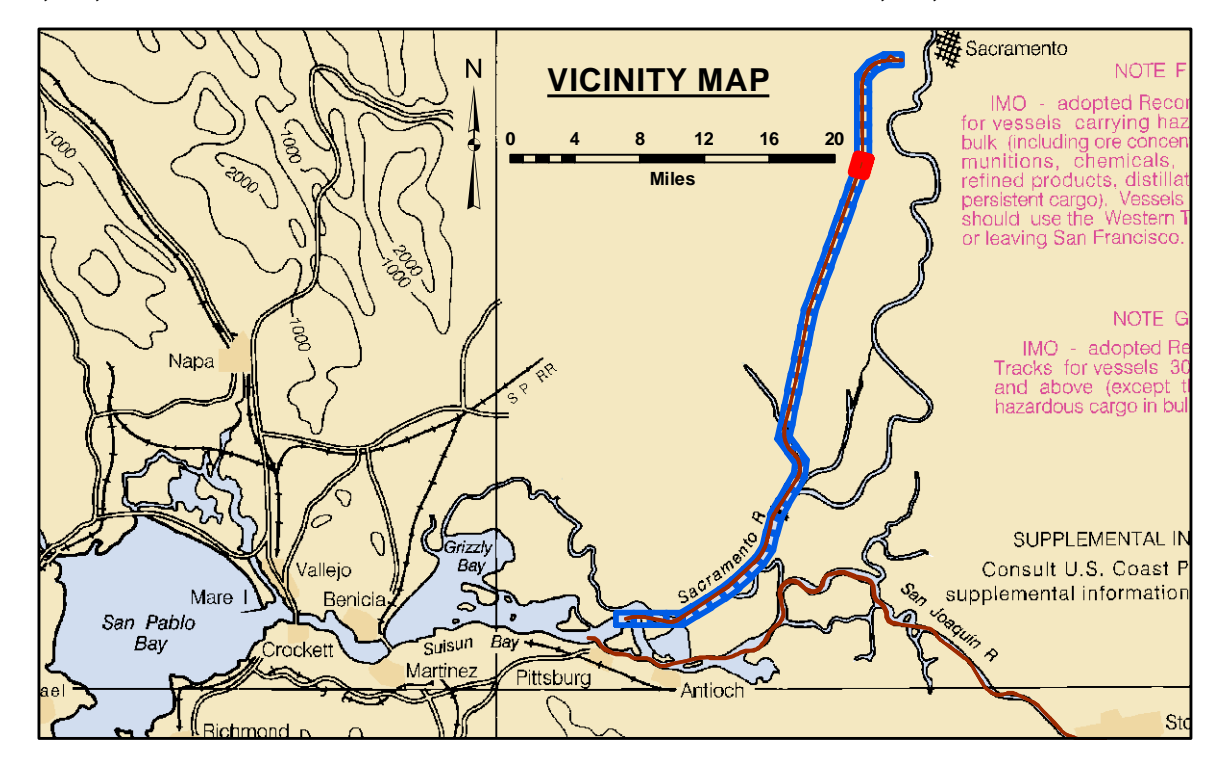


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Chart Date:	Nov 18, 2021
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

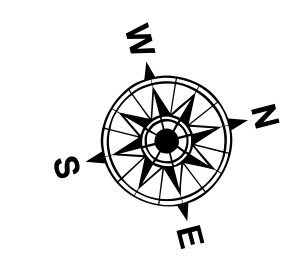
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0 400 800 1,200 Feet

--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— Contours
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding within Channel Quarter**	— -30
..... Cable Submarine	⊠ Anchorage Area	⊥ Beacon, General	— -29
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