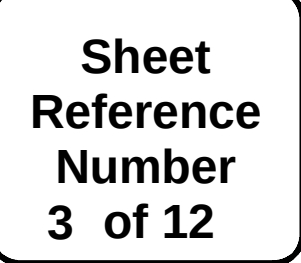
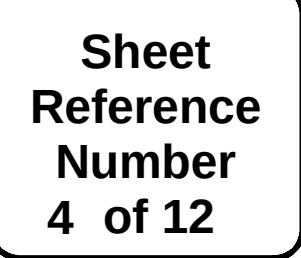


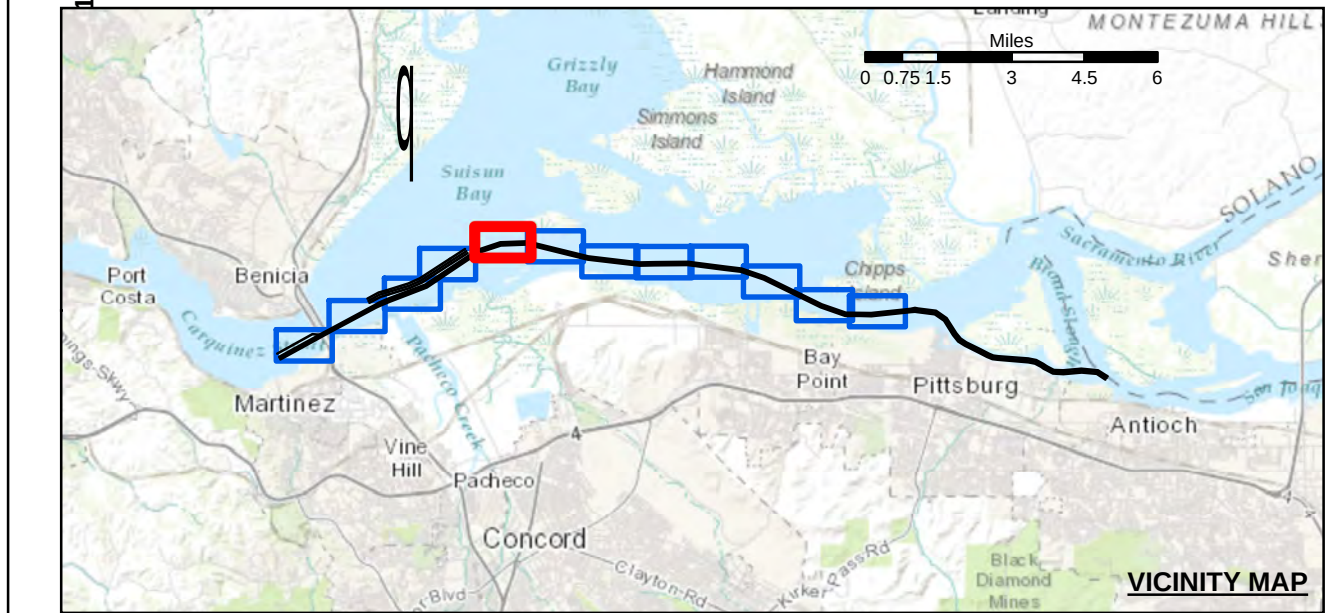
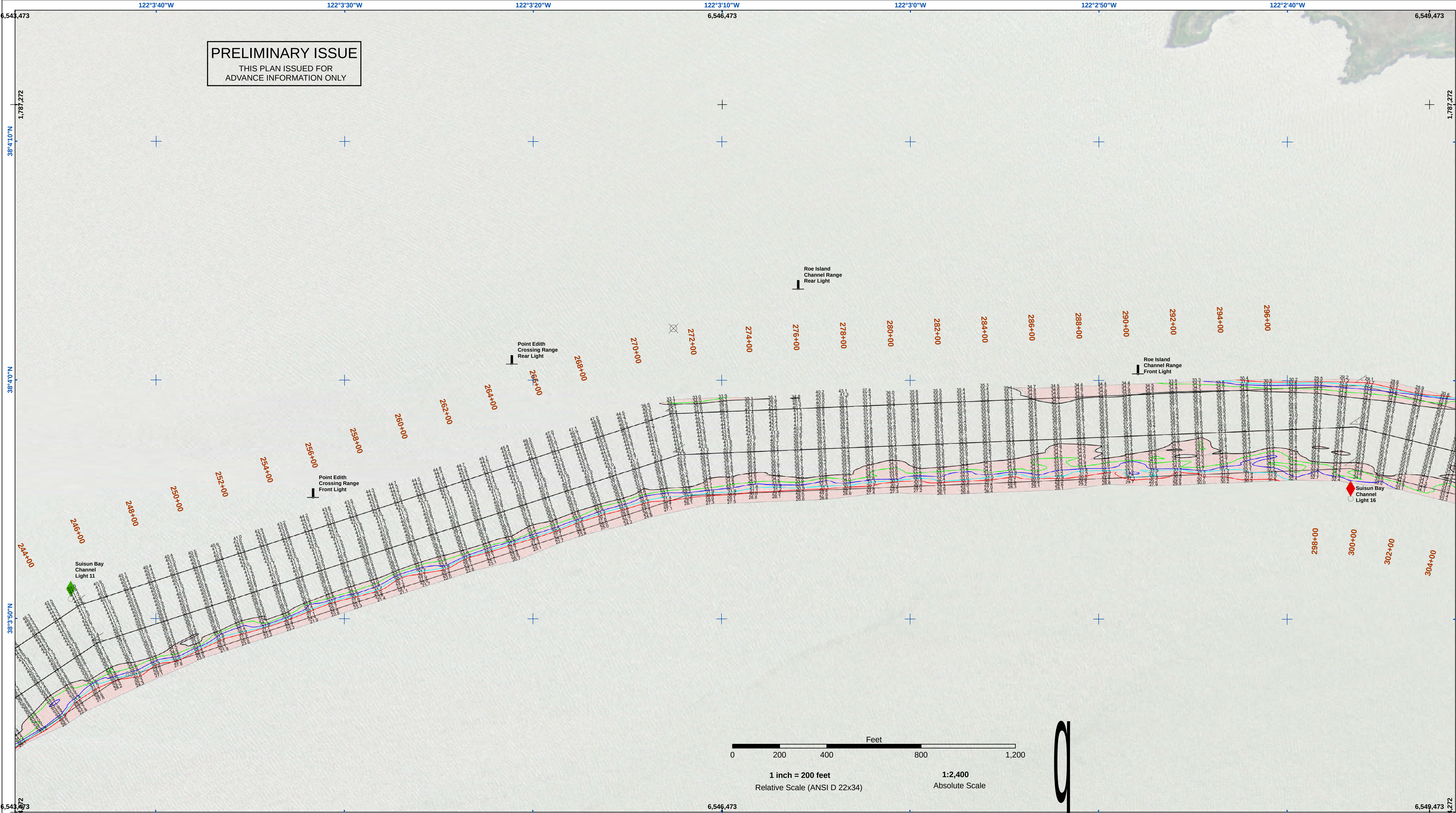
Access Constraints: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be retransmitted, reproduced, or further disseminated in any form, by any means, without the express written permission of the United States Government. The data are provided for the recipient's use only and are not to be used for any other purpose, expressed, implied concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the recipient. The recipient understands that the data are provided under no liability whatsoever to any person by reason of any use made thereof. These data belong to the Government. Therefore the recipient agrees to release the data to the Government and other than Government provided data. The recipient may not transfer these data to others without also transferring this Disclaimer.

Travis J. Rayfield LT Colonel, U.S. District Engineer Travis J. Rayfield	Submitted Hydro Survey Team Leader	Plotted By:	Designed by:	July 21, 2017
	Rechecked Chief, Hydro Survey Section	Plotted By:		
	Approved Chief, Construction Branch	Checked By:	Drawn by:	

SUISUN BAY CHANNEL
PREDREDGE SURVEY
15 & 19 JULY 2017







Federal Navigation Channel

Shoaling Area

Placement Area

Anchorage Area

Wreck Area

Submerged Wreck

Angle Point

Beacon, General

Obstruction Point

Navigation Buoy

Navigation Buoy

Shoalest Sounding*

Contours

-35

-34

-33

-32

-31

NOTES:

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

VERTICAL DATUM:
SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITION EXISTING AT THAT TIME.

PLANE GRID, BEARING AND COORDINATES ARE BASED ON THE STATE OF CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, ZONE II NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY NATIONAL OCEAN SURVEY, BASE MAPS ARE USDA NAIP 2010.

*SHOALEST SOUNDING PER QUARTER PER REACH

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.

SURVEYED BY THE CORPS OF ENGINEERS.

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.

THE PROJECT DEPTH IS 35 FEET.

VERTICAL CONTROL:
SUISUN BAY CHANNEL
(LINES 00+00 TO 160+00) BENCHMARK "9" (1948), USC&GS DISK ELEV 14.875 FT MLLW, NAVD 88 DATUM.
TIDE GAUGE LOCATED AT PORT OF BENICIA DOCK.

(LINES 150+00 TO 500+00) BENCHMARK "5144-P" (1990 RESET 1997), (LINES 500+00 TO 660+00) BENCHMARK "5144-P" (1990 RESET 1997), USC&GS DISK, ELEV 11.83 FT MLLW, NAVD 88 DATUM.
TIDE GAUGE LOCATED AT CONCORD NAVAL WEAPONS STATION TUG DOCK, NOAA STATION.

(LINES 660+00 TO 733+45) BENCHMARK "5096-B", USC&GS DISK, ELEV 21.76 FT MLLW, NAVD 88 DATUM.
TIDE GAUGE LOCATED AT DIABLO SERVICE DOCK.

HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON

US Army Corps
of Engineers

San Francisco District
1455 Market Street
San Francisco, CA 94103

DISCLAIMER

The United States Government furnishes this information as a service to the public. It is not intended to be used for navigation or other purposes. The user is responsible for the results of any application of the data for other than its intended purpose.

Access Constraints: The United States Government furnishes this information as a service to the public. It is not intended to be used for navigation or other purposes. The user is responsible for the results of any application of the data for other than its intended purpose.

Distribution Liability: The data represents the results of data collected by the United States Government. The user is responsible for the results of any application of the data for other than its intended purpose.

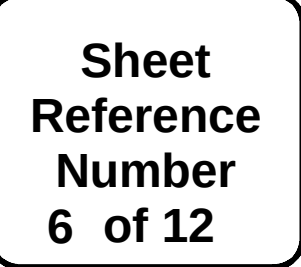
PREPARED UNDER THE DIRECTION OF LT COLONEL J. RAYFIELD C.E. DISTRICT ENGINEER	Surveyed By:	Chart Date:
Submitted: Hydro Survey Team Leader	Plotted By:	Jul 21, 2017
Recommended: Chief, Hydro Survey Section	Checked By:	Designed by:
Approved: Chief Construction Branch	PDT	Drawn by:
	PDT	PDT

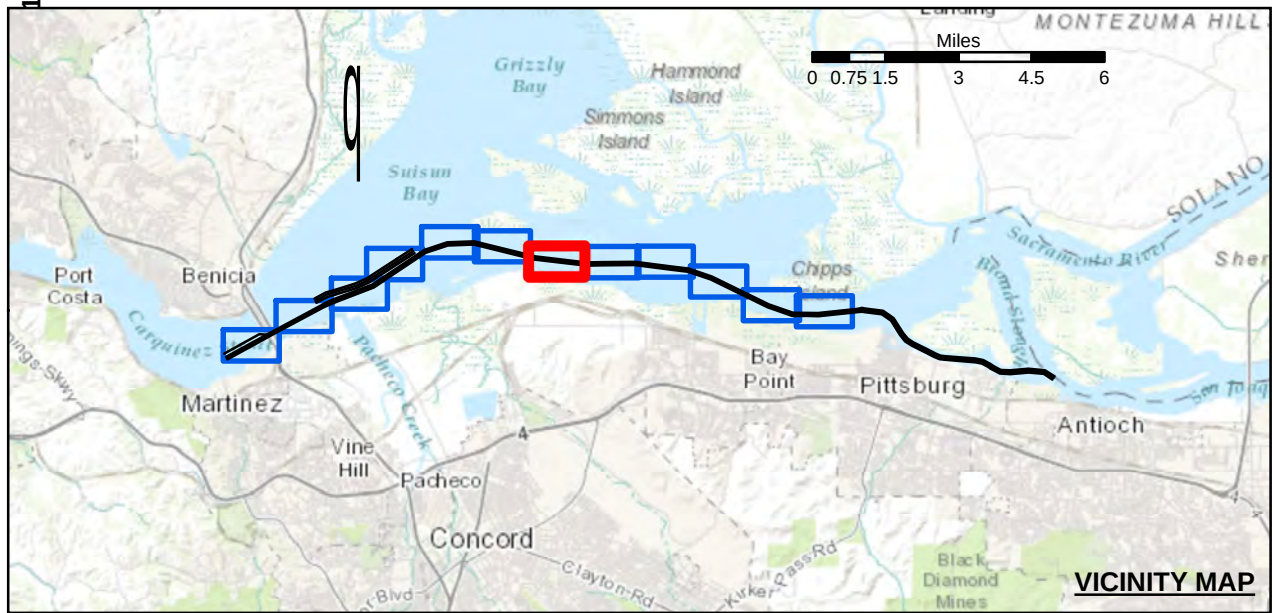
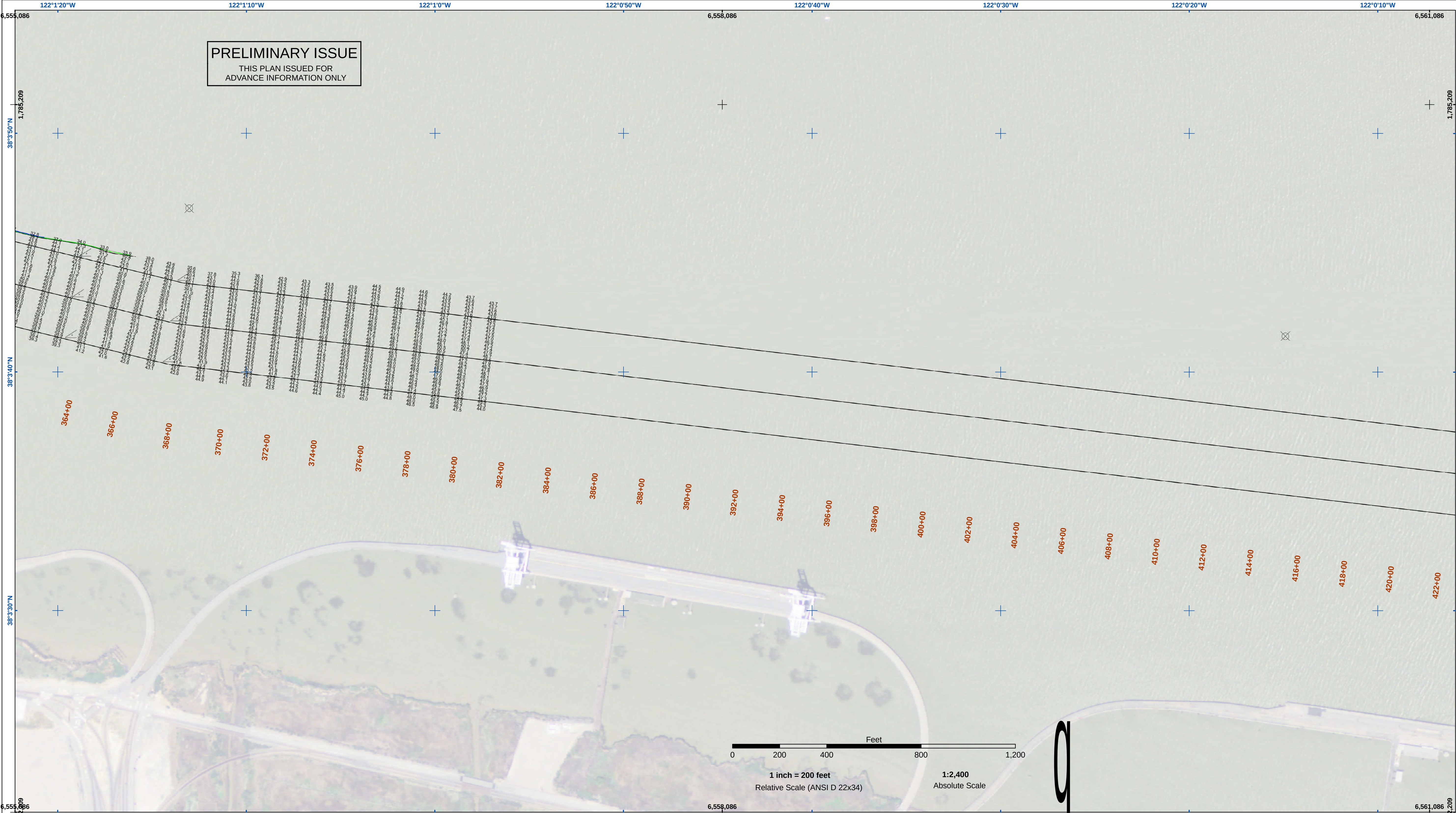
CALIFORNIA

CONTRA COSTA COUNTY

SUISUN BAY CHANNEL
PREDREDGE SURVEY
15 & 19 JULY 2017

Sheet
Reference
Number
5 of 12





- Federal Navigation Channel

Shoaling Area

Placement Area

Anchorage Area

Wreck Area

Submerged Wreck

Angle Point
- Beacon, General

Obstruction Point

Navigation Buoy

Navigation Buoy

Shoalest Sounding*
- Contours

-35

-34

-33

-32

-31

NOTES:

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

VERTICAL DATUM:
SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITION EXISTING AT THAT TIME.

PLANE GRID, BEARING AND COORDINATES ARE BASED ON THE STATE OF CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, ZONE II NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY NATIONAL OCEAN SURVEY. BASE MAPS ARE USDA NAIP 2010.

*SHOALEST SOUNDING PER QUARTER PER REACH

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.

SURVEYED BY THE CORPS OF ENGINEERS.

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.

THE PROJECT DEPTH IS 35 FEET.

VERTICAL CONTROL:
SUISUN BAY CHANNEL
(LINES 00+00 TO 160+00) BENCHMARK "9" (1948), USC&GS DISK
ELEV 14.875 FT MLLW, NAVD 88 DATUM.
TIDE GAUGE LOCATED AT PORT OF BENICIA DOCK.

(LINES 150+00 TO 500+00) BENCHMARK "5144-P" (1990 RESET 1997),
(LINES 500+00 TO 660+00) BENCHMARK "5144-P" (1990 RESET 1997),
USC&GS DISK, ELEV 11.83 FT MLLW, NAVD 88 DATUM.
TIDE GAUGE LOCATED AT CONCORD NAVAL WEAPONS STATION TUG DOCK, NOAA STATION.

(LINES 660+00 TO 733+45) BENCHMARK "5096-B",
USC&GS DISK, ELEV 21.76 FT MLLW, NAVD 88 DATUM.
TIDE GAUGE LOCATED AT DIABLO SERVICE DOCK.

HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON

**US Army Corps
of Engineers**

San Francisco District
1455 Market Street
San Francisco, CA 94103

DISCLAIMER

Access Constraints: The United States Government furnishes this information as a service to the public and does not express any opinion or make any warranty, expressed or implied, concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information. The user is responsible for the results of any use of the information. The user is responsible for the results of any use of the information. The user is responsible for the results of any use of the information.

DISTRIBUTION LIABILITY

The data represents the results of data collected by the United States Government. The data is not intended for use in any other manner than for the intended purpose. The user is responsible for the results of any use of the data. The user is responsible for the results of any use of the data. The user is responsible for the results of any use of the data.

PREPARED UNDER THE DIRECTION OF LT COLONEL C.E. DISTRICT ENGINEER TRAVIS J. RAYFIELD	Surveyed By:	Chart Date: Jul 21, 2017
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Designed by:
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

CALIFORNIA

CONTRA COSTA COUNTY

SUISUN BAY CHANNEL

PREDREDGE SURVEY

15 & 19 JULY 2017

**Sheet
Reference
Number**

7 of 12