

US Army Corps of Engineers
 San Francisco District
 450 Golden Gate Ave
 San Francisco, CA 94102

PRELIMINARY ISSUE
 THIS PLAN ISSUED FOR
 ADVANCE INFORMATION ONLY

1 inch = 200 feet
 Relative Scale (ANSI D 22x34)
 1:2,400
 Absolute Scale

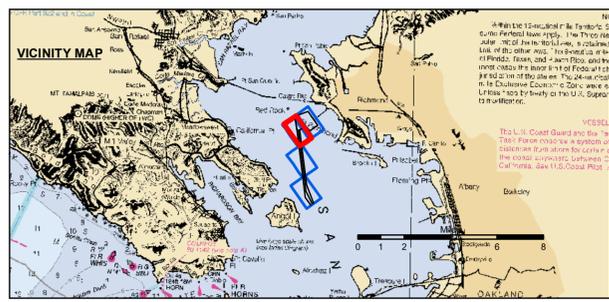
FLOOD →
 ← EBB

DISCLAIMER
 The United States Government furnishes this information as a public service. It is not intended to be used for any purpose other than that for which it was prepared. The user is responsible for the results of any application of the data for other than the intended purpose. The user is responsible for the results of any application of the data for other than the intended purpose. The user is responsible for the results of any application of the data for other than the intended purpose.

Prepared Under the Direction of	Chart Date
KEVIN P. ARNETT	Jul 14, 2022
Plotted By	Designed by
PDT	PDT
Checked By	Drawn by
PDT	PDT

ALAMEDA COUNTY
 RICHMOND OUTER HARBOR
 CONDITION/PRE-DREDGE
 POST-DREDGE SURVEY
 SURVEY DATE:

Sheet
 Number
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Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-45
Placement Area	Navigation Buoy	-44
Anchorage Area	Navigation Buoy	-43
Wreck Area	Shoalest Sounding*	-42
Submerged Wreck		-41
Angle Point		

NOTES:
 HORIZONTAL COORDINATE SYSTEM:
 NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE III. 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.

*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 LOCATION 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.

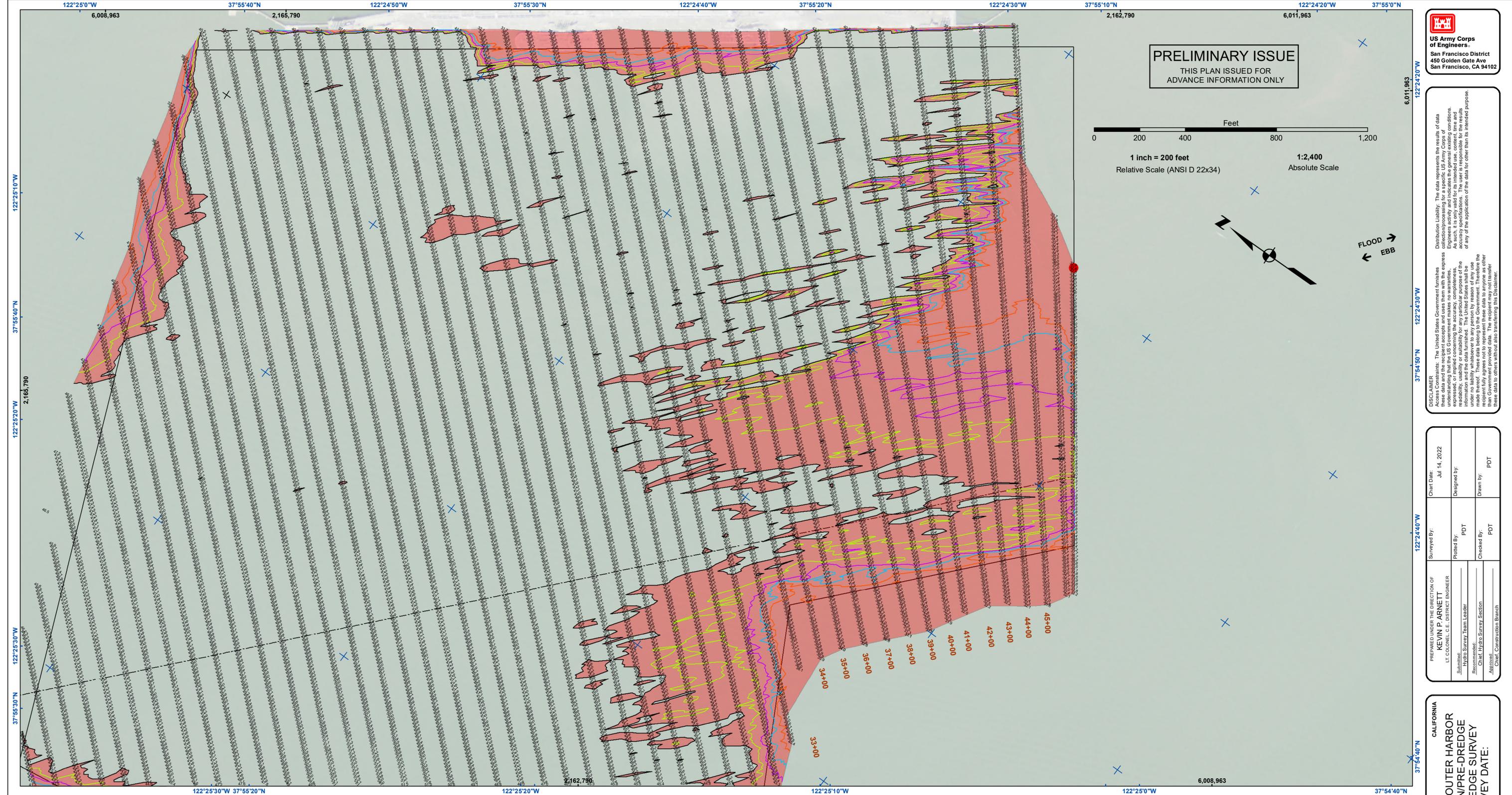
BASE MAPS ARE USDA NAIP 2010.

THE PROJECT DEPTHS ARE AS FOLLOWS:
 SOUTHAMPTON SHOALS CHANNEL -45 FEET.
 LONG WHARF MANEUVERING AREA -45 FEET.

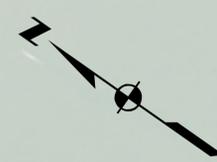
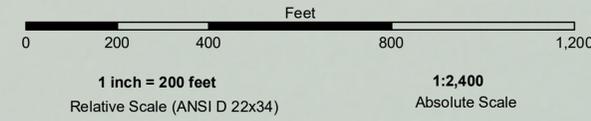
1:00 INDICATED THE NUMBER AND BEGINNING OF A LINE OF SOUNDINGS.

HORIZONTAL CONTROL:
 HORIZONTAL POSITIONING: COAST GUARD DGPS
 VERTICAL TIDES: INTERPOLATED FROM NOAA ONLINE TIDE STATIONS:
 941 4863 - RICHMOND, CA
 941 4290 - SAN FRANCISCO, CA

VERTICAL CONTROL:
 (SOUTHAMPTON SHOALS & LONG WHARF MANEUVERING) BENCHMARK *101 1937 ELEV 15.86 FT. MLLW.
 AND BENCHMARK *111 1946 ELEV 15.47 FT. MLLW.
 TIDE GAUGE LOCATED AT TIBURON NET DEPOT.



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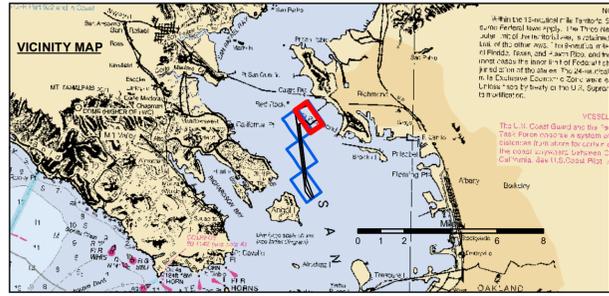


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Prepared Under the Direction of	Surveyed By	Chart Date
LT COLONEL C.E. DISTRICT ENGINEER KEVIN P. ARNETT		Jul 14, 2022
Submitted	Plotted By	Designed by
Hydro Survey Team Leader	PDT	
Recommended	Checked By	Drawn by
Chief, Hydro Survey Section	PDT	PDT
Approved	Chief, Construction Branch	



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