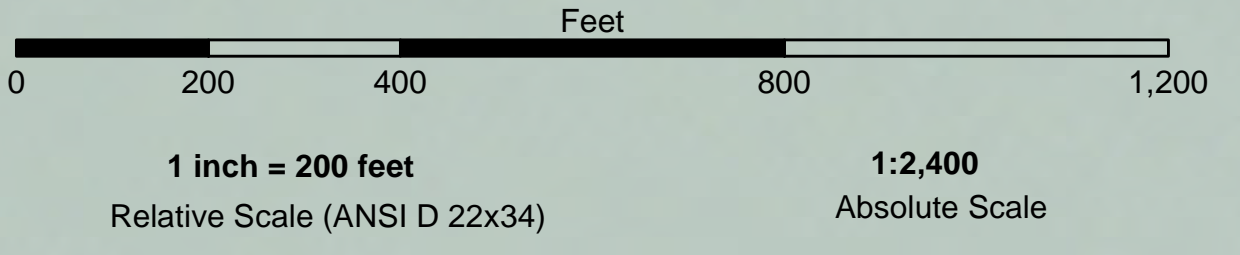


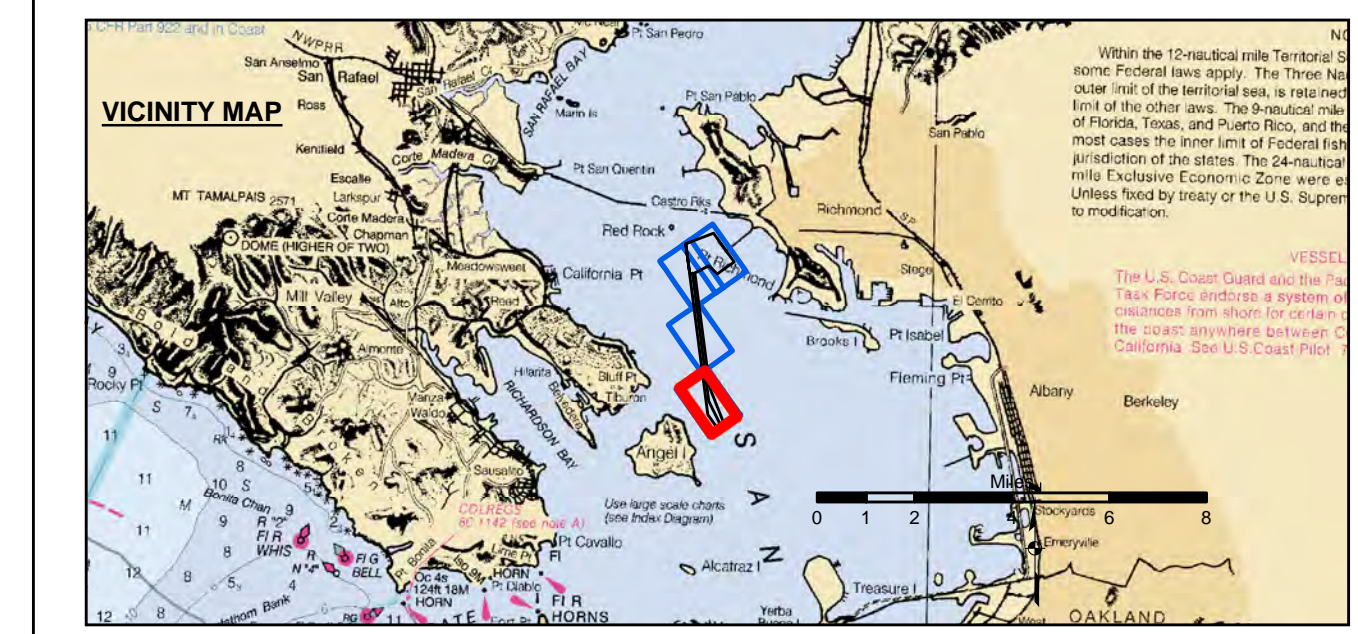
PRELIMINARY ISSUE
THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY



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

DISCLAIMER
The United States Government furnishes this information for your information only. It is not 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 its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

Prepared Under the Direction of:	Chart Date:
LT COLONEL C.E. CUNNINGHAM	Mar 25, 2020
Subject:	Plotted By:
Hydro Survey Team Leader	PDT
Recommended:	Checked By:
Chief, Hydro Survey Section	PDT
Approved:	Drawn by:
Chief, Construction Branch	PDT



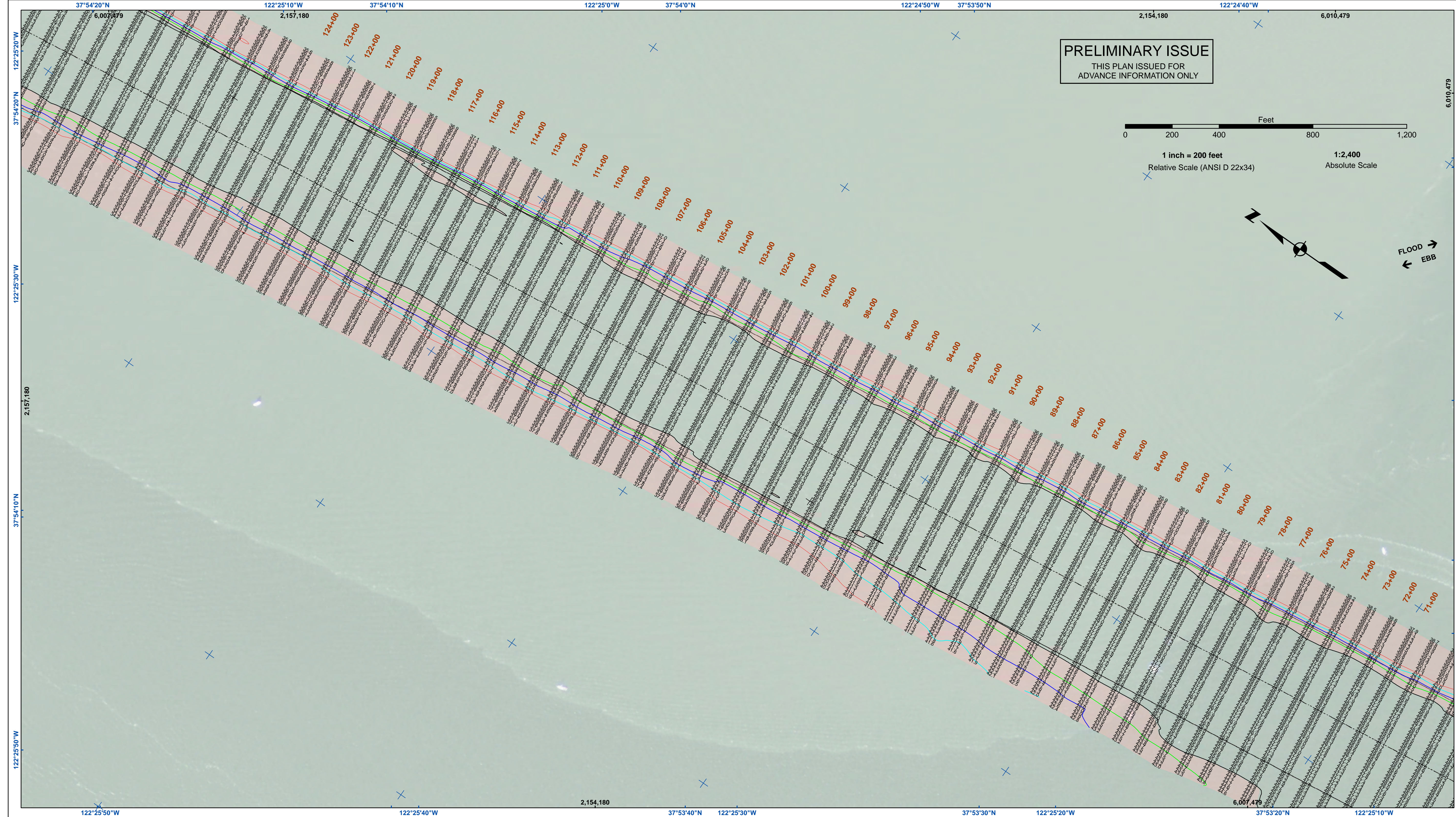
	Federal Navigation Channel		Beacon, General	Contours
	Shoaling Area		Obstruction Point	
	Placement Area		Navigation Buoy	
	Anchorage Area		Navigation Buoy	
	Wreck Area		Navigation Buoy	
	Submerged Wreck		Shoalest Sounding*	
	Angle Point			

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.

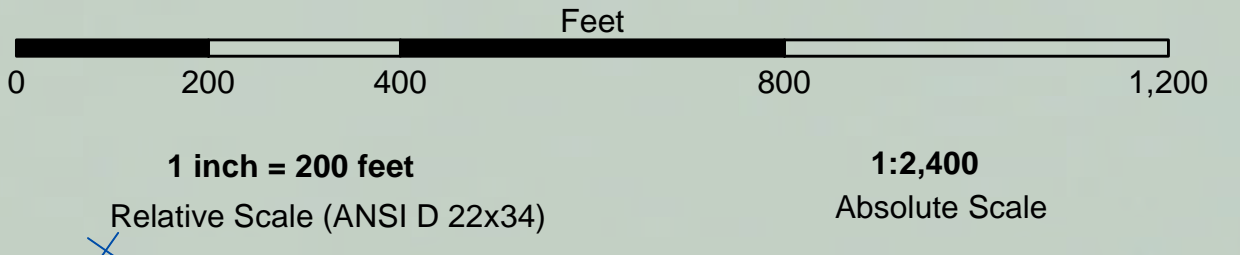
SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.
SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.
BASE MAPS ARE USDA NAIP 2010.
THE PROJECT DEPTHS ARE AS FOLLOWS:
SOUTHAMPTON SHOALS CHANNEL -45 FEET.
LONG WHARF MANEUVERING AREA -45 FEET.
1:00 INDICATED 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 4290 - RICHMOND, CA
941 4290 - SAN FRANCISCO, CA
VERTICAL CONTROL:
(SOUTHAMPTON SHOALS & LONG WHARF MANEUVERING) BENCHMARK *11* 1937 ELEV 15.86 FT. MLLW.
AND BENCHMARK *11* 1946 ELEV 15.47 FT. MLLW.
TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

ALAMEDA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
18 MARCH 2020

Sheet Reference Number
1 of 4



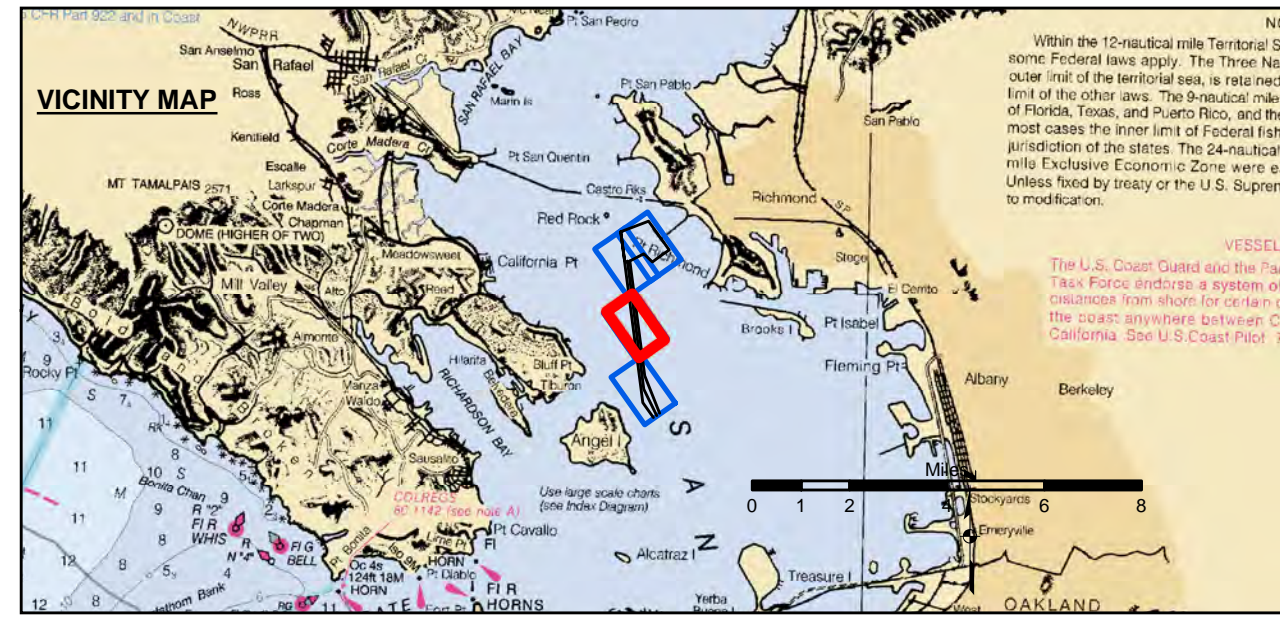
PRELIMINARY ISSUE
THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY



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

DISCLAIMER
The United States Government furnishes this information for the general information of the recipient. The data represents the results of data collected by the United States Government and is not intended for use in any other manner. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

Chart Date:	Mar 25, 2020
Surveyed By:	John D. Cunningham
Plotted By:	PDT
Designed by:	PDT
Checked By:	PDT
Drawn by:	PDT



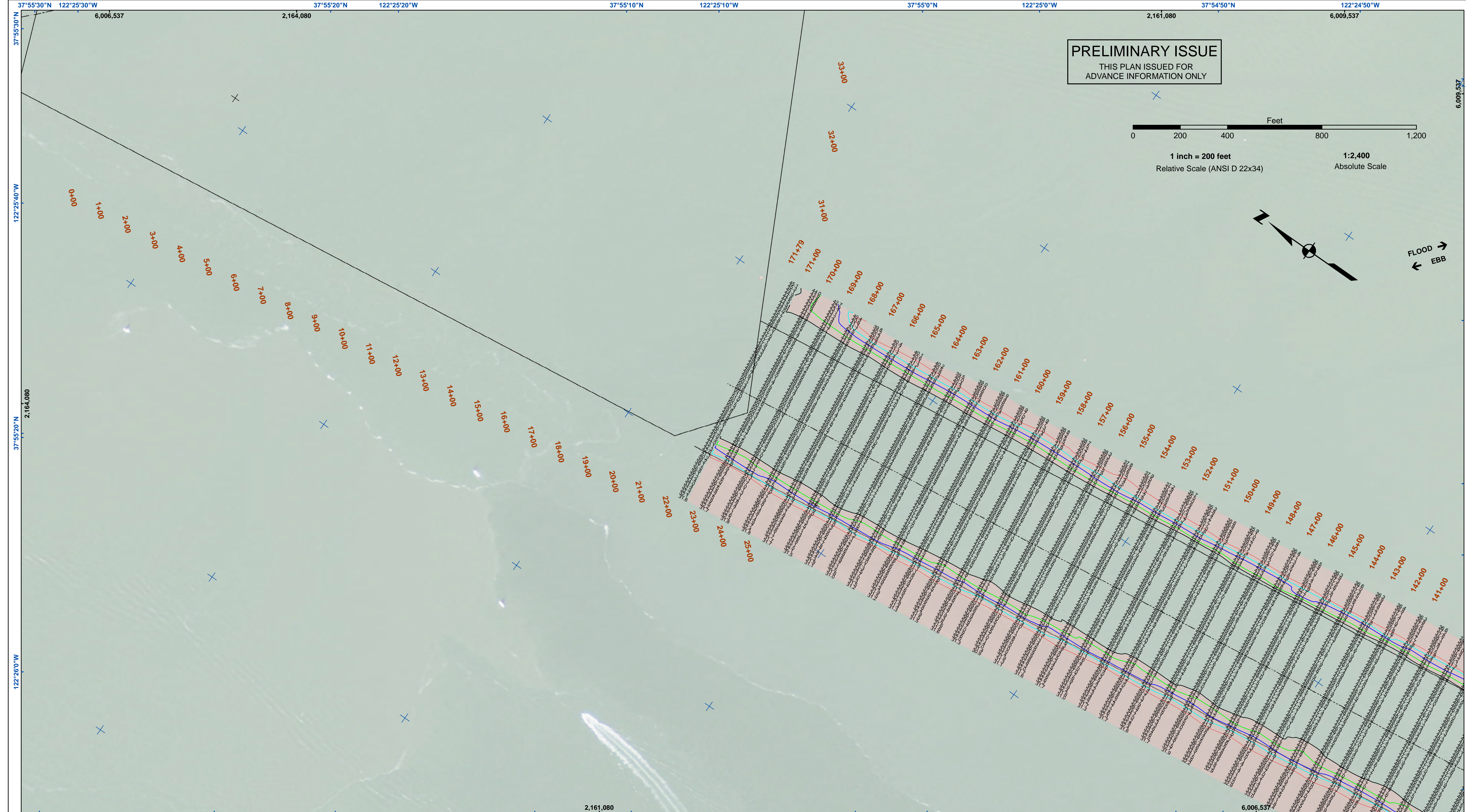
Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-45
Placement Area	Navigation Buoy	-44
Anchorage Area	Navigation Buoy	-43
Wreck Area	Shoalest Sounding*	-42
Submerged Wreck		-41
Angle Point		

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.

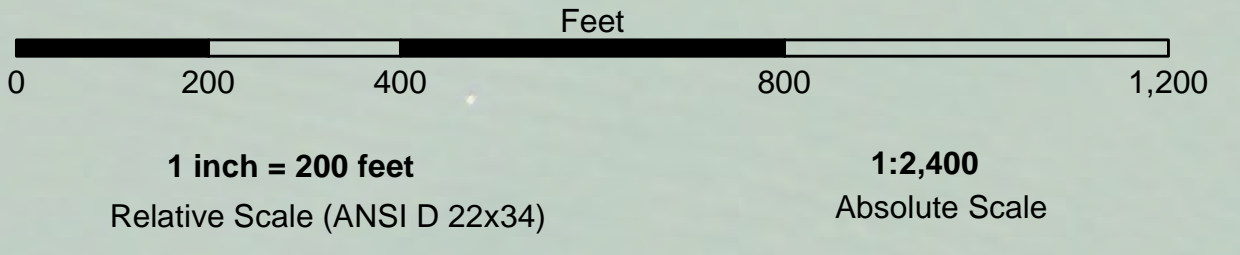
SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.
SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.
BASE MAPS ARE USDA NAIP 2010.
THE PROJECT DEPTHS ARE AS FOLLOWS:
SOUTHAMPTON SHOALS CHANNEL -45 FEET.
LONG WHARF MANEUVERING AREA -45 FEET.
1:00 INDICATED 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 *11 1937 ELEV 15.86 FT. MLLW.
AND BENCHMARK *11 1946 ELEV 15.47 FT. MLLW.
TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

ALAMEDA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
18 MARCH 2020

Sheet Number
2 of 4



PRELIMINARY ISSUE
THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY

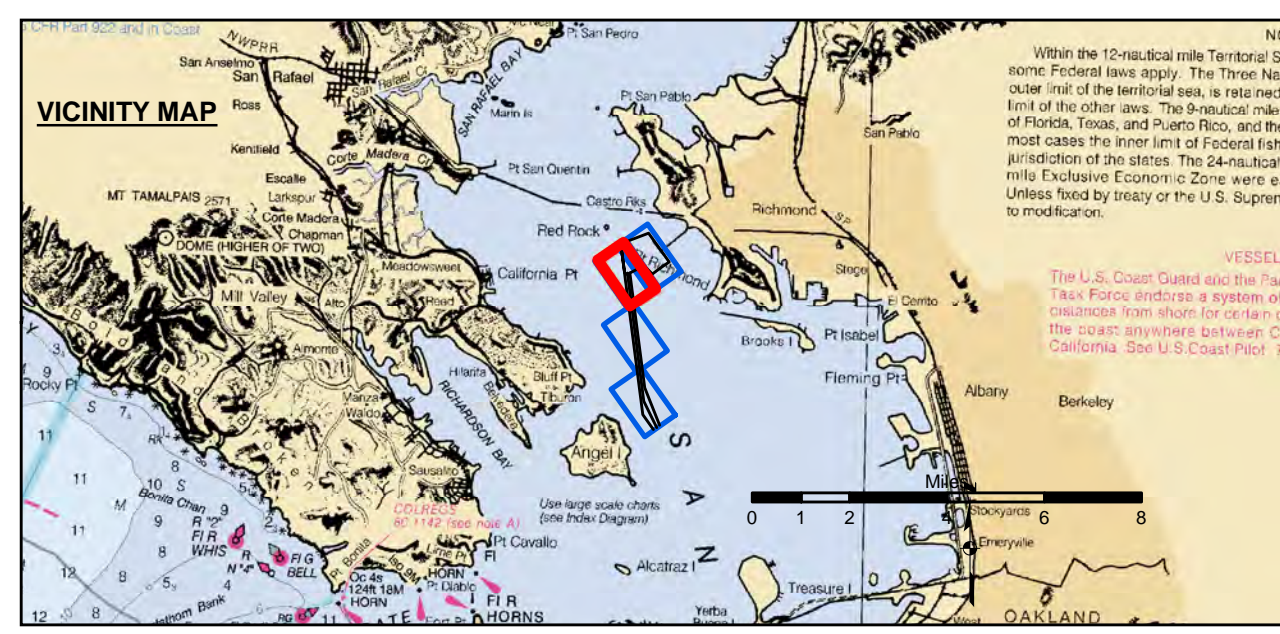


US Army Corps of Engineers
San Francisco District
450 Golden Gate Ave
San Francisco, CA 94102

DISCLAIMER
The United States Government furnishes this information for the general information of the recipient. The data represents the results of data collected by the United States Government and is not intended for use in any other manner. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

Prepared Under the Direction of JOHN D. CUNNINGHAM LT COLONEL, C.E. DISTRICT ENGINEER	Surveyed By: PDT	Chart Date: Mar 25, 2020
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		PDT

ALAMEDA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
18 MARCH 2020



Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-45
Placement Area	Navigation Buoy	-44
Anchorage Area	Navigation Buoy	-43
Wreck Area	Navigation Buoy	-42
Submerged Wreck	Shoalest Sounding*	-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 DATUMS: INTERPOLATED FROM NOAA ONLINE TIDE STATIONS:
941 4293 - RICHMOND, CA
941 4290 - SAN FRANCISCO, CA
VERTICAL CONTROL:
(SOUTHAMPTON SHOALS & LONG WHARF MANEUVERING) BENCHMARK *11 1937 ELEV 15.86 FT. MLLW.
AND BENCHMARK *11 1946 ELEV 15.47 FT. MLLW.
TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

Sheet Number
3 of 4