

PRELIMINARY ISSUE
THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY

0 200 400 800 1,200
Feet
1 inch = 200 feet
Relative Scale (ANSI D 22x34)
1:2,400
Absolute Scale

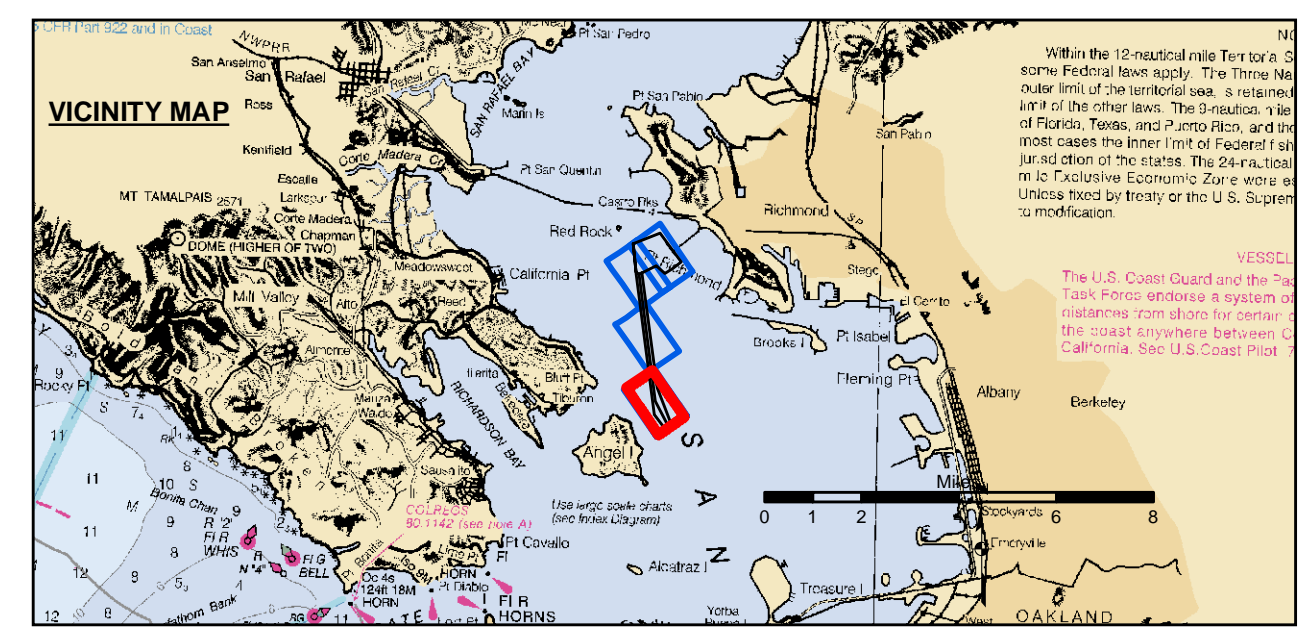
US Army Corps of Engineers
San Francisco District
450 Golden Gate Ave
San Francisco, CA 94102

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Chart Date:	Sep 11, 2020
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Flatted by:	PDT
Surveyed By:	

ALAMEDA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
09 SEPTEMBER 2020

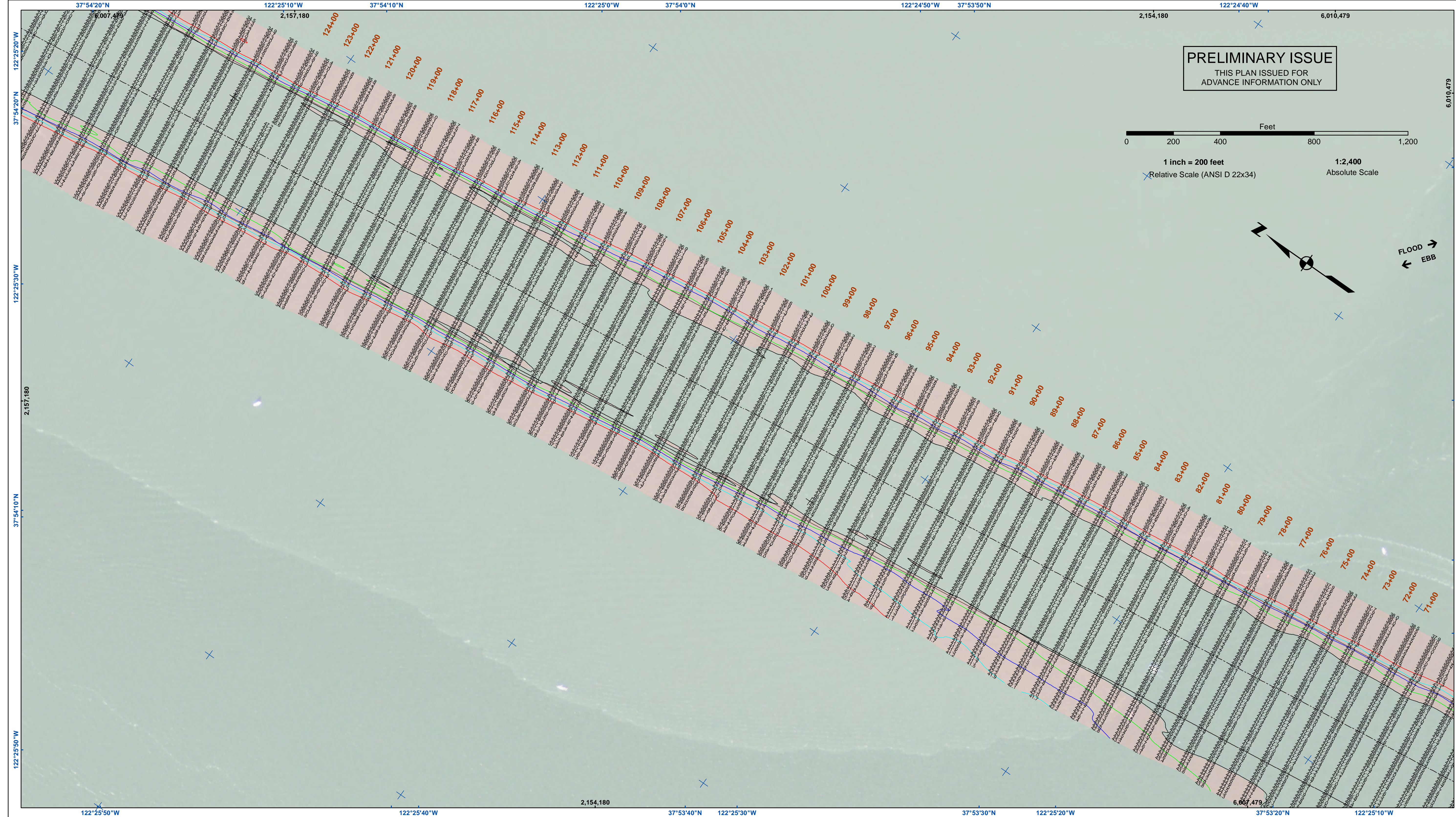
Sheet Reference Number
1 of 4



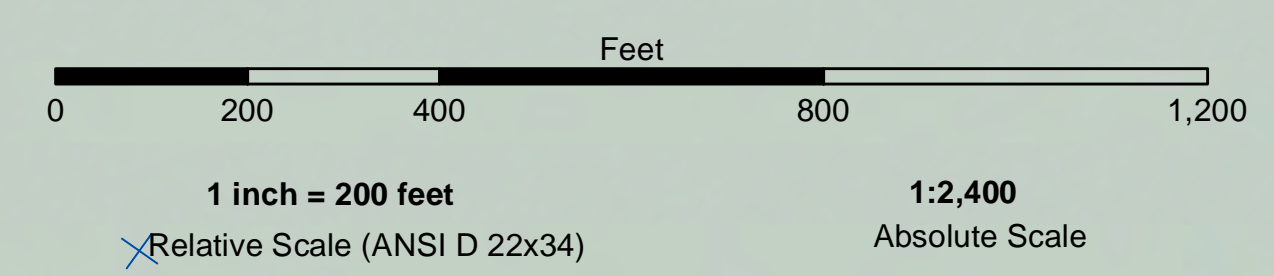
- | | | |
|----------------------------|--------------------|-----------------|
| Federal Navigation Channel | Beacon, General | Contours |
| Shoaling Area | Obstruction Point | -45 |
| Placement Area | Navigation Buoy | -44 |
| Anchorage Area | Navigation Buoy | -43 |
| Wreck Area | Shoalest Sounding* | -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 "10" 1937 ELEV 15.86 FT. MLLW.
AND BENCHMARK "11" 1946 ELEV 15.47 FT. MLLW.
TIDE GAUGE LOCATED AT TIBURON NET DEPOT.



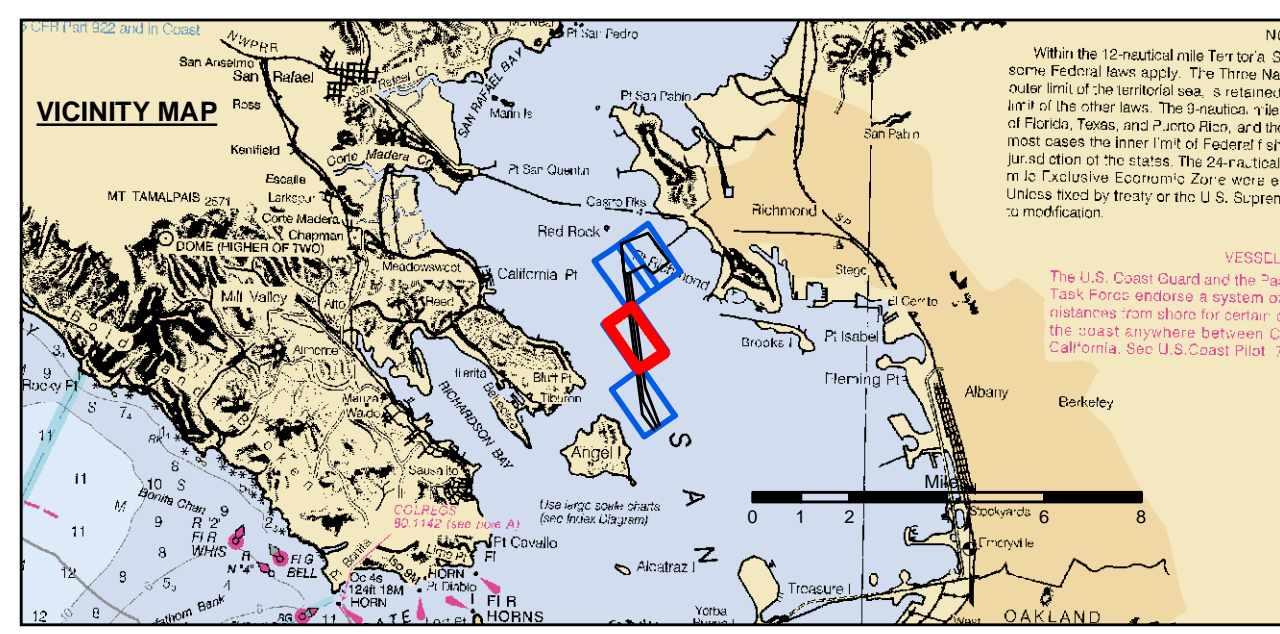
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Plotted by:	PDT
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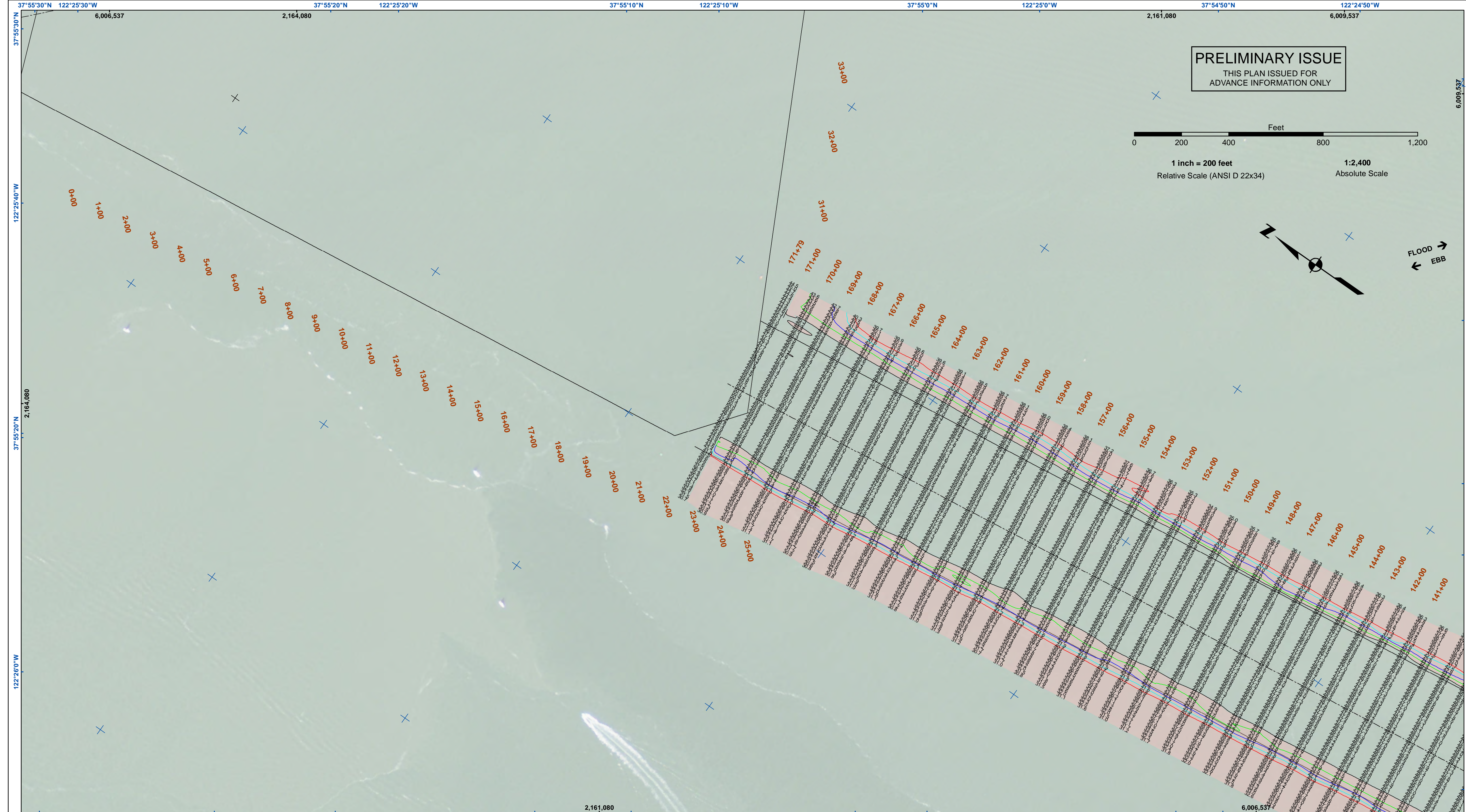
Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-45
Placement Area	Navigation Buoy	-44
Anchorage Area	Navigation Buoy	-43
Wreck Area	Shoalest Sounding*	-42
Submerged Wreck		-41
Angle Point		

NOTES:
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HORIZONTAL POSITIONING: COAST GUARD DGPS
VERTICAL TIDES: INTERPOLATED FROM NOAA ONLINE TIDE STATIONS:
941 4293 - RICHMOND, CA
941 4290 - SAN FRANCISCO, CA
VERTICAL CONTROL:
(SOUTHAMPTON SHOALS & LONG WHARF MANEUVERING) BENCHMARK "10" 1937 ELEV 15.86 FT. MLLW.
AND BENCHMARK "11" 1946 ELEV 15.47 FT. MLLW.
TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

CALIFORNIA
ALAMEDA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
09 SEPTEMBER 2020

Sheet Number
2 of 4



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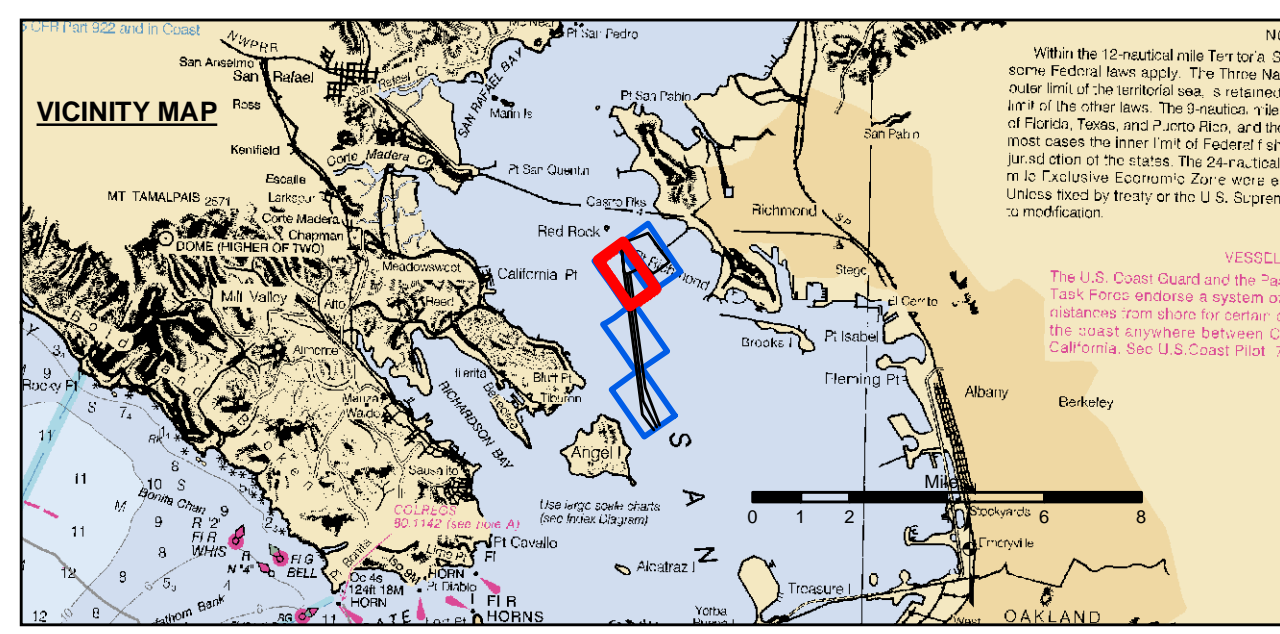
FLOOD →
 ← EBB

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Prepared Under the Direction of JOHN D. CUNNINGHAM LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: Sep 11, 2020
Submitted: Hydro Survey Team Leader	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Drawn by: PDT
Approved: Chief, Construction Branch	

ALAMEDA COUNTY
 CALIFORNIA
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
 09 SEPTEMBER 2020

Sheet
Number
3 of 4



- 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**
- 45
- 44
- 43
- 42
- 41

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