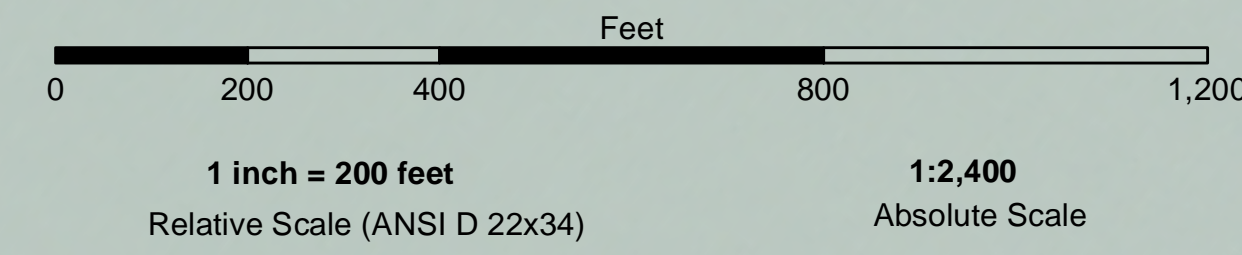


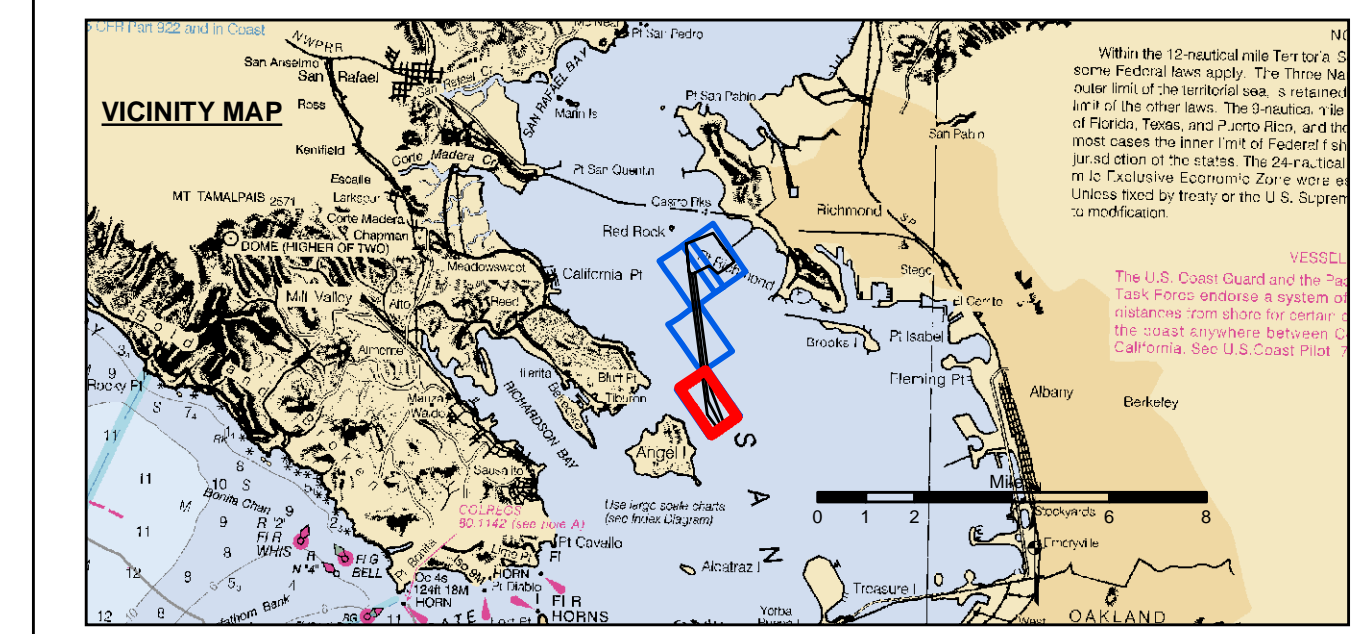
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**US Army Corps of Engineers**  
San Francisco District  
1455 Market Street  
San Francisco, CA 94103

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Chart Date:	May 28, 2020
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Approved:	Chief, Construction Branch
Surveyed By:	Plotted By:
LT COLONEL C.E. CUNNINGHAM	PDT
Hydro Survey Team Leader	
Chief, Hydro Survey Section	
Chief, Construction Branch	



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

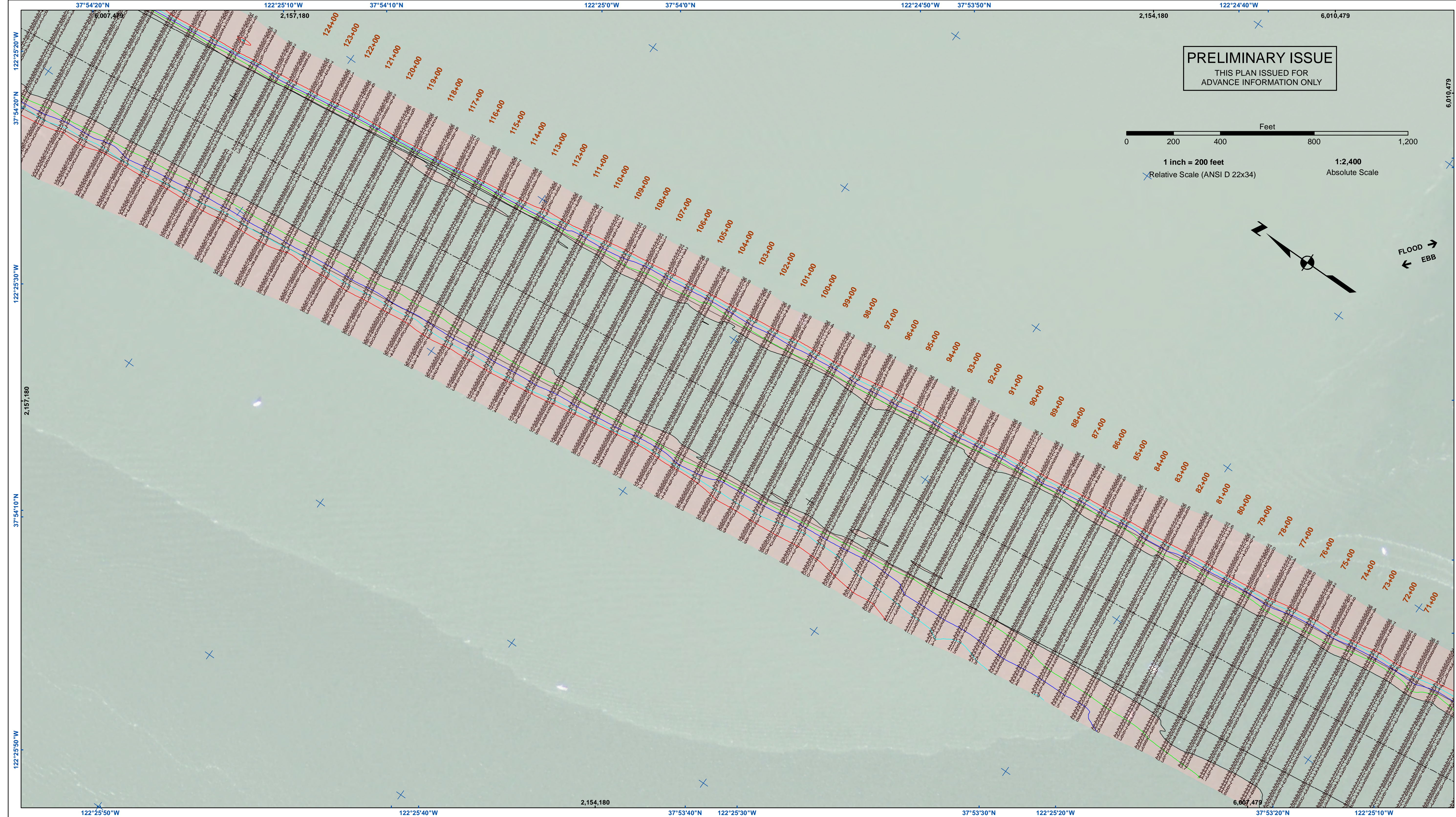
**NOTES:**  
HORIZONTAL COORDINATE SYSTEM:  
NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE III. DISTANCE UNITS IN U.S. SURVEY FEET.  
VERTICAL DATUM:  
SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.  
THE INFORMATION 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.  
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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, NAVD 88. 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.

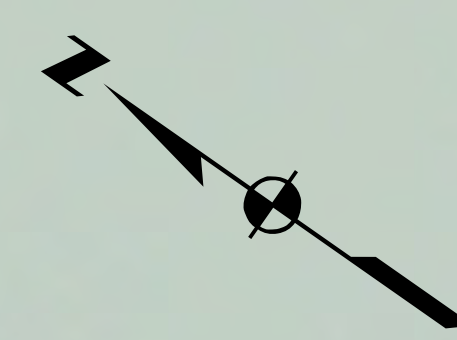
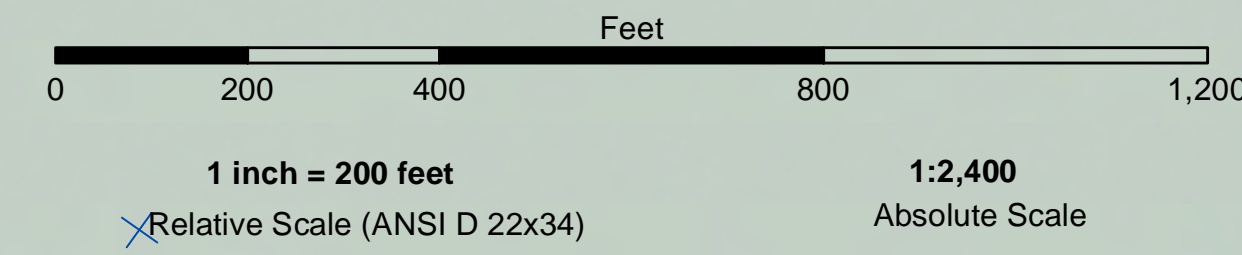
ALAMEDA COUNTY  
RICHMOND OUTER HARBOR  
SOUTHAMPTON SHOALS  
CONDITION SURVEY  
20 MAY 2020

**Sheet Reference Number**  
1 of 4

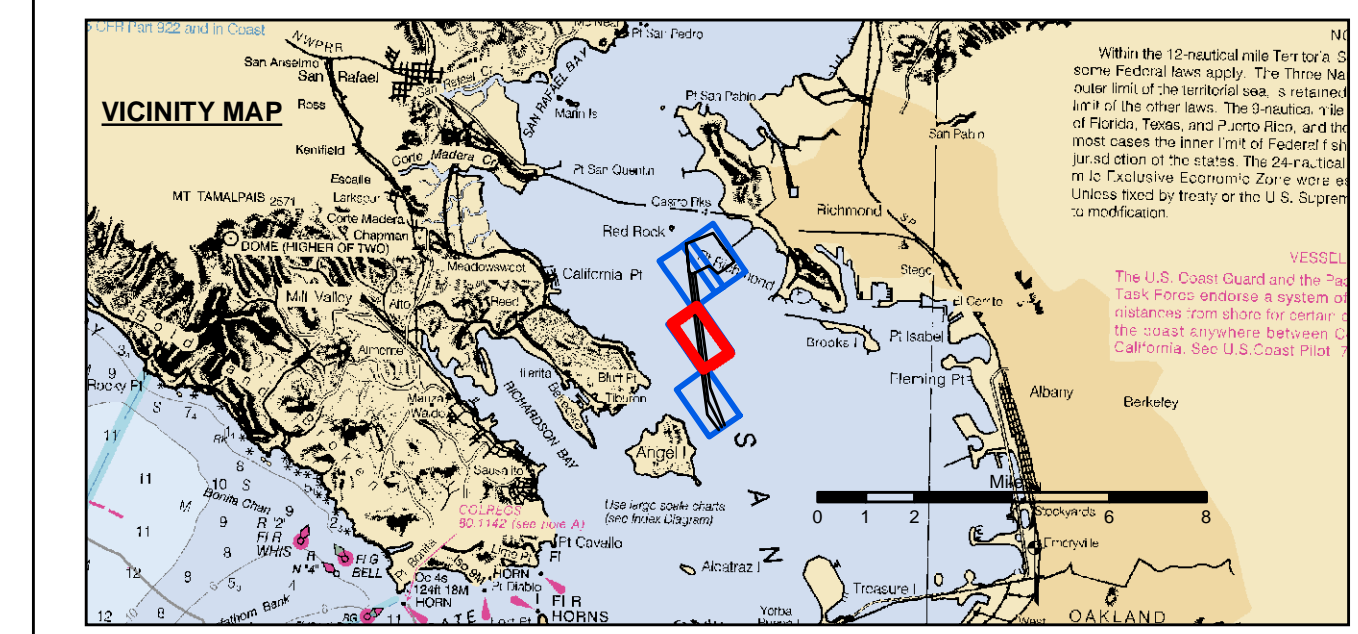




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FLOOD →  
← EBB



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

NOTES:  
HORIZONTAL COORDINATE SYSTEM:  
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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.  
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TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

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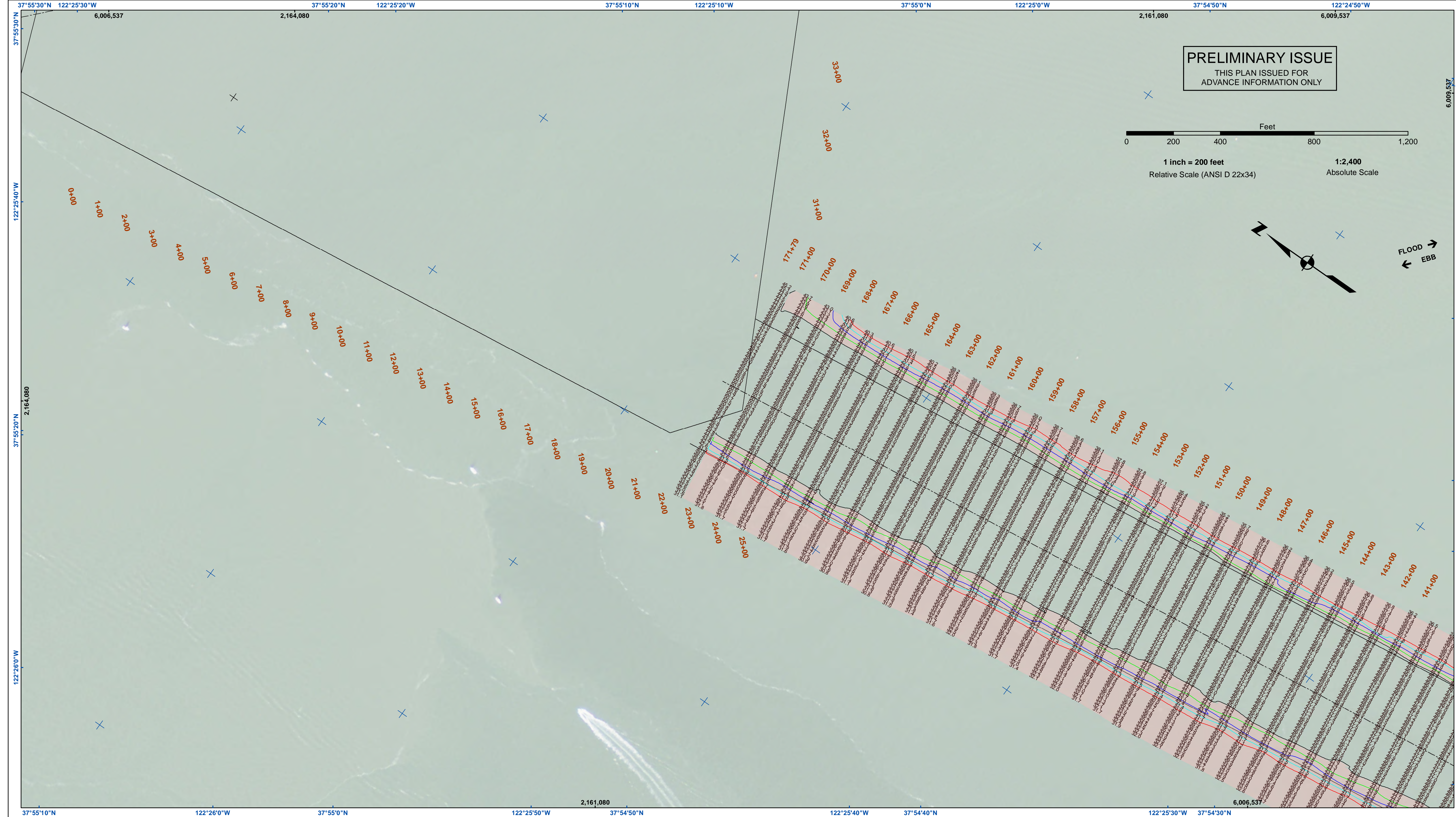
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Chart Date:	May 28, 2020
Designed by:	PDT
Plotted By:	PDT
Checked By:	PDT
Drawn by:	PDT

ALAMEDA COUNTY  
RICHMOND OUTER HARBOR  
SOUTHAMPTON SHOALS  
CONDITION SURVEY  
20 MAY 2020

Sheet  
Reference  
Number  
**2 of 4**





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1 inch = 200 feet  
 Relative Scale (ANSI D 22x34)

1:2,400  
 Absolute Scale

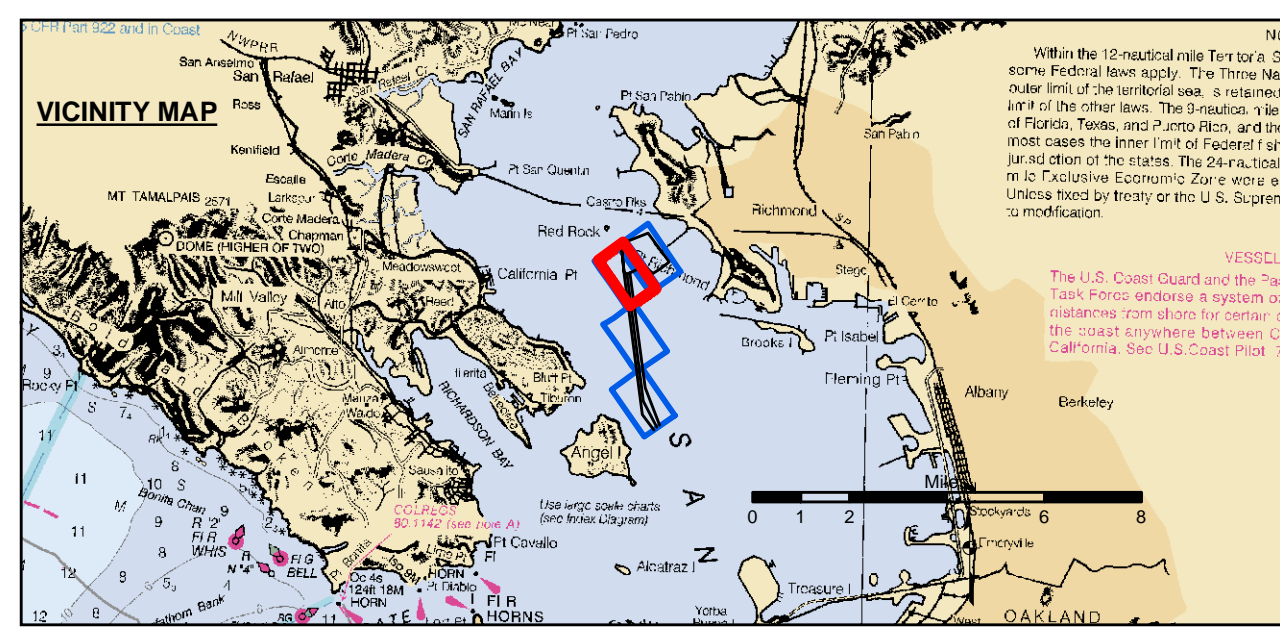
FLOOD  
 EBB

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Chart Date:	May 28, 2020
Designed by:	PDT
Plotted by:	PDT
Checked by:	PDT
Drawn by:	PDT

ALAMEDA COUNTY  
 CALIFORNIA  
**RICHMOND OUTER HARBOR**  
**SOUTHAMPTON SHOALS**  
**CONDITION SURVEY**  
 20 MAY 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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