

**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

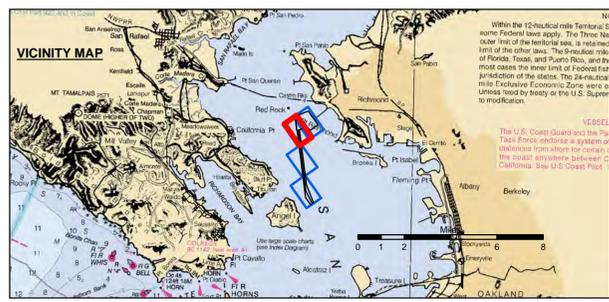
FLOOD  
 EBB

**DISCLAIMER**  
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Chart Date:	Jan 28, 2020
Designed by:	
Plotted By:	PDT
Checked By:	PDT
Drawn by:	PDT

ALAMEDA COUNTY  
 RICHMOND OUTER HARBOR  
 LONG WHARF  
 CONDITION SURVEY  
 08 JANUARY 2020

Sheet  
 Reference  
 Number  
**3 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                 | 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.

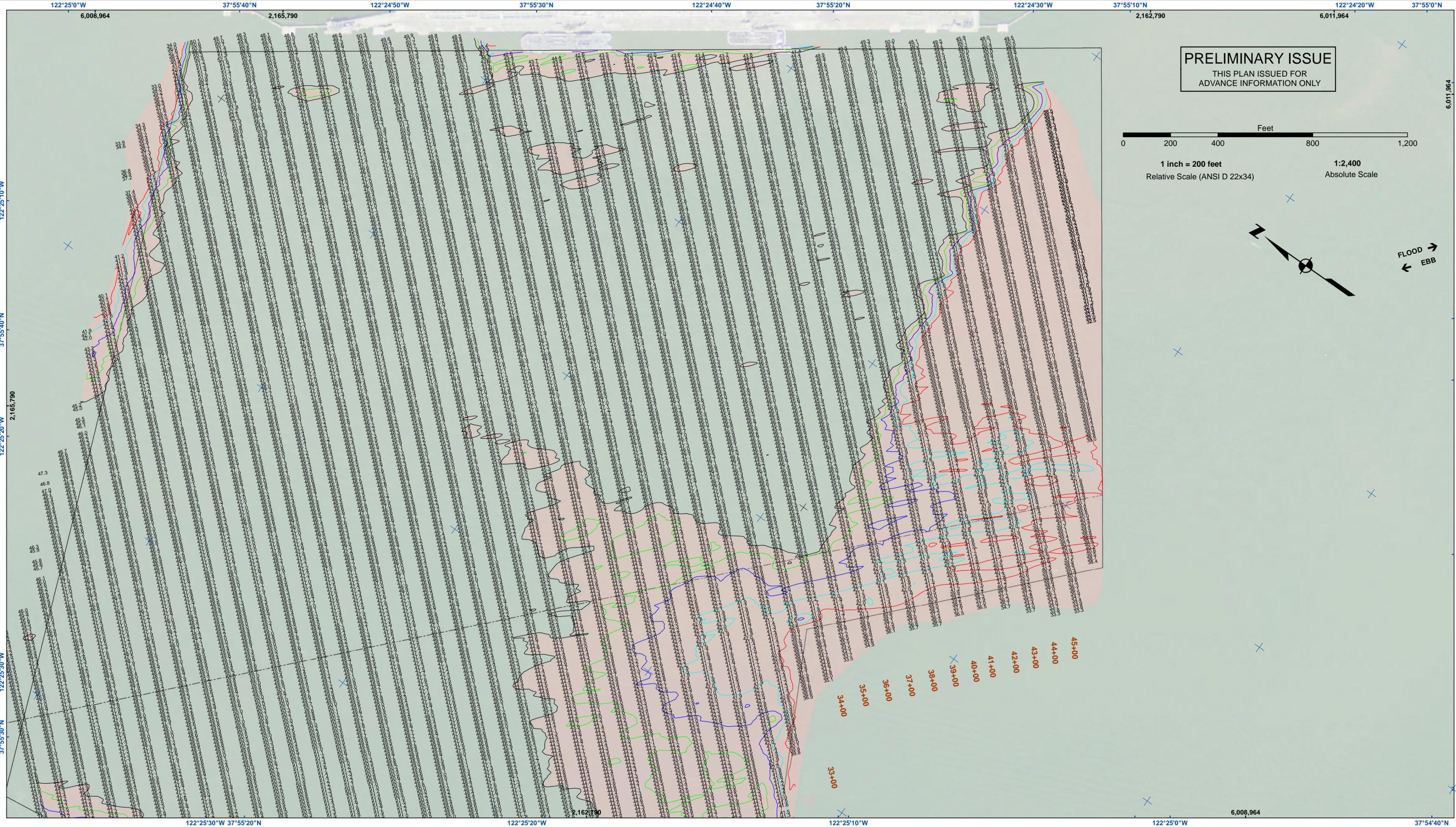
BASE MAPS ARE USDA NAIP 2010.

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

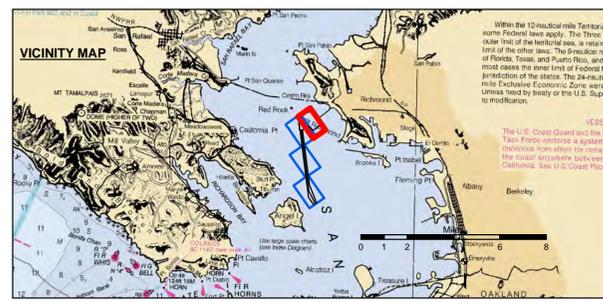
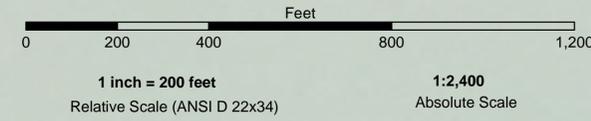
1:00 INDICATED THE NUMBER AND BEGINNING OF A LINE OF SOUNDINGS.

HORIZONTAL CONTROL:  
 SOUNDINGS: 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 "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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	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				

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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.  
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Prepared Under the Direction of <b>JOHN D. CUNNINGHAM</b> LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: Jan 28, 2020
Submitted by: Hydro Survey Team Leader	Designed by: PDT
Recommended by: Chief, Hydro Survey Section	Drawn by: PDT
Approved by: Chief, Construction Branch	PDT

CALIFORNIA  
**RICHMOND OUTER HARBOR**  
LONG WHARF  
CONDITION SURVEY  
08 JANUARY 2020

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**4 of 4**