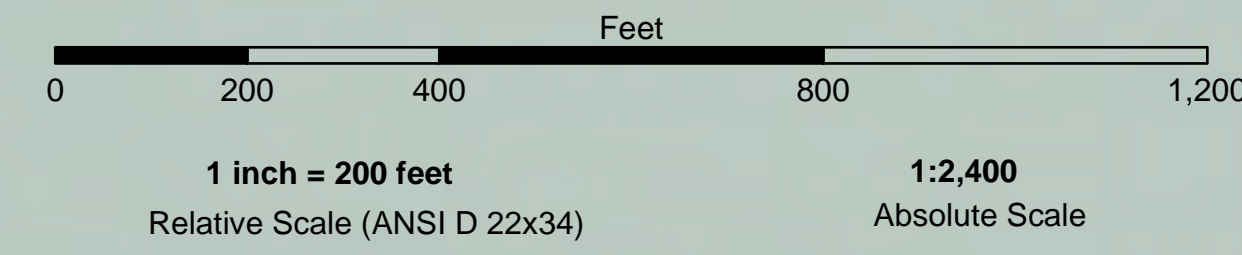


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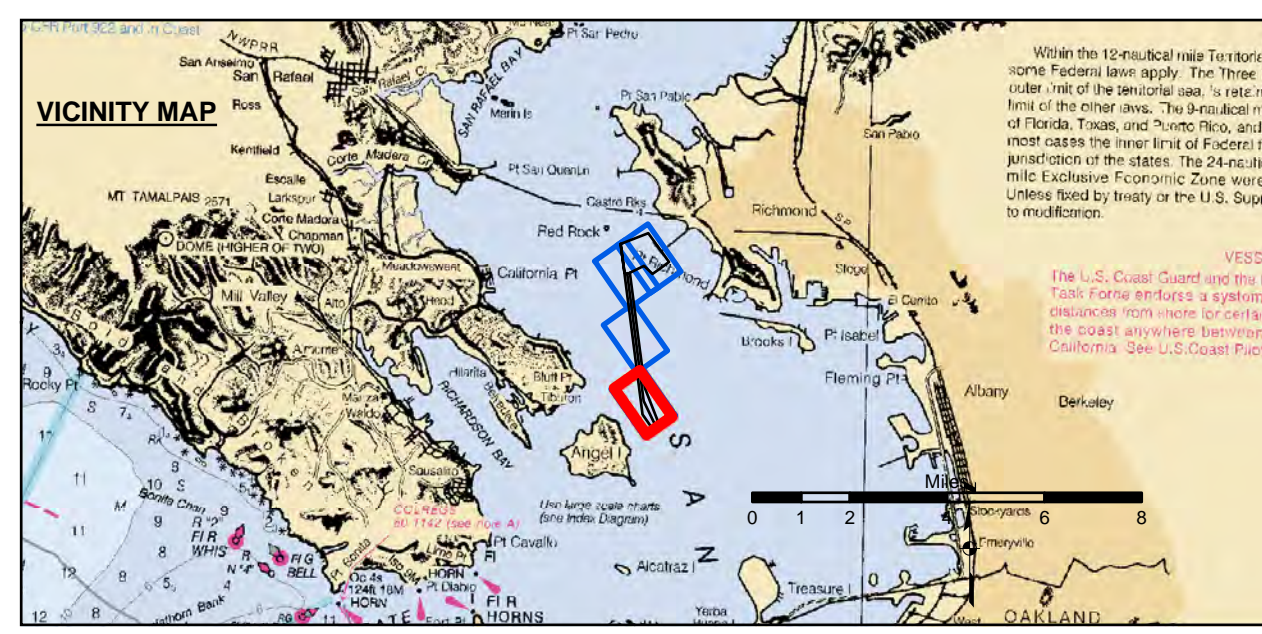


US Army Corps of Engineers
San Francisco District
1455 Market Street
San Francisco, CA 94103

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Chart Date:	May 23, 2018
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	Plotted By: PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

ALAMEDA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
18 APRIL 2018

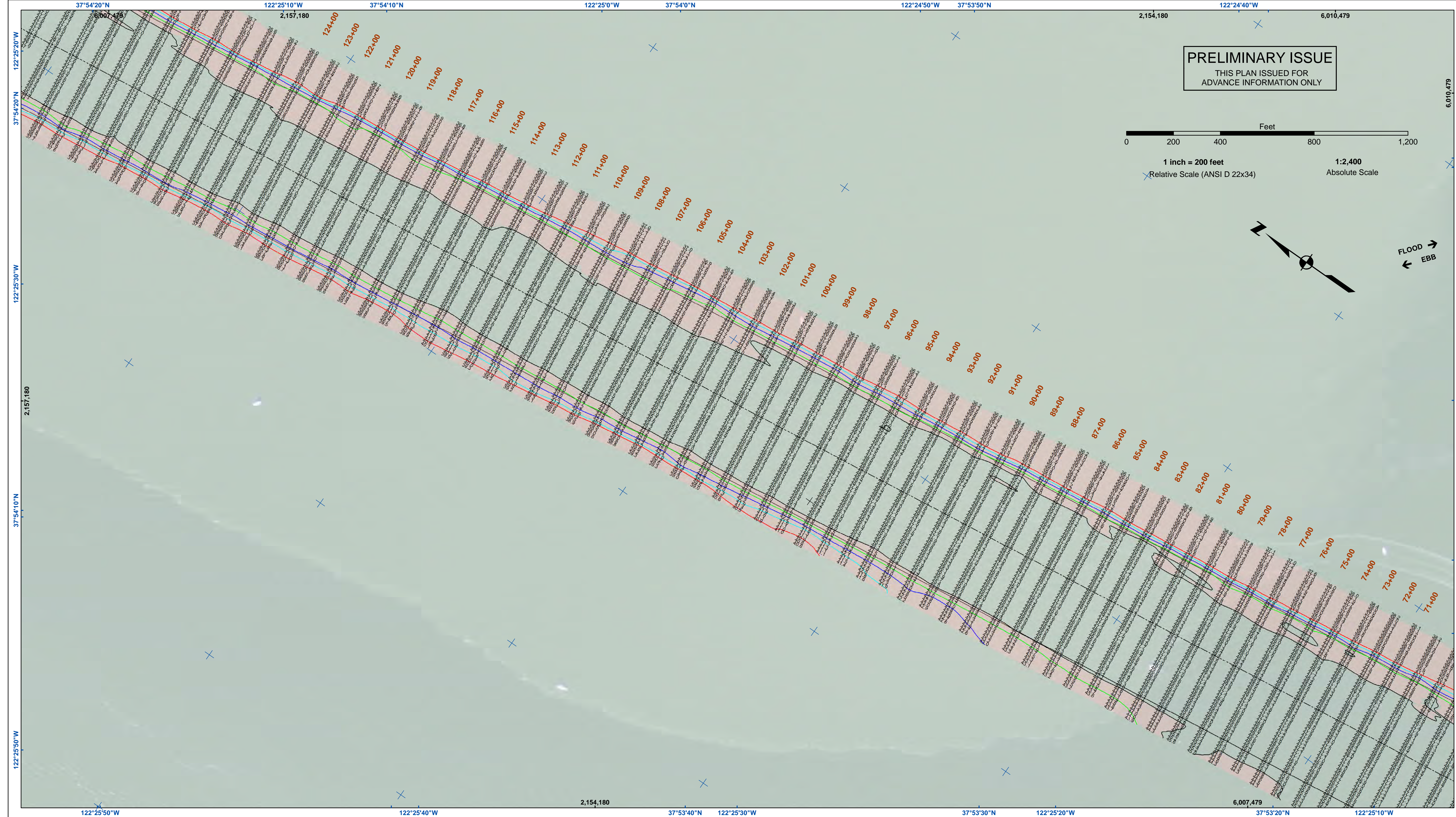


Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	
Placement Area	Navigation Buoy	-45
Anchorage Area	Navigation Buoy	-44
Wreck Area	Shoalest Sounding*	-43
Submerged Wreck		-42
Angle Point		-41

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.
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, 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 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 Reference Number
1 of 4



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

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

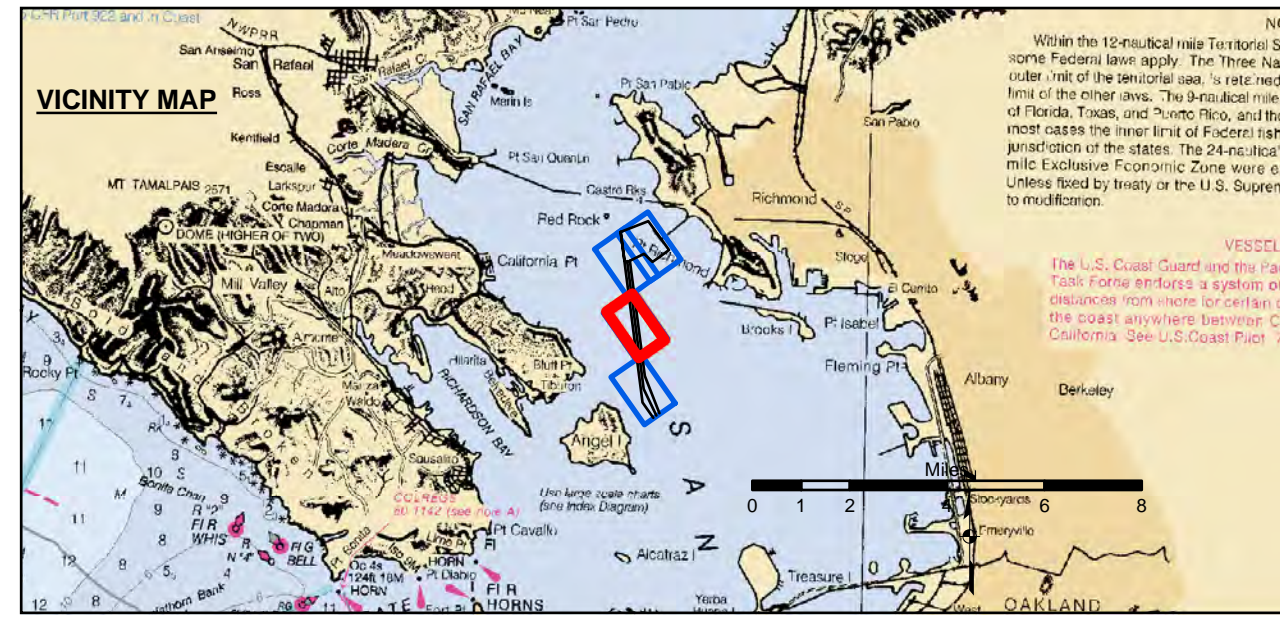
FLOOD →
 ← EBB

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Chart Date:	May 23, 2018
Designed by:	PDT
Plotted by:	PDT
Checked by:	PDT
Drawn by:	PDT

ALAMEDA COUNTY
 RICHMOND OUTER HARBOR
 SOUTHAMPTON SHOALS
 CONDITION SURVEY
 18 APRIL 2018

Sheet
 Reference
 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.

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*SHOALEST SOUNDING PER QUARTER PER REACH
 DRAWING NOT TO BE USED FOR NAVIGATION.
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SURVEYED BY THE CORPS OF ENGINEERS.

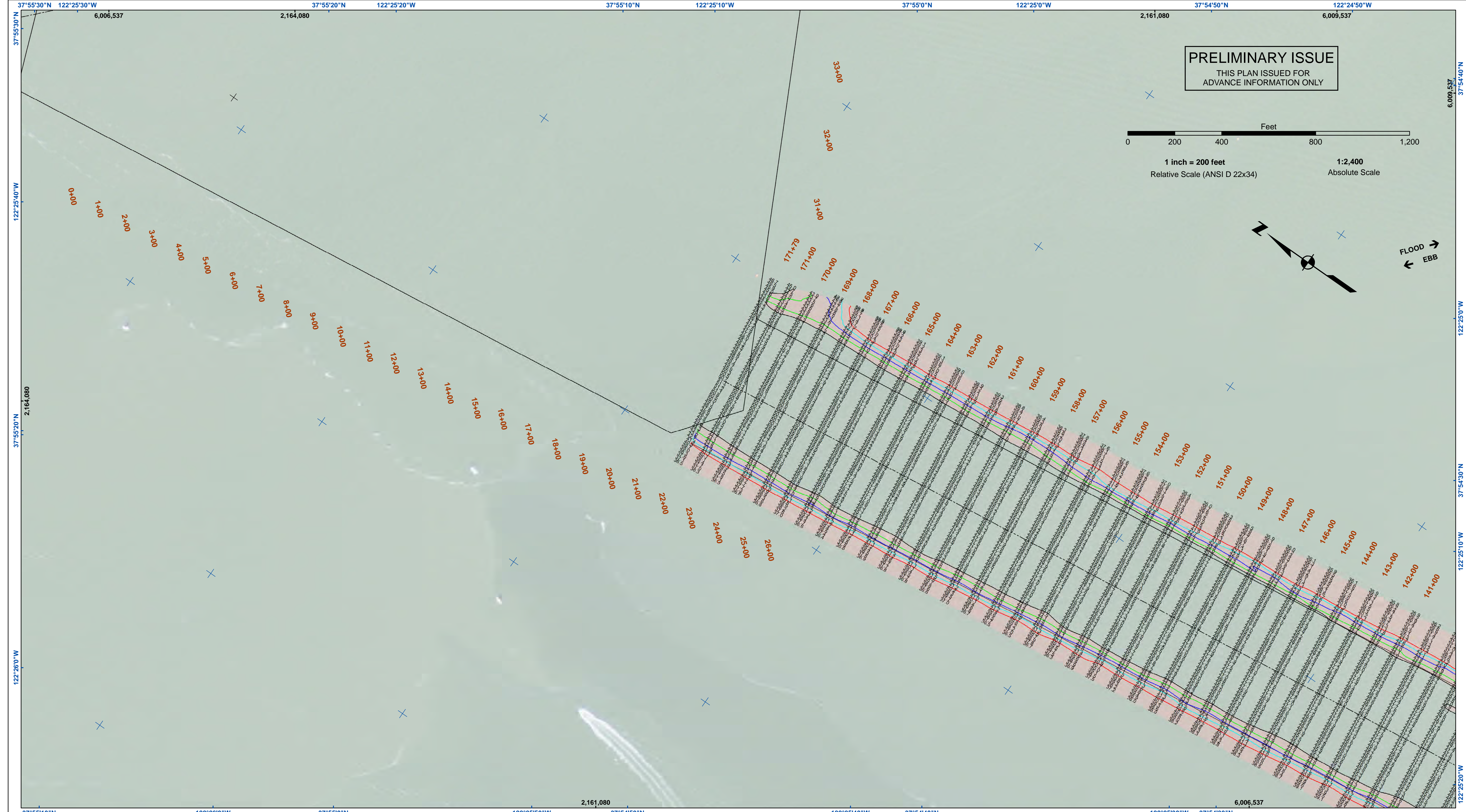
SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT. SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY, NAVD 88. BASE MAPS ARE USDA NAIP 2010.

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

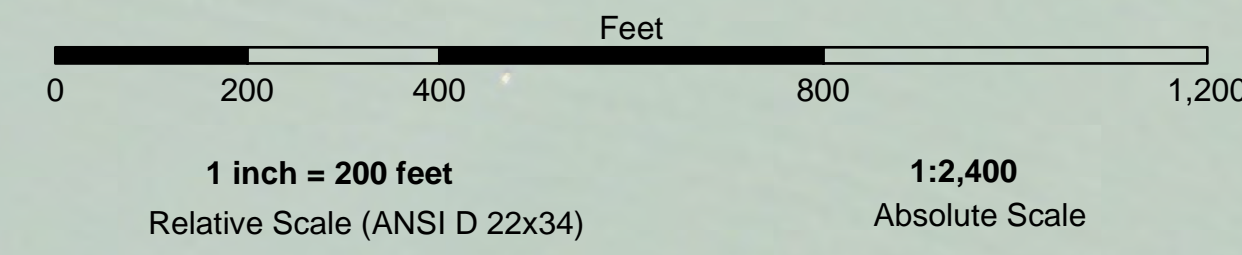
1:00 INDICATED THE NUMBER AND BEGINNING OF A LINE OF SOUNDINGS.

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 *101 1937 ELEV 15.86 FT. MLLW.
 AND BENCHMARK *111 1946 ELEV 15.47 FT. MLLW.
 TIDE GAUGE LOCATED AT TIBURON NET DEPOT.



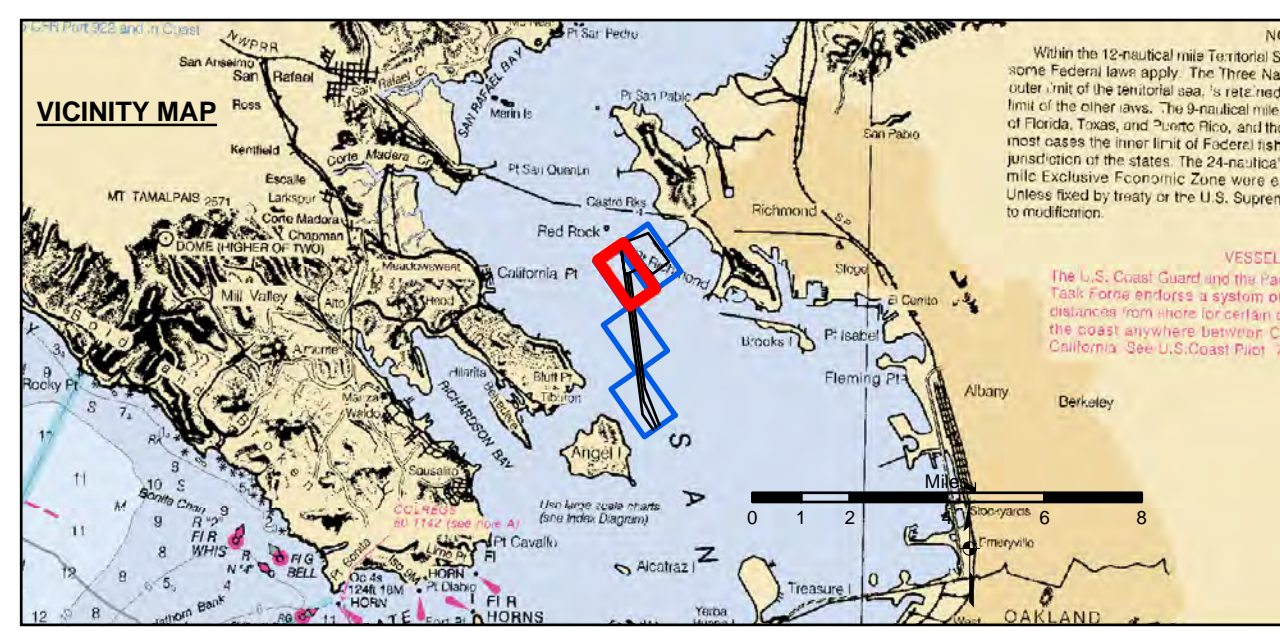
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San Francisco, CA 94103

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Prepared Under the Direction of	Chart Date
LT. COLONEL, C.E. DISTRICT ENGINEER	May 23, 2018
Surveyed By:	Designed by:
Plotted By: PDT	PDT
Checked By: PDT	Drawn by: PDT



Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Navigation Buoy	
Placement Area	Navigation Buoy	-44
Anchorage Area	Shoalest Sounding*	-43
Wreck Area		-42
Submerged Wreck		-41
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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
CALIFORNIA
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
18 APRIL 2018

Sheet Reference Number
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