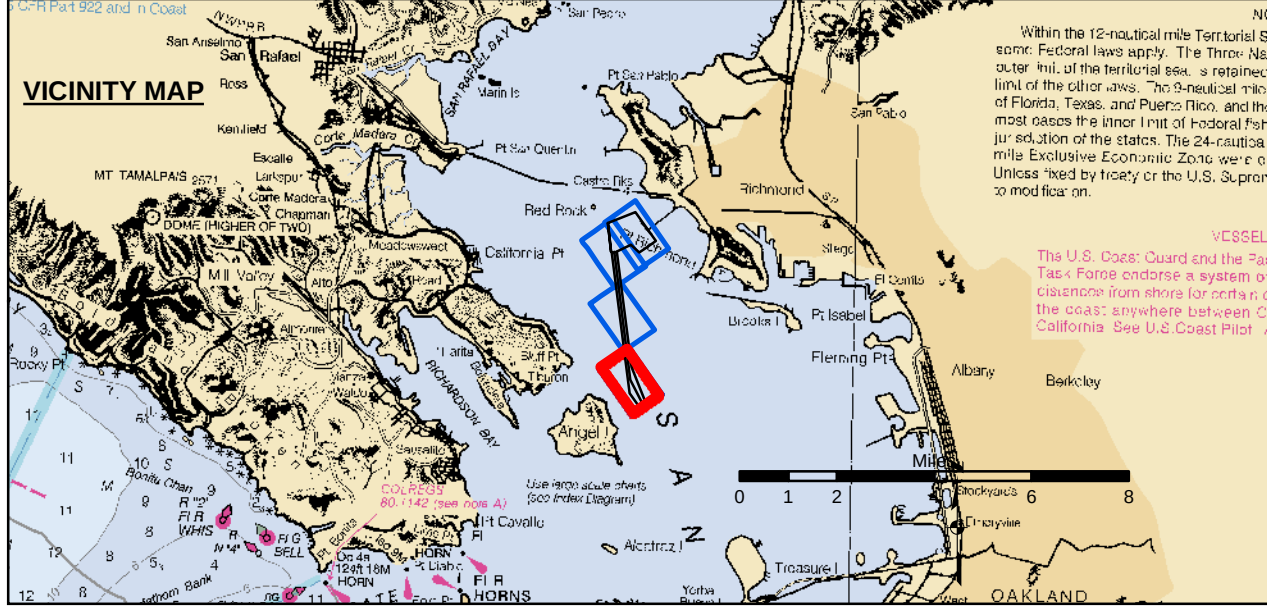
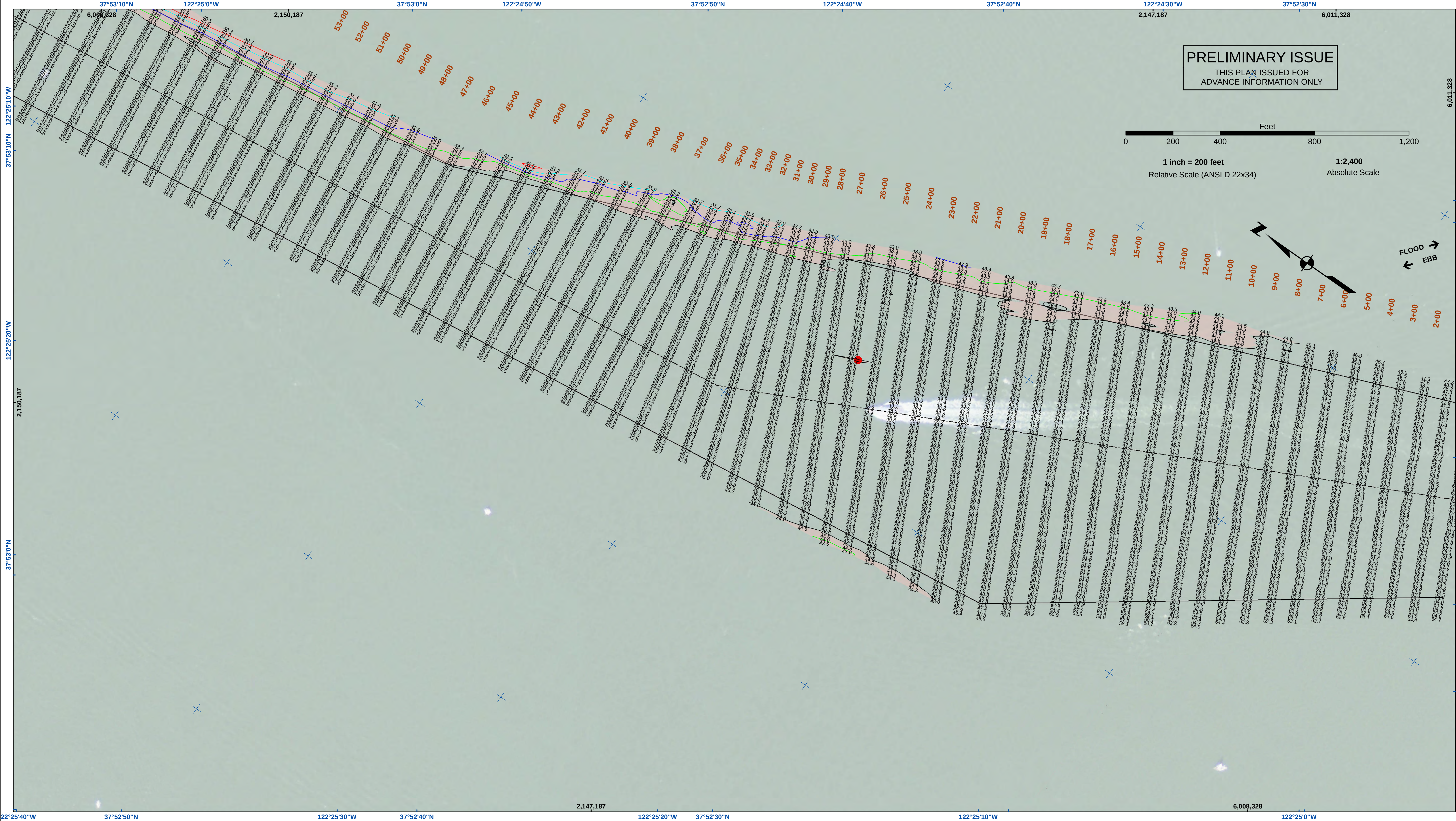




- Federal Navigation Channel

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

NOTES:
HORIZONTAL COORDINATE SYSTEM:
NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE II. 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.

SOUNDING FOR THE CHANNEL MEASURED WITH MULTIBEAM ECHOSOUNDER AND ARE SHOWN TO THE NEAREST TENTH 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.
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.

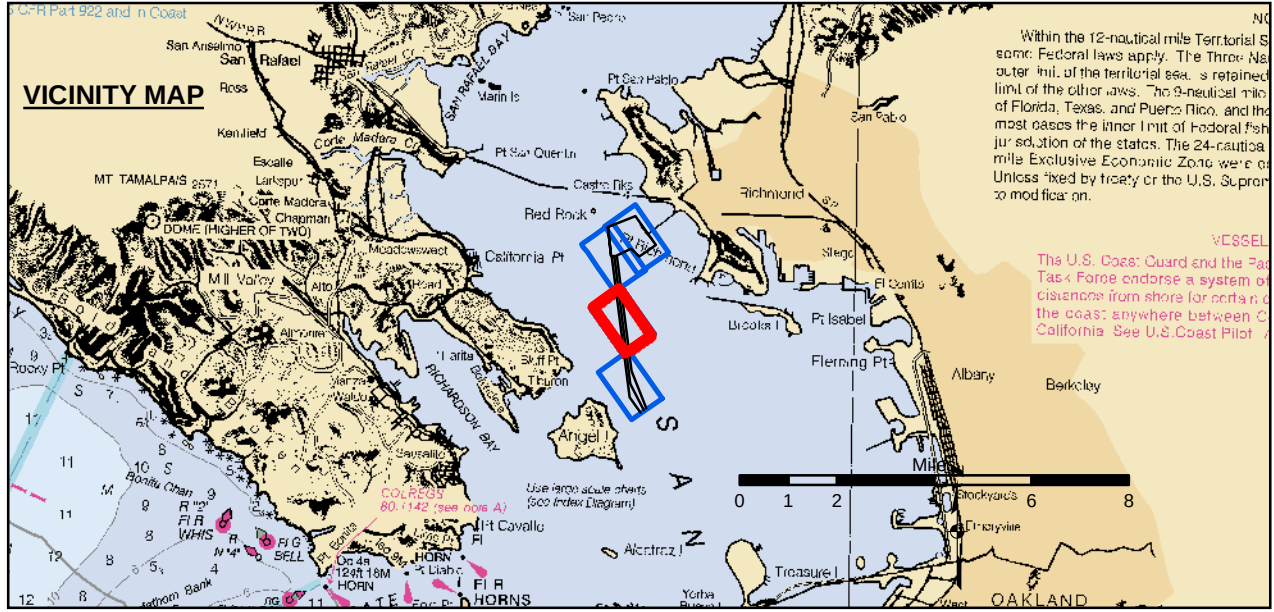
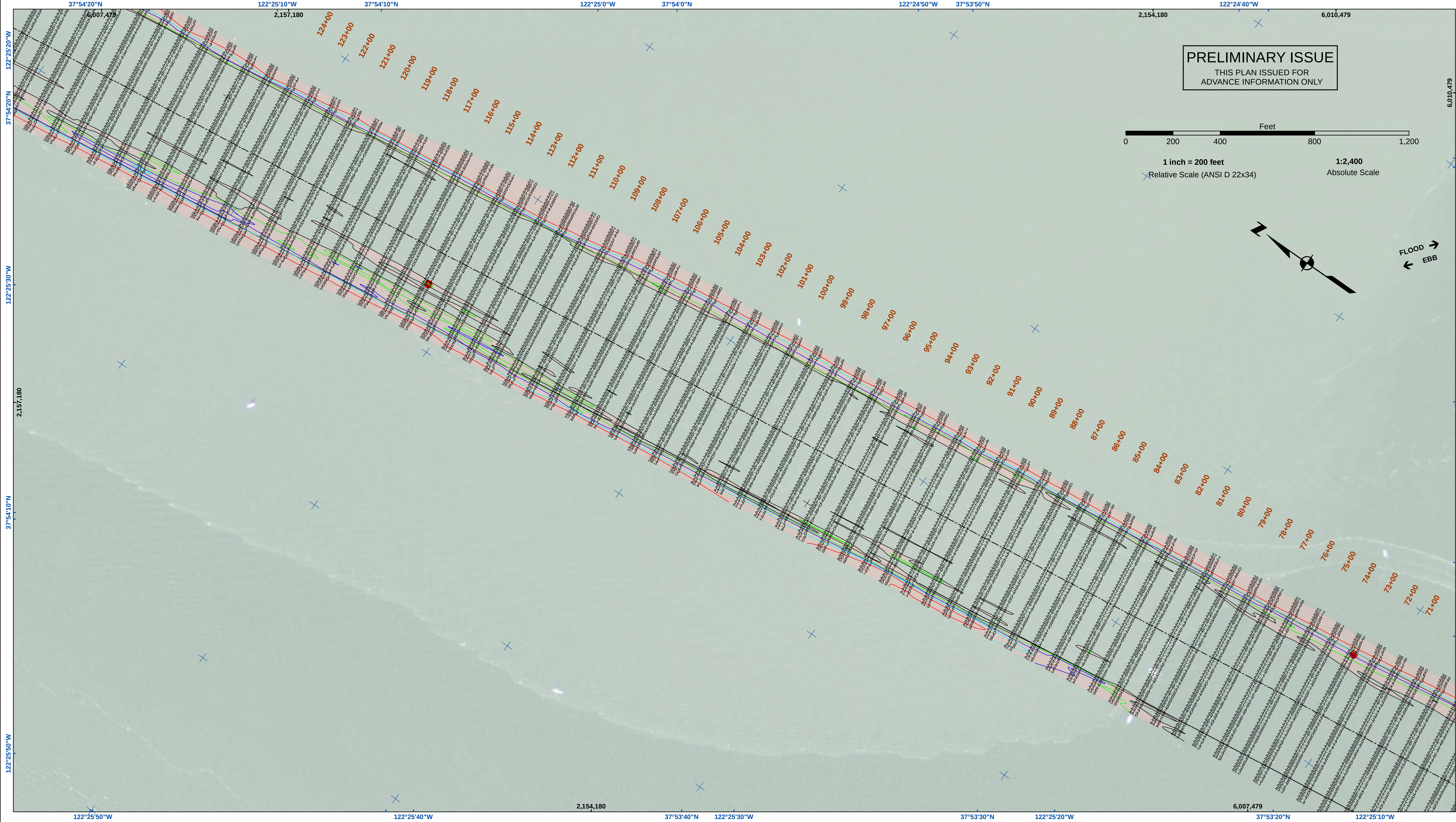
US Army Corps of Engineers
San Francisco District
450 Golden Gate Avenue
San Francisco, CA 94102

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PREPARED UNDER THE DIRECTION OF TIMOTHY W. SHEBESTA LT COLONEL, C.E., DISTRICT ENGINEER	Surveyed By:	Chart Date:
Submitted: Hydro Survey Team Leader	Plotted By:	Jul 08, 2024
Recommended: Chief, Hydro Survey Section	Checked By:	PDT
Approved: Chief, Construction Branch	Drawn by:	PDT

CONTRA COSTA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOAL
CONDITION SURVEY
03 JULY 2024

Sheet
Reference
Number
1 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

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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US Army Corps
of Engineers

San Francisco District
450 Golden Gate Avenue
San Francisco, CA 94102

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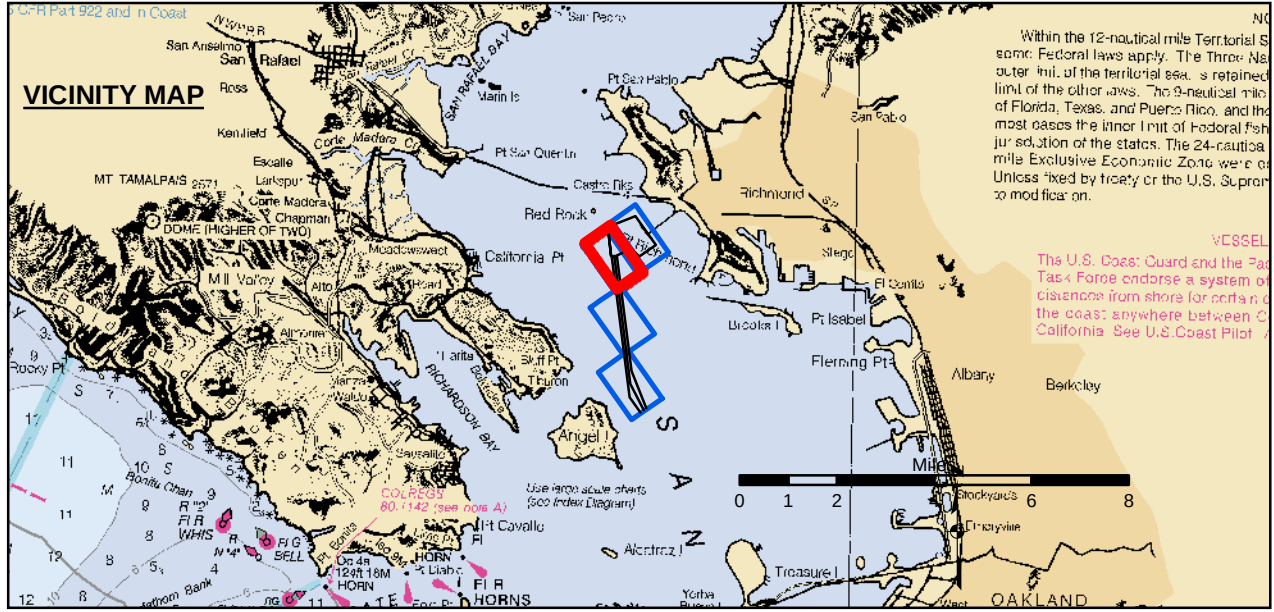
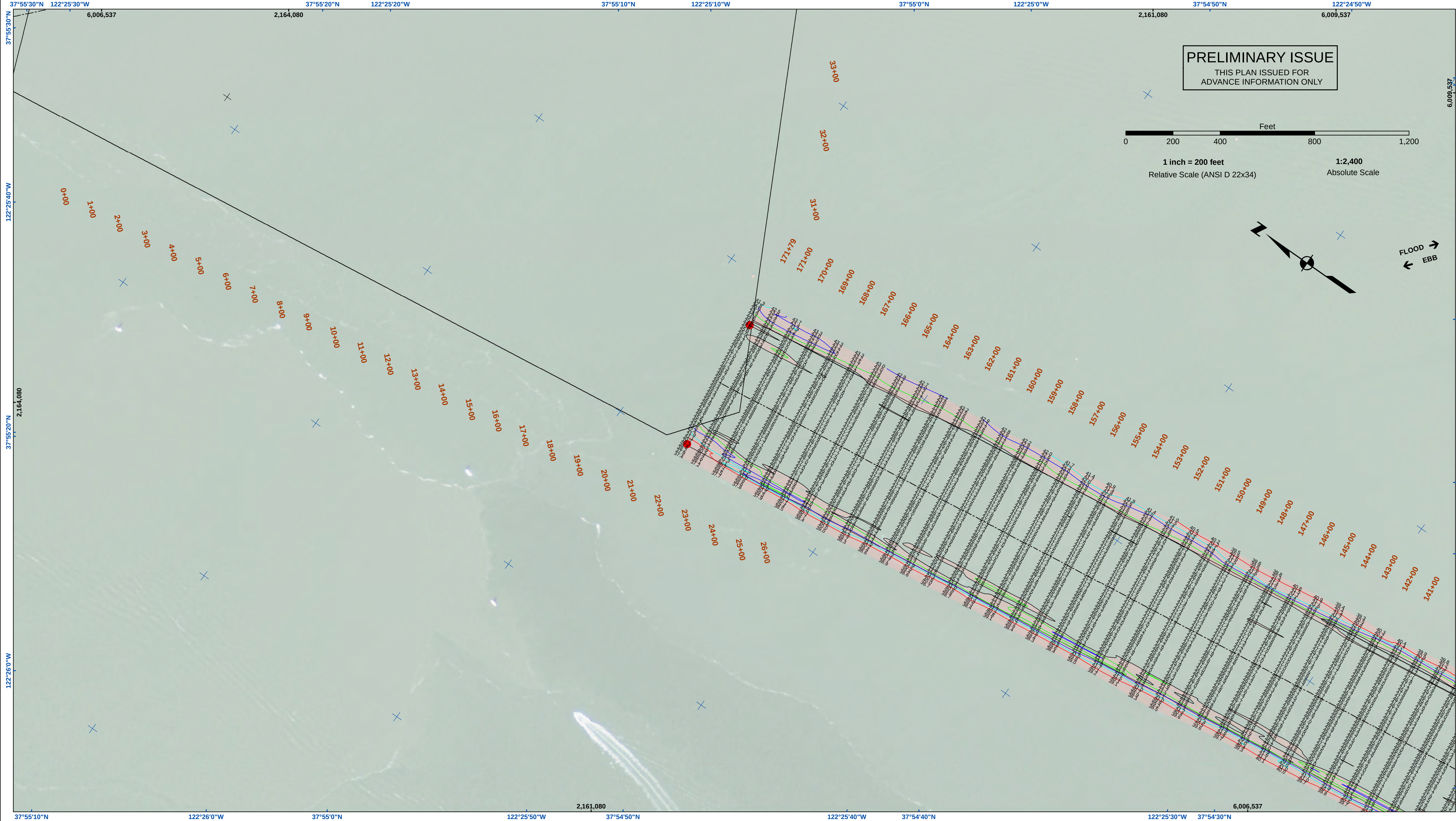
PREPARED UNDER THE DIRECTION OF TIMOTHY W. SHEBESTA LT COLONEL, C.E. DISTRICT ENGINEER	Surveyed By:	Chart Date: Jul 08, 2024
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Designed by:
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

CONTRA COSTA COUNTY

CALIFORNIA

RICHMOND OUTER HARBOR
SOUTHAMPTON SHOAL
CONDITION SURVEY
03 JULY 2024

Sheet
Reference
Number
2 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

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Contours

-45

-44

-43

-42

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NOTES:
HORIZONTAL COORDINATE SYSTEM:
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PREPARED UNDER THE DIRECTION OF TIMOTHY W. SHEBESTA LT COLONEL, C.E. DISTRICT ENGINEER	Surveyed By:	Chart Date:
Submitted: Hydro Survey Team Leader	Plotted By:	Jul 08, 2024
Recommended: Chief, Hydro Survey Section	Checked By:	Designed by:
Approved: Chief, Construction Branch	PDT	Drawn by:
		PDT

CONTRA COSTA COUNTY

CALIFORNIA

RICHMOND OUTER HARBOR

SOUTHAMPTON SHOAL

CONDITION SURVEY

03 JULY 2024

Sheet Reference

Number

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