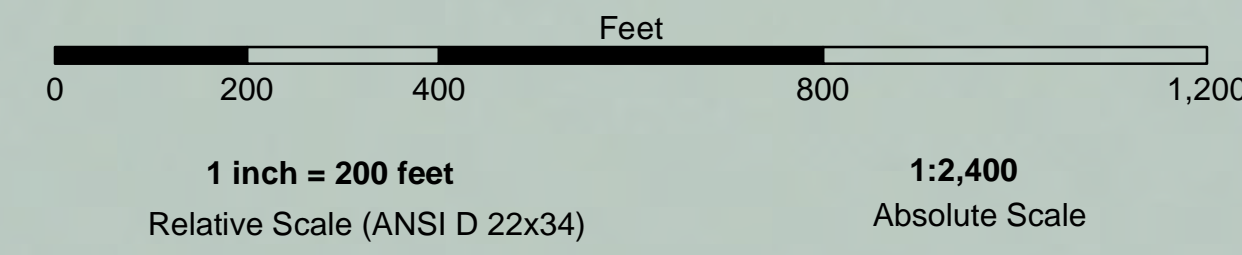


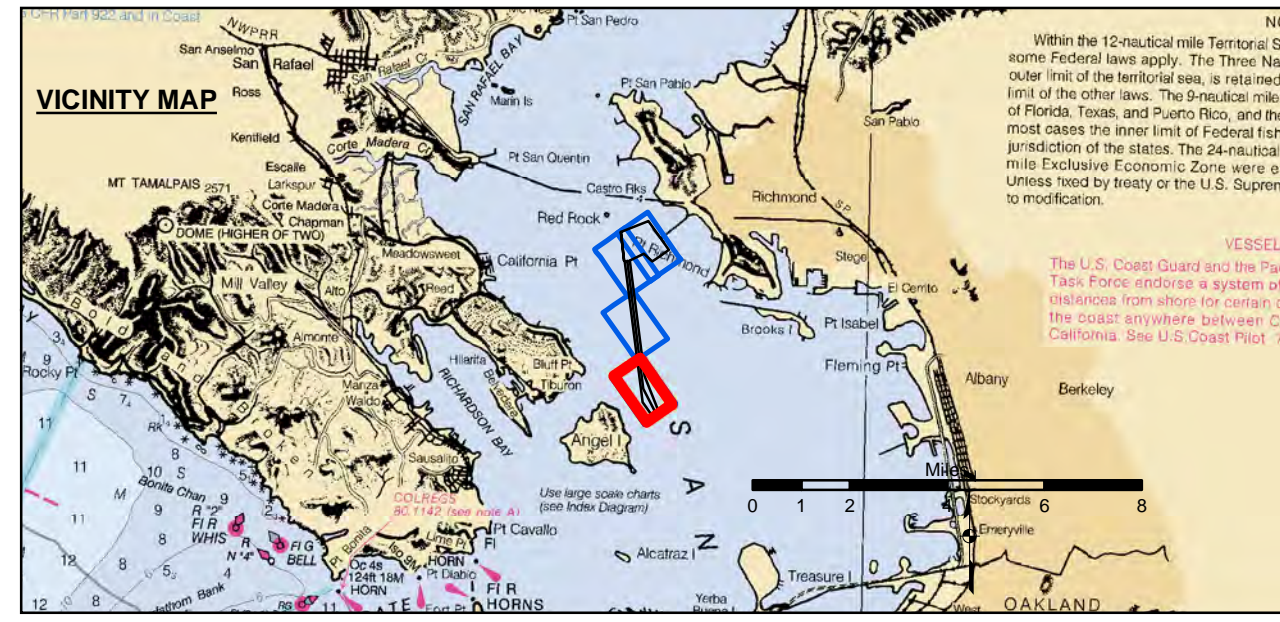
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US Army Corps of Engineers
San Francisco District
450 Golden Gate Ave
San Francisco, CA 94102

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| Chart Date: | Jan 28, 2020 |
| Surveyed By: | John D. Cunningham |
| Plotted By: | PDT |
| Checked By: | PDT |
| Drawn By: | PDT |



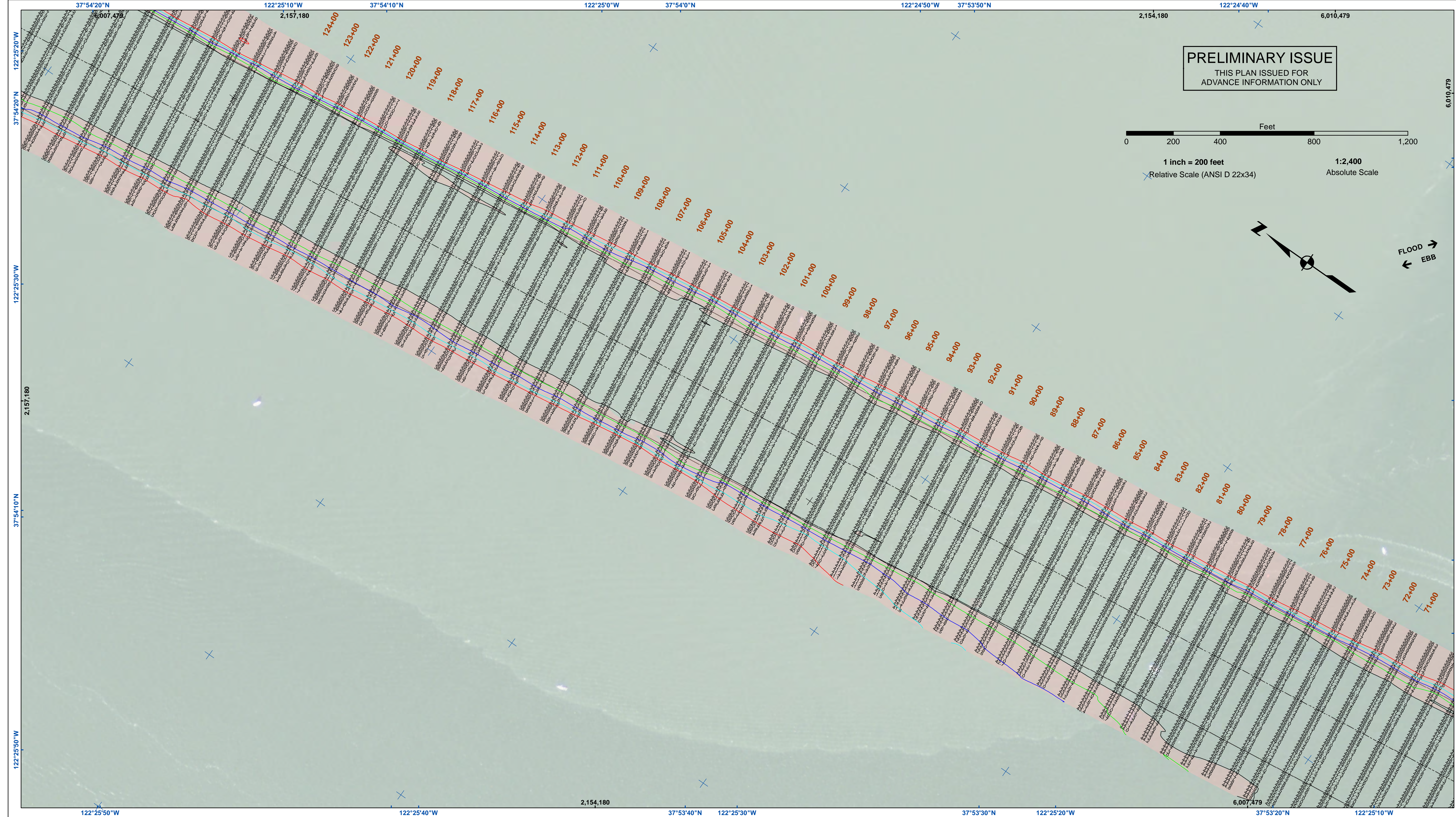
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|--|----------------------------|--|--------------------|-----------------|-----|
| | Federal Navigation Channel | | Beacon, General | Contours | |
| | Shoaling Area | | Obstruction Point | | -45 |
| | Placement Area | | Navigation Buoy | | -44 |
|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

NOTES:
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 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.

CALIFORNIA
ALAMEDA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
07 JANUARY 2020

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Reference
Number
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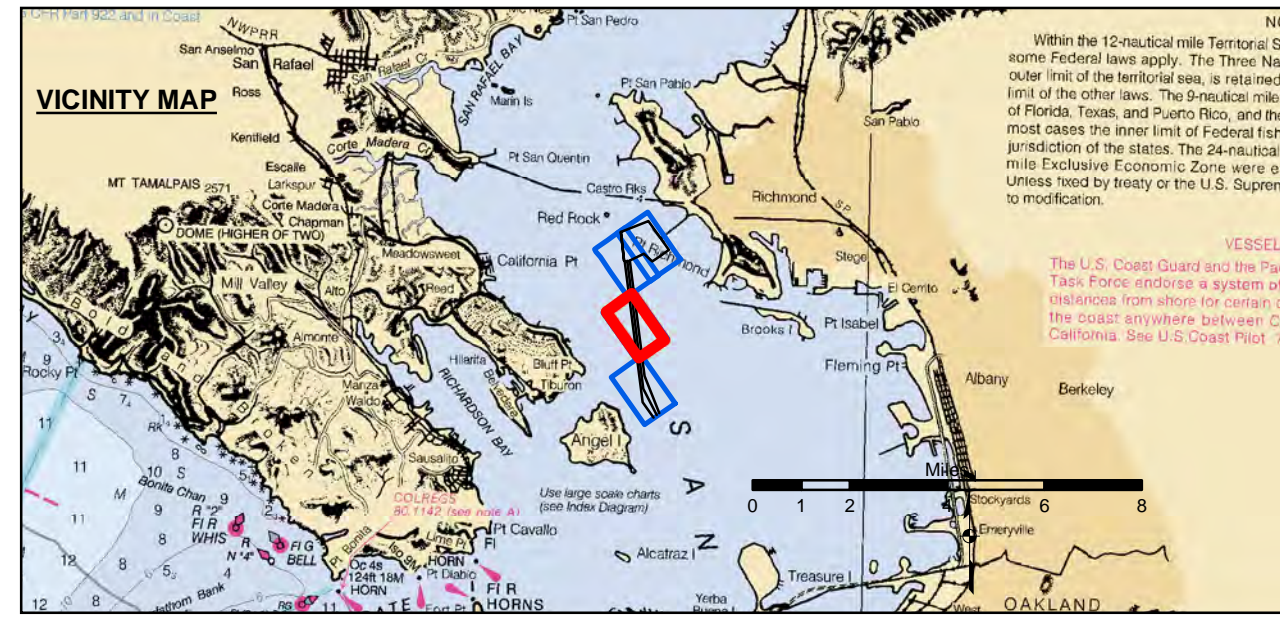
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 San Francisco District
 450 Golden Gate Ave
 San Francisco, CA 94102

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| | |
|---|--------------------------|
| Prepared Under the Direction of JOHN D. CUNNINGHAM LT Colonel, C.E., District Engineer | Chart Date: Jan 28, 2020 |
| Submitted: Hydro Survey Team Leader | Designed by: PDT |
| Recommended: Chief, Hydro Survey Section | Drawn by: PDT |
| Approved: Chief, Construction Branch | PDT |

CALIFORNIA
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
 07 JANUARY 2020

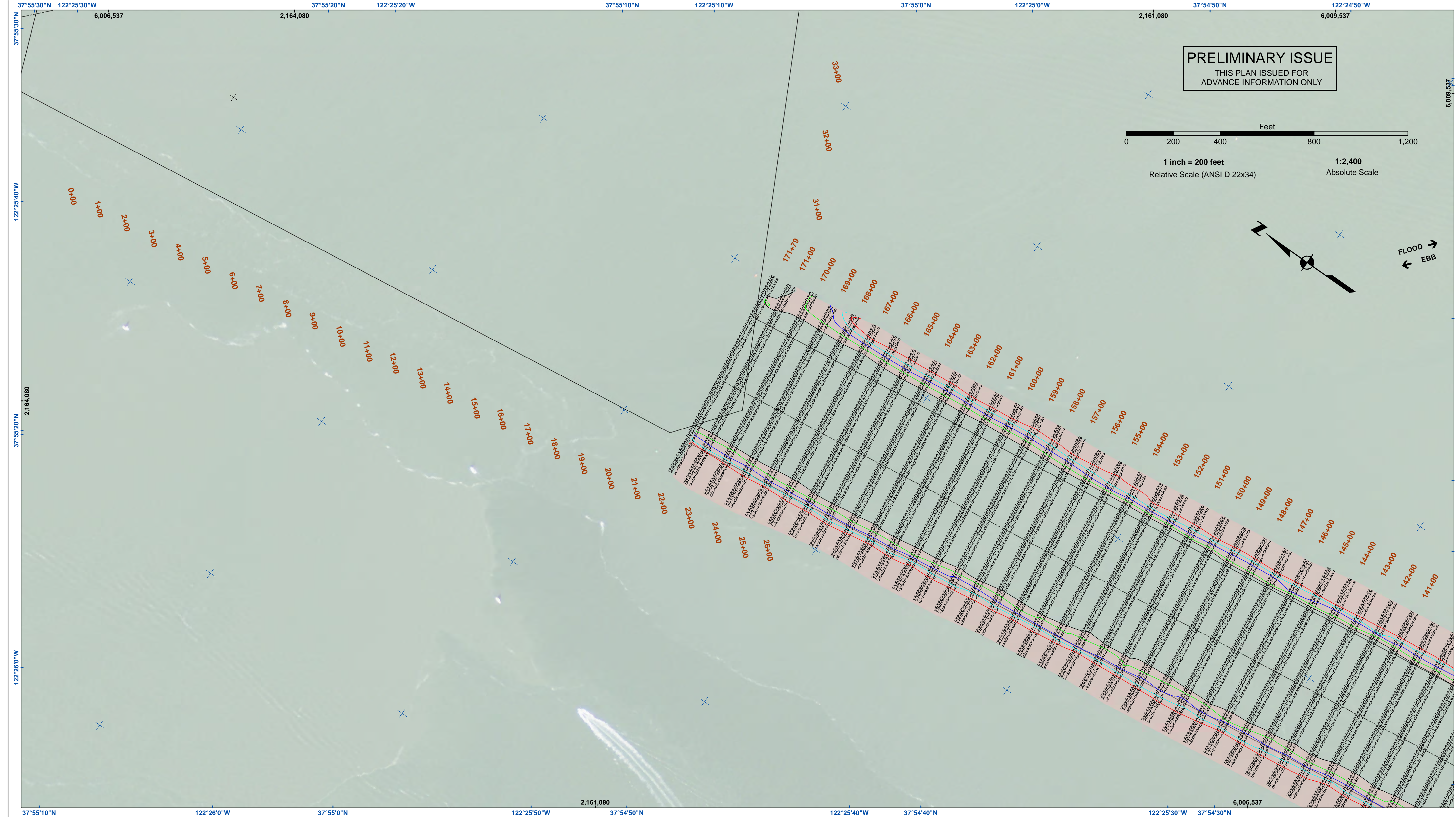
Sheet
Number
2 of 4



| | | |
|----------------------------|--------------------|-----------------|
| 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.
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 SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.
 BASE MAPS ARE USDA NAIP 2010.
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 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.
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 TIDE GAUGE LOCATED AT TIBURON NET DEPOT.



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

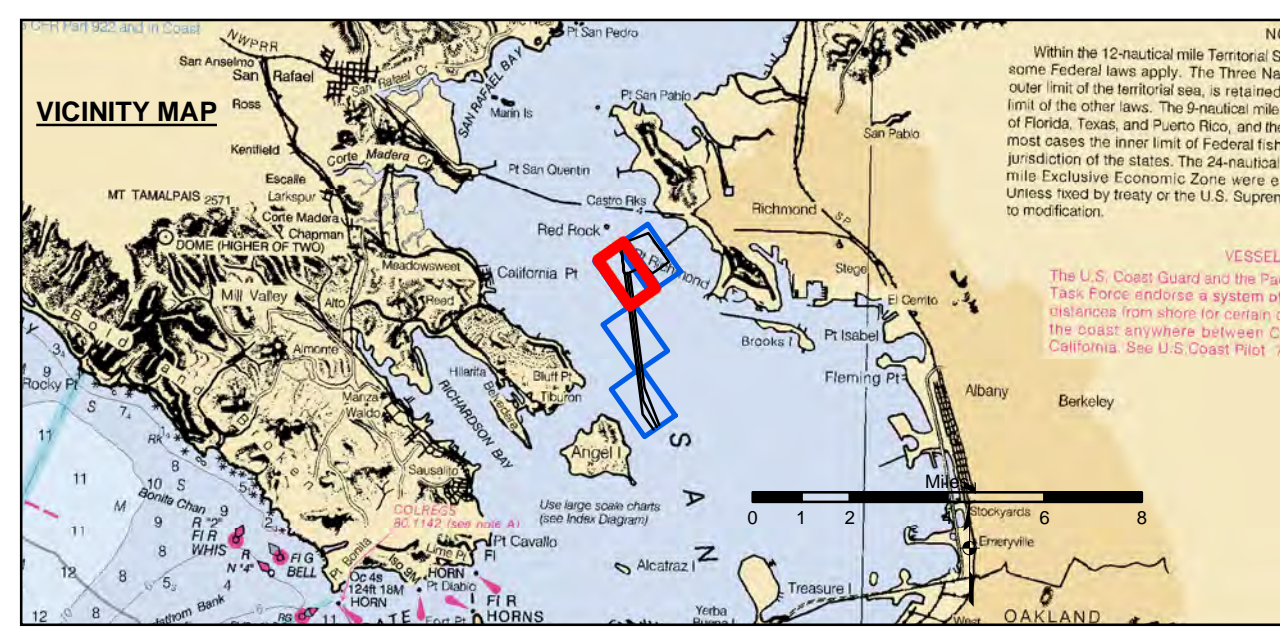
Directional Indicators: FLOOD, EBB

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

ALAMEDA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
 07 JANUARY 2020

Sheet
Number
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| | | |
|----------------------------|--------------------|-----------------|
| Federal Navigation Channel | Beacon, General | Contours |
| Shoaling Area | Obstruction Point | -45 |
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| Wreck Area | Shoalest Sounding* | -42 |
| Submerged Wreck | | -41 |
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NOTES:
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VERTICAL DATUM:
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 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 *10* 1937 ELEV 15.86 FT. MLLW.
 AND BENCHMARK *11* 1946 ELEV 15.47 FT. MLLW.
 TIDE GAUGE LOCATED AT TIBURON NET DEPOT.