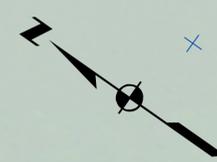
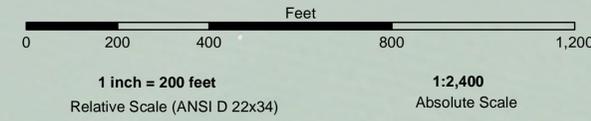
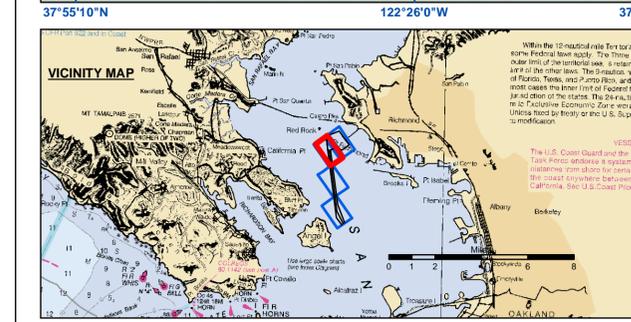


PRELIMINARY ISSUE
THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY



FLOOD →
← EBB



- | | | |
|----------------------------|--------------------|----------|
| 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.
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 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.

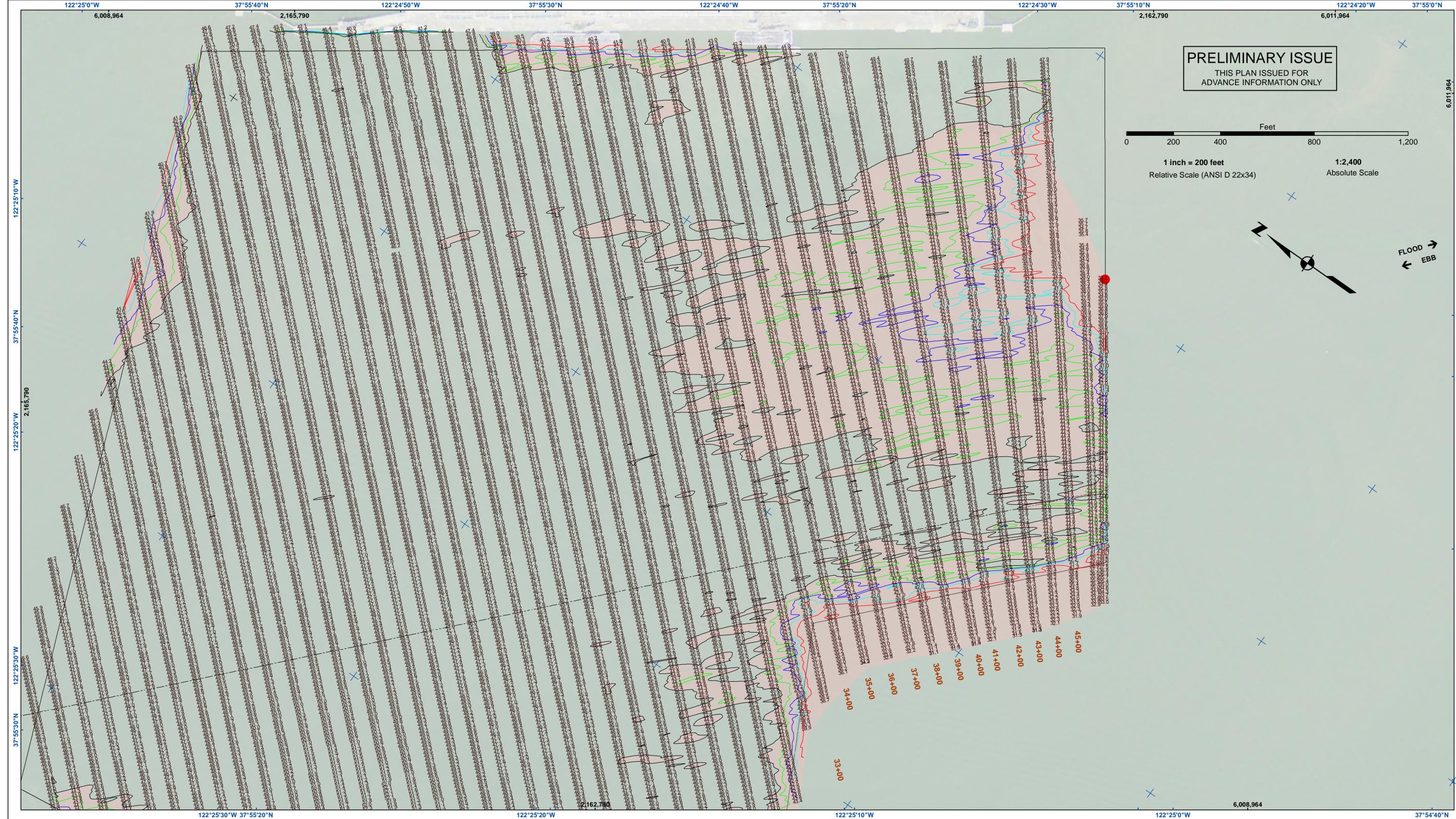
US Army Corps of Engineers
San Francisco District
450 Golden Gate Ave
San Francisco, CA 94102

DISCLAIMER
The United States Government furnishes this information as a public service. It is not intended to be used for any purpose other than the intended purpose. The user is responsible for the results of any application of this information. The United States Government makes no warranty, expressed or implied, concerning the accuracy, completeness, or timeliness of the information. The user is responsible for the results of any application of this information. The United States Government makes no warranty, expressed or implied, concerning the accuracy, completeness, or timeliness of the information. The user is responsible for the results of any application of this information. The United States Government makes no warranty, expressed or implied, concerning the accuracy, completeness, or timeliness of the information. The user is responsible for the results of any application of this information.

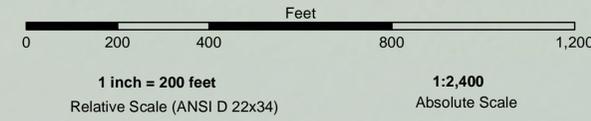
Prepared Under the Direction of:	Chart Date:
LT COLONEL K.E. ARNETT	Nov 10, 2021
Submitted:	Designed by:
Hydro Survey Team Leader	PDT
Recommended:	Checked By:
Chief, Hydro Survey Section	PDT
Approved:	Drawn by:
Chief, Construction Branch	PDT

CALIFORNIA
ALAMEDA COUNTY
RICHMOND OUTER HARBOR
LONG WHARF
CONDITION SURVEY
08 NOVEMBER 2021

Sheet
Reference
Number
3 of 4



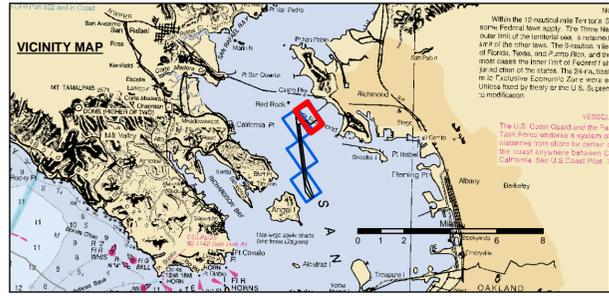
PRELIMINARY ISSUE
THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY



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

DISCLAIMER
The United States Government furnishes this information as a public service. It is not intended to be used for any purpose other than that for which it was prepared. The United States Government makes no warranty, expressed or implied, concerning the accuracy, completeness, or reliability of this information. The user is responsible for the results of any application of the data for other than its intended purpose. These data belong to the Government. Therefore the recipient may not transfer these data to others without also transferring this disclaimer.

Prepared Under the Direction of:	Chart Date:
KEVIN P. ARNETT	Nov 10, 2021
Plotted By:	Designed by:
PDT	PDT
Checked By:	Drawn by:
PDT	PDT



- 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.
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 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
LONG WHARF
CONDITION SURVEY
08 NOVEMBER 2021

Sheet Reference Number
4 of 4