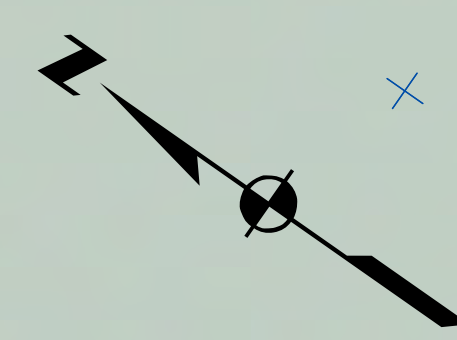
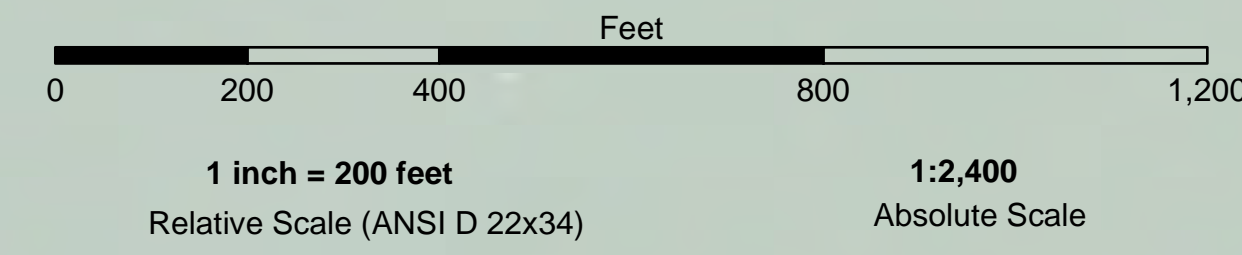
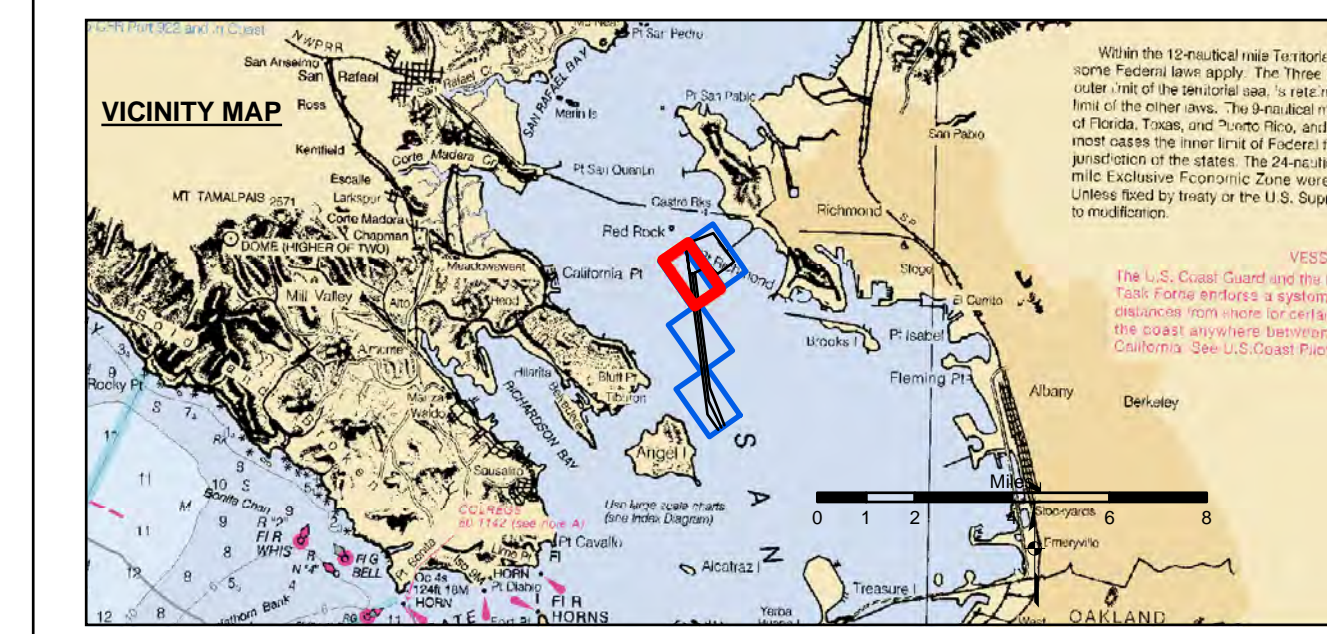


PRELIMINARY ISSUE
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ADVANCE INFORMATION ONLY



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 | 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, 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 4290 - 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.

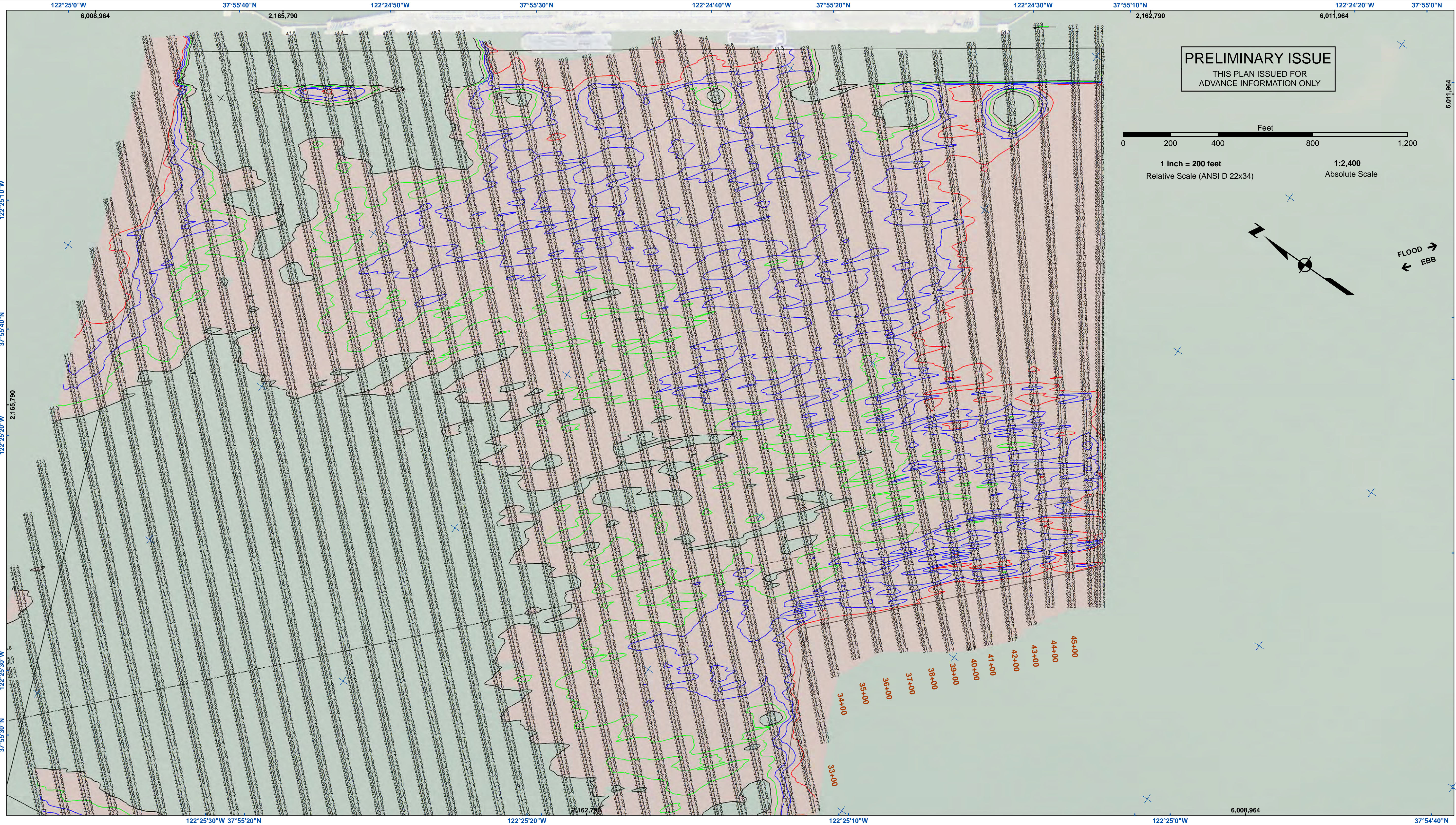
US Army Corps of Engineers
San Francisco District
1455 Market Street
San Francisco, CA 94103

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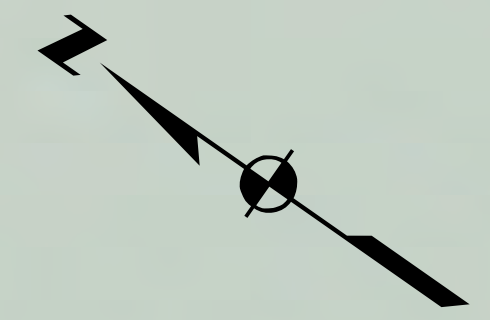
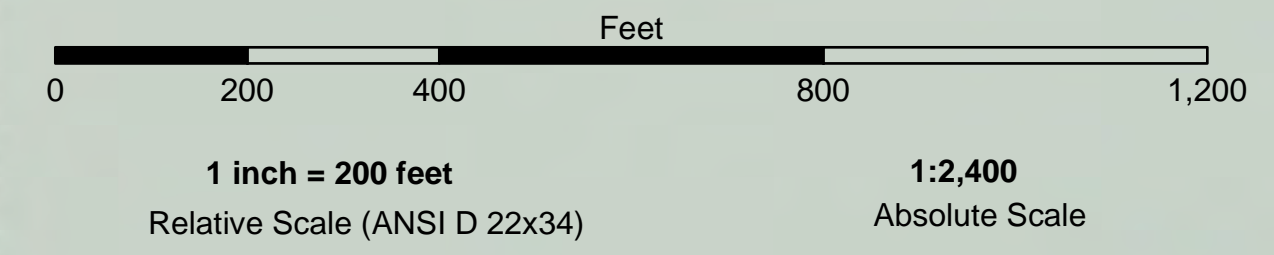
Prepared Under the Direction of: TRAVIS J. RAYFIELD LT. COLONEL, C.E., DISTRICT ENGINEER	Chart Date: May 23, 2018
Subproject: Hydro Survey, Team Leader	Designed by: PDT
Recommendation: Chief, Hydro Survey Section	Plotted by: PDT
Approved: Chief, Construction Branch	Checked by: PDT
	Drawn by: PDT

CALIFORNIA
**RICHMOND OUTER HARBOR
LONG WHARF
CONDITION SURVEY**
19 APRIL 2018

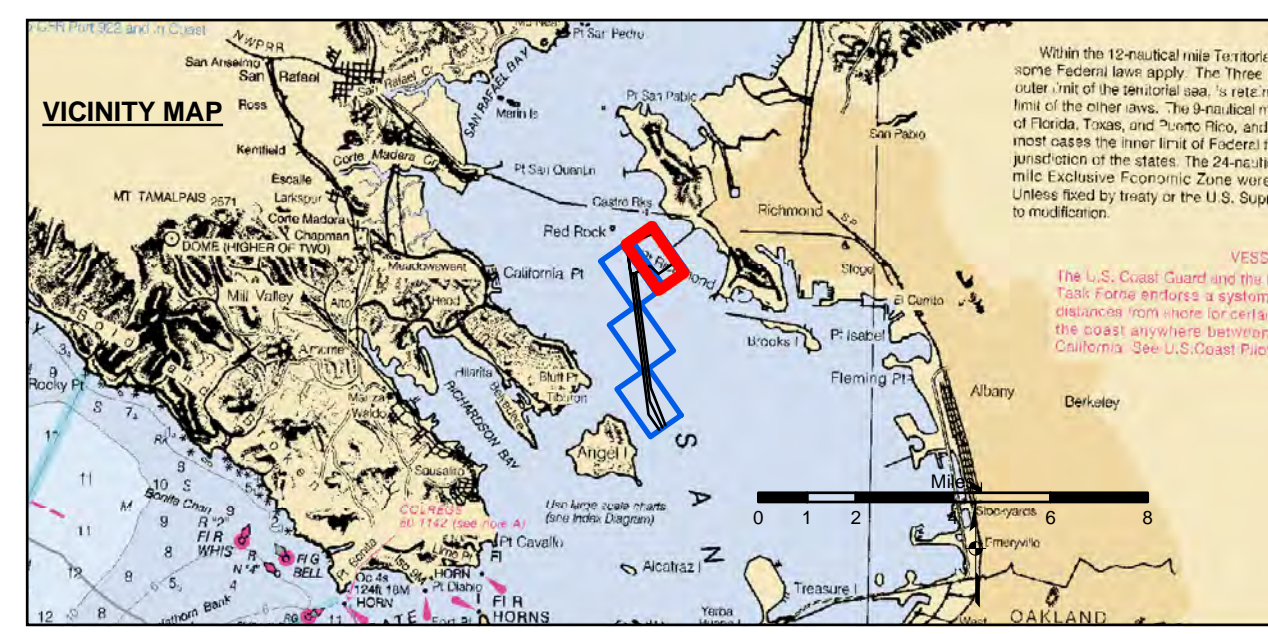
Sheet Reference Number
3 of 4



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FLOOD →
← EBB



- 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:
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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 4863 - RICHMOND, CA
941 4290 - SAN FRANCISCO, CA
VERTICAL CONTROL:
(SOUTHAMPTON SHOALS & LONG WHARF MANEUVERING) BENCHMARK *11 1937 ELEV 15.86 FT. MLLW.
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TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

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San Francisco District
1455 Market Street
San Francisco, CA 94103

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Prepared Under the Direction of:	Chart Date:
LT COLONEL C.E. DISTRICT ENGINEER	May 23, 2018
Subject:	Plotted 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
19 APRIL 2018

Sheet
Reference
Number
4 of 4