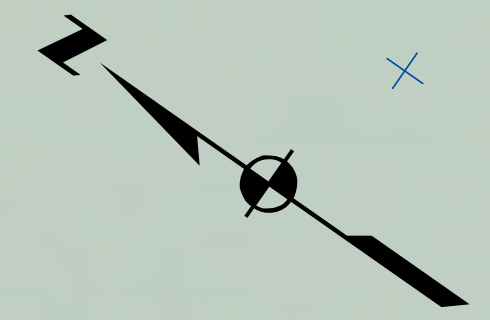
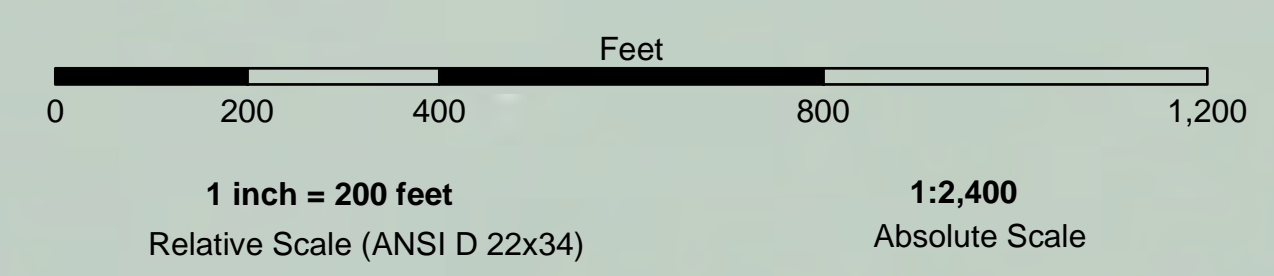
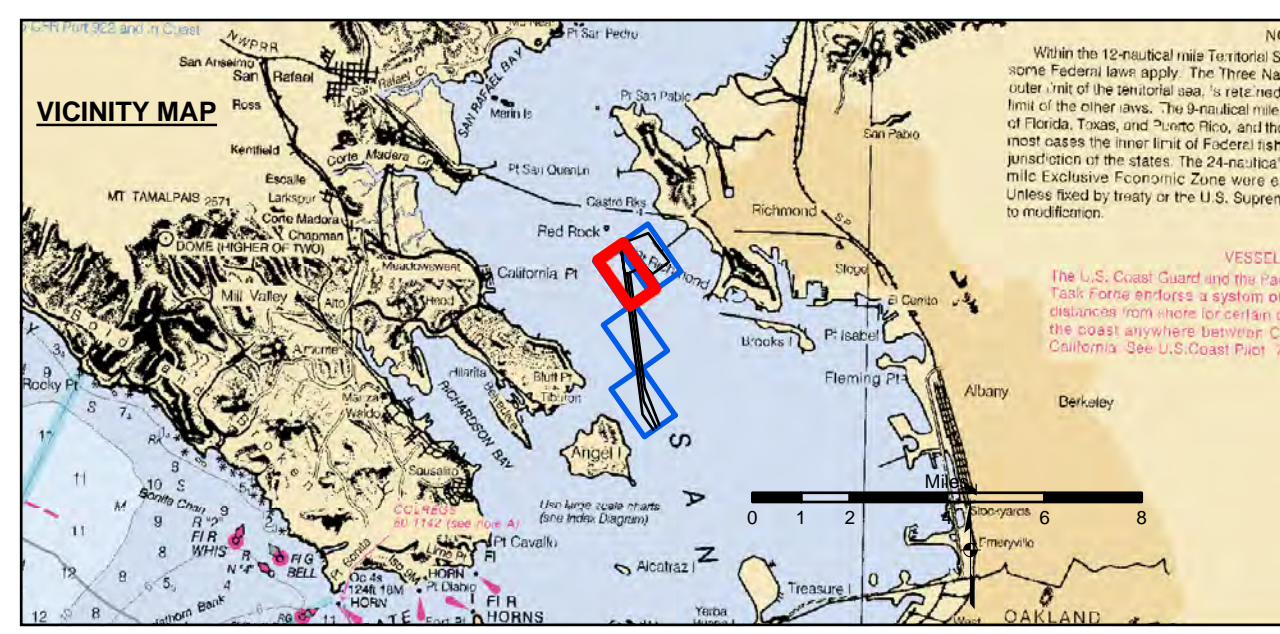


PRELIMINARY ISSUE
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FLOOD →
← EBB



- | | | |
|----------------------------|--------------------|-----------------|
| 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 *11* 1937 ELEV 15.86 FT. MLLW.
AND BENCHMARK *11* 1946 ELEV 15.47 FT. MLLW.
TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

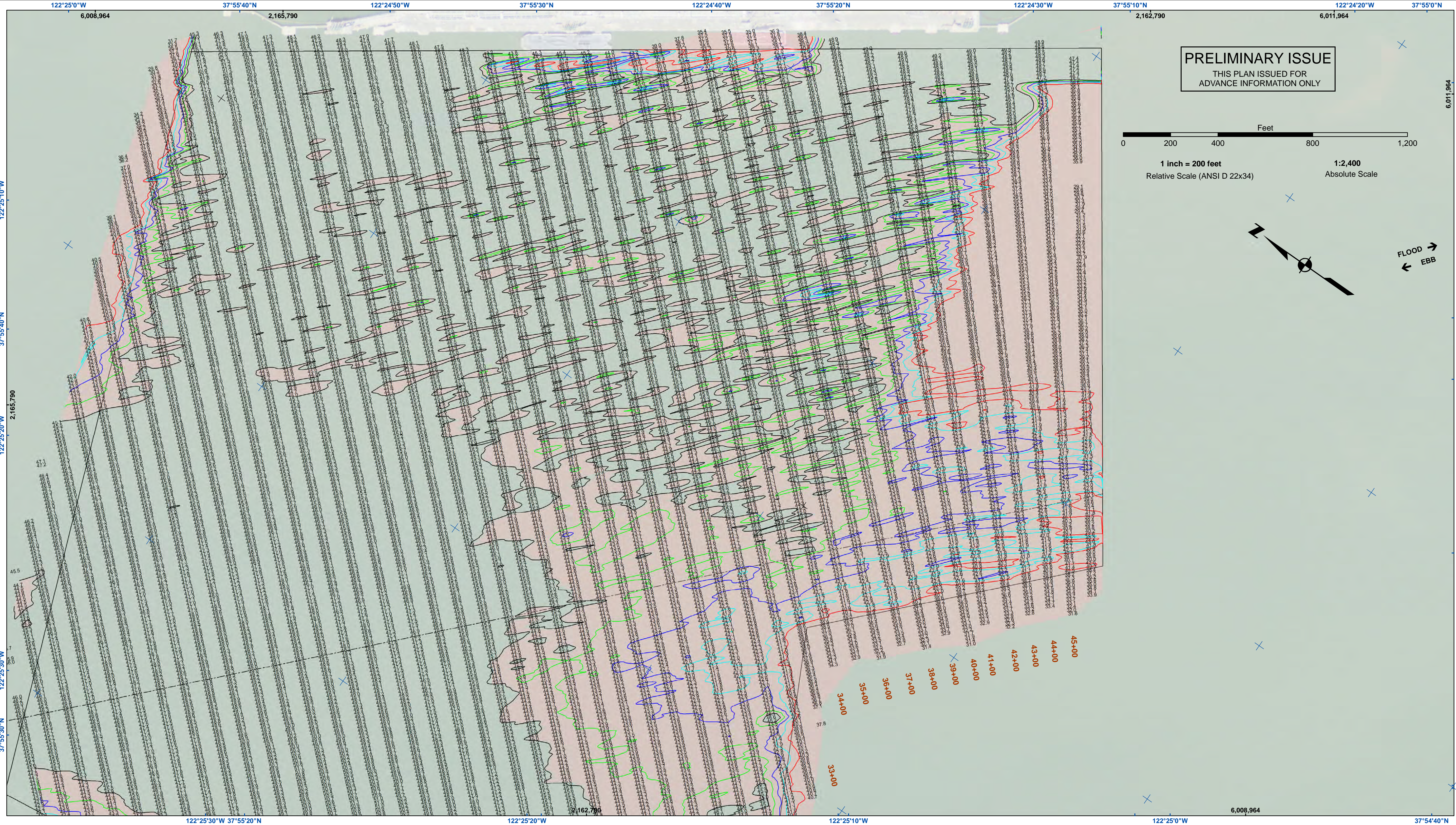


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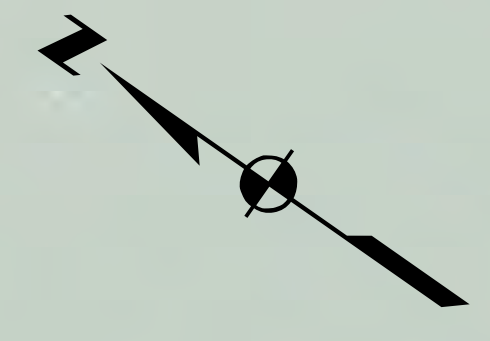
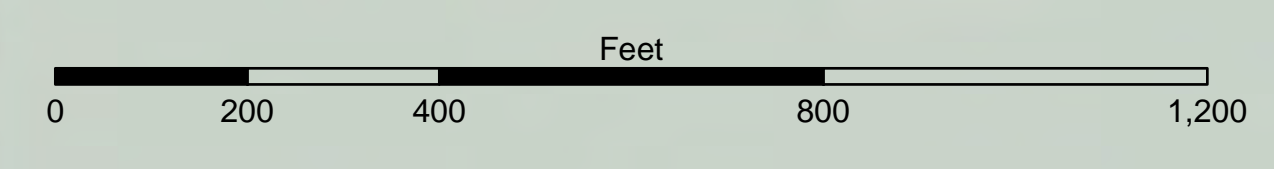
Prepared Under the Direction of:	Chart Date:
TRAVIS J. RAYFIELD	Aug 22, 2018
LT Colonel, C.E., District Engineer	Designed by:
Subject: Hydro Survey Team Leader	PDT
Recommended by:	Checked by:
Chief, Hydro Survey Section	PDT
Approved by:	Drawn by:
Chief, Construction Branch	PDT

ALAMEDA COUNTY
CALIFORNIA
**RICHMOND OUTER HARBOR
CONDITION SURVEY
07 AUGUST 2018**

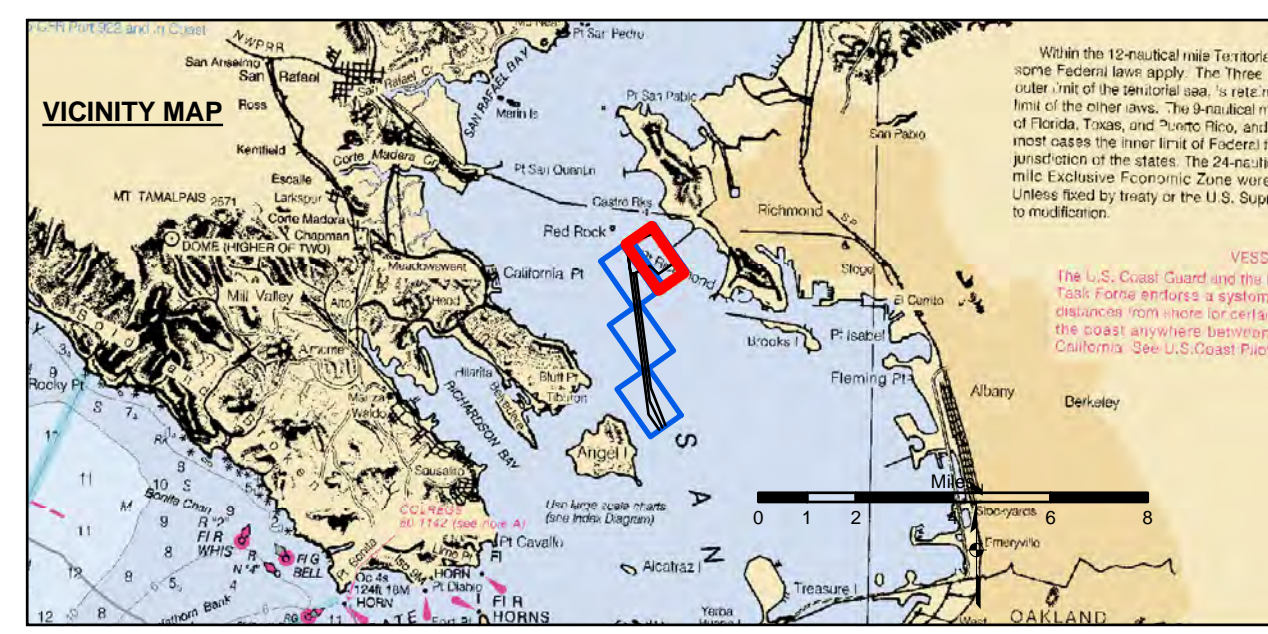
**Sheet
Reference
Number
3 of 4**



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- | | | |
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| Federal Navigation Channel | Beacon, General | Contours |
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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.

US Army Corps of Engineers
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. TRAVIS J. RAYFIELD	Aug 22, 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
CONDITION SURVEY
07 AUGUST 2018

Sheet Reference Number
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