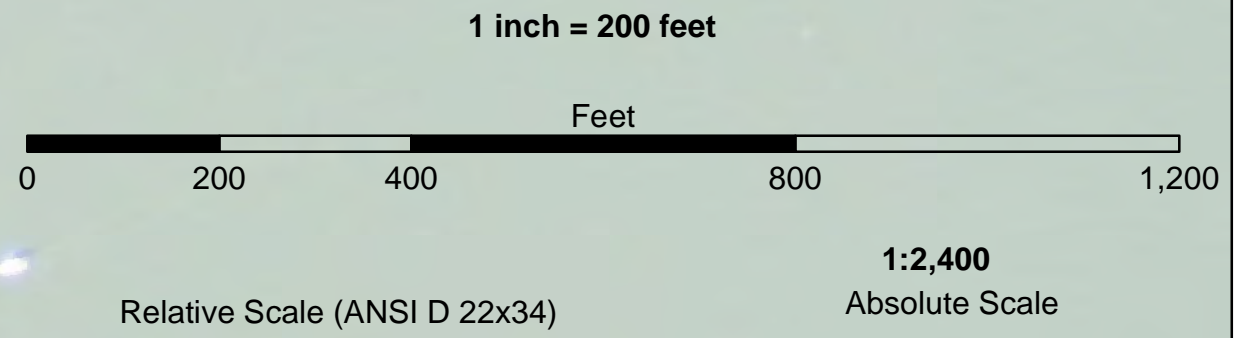
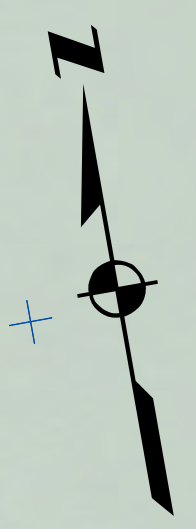
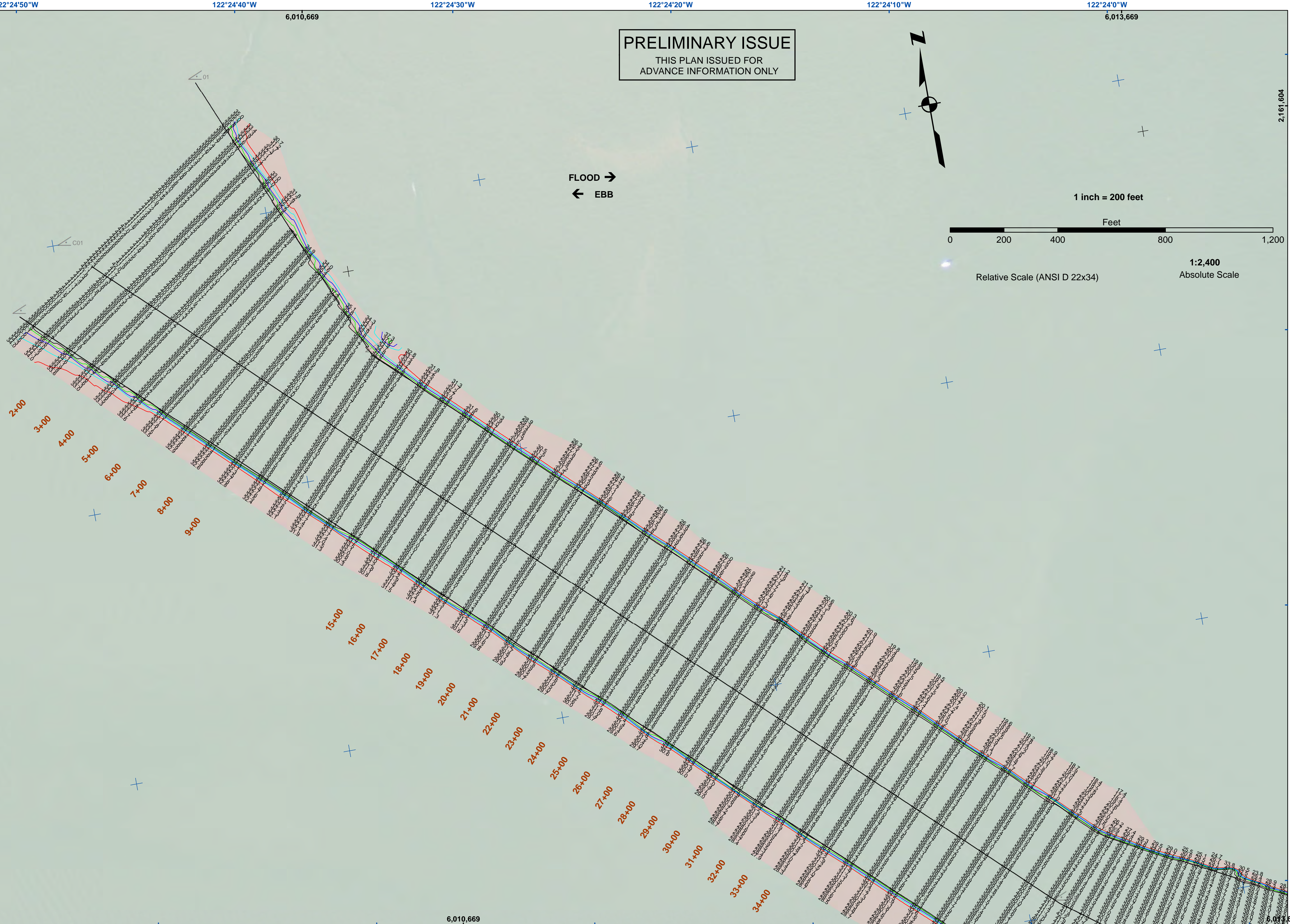




**PRELIMINARY ISSUE**  
THIS PLAN ISSUED FOR  
ADVANCE INFORMATION ONLY



FLOOD →  
← EBB

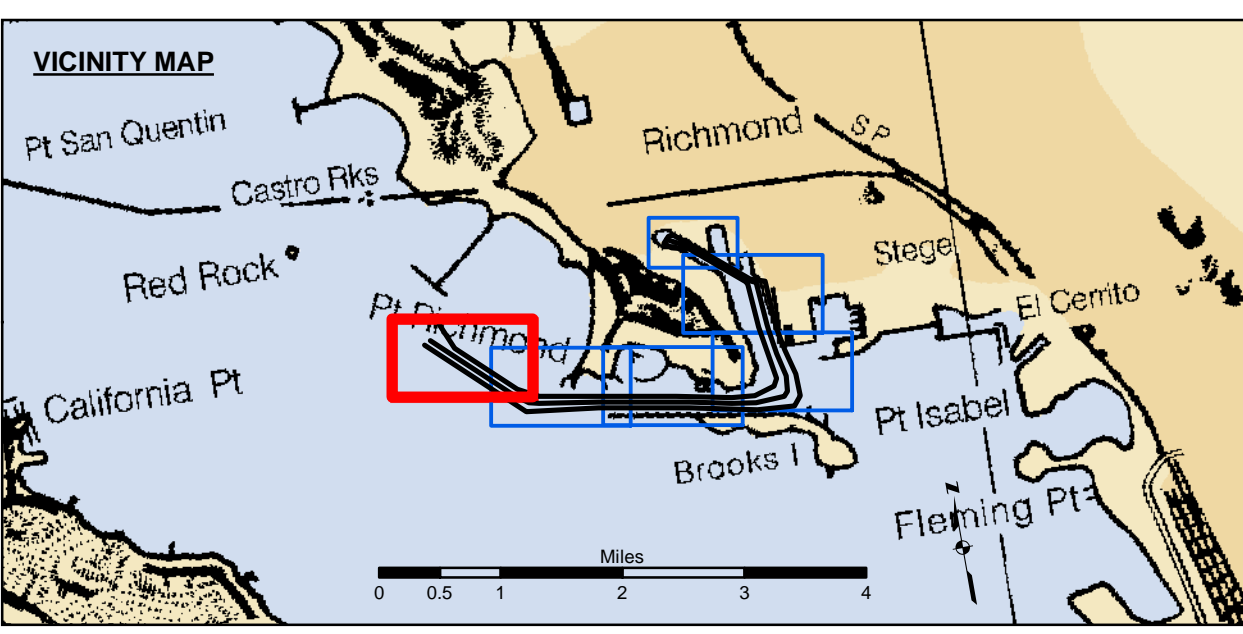


**N.A.D. 1983 FEET COORDINATES**

Channel Angle Point	Easting	Northing
01	6010230.66	2162394.62
02	6009436.76	2161650.06
03	6010702.46	2161282.52
04	6013280.69	2158029.15
05	6013071.04	2159051.01
06	6016426.10	2157649.80
07	6013946.57	2158590.79
08	6020299.03	2156972.78
09	6019811.99	2157565.50
10	6023187.74	2156366.30
11	6022179.38	2157068.47
12	6024797.57	2156256.37
13	6023175.24	2156977.58
14	6025133.92	2156630.24
15	6024071.72	2157243.76
16	6025096.44	2157620.99
17	6024244.63	2157572.06
18	6024794.33	2158699.33
19	6023863.13	2159896.61
20	6024629.99	2159700.65
21	6023718.07	2161814.06
22	6024470.69	2161806.34
23	6023659.10	2161929.33
24	6023871.49	2162011.81
25	6022130.19	2163218.69
26	6022259.11	2163371.56

**N.A.D. 1983 FEET COORDINATES**

Centerline Angle Point	Easting	Northing
C01	6009645.81	2161871.50
C02	6012865.31	2158832.66
C03	6013468.42	2158386.31
C04	6013908.41	2158274.43
C05	6023181.49	2156671.94
C06	6024434.65	2156750.07
C07	6024602.82	2156937.00
C08	6024670.54	2157596.53
C09	6024272.27	2159641.94
C10	6024094.38	2161810.20
C11	6023765.30	2161970.57
C12	6022194.65	2163295.13



Federal Navigation Channel	Beacon, General	<b>Contours</b>
Shoaling Area	Obstruction Point	-38
Placement Area	Navigation Buoy	-37
Anchorage Area	Navigation Buoy	-36
Wreck Area	Shoalest Sounding*	-35
Submerged Wreck		-34
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 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:  
INNER HARBOR CHANNEL -37.5 FEET  
SANTE FE CHANNEL -30 FEET.

(INNER HARBOR CHANNEL) BENCHMARK A-558 ELEV 15.81FT. MLLW.  
BENCHMARK #2 (1032) USC&GS DISK OLD FORD PLANT 16.0825 FT. MLLW.  
B.M. LS 2769 CITY OF RICHMOND DISK PAVEMENT 13.971 FT. MLLW.

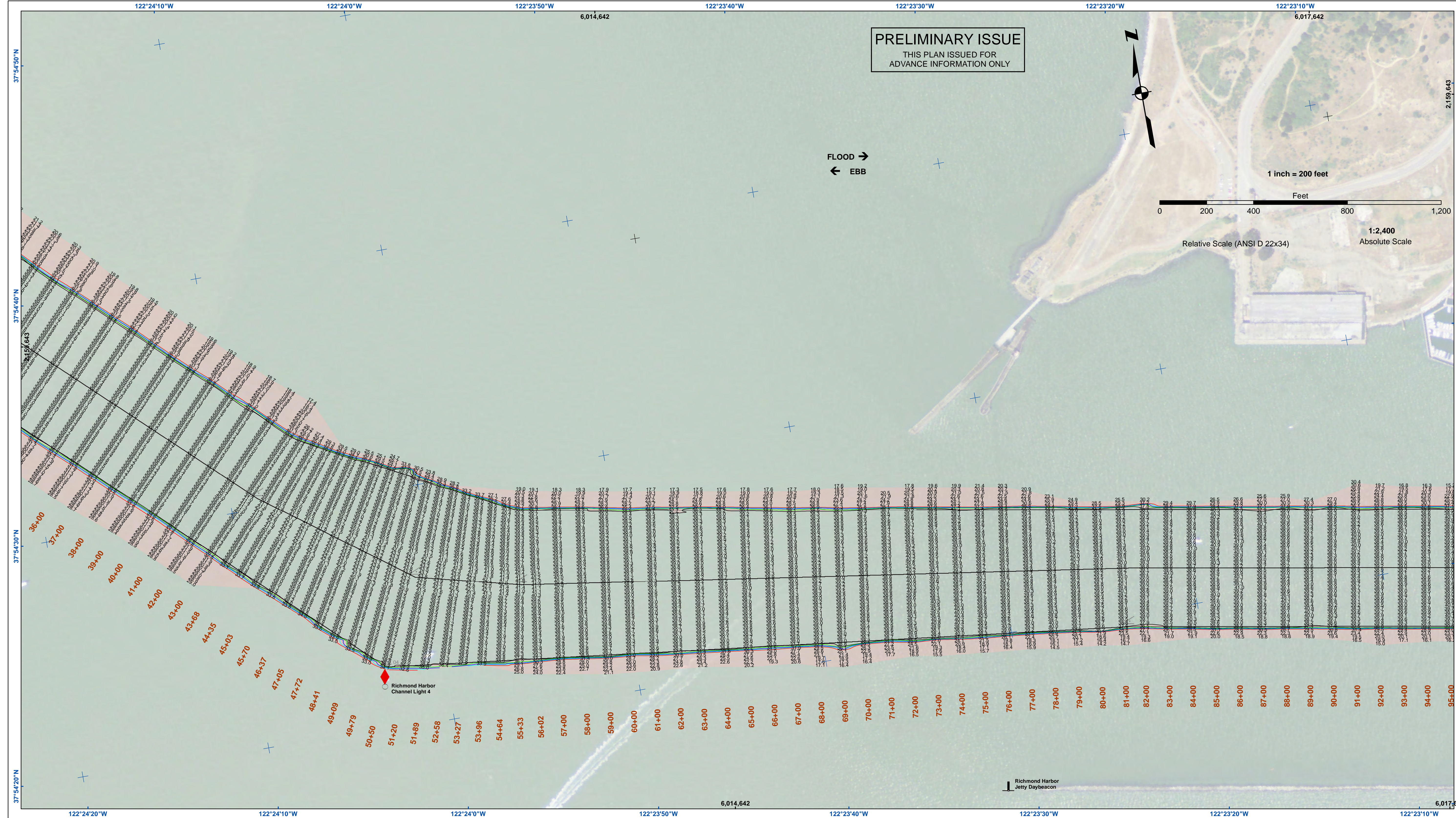
TIDE GAGE LOCATION: MON B-1.  
HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON.  
VERTICAL CONTROL: BENCHMARK, MLLW ELEV., AGENCY

**DISCLAIMER**  
The United States Government furnishes this information as a service to the public and does not warrant, express or implied, the accuracy, completeness, or reliability of the data. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

Prepared Under the Direction of	Chart Date:
TIMOTHY W. SHEBESTA	Apr 02, 2024
Submitted:	Designed by:
Hydro Survey Team Leader	PDT
Recommended:	Checked by:
Chief, Hydro Survey Section	PDT
Approved:	Drawn by:
Chief, Construction Branch	PDT

CALIFORNIA
CONTRA COSTA COUNTY
RICHMOND INNER HARBOR
POST-DREDGE SURVEY
17, 20, 28, JULY 2023
01, 08, 17, 21, 23 AUGUST 2023
01, 05, 08 SEPTEMBER 2023
09, 10, 26 JANUARY 2024
06, 20 FEBRUARY 2024
04, 15, 27 MARCH 2024

**Sheet Reference Number**  
1 of 6



**PRELIMINARY ISSUE**  
THIS PLAN ISSUED FOR  
ADVANCE INFORMATION ONLY

FLOOD →  
← EBB

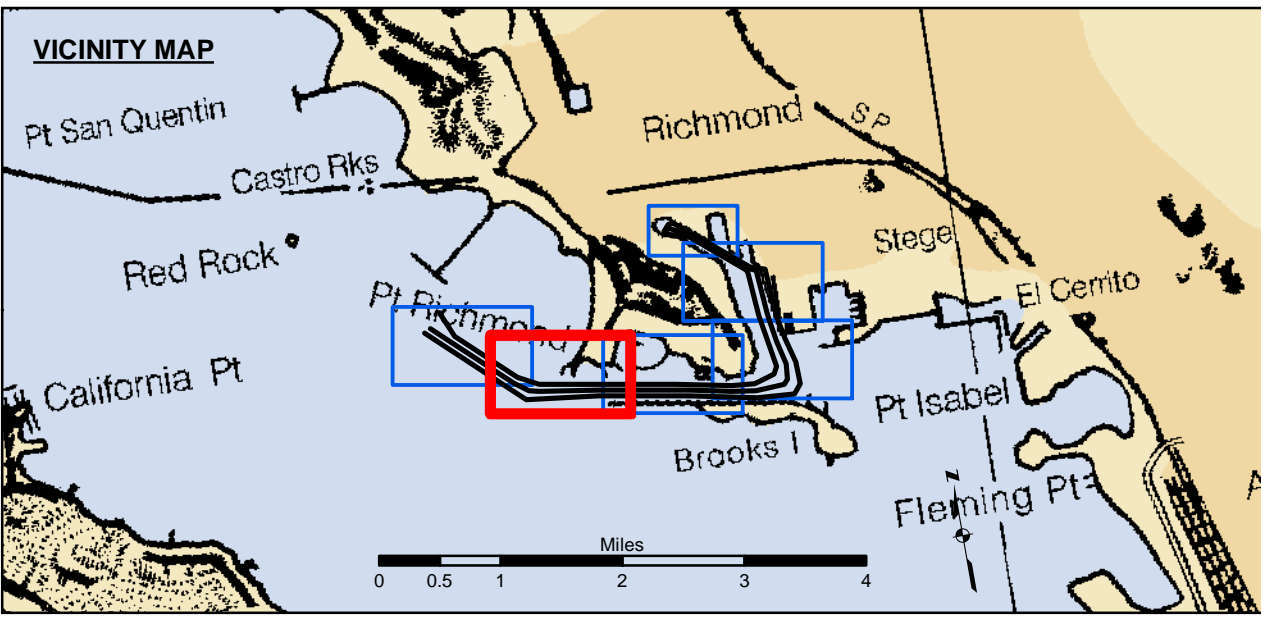


1 inch = 200 feet



Relative Scale (ANSI D 22x34)

1:2,400  
Absolute Scale



- |                            |                    |                 |
|----------------------------|--------------------|-----------------|
| Federal Navigation Channel | Beacon, General    | <b>Contours</b> |
| Shoaling Area              | Obstruction Point  | -38             |
| Placement Area             | Navigation Buoy    | -37             |
| Anchorage Area             | Navigation Buoy    | -36             |
| Wreck Area                 | Shoalest Sounding* | -35             |
| Submerged Wreck            |                    | -34             |
| 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.  
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:  
INNER HARBOR CHANNEL -37.5 FEET  
SANTE FE CHANNEL -30 FEET.

(INNER HARBOR CHANNEL) BENCHMARK A-558 ELEV 15.81 FT. MLLW.  
BENCHMARK #2 (1032) USC&GS DISK OLD FORD PLANT 16.0825 FT. MLLW.  
B.M. LS 2769 CITY OF RICHMOND DISK PAVEMENT 13.971 FT. MLLW.

TIDE GAGE LOCATION: MON B-1.  
HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON.  
VERTICAL CONTROL: BENCHMARK, MLLW ELEV., AGENCY

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

**DISCLAIMER**  
The United States Government furnishes this information for the general information of the user. The user is responsible for the results of any application of the data for other than its intended purpose. The United States Government makes no warranties, expressed or implied, concerning the accuracy, completeness, or reliability of the information furnished hereunder. The user shall assume all liability whatsoever to any person by reason of any use of the information furnished hereunder. The user shall not transfer these data to others without also transferring this disclaimer.

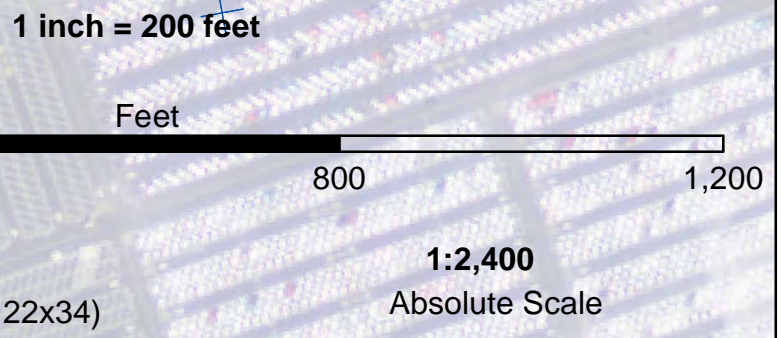
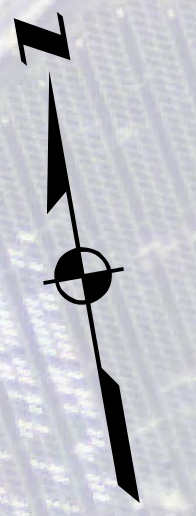
Prepared Under the Direction of <b>TIMOTHY W. SHEBESTA</b> LT COLONEL, C.E., DISTRICT ENGINEER	Surveyed By: PDT	Chart Date: Apr 02, 2024
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

CALIFORNIA  
CONTRA COSTA COUNTY  
RICHMOND INNER HARBOR  
POST-DREDGE SURVEY  
17, 20, 28, JULY 2023  
01, 08, 17, 21, 23 AUGUST 2023  
01, 05, 08 SEPTEMBER 2023  
09, 10, 26 JANUARY 2024  
06, 20 FEBRUARY 2024  
04, 15, 27 MARCH 2024

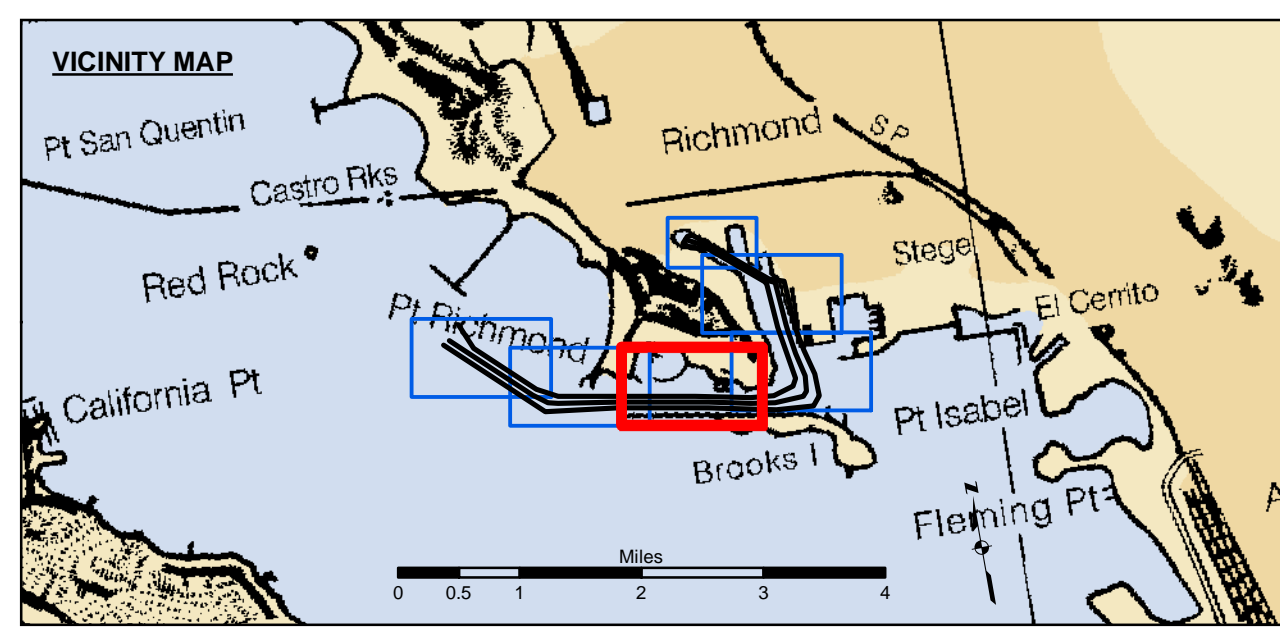
**Sheet  
Reference  
Number**  
**2 of 6**



**PRELIMINARY ISSUE**  
THIS PLAN ISSUED FOR  
ADVANCE INFORMATION ONLY



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
- 38
- 37
- 36
- 35
- 34

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.  
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:  
INNER HARBOR CHANNEL - 37.5 FEET  
SANTE FE CHANNEL - 30 FEET.

(INNER HARBOR CHANNEL) BENCHMARK A-558 ELEV 15.81 FT. MLLW.  
BENCHMARK #2 (1032) USCGS DISK OLD FORD PLANT 16.0825 FT. MLLW.  
B.M. LS 2769 CITY OF RICHMOND DISK PAVEMENT 13.971 FT. MLLW.

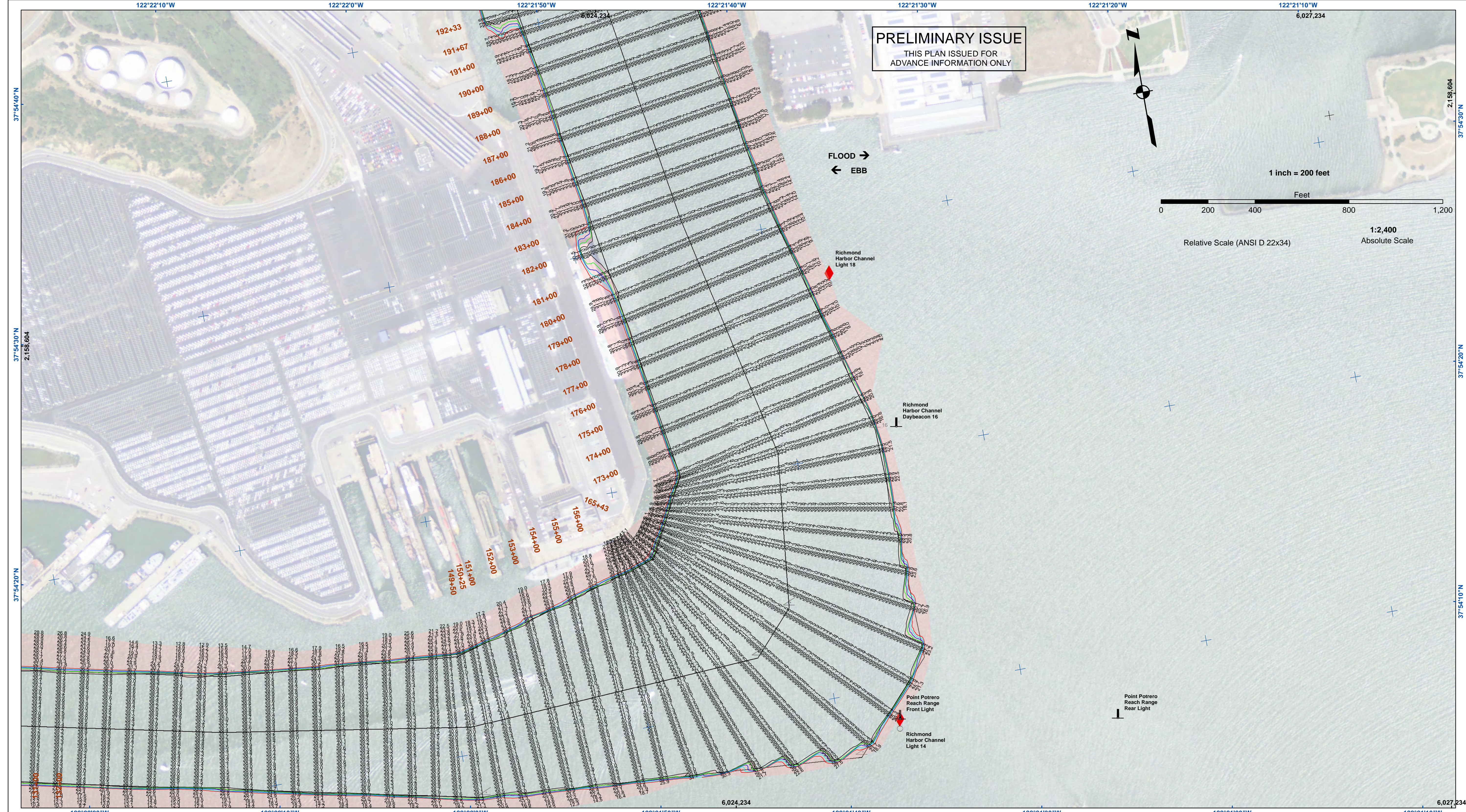
TIDE GAGE LOCATION: MON B-1.  
HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON.  
VERTICAL CONTROL: BENCHMARK, MLLW ELEV., AGENCY



**DISCLAIMER**  
The United States Government furnishes this information for the general information of the user. The user assumes all responsibility for the use of this information. The user shall not be held liable for any damage or injury resulting from the use of this information. The user shall not be held liable for any damage or injury resulting from the use of this information. The user shall not be held liable for any damage or injury resulting from the use of this information.

PREPARED UNDER THE DIRECTION OF <b>TIMOTHY W. SHEBESTA</b> LT COLONEL, C.E., DISTRICT ENGINEER	Surveyed By: _____	Chart Date: Apr 02, 2024
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Designed by: _____
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: _____
Approved: Chief, Construction Branch		PDT

CALIFORNIA CONTRA COSTA COUNTY RICHMOND INNER HARBOR POST-DREDGE SURVEY 17, 20, 28, JULY 2023 01, 08, 17, 21, 23 AUGUST 2023 01, 05, 08 SEPTEMBER 2023 09, 10, 26 JANUARY 2024 06, 20 FEBRUARY 2024 04, 15, 27 MARCH 2024
--

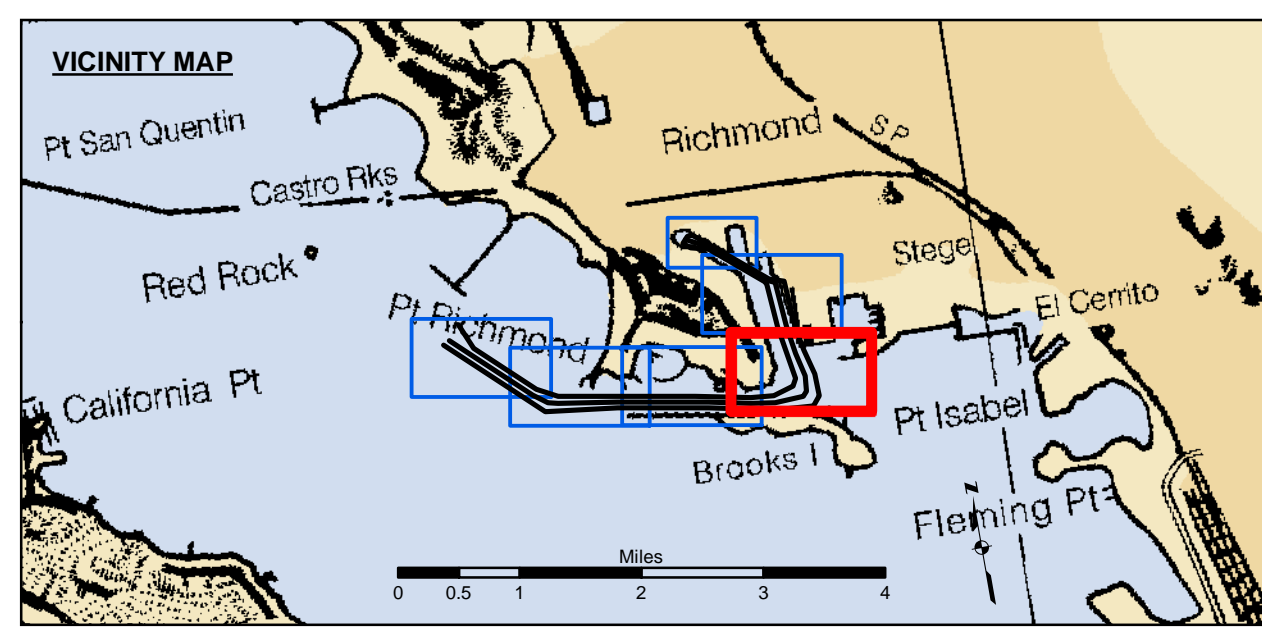


**US Army Corps of Engineers**  
 San Francisco District  
 450 Golden Gate Avenue  
 San Francisco, CA 94102

**DISCLAIMER**  
 The United States Government furnishes this information for the general information of the recipient. The data is not intended for use in any other manner than that intended for the purpose for which it was collected. The user is responsible for the results of any application of the data for other than the intended purpose. The user is responsible for the results of any application of the data for other than the intended purpose. The user is responsible for the results of any application of the data for other than the intended purpose.

Prepared Under the Direction of <b>TIMOTHY W. SHEBESTA</b> LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: Apr 02, 2024
Submitted: Hydro Survey Team Leader	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Drawn by: PDT
Approved: Chief, Construction Branch	

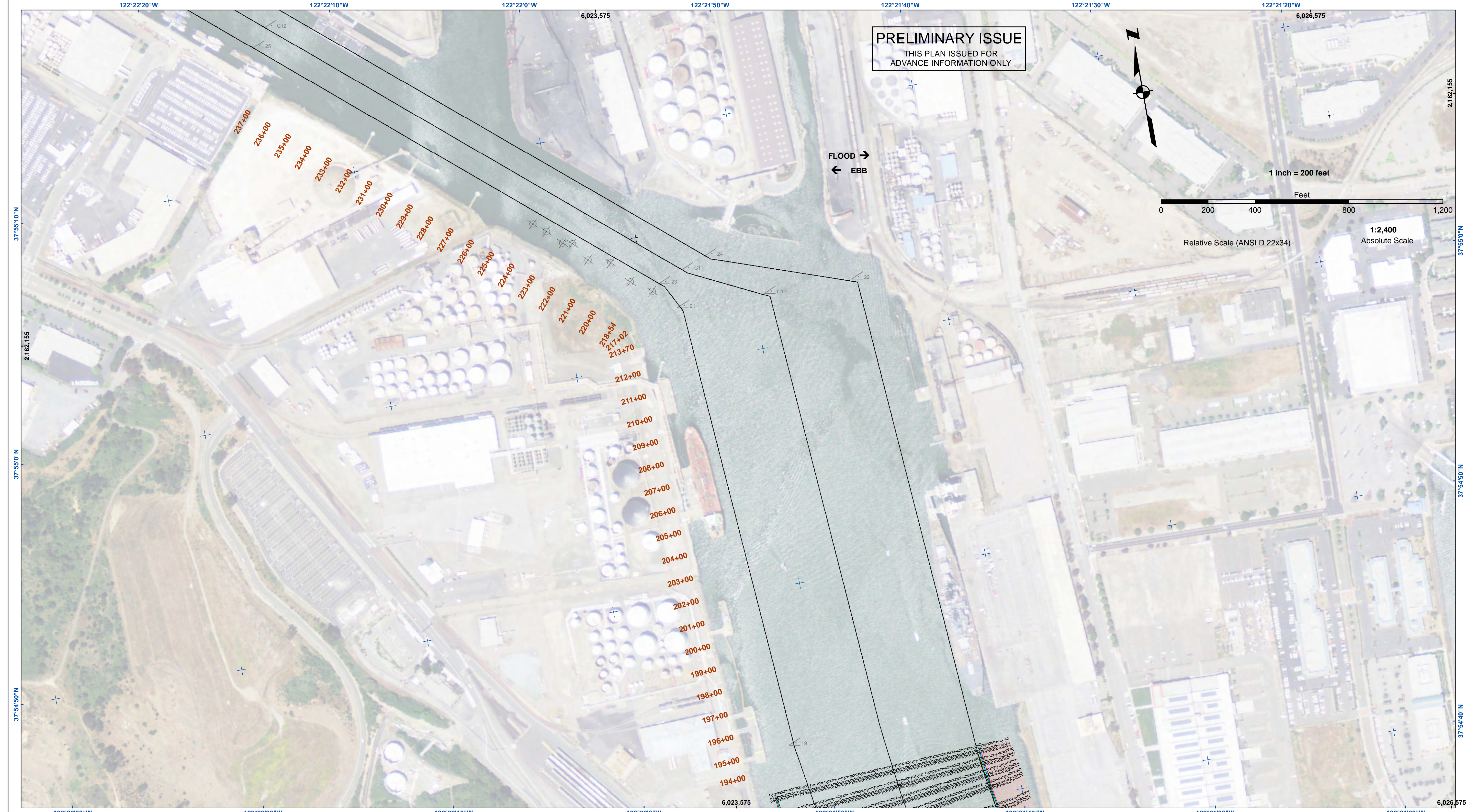
CALIFORNIA CONTRA COSTA COUNTY RICHMOND INNER HARBOR POST-DREDGE SURVEY 17, 20, 28, JULY 2023 01, 08, 17, 21, 23 AUGUST 2023 01, 05, 08 SEPTEMBER 2023 09, 10, 26 JANUARY 2024 06, 20 FEBRUARY 2024 04, 15, 27 MARCH 2024
--



Federal Navigation Channel	Beacon, General	<b>Contours</b>
Shoaling Area	Obstruction Point	-38
Placement Area	Navigation Buoy	-37
Anchorage Area	Navigation Buoy	-36
Wreck Area	Shoalest Sounding*	-35
Submerged Wreck		-34
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 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:  
 INNER HARBOR CHANNEL -37.5 FEET  
 SANTE FE CHANNEL -30 FEET.  
 (INNER HARBOR CHANNEL) BENCHMARK A-558 ELEV 15.81 FT. MLLW.  
 BENCHMARK #2 (1032) USC&GS DISK OLD FORD PLANT 16.0825 FT. MLLW.  
 B.M. LS 2769 CITY OF RICHMOND DISK PAVEMENT 13.971 FT. MLLW.  
 TIDE GAGE LOCATION: MON B-1.  
 HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON.  
 VERTICAL CONTROL: BENCHMARK, MLLW ELEV., AGENCY

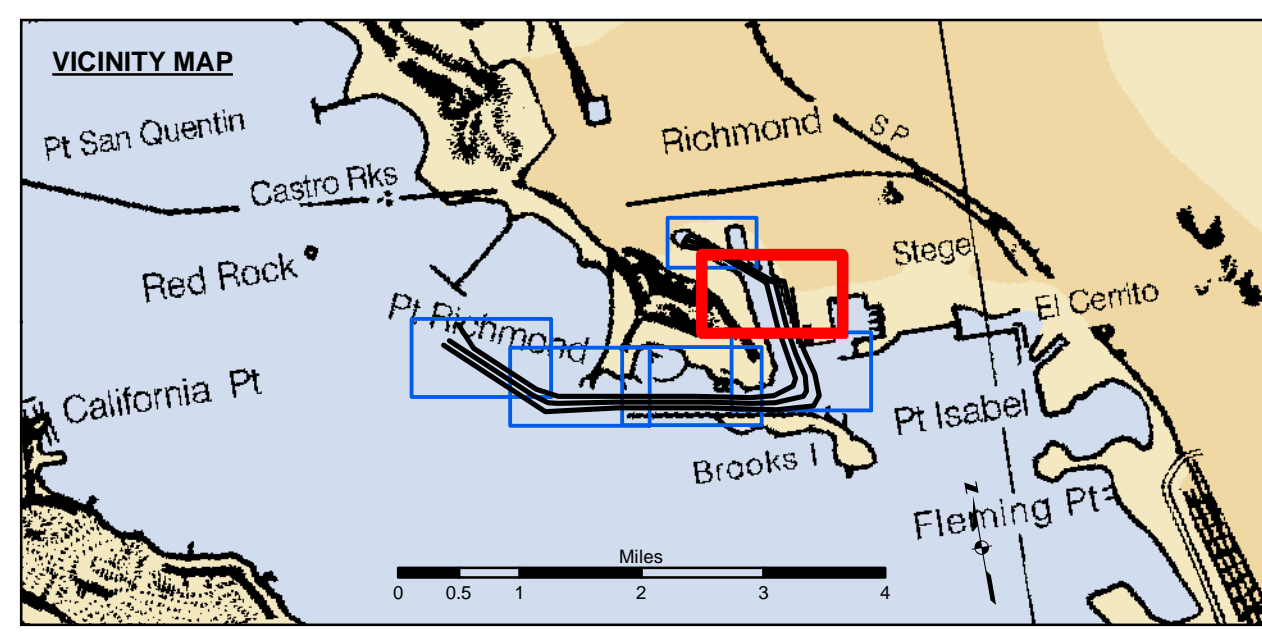


**US Army Corps of Engineers**  
 San Francisco District  
 450 Golden Gate Avenue  
 San Francisco, CA 94102

**DISCLAIMER**  
 The United States Government furnishes this information for the purpose of providing accurate and reliable data for the user's information. The user is responsible for the results of any application of the data for other than the intended purpose. The user is responsible for the results of any application of the data for other than the intended purpose. The user is responsible for the results of any application of the data for other than the intended purpose.

Chart Date:	Apr 02, 2024
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Approved:	Chief, Construction Branch

CONTRA COSTA COUNTY	CALIFORNIA
RICHMOND INNER HARBOR	POST-DREDGE SURVEY
17, 20, 28, JULY 2023	01, 08, 17, 21, 23 AUGUST 2023
01, 05, 08 SEPTEMBER 2023	09, 10, 26 JANUARY 2024
06, 20 FEBRUARY 2024	04, 15, 27 MARCH 2024



Federal Navigation Channel	Beacon, General	<b>Contours</b>
Shoaling Area	Obstruction Point	-38
Placement Area	Navigation Buoy	-37
Anchorage Area	Navigation Buoy	-36
Wreck Area	Shoalest Sounding*	-35
Submerged Wreck		-34
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. SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.  
 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 FOR THE CHANNEL MEASURED WITH MULTIBEAM ECHOSOUNDER AND ARE SHOWN TO THE NEAREST TENTH FOOT.  
 BASE MAPS ARE USDA NAIP 2010.  
 THE PROJECT DEPTHS ARE AS FOLLOWS:  
 INNER HARBOR CHANNEL - 37.5 FEET  
 SANTE FE CHANNEL - 30 FEET.  
 (INNER HARBOR CHANNEL) BENCHMARK A-558 ELEV 15.81 FT. MLLW.  
 BENCHMARK #2 (1032) USC&GS DISK OLD FORD PLANT 16.0825 FT. MLLW.  
 B.M. LS 2769 CITY OF RICHMOND DISK PAVEMENT 13.971 FT. MLLW.  
 TIDE GAGE LOCATION: MON B-1.  
 HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON.  
 VERTICAL CONTROL: BENCHMARK, MLLW ELEV, AGENCY