

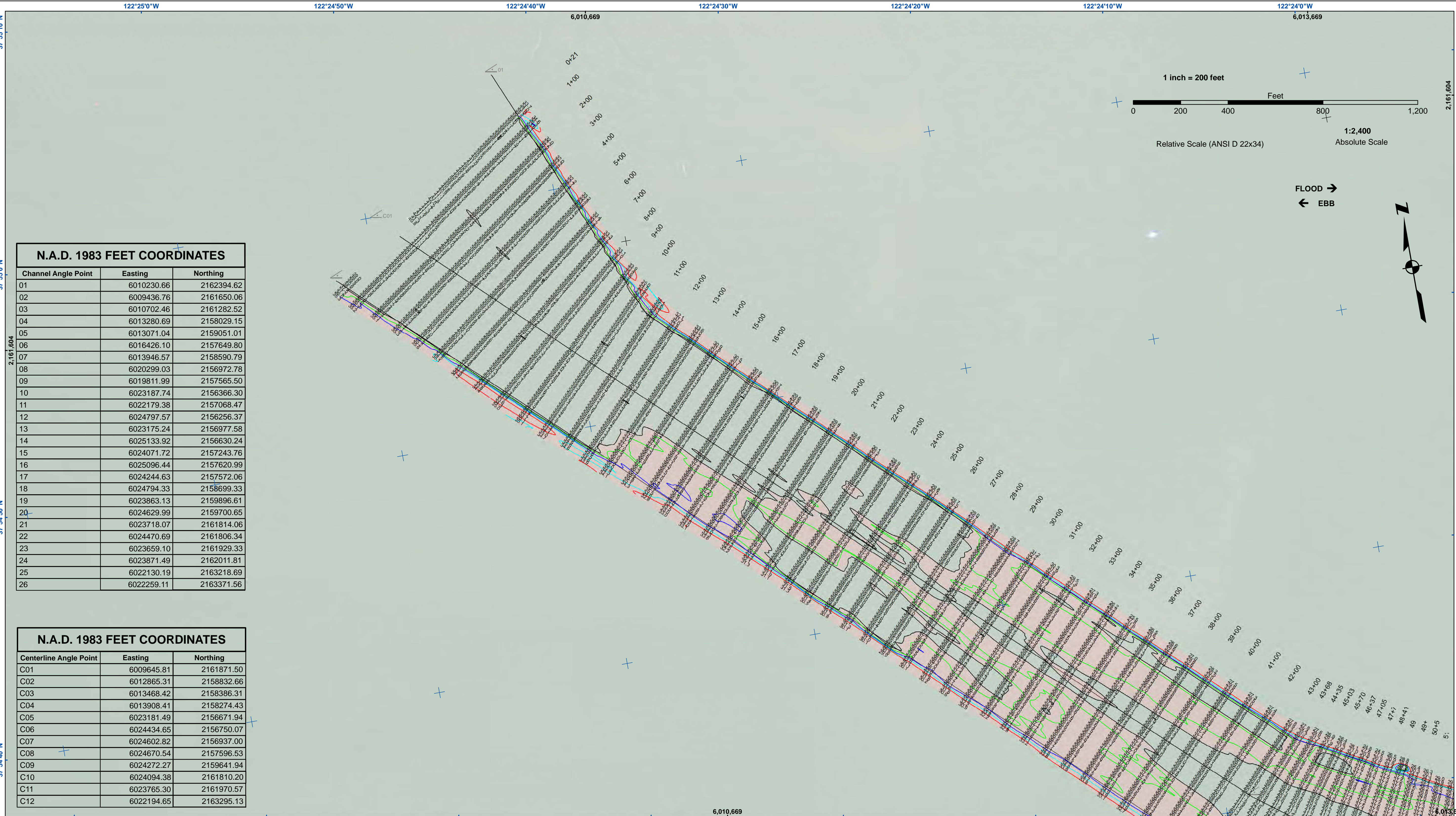


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Prepared Under the Direction of	Chart Date:	Feb 05, 2018
LT COLONEL C.E. DISTRICT ENGINEER	Designed by:	
Submittal:	Plotted by:	PDT
Hydro Survey Team Leader	Checked by:	PDT
Recommendation:	Drawn by:	PDT
Chief, Hydro Survey Section	Approved:	
Chief, Construction Branch		

ALAMEDA COUNTY  
**RICHMOND INNER HARBOR**  
 CONDITION SURVEY  
 31 JANUARY 2018

**Sheet**  
**Reference**  
**Number**  
**1 of 5**

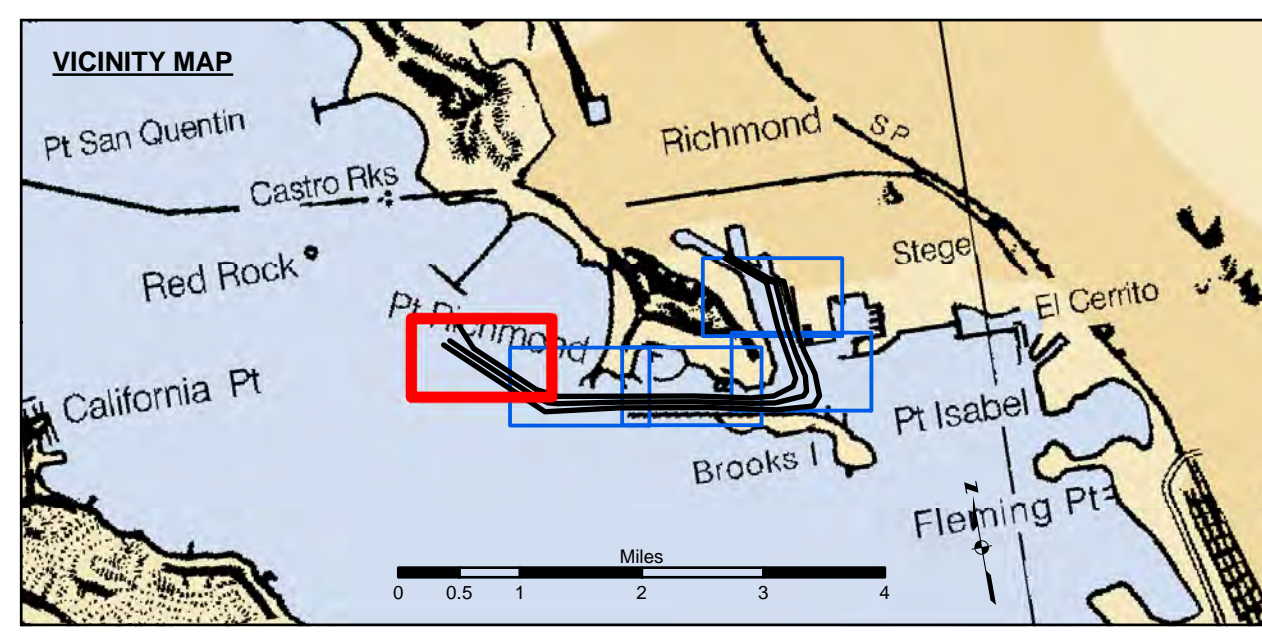


**N.A.D. 1983 FEET COORDINATES**

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	Contours
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		

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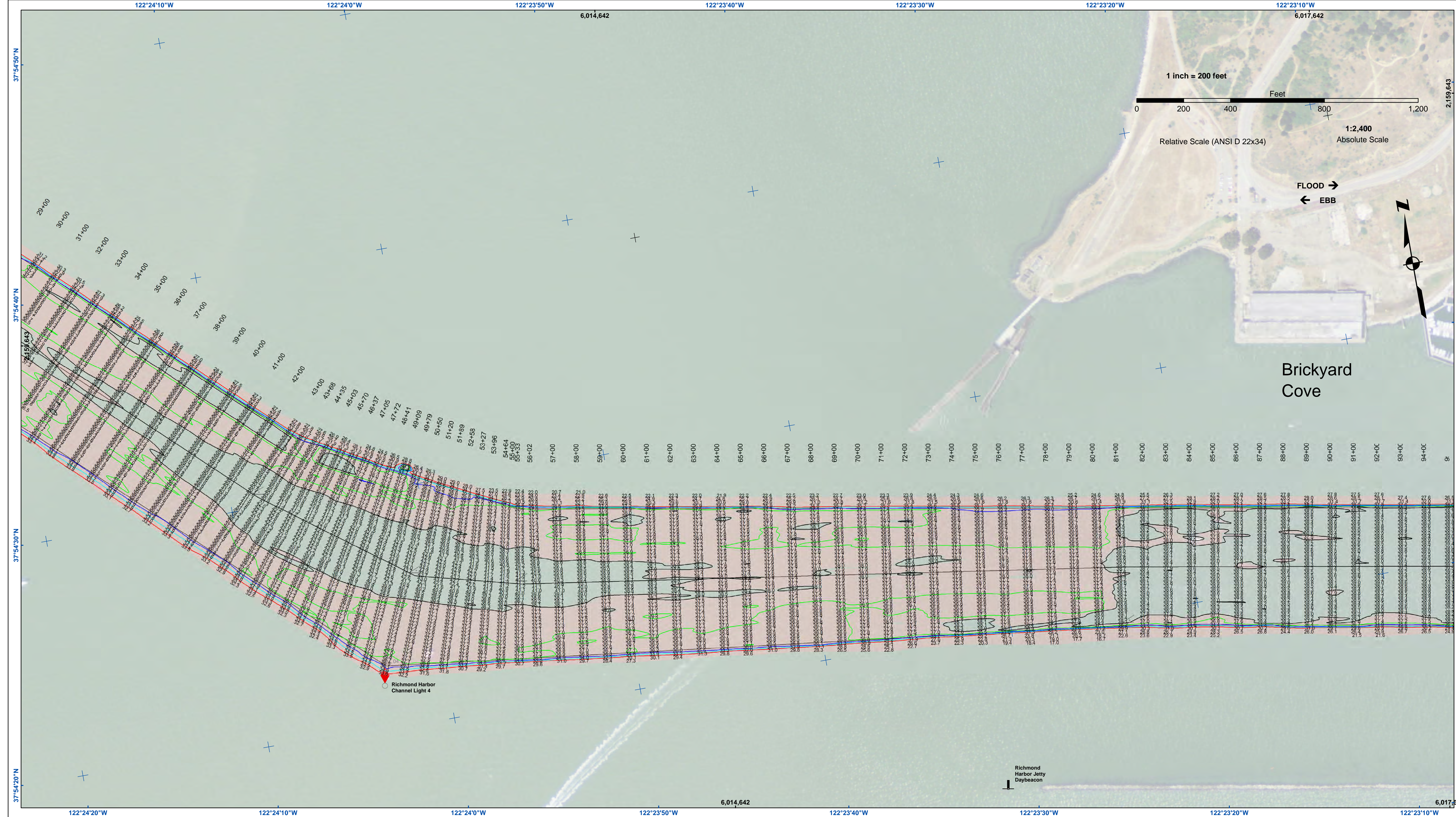
BASE MAPS ARE USDA NAIP 2010.

THE PROJECT DEPTHS ARE AS FOLLOWS:  
 INNER HARBOR CHANNEL -37.5 FEET.  
 SANTE FE CHANNEL -30 FEET.

(INNER HARBOR CHANNEL) BENCHMARK A-588 ELEV 15.81 FT. MLLW.  
 BENCHMARK #2 (103) USCGS DISK OLD FORD PLANT 16.025 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





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 San Francisco District  
 1455 Market Street  
 San Francisco, CA 94103

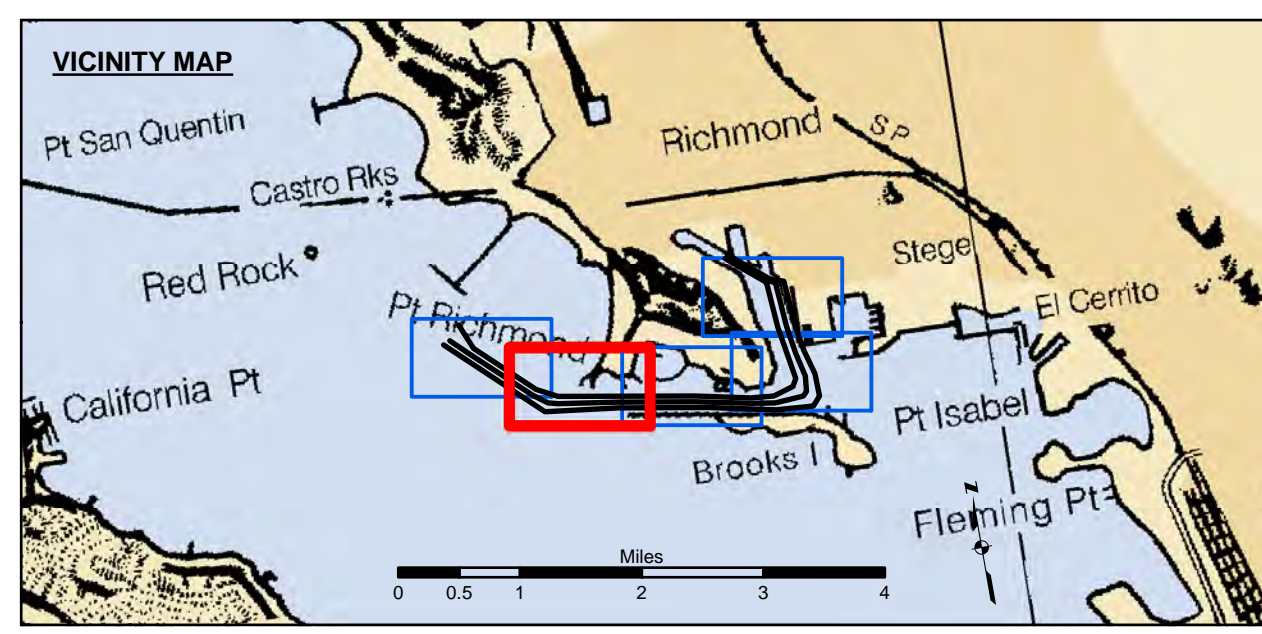
1 inch = 200 feet  
 Feet  
 0 200 400 800 1,200  
 Relative Scale (ANSI D 22x34)  
 Absolute Scale

FLOOD →  
 ← EBB

Brickyard Cove

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Chart Date:	Feb 05, 2018
Designed by:	PDT
Plotted By:	PDT
Checked By:	PDT
Drawn by:	PDT



- |                            |                    |                 |
|----------------------------|--------------------|-----------------|
| 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                |                    |                 |

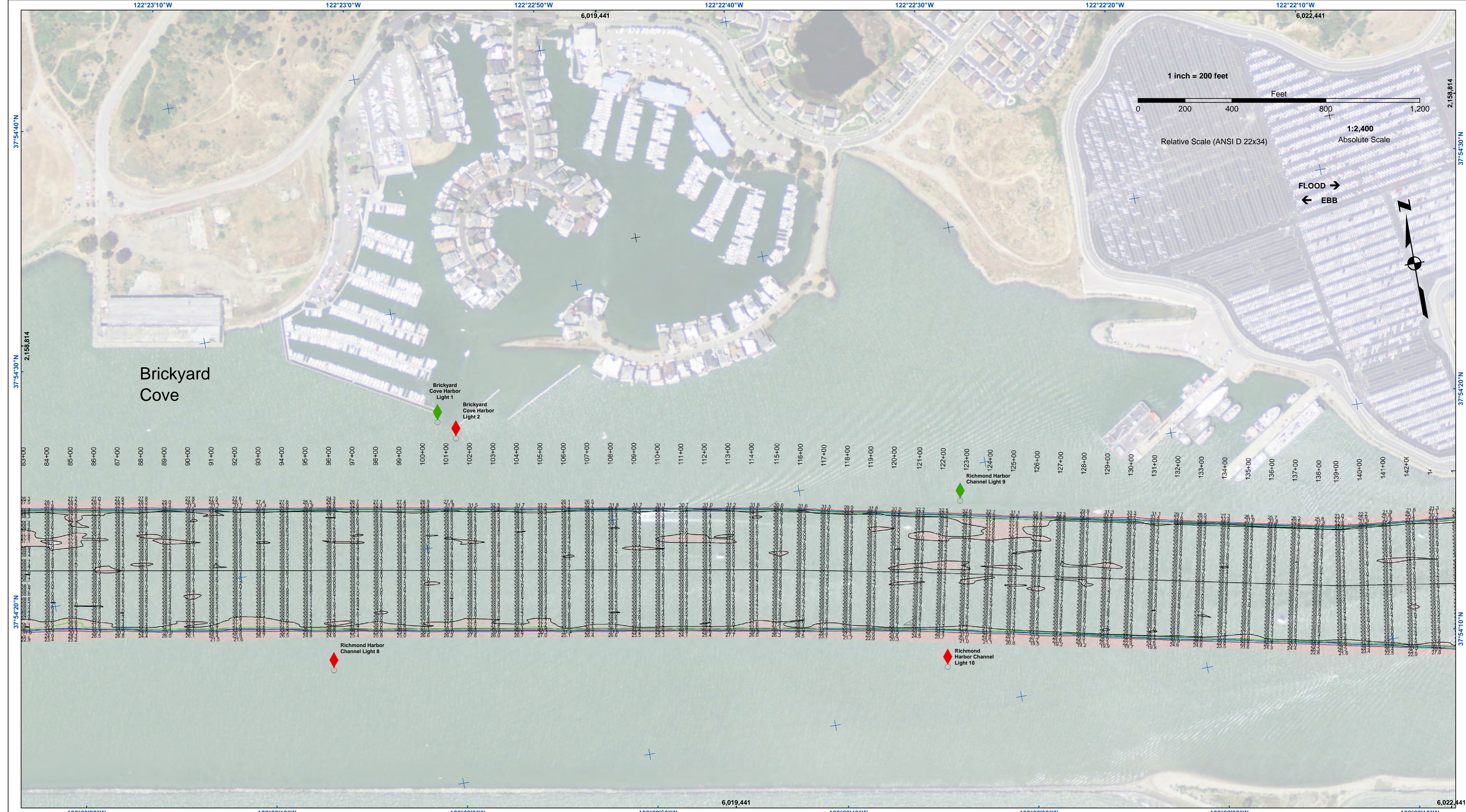
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 SANTE FE CHANNEL -30 FEET.  
 (INNER HARBOR CHANNEL) BENCHMARK A-588 ELEV 15.81 FT. MLLW.  
 BENCHMARK #2 (1030) USCGS DISK OLD FORD PLANT 16.025 FT. MLLW.  
 B.M. LS 2769 CITY OF RICHMOND DISK PAVEMENT 13.971 FT. MLLW.  
 TIDE GAGE LOCATION: MON B-1.  
 HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON.  
 VERTICAL CONTROL: BENCHMARK, MLLW ELEV., AGENCY

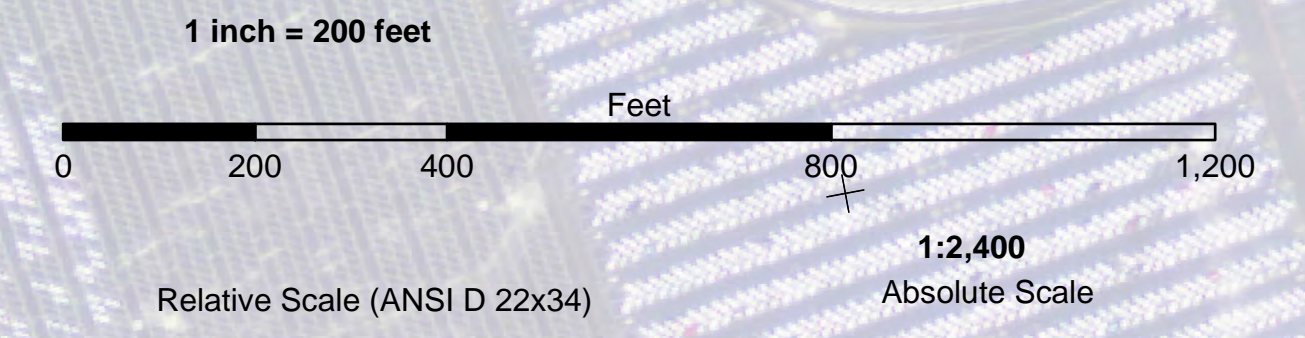
ALAMEDA COUNTY  
**RICHMOND INNER HARBOR**  
 CONDITION SURVEY  
 31 JANUARY 2018

**Sheet**  
**Reference**  
**Number**  
**2 of 5**





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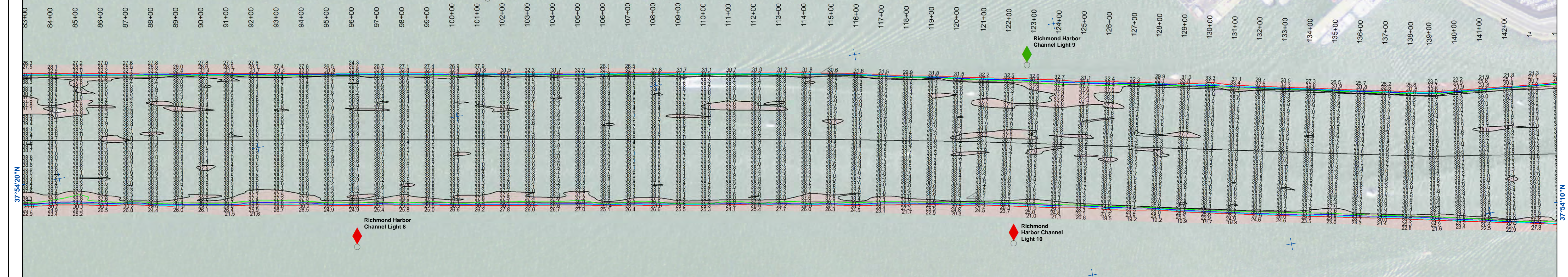
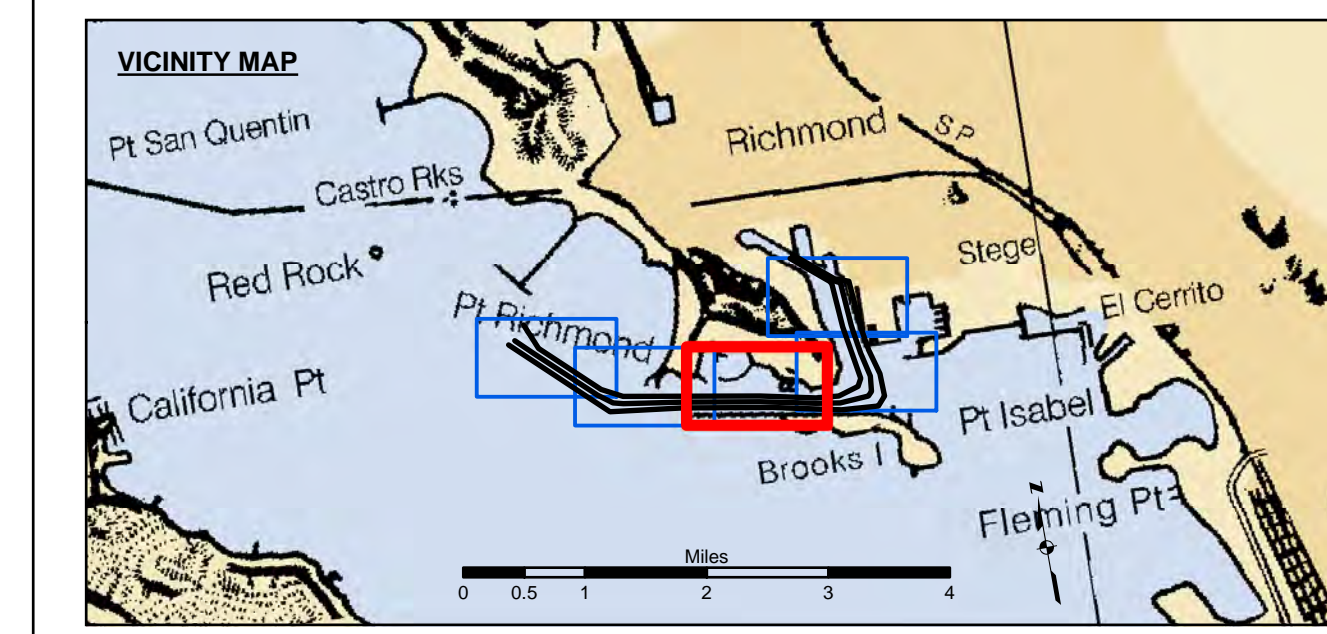


Chart Date:	Feb 05, 2018
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Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Drawn by:	PDT



Federal Navigation Channel	Beacon, General	<b>Contours</b>
Shoaling Area	Obstruction Point	-38
Placement Area	Navigation Buoy	-37
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Angle Point		

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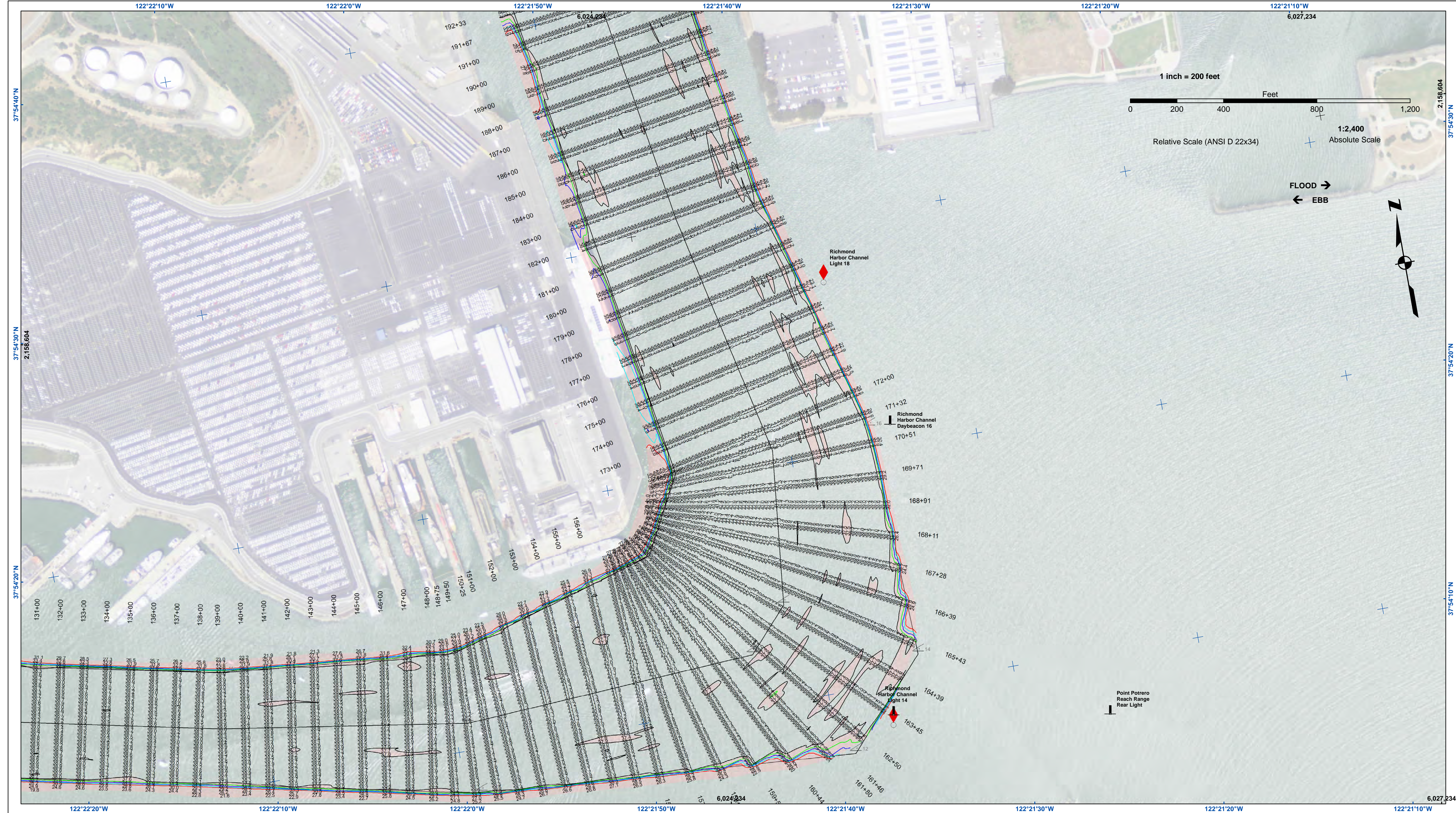
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ALAMEDA COUNTY  
**RICHMOND INNER HARBOR**  
 CONDITION SURVEY  
 31 JANUARY 2018

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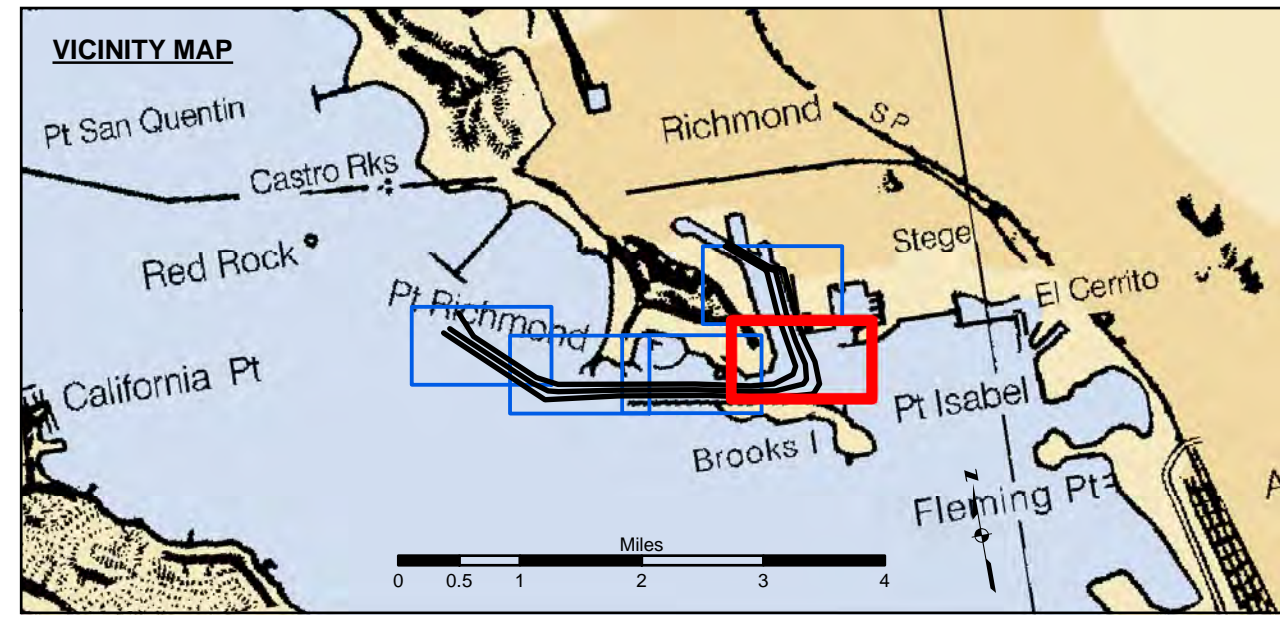
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Prepared Under the Direction of	Chart Date:	Feb 05, 2018
LT COLONEL J. RAYFIELD	Surveyed By:	PDT
Subproject: Hydro Survey Team Leader	Plotted By:	PDT
Recommended: Chief, Hydro Survey Section	Checked By:	PDT
Approved: Chief, Construction Branch	Drawn by:	PDT

CALIFORNIA  
 ALAMEDA COUNTY  
**RICHMOND INNER HARBOR**  
 CONDITION SURVEY  
 31 JANUARY 2018

**Sheet**  
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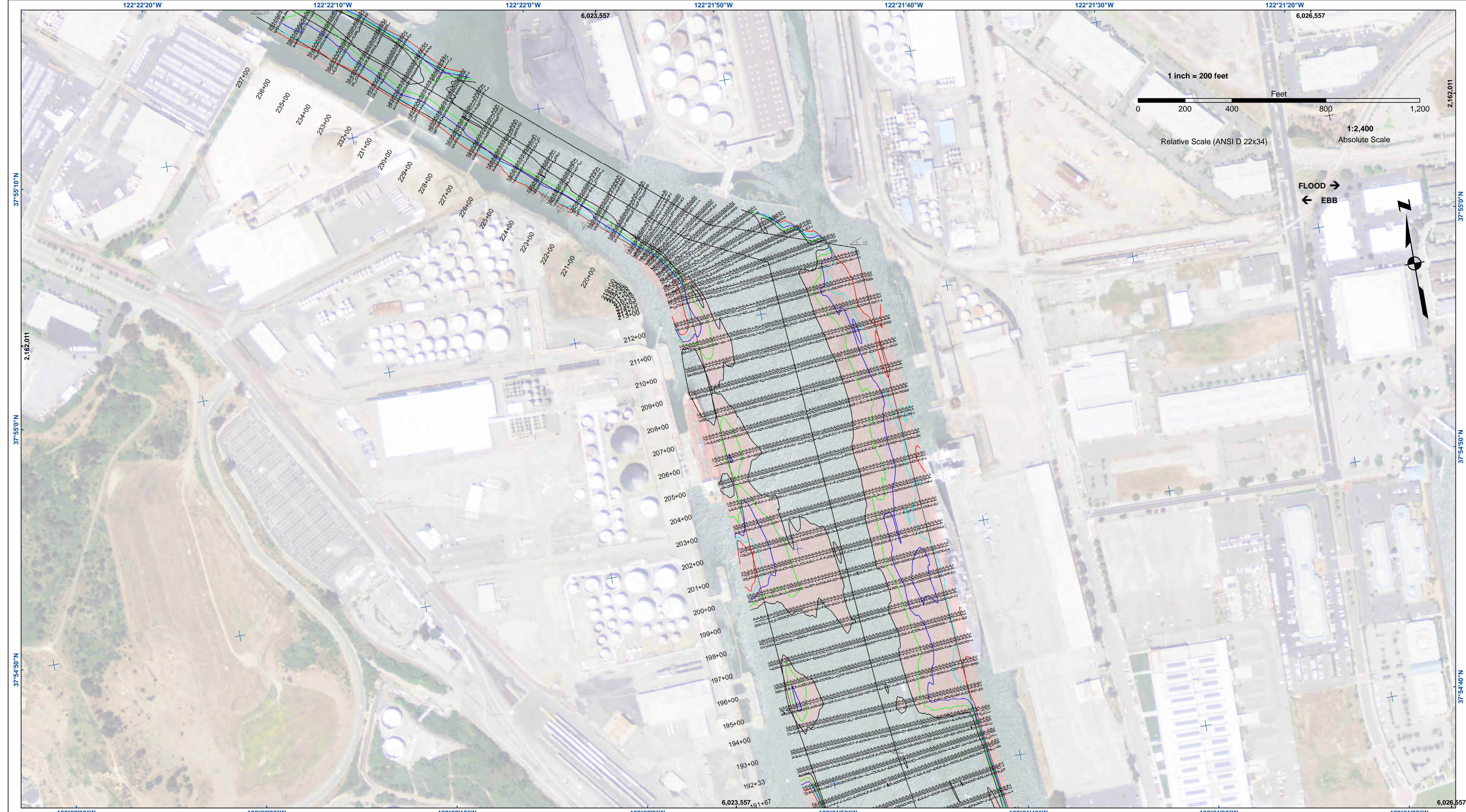


- Federal Navigation Channel
- Shoaling Area
- Placement Area
- Anchorage Area
- Wreck Area
- Submerged Wreck
- Angle Point
- Beacon, General
- Obstruction Point
- Navigation Buoy
- Navigation Buoy
- Shoalest Sounding\*
- Contours**
- 38
- 37
- 36
- 35
- 34

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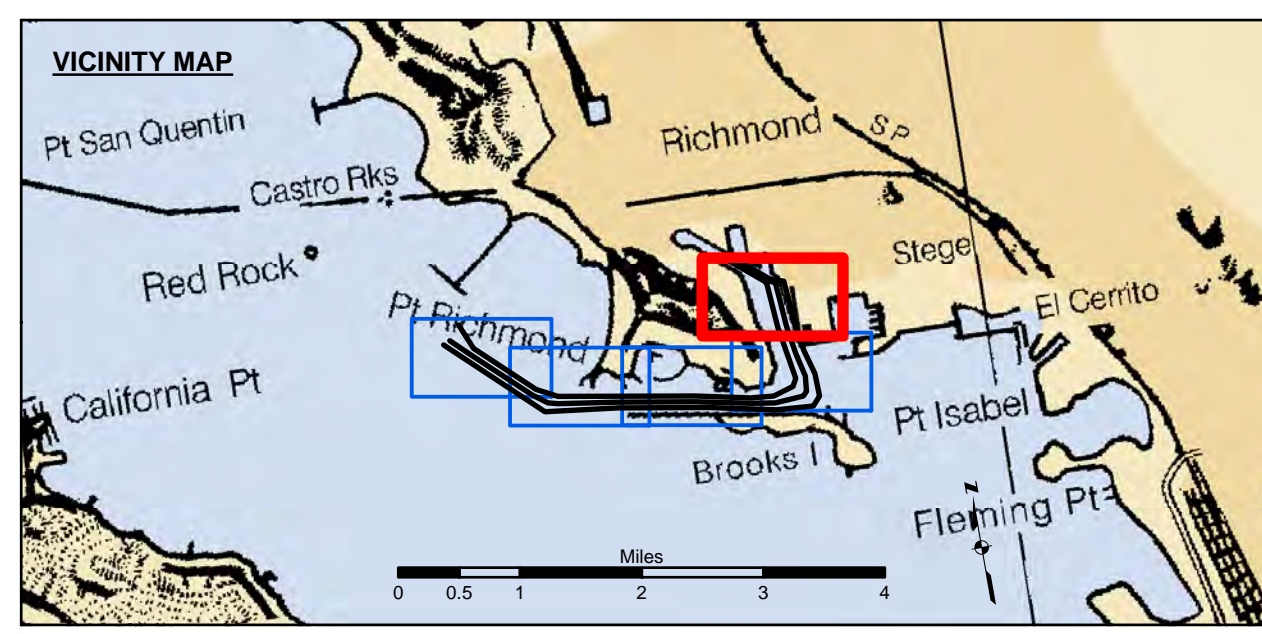


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Chart Date:	Feb 05, 2018
Surveyed By:	Travis J. Rayfield
Plotted By:	PDT
Checked By:	PDT
Designed by:	PDT
Drawn by:	PDT

ALAMEDA COUNTY  
**RICHMOND INNER HARBOR**  
 CONDITION SURVEY  
 31 JANUARY 2018



Federal Navigation Channel	Beacon, General	<b>Contours</b>
Shoaling Area	Obstruction Point	-38
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