

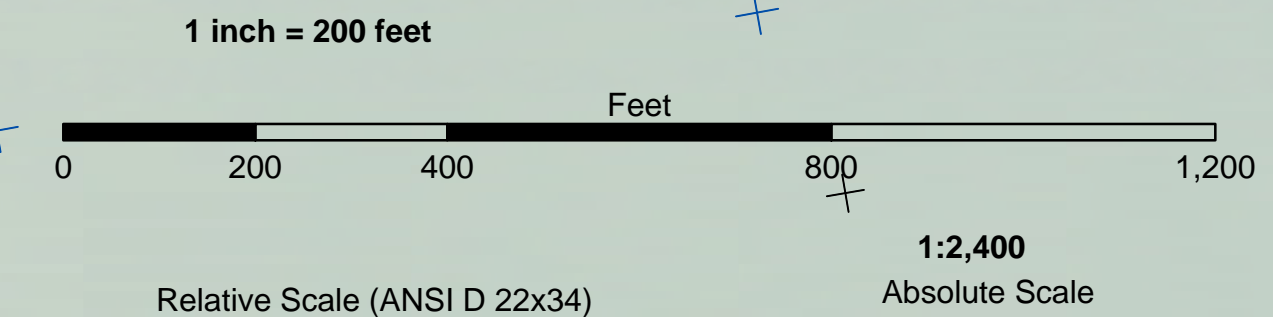
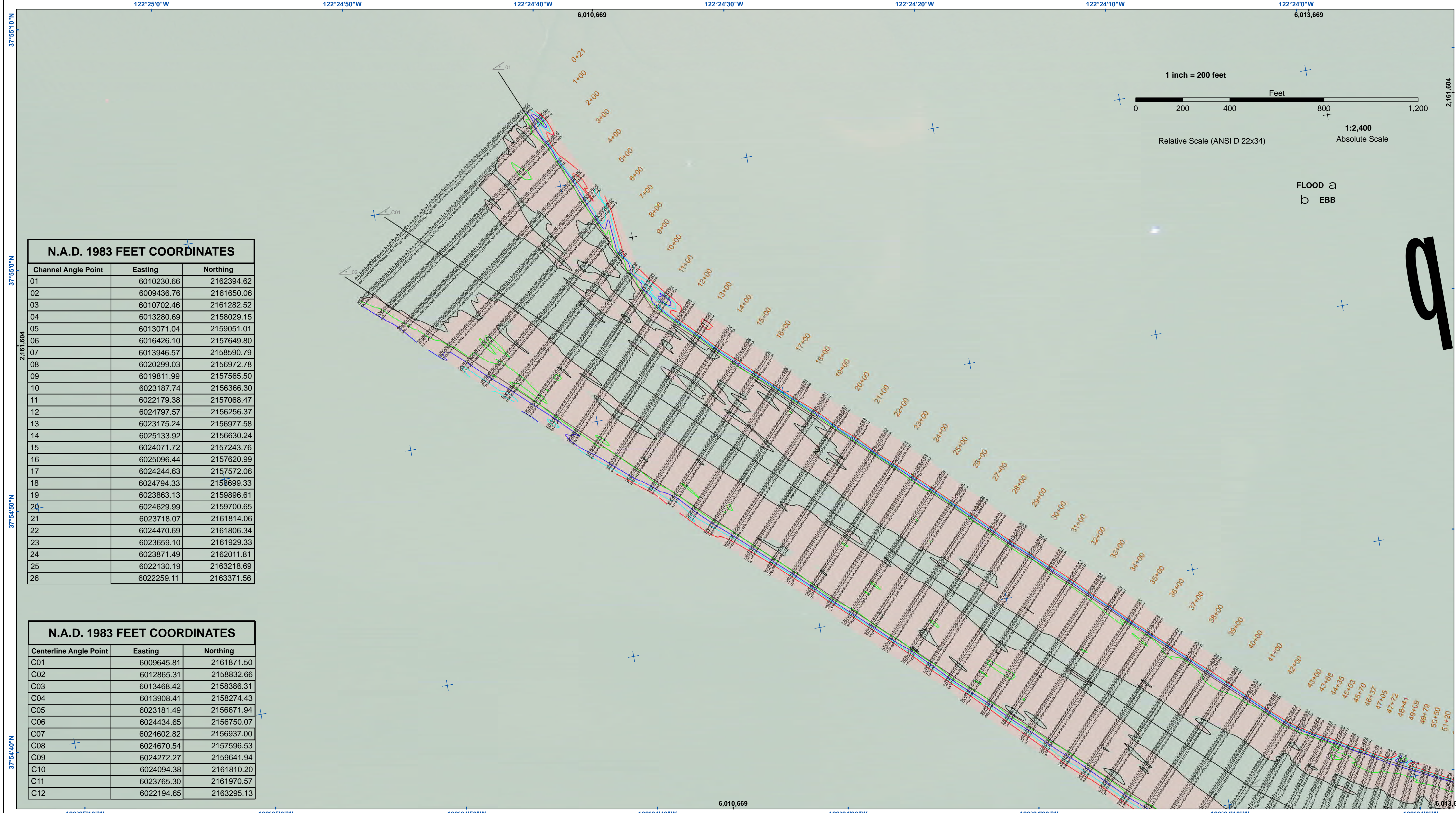


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Prepared Under the Direction of	JOHN C. MORROW	Chart Date	Jun 13, 2017
Surveyed By	PDT	Designed by	PDT
Plotted By	PDT	Drawn by	PDT
Checked By	PDT		
Approved	Chief, Construction Branch		

ALAMEDA COUNTY  
**RICHMOND INNER HARBOR**  
 PREDREDGE SURVEY  
 8-9 JUNE 2017

**Sheet Reference Number**  
 1 of 5



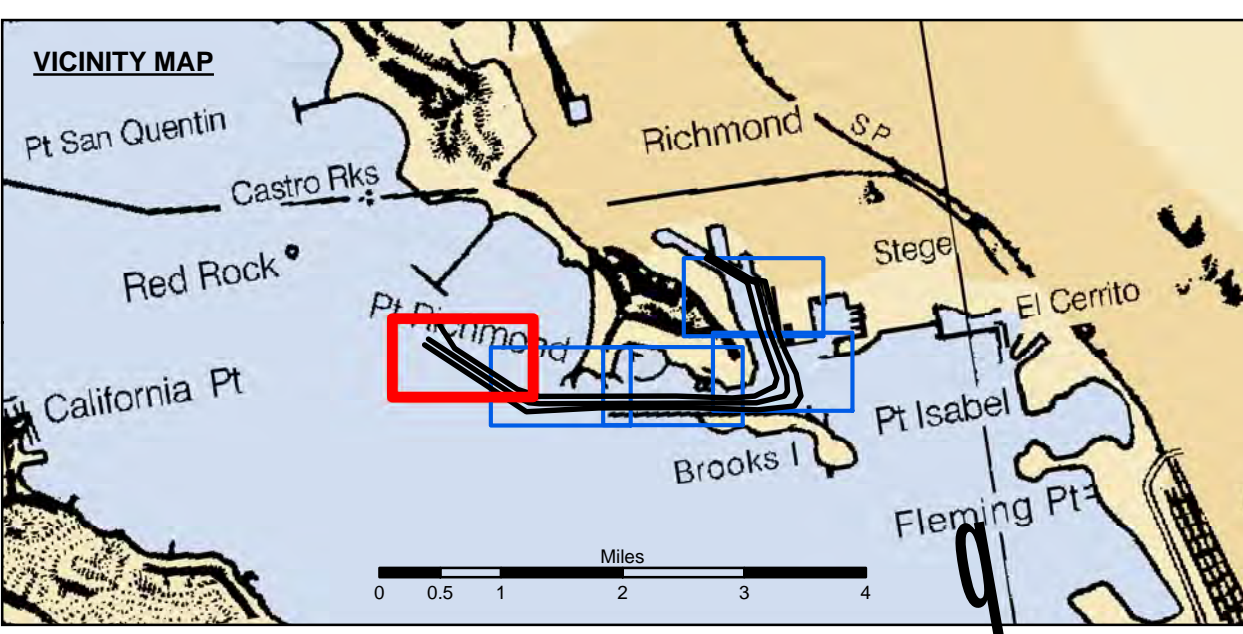
FLOOD a  
 EBB b

**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:**  
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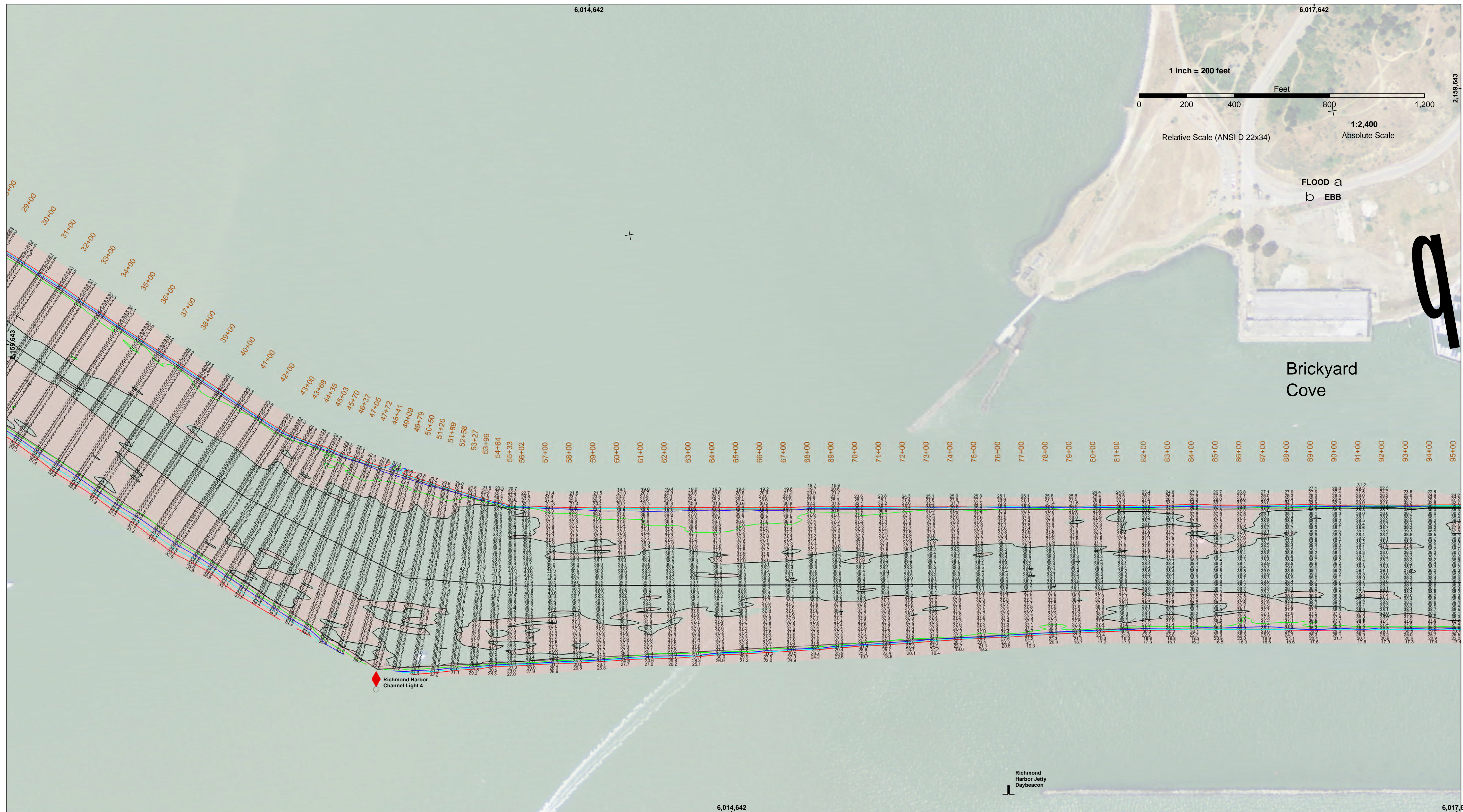
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BASE MAPS ARE USDA NAIP 2010. THE PROJECT DEPTHS ARE AS FOLLOWS: INNER HARBOR CHANNEL -37.5 FEET. SANTE FE CHANNEL -30 FEET.

(INNER HARBOR CHANNEL) BENCHMARK A-558 ELEV 15.81 FT. MLLW. BENCHMARK #2 (1032) USCGS DISK OLD FORD PLANT 16.0R25 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

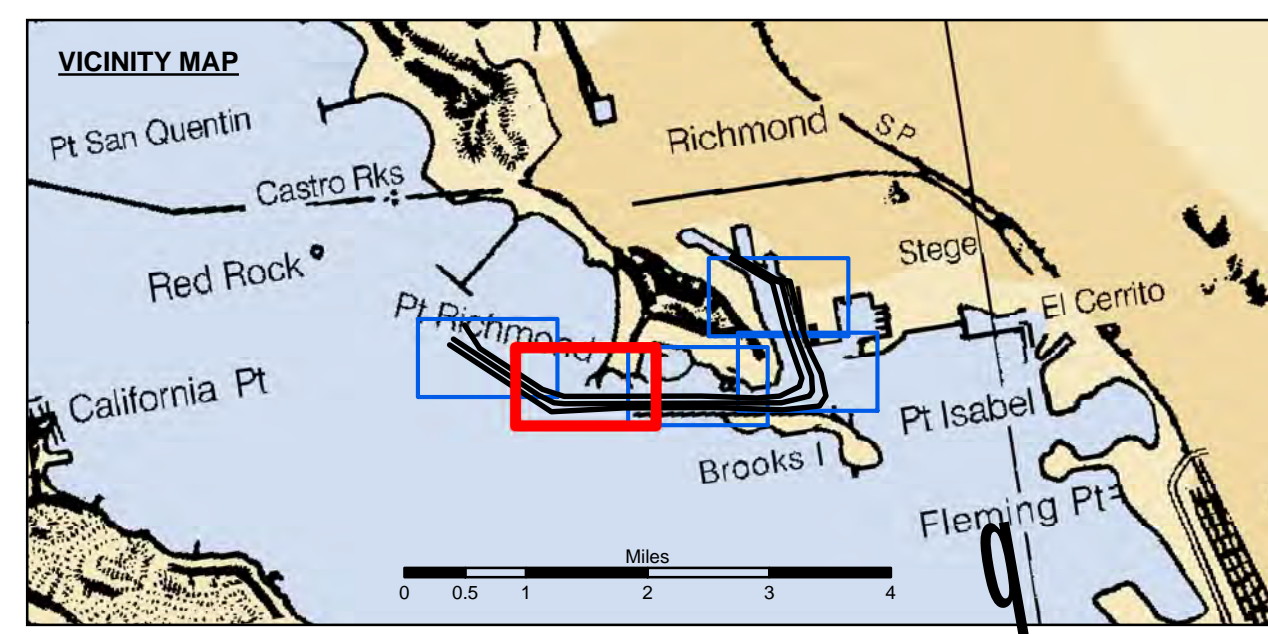


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Chart Date:	Jun 13, 2017
Designed by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Drawn by:	PDT

ALAMEDA COUNTY  
 RICHMOND INNER HARBOR  
 PREDREDGE SURVEY  
 8-9 JUNE 2017



Federal Navigation Channel	Beacon, General	<b>Contours</b>
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Angle Point		

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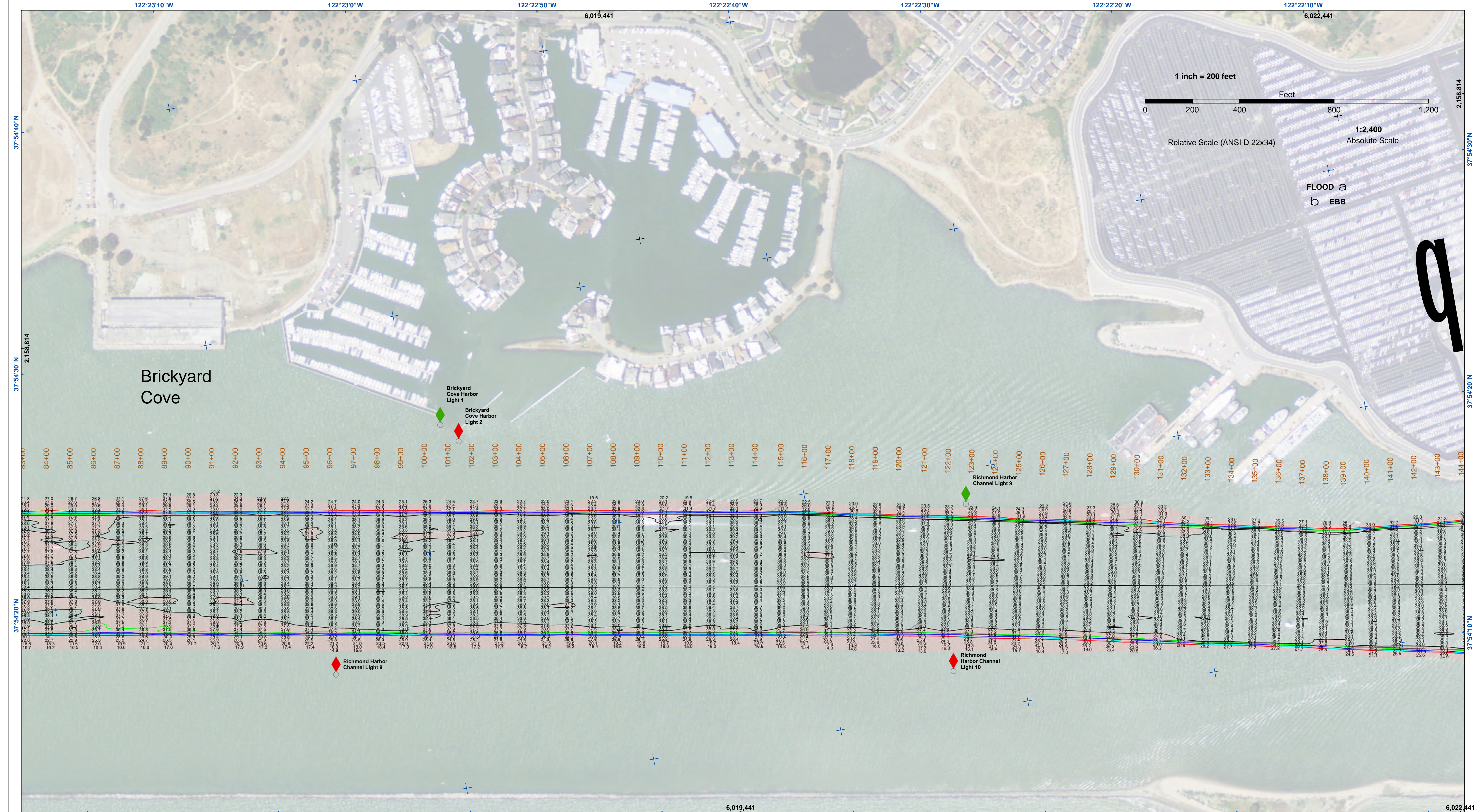
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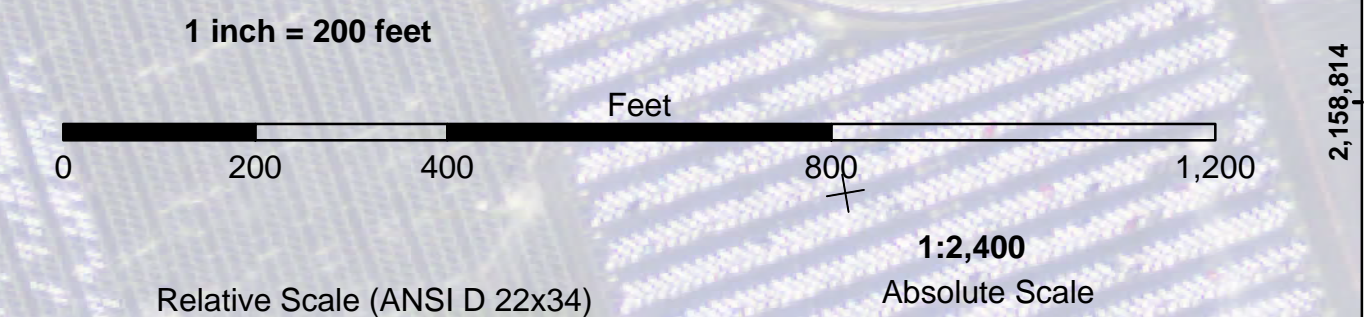
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TIDE GAGE LOCATION: MON B-1.  
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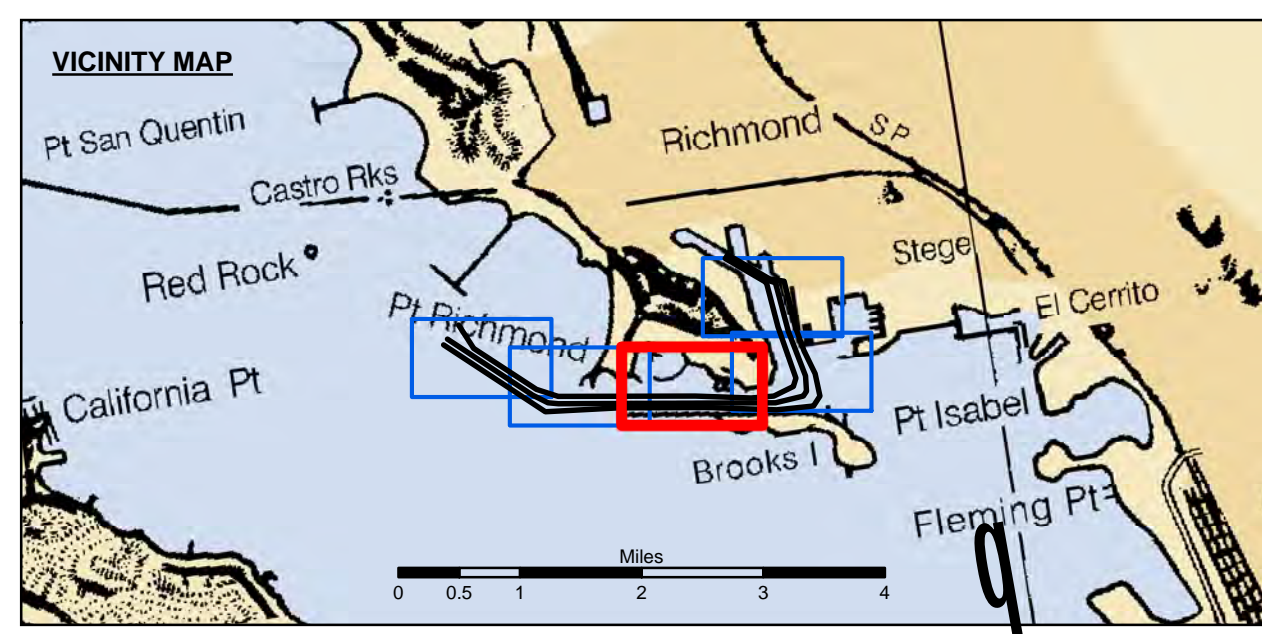


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Drawn by:	PDT
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Checked By:	PDT



Federal Navigation Channel	Beacon, General	<b>Contours</b>
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Angle Point		

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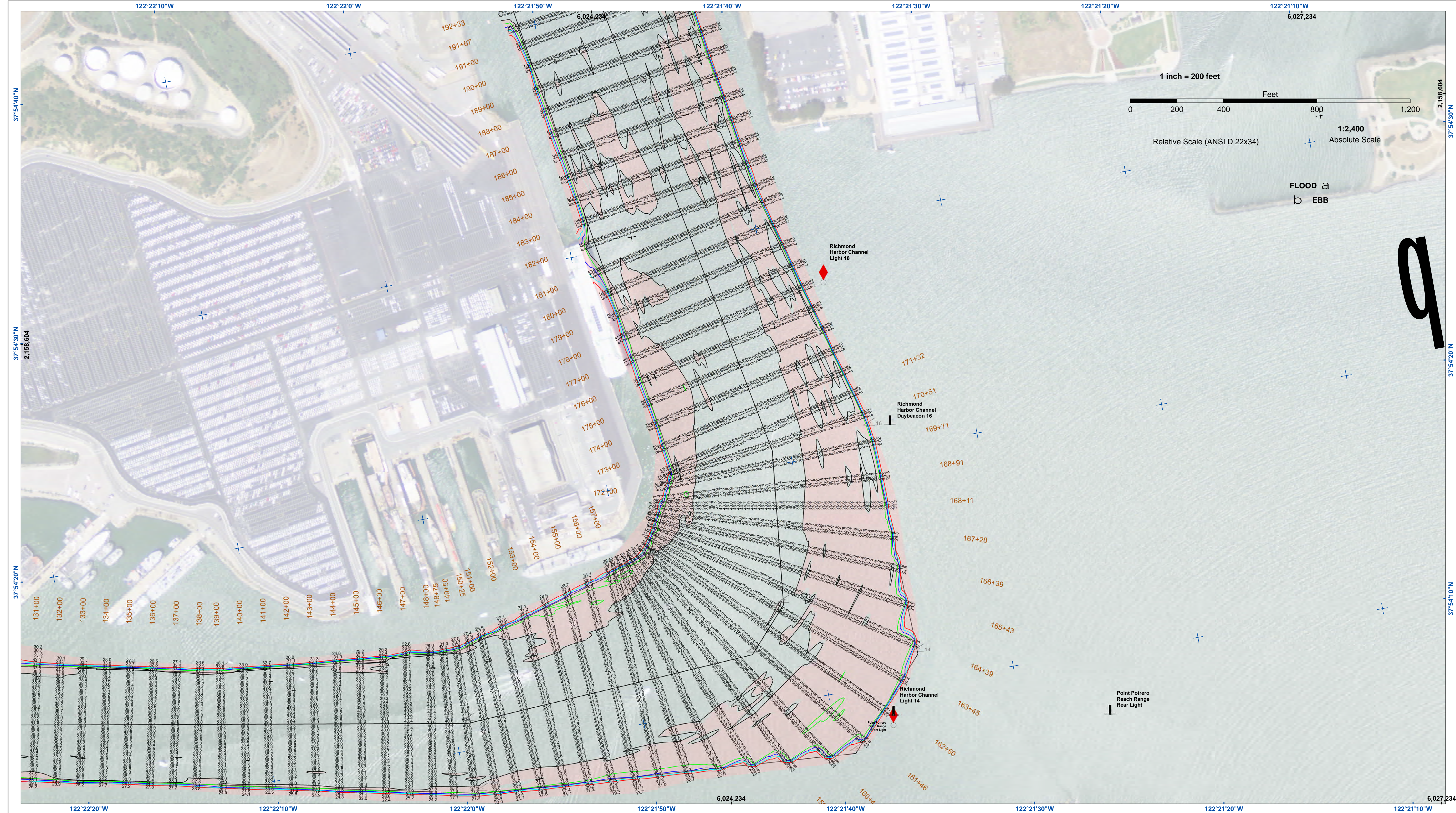
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ALAMEDA COUNTY  
 CALIFORNIA  
**RICHMOND INNER HARBOR**  
 PREDREDGE SURVEY  
 8-9 JUNE 2017

**Sheet Reference Number**  
 3 of 5



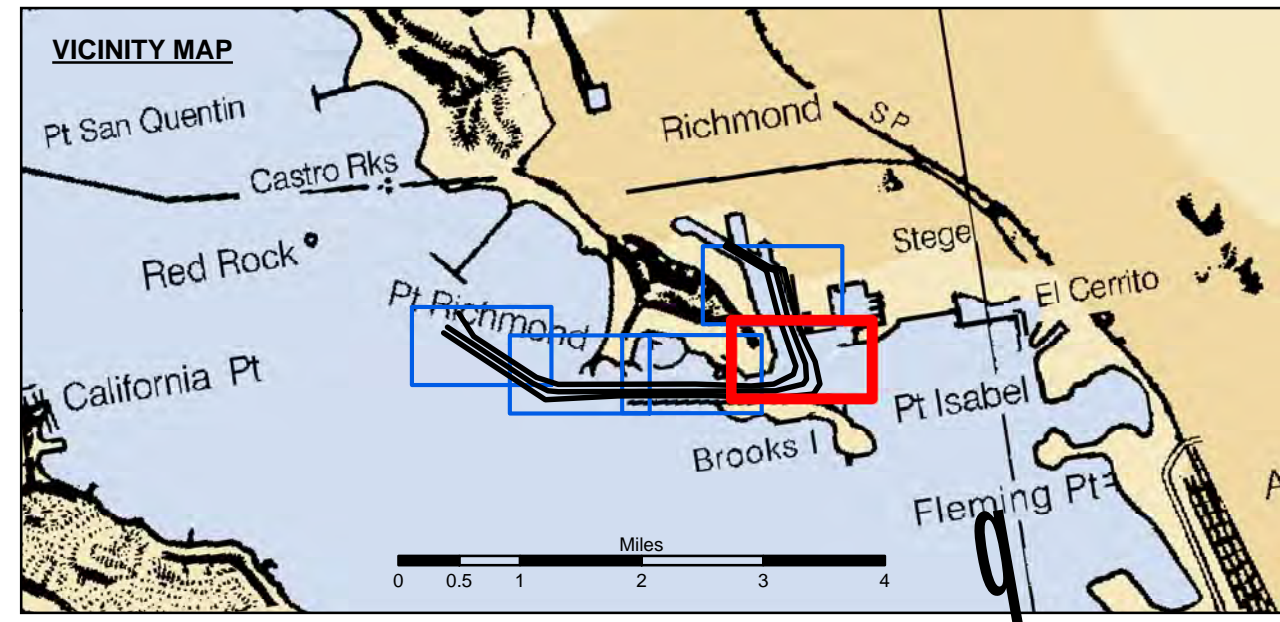
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Prepared Under the Direction of <b>JOHN C. MORROW</b> LT Colonel, C.E. District Engineer	Chart Date: Jun 13, 2017
Subject: Hydro Survey Team Leader	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Flattened by: PDT
Approved: Chief, Construction Branch	Checked by: PDT
	Drawn by: PDT

CALIFORNIA  
**RICHMOND INNER HARBOR**  
 PREDREDGE SURVEY  
 8-9 JUNE 2017

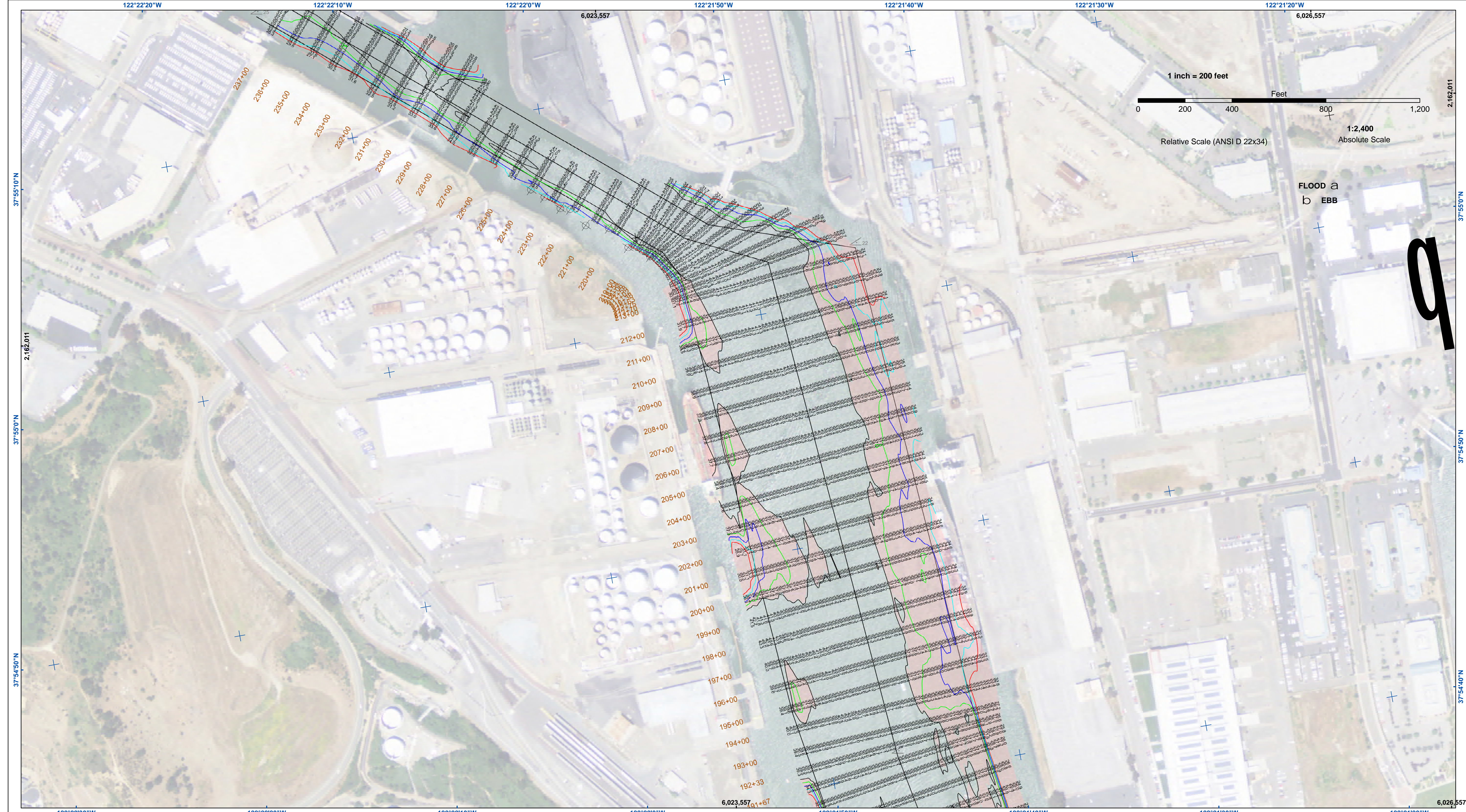
**Sheet Reference Number**  
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- Federal Navigation Channel
- Shoaling Area
- Placement Area
- Anchorage Area
- Wreck Area
- Submerged Wreck
- Angle Point
- Beacon, General
- Obstruction Point
- Navigation Buoy
- Navigation Buoy
- Shoalest Sounding\*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

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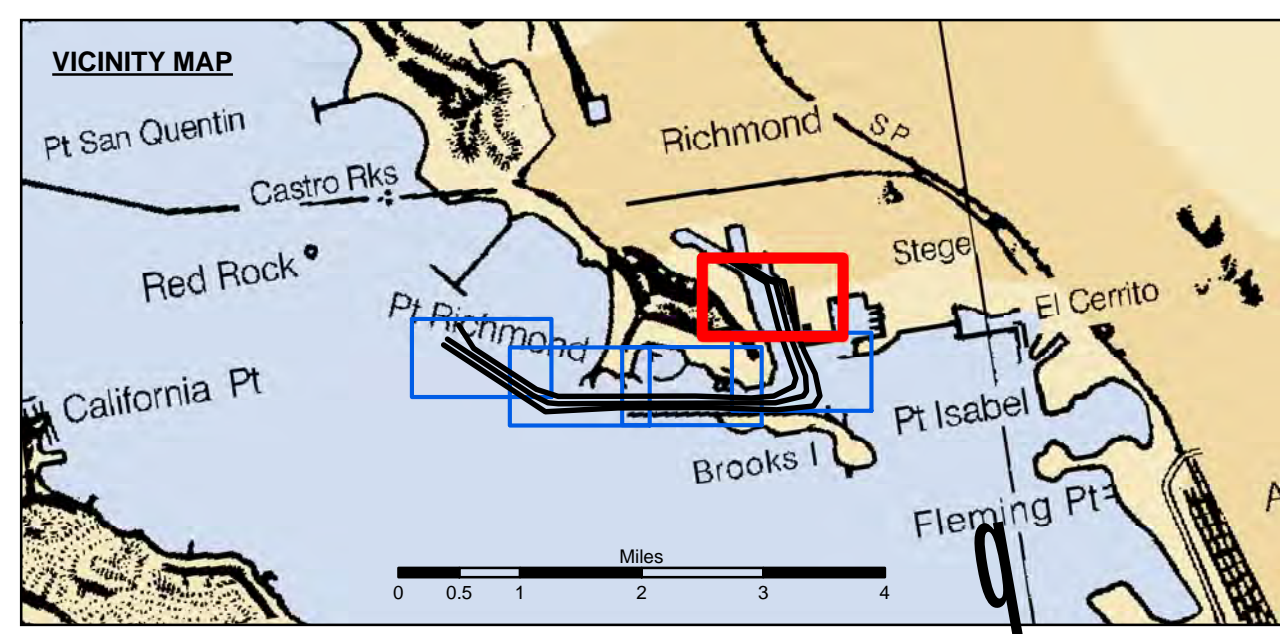


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