

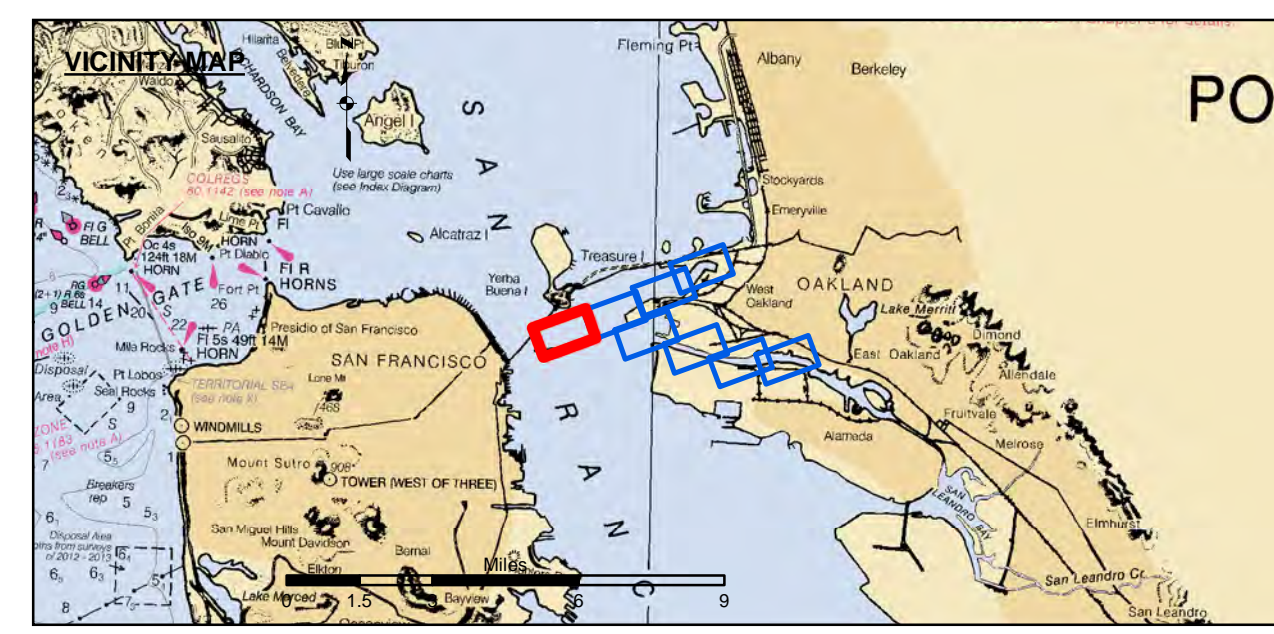
US Army Corps of Engineers
 San Francisco District
 450 Golden Gate Ave
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Prepared Under the Direction of JOHN D. CUNNINGHAM LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: Jan 28, 2020
Submittal: Hydro Survey Team Leader	Designed by:
Recommendation: Navigation Technical Manager	Drawn by:
Approved: Project Manager	Checked by:

ALAMEDA COUNTY
OAKLAND HARBOR
 OAKLAND INNER
 CONDITION SURVEY
 14-15 JANUARY 2020

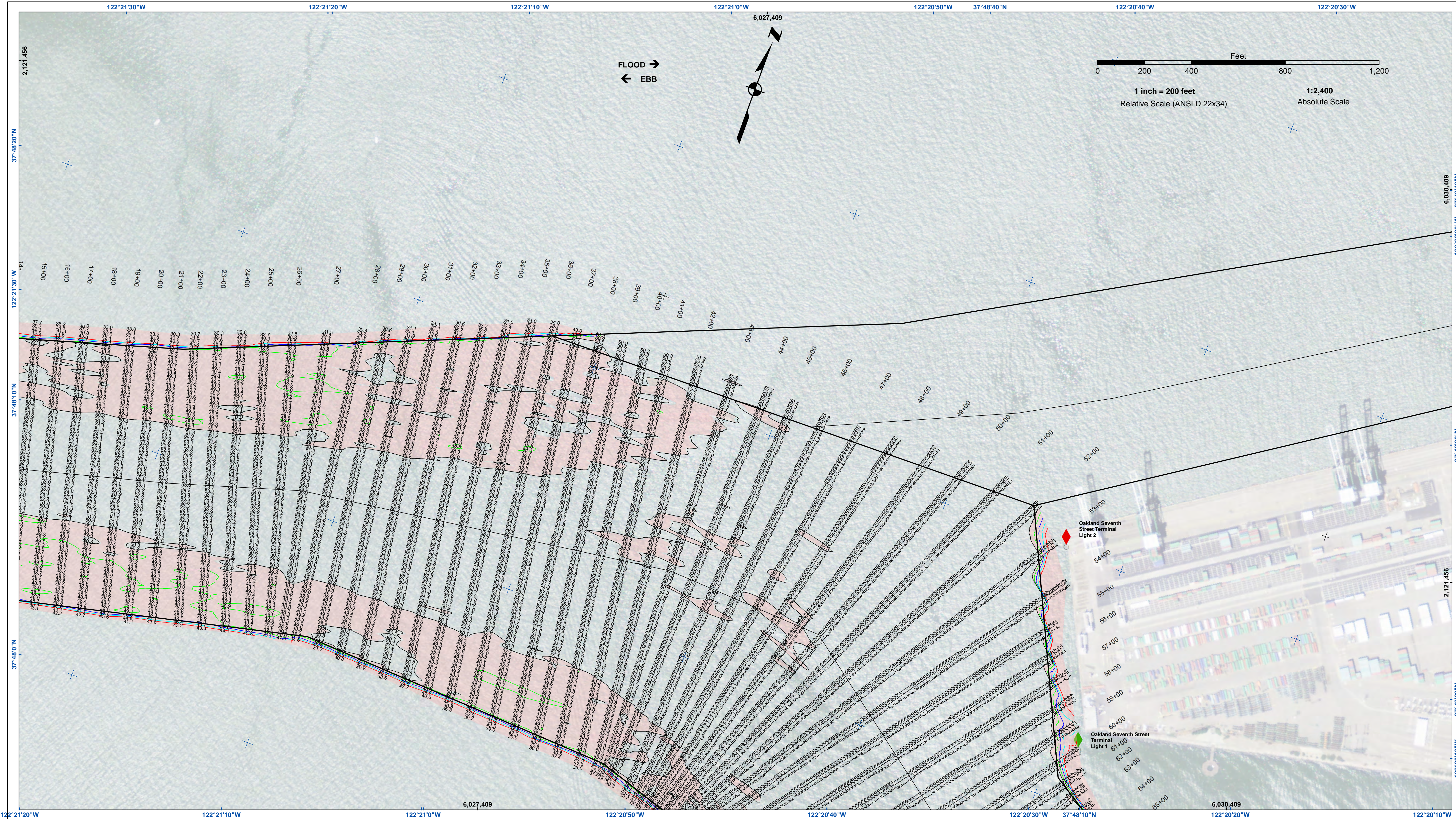
Sheet Reference Number
 1 of 8



- | | | |
|----------------------------|--------------------|----------|
| Federal Navigation Channel | Beacon, General | Contours |
| Shoaling Area | Obstruction Point | -50 |
| Placement Area | Navigation Buoy | -49 |
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| Wreck Area | Shoalest Sounding* | -47 |
| Submerged Wreck | | -46 |
| Angle Point | | |

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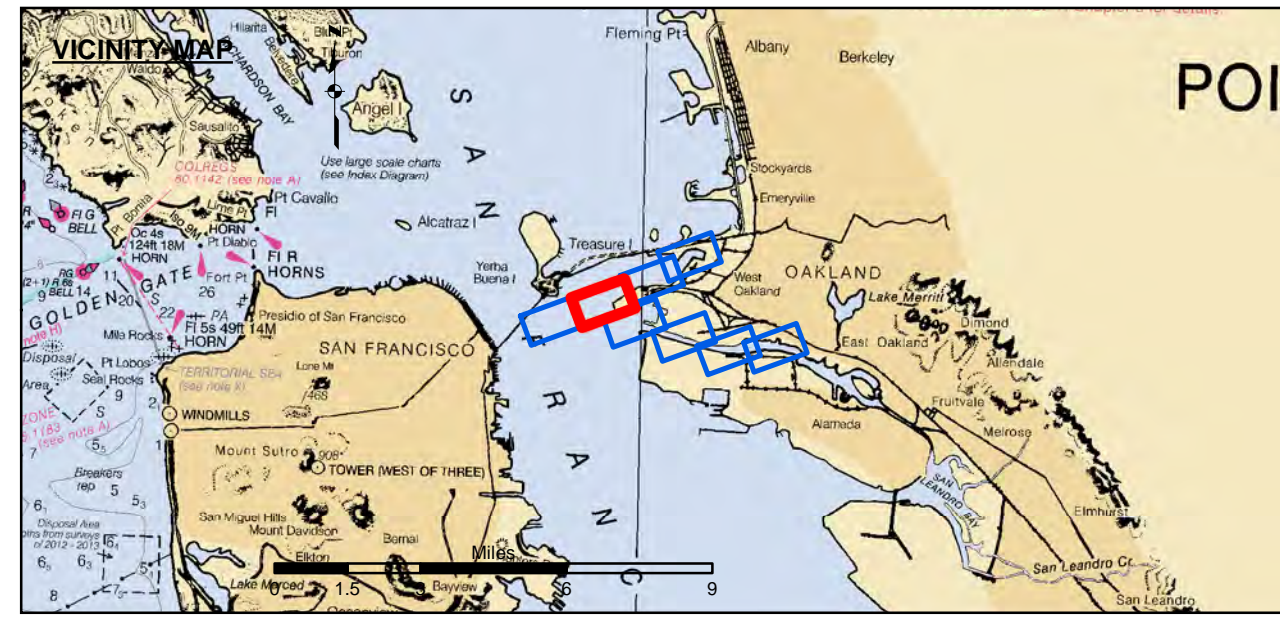


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Submitted by: Hydro Survey Team Leader	Designed by:
Recommended by: Navigation Technical Manager	Flattened by:
Approved by: Project Manager	Checked by:
	Drawn by:

ALAMEDA COUNTY
OAKLAND HARBOR
 OAKLAND INNER
 CONDITION SURVEY
 14-15 JANUARY 2020



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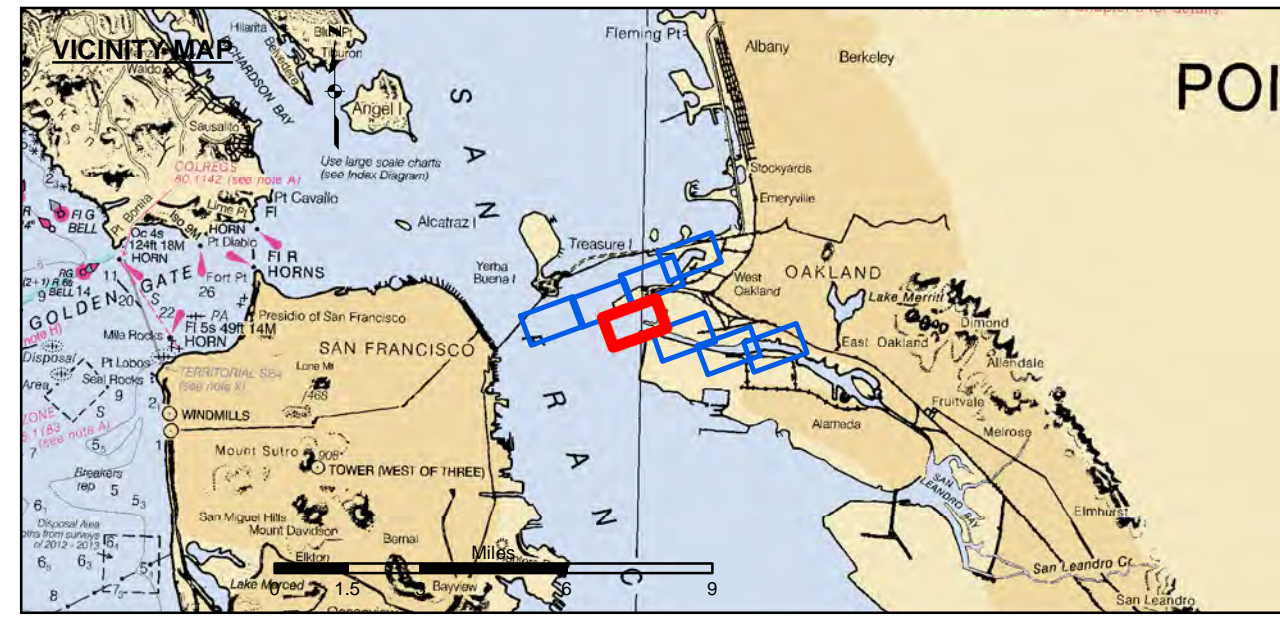


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Drawn by:	
Surveyed By:	JOHN D. CUNNINGHAM
Plotted By:	
Checked By:	
Project Manager:	

ALAMEDA COUNTY
OAKLAND HARBOR
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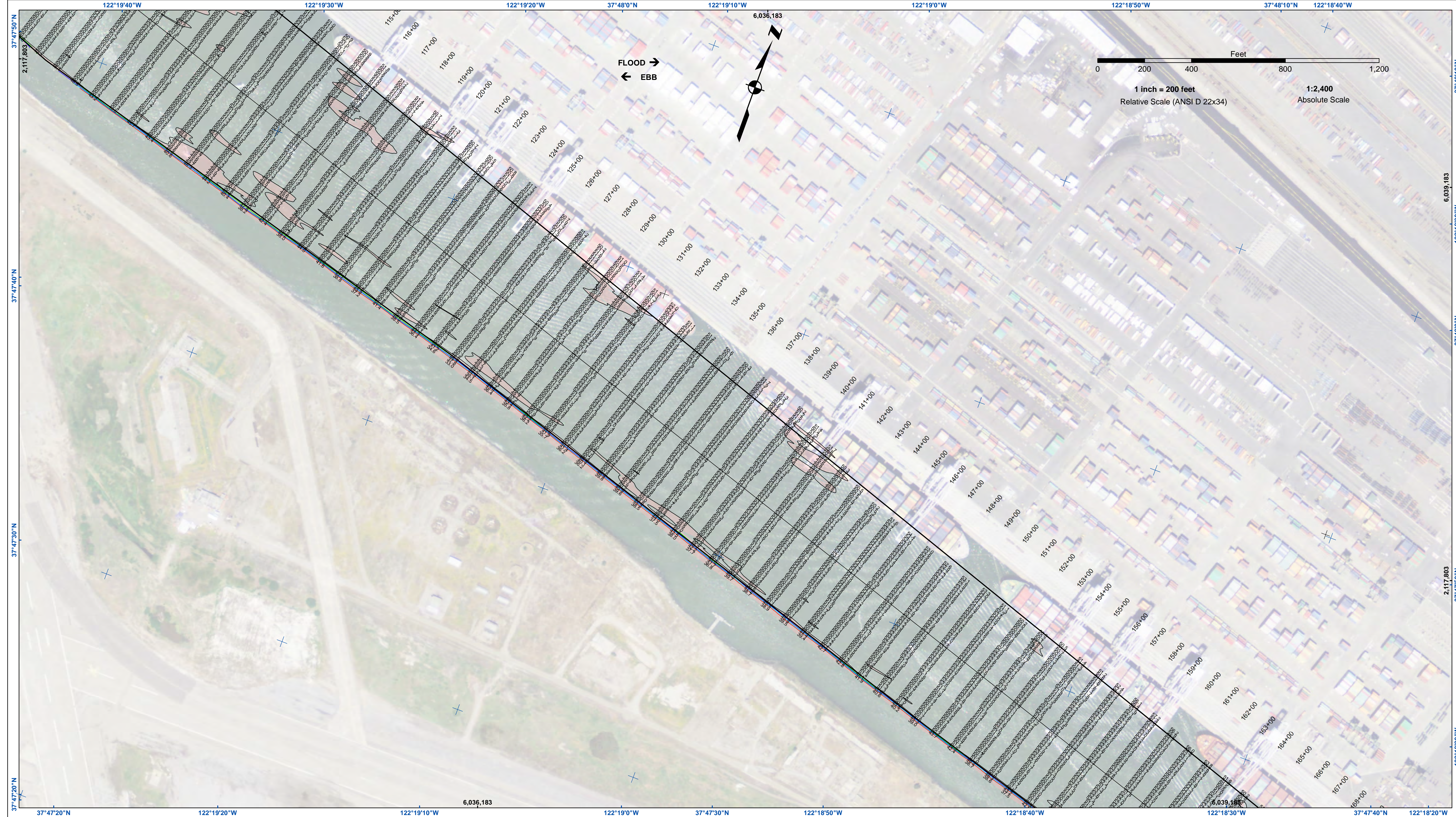
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Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-50
Placement Area	Navigation Buoy	-49
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Submerged Wreck		-46
Angle Point		

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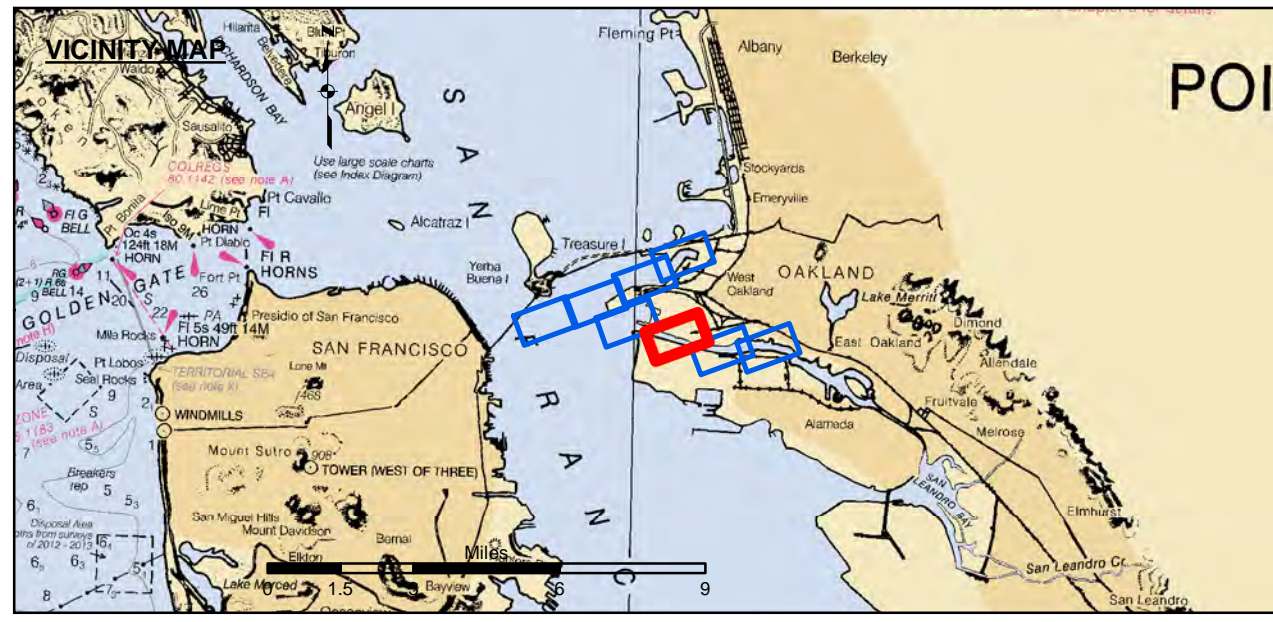
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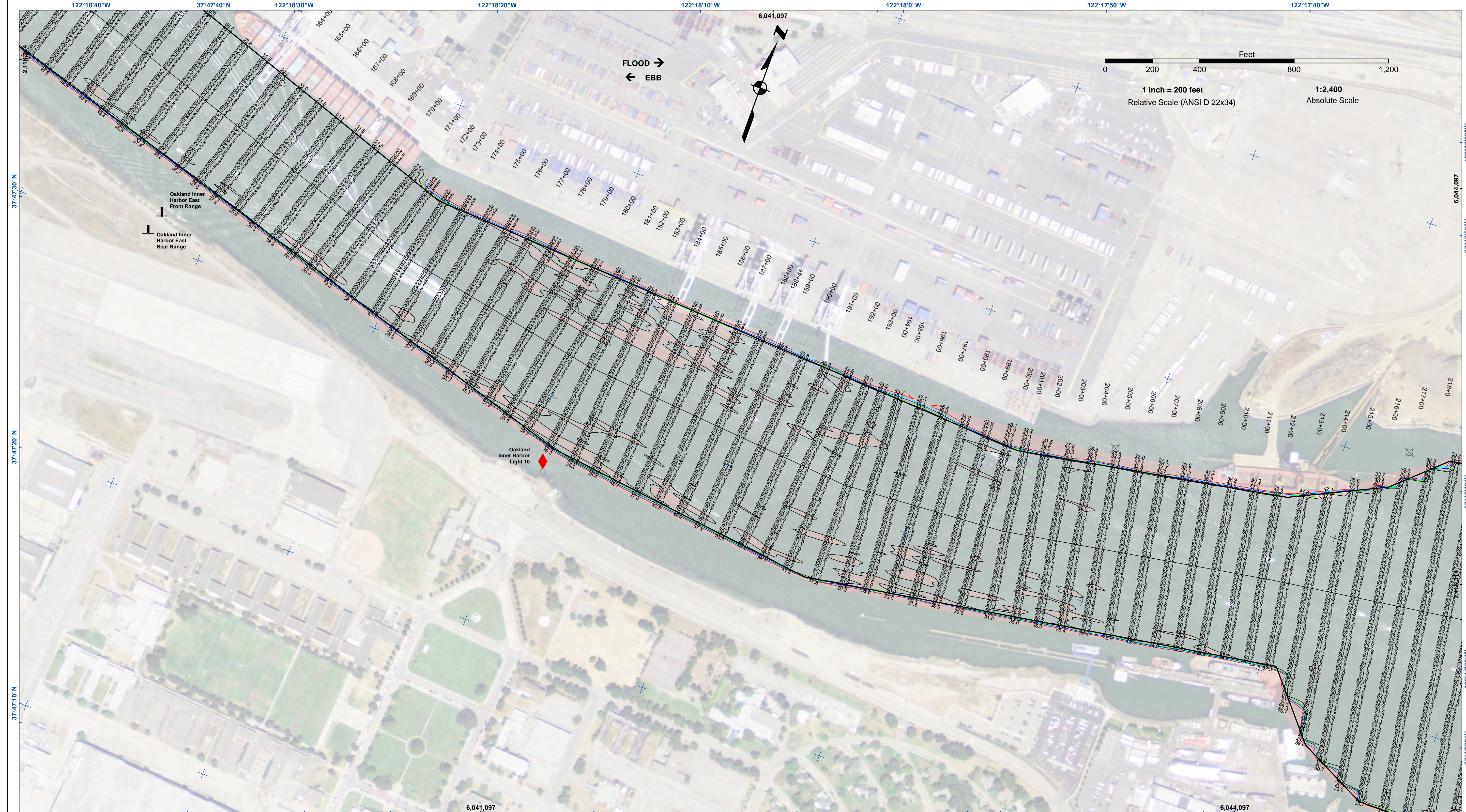
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- | | | |
|------------------------------|----------------------|------------|
| — Federal Navigation Channel | ⊥ Beacon, General | — Contours |
| ■ Shoaling Area | ⊗ Obstruction Point | — -50 |
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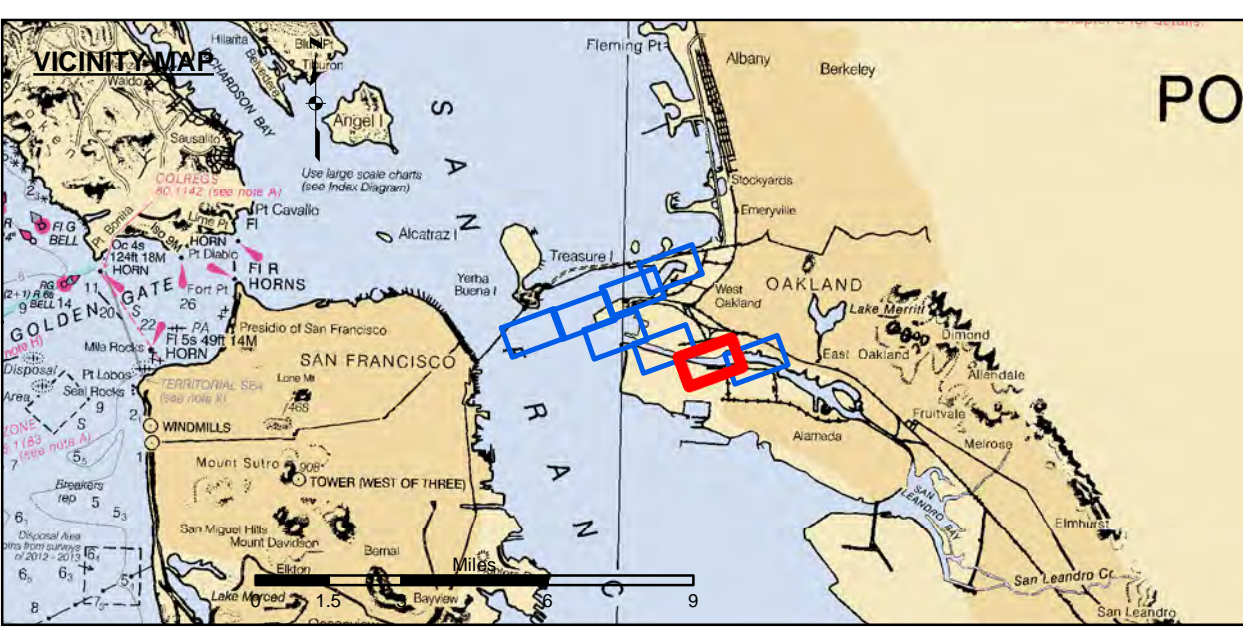


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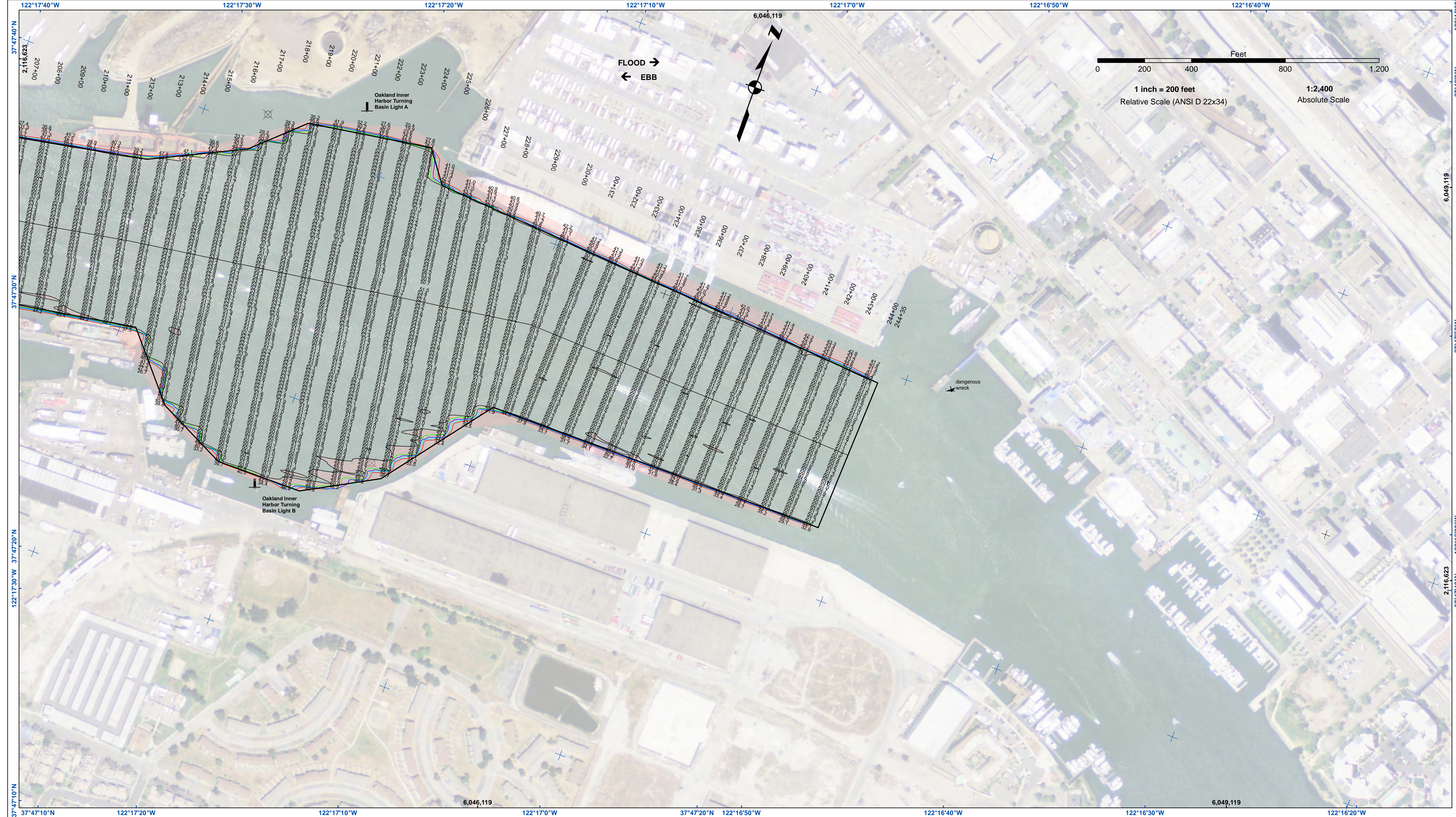


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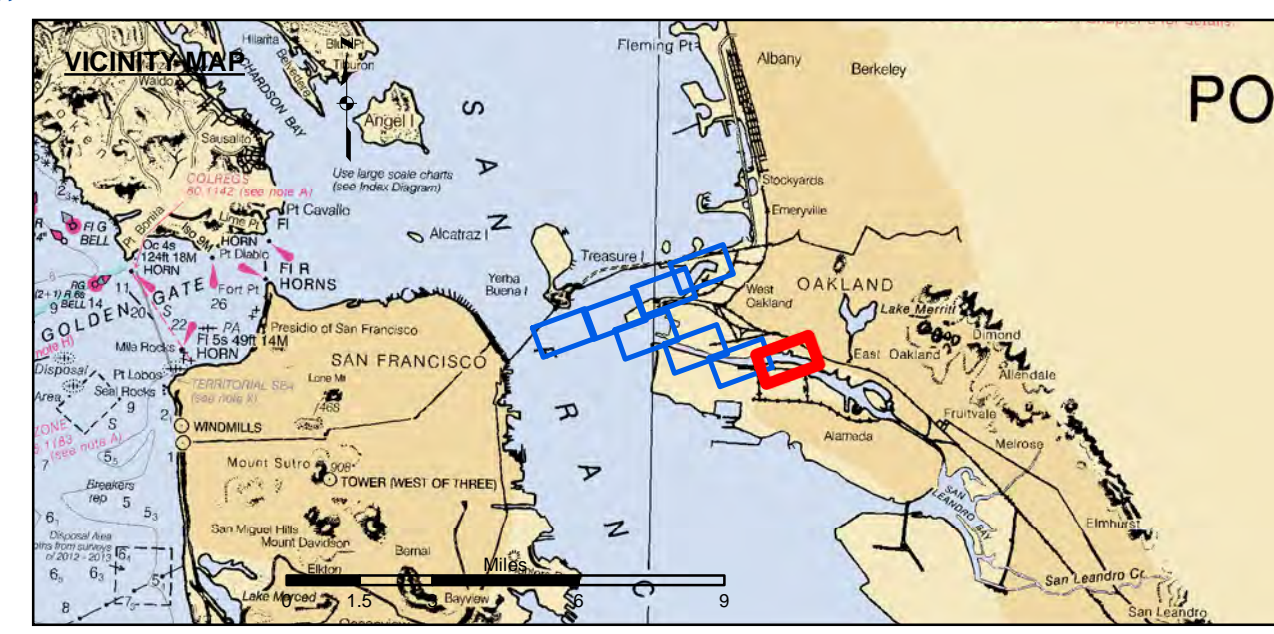


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 PCIP: PORT 1 1936/PID HT0654
 OAKLAND INNER REACH 4+0 DISK SET AT SOUTH END OF CLAY STREET, AT THE PORT OF OAKLAND CLAY STREET PIER. ELEVATION: 9.56 FEET MLLW - PUBLISHED 21 APR 2003 ON NOAA STATION 941 4764 TIDE GAUGE LOCATION IS CHISEL MARK APPROX. 10 FEET WEST ON TOP OF CONCRETE CURB; CHISEL ELEVATION 11.0 FEET MLLW.
 LPOP 1: 941 4777 B TIDAL/PID AE211, OAKLAND INNER REACH 1+3 DISK SET IN BALLARD FOUNDATION NEAR THE NORTHEAST END OF BERTH 40 OF THE OAKLAND MIDDLE HARBOR.
 ELEVATION: 13.48 FEET MLLW - DERIVED FROM WGS-84 ELLIPSOID ELEVATION, GEOID09 AND VDATUM MODELS
 TIDE GAUGE LOCATION IS IN FACE OF PILING AT BERTH 37. NAIL ELEVATION 9.7 FEET MLLW.
 LPOP 2: OAK OUTER 1 2012/PID, OAKLAND OUTER REACH 7+0 DISK SET IN PARKING LOT AT PIER 6 AMNAV TUG TERMINAL AT THE EDGE OF THE PIER. ELEVATION: 14.04 FEET MLLW - DERIVED FROM WGS-84 ELLIPSOID ELEVATION, GEOID09 AND VDATUM MODELS TIDE GAUGE LOCATION IS IN FACE OF PILING AT PIER 6, 10' EAST OF BENCHMARK; NAIL ELEVATION 10.1 FEET MLLW.

Sheet
Reference
Number
8 of 8