



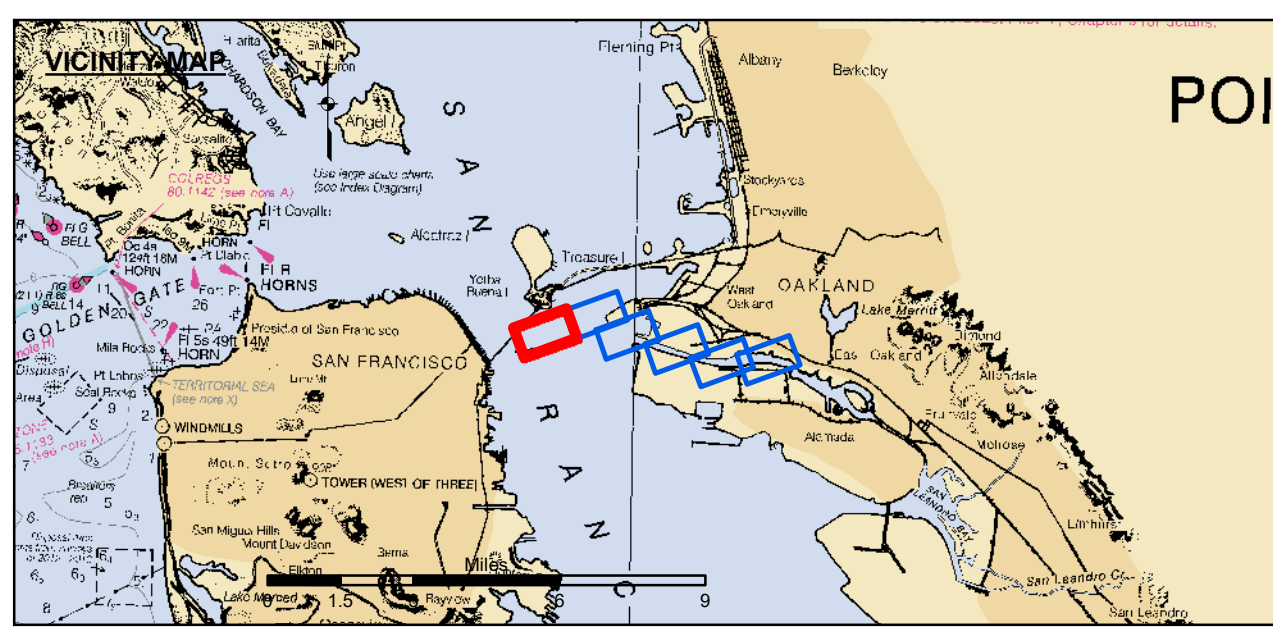
US Army Corps of Engineers
 San Francisco District
 450 Golden Gate Ave
 San Francisco, CA 94102

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Prepared Under the Direction of KEVIN P. ARNETT LT COLONEL, C.E., DISTRICT ENGINEER	Surveyed By:	Chart Date:
Submitted: Hydro Surveys Team Leader	Plotted By:	Aug 05, 2022
Recommended: Navigation Technical Manager	Checked By:	Designed by:
Approved: Project Manager	Drawn by:	Drawn by:

CALIFORNIA
OAKLAND HARBOR
 INNER HARBOR
 CONDITION SURVEY
 20 JULY 2022

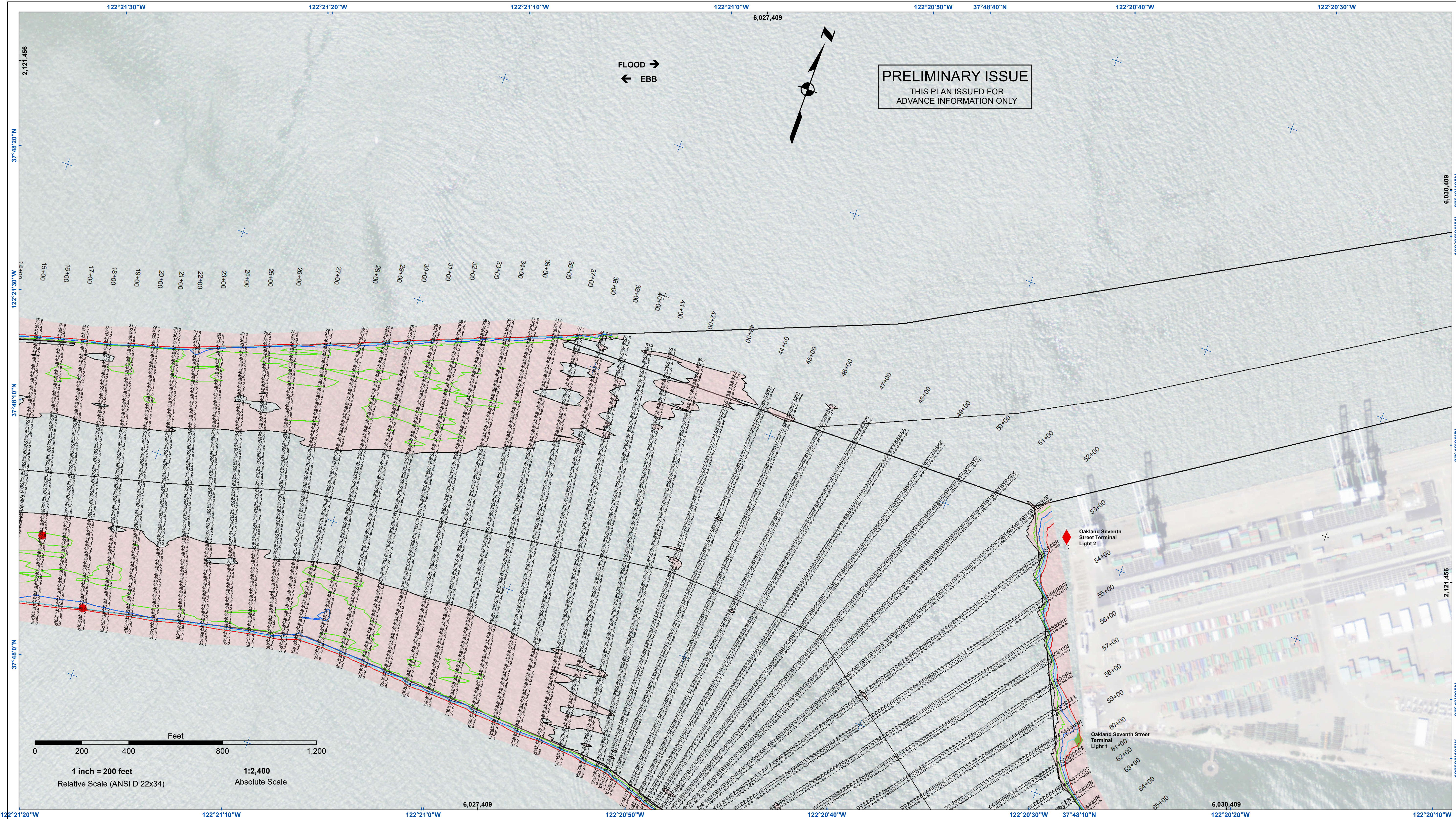
Sheet Number
 1 of 6



- 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
- 50
- 49
- 48
- 47
- 46

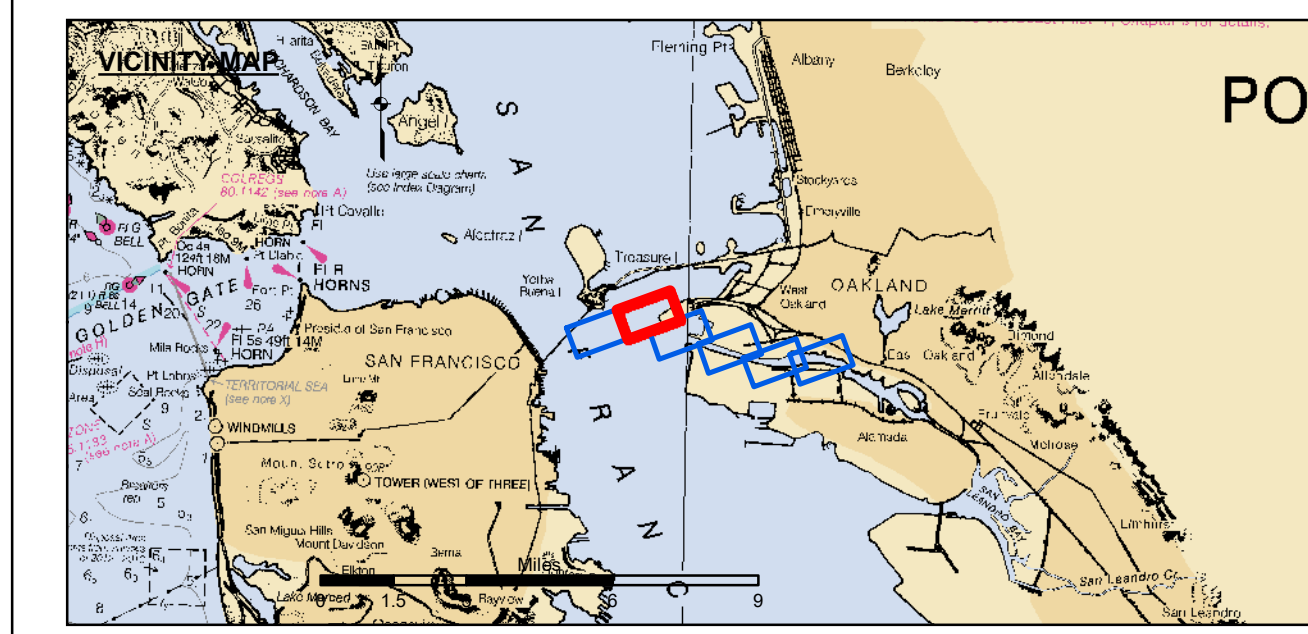
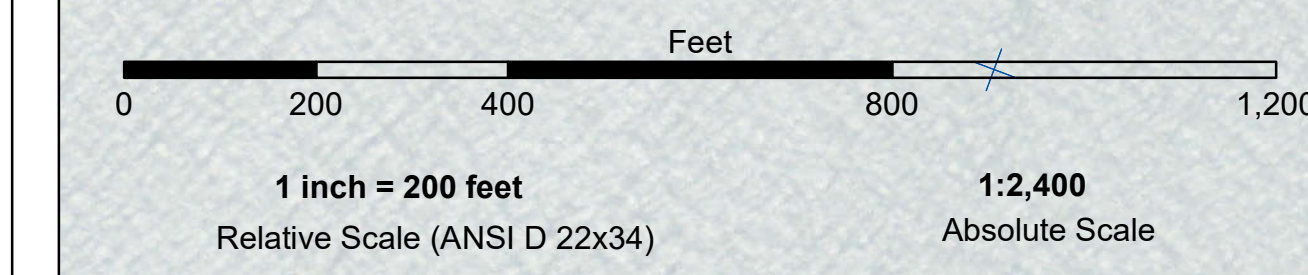
NOTES:
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FLOOD →
← EBB



- | | | |
|----------------------------|--------------------|-----------------|
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| Shoaling Area | Obstruction Point | -50 |
| Placement Area | Navigation Buoy | -49 |
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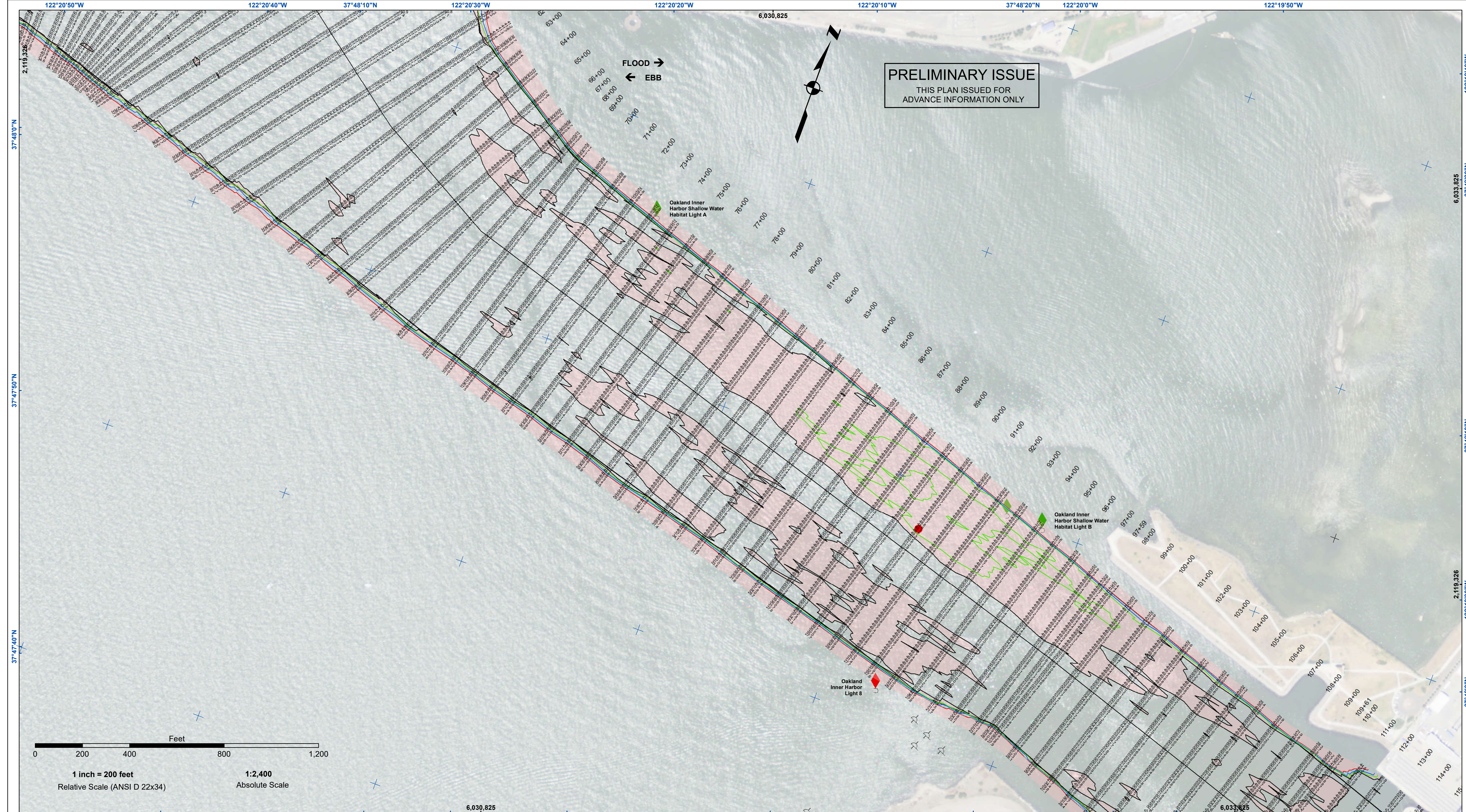
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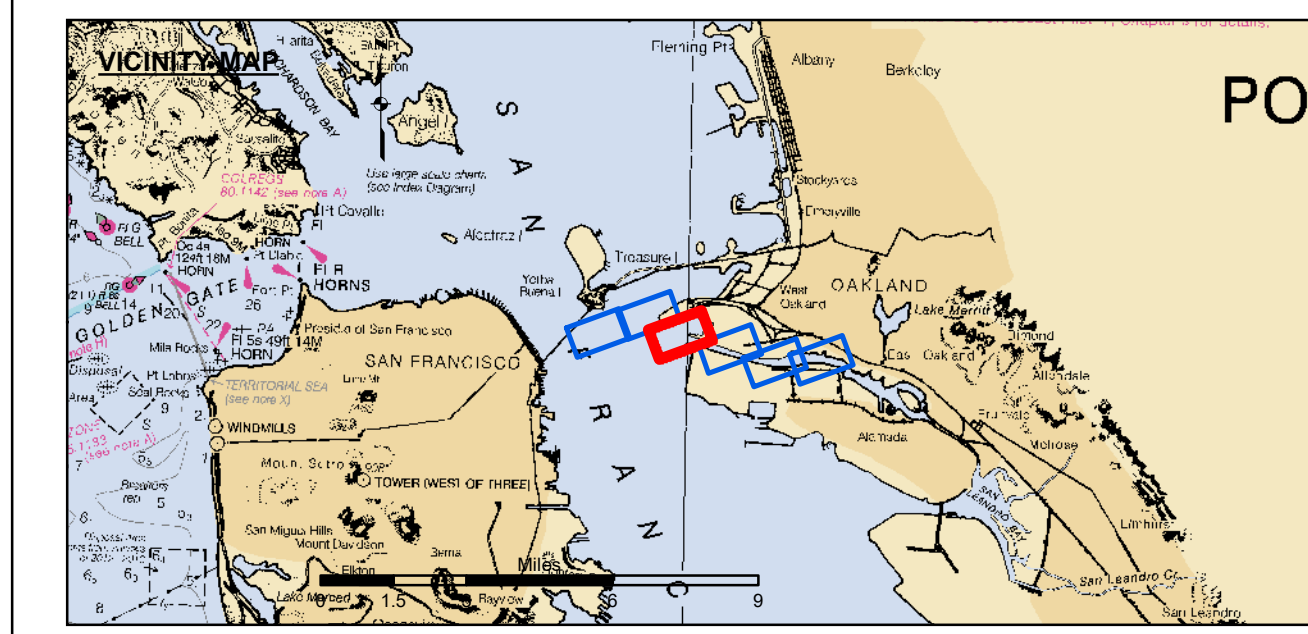
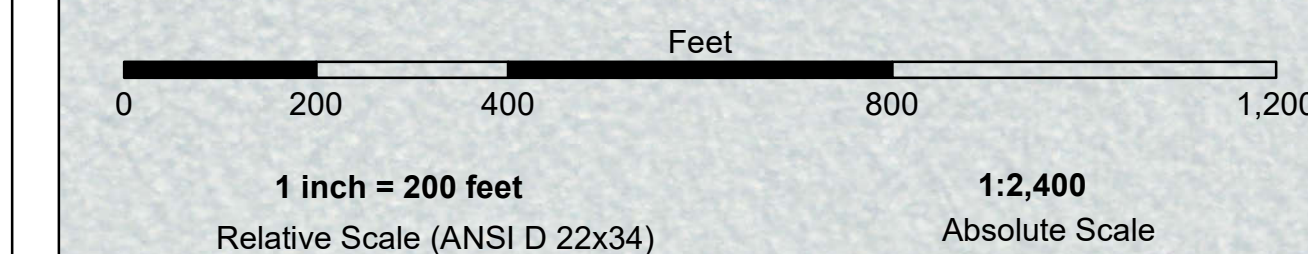
Chart Date:	Aug 05, 2022
Prepared Under the Direction of:	KEVIN P. ARNETT
Surveyed By:	LT COLONEL C.E. DISTRICT ENGINEER
Flatted By:	Hydro Surveys Team Leader
Designed by:	Navigation Technical Manager
Checked By:	Project Manager

CALIFORNIA
ALAMEDA COUNTY
OAKLAND HARBOR
INNER HARBOR
CONDITION SURVEY
20 JULY 2022

Sheet Number
2 of 6



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- | | | |
|----------------------------|--------------------|----------|
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| Shoaling Area | Obstruction Point | -50 |
| Placement Area | Navigation Buoy | -49 |
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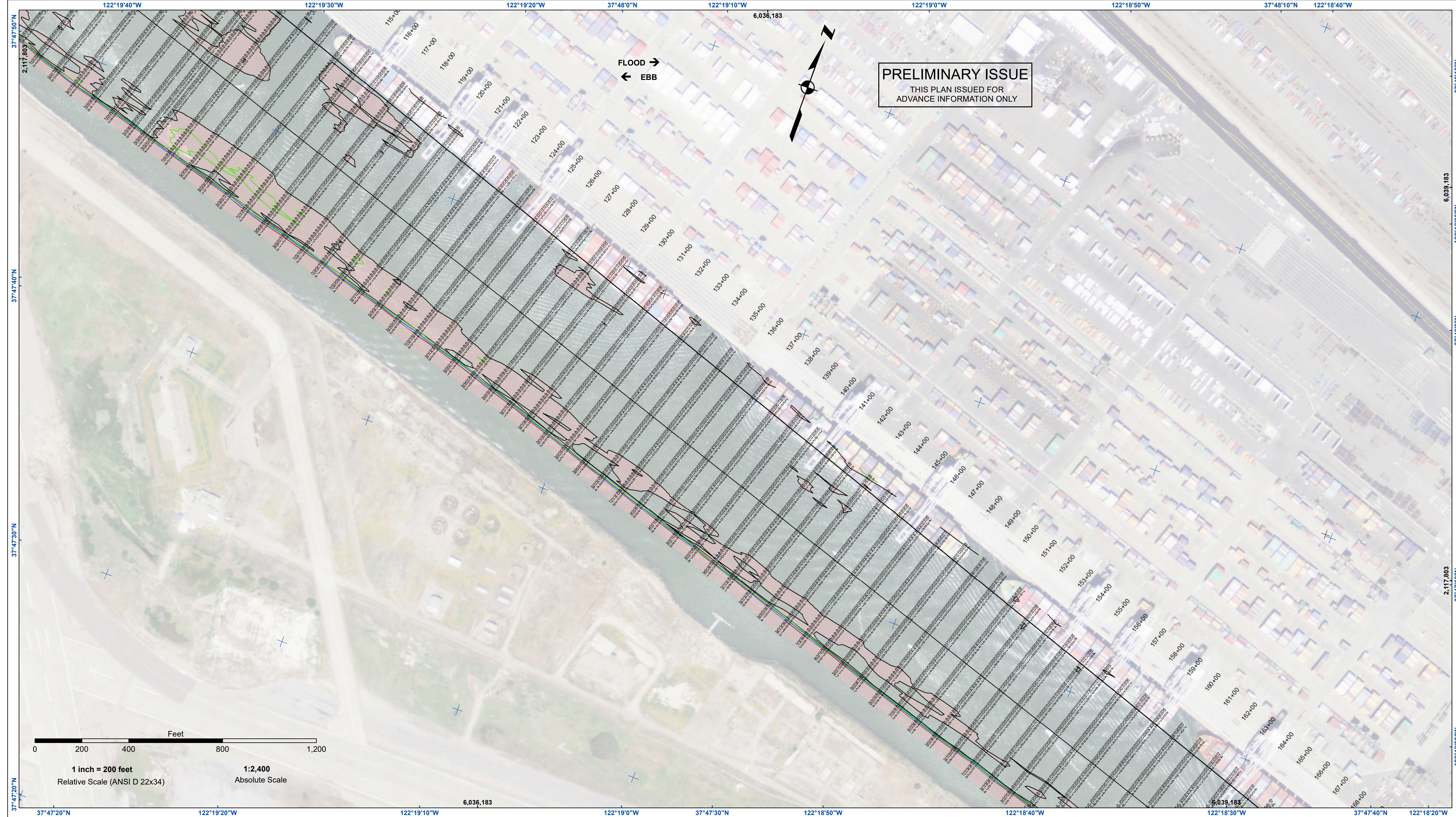
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Chart Date:	Aug 05, 2022
Surveyed By:	LT COLONEL C.E. DISTRICT ENGINEER KEVIN P. ARNETT
Plotted By:	Hydro Survey Team Leader
Designed by:	
Checked By:	Navigation Technical Manager
Drawn by:	
Approved:	Project Manager

CALIFORNIA
OAKLAND HARBOR
INNER HARBOR
CONDITION SURVEY
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Sheet
Reference
Number
3 of 6



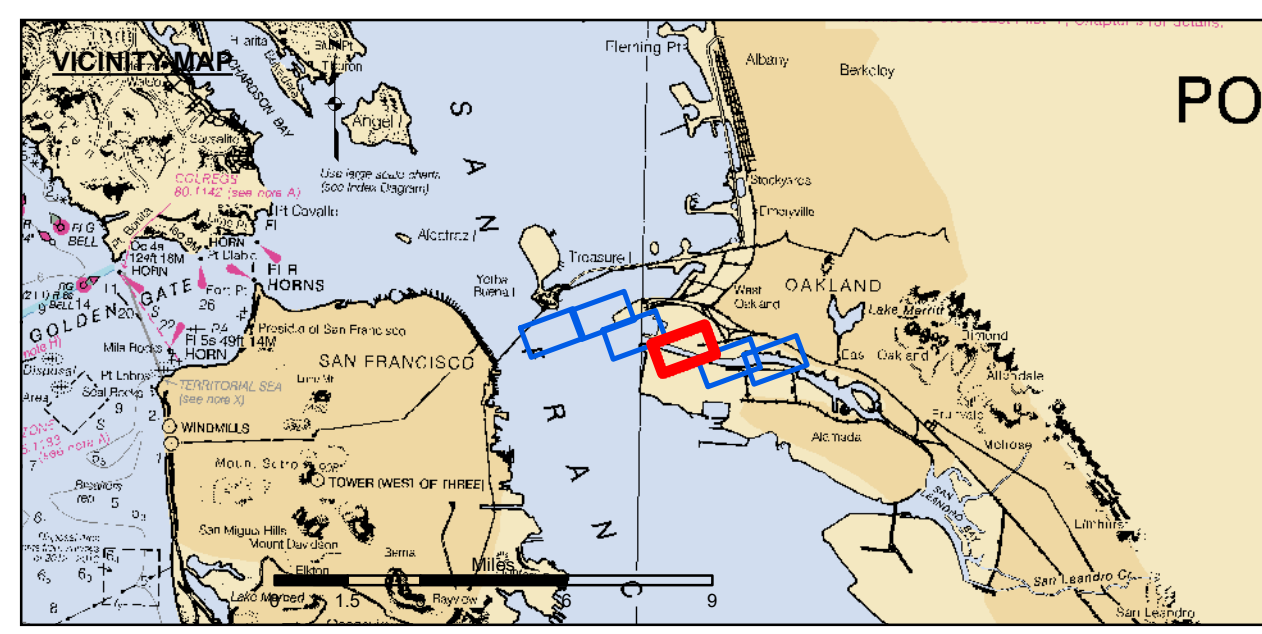
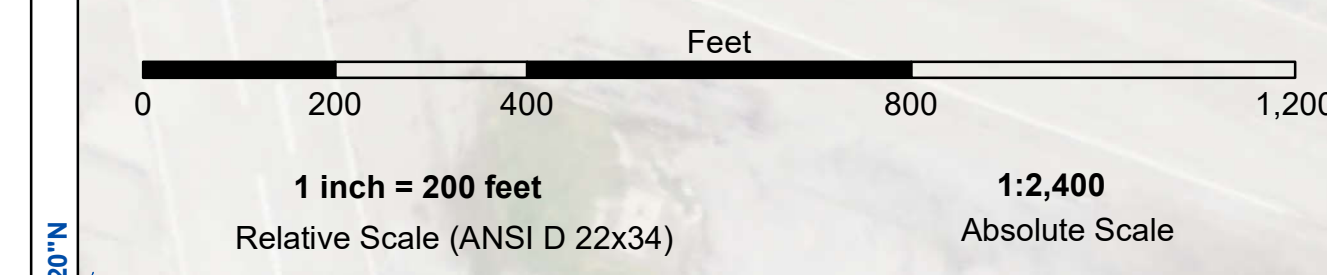
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ALAMEDA COUNTY
OAKLAND HARBOR
 INNER HARBOR
 CONDITION SURVEY
 20 JULY 2022

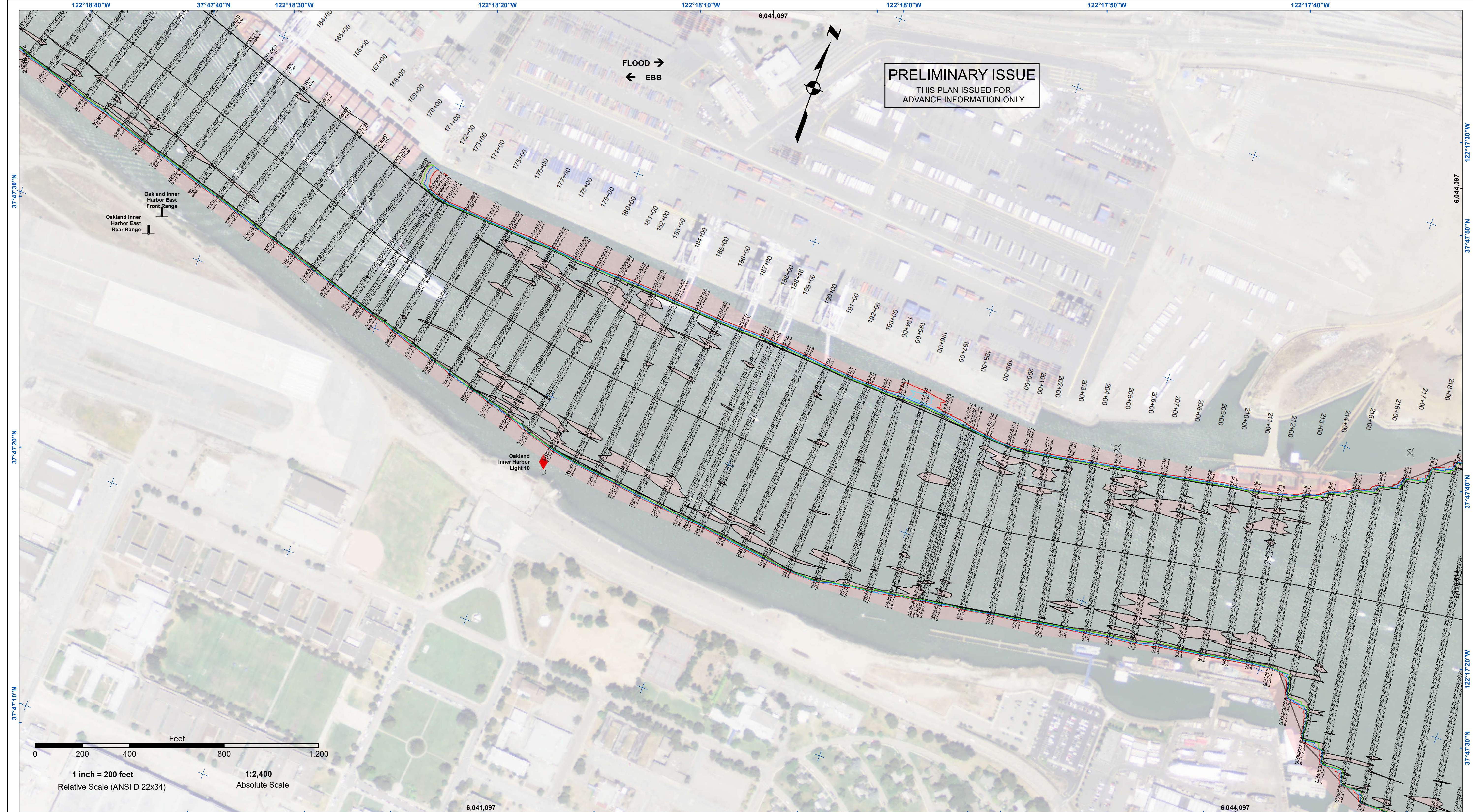
Sheet
Number
4 of 6



- | | | |
|----------------------------|--------------------|-----------------|
| Federal Navigation Channel | Beacon, General | Contours |
| Shoaling Area | Obstruction Point | -50 |
| Placement Area | Navigation Buoy | -49 |
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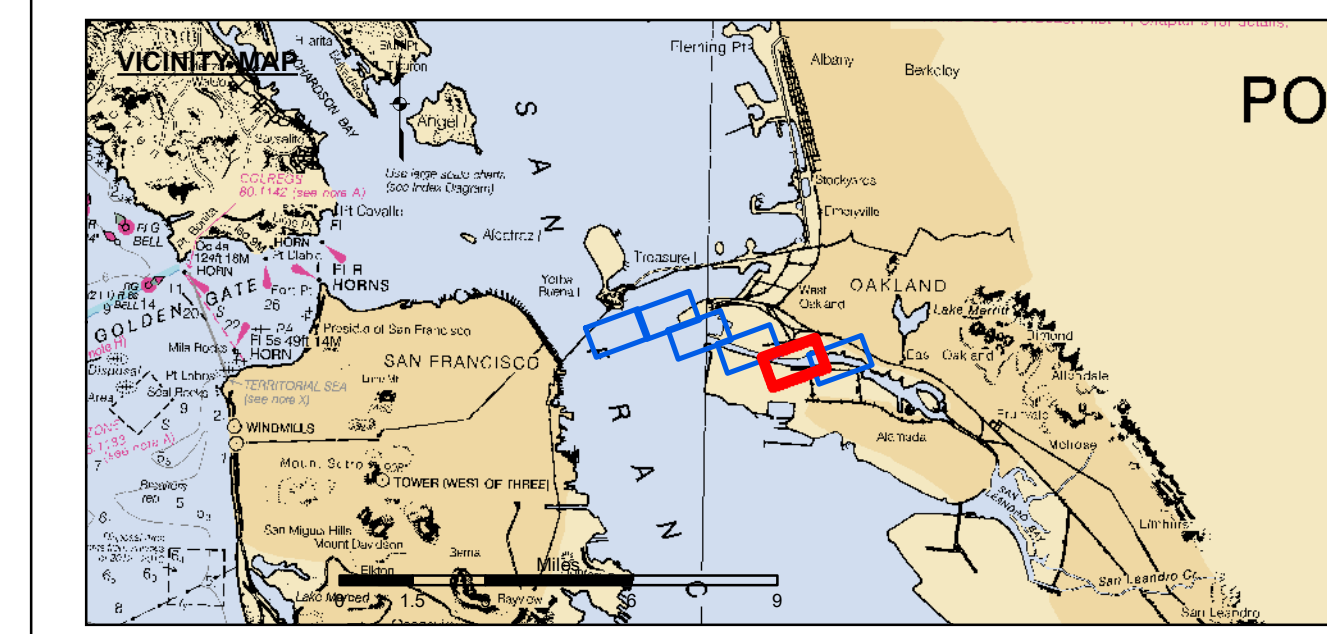


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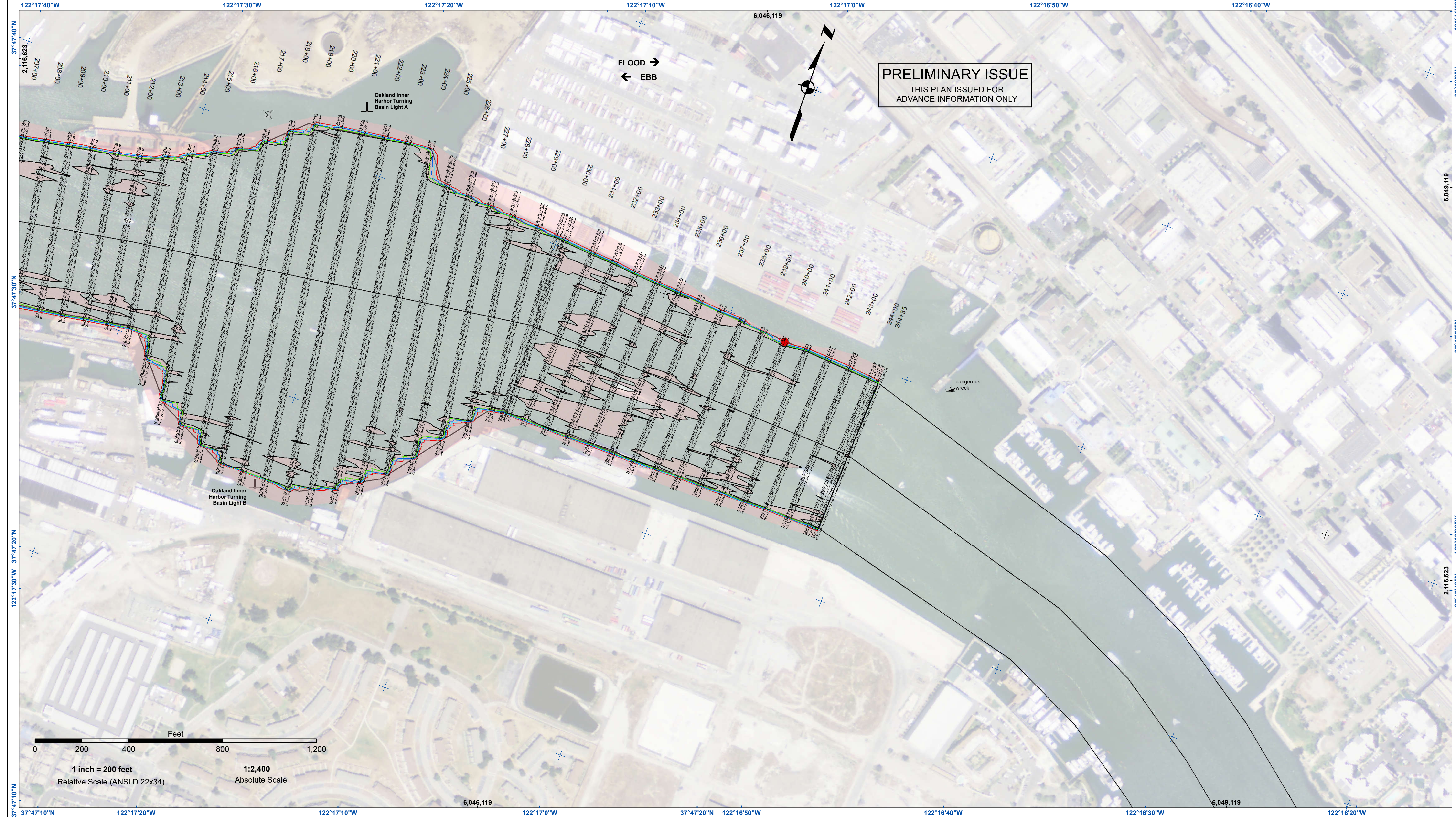
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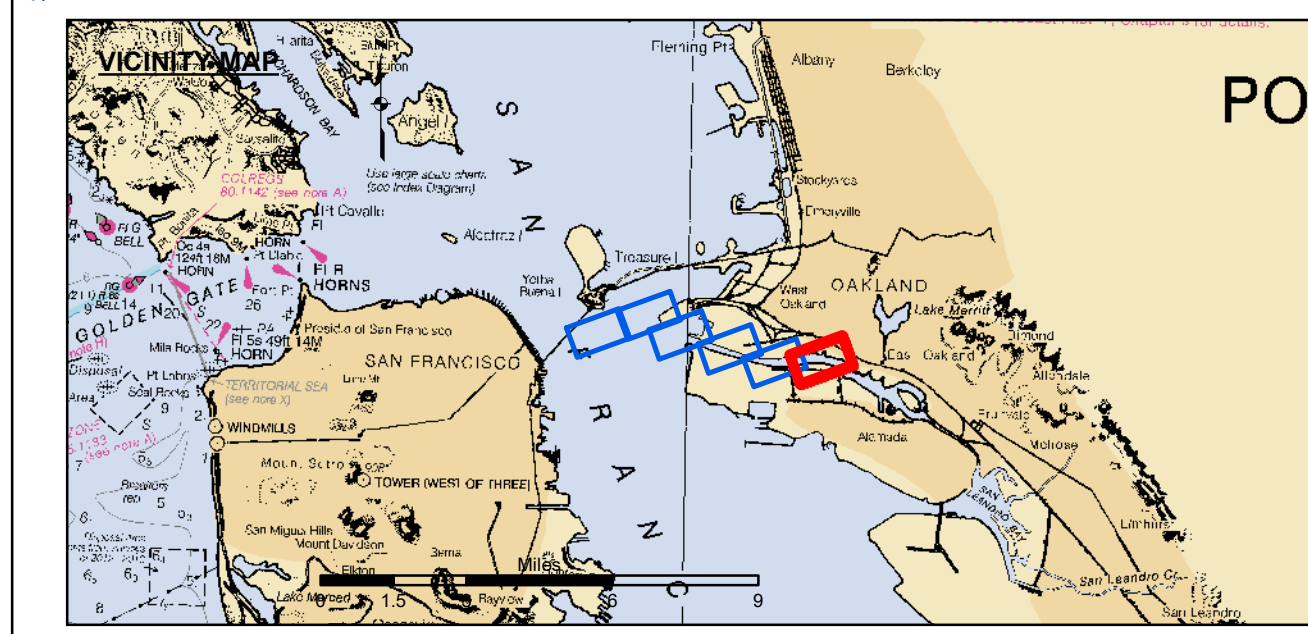
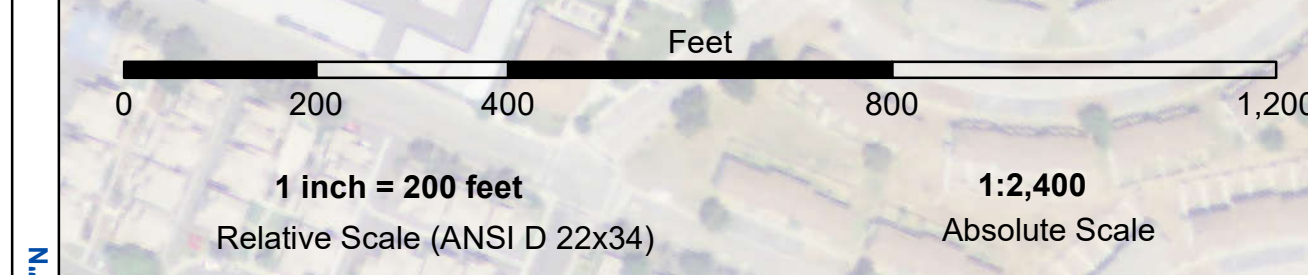
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THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.
THE PROJECT DEPTHS ARE AS FOLLOWS:
OUTER AND INNER HARBOR IS -50 FEET
INNER HARBOR TURNING BASIN TO PARK STREET BRIDGE IS -35 FEET
TIDAL CANAL PROJECT DEPTH IS -18 FEET
PLANE GRID AND COORDINATES ARE BASED ON LAMBERT PROJECTION, NAD 83, ZONE III CALIFORNIA AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY THE NATIONAL OCEAN SURVEY.
HORIZONTAL CONTROL:
PRIMARY: RTK POSITIONING
SECONDARY: COAST GUARD DGPS D-BEACON
VERTICAL CONTROL:
PRCP: PORT 1 1936/PID HT0654
OAKLAND INNER REACH 4-8 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 AE2211, 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 7-10 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.

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Prepared Under the Direction of	Chart Date:
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Submittal:	Designed by:
Hydro Surveys Team Leader	
Recommendation:	Checked by:
Navigation Technical Manager	
Approved:	Drawn by:
Project Manager	

CALIFORNIA
OAKLAND HARBOR
INNER HARBOR
CONDITION SURVEY
20 JULY 2022

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