

Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-50
Placement Area	Navigation Buoy	-49
Anchorage Area	Navigation Buoy	-48
Wreck Area	Shoalest Sounding*	-47
Submerged Wreck		-46
Angle Point		

NOTES:
 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 LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.
 SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.
 SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY. NAVD 88.
 SURVEYED BY THE CORPS OF ENGINEERS.
 BASE MAPS ARE USDA NAIP 2010.
 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.
 PROJECT DEPTH OF OUTER AND INNER HARBOR IS -50 FEET.
 PROJECT DEPTH FROM INNER HARBOR TURNING BASIN TO PARK STREET BRIDGE IS 35 FEET.
 TIDAL CANAL PROJECT DEPTH IS 18 FEET.

VERTICAL CONTROL:
 PRCP: PORT 1 1836/PID HT0654.
 OAKLAND INNER REACH 4-6 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.
 LCP1: 941 4777 B TIDAL/PID A5211, 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.
 LCP2: OAK OUTER 1 2012/NO 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 DATUM MODELS TIDE GAUGE LOCATION IS IN FACE OF PILING AT PIER 6, 10' EAST OF BENCHMARK; NAIL ELEVATION 10.1 FEET MLLW.

HORIZONTAL CONTROL:
 PRIMARY: RTK POSITIONING
 SECONDARY: COAST GURAD DGPS D-BEACON

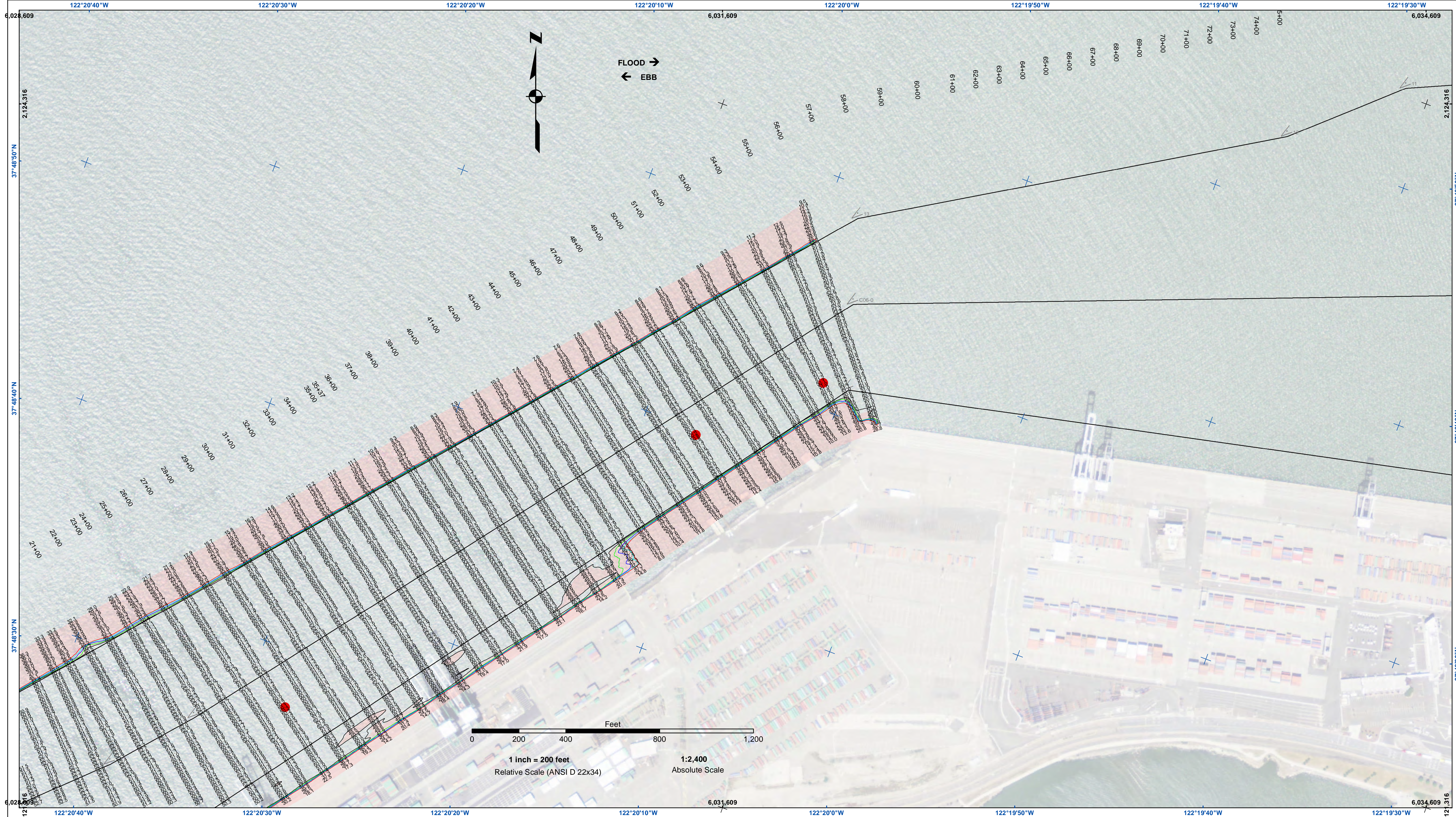
US Army Corps of Engineers
 San Francisco District
 1455 Market Street
 San Francisco, CA 94103

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Prepared Under the Direction of	Chart Date:
KEVIN P. ARNETT	Oct 28, 2021
Submittal:	Designed by:
Hydro Survey Team Leader	
Recommendation:	Drawn by:
Navigation Technical Manager	
Approval:	Checked by:
Project Manager	

ALAMEDA COUNTY CALIFORNIA
OAKLAND HARBOR
 OUTER HARBOR
 POST-DREDGE SURVEY
 12 OCTOBER 2021

Sheet Number
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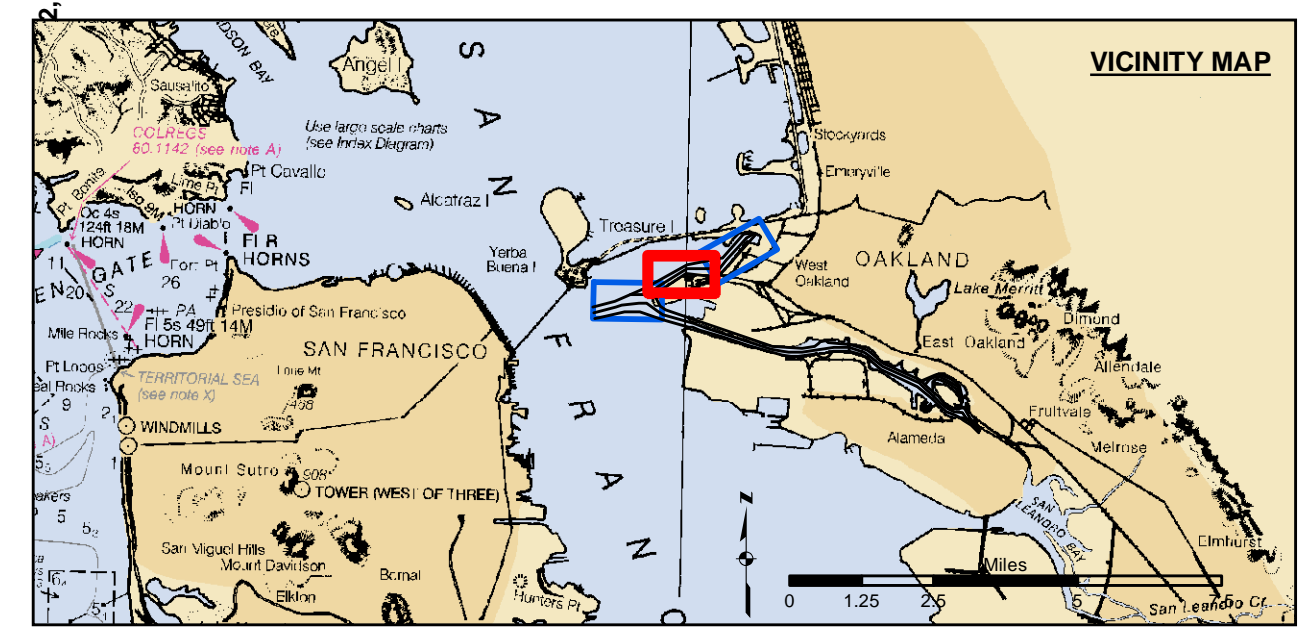


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Chart Date:	Oct 28, 2021
Designed by:	
Drawn by:	
Checked by:	
Project Manager:	
Surveyed By:	KEVIN P. ARNETT
Plotted By:	Hydro Survey Team Leader
Checked By:	Navigation Technical Manager
Approved:	Project Manager

ALAMEDA COUNTY
 CALIFORNIA
OAKLAND HARBOR
 OUTER HARBOR
 POST-DREDGE SURVEY
 12 OCTOBER 2021



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