

Federal Navigation Channel	Beacon, General	<b>Contours</b>
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:  
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SOUNDING FOR THE CHANNEL MEASURED WITH MULTIBEAM ECHOSOUNDER AND ARE SHOWN TO THE NEAREST TENTH FOOT.  
SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.  
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. 236, 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:  
PPCP: PORT 1 1936/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.  
LPCP 1: 941 4777 B TIDAL/PID AE5211, 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, GEOD09 AND VDATUM MODELS TIDE GAUGE LOCATION IS IN FACE OF PILING AT BERTH 27; NAIL ELEVATION 9.7 FEET MLLW.  
LPCP 2: OAK OULT 1 2012/NO PID, OAKLAND OUTER REACH 7-10 DISK SET IN PARKING LOT AT PIER 6 ANNAV TUG TERMINAL AT THE EDGE OF THE PIER. ELEVATION: 14.04 FEET MLLW - DERIVED FROM WGS-84 ELLIPSOID ELEVATION, GEOD09 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 GUARD DGPS D-BEACON

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

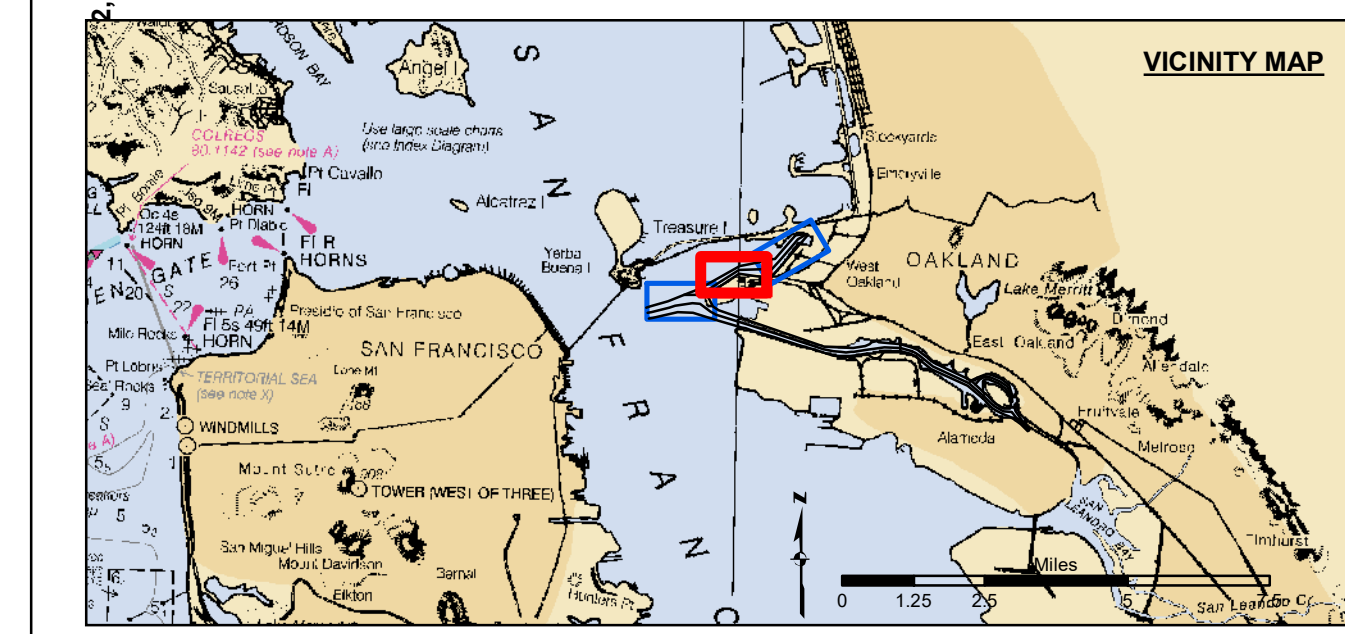
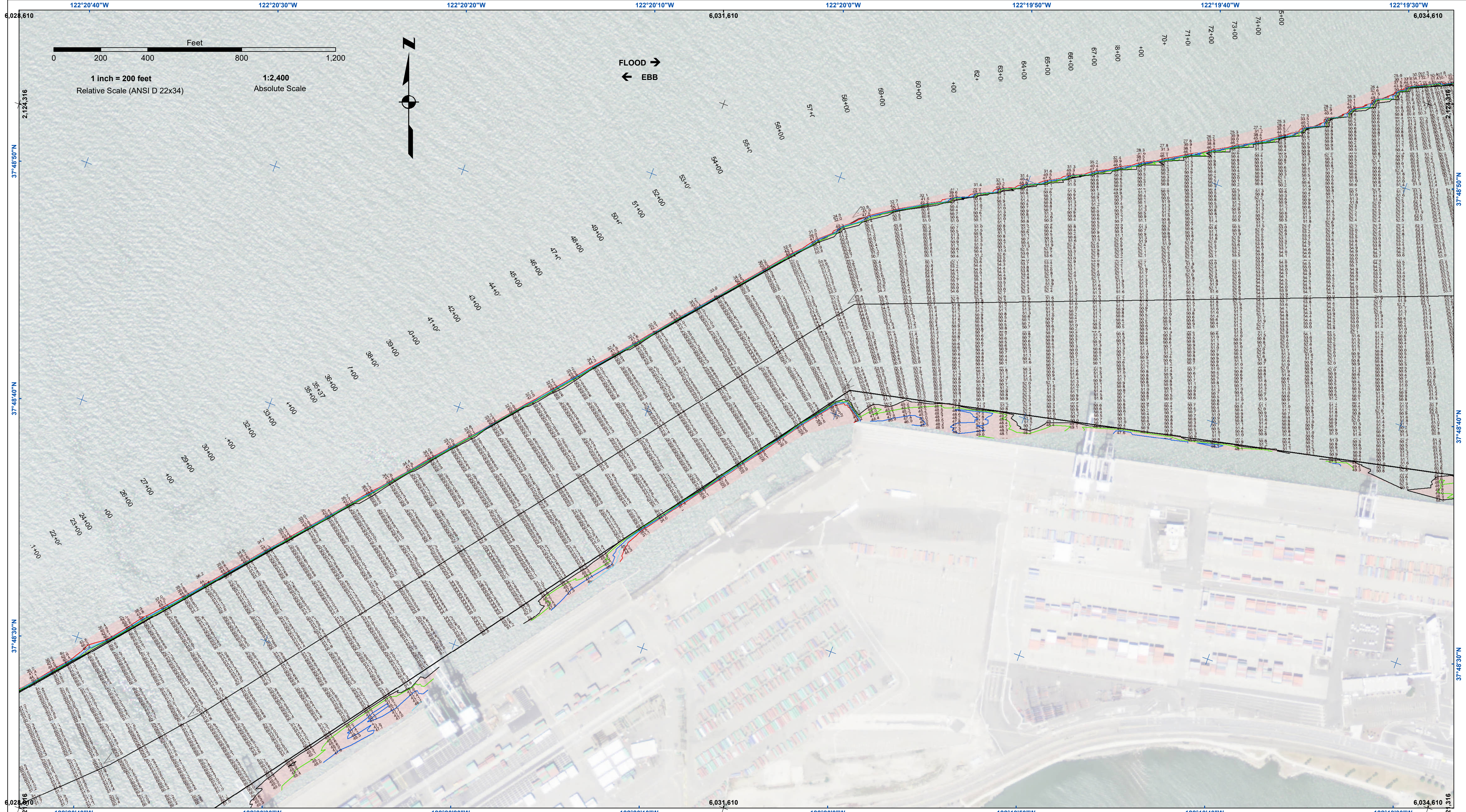
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Prepared Under the Direction of	Chart Date:
LT COLONEL W. SHEBESTA	Oct 19, 2023
Submittal:	Designed by:
Hydro Survey Team Leader	
Recommendation:	Checked by:
Navigation Technical Manager	
Approval:	Drawn by:
Project Manager	

ALAMEDA COUNTY  
**OAKLAND HARBOR**  
POST-DREDGE SURVEY  
23 AUGUST - 26 OCTOBER 2023

**Sheet Reference Number**  
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	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
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TIDE GAUGE LOCATION IS IN FACE OF PILING AT BERTH 27; NAILED ELEVATION: 2.7 FEET MLLW.  
LPCP 2: OAK OUTER 1 2012/NO PID, OAKLAND OUTER REACH 7-10 DISK SET IN PARKING LOT AT PIER 6 ANNAV TUG  
TERMINAL AT THE EDGE OF THE PIER ELEVATION: 14.04 FEET MLLW - DERIVED FROM WGS-84 ELLIPSOID ELEVATION,  
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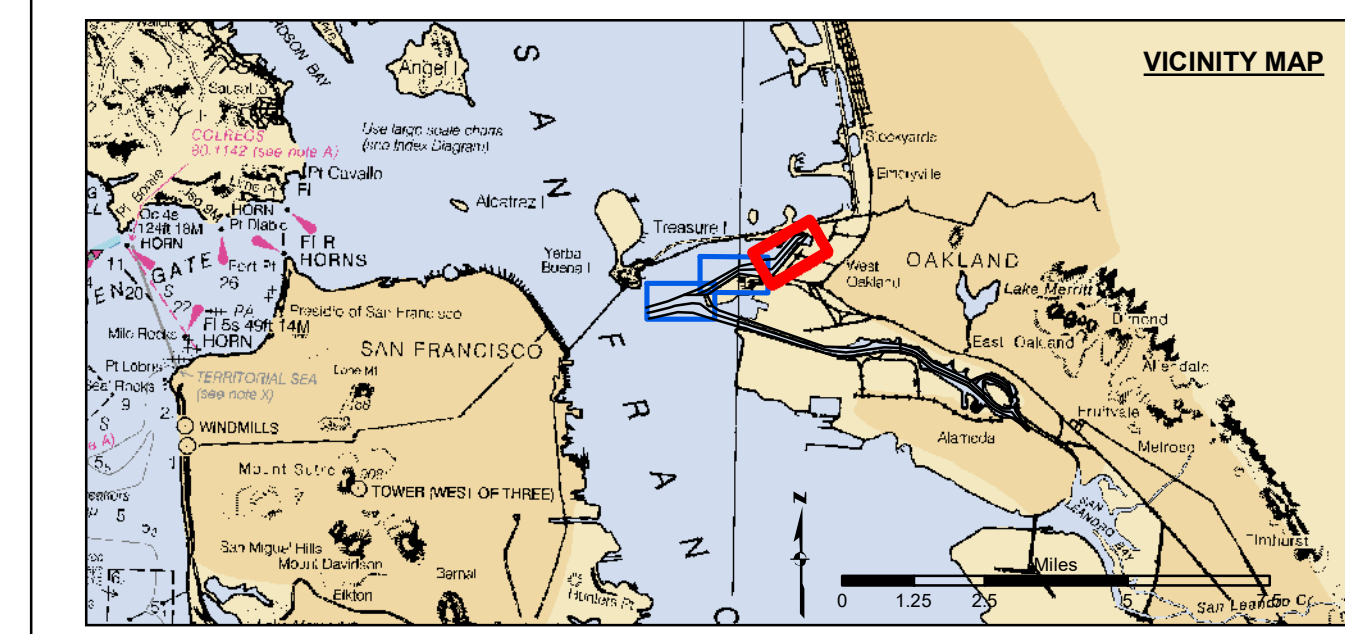
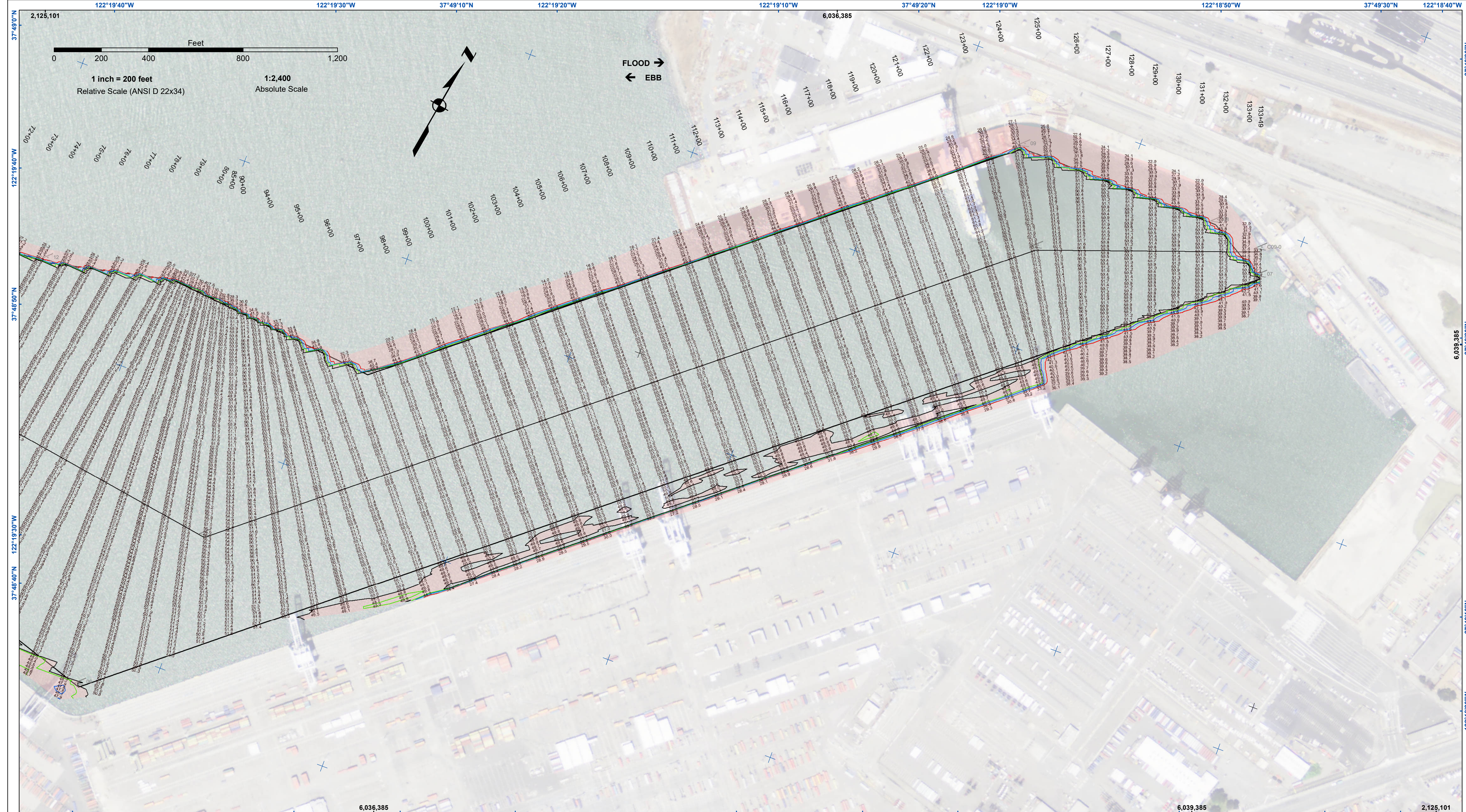
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Chart Date:	Oct 19, 2023
Surveyed By:	Prepared Under the Direction of TIMOTHY W. SHEBESTA LT COLONEL, C.E. DISTRICT ENGINEER
Plotted By:	Hydro Survey Team Leader
Checked By:	Navigation Technical Manager
Drawn By:	Project Manager

CALIFORNIA  
ALAMEDA COUNTY  
OAKLAND HARBOR  
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Plotted By:	Hydro Survey Team Leader
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