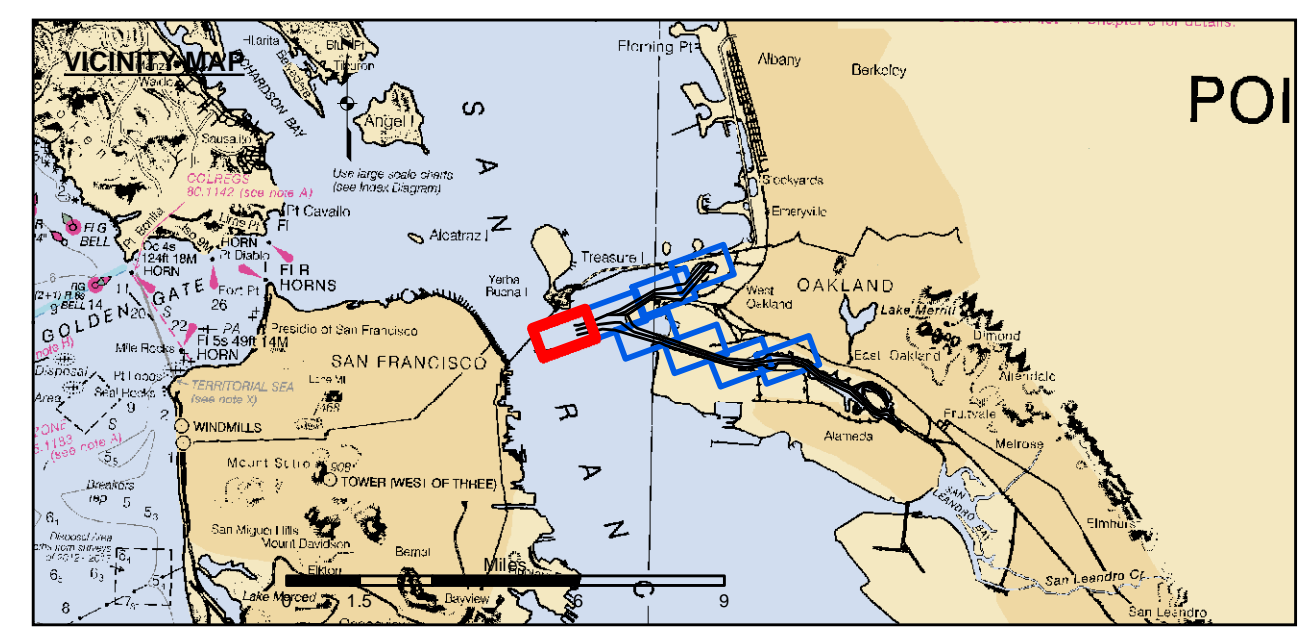


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Prepared Under the Direction of JOHN D. CUNNINGHAM LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: Nov 23, 2020
Submitted by: Hydro Survey Team Leader	Designed by:
Recommended by: Navigation Technical Manager	Checked by:
Approved by: Project Manager	Drawn by:

ALAMEDA COUNTY
OAKLAND HARBOR
 INNER HARBOR
 POST-DREDGE SURVEY
 21 AUGUST 2020
 2, 28, 30 OCTOBER 2020

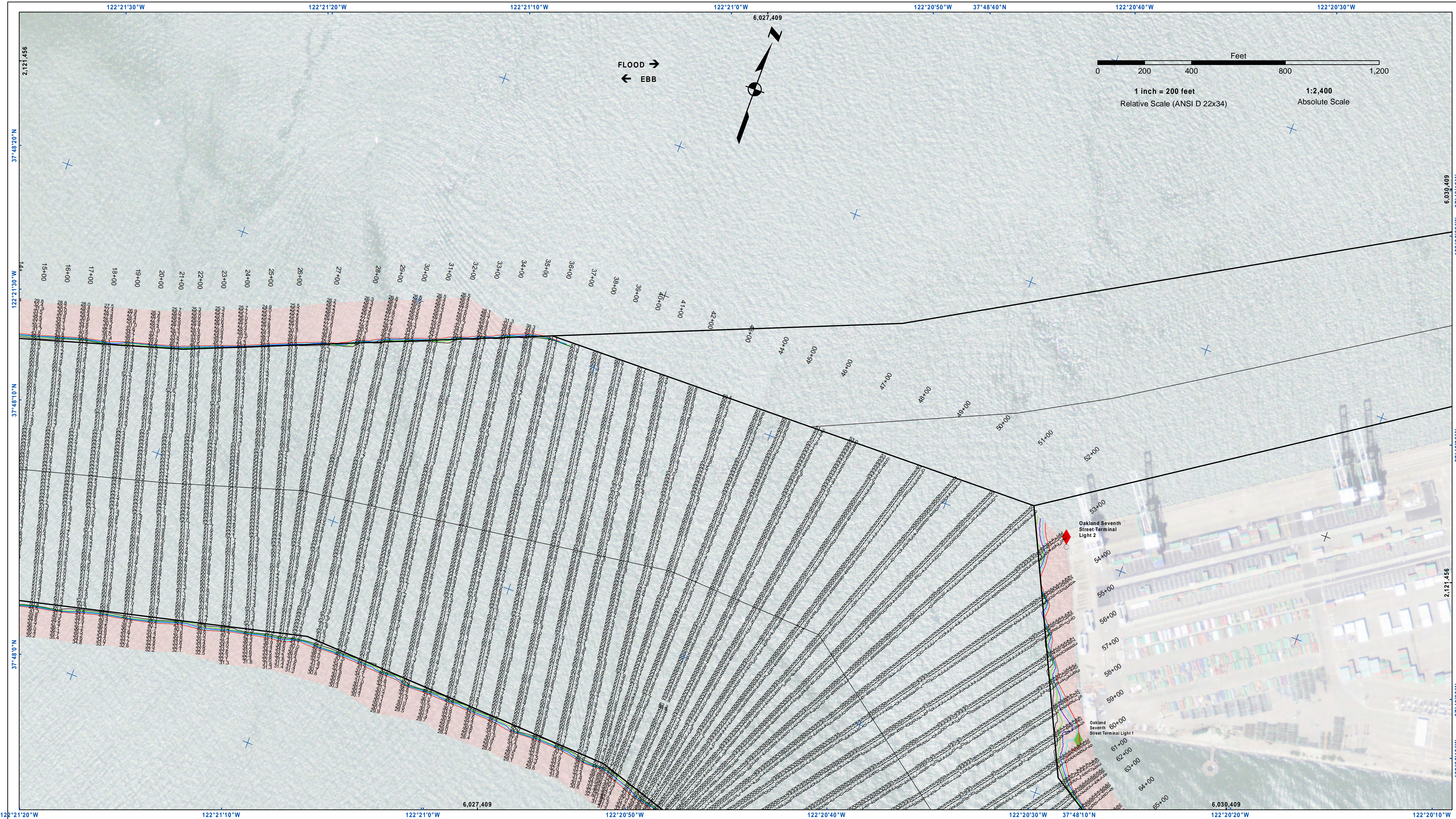
Sheet
Reference
Number
1 of 8



- 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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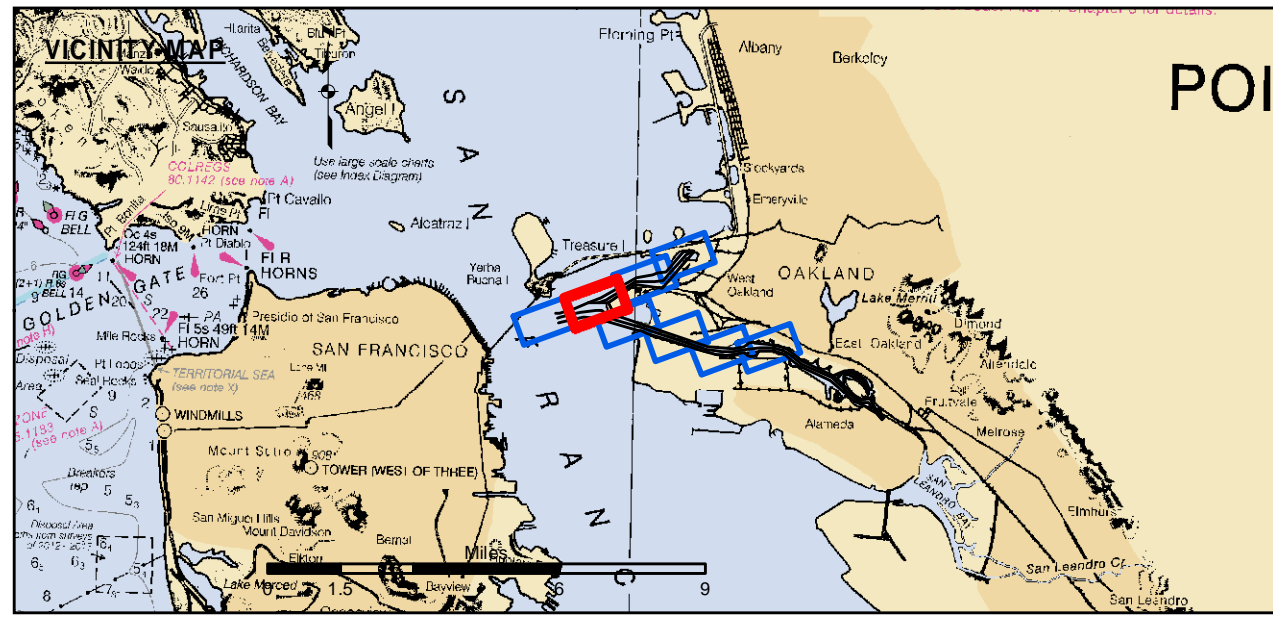


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Prepared Under the Direction of:	John D. Cunningham	Chart Date:	Nov 23, 2020
Surveyed By:	John D. Cunningham	Designed by:	
Plotted By:	Hydro Surveys Team Leader	Drawn by:	
Recommended:	Navigation Technical Manager	Checked by:	
Approved:	Project Manager		

ALAMEDA COUNTY
OAKLAND HARBOR
 INNER HARBOR
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Sheet Reference Number
 2 of 8



- Federal Navigation Channel
- Shoaling Area
- Placement Area
- Anchorage Area
- Wreck Area
- Submerged Wreck
- Angle Point
- Beacon, General
- Obstruction Point
- Navigation Buoy
- Navigation Buoy
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- Contours
- 50
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- 48
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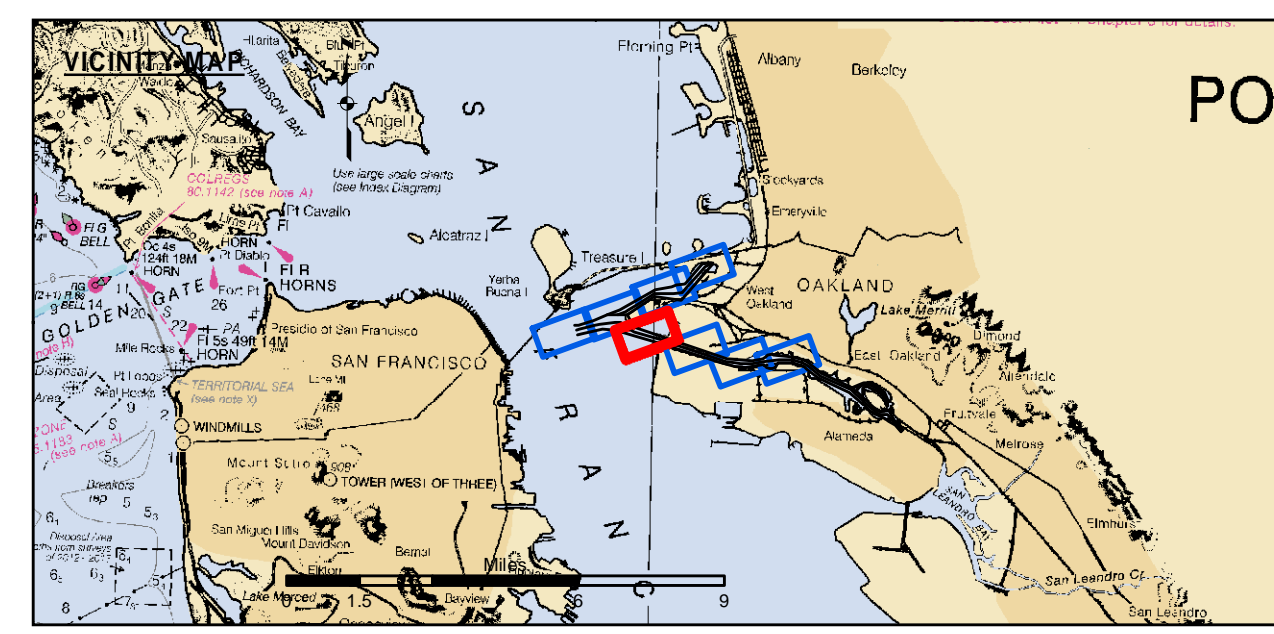
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Chart Date:	Nov 23, 2020
Designed by:	
Drawn by:	
Surveyed By:	
Plotted By:	
Checked By:	
Project Manager:	

ALAMEDA COUNTY
OAKLAND HARBOR
 INNER HARBOR
 POST-DREDGE SURVEY
 21 AUGUST 2020
 2, 28, 30 OCTOBER 2020

Sheet Reference Number
 5 of 8



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		

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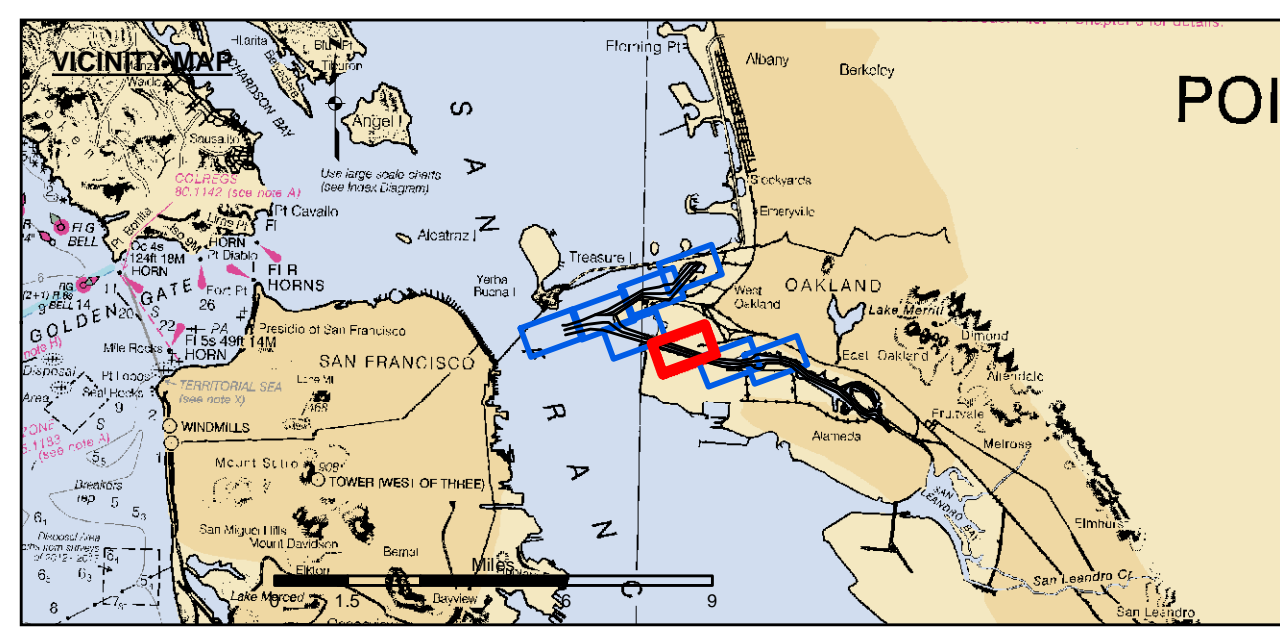
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Prepared Under the Direction of JOHN D. CUNNINGHAM LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: Nov 23, 2020
Submittal: Hydro Survey Team Leader	Designed by:
Recommendation: Navigation Technical Manager	Drawn by:
Approval: Project Manager	Checked By:
Surveyed By:	Plotted By:

ALAMEDA COUNTY
OAKLAND HARBOR
 INNER HARBOR
 POST-DREDGE SURVEY
 21 AUGUST 2020
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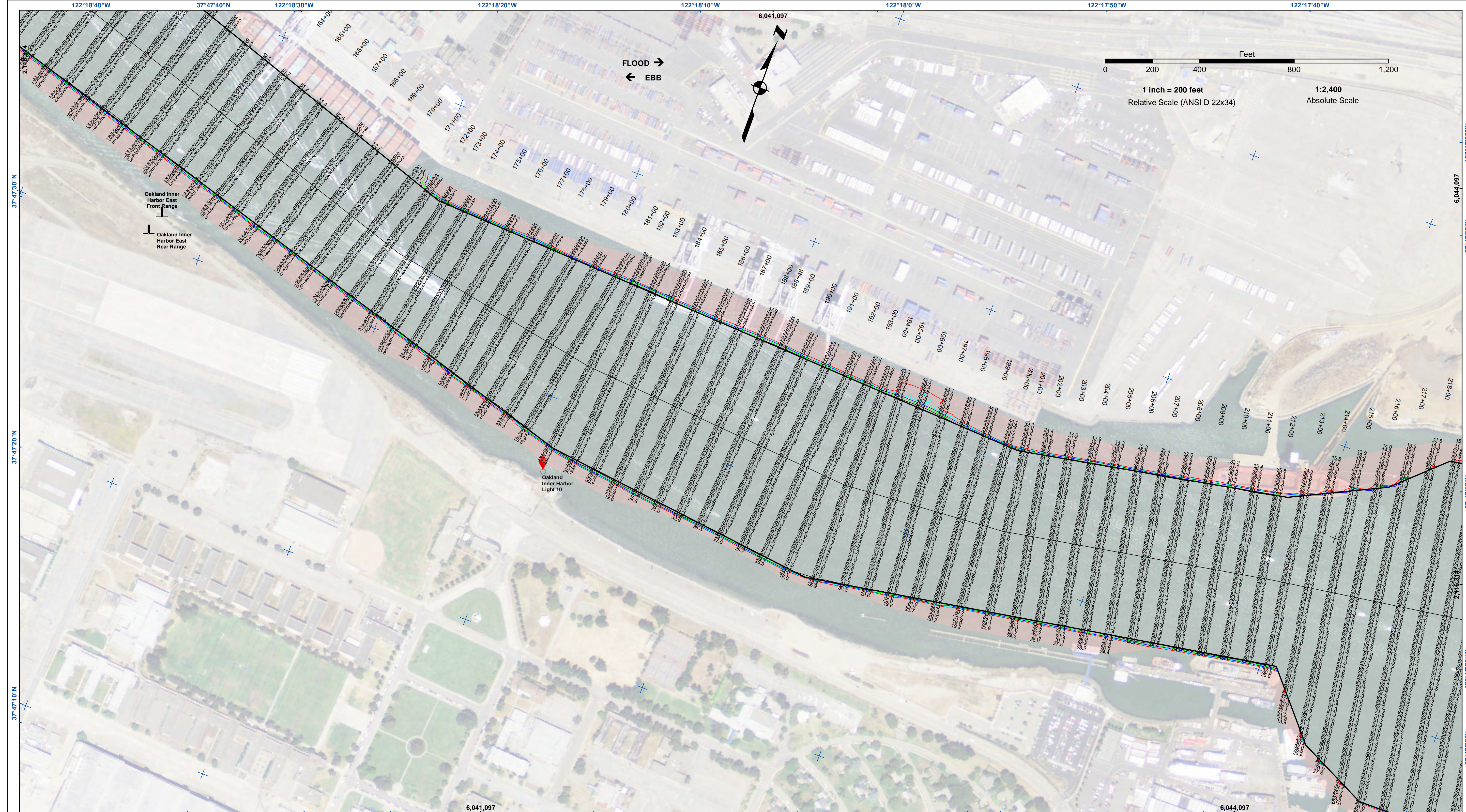
Sheet Reference Number
6 of 8



- Federal Navigation Channel
- Shoaling Area
- Placement Area
- Anchorage Area
- Wreck Area
- Submerged Wreck
- Angle Point
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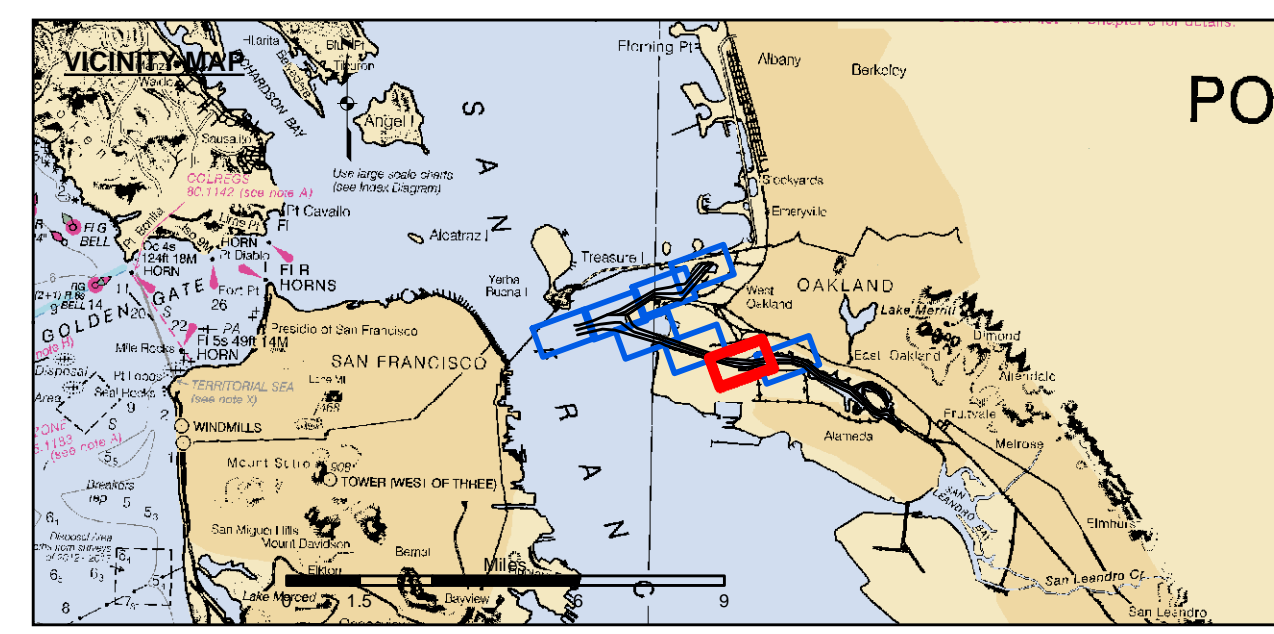


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Prepared Under the Direction of	John D. Cunningham
Surveyed By	Nov 23, 2020
Plotted By	Designed by:
Checked By	Drawn by:
Approved:	Project Manager

CALIFORNIA
OAKLAND HARBOR
INNER HARBOR
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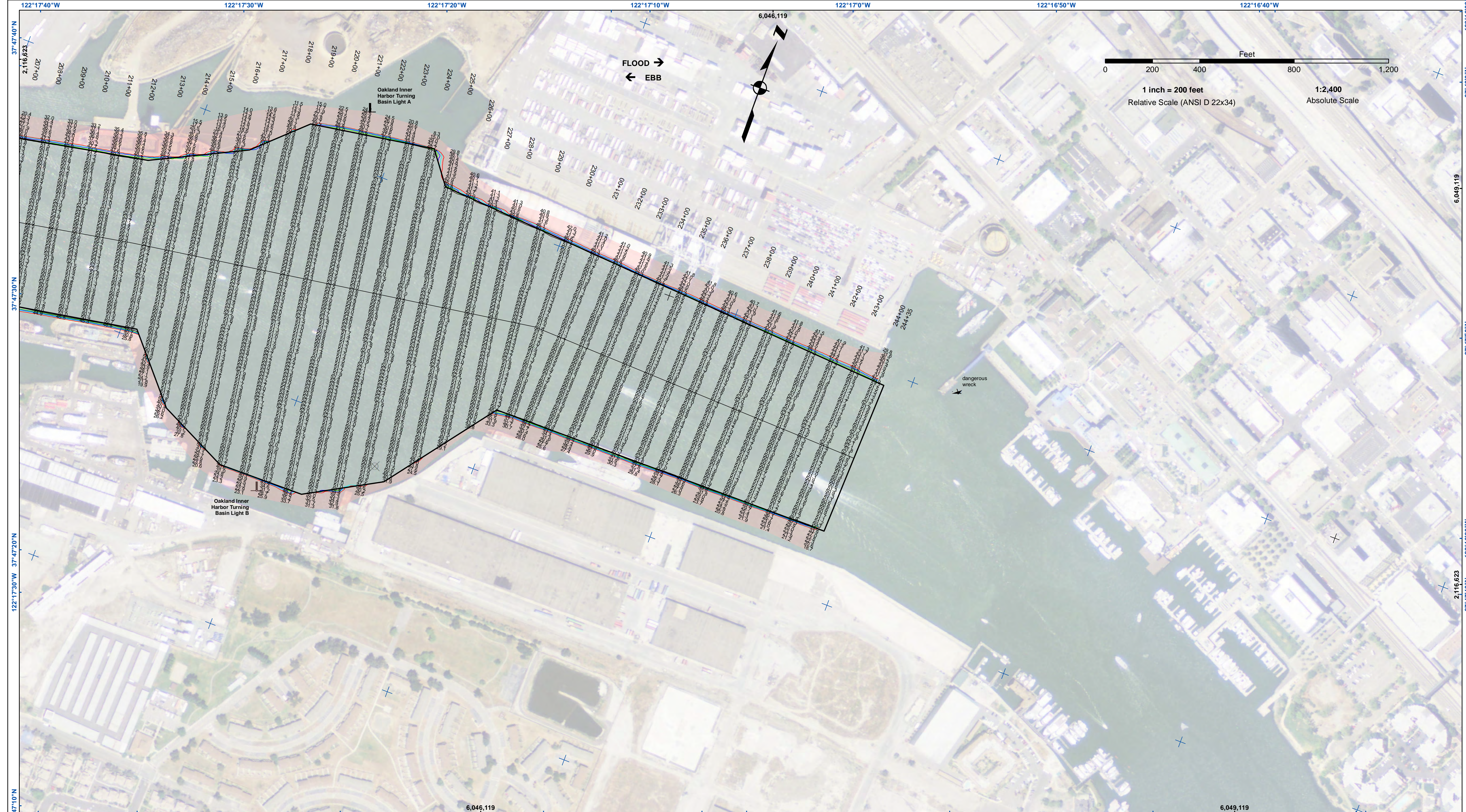
Sheet
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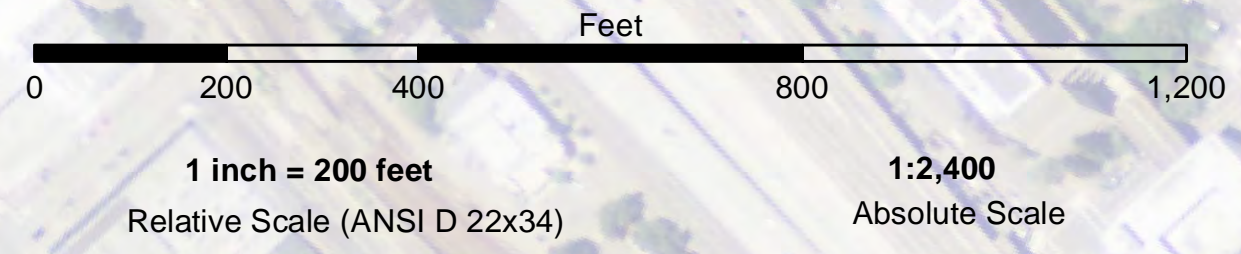
- | | | |
|----------------------------|--------------------|----------|
| Federal Navigation Channel | Beacon, General | Contours |
| Shoaling Area | Obstruction Point | -50 |
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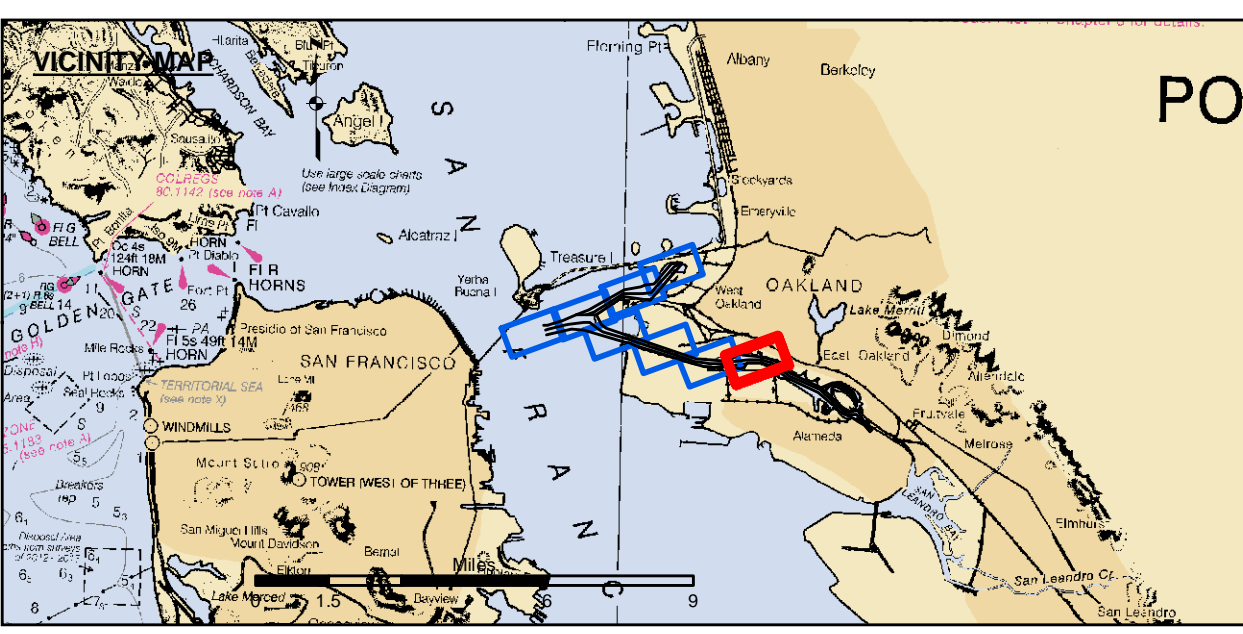


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Submittal: Hydro Survey Team Leader	Designed by:
Recommendation: Navigation Technical Manager	Drawn by:
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- | | | |
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| Federal Navigation Channel | Beacon, General | Contours |
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 VERTICAL CONTROL:
 PCIP: PORT 1 1936/PID HT0854
 OAKLAND INNER REACH 4+8 DISK SET AT SOUTH END OF CLAY STREET, AT THE PORT OF OAKLAND CLAY STREET PIER. ELEVATION: 956 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 7-10 DISK SET IN PARKING LOT AT PIER 6 AMN/V 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.

ALAMEDA COUNTY
OAKLAND HARBOR
 INNER HARBOR
 POST-DREDGE SURVEY
 21 AUGUST 2020
 2, 28, 30 OCTOBER 2020

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