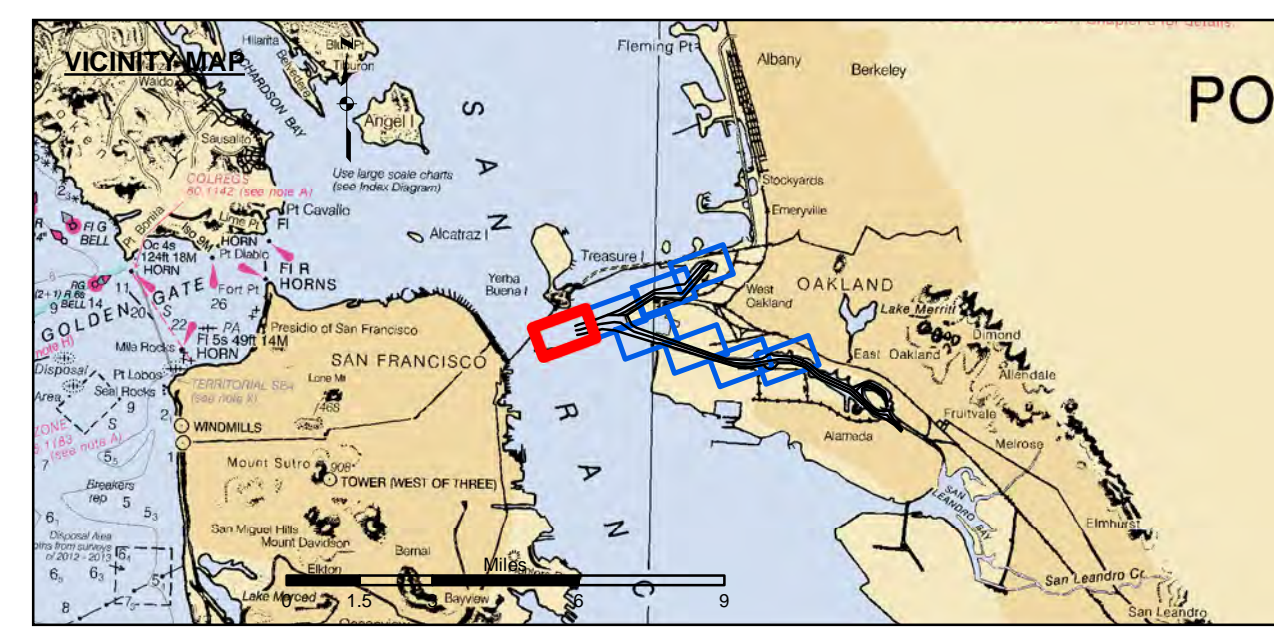


DISCLAIMER
 The United States Government furnishes this information as a service to the public and does not warrant, express or implied, the accuracy, completeness, or reliability of the information. The user is responsible for the results of any application of the data for other than its intended purpose. These data belong to the Government. Therefore, the recipient may not transfer these data to others without also transferring this Disclaimer.

Prepared Under the Direction of JOHN D. CUNNINGHAM LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: Aug 02, 2019
Submitted by: Hydro Survey Team Leader	Designed by:
Recommended by: Navigation Technical Manager	Drawn by:
Approved by: Project Manager	

ALAMEDA COUNTY
OAKLAND HARBOR
 INNER HARBOR
 CONDITION SURVEY
 24-30 JULY 2019

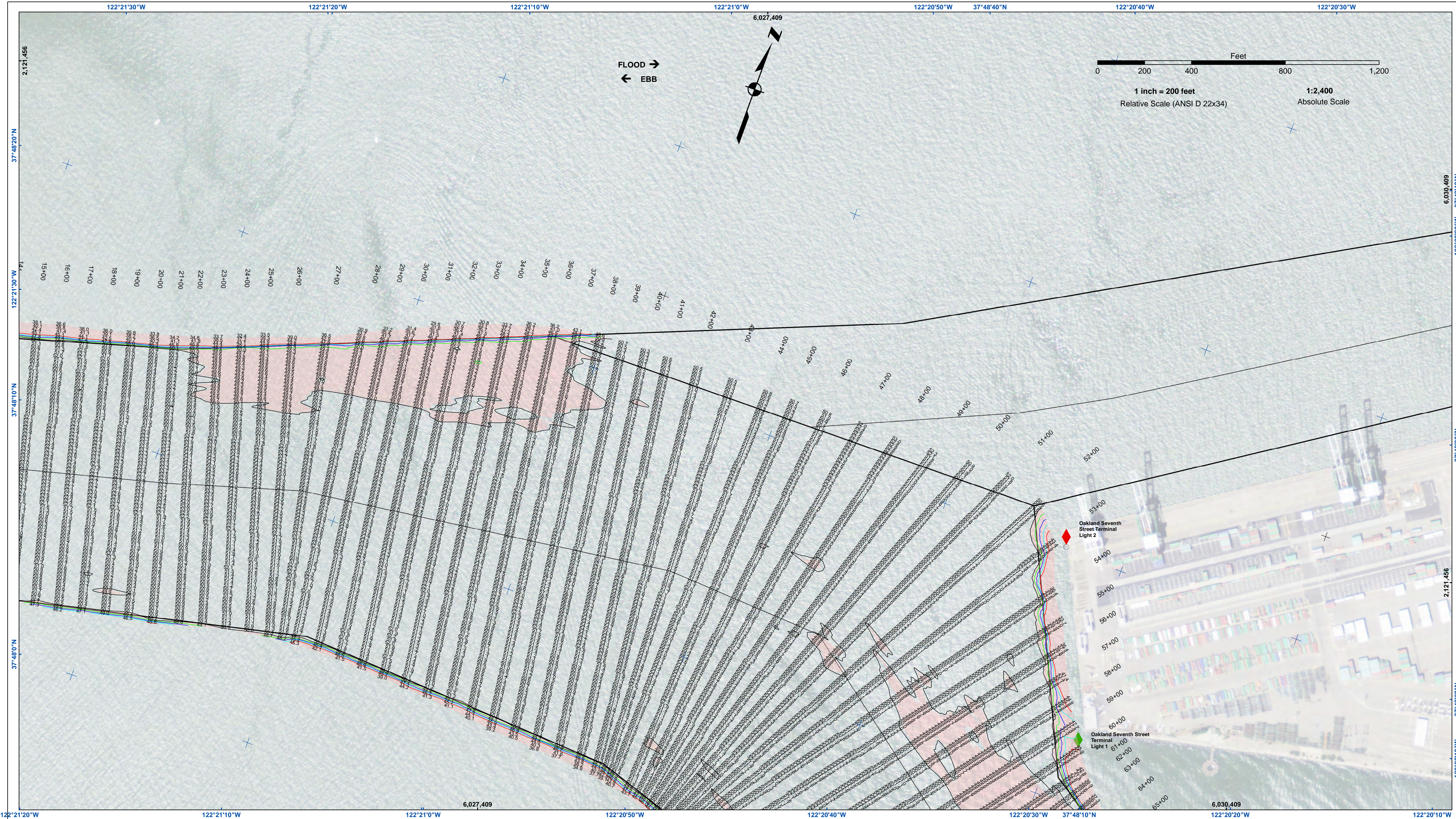


- | | | |
|----------------------------|--------------------|----------|
| Federal Navigation Channel | Beacon, General | Contours |
| Shoaling Area | Obstruction Point | -50 |
| Placement Area | Navigation Buoy | -49 |
| Anchorage Area | Navigation Buoy | -48 |
| Wreck Area | Shoalest Sounding* | -47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

NOTES:
 HORIZONTAL COORDINATE SYSTEM:
 NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE III. DISTANCE UNITS IN U.S. SURVEY FEET.
 VERTICAL DATUM:
 SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.
 THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITION EXISTING AT THAT TIME.
 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.
 SURVEYED BY THE CORPS OF ENGINEERS.
 BASE MAPS ARE USDA NAIP 2010.
 *SHOALEST SOUNDING PER QUARTER PER REACH

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.
 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+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.

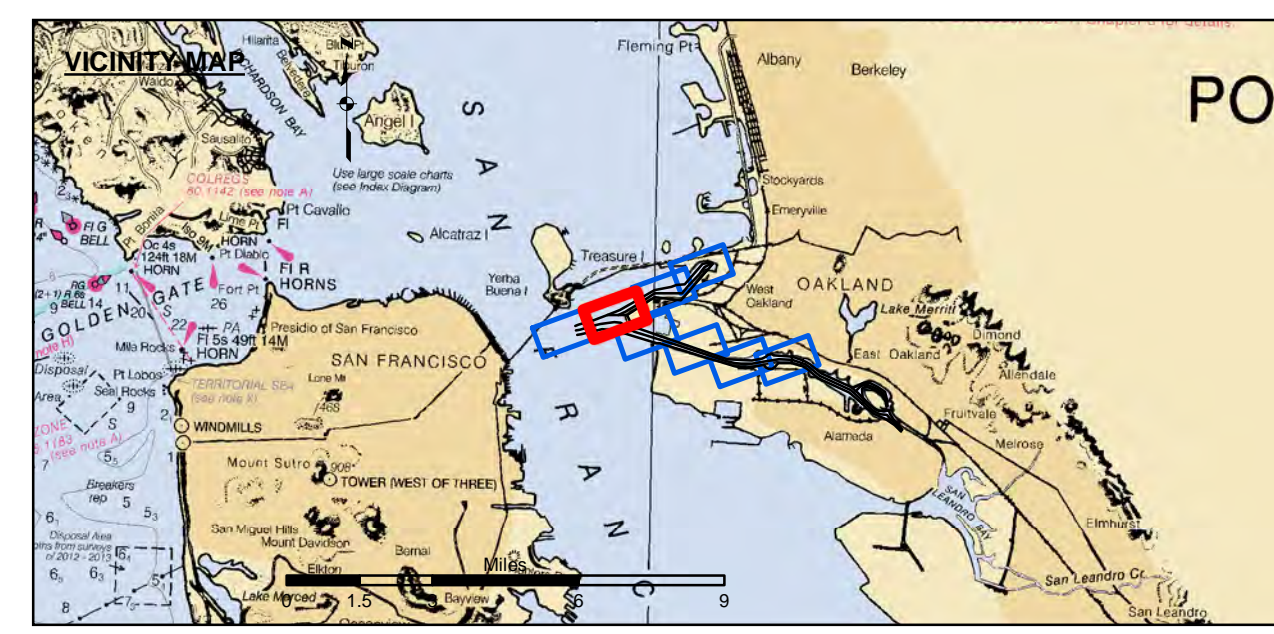
Sheet
Reference
Number
1 of 8



DISCLAIMER
 The United States Government furnishes this information as a public service and does not warrant, express or implied, the accuracy, completeness, or reliability of the data. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

Prepared Under the Direction of JOHN D. CUNNINGHAM LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: Aug 02, 2019
Subject: Hydro Surveys Team Leader	Designed by:
Recommendation: Navigation Technical Manager	Drawn by:
Approved: Project Manager	Checked by:

ALAMEDA COUNTY
OAKLAND HARBOR
 INNER HARBOR
 CONDITION SURVEY
 24-30 JULY 2019

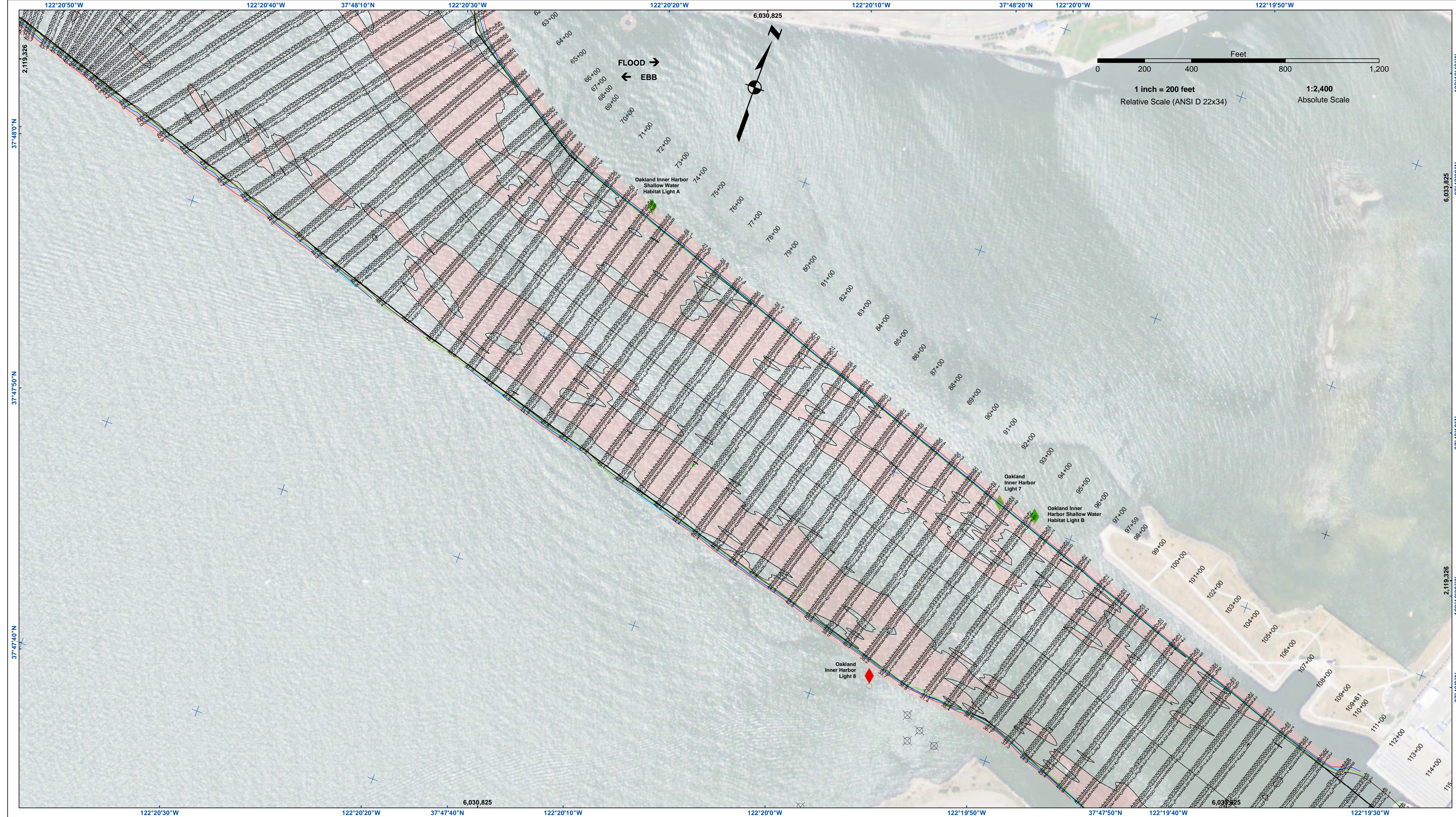


- | | | |
|------------------------------|----------------------|------------|
| — Federal Navigation Channel | ⊥ Beacon, General | — Contours |
| ■ Shoaling Area | ⊗ Obstruction Point | — -50 |
| □ Placement Area | ◇ Navigation Buoy | — -49 |
| - - - Anchorage Area | ◇ Navigation Buoy | — -48 |
| ▨ Wreck Area | ◇ Navigation Buoy | — -47 |
| ⚓ Submerged Wreck | ● Shoalest Sounding* | — -46 |
| ∠ Angle Point | | |

NOTES:
 HORIZONTAL COORDINATE SYSTEM: NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE III. DISTANCE UNITS IN U.S. SURVEY FEET.
 VERTICAL DATUM: SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.
 THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITION EXISTING AT THAT TIME.
 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.
 SURVEYED BY THE CORPS OF ENGINEERS. BASE MAPS ARE USDA NAIP 2010.
 *SHOALEST SOUNDING PER QUARTER PER REACH

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. 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+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 A6211, 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
2 of 8

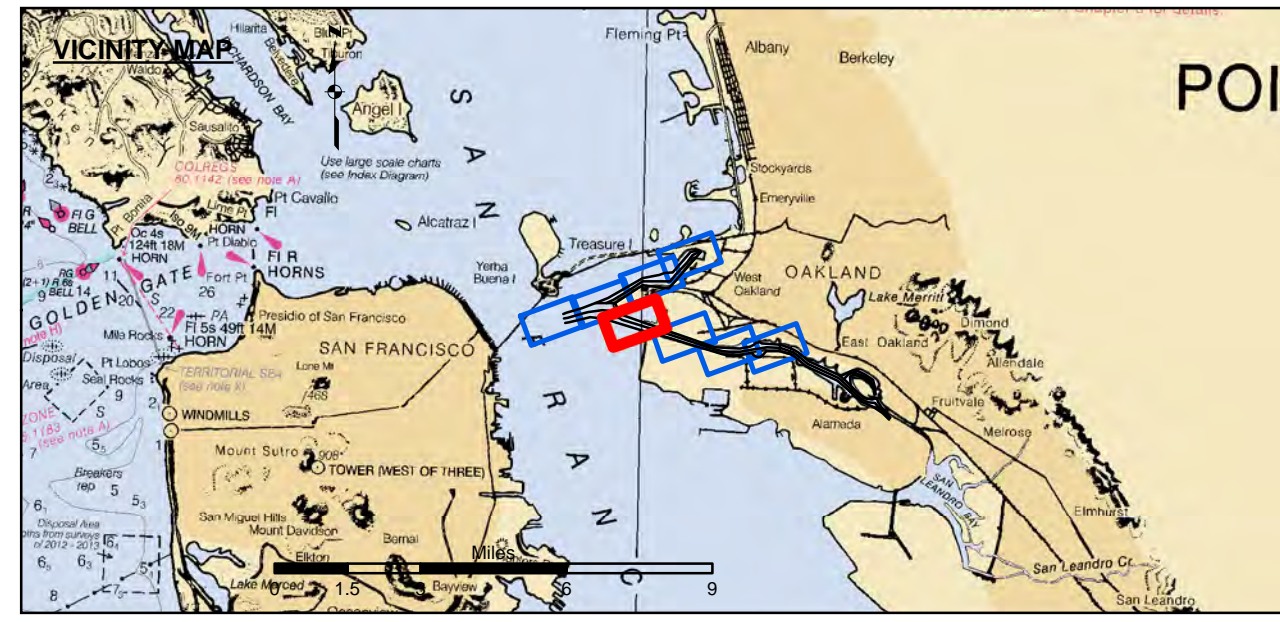


DISCLAIMER: The United States Government furnishes this information as a service to the public and does not warrant, express or implied, the accuracy, completeness, or reliability of the information. The user is responsible for the results of any application of the data for other than its intended purpose. The data represents the results of data collected by the United States Government and is not intended for use in any other application. The user is responsible for the results of any application of the data for other than its intended purpose. The data represents the results of data collected by the United States Government and is not intended for use in any other application. The user is responsible for the results of any application of the data for other than its intended purpose.

Chart Date:	Aug 13, 2019
Designed by:	
Drawn by:	
Surveyed By:	JOHN D. CUNNINGHAM
Plotted By:	
Checked By:	
Approved:	

ALAMEDA COUNTY
OAKLAND HARBOR
 INNER HARBOR
 CONDITION SURVEY
 24-30 JULY 2019

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 | | |

NOTES:
 HORIZONTAL COORDINATE SYSTEM: NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE III. DISTANCE UNITS IN U.S. SURVEY FEET.
 VERTICAL DATUM: SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER. 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.
 THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITION EXISTING AT THAT TIME.
 SURVEYED BY THE CORPS OF ENGINEERS. BASE MAPS ARE USDA NAIP 2010.
 *SHOALEST SOUNDING PER QUARTER PER REACH

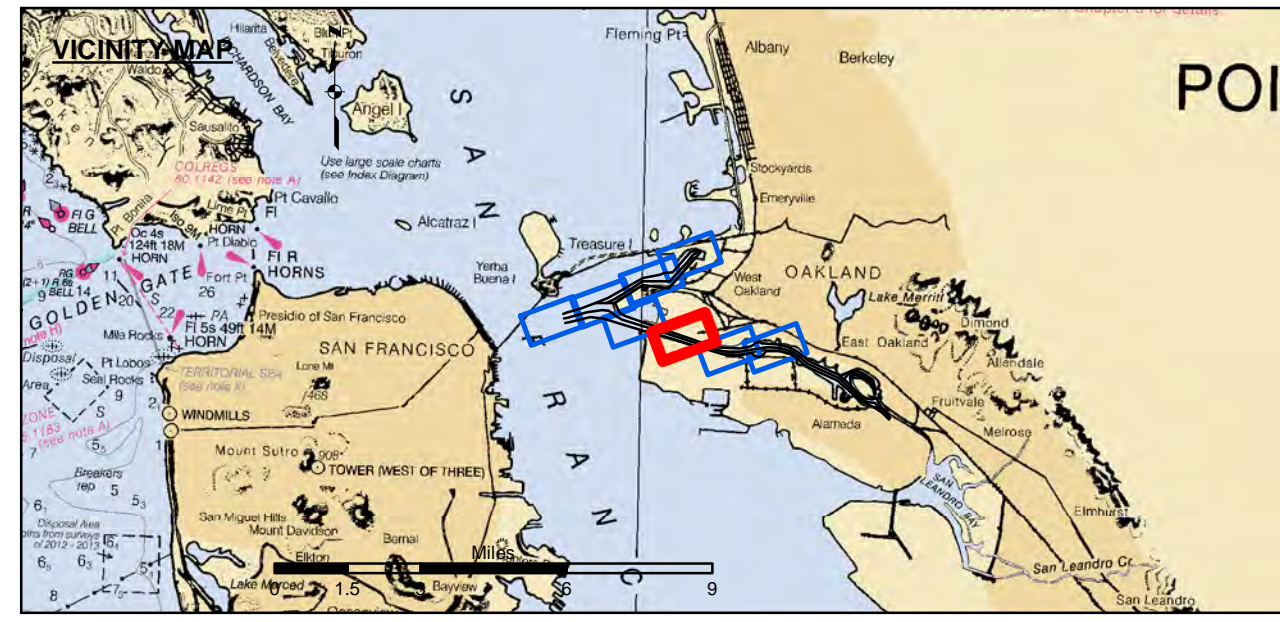
DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY. THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY. THE PROJECT DEPTHS ARE AS FOLLOWS:
 OUTER AND INNER HARBOR IS -50 FEET
 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+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. LPOP 1: 941 4777 B TIDAL/PID A/E211, 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.



DISCLAIMER
 The United States Government furnishes this information as a service to the public and does not warrant, express or implied, the accuracy, completeness, or reliability of the information. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

Prepared Under the Direction of	Chart Date:
JOHN D. CUNNINGHAM	Aug 02, 2019
LT COLONEL, C.E., DISTRICT ENGINEER	Designed by:
Submitted:	Hydro Survey Team Leader
Recommended:	Navigation Technical Manager
Approved:	Project Manager
Surveyed By:	Plotted By:
Checked By:	Drawn by:

ALAMEDA COUNTY
 OAKLAND HARBOR
 INNER HARBOR
 CONDITION SURVEY
 24-30 JULY 2019

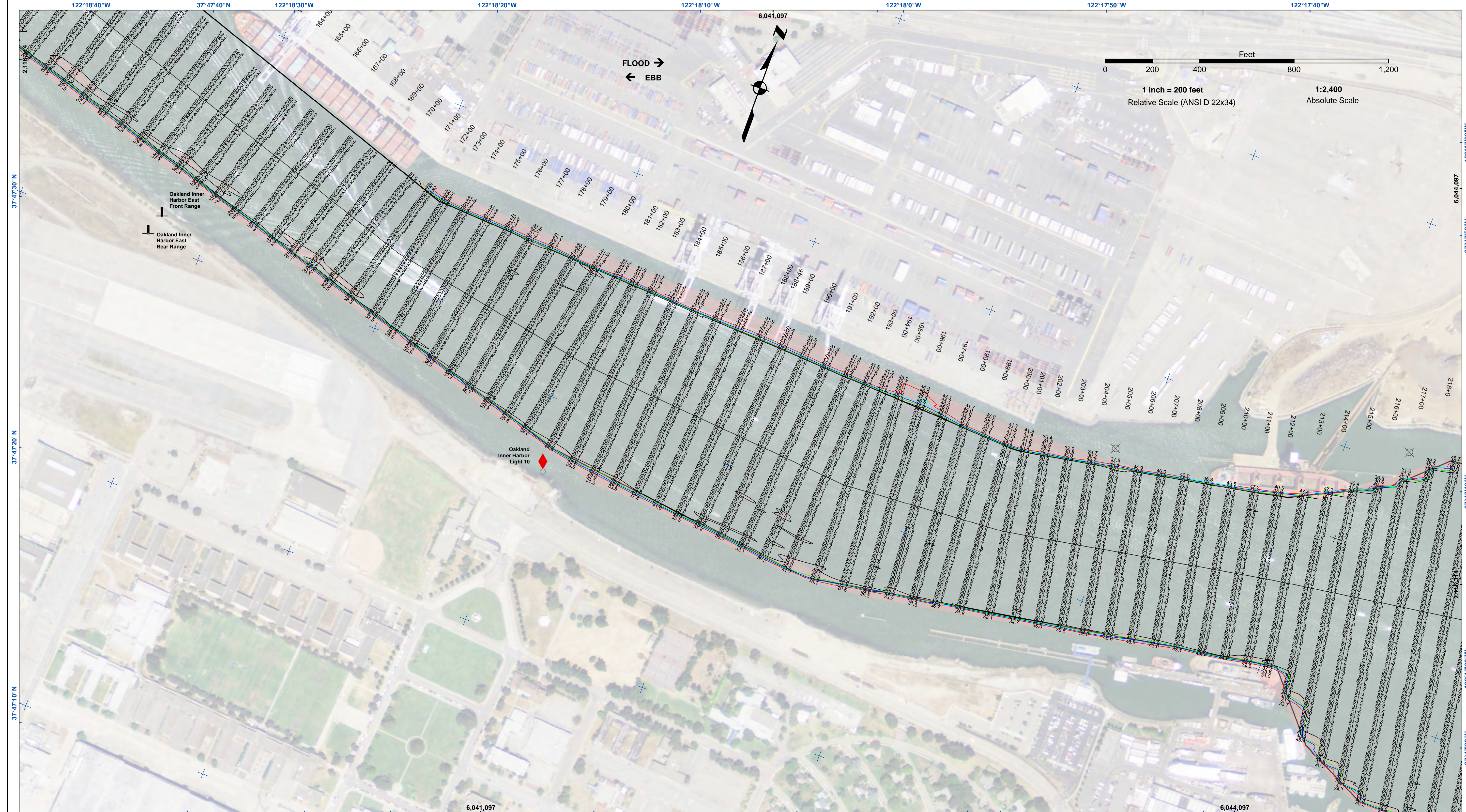


- | | | |
|----------------------------|--------------------|-----------------|
| Federal Navigation Channel | Beacon, General | Contours |
| Shoaling Area | Obstruction Point | -50 |
| Placement Area | Navigation Buoy | -49 |
| Anchorage Area | Navigation Buoy | -48 |
| Wreck Area | Shoalest Sounding*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

NOTES:
 HORIZONTAL COORDINATE SYSTEM: NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE III. DISTANCE UNITS IN U.S. SURVEY FEET.
 VERTICAL DATUM: SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER. SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.
 THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITION EXISTING AT THAT TIME.
 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.
 SURVEYED BY THE CORPS OF ENGINEERS. BASE MAPS ARE USDA NAIP 2010.
 *SHOALEST SOUNDING PER QUARTER PER REACH

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. 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:
 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
6 of 8



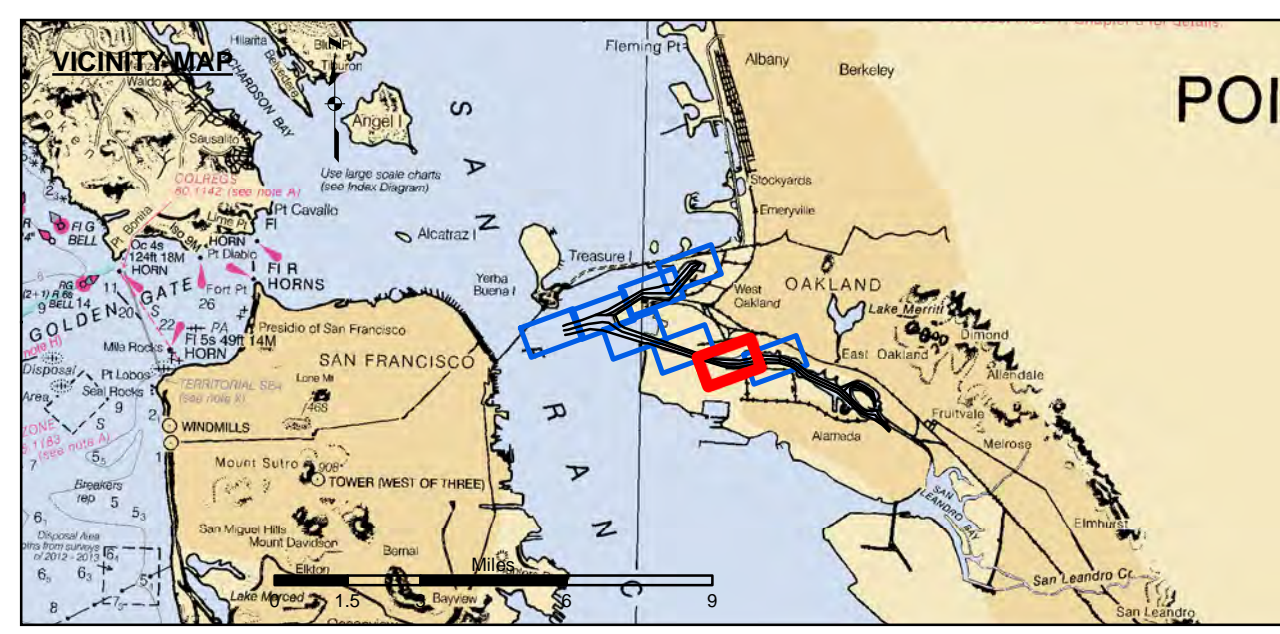
US Army Corps of Engineers
 San Francisco District
 450 Golden Gate Ave
 San Francisco, CA 94102

DISCLAIMER
 The United States Government furnishes this information as a service to the public. It is not intended to be used for any purpose other than that intended by the Government. The user is responsible for the results of any application of the data for other than the intended purpose. The user is responsible for the results of any application of the data for other than the intended purpose. The user is responsible for the results of any application of the data for other than the intended purpose.

Chart Date:	Aug 02, 2019
Designed by:	
Drawn by:	
Surveyed By:	
Plotted By:	
Checked By:	
Approved:	

CALIFORNIA
OAKLAND HARBOR
INNER HARBOR
CONDITION SURVEY
 24-30 JULY 2019

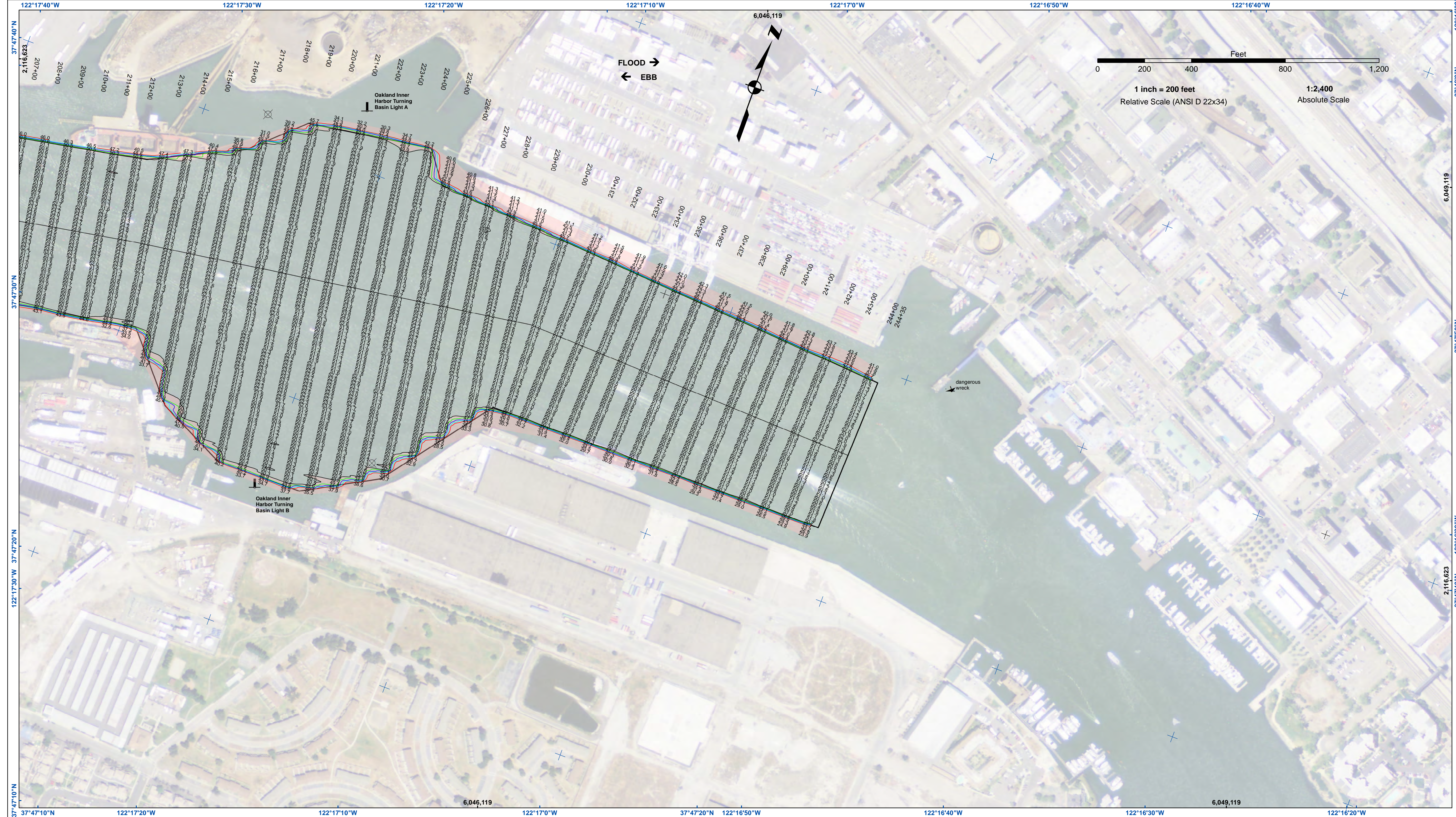
Sheet
Reference
Number
7 of 8



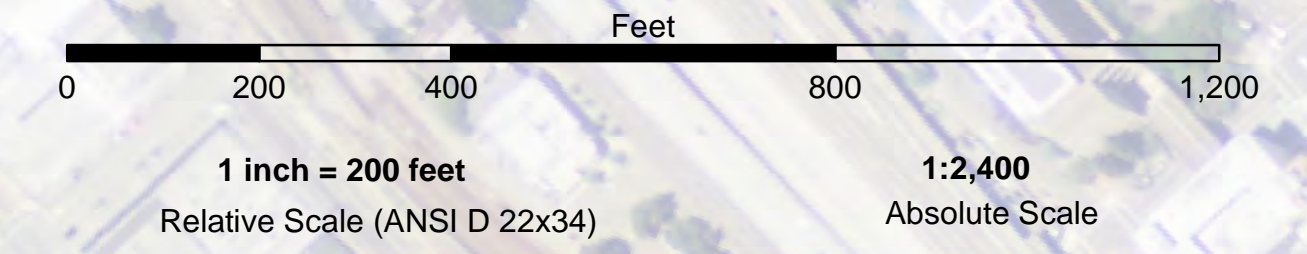
- Federal Navigation Channel
- Shoaling Area
- Placement Area
- Anchorage Area
- Wreck Area
- Submerged Wreck
- Angle Point
- Beacon, General
- Obstruction Point
- Navigation Buoy
- Navigation Buoy
- Shoalest Sounding*
- Contours
- 50
- 49
- 48
- 47
- 46

NOTES:
 HORIZONTAL COORDINATE SYSTEM: NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE III. DISTANCE UNITS IN U.S. SURVEY FEET.
 VERTICAL DATUM: SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.
 THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITION EXISTING AT THAT TIME.
 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.
 SURVEYED BY THE CORPS OF ENGINEERS. BASE MAPS ARE USDA NAIP 2010.
 *SHOALEST SOUNDING PER QUARTER PER REACH

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. 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+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.



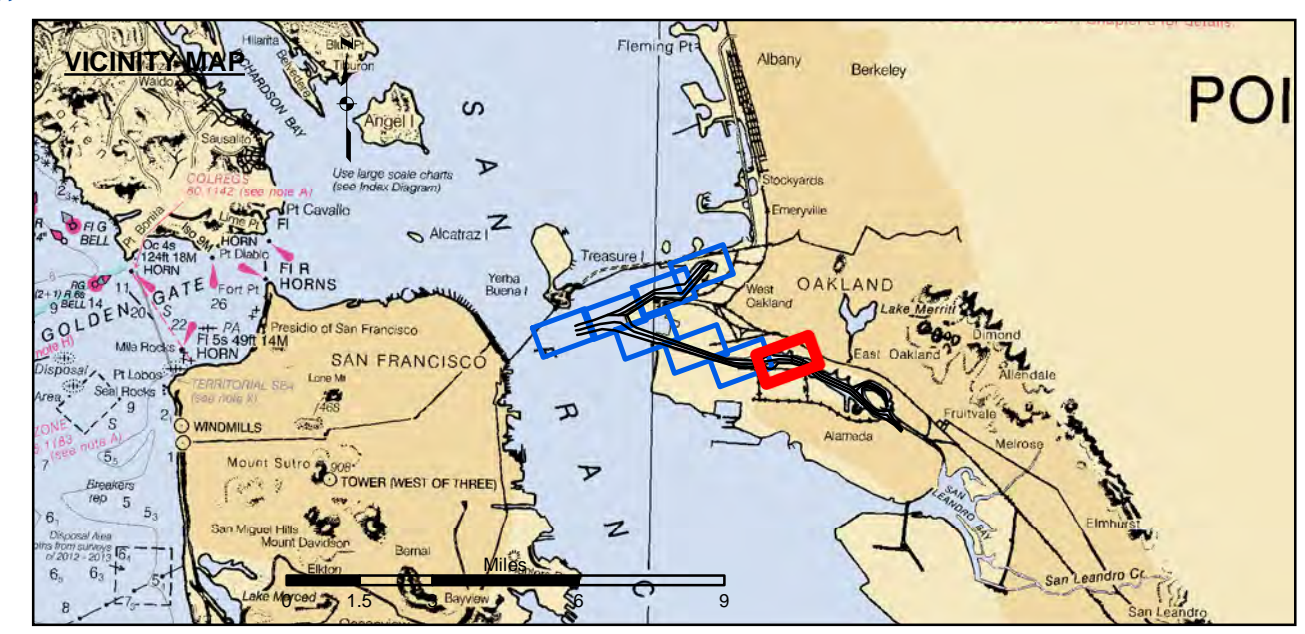
US Army Corps of Engineers
 San Francisco District
 450 Golden Gate Ave
 San Francisco, CA 94102



DISCLAIMER
 The United States Government furnishes this information as a public service and does not warrant, express or implied, the accuracy, completeness, or reliability of the data. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. These data belong to the Government. Therefore the recipient may not transfer these data to others without also transferring this disclaimer.

Chart Date:	Aug 02, 2019
Surveyed By:	LT COLONEL C.E. CUNNINGHAM
Plotted By:	Hydro Survey Team Leader
Checked By:	Navigation Technical Manager
Designed by:	
Drawn by:	

ALAMEDA COUNTY
 OAKLAND HARBOR
 INNER HARBOR
 CONDITION SURVEY
 24-30 JULY 2019



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:
 HORIZONTAL COORDINATE SYSTEM:
 NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE III. DISTANCE UNITS IN U.S. SURVEY FEET.
 VERTICAL DATUM:
 SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.
 THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITION EXISTING AT THAT TIME.
 SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.
 SURVEYED BY THE CORPS OF ENGINEERS.
 BASE MAPS ARE USDA NAIP 2010.
 *SHOALEST SOUNDING PER QUARTER PER REACH

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.
 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:
 PCIP: 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.
 LPOP 1: 941 4777 B TIDAL/PID A6211, 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.

Sheet Reference Number
 8 of 8