

PRELIMINARY ISSUE
THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY

**NAD 83
CENTERLINE ANGLE POINTS
(BAR & ENTRANCE)**

PT	X	Y
C1	5936273.49	2172157.43
C2	5938147.59	2171508.43
C3	5940265.09	2170773.43
C4	5943553.39	2166602.43
C5	5944545.29	2166122.43
C6	5945376.39	2165957.23
C7	5946085.69	2166728.23
C8	5946886.39	2167508.33
C9	5947166.09	2168359.43
C10	5948049.39	2169917.43
C11	5949433.89	2170455.43
C12	5949233.79	2171119.43
C13	5950417.39	2171891.43
C14	5951329.29	2172556.43
C15	5952138.39	2173530.43
C16	5952999.89	2174706.43
C17	5953711.89	2180451.43
C18	5956236.79	2183159.43
C19	5957823.09	2186379.43
C20	5958152.59	2187513.43
C21	5958681.79	2187878.43
C22	5959291.79	2188078.43
C23	5959581.79	2189078.43

**NAD 83
CHANNEL ANGLE POINTS
HUMBOLDT BAY (BAR & ENTRANCE)**

PT	X	Y	PT	X	Y
1	5936596.69	2173163.63	24	5959081.79	2187578.43
2	5938385.39	2172268.83	25	5958241.69	2187381.23
3	5940404.09	2171258.93	26	5958007.99	2186903.83
4	5943666.09	2169944.43	27	5958425.99	2183993.63
5	5944727.49	2168468.93	28	5958165.59	2181942.63
6	5945239.99	2166690.33	29	5956348.69	2181424.83
7	5945752.59	2165911.73	30	5955996.99	2180383.43
8	5946464.09	2165131.33	31	5955163.09	2178504.63
9	5946953.59	2164279.53	32	5952300.39	2173413.53
10	5947631.69	2170042.13	33	5951516.19	2172459.53
11	5948193.09	2170679.33	34	5950526.69	2171724.13
12	5949124.59	2171287.03	35	5949343.09	2170952.03
13	5950308.09	2172059.13	36	5948674.79	2170232.13
14	5951141.79	2172853.23	37	5948301.49	2169794.33
15	5951976.39	2173548.23	38	5947989.59	2169234.23
16	5952816.79	2174808.43	39	5948007.49	2168711.23
17	5953584.79	2180520.43	40	5946431.39	2168537.23
18	5956047.79	2183225.33	41	5945672.89	2165182.43
19	5956738.19	2187056.43	42	5945354.09	2162524.63
20	5957883.59	2187647.53	43	5944363.09	2162776.33
21	5958881.79	2188378.43	44	5943441.39	2162611.63
22	5959581.79	2188078.43	45	5943125.19	2172287.53
23	5959681.79	2188378.43	46	5937908.79	2170746.43
			47	5936950.29	2171151.43

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

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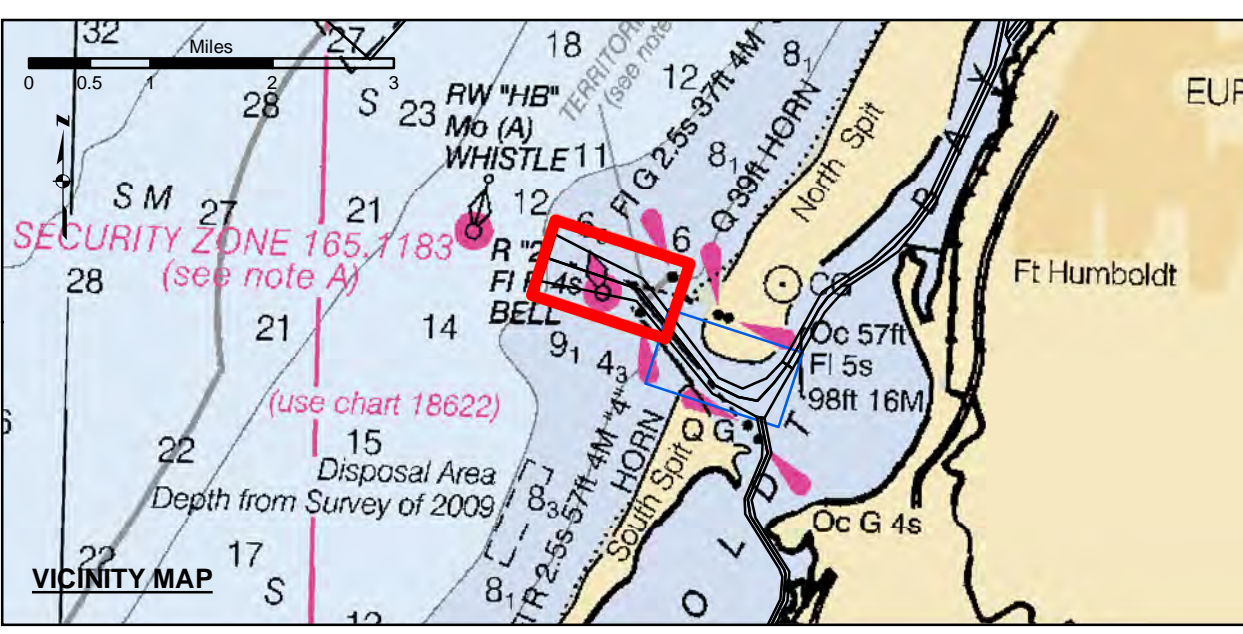
PREPARED UNDER THE DIRECTION OF
JOHN D. CUNNINGHAM
LT COLONEL, C.E. DISTRICT ENGINEER

Submittal:	Hydro Survey Team Leader	Surveyed By:	Plotted By:	Checked By:	Drawn by:
Recommendation:	Chief, Hydro Survey Section	PDT	PDT	PDT	PDT
Approval:	Chief, Construction Branch				

Chart Date: Jul 24, 2020

CALIFORNIA
HUMBOLDT COUNTY
**HUMBOLDT BAY
BAR & ENTRANCE CHANNEL
CONDITION SURVEY**
19 JULY 2020

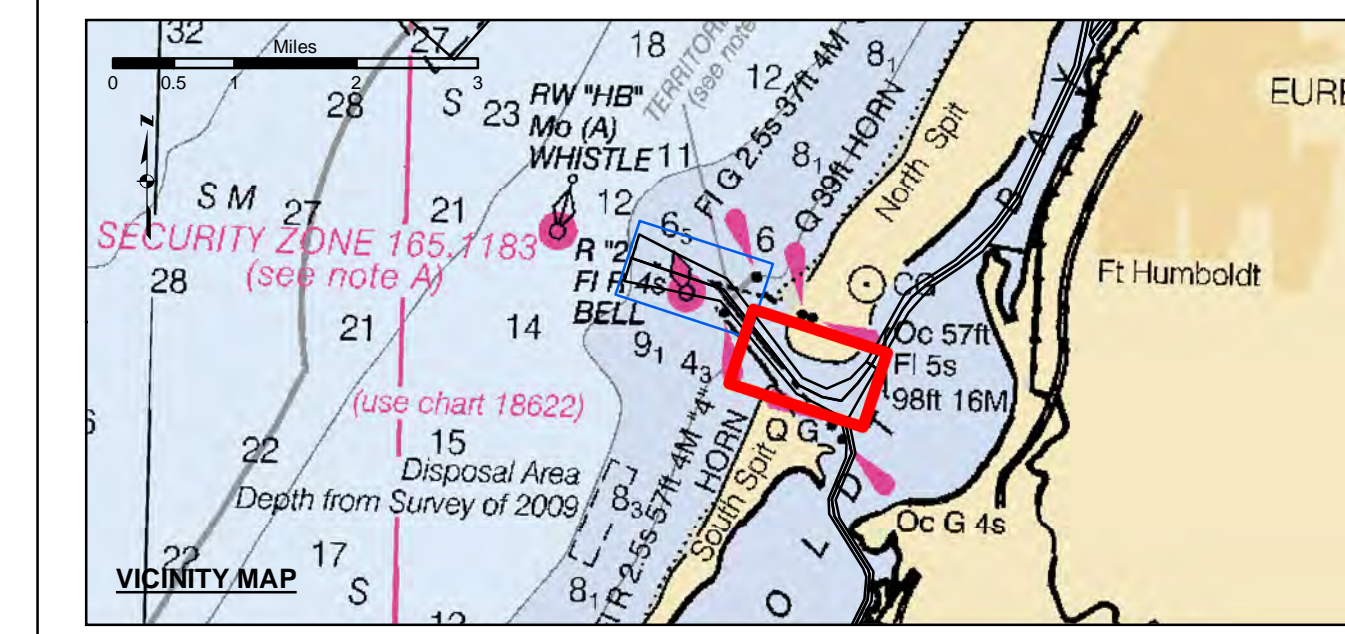
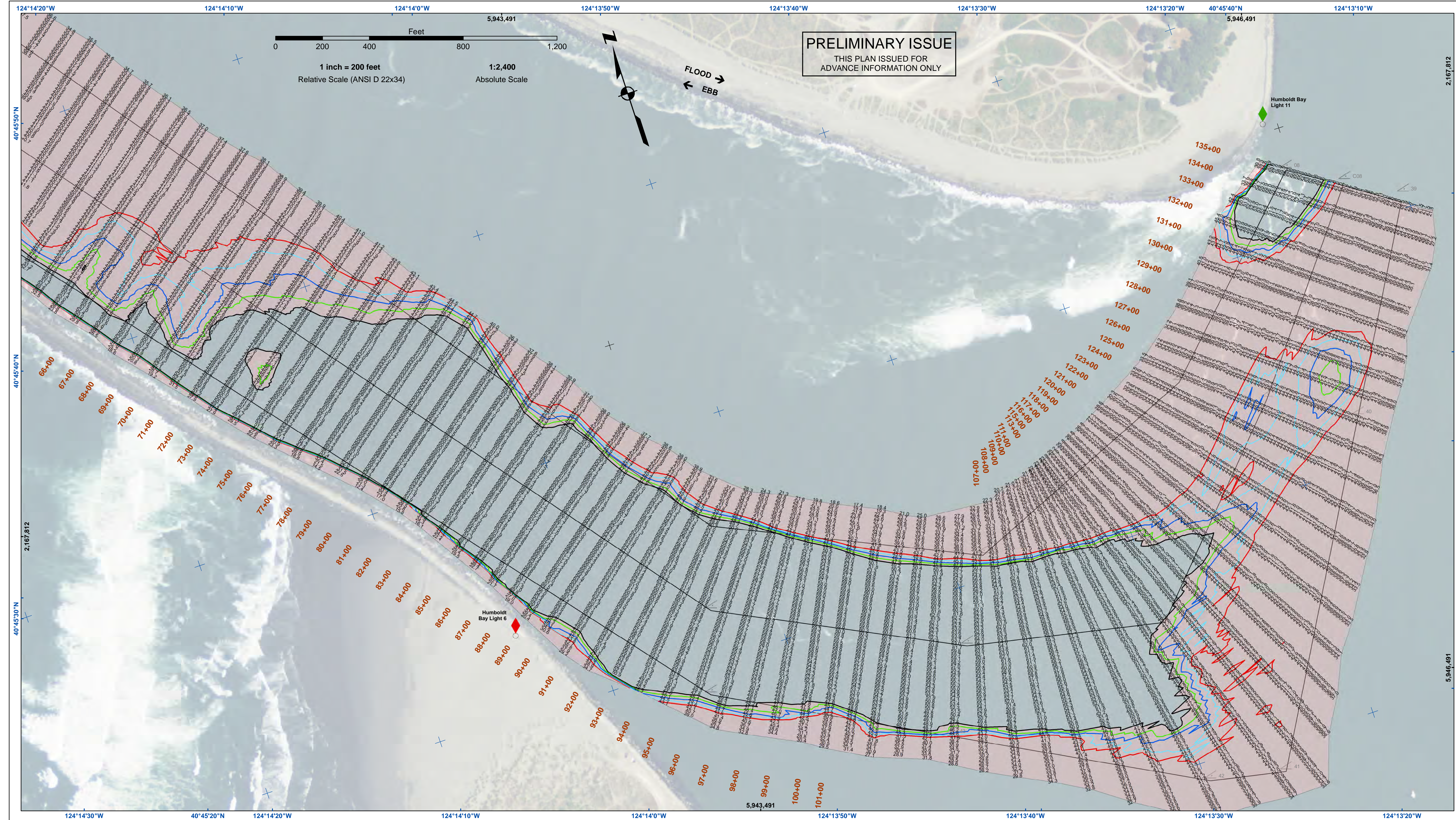
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Number
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- Federal Navigation Channel
- Shoaling Area
- Placement Area
- Anchorage Area
- Wreck Area
- Submerged Wreck
- Zone_I_Angle_Points
- Beacon, General
- Obstruction Point
- Navigation Buoy
- Navigation Buoy
- Shoalest Sounding*
- Contours
- 48
- 47
- 46
- 45
- 44

NOTES:
DRAWINGS NOT TO BE USED AS 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 LOCATION REPRESENT THE POSITION OF THE SINKER ONLY.
SURVEYED BY THE CORPS OF ENGINEERS.
SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTHS OF A FOOT.
SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.
PLANE GRID AND COORDINATES ARE BASED ON THE STATE OF CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, ZONE 1 NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY THE NATIONAL OCEAN SURVEY.
PROJECT DEPTHS ARE AS FOLLOWS:
BAR & ENTRANCE CHANNEL = 48 FEET
NORTH BAY, SAMOA TO MILE 5.0 & = 38 FEET
EUREKA CHANNEL, FIELDS LANDING CHANNEL & MILE 5.0 TO "N" STREET = 26 FEET

1:00 INDICATES THE NUMBER AND BEGINNING OF A LINE OF SOUNDINGS.
SOUNDINGS ARE BASED ON TIDE GAUGES REFERENCED TO U.S.C. & G.S.
Vertical and Horizontal Control:
NOAA Station: 941 8767 - North Spit, CA
Benchmark:
NO 11 1940 (PID: LV0359)
MLW Elev: 4.251m
Tides:
RTK GPS, using GEOID12a and VDATUM
RTK elevations calibrated at 10.0ft nail at Coast Guard Station Humboldt Bay
Position:
RTK Positions



	Federal Navigation Channel		Beacon, General	Contours	
	Shoaling Area		Navigation Buoy		-48
	Placement Area		Navigation Buoy		-47
	Anchorage Area		Shoalest Sounding*		-46
	Wreck Area				-45
	Submerged Wreck				-44
	Zone_I_Angle_Points				

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 RTK elevations calibrated at 10.0ft nail at Coast Guard Station Humboldt Bay
 Position:
 RTK Positions

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 San Francisco District
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Prepared Under the Direction of JOHN D. CUNNINGHAM LT Colonel, C.E., District Engineer	Chart Date: Jul 24, 2020	PDT
Submitted: Hydro Survey Team Leader	Designed by: PDT	Drawn by: PDT
Recommended: Chief, Hydro Survey Section	Checked by: PDT	
Approved: Chief, Construction Branch		

CALIFORNIA
 HUMBOLDT COUNTY
**HUMBOLDT BAY
 BAR & ENTRANCE CHANNEL
 CONDITION SURVEY
 19 JULY 2020**

**Sheet
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