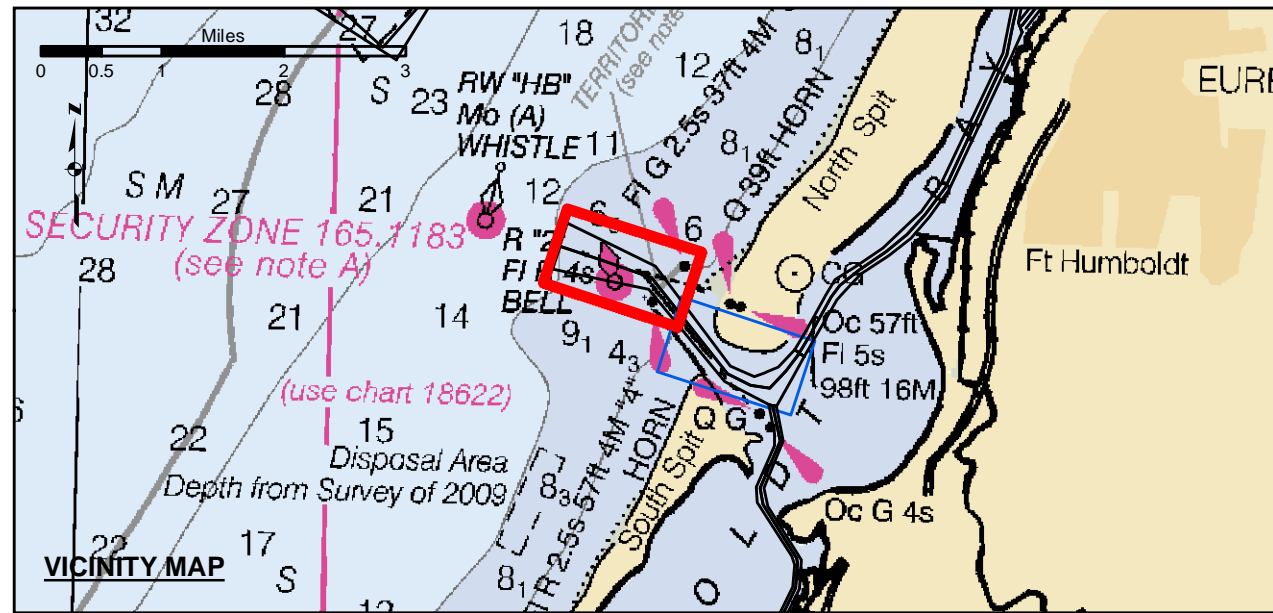


NAD 83 CENTERLINE ANGLE POINTS HUMBOLDT BAY (BAR & ENTRANCE)		
LINE PT	X	Y
C1	5936273.49	2172157.43
C2	5938147.59	2171508.43
C3	5940365.09	2170773.43
C4	5943553.39	2166602.43
C5	5944545.29	2166122.43
C6	5945376.39	2165957.23
C7	5946085.69	2165728.23
C8	5946889.99	2165508.33
C9	5947166.09	2165359.43
C10	5948049.99	2165917.43
C11	5949433.89	2170455.43
C12	5949233.79	2171119.43
C13	5950417.39	2171891.43
C14	5951329.29	2172551.43
C15	5952138.39	2173530.43
C16	5952989.89	2174706.43
C17	5955671.89	2180451.43
C18	5956236.79	2183159.43
C19	5957623.09	2189379.43
C20	5958152.59	2187513.43
C21	5958581.79	2187878.43
C22	5959291.79	2188678.43
C23	5959581.79	2189078.43

NAD 83 CHANNEL ANGLE POINTS HUMBOLDT BAY (BAR & ENTRANCE)					
LINE PT	X	Y	LINE PT	X	Y
1	5936596.69	2173163.63	24	5959081.79	2187578.43
2	5938385.39	2172268.83	25	5958421.69	2187381.23
3	5940404.09	2171258.93	26	5958007.99	2186903.83
4	5943666.09	2168944.43	27	5956425.99	2183093.63
5	5944727.49	2166468.93	28	5956165.59	2181842.63
6	5945239.39	2166690.33	29	5956346.69	2181424.83
7	5945752.39	2166911.73	30	5956566.39	2180383.43
8	5946464.03	2167631.33	31	5956165.09	2174604.63
9	5946953.59	2168479.53	32	5956230.39	2173413.53
10	5947931.59	2170042.13	33	5956151.79	2172459.63
11	5948193.09	2170679.33	34	5956526.69	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	5947386.59	2169234.23
16	5952816.79	2174808.43	39	5946907.49	2167381.23
17	5955484.79	2180520.43	40	5946431.39	2166537.23
18	5956047.79	2183225.39	41	5945672.89	2165192.43
19	5957636.19	2187059.43	42	5945356.09	2163554.63
20	5957883.59	2187647.53	43	5944363.09	2165776.33
21	5958581.79	2188378.43	44	5943441.39	2162611.63
22	5959581.79	2189078.43	45	5941215.19	2170287.33
23	5959681.79	2188378.43	46	5937908.79	2170746.43
			47	5935950.29	2171151.43



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, SAMOATO 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 8787 - 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

US Army Corps
of Engineers

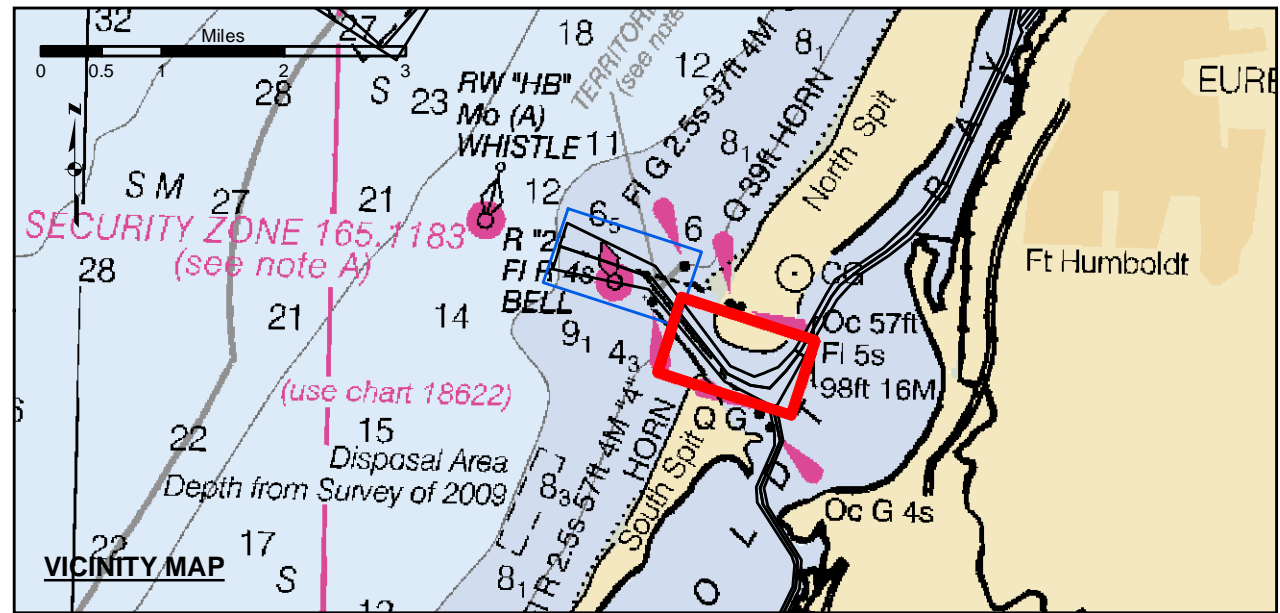
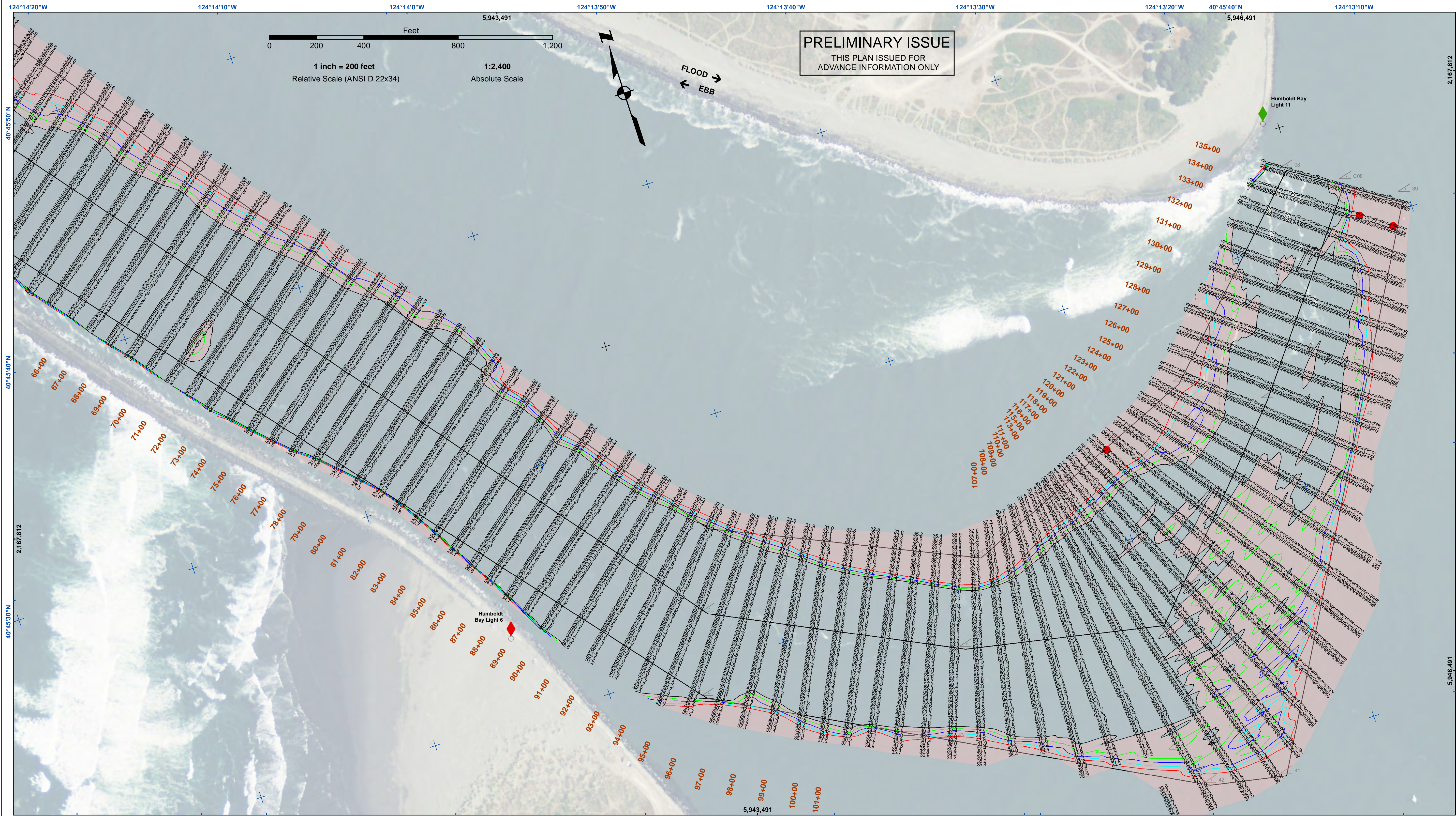
San Francisco District
450 Golden Gate Ave
San Francisco, CA 94102

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Prepared Under the Direction of LT COLONEL C.E. DISTRICT ENGINEER	Surveyed By:	Chart Date:
Submitted: Hydro Survey Team Leader	Plotted By:	Aug 26, 2021
Recommended: Chief, Hydro Survey Section	Checked By:	Designed by:
Approved: Chief, Construction Branch	PDT	Drawn by:
	PDT	PDT

HUMBOLDT COUNTY
HUMBOLDT BAY
BAR & ENTRANCE CHANNEL
CONDITION SURVEY
20 & 25 AUGUST 2021

Sheet
Reference
Number
1 of 2



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

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Benchmark:
NO 11 1940 (PID: LV0359)
MLLW Elev: 4.251m

Tides:
RTK GPS, using GEOID12a and VDUTUM
RTK elevations calibrated at 10.0ft nail at Coast Guard Station Humboldt Bay

Position:
RTK Positions



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	Chart Date:
LT COLONEL C.E. DISTRICT ENGINEER	Aug 26, 2021
Submitted:	Designed by:
Hydro Survey Team Leader	PDT
Recommended:	Checked by:
Chief, Hydro Survey Section	PDT
Approved:	Drawn by:
Chief, Construction Branch	PDT

HUMBOLDT COUNTY

HUMBOLDT BAY

BAR & ENTRANCE CHANNEL

CONDITION SURVEY

20 & 25 AUGUST 2021

Sheet

Reference

Number

2 of 2