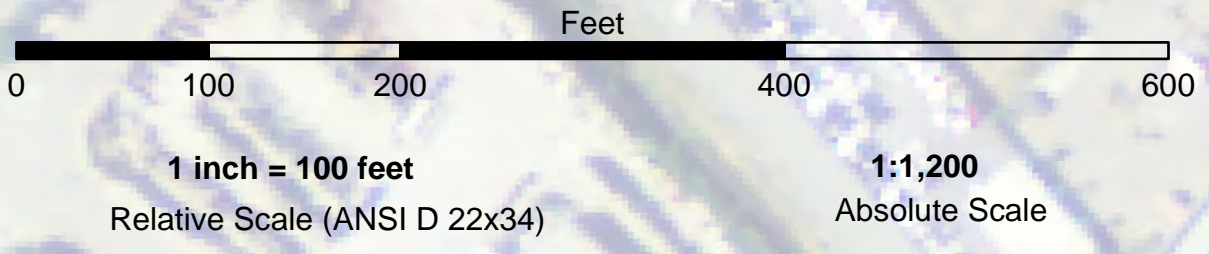
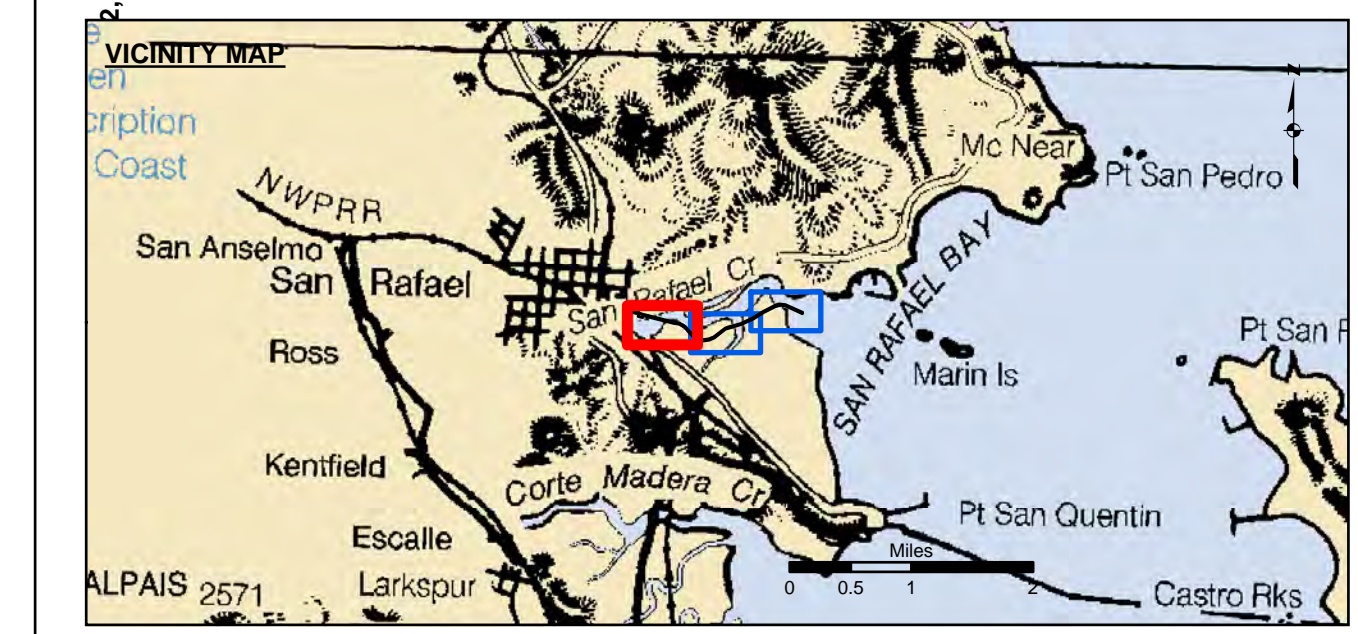


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NAD 1983 CENTERLINE ANGLE POINTS			NAD 1983 CHANNEL ANGLE POINTS			NAD 1983 CHANNEL ANGLE POINTS		
ANGLE PT	X	Y	ANGLE PT	X	Y	ANGLE PT	X	Y
CO1	5987089.37	2181692.15	1	5987101.87	2181719.45	23	5979972.37	2181637.25
CO2	5986334.07	2182035.55	2	5986637.57	2181930.55	24	5979945.57	2181540.95
CO3	5986088.27	2182054.45	3	5986637.57	2182065.05	25	5980138.27	2181487.25
CO4	5985885.57	2181993.85	4	5986084.97	2182084.85	26	5980165.07	2181583.65
CO5	5985380.77	2181729.75	5	5985874.27	2182021.75	27	5981470.57	2181246.85
CO6	5984935.97	2181458.25	6	5985365.97	2181755.85	28	5981713.67	2181206.95
CO7	5984421.07	2181213.45	7	5984921.77	2181484.65	29	5981880.67	2181121.75
CO8	5983862.47	2181058.95	8	5984410.57	2181241.65	30	5981952.57	2181067.35
CO9	5983735.07	2181010.85	9	5983853.17	2181087.55	31	5982244.97	2180738.05
C10	5983242.97	2180634.65	10	5983720.27	2181037.35	32	5982461.67	2180578.65
C11	5983023.37	2180542.35	11	5983227.77	2180660.75	33	5982755.97	2180482.65
C12	5982759.17	2180513.25	12	5983015.77	2180571.65	34	5983030.97	2180512.95
C13	5982475.57	2180605.75	13	5982762.27	2180543.75	35	5983258.17	2180608.45
C14	5982265.37	2180760.35	14	5982489.47	2180632.75	36	5983749.77	2180984.35
C15	5981973.07	2181089.55	15	5982285.67	2180782.65	37	5984431.57	2181185.15
C16	5981896.67	2181147.35	16	5981993.57	2181111.65	38	5984431.57	2181185.15
C17	5981723.17	2181235.75	17	5981912.57	2181172.85	39	5984950.27	2181431.85
C18	5981476.77	2181276.25	18	5981732.57	2181264.65	40	5985395.57	2181703.65
C19	5980172.77	2181612.05	19	5981482.97	2181305.55	41	5985896.97	2181965.95
C20	5919679.07	2181750.05	20	5980180.57	2181641.55	42	5986091.47	2182024.15
			21	5979689.27	2181778.35	43	5986326.57	2182006.05
			22	5979668.87	2181721.75	44	5987076.97	2181664.85



- 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**
- 5
- 4
- 3
- 2
- 1

NOTES:
DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY.
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SURVEYED BY THE CORPS OF ENGINEERS.

SOUNDINGS FOR ARE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST FOOT AND TENTH OF A FOOT.

SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.

PLANE GRID AND COORDINATES ARE BASED ON LAMBERT PROJECTION, ZONE III NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY NATIONAL OCEAN SURVEY.

THE PROJECT DEPTH IS 5 FEET.

HORIZONTAL CONTROL: DESIGNATION, SOURCE, XYZ COAST GUARD D-BEACON

VERTICAL CONTROL: BENCHMARK, MLLW ELEV., AGENCY B.M. TIDAL 17 (1951), USC&GS DISK, 9.73 MLLW HARBOR ST. PUMPHOUSE, EAST FRANCISCO BLVD. B.M. L 551 (1956), USC&GS DISK, 15.61 MLLW SAN RAFAEL SANITARY DIST. PUMPHOUSE, PT. SAN PEDRO RD.

TIDE GAGE LOCATION: SAN RAFAEL YACHT HARBOR & MARIN YACHT HARBOR
STA. 119+00 TO 150+00 ... Marin Yacht Harbor
STA. 150+00 TO 200+87 ... San Rafael Yacht Harbor
FLOOD => SLACK => EBB TIDE SURVEY 5.2 FT. => 6.4 FT.

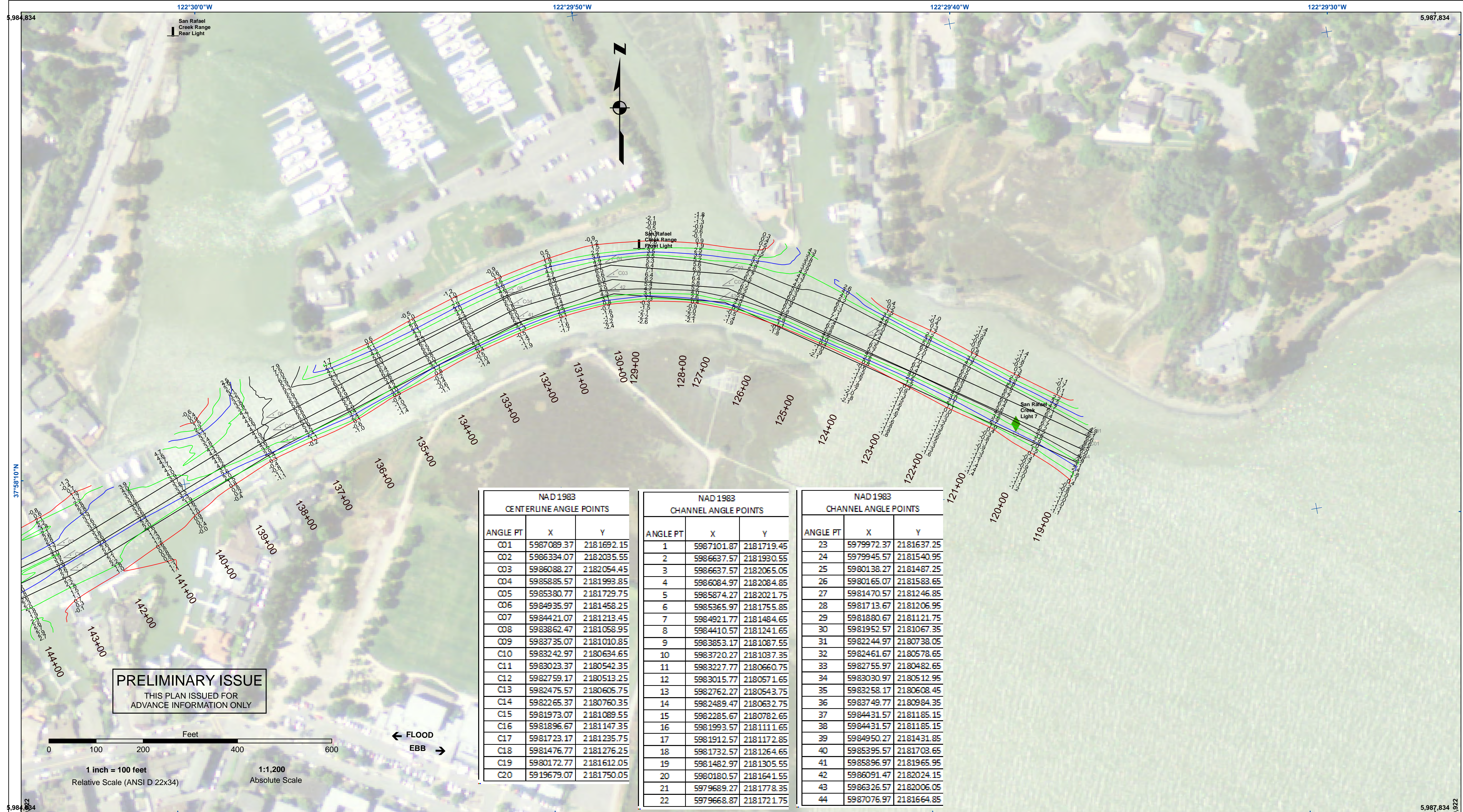
US Army Corps of Engineers
San Francisco District
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Chart Date:	Nov 03, 2017
Designed by:	
Drawn by:	PDT
Checked by:	PDT
Surveyed By:	TRAVIS J. RAYFIELD
Plotted By:	PDT
Hydro Survey Team Leader:	
Chief, Hydro Survey Section:	
Chief, Construction Branch:	

CALIFORNIA
MARIN COUNTY
SAN RAFAEL CREEK
CONDITION SURVEY
30 OCTOBER 2017

Sheet Reference Number
1 of 3

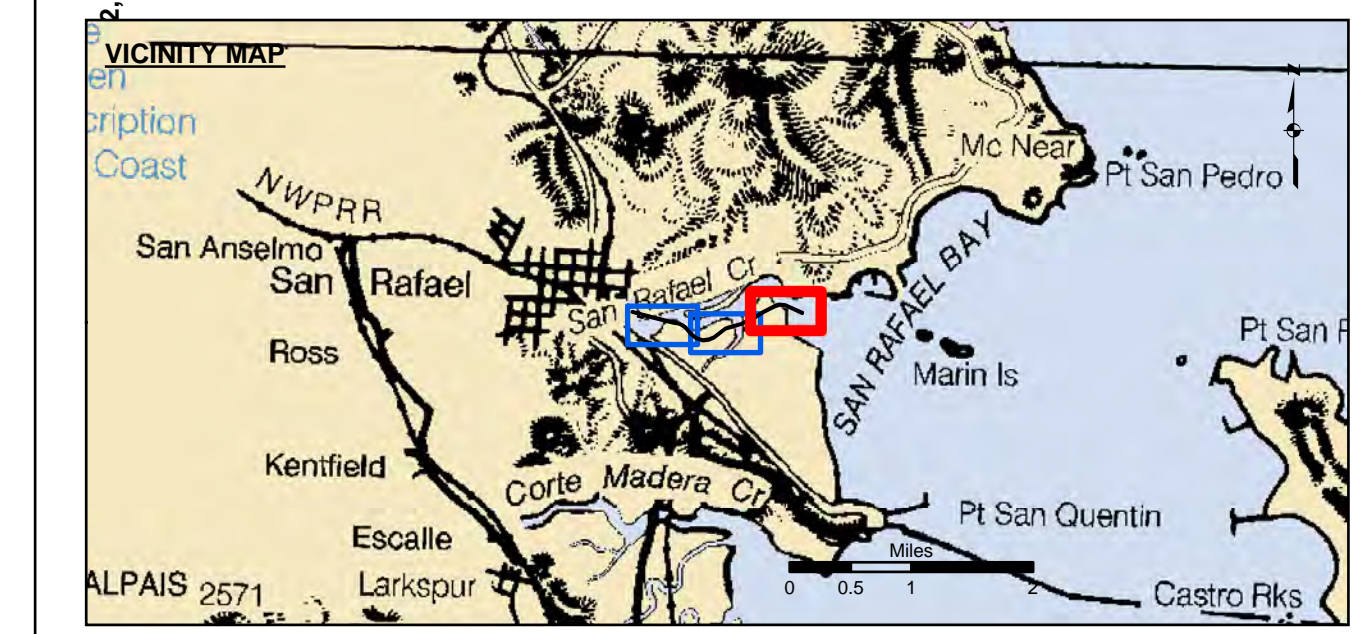


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ANGLE PT	X	Y	ANGLE PT	X	Y	ANGLE PT	X	Y
C01	5987089.37	2181692.15	1	5987101.87	2181719.45	23	5979972.37	2181637.25
C02	5986334.07	2182035.55	2	5986637.57	2181930.55	24	5979945.57	2181540.95
C03	5986088.27	2182054.45	3	5986637.57	2182065.05	25	5980138.27	2181487.25
C04	5985885.57	2181993.85	4	5986084.97	2182084.85	26	5980165.07	2181583.65
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C07	5984421.07	2181213.45	7	5984921.77	2181484.65	29	5981880.67	2181121.75
C08	5983862.47	2181058.95	8	5984410.57	2181241.65	30	5981952.57	2181067.35
C09	5983735.07	2181010.85	9	5983853.17	2181087.55	31	5982244.97	2180738.05
C10	5983242.97	2180634.65	10	5983720.27	2181037.35	32	5982461.67	2180578.65
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C12	5982759.17	2180513.25	12	5983015.77	2180571.65	34	5983030.97	2180512.95
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			22	5979668.87	2181721.75	44	5987076.97	2181664.85



← FLOOD
EBB →



Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	
Placement Area	Navigation Buoy	
Anchorage Area	Navigation Buoy	
Wreck Area	Shoalest Sounding*	
Submerged Wreck		-5
Angle Point		-4
		-3
		-2
		-1

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San Francisco, CA 94103

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Prepared Under the Direction of:	Chart Date:
TRAVIS J. RAYFIELD	Nov 03, 2017
LT Colonel, C.E., District Engineer	Designed by:
Subproject: PDT	Plotted by:
Hydro Survey Team Leader	Checked by:
Recommended:	PDT
Chief, Hydro Survey Section	Drawn by:
Approved:	PDT
Chief, Construction Branch	

CALIFORNIA
MARIN COUNTY
SAN RAFAEL CREEK
CONDITION SURVEY
30 OCTOBER 2017

Sheet
Reference
Number
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