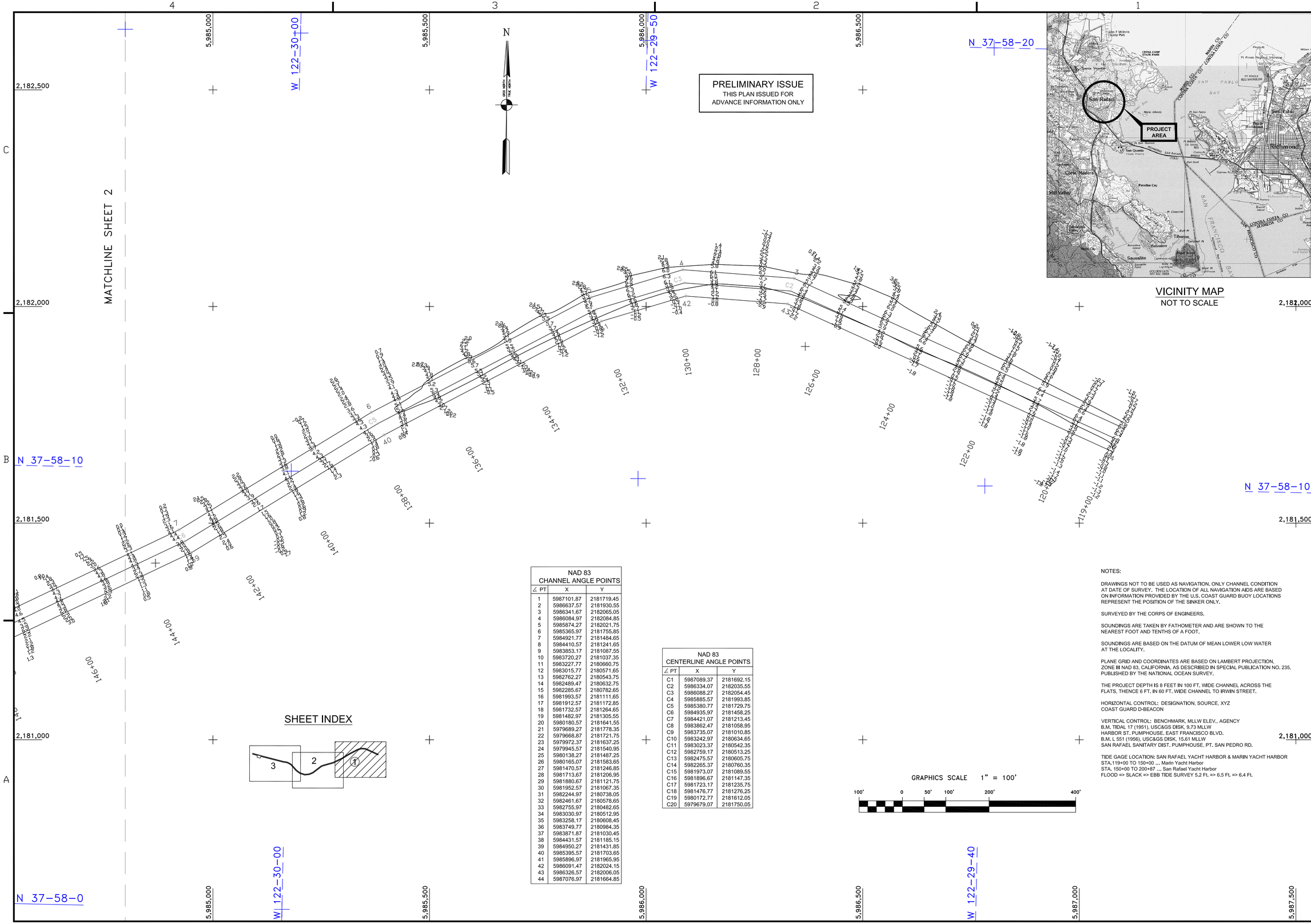

NAD 83 CHANNEL ANGLE POINTS		
∠ PT	X	Y
1	5987101.87	2181719.45
2	5986637.57	2181930.55
3	5986341.67	2182065.05
4	5986084.97	2182084.85
5	5985874.27	2182021.75
6	5985365.97	2181755.85
7	5984921.77	2181484.65
8	5984410.57	2181241.65
9	5983853.17	2181087.55
10	5983720.27	2181037.35
11	5983227.77	2180660.75
12	5983015.77	2180571.65
13	5982762.27	2180543.75
14	5982489.47	2180632.75
15	5982285.67	2180782.65
16	5981993.57	2181111.65
17	5981912.57	2181172.85
18	5981732.57	2181264.65
19	5981482.97	2181305.55
20	5980180.57	2181641.55
21	5979689.27	2181778.35
22	5979668.87	2181721.75
23	5979972.37	2181637.25
24	5979945.57	2181540.95
25	5980138.27	2181487.25
26	5980165.07	2181583.65
27	5981470.57	2181246.85
28	5981713.67	2181206.95
29	5981880.67	2181121.75
30	5981952.57	2181067.35
31	5982244.97	2180738.05
32	5982461.67	2180578.65
33	5982755.97	2180482.65
34	5983030.97	2180512.95
35	5983258.17	2180608.45
36	5983749.77	2180984.35
37	5983871.67	2181030.45
38	5984431.57	2181185.15
39	5984950.27	2181431.85
40	5985395.57	2181703.65
41	5985896.97	2181965.95
42	5986091.47	2182024.15
43	5986326.57	2182006.05
44	5987076.97	2181664.85

NAD 83 CENTERLINE ANGLE POINTS		
∠ PT	X	Y
C1	5987089.37	2181692.15
C2	5986334.07	2182035.55
C3	5986088.27	2182054.45
C4	5985885.57	2181993.85
C5	5985380.77	2181729.75
C6	5984935.97	2181458.25
C7	5984421.07	2181213.45
C8	5983862.47	2181058.95
C9	5983735.07	2181010.85
C10	5983242.97	2180634.65
C11	5983023.37	2180542.35
C12	5982759.17	2180513.25
C13	5982475.57	2180605.75
C14	5982265.37	2180760.35
C15	5981973.07	2181089.55
C16	5981896.67	21811447.35
C17	5981723.17	2181235.75
C18	5981476.77	2181276.25
C19	5980172.77	2181612.05
C20	5979679.07	2181750.05

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 LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.

SURVEYED BY THE CORPS OF ENGINEERS.

SOUNDINGS ARE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST FOOT AND 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 LAMBERT PROJECTION. ZONE III NAD 83, CALIFORNIA. AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY THE NATIONAL OCEAN SURVEY.

THE PROJECT DEPTH IS 8 FEET IN 100 FT. WIDE CHANNEL ACROSS THE FLATS, THENCE 6 FT. IN 60 FT. WIDE CHANNEL TO IRWIN STREET.

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 FL => 6.5 FL => 6.4 FL.

US Army Corps of Engineers
San Francisco District
1455 Market Street
San Francisco, CA 94103

Mark	Description	Date	Appr.

SUBMITTED: PDT
Hydro. Survey Team Leader
APPROVAL RECOMMENDED:
Chief, Geomatics Section
APPROVED:
Chief, Construction Branch

DESIGNED BY: CHECKED BY: PDT
DRAWN BY: PDT
DATE: 11/21/2011
SHEET NO. 1 OF 3
DRAWING NO. 55 2

PREPARED UNDER THE DIRECTION OF
TORREY A. DICIRO
LT. COLONEL, C.E., DISTRICT ENGINEER

CALIFORNIA
MARIN COUNTY

SAN RAFAEL CREEK
PREDREDGE SURVEY
16 NOVEMBER 2011

Sheet reference number
C1