

Mark	Description	Date	Appr.

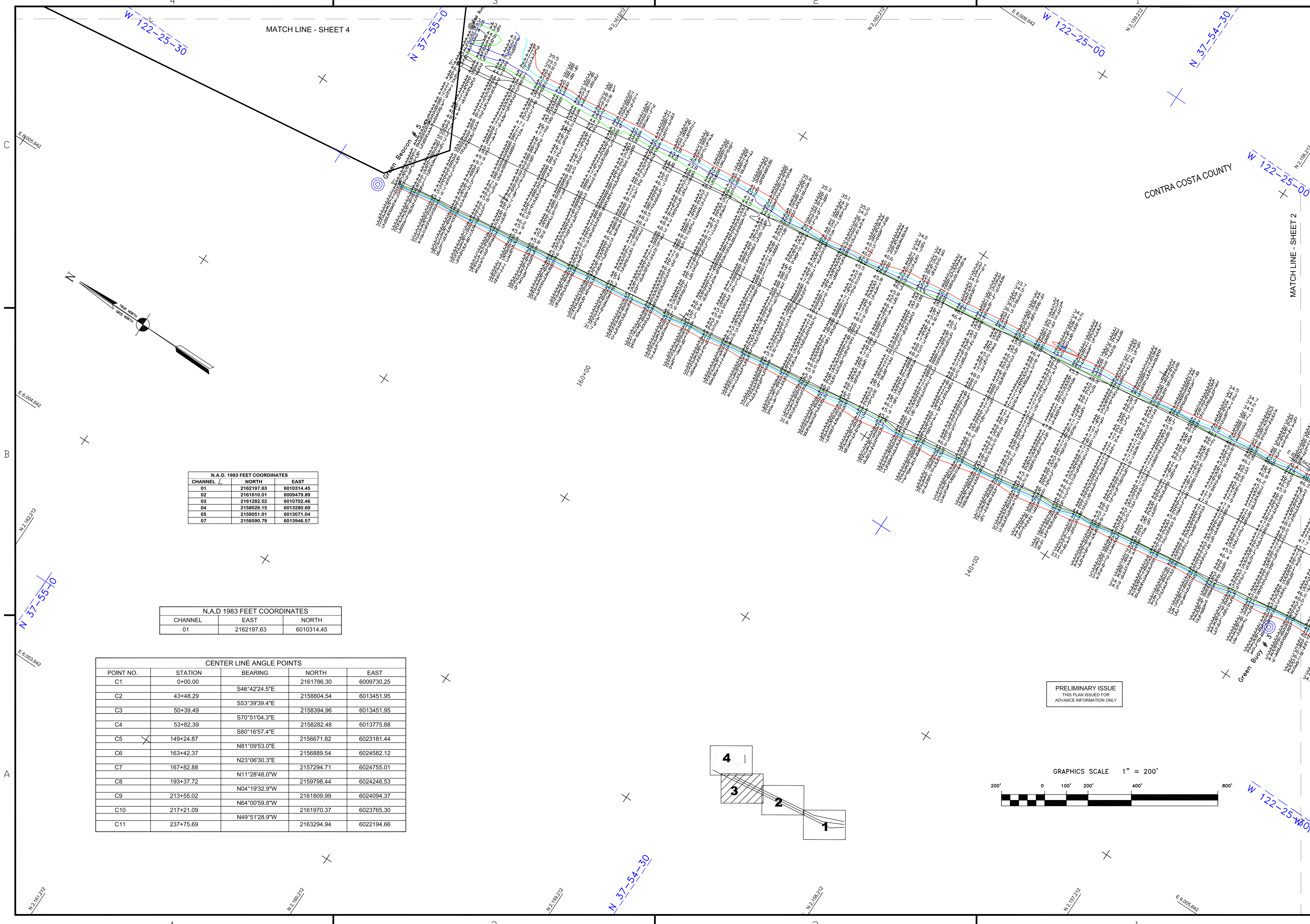
Mark	Description	Date	Appr.

DESIGNED BY:	PDT	SHEET NO.	DRAWING NO.	DATE:	DRAWN BY:	PDT	PDT

PREPARED UNDER THE DIRECTION OF  
**JOHN K. BAKER**  
LT. COLONEL, C.E., DISTRICT ENGINEER

CALIFORNIA  
CONTRA COSTA COUNTY  
**RICHMOND OUTER HARBOR**  
SOUTHAMPTON SHOAL  
POSTDRUDGE SURVEY  
21 & 28 AUGUST 2013

Sheet reference  
number  
**C3**



N.A.D. 1983 FEET COORDINATES		
CHANNEL	NORTH	EAST
01	2162197.63	6010314.45
02	2161610.01	6009479.89
03	2161282.52	6010702.46
04	2158029.15	6013280.89
05	2159051.01	6013071.04
07	2158590.79	6013946.57

N.A.D. 1983 FEET COORDINATES		
CHANNEL	EAST	NORTH
01	2162197.63	6010314.45

CENTER LINE ANGLE POINTS				
POINT NO.	STATION	BEARING	NORTH	EAST
C1	0+00.00	S46°42'24.5"E	2161786.30	6009730.25
C2	43+48.29	S53°39'39.4"E	2158804.54	6013451.95
C3	50+39.49	S70°51'04.3"E	2158394.96	6013451.95
C4	53+82.39	S80°16'57.4"E	2156671.82	6023181.44
C5	149+24.87	N81°09'53.0"E	2156889.54	6024582.12
C6	163+42.37	N23°06'30.3"E	2157294.71	6024755.01
C7	167+82.88	N11°28'48.0"W	2159798.44	6024246.53
C8	193+37.72	N04°19'32.9"W	2161809.99	6024094.37
C9	213+55.02	N64°00'59.8"W	2161970.37	6023765.30
C10	217+21.09	N49°51'28.9"W	2163294.94	6022194.66
C11	237+75.69			