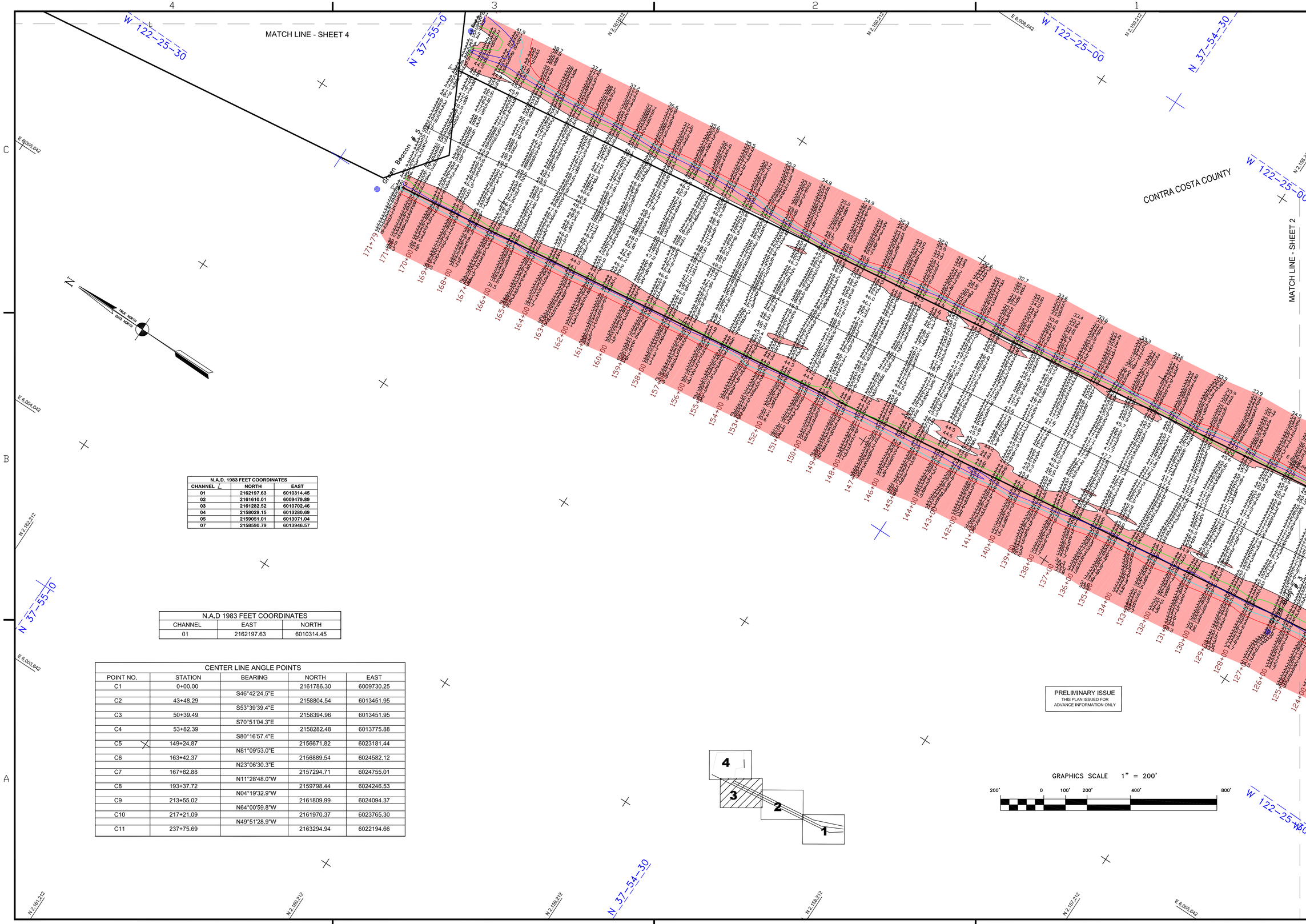

N.A.D. 1983 FEET COORDINATES		
CHANNEL ℄	NORTH	EAST
01	2162197.63	6010314.45
02	2161610.01	6009479.89
03	2161282.52	6010702.46
04	2158029.15	6013280.69
05	2159051.01	6013071.04
07	2158590.79	6013946.57

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		2161786.30	6009730.25
		S46°42'24.5"E		
C2	43+48.29		2158804.54	6013451.95
		S53°39'39.4"E		
C3	50+39.49		2158394.96	6013451.95
		S70°51'04.3"E		
C4	53+82.39		2158282.48	6013775.88
		S80°16'57.4"E		
C5	149+24.87		2156671.82	6023181.44
		N81°09'53.0"E		
C6	163+42.37		2156889.54	6024582.12
		N23°06'30.3"E		
C7	167+82.88		2157294.71	6024755.01
		N11°28'48.0"W		
C8	193+37.72		2159798.44	6024246.53
		N04°19'32.9"W		
C9	213+55.02		2161809.99	6024094.37
		N64°00'59.8"W		
C10	217+21.09		2161970.37	6023765.30
		N49°51'28.9"W		
C11	237+75.69		2163294.94	6022194.66

PRELIMINARY ISSUE
THIS PLAN ISSUED FOR ADVANCE INFORMATION ONLY

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

Mark	Description	Date	Appr.

DESIGNED BY: PDT | CHECKED BY: PDT | DRAWN BY: PDT
DATE: 3/21/2012 | SHEET NO. 3 OF 4 | DRAWING NO. 9 2
SUBMITTED: PDT, Hydro. Survey Team Leader
APPROVAL RECOMMENDED: Chief, Geomatics Section
APPROVED: Chief, Construction Branch
PREPARED UNDER THE DIRECTION OF
TORREY A. DICIRO
LT. COLONEL, C.E., DISTRICT ENGINEER

CONTRA COSTA COUNTY CALIFORNIA

RICHMOND HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
13, 19–20 MARCH 2012

Sheet reference number
C3