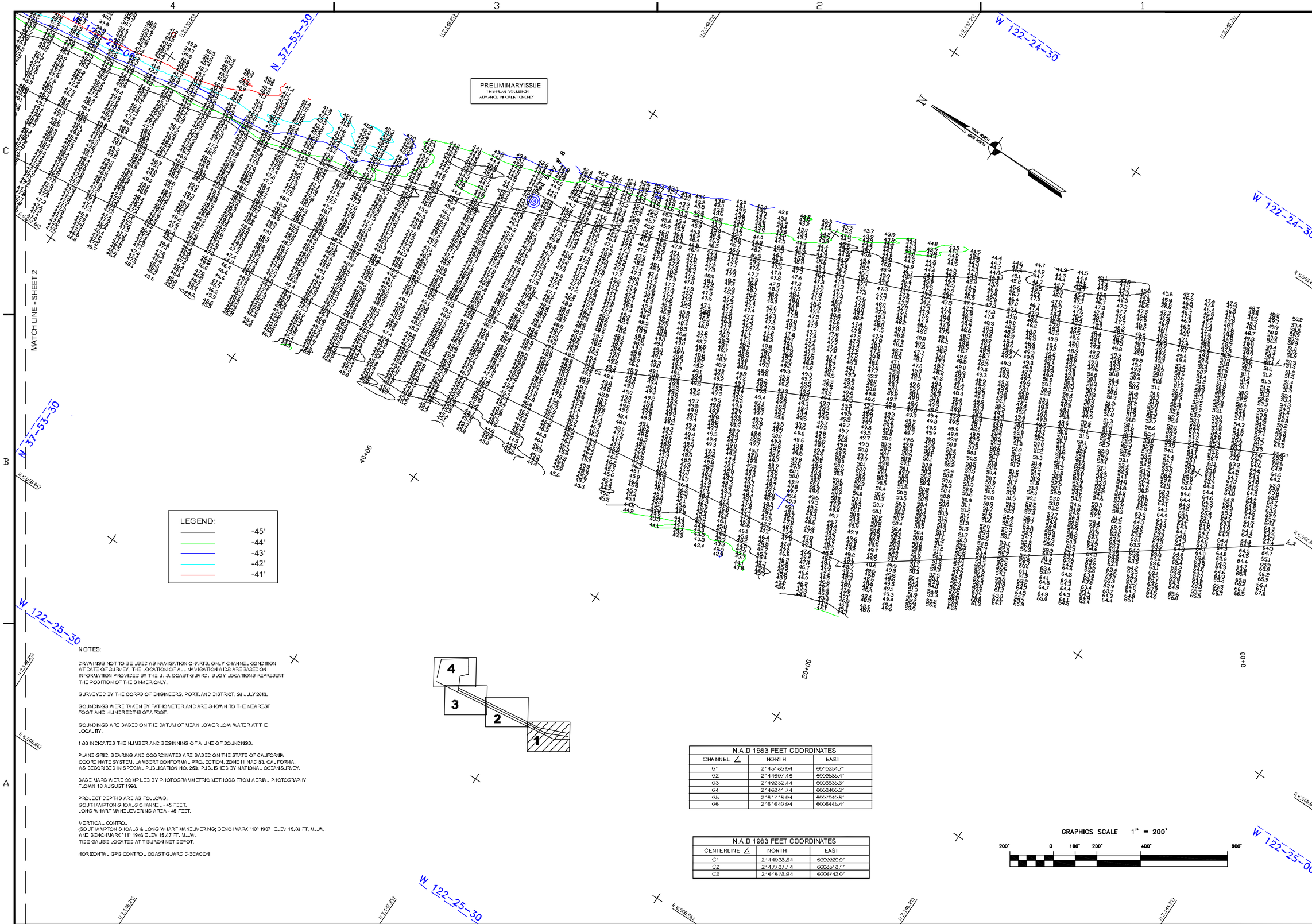

NOTES:

DRAWINGS NOT TO BE USED AS NAVIGATION CHARTS. 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, PORTLAND DISTRICT, 26 JULY 2013.

SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST FOOT AND HUNDREDTHS OF A FOOT.

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

1:00 INDICATES THE NUMBER AND BEGINNING OF A LINE OF SOUNDINGS.

PLANE GRID, BEARING AND COORDINATES ARE BASED ON THE STATE OF CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, ZONE III NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 250, PUBLISHED BY NATIONAL OCEAN SURVEY.

BASE MAPS WERE COMPILED BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY FLOWN 10 AUGUST 1996.

PROJECT DEPTHS ARE AS FOLLOWS:
SOUTHAMPTON SHOALS CHANNEL - 45 FEET.
LONG WHARF MANEUVERING AREA - 45 FEET.

VERTICAL CONTROL
(SOUTHAMPTON SHOALS & LONG WHARF MANEUVERING; BENCHMARK "10" 1937 ELEV 15.36 FT. MLLW. AND BENCHMARK "11" 1946 ELEV 15.47 FT. MLLW.
TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

HORIZONTAL GPS CONTROL COAST GUARD DIBEACON

N.A.D 1983 FEET COORDINATES		
CHANNEL ∠	NORTH	EAST
C1	2'145'80.04	6010254.7'
C2	2'144697.46	6009585.4'
C3	2'149232.44	6008635.8'
C4	2'146341.74	6008400.3'
C5	2'6'7'6.94	6007040.6'
C6	2'6'5'40.94	6006445.4'

N.A.D 1983 FEET COORDINATES		
CENTERLINE ∠	NORTH	EAST
C1	2'144938.84	6009920.0'
C2	2'147787.14	6008518.1'
C3	2'6'5'78.94	6006743.0'

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, Hydro Survey Section
APPROVED:
Chief, Construction Branch

DESIGNED BY: PDT
DATE: 7/31/2013
SHEET NO. 1 OF 4
CHECKED BY: PDT
DRAWING NO. 9
DRAWN BY: PDT
2
xxx

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

CONTRA COSTA COUNTY CALIFORNIA

RICHMOND OUTER HARBOR
SOUTHAMPTON SHOAL
CONDITION SURVEY
26 JULY 2013

Sheet reference number
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