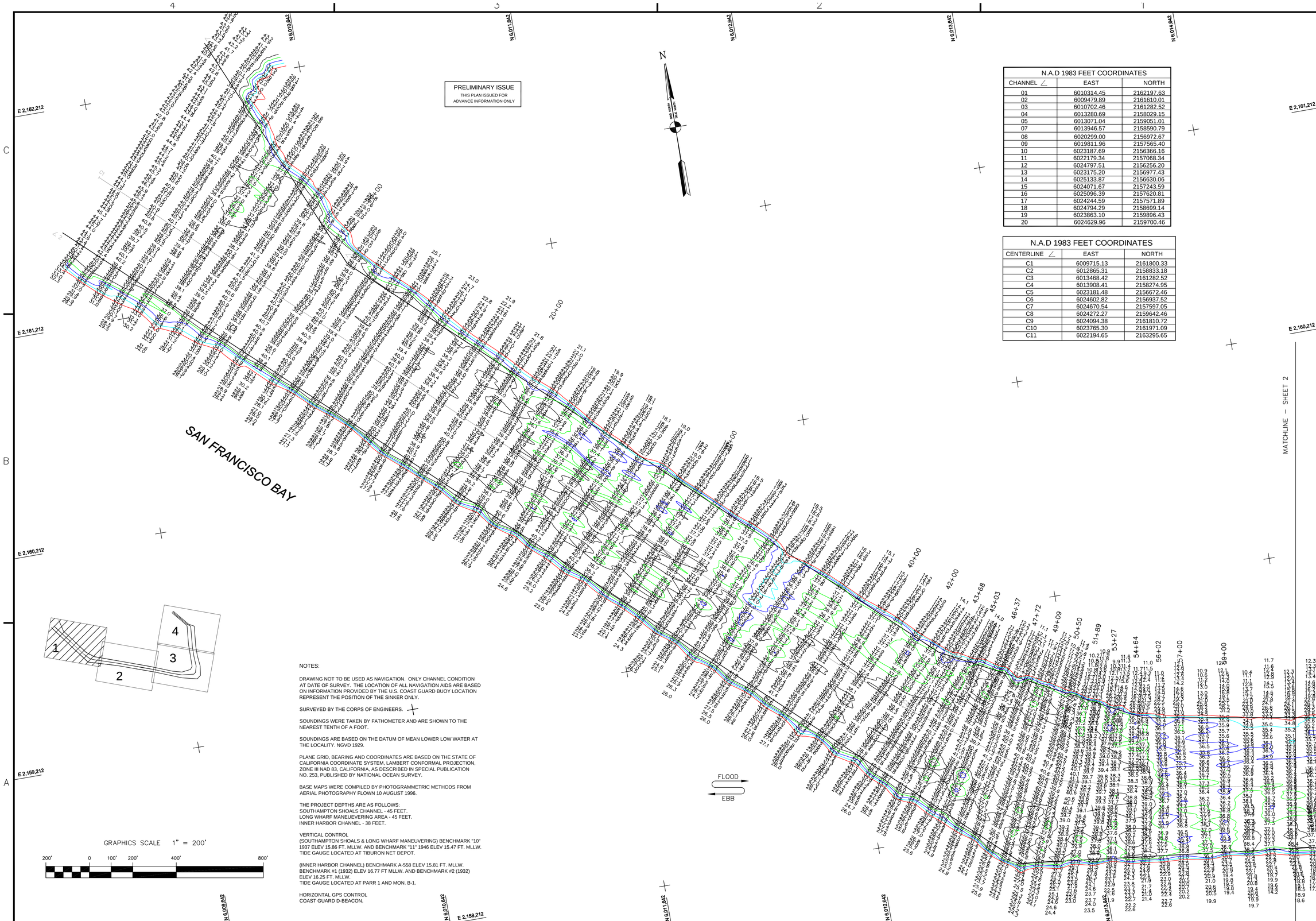


| N.A.D 1983 FEET COORDINATES | | |
|---|---|---|
| CHANNEL ∠ | EAST | NORTH |
| 01 | 6010314.45 | 2162197.63 |
| 02 | 6009479.89 | 2161610.01 |
| 03 | 6010702.46 | 2161282.52 |
| 04 | 6013280.69 | 2158029.15 |
| 05 | 6013071.04 | 2159051.01 |
| 07 | 6013946.57 | 2158590.79 |
| 08 | 6020299.00 | 2156972.67 |
| 09 | 6019811.96 | 2157565.40 |
| 10 | 6023187.69 | 2156366.16 |
| 11 | 6022179.34 | 2157068.34 |
| 12 | 6024797.51 | 2156256.20 |
| 13 | 6023175.20 | 2156977.43 |
| 14 | 6025133.87 | 2156630.06 |
| 15 | 6024071.67 | 2157243.59 |
| 16 | 6025096.39 | 2157620.81 |
| 17 | 6024244.59 | 2157571.89 |
| 18 | 6024794.29 | 2158699.14 |
| 19 | 6023863.10 | 2159896.43 |
| 20 | 6024629.96 | 2159700.46 |

| N.A.D 1983 FEET COORDINATES | | |
|---|---|---|
| CENTERLINE ∠ | EAST | NORTH |
| C1 | 6009715.13 | 2161800.33 |
| C2 | 6012865.31 | 2158833.18 |
| C3 | 6013468.42 | 2161282.52 |
| C4 | 6013908.41 | 2158274.95 |
| C5 | 6023181.48 | 2156672.46 |
| C6 | 6024602.82 | 2156937.52 |
| C7 | 6024670.54 | 2157597.05 |
| C8 | 6024272.27 | 2159642.46 |
| C9 | 6024094.38 | 2161810.72 |
| C10 | 6023765.30 | 2161971.09 |
| C11 | 6022194.65 | 2163295.65 |

GRAPHICS SCALE 1" = 200'

200' 0 100' 200' 400' 800'

NOTES:

DRAWING 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 LOCATION REPRESENT THE POSITION OF THE SINKER ONLY.

SURVEYED BY THE CORPS OF ENGINEERS.

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

SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY. NGVD 1929.

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. 253, PUBLISHED BY NATIONAL OCEAN SURVEY.

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

THE PROJECT DEPTHS ARE AS FOLLOWS:
SOUTHAMPTON SHOALS CHANNEL - 45 FEET.
LONG WHARF MANEUVERING AREA - 45 FEET.
INNER HARBOR CHANNEL - 38 FEET.

VERTICAL CONTROL
(SOUTHAMPTON SHOALS & LONG WHARF MANEUVERING) BENCHMARK "10" 1937 ELEV 15.86 FT. MLLW. AND BENCHMARK "11" 1946 ELEV 15.47 FT. MLLW. TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

(INNER HARBOR CHANNEL) BENCHMARK A-558 ELEV 15.81 FT. MLLW. BENCHMARK #1 (1932) ELEV 16.77 FT MLLW. AND BENCHMARK #2 (1932) ELEV 16.25 FT. MLLW.
TIDE GAUGE LOCATED AT PARR 1 AND MON. B-1.

HORIZONTAL GPS CONTROL
COAST GUARD D-BEACON.


US Army Corps of Engineers
San Francisco District
333 Market Street
San Francisco, CA 94105


| Mark | Description | Date | Appr. |
|---|---|---|---|
| | | | |

SUBMITTED: TVW
Hydro Survey Section
APPROVAL RECOMMENDED:
Chief, Engineering Branch
APPROVED:
Chief, Engineering Technical & Services Div.

DESIGNED BY: | CHECKED BY: PC | DRAWN BY: EWC
DATE: 5/4/2003 | SHEET NO. 1 OF 4 | DRAWING NO. 9 | 2 | 330

PREPARED UNDER THE DIRECTION OF
MICHAEL McCORMICK
LT. COLONEL, C.E., DISTRICT ENGINEER

CONTRA COSTA COUNTY CALIFORNIA

# RICHMOND INNER HARBOR
## PREDREDGE SURVEY
30 APRIL & 1–2 MAY 2003

Sheet reference number
C1