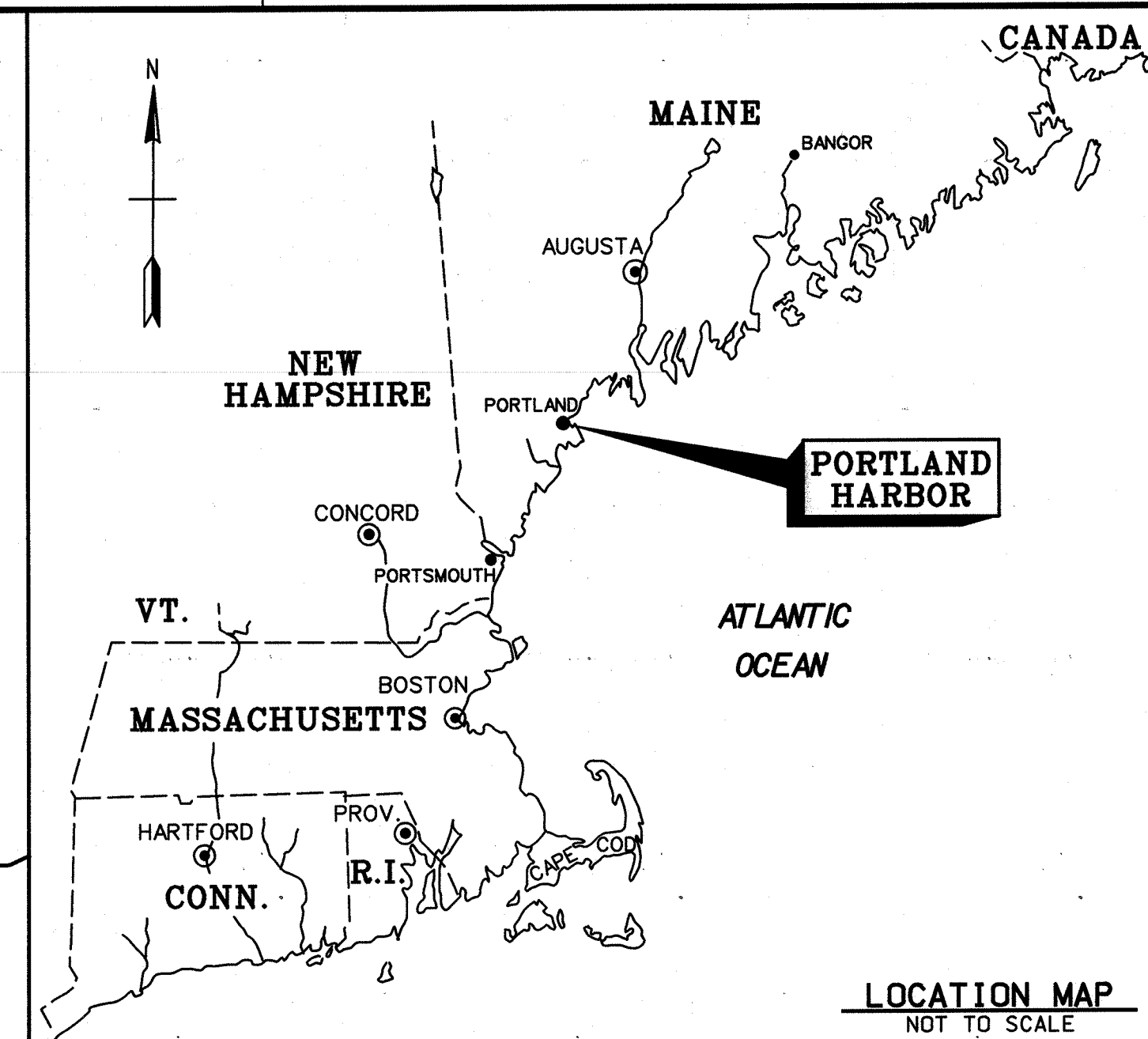


INDEX OF NAVIGATION AIDS			
NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
G&W GONG PH	06/12/06	N 2943111.41 E 2935387.86	43° - 38' - 26.9"N 70° - 13' - 01.7"W
FI Y-A	06/12/06	N 298043.26 E 293525.15	43° - 39' - 03.6"N 70° - 12' - 59.9"W
FI Y-B BELL	07/20/05	N 301187.78 E 2941403.33	43° - 39' - 34.8"N 70° - 12' - 34.4"W
RN-6	07/20/05	N 301730.18 E 2940688.54	43° - 39' - 40.2"N 70° - 12' - 44.1"W
FI G-1	06/12/06	N 299390.34 E 2937285.95	43° - 39' - 17.0"N 70° - 13' - 30.4"W
FI G-3	10/19/10	N 300378.31 E 2936260.56	43° - 39' - 26.8"N 70° - 13' - 44.3"W
FI R-4	06/12/06	N 301042.57 E 2937748.47	43° - 39' - 33.4"N 70° - 13' - 24.1"W
FI G-5	10/19/10	N 300445.91 E 2934405.12	43° - 39' - 27.5"N 70° - 14' - 09.5"W
No Wake	10/19/10	N 299035.42 E 2932341.84	43° - 39' - 13.5"N 70° - 14' - 37.6"W
FI G-1	10/19/10	N 297211.14 E 2930479.64	43° - 38' - 55.5"N 70° - 15' - 02.9"W
FI R-2	10/19/10	N 297083.66 E 2930346.33	43° - 38' - 54.2"N 70° - 15' - 04.7"W
FI G-1	10/19/10	N 294645.11 E 2926551.74	43° - 38' - 30.1"N 70° - 15' - 56.3"W
GC-3	10/19/10	N 294553.09 E 2925642.00	43° - 38' - 29.2"N 70° - 16' - 08.7"W
FI G-5	10/19/10	N 294409.73 E 2924589.93	43° - 38' - 27.7"N 70° - 16' - 23.0"W
FI R-6	10/19/10	N 294110.28 E 2923766.58	43° - 38' - 24.7"N 70° - 16' - 53.2"W



GENERAL NOTES:

1. Soundings are in Feet and tenths and refer to the plane of Mean Lower Low Water (MLLW) 1983-2001 Tidal Epoch.

2. Topography shown is from previous surveys and/or NOAA Chart No. 13292. All topography, including shoreline, bridges, piers, etc., is located approximate unless otherwise noted and should be used as a general reference only.

3. Bench Mark Data: BM Tidal 31 is a primary NOS disk stamped "ELEV 14.501 FT TIDAL 31", set vertically in the northeast face of the stone foundation of a three story building located along Commercial Street between India and Franklin Streets, 206.7 feet southwest of the southwest curb of India Street, 41.5 feet north-northeast of fire hydrant on the northwest side of Commercial Street, 8.9 feet northwest of the northwest curb of Commercial Street, and 0.5 foot above the sidewalk.

Elevation is 19.03 feet above MLLW.

4. Bench Mark Data: BM 841 8268 B (1979) is a standard NOS disk stamped "841 8268 B 1979", set flush in the concrete foundation supporting a large bollard, located in the northeast corner of the depot, 30 feet west of the shoreline, 9.0 feet north of the southwest corner of the foundation, 5.0 feet northwest of the bollard, and 1.0 foot south of the northwest corner of the concrete foundation.

Elevation is 16.42 feet above MLLW.

5. Coordinates shown are based on the Transverse Mercator Grid System for the State of Maine (West Zone 1802) and NAD 1983.

6. Survey was performed using a Reson 8124 multibeam echosounder system with a 200 KHz transducer.

Horizontal positioning and vertical depths were obtained utilizing a Lela 1200 GPS System. An RTK base station was set up on S.A. Thomas (2010). A "Hypack" (KTD) file was created from NAVD88 to MLLW corrections as follows:

<u>National Ocean Surveys (NOS) Pub. No.</u>	<u>Correction</u>
8418150 (Casco Bay)	5.25 (NOS)
8418268 (Cove River)	5.63 (COE Observed)

7. The sounding information shown on these maps represents the SHOALEST soundings of those obtained from hydrographic surveys conducted from October thru November 2010.

8. The sounding information depicted on these maps should NOT be used to determine volumes. Volumes are determined from more sounding information than shown. Additional sounding information is available upon request.

9. The information depicted on these maps represents the results of surveys made on the dates indicated, and can only be considered as indicating the general conditions existing at that time.

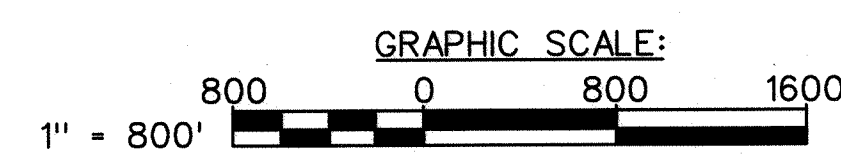
10. Field Books: R&H 5075 and 5104

35-foot depth contour shown thus: _____

45-foot depth contour shown thus: _____

Surveyed by: Jeffrey W. Preston and Crew

Refer to Survey No. 11-099



**US Army Corps
of Engineers®**
New England District

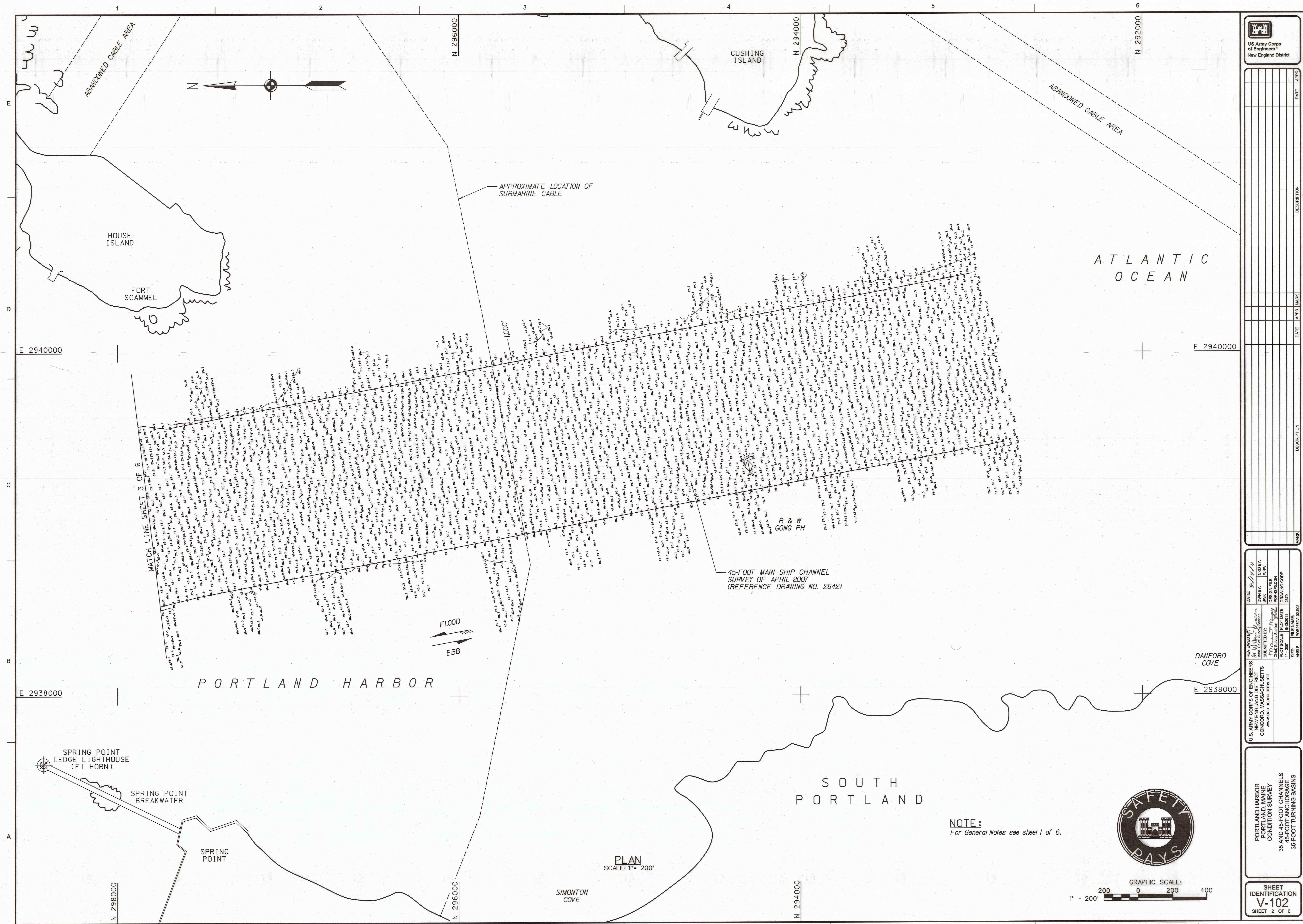
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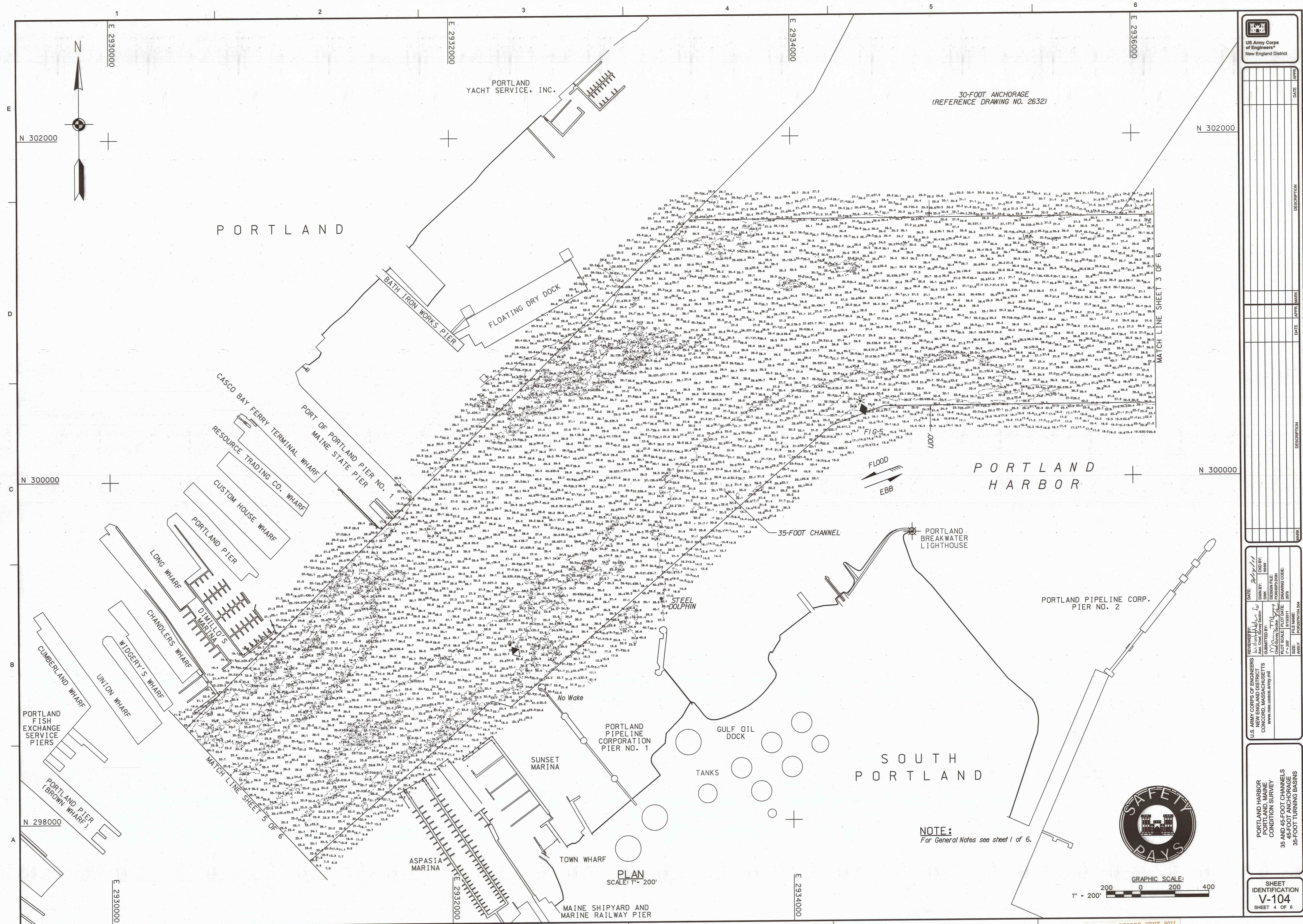
U.S. ARMY CORPS OF ENGINEERS NEW ENGLAND DISTRICT CONCORD, MASSACHUSETTS www.hq.usace.army.mil	REVIEWED BY: <i>W. J. [Signature]</i> <i>Chief, Survey Section</i> DATE: <i>9/14/11</i> DWN BY: <i>WHW</i> CKD BY: <i>WHW</i> SWK SUBMITTED BY: <i>M. [Signature]</i> <i>Chief, Survey Section</i> DESIGN FILE: <i>PORHSP3.DGN</i> PLOT SCALE: <i>1" = 800'</i> PLOT DATE: <i>9/13/2011</i> DRAWING CODE: <i>2879</i> SIZE: FILE NAME:
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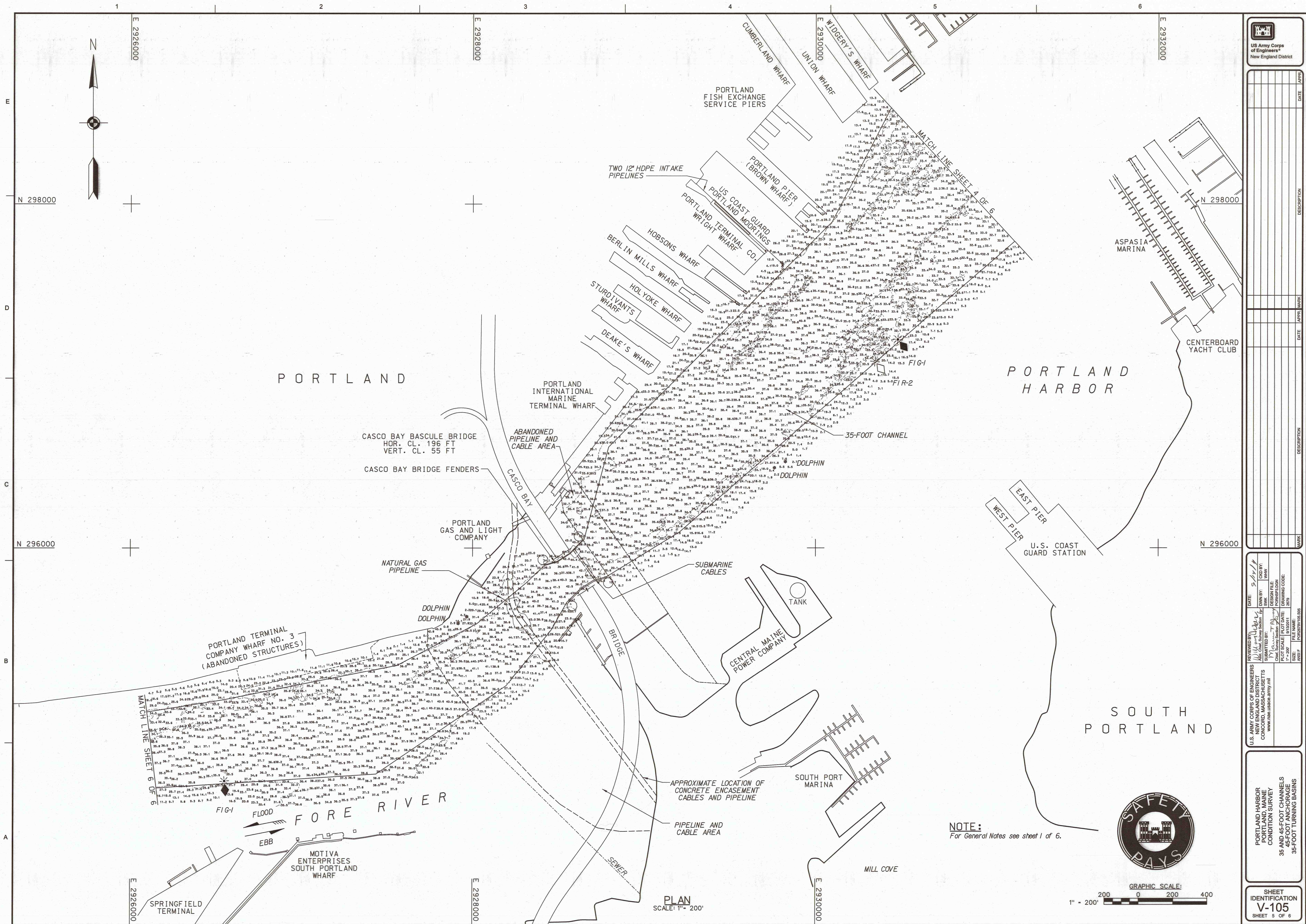
PORTLAND HARBOR
PORTLAND, MAINE
CONDITION SURVEY

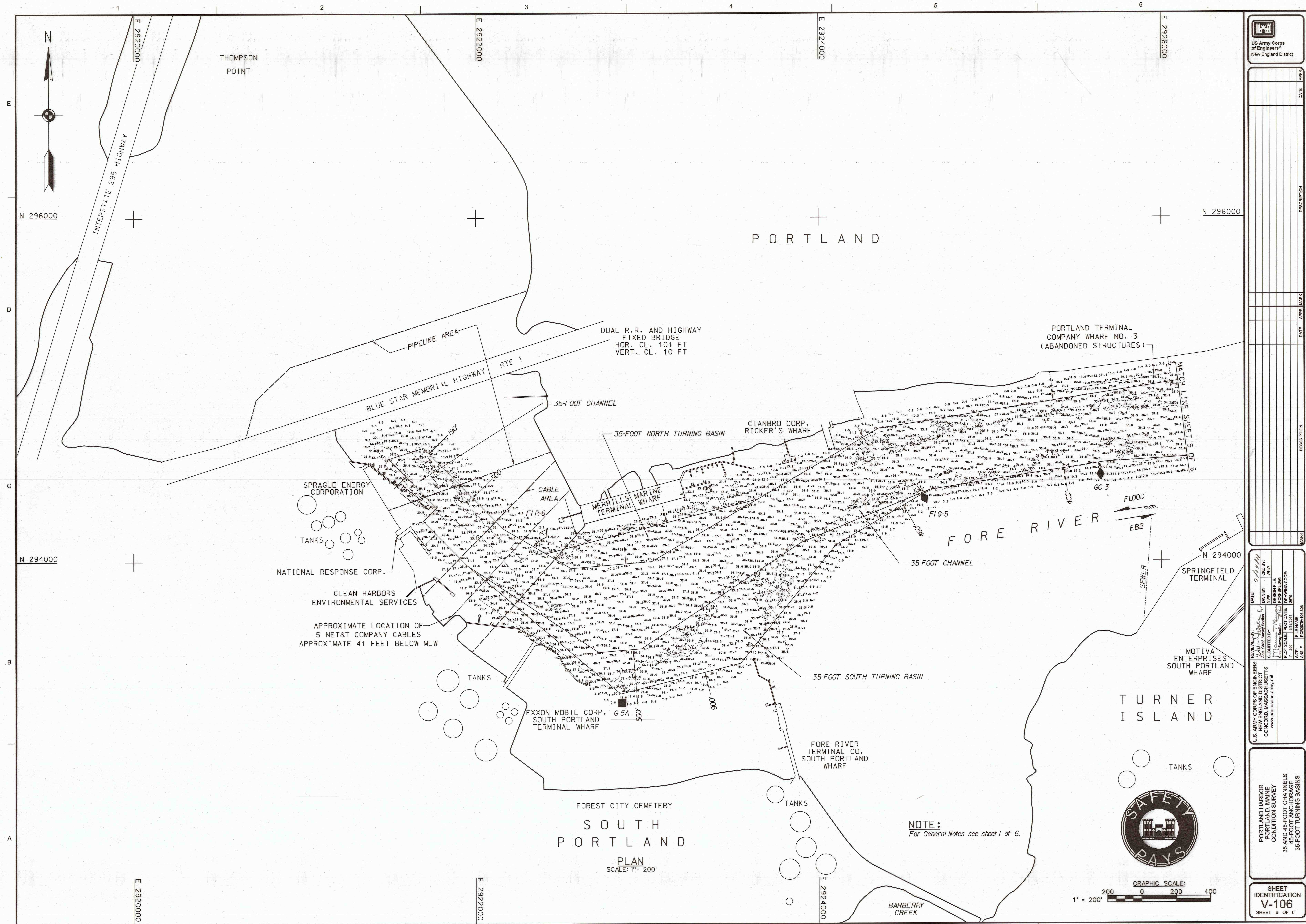
35 AND 45-FOOT CHANNELS
45-FOOT ANCHORAGE
35-FOOT TURNING BASINS

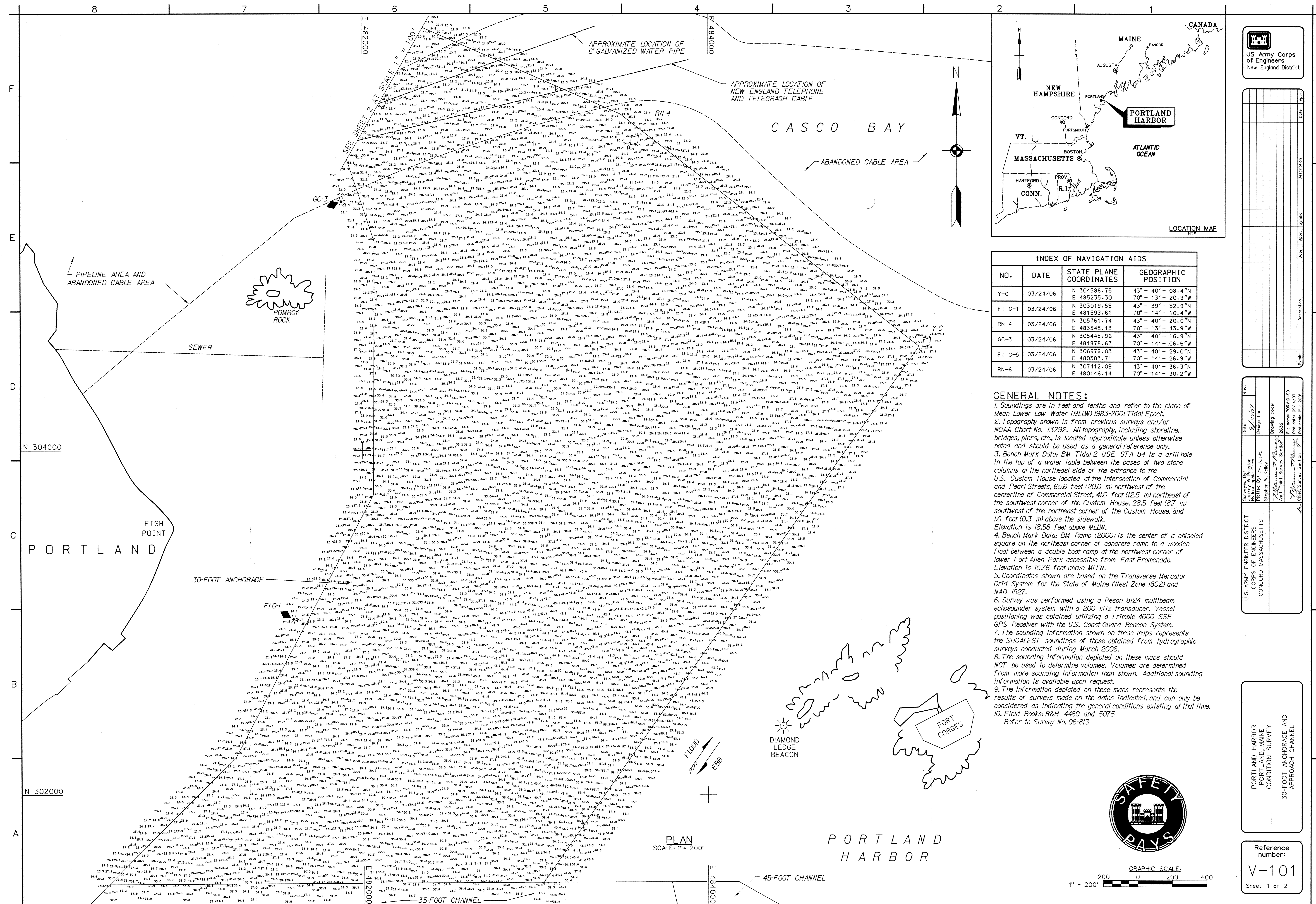
SHEET
IDENTIFICATION
V-101
SHEET 1 OF 6

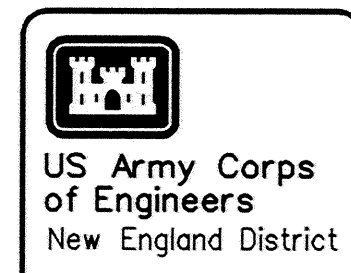
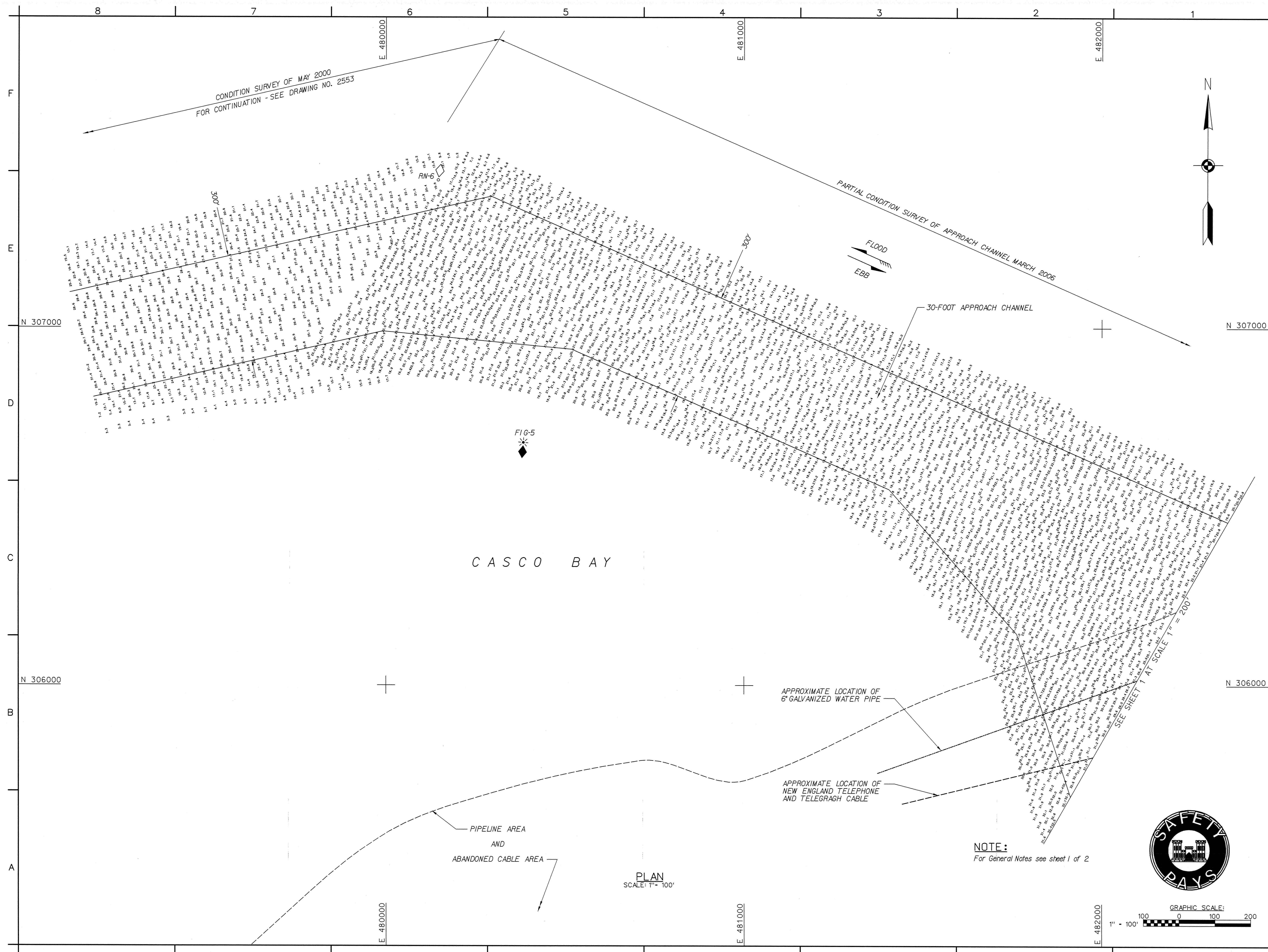










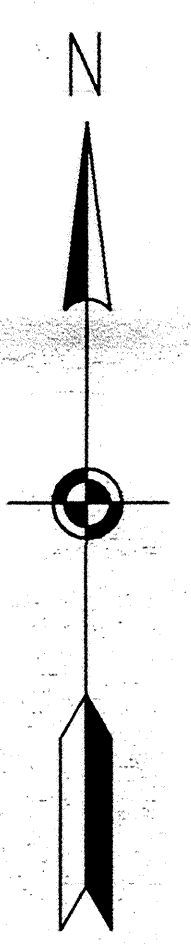
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U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS CONCORD, MASSACHUSETTS	Surveyed By: Jeffrey W. Preston Plotted By: <i>Stacy</i> Stephen M. Kelley	Date: <i>2/26/87</i>	Rev.
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		Drawing code:	
	<i>Thomas M. Kelly</i> Asst. Chief, Survey Section		
		File name: P0RW002.502	
		Plot scale: 1" = 400'	
	<i>in</i> Chief, Survey Section	Plot scale: 1" = 300'	

PORTLAND HARBOR
PORTLAND, MAINE
CONDITION SURVEY

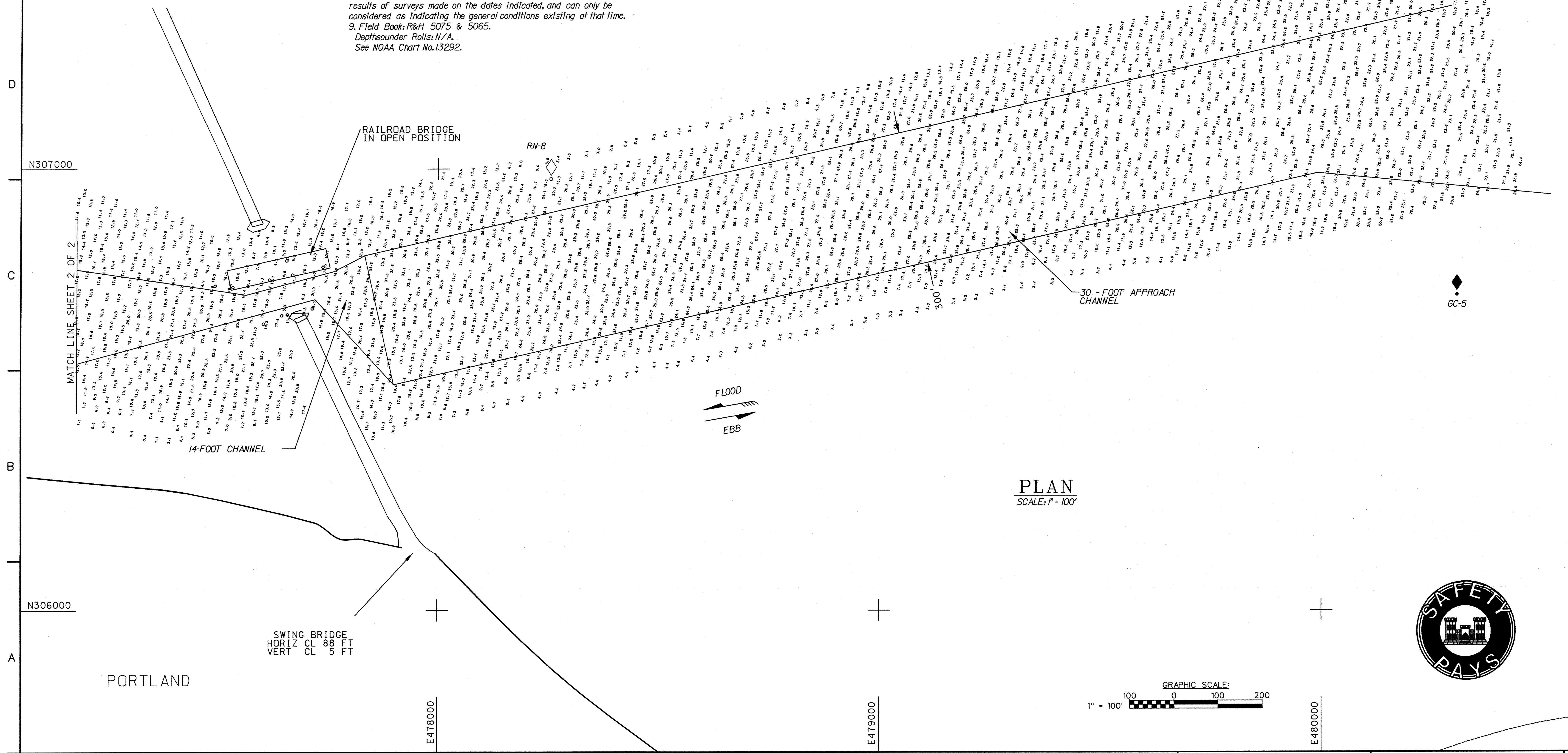
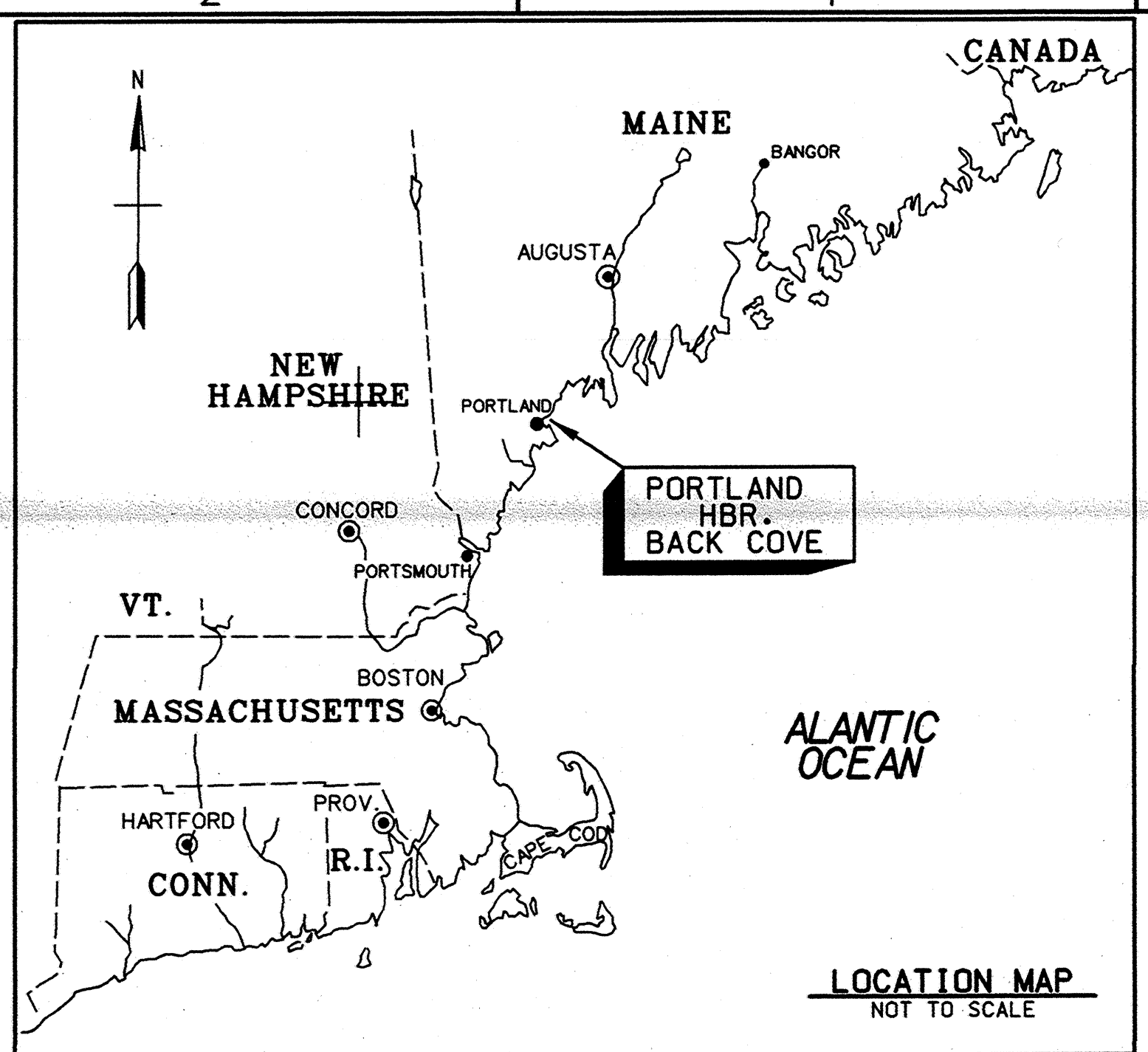
30-FOOT ANCHORAGE AND
APPROACH CHANNEL

Reference
number:
V-102
Sheet 2 of 2



GENERAL NOTES:
1. Soundings are in feet and tenths and refer to the plane of Mean Lower Low Water (MLLW).
2. Topography shown is from previous surveys and/or NOAA Chart No. 13292. All topography, including shoreline, bridges piers, etc. is located approximate and should be used as a general reference only.
3. Bridges, piers, dolphins, piles and metal sheathing etc., was located during the May of 2000 condition survey.
4. Bench Mark Data: No Stamping: The benchmark is a drill hole located at the intersection of Commercial Street and Pearl Street, on the northeast of center of entrance to US Custom House, 55.5 feet (16.9 m) northeast of the northeast curb of Pearl Street, 11.5 feet (3.5 m) northwest of the northwest curb of Commercial Street, and 6.5 feet (2.0 m) northeast of center of entrance. The bench mark is a 0.5 inch drill hole in the sill about 1 foot (0.3 m) above the sidewalk. (Note: bench mark historically referred to as No. 2 U.S.E. (1901). Elevation is 18.62 feet (5.7 m) above MLLW.
5. Coordinates shown are based on the Transverse Mercator Grid System for the State of Maine (West Zone) and NAD 27.
6. The sounding information depicted on these maps represents the SHOALEST soundings of those obtained from hydrographic surveys conducted during May 2000.
7. The sounding information depicted on these maps should NOT be used to determine volumes. Volumes are determined from more sounding information than shown. Additional sounding information is available upon request.
8. The information depicted on these maps represents the results of surveys made on the dates indicated, and can only be considered as indicating the general conditions existing at that time.
9. Field Book: R&H 5075 & 5065.
Depthsounder Rolls: N/A.
See NOAA Chart No. 13292.

INDEX OF NAVIGATION AIDS			
NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
RN-6	05/10/00	N 307447 E 480118	43° - 40' - 36.6"N 70° - 14' - 30.5"W
RN-8	05/10/00	N 306977 E 478257	43° - 40' - 32.0"N 70° - 14' - 55.9"W
GC-5	05/10/00	N 306714 E 480307	43° - 40' - 29.4"N 70° - 14' - 28.0"W



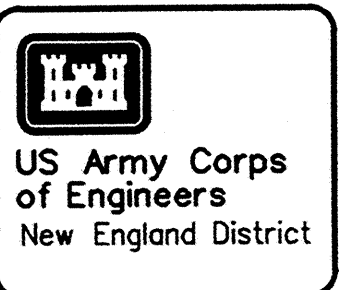
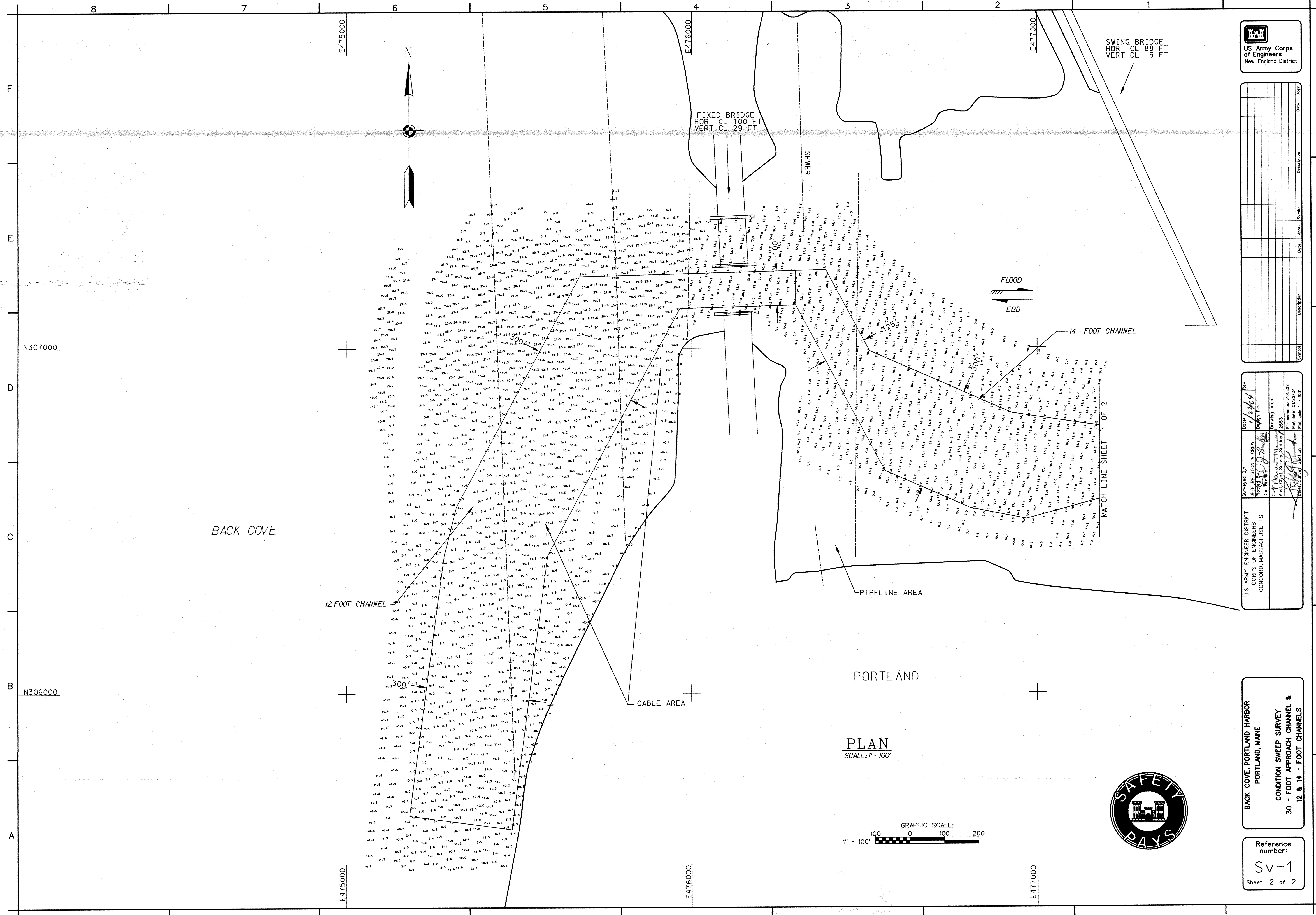
US Army Corps of Engineers
New England District

Rev.	Date	By	Description
1	1/22/04	JEFF AUSTON & CREW	Design title
2	05/10/00	Don Bradley	Project
3	05/10/00	Don Bradley	Project
4	05/10/00	Don Bradley	Project
5	05/10/00	Don Bradley	Project
6	05/10/00	Don Bradley	Project
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U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

BACK COVE, PORTLAND HARBOR
PORTLAND, MAINE
CONDITION SWEEP SURVEY
30 - FOOT APPROACH CHANNEL &
12 & 14 - FOOT CHANNELS

Reference number:
Sv-1
Sheet 1 of 2

[illegible]

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS CONCORD, MASSACHUSETTS	Survived By: LEFF BREYTON & CREW Plotted By: <i>Don Bradley</i>	Date: <i>1/24/04</i> Dedign file:	Rev.
	<i>Plot Area</i> Rest. Chief, Survey Section / 2553	Drawing code	
	<i>Plot Area</i> Chief, Survey Section	Plot scale: 1" = 50'	Plot date: 01/22/04

BACK COVE, PORTLAND HARBOR
PORTLAND, MAINE

CONDITION SWEEP SURVEY
30 - FOOT APPROACH CHANNEL &
12 & 14 - FOOT CHANNELS

Reference
number:
SV-1
Sheet 2 of 2