BERTH COORDINATE LIST

Point	Northing	Easting	Depth (MLW)
3001	674683.360	592088.699	35.00
3002	674666.542	592113.542	35.00
3003	674169.745	591777.206	35.00
3004	674186.563	591752.363	35.00
3005	674666.542	592113.542	40.00
3006	674626.096	592173.207	40.00
3007	674129.441	591836.662	40.00
3008	674169.745	591777.206	40.00

Berth 30

DREDGING TEMPLATE

FEDERAL CHANNEL

Port Newark Pierhead Channel

FLOOD

EBB

N 674,400

N 674,000

E 591,600

E 592,000

E 592,400

20'

50'

250'

600'

35'+2' M.L.W.

40'+2' M.L.W.

25+00 24+00 23+00 22+00 21+00 20+00 19+00 18+00 17+00 16+00

Mon–28 (30/32)

Mon–25 (28/30)

0 40 80 160 FT.

Scale: 1"=80'

ESTIMATED WATER DEPTH AT MEAN LOW TIDE THE PORT AUTHORITY MAKES NO REPRESENTATION AS TO ACCURACY.

CALL (973) 578-2192 FOR SPECIFIC VESSEL ARRANGEMENTS.

NOTE:
THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. THE DATA IS REPRESENTATIVE OF A LARGER DATA SET. SOUNDINGS AND CONTOURS SHOWN ARE FROM 8'X16' GRID NEAREST TO CENTER. COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983) SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER THE PLANE OF MEAN LOW WATER IS 2.3 FEET BELOW NGVD (1929) THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 2 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110 2 1003.
THIS SURVEY WAS COMPLETED USING THE FOLLOWING EQUIPMENT:
* Survey Vessel "Red Rogers".
* Reson 7101 Multibeam.
* TSS 320 POS/MV.
* Coastal Oceanographics "HYPACK" software

Volume Report

THE DATA USED FOR VOLUME CALCULATIONS IS REPRESENTATIVE OF A LARGER DATA SET. SOUNDINGS USED FOR VOLUME CALCULATIONS ARE ON A 3'X3' GRID WITH THE DEPTH NEAREST TO THE CENTER USED.

Design Depth	Volume to Dredge Template	Volume of 2' Over dredge	Total Volume
35'	1,753 yd3	1,225 yd3	2,978 yd3
40'	2,495 yd3	3,034 yd3	5,529 yd3
TOTAL	4,248 yd3	4,259 yd3	8,507 yd3

NOTE: BERTH LENGTHS, WIDTHS AND DEEP WATER BERTH DIMENSIONS FROM P.A. PORT DEPARTMENT.

Coordinates are expressed in feet and refer to the NEW JERSEY STATE PLANE (NAD 83) System.

Soundings refer to Mean Low Water as determined by U.S.A.C.E.

The Plane of Mean Low Water is 2.3 feet below Mean Sea Level (NGVD 29).

Note:
This survey does not guarantee the absence or presence of any underwater obstructions. Diver verification may be required.

NAVD88 3.42
NGVD29 2.30
MLW (N.O.A.A.) 0.67
MLW (COE) & SURVEY 0.00

I hereby certify to The Port Authority of New York and New Jersey that this map indicates the conditions existing as of the date indicated hereon to the best of my professional knowledge.

William A. Rogers, Jr., P.E., L.S.
New Jersey State # 22254
A.C.S.M. Certified Hydrographer # 151

PREPARED FOR
THE PORT AUTHORITY OF NY & NJ

ROGERS SURVEYING, PLLC
1302 Richmond Terrace
Staten Island, N.Y. 10310
(718) 447-7311
www.rogerssurveying.net

Title

NEW JERSEY MARINE TERMINAL

HYDROGRAPHIC SURVEY

No.	Date	Revision	Approved

VERTICAL CONTROL
Mean Low Water = 2.3' Below 0.00 NGVD '29

HORIZONTAL CONTROL
ALL COORDINATES, BEARING AND DISTANCES ARE REFERENCED TO THE NEW JERSEY PLANE COORDINATE SYSTEM (N.A.D. 83) AS SET FORTH IN N.J.S.A. 51:3–7

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without it's written consent.

Rogers Surveying — Surveyed by | BW — Drawn by | DWR — Checked by

Date 12/10/12-01/17/13 | Scale 1"= 80'

Contract Number 410–12–037 | Drawing Number 28 of 60

BERTH 30