

**FLOOD**  
—  
**EBB** →



**ROGERS SURVEYING, P.L.C.**  
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[illegible]NEW JERSEY  
MARINE  
TERMINALHYDROGRAPHIC  
SURVEY

**VERTICAL CONTROL**  
Mean Low Water = 2.3' Below 0.00 NGVD '2

**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 contra  
All inventions, ideas, designs and metho  
herein are reserved to Port Authority a  
may not be used without it's written conse

<u>Rogers Surveying</u>	<u>BW</u>	<u>DWR</u>
Surveyed by	Drawn by	Checked by

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

410-12-037 20 of 60

BERTH 20

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 18'x18' 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:

- "Sed Vessel" "Red Rogers".
- Reason 7101 Multibeam.
- TSS 320 POS/MV.
- Coastal Oceanographics "HYPACK" software

<b>Volume Report</b> <small>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.</small>			
<i>Design Depth</i>	<i>Volume to Dredge Template</i>	<i>Volume of 2' Over dredge</i>	<i>Total Volume</i>
35'	440 yd3	594 yd3	1,034 yd3
38'	3,157 yd3	4,574 yd3	7,731 yd3
TOTAL	3,597 yd3	5,168 yd3	8,765 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. NAVD88 3.42  
Soundings refer to Mean Low Water as determined by U.S.A.C.E. NGVD29 2.30  
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.

system. NAVDBB 3.42 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.

29). NGVD29 2.30

MLW (N.O.A.A.) 0.67

MLW (COE & SURVEY 0.00

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