Elizabeth Channel

N 675,200

E 587,200

N 674,800

E 586,800

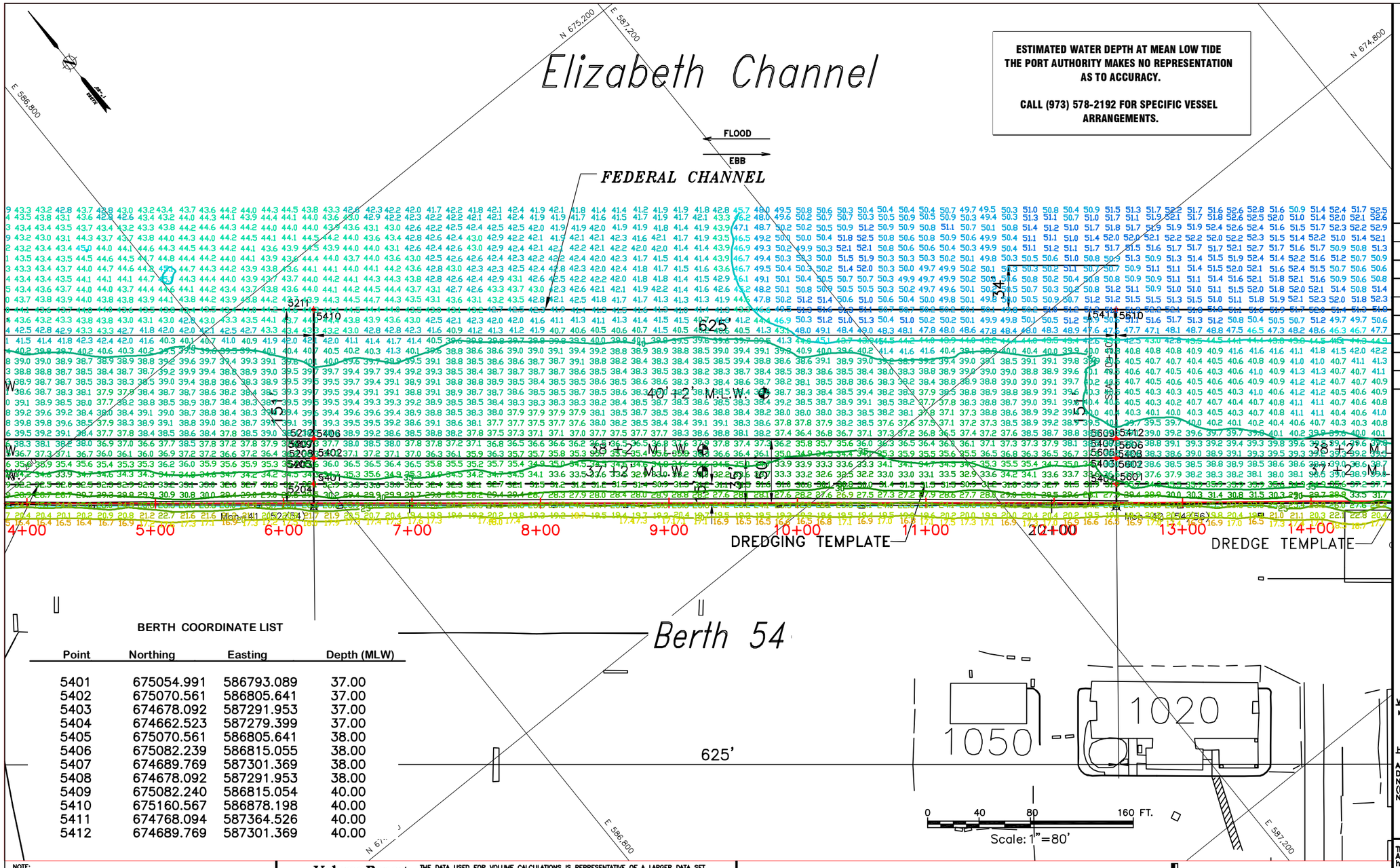
FLOOD

EBB

FEDERAL CHANNEL

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

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



BERTH COORDINATE LIST

Point	Northing	Easting	Depth (MLW)
5401	675054.991	586793.089	37.00
5402	675070.561	586805.641	37.00
5403	674678.092	587291.953	37.00
5404	674662.523	587279.399	37.00
5405	675070.561	586805.641	38.00
5406	675082.239	586815.055	38.00
5407	674689.769	587301.369	38.00
5408	674678.092	587291.953	38.00
5409	675082.240	586815.054	40.00
5410	675160.567	586878.198	40.00
5411	674768.094	587364.526	40.00
5412	674689.769	587301.369	40.00

Berth 54

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 "Ted 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
37'	1,199yd3	923 yd3	2,122 yd3
38'	443 yd3	675 yd3	1,118 yd3
40'	2,030 yd3	3,502 yd3	5,532 yd3
TOTAL	3,672 yd3	5,100 yd3	8,772 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.)	0.87
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.

Surveyed by	Drawn by	Checked by
Rogers Surveying	BW	DWR

Date 12/10/12-01/17/13
Scale 1"= 80'
Contract Number 410-12-037
Drawing Number 36 of 60
BERTH 54