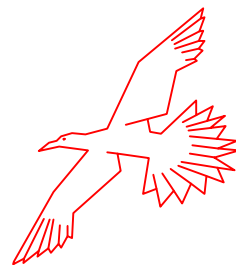


CROSS HARBOR TRANSFER FACILITY (GREENVILLE)
BAYONNE , NEW JERSEY
CONTRACT No. 410-10-037
SURVEY No. 2012-364

HYDROGRAPHIC SURVEY
January 17, 2013

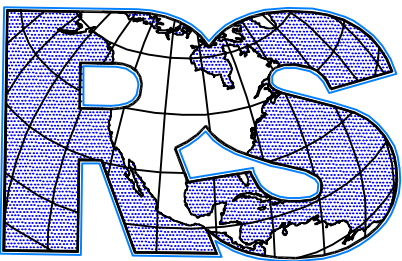
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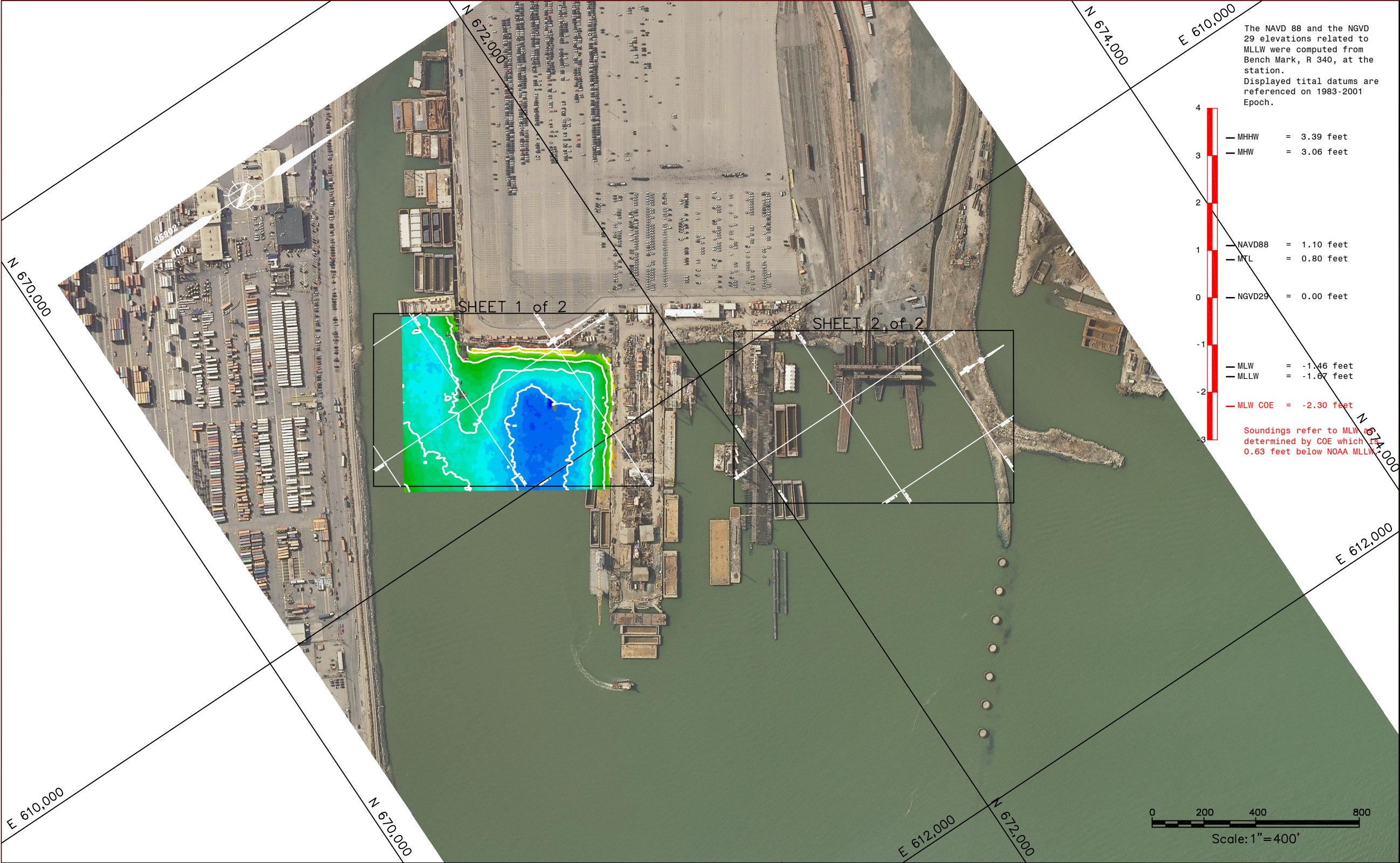
- 1. INDEX
- 2. SHEETS 1 – 2



Vicinity Map



ROGERS SURVEYING, PLLC
1632 Richmond Terrace
Staten Island, N.Y. 10310
(718) 447-7311
www.rogerssurveying.net



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OF NY & NJ**



Title

**PORT AUTHORITY
GREENVILLE
CHANNEL
BAYONNE NEW
JERSEY**

**HYDROGRAPHIC
SURVEY AND BERTH
VOLUME
CALCULATIONS**

Index

No.	Date	Revision	Approved

VERTICAL CONTROL
Mean Low Water = 2.33' 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 BW DWR
Surveyed by Drawn by Checked by

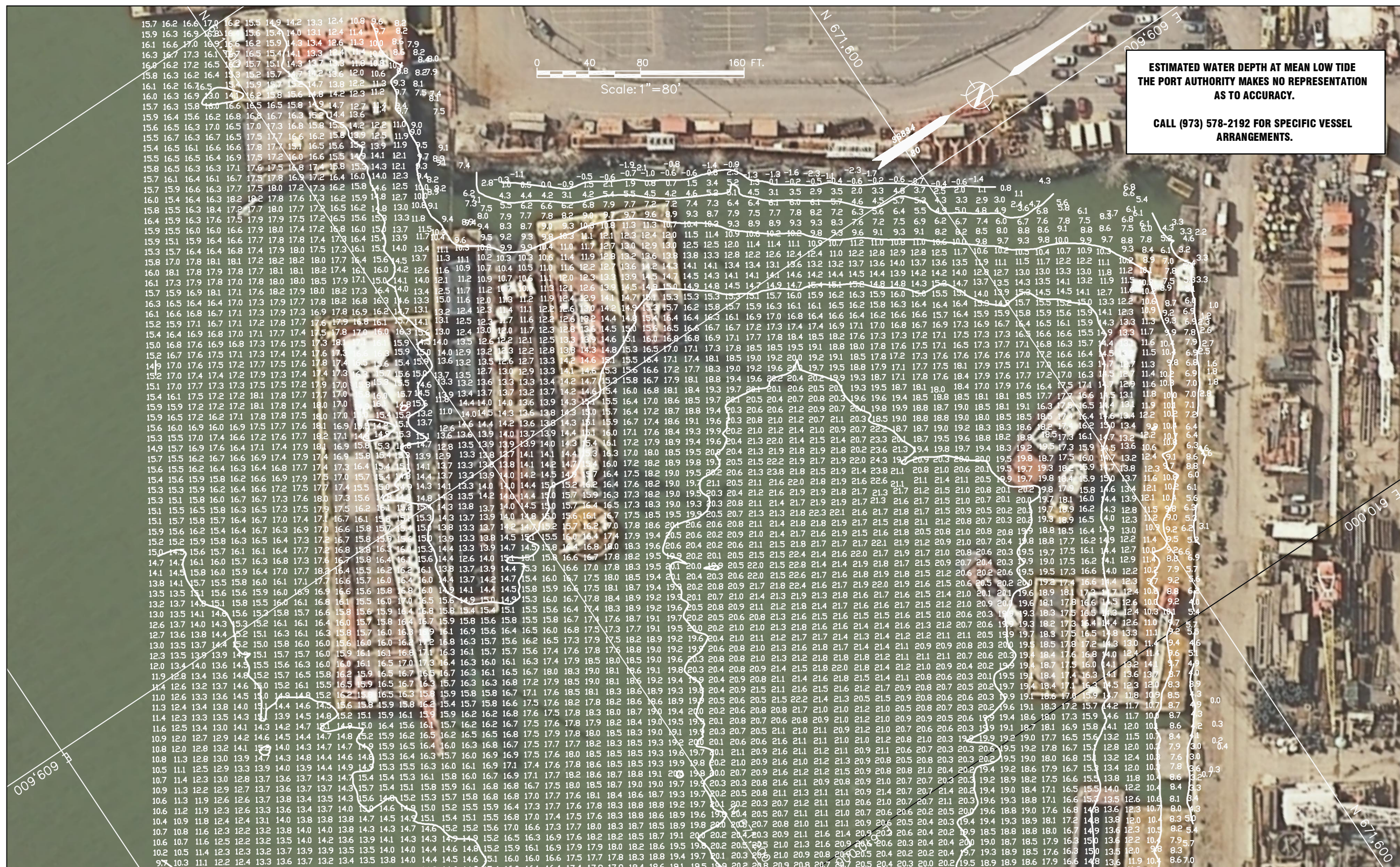
Date 01/17/2013 Scale 1"=400'
Contract Number 410-07-030 Drawing Number 36834

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'X 3' GRID WITH THE DEPTH NEAREST TO THE CENTER USED.			
Design Depth	Volume to Dredge Template	Volume of 2' Overdredge	Total Volume

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



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ROGERS SURVEYING, PLLC
1022 Richmond Terrace
Rye Brook, N.Y. 10570
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[illegible]

Title

PORT AUTHORITY
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JERSEY

HYDROGRAPHIC SURVEY AND BERTH VOLUME CALCULATIONS

Sheet 1

No.	Date	Revision	Approved

VERTICAL CONTROL

VERTICAL CONTROL
Mean Low Water = 2.33' Below 0.00 NGVD '29

HORIZONTAL CONTROL

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THIS SURVEY WAS COMPLETED USING THE FOLLOWING EQUIPMENT:

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- Reason 7101 Multibeam.
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Volume Report

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—

3.42 I hereby certify to The Port Authority
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as of the date indicated hereon to the
best of my professional knowledge.

1022 P. P. P.

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

MLW (N.O.A.A.)
MLW (COE)
& SURVEY

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

Date _____ Scale 1"=80'

01/17/2013	
Contract Number	Drawing Number
410-07-030	36834



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THE PORT AUTHORITY
OF NY & NJ



ROGERS SURVEYING, PLLC
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Rutherford, N.J. 07070
(973) 400-7311
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Title

**PORT AUTHORITY
GREENVILLE
CHANNEL
BAYONNE NEW
JERSEY**

**HYDROGRAPHIC
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Sheet 2

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