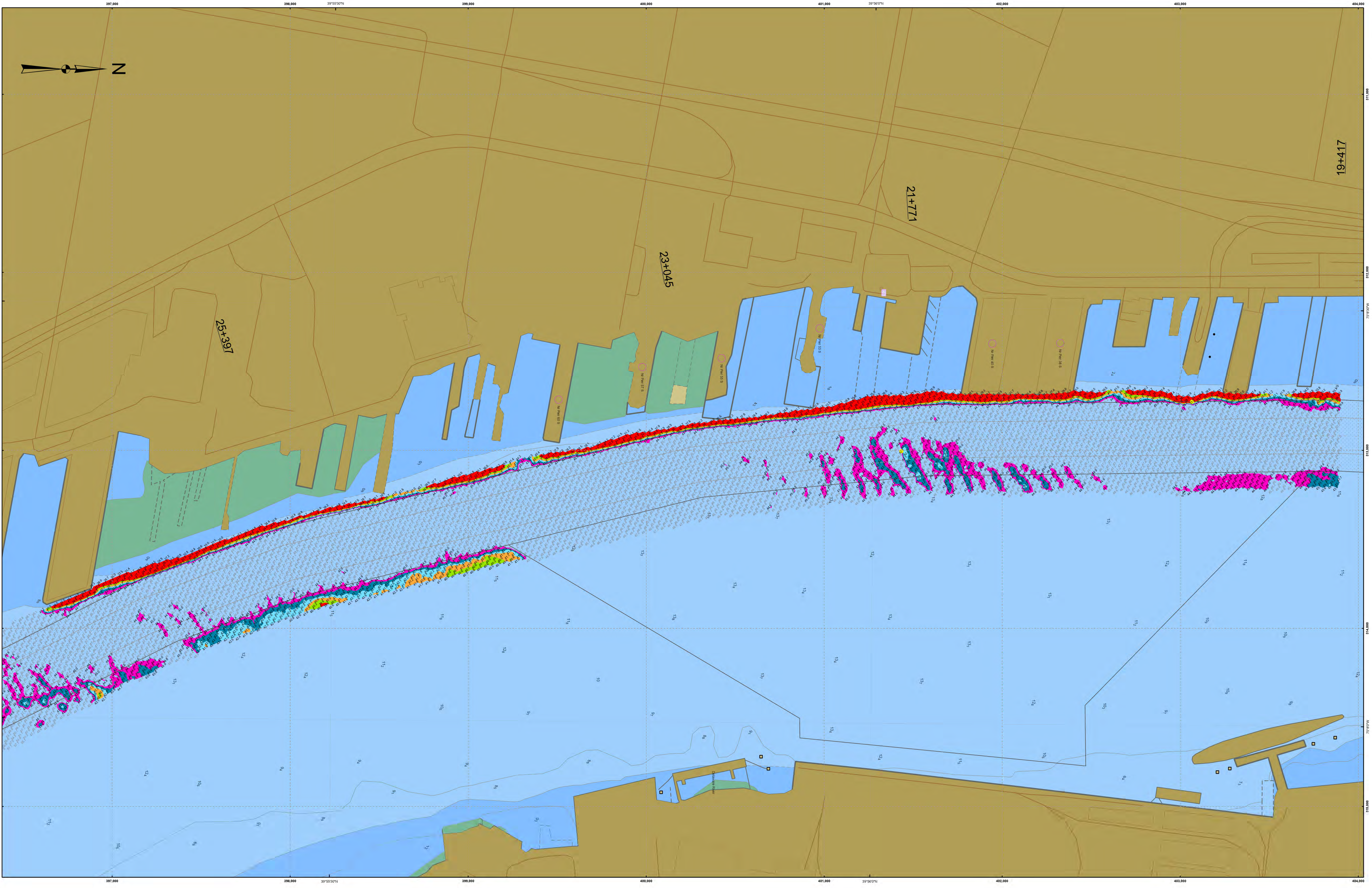
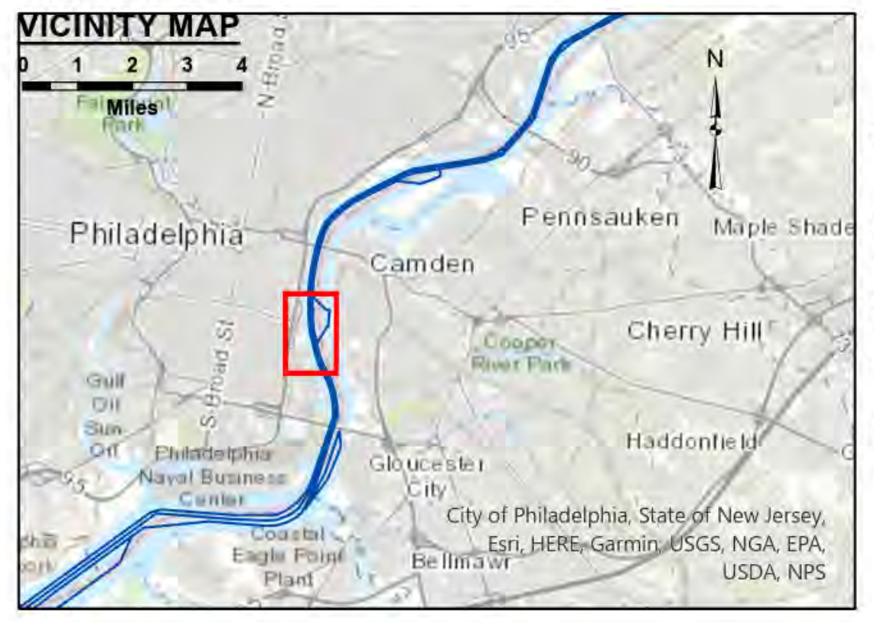


US Army Corps of Engineers
Philadelphia District

VICINITY MAP


0 1 2 3 4
Miles
N
Philadelphia
Camden
Pennsauken
Maple Shade
Cherry Hill
Haddonfield
Gloucester City
Philadelphia Naval Business Center
City of Philadelphia, State of New Jersey, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

1. THIS SURVEY MEETS STANDARDS AS OUTLINED IN CORPS OF ENGINEERS' HYDROGRAPHIC SURVEY MANUAL EM1110-2-1003, DATED NOVEMBER 30, 2013 FOR NAVIGATION AND DREDGING SUPPORT SURVEYS.

2. HORIZONTAL REFERENCE - NAD 83, NEW JERSEY STATE PLANE, ZONE 2900, U.S. FOOT.

3. VERTICAL REFERENCE – MEAN LOWER LOW WATER, WHICH IS BELOW N.A.V.D. 88 BY THE FOLLOWING:
3.15' from STA. 18+346.82 to STA. 19+547.79
3.12' from STA. 19+547.79 to STA. 25+528.28
3.11' from STA. 25+528.28 to STA. 32+754.80
3.10' from STA. 32+754.80 to STA. 41+217.47

4. GEOID 12B AND NOAA TIDAL EPOCH: 1983 – 2001 WERE USED. SOUNDINGS ARE EXPRESSED IN FEET AND TENTHS AND REFER TO MEAN LOWER LOW WATER.

5. SOUNDINGS WERE SELECTED FOR PLOTTING PURPOSES ONLY, USING THE MINIMUM DEPTH WITHIN A 30'X30' CELL SHIFTED TO THE CELL CENTER.

6. CONTOURS DEPICT ACTUAL LOCATION OF BATHYMETRY AND DO NOT NECESSARILY REFLECT PLOTTED SOUNDING LOCATIONS.

7. CONTOURS WERE GENERATED USING THE MINIMUM DEPTH WITHIN A 15'X15' CELL.

8. HYPACK, INC. SOFTWARE WAS USED TO PERFORM THE SOUNDING SELECTION AND CONTOUR GENERATION.

9. THE INFORMATION DEPICTED ON THIS MAP REPRESENT THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

10. THE POSITIONS OF THE AIDS TO NAVIGATION ARE PROVIDED FOR INFORMATION ONLY, AND SHOULD NOT BE USED FOR NAVIGATION.

11. THE LIMITS OF THE FEDERAL CHANNEL DEPICT THE MOST CURRENT CHANNEL FRAMEWORK AVAILABLE WHICH CAN ALSO BE DOWNLOADED HERE:

http://navigation.usace.army.mil/Survey/Framework

12. BASE MAPPING LINEWORK OR ORTHOPHOTOGRAPHY HAS BEEN COMPILED FROM A VARIETY OF SOURCES AND DATES AND IS INTENDED TO PORTRAY GENERAL CHARACTERISTICS OF THE SHORELINE AND OTHER FEATURES. TEMPORAL CHANGES MAY HAVE OCCURRED SINCE THIS DATA SET WAS COLLECTED AND SOME PARTS OF THE DATA MAY NO LONGER BE AN ACCURATE REPRESENTATION OF THE SURFACE CONDITIONS.

Scale in Feet
200 0 200 400 600

●	Shoalest Sounding per Quarter
	CenterLine
—	ToeLine
- - -	QuarterLine
—	StationLine
	45 - 59.42
🟪	44 - 45
🟦	43 - 44
🟦	42 - 43
🟧	41 - 42
🟩	40 - 41
🟥	13.58 - 40

STA. 19+417 to STA. 29+110 -- 19 MAR 25
STA. 29+110 to STA. 38+209 -- 11 MAR 25
STA. 33+750 to STA. 34+400 -- 15 APR 25

DISCLAIMER
This data is provided for general information only. It is not intended for use as a navigation aid. NOAA publishes the official navigation charts to be used in US waters by mariners. Any navigational use of this data by others than the Corps of Engineers constitutes misuse of the data. At best, hydrographic surveys are accurate only at the time they are measured and only within the tolerances of the survey equipment, computers, printers, and other tools and equipment used to produce and print them. Wind, waves, currents, and other maritime effects are constantly changing the topography of the waters of the United States. Survey equipment and computer plotting software have inherent inaccuracies, and printers and displays can also create inaccuracies.

The materials are provided "as is." The government makes no representations or warranties about the qualityor suitability of the materials, expressed or implied, including but not limited to any implied warranties of merchantability, fitness for a particular purpose, or non-infringement. The government makes no warranties, guaranties or representations as to the truth, accuracy, or completeness of the data provided.

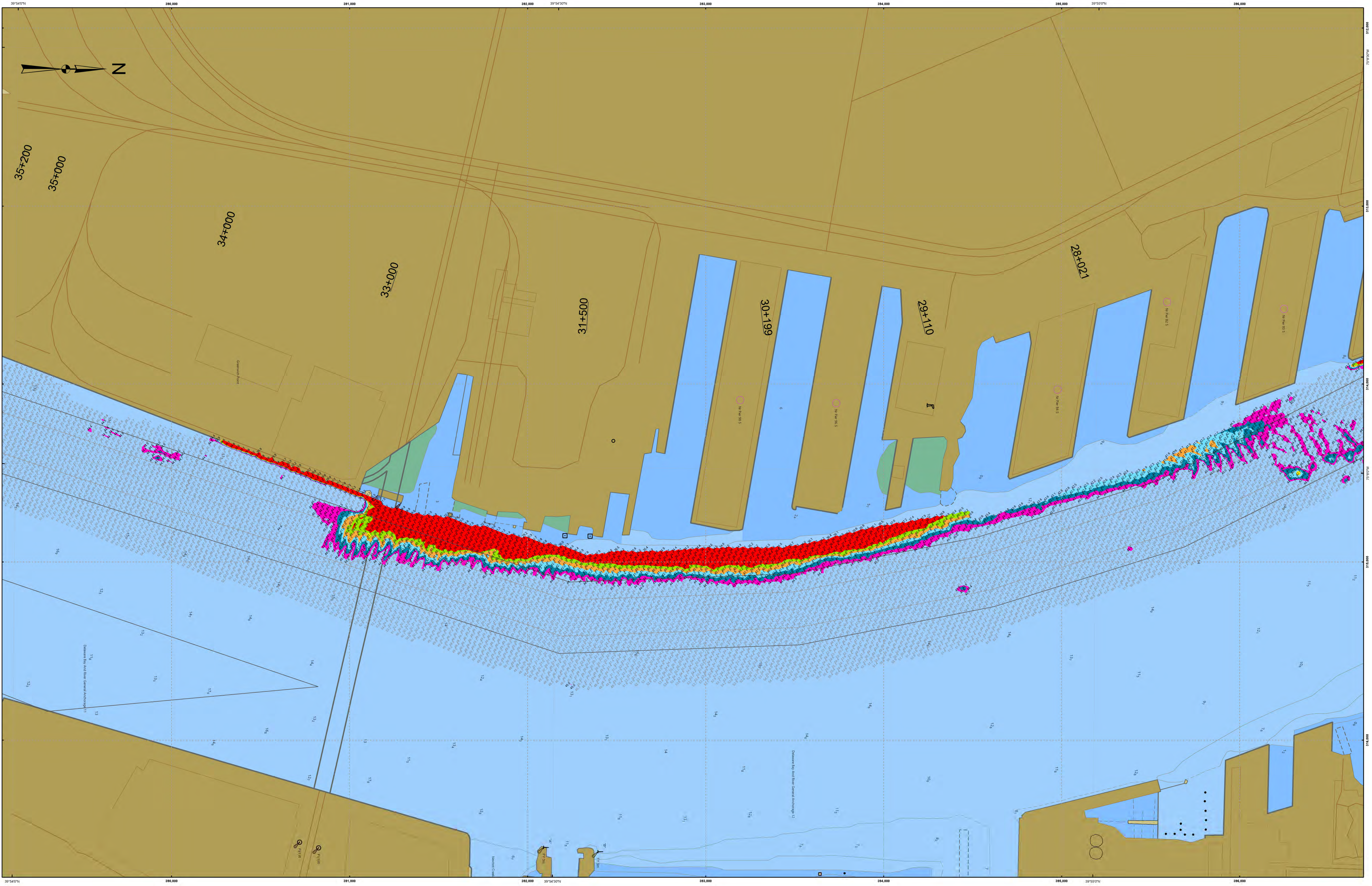
The government disclaims any liability for the use of this data by others and the government shall not be liable for any damages suffered as a result of using, modifying, contributing, or distributing this information.

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

Surveyed By:
Drawing No.
Plotted By:
E. Anthony
Plot Scale
Checked By:
Approved:
Chief, Survey Section

DELAWARE RIVER, PHILADELPHIA TO THE SEA
HORSESHOE BEND TO CAMDEN WATERFRONT
EXAMINATION
STA. 19+417 to STA. 38+208

E-PS-353


N
35+200
35+000
34+000
33+000
31+500
30+199
29+110
28+021
39°54'0"N
390,000
391,000
392,000
39°54'30"N
393,000
394,000
395,000
39°55'0"N
396,000
75°8'30"W
75°8'0"W
312,000
313,000
314,000
315,000
316,000
Newton Creek
Delaware Bay And River General Anchorage 11
Delaware Bay And River General Anchorage 12

US Army Corps of Engineers
Philadelphia District

STA. 19+417 to STA. 29+110 -- 19 MAR 25
STA. 29+110 to STA. 38+209 -- 11 MAR 25
STA. 33+750 to STA. 34+400 -- 15 APR 25

DISCLAIMER
This data is provided for general information only. It is not intended for use as a navigation aid. NOAA publishes the official navigation charts to be used in US waters by mariners. Any navigational use of this data by others than the Corps of Engineers constitutes misuse of the data. At best, hydrographic surveys are accurate only at the time they are measured and only within the tolerances of the survey equipment, computers, printers, and other tools and equipment used to produce and print them. Wind, waves, currents, and other maritime effects are constantly changing the topography of the waters of the United States. Survey equipment and computer plotting software have inherent inaccuracies, and printers and displays can also create inaccuracies.

The materials are provided "as is." The government makes no representations or warranties about the qualityor suitability of the materials, expressed or implied, including but not limited to any implied warranties of merchantability, fitness for a particular purpose, or non-infringement. The government makes no warranties, guaranties or representations as to the truth, accuracy, or completeness of the data provided.

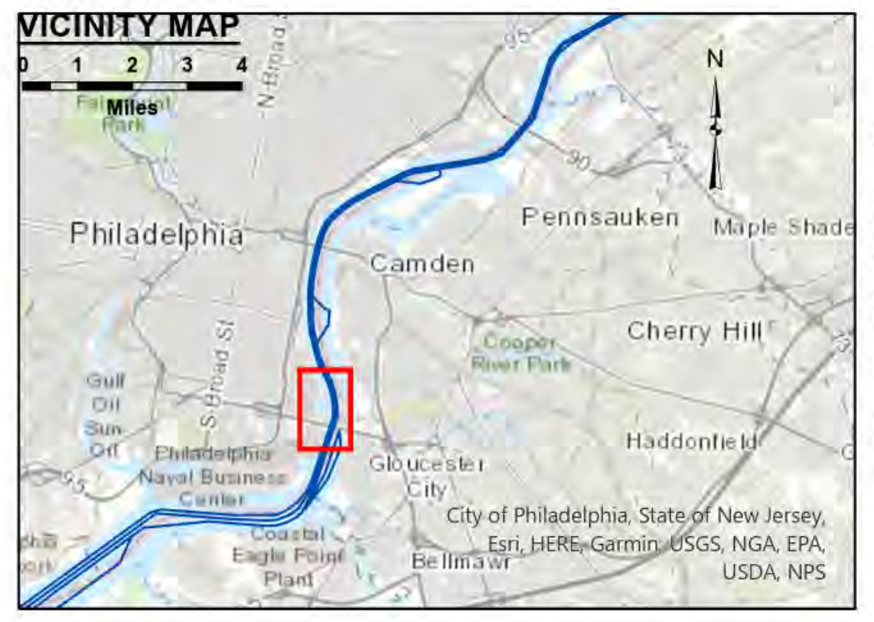
The government disclaims any liability for the use of this data by others and the government shall not be liable for any damages suffered as a result of using, modifying, contributing, or distributing this information.

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

Drawing No.
Surveyed By:
Plot Scale
Plotted By:
E. Anthony
Checked By:
Approved:
Chief, Survey Section

DELAWARE RIVER, PHILADELPHIA TO THE SEA
HORSESHOE BEND TO CAMDEN WATERFRONT
EXAMINATION
STA. 19+417 to STA. 38+208

E-PS-353


VICINITY MAP
0
1
2
3
4
Miles
N
Philadelphia
Camden
Pennsauken
Maple Shade
Cherry Hill
Cooper River Park
Haddonfield
Gloucester City
Bellmawr
Philadelphia Naval Business Center
Coastal Eagle Point Plant
Gulf Oil Sun Oil
S Broad St
N Broad St
City of Philadelphia, State of New Jersey, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

1. THIS SURVEY MEETS STANDARDS AS OUTLINED IN CORPS OF ENGINEERS' HYDROGRAPHIC SURVEY MANUAL EM1110-2-1003, DATED NOVEMBER 30, 2013 FOR NAVIGATION AND DREDGING SUPPORT SURVEYS.

2. HORIZONTAL REFERENCE - NAD 83, NEW JERSEY STATE PLANE, ZONE 2900, U.S. FOOT.

3. VERTICAL REFERENCE – MEAN LOWER LOW WATER, WHICH IS BELOW N.A.V.D. 88 BY THE FOLLOWING:
3.15' from STA. 18+346.82 to STA. 19+547.79
3.12' from STA. 19+547.79 to STA. 25+528.28
3.11' from STA. 25+528.28 to STA. 32+754.80
3.10' from STA. 32+754.80 to STA. 41+217.47

4. GEOID 12B AND NOAA TIDAL EPOCH: 1983 – 2001 WERE USED. SOUNDINGS ARE EXPRESSED IN FEET AND TENTHS AND REFER TO MEAN LOWER LOW WATER.

5. SOUNDINGS WERE SELECTED FOR PLOTTING PURPOSES ONLY, USING THE MINIMUM DEPTH WITHIN A 30'X30' CELL SHIFTED TO THE CELL CENTER.

6. CONTOURS DEPICT ACTUAL LOCATION OF BATHYMETRY AND DO NOT NECESSARILY REFLECT PLOTTED SOUNDING LOCATIONS.

7. CONTOURS WERE GENERATED USING THE MINIMUM DEPTH WITHIN A 15'X15' CELL.

8. HYPACK, INC. SOFTWARE WAS USED TO PERFORM THE SOUNDING SELECTION AND CONTOUR GENERATION.

9. THE INFORMATION DEPICTED ON THIS MAP REPRESENT THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

10. THE POSITIONS OF THE AIDS TO NAVIGATION ARE PROVIDED FOR INFORMATION ONLY, AND SHOULD NOT BE USED FOR NAVIGATION.

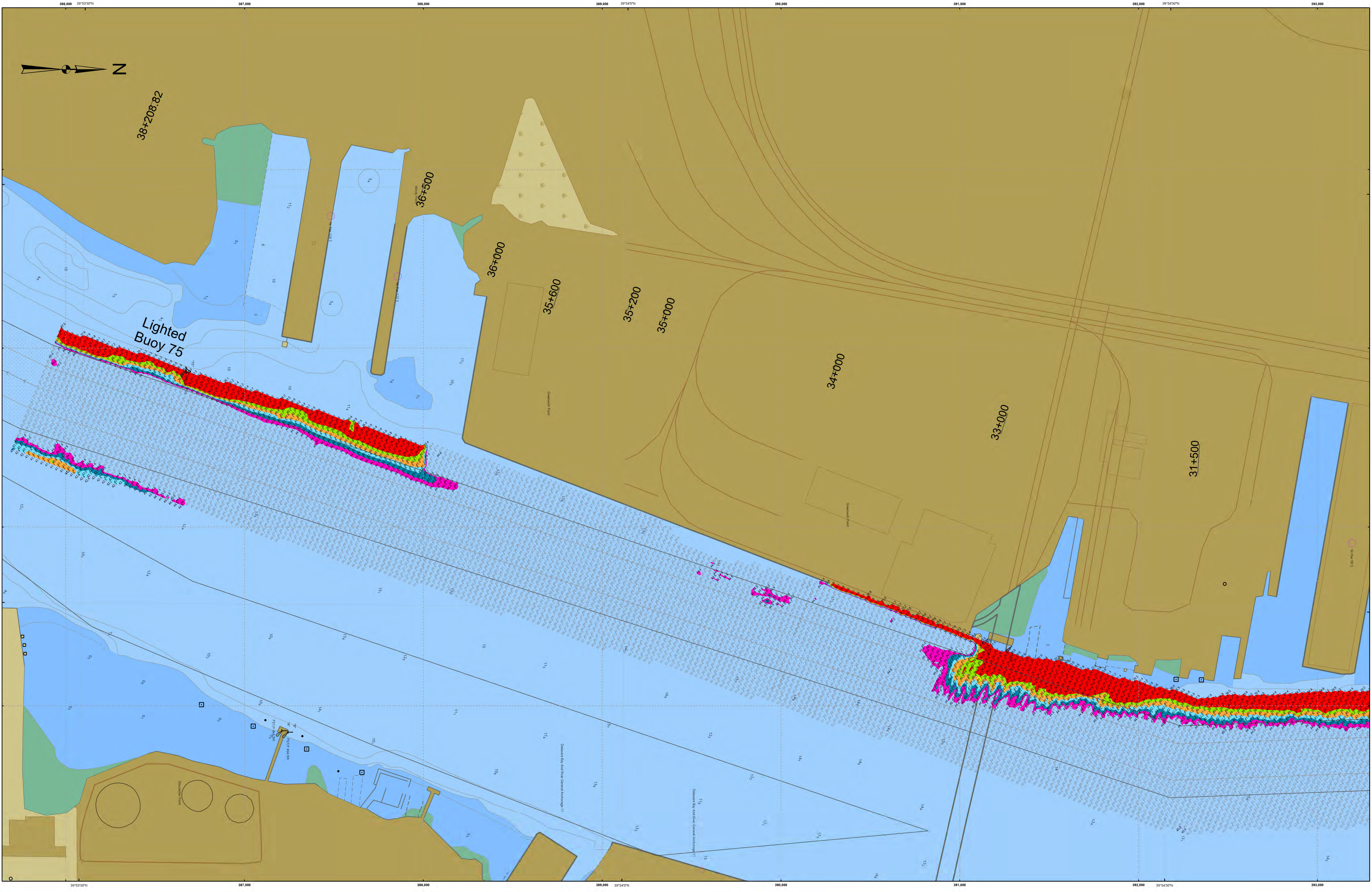
11. THE LIMITS OF THE FEDERAL CHANNEL DEPICT THE MOST CURRENT CHANNEL FRAMEWORK AVAILABLE WHICH CAN ALSO BE DOWNLOADED HERE:

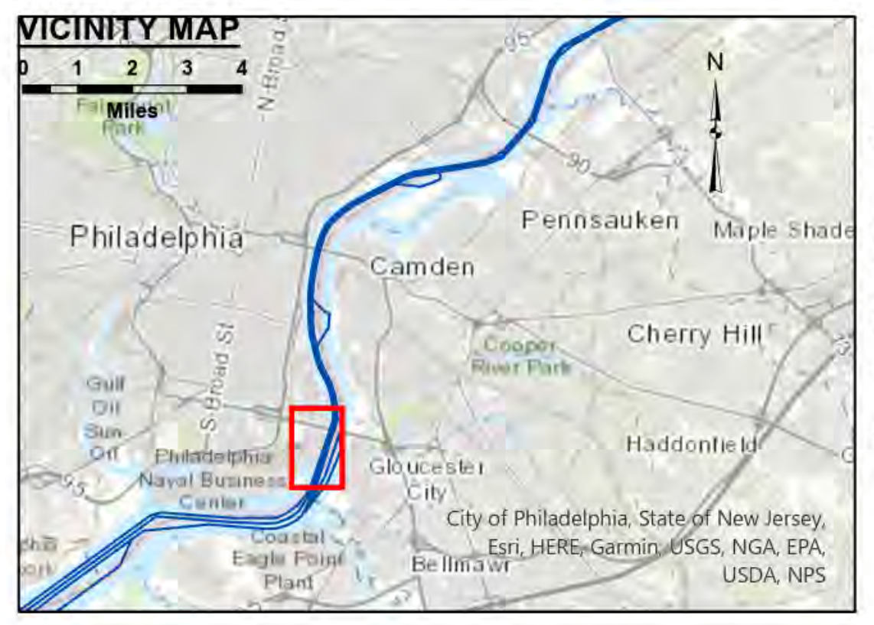
http://navigation.usace.army.mil/Survey/Framework

12. BASE MAPPING LINEWORK OR ORTHOPHOTOGRAPHY HAS BEEN COMPILED FROM A VARIETY OF SOURCES AND DATES AND IS INTENDED TO PORTRAY GENERAL CHARACTERISTICS OF THE SHORELINE AND OTHER FEATURES. TEMPORAL CHANGES MAY HAVE OCCURRED SINCE THIS DATA SET WAS COLLECTED AND SOME PARTS OF THE DATA MAY NO LONGER BE AN ACCURATE REPRESENTATION OF THE SURFACE CONDITIONS.

Scale in Feet
200 0 200 400 600

●	Shoalest Sounding per Quarter
	CenterLine
—	ToeLine
┈	QuarterLine
—	StationLine
	45 - 59.42
🟪	44 - 45
🟦	43 - 44
🟦	42 - 43
🟧	41 - 42
🟩	40 - 41
🟥	13.58 - 40





1. THIS SURVEY MEETS STANDARDS AS OUTLINED IN CORPS OF ENGINEERS' HYDROGRAPHIC SURVEY MANUAL EM1110-2-1003, DATED NOVEMBER 30, 2013 FOR NAVIGATION AND DREDGING SUPPORT SURVEYS.

2. HORIZONTAL REFERENCE - NAD 83, NEW JERSEY STATE PLANE, ZONE 2900, U.S. FOOT.

3. VERTICAL REFERENCE – MEAN LOWER LOW WATER, WHICH IS BELOW N.A.V.D. 88 BY THE FOLLOWING:
3.15' from STA. 18+346.82 to STA. 19+547.79
3.12' from STA. 19+547.79 to STA. 25+528.28
3.11' from STA. 25+528.28 to STA. 32+754.80
3.10' from STA. 32+754.80 to STA. 41+217.47

4. GEOID 12B AND NOAA TIDAL EPOCH: 1983 – 2001 WERE USED. SOUNDINGS ARE EXPRESSED IN FEET AND TENTHS AND REFER TO MEAN LOWER LOW WATER.

5. SOUNDINGS WERE SELECTED FOR PLOTTING PURPOSES ONLY, USING THE MINIMUM DEPTH WITHIN A 30'X30' CELL SHIFTED TO THE CELL CENTER.

6. CONTOURS DEPICT ACTUAL LOCATION OF BATHYMETRY AND DO NOT NECESSARILY REFLECT PLOTTED SOUNDING LOCATIONS.

7. CONTOURS WERE GENERATED USING THE MINIMUM DEPTH WITHIN A 15'X15' CELL.

8. HYPACK, INC. SOFTWARE WAS USED TO PERFORM THE SOUNDING SELECTION AND CONTOUR GENERATION.

9. THE INFORMATION DEPICTED ON THIS MAP REPRESENT THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

10. THE POSITIONS OF THE AIDS TO NAVIGATION ARE PROVIDED FOR INFORMATION ONLY, AND SHOULD NOT BE USED FOR NAVIGATION.

11. THE LIMITS OF THE FEDERAL CHANNEL DEPICT THE MOST CURRENT CHANNEL FRAMEWORK AVAILABLE WHICH CAN ALSO BE DOWNLOADED HERE:

http://navigation.usace.army.mil/Survey/Framework

12. BASE MAPPING LINEWORK OR ORTHOPHOTOGRAPHY HAS BEEN COMPILED FROM A VARIETY OF SOURCES AND DATES AND IS INTENDED TO PORTRAY GENERAL CHARACTERISTICS OF THE SHORELINE AND OTHER FEATURES. TEMPORAL CHANGES MAY HAVE OCCURRED SINCE THIS DATA SET WAS COLLECTED AND SOME PARTS OF THE DATA MAY NO LONGER BE AN ACCURATE REPRESENTATION OF THE SURFACE CONDITIONS.

Scale in Feet
200 0 200 400 600

● Shoalest Sounding per Quarter
CenterLine
— ToeLine
---- QuarterLine
— StationLine
45 - 59.42
🟪 44 - 45
🟦 43 - 44
🟦 42 - 43
🟧 41 - 42
🟩 40 - 41
🟥 13.58 - 40

US Army Corps of Engineers
Philadelphia District

STA. 19+417 to STA. 29+110 -- 19 MAR 25
STA. 29+110 to STA. 38+209 -- 11 MAR 25
STA. 33+750 to STA. 34+400 -- 15 APR 25

DISCLAIMER
This data is provided for general information only. It is not intended for use as a navigation aid. NOAA publishes the official navigation charts to be used in US waters by mariners. Any navigational use of this data by others than the Corps of Engineers constitutes misuse of the data. At best, hydrographic surveys are accurate only at the time they are measured and only within the tolerances of the survey equipment, computers, printers, and other tools and equipment used to produce and print them. Wind, waves, currents, and other maritime effects are constantly changing the topography of the waters of the United States. Survey equipment and computer plotting software have inherent inaccuracies, and printers and displays can also create inaccuracies.

The materials are provided "as is." The government makes no representations or warranties about the qualityor suitability of the materials, expressed or implied, including but not limited to any implied warranties of merchantability, fitness for a particular purpose, or non-infringement. The government makes no warranties, guaranties or representations as to the truth, accuracy, or completeness of the data provided.

The government disclaims any liability for the use of this data by others and the government shall not be liable for any damages suffered as a result of using, modifying, contributing, or distributing this information.

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
Drawing No.
Surveyed By:
Plot Scale
Plotted By:
E. Anthony
Checked By:
Approved:
Chief, Survey Section

DELAWARE RIVER, PHILADELPHIA TO THE SEA
HORSESHOE BEND TO CAMDEN WATERFRONT
EXAMINATION
STA. 19+417 to STA. 38+208

E-PS-353