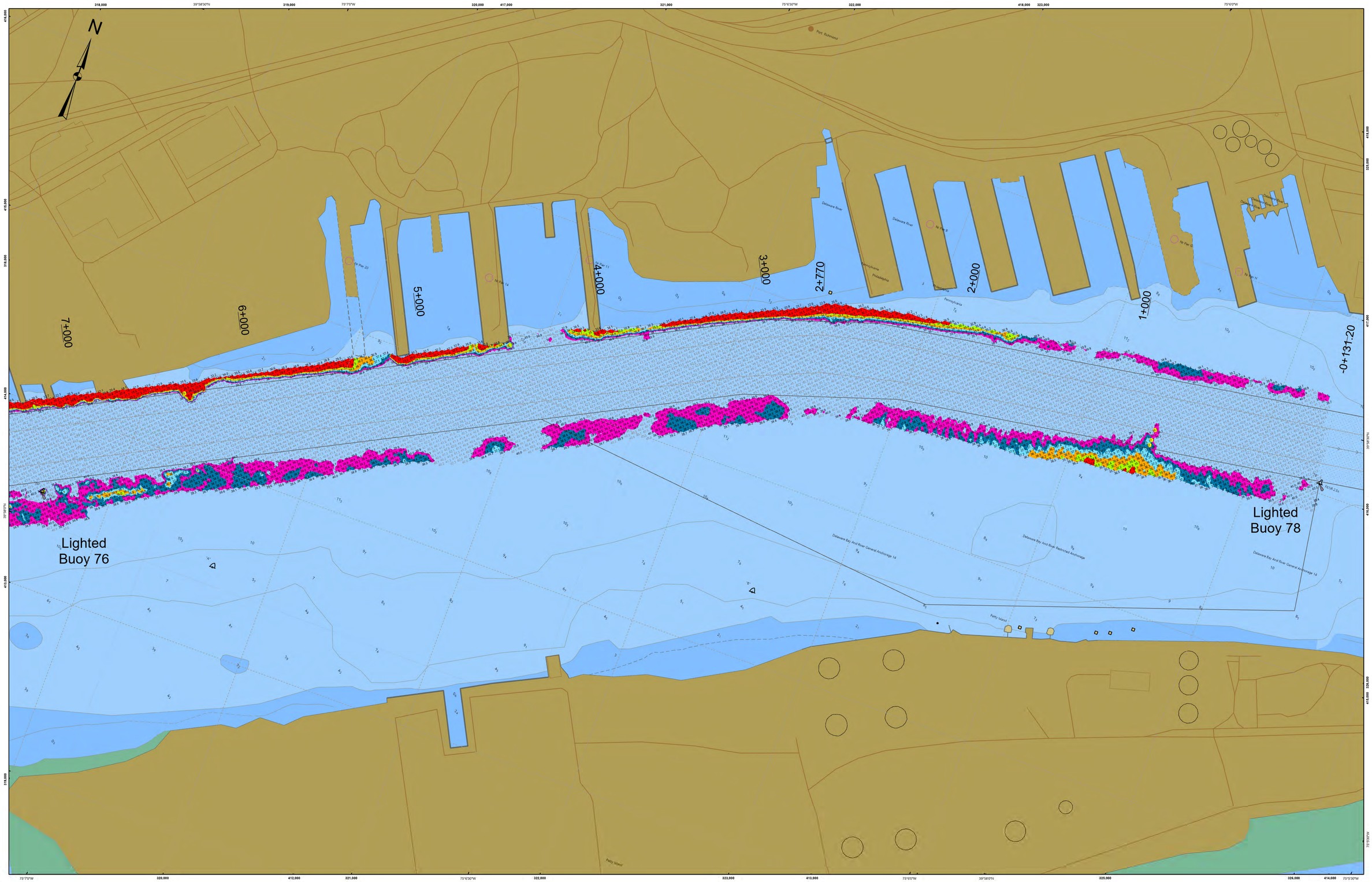
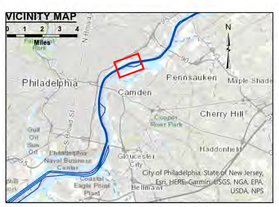
US Army Corps of Engineers
Philadelphia District

STA. -0+131 to STA. 14+929 -- 14 JAN 25
STA. 14+929 to STA. 19+417 -- 07 MAR 25





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:
3.21' from STA. -0+131 to STA. 2+901.25
3.22' from STA. 2+901.25 to STA. 12+096.69
3.23' from STA. 12+096.69 to STA. 15+676.31
3.21' from STA. 15+676.31 to STA. 16+914.64
3.18' from STA. 16+914.64 to STA. 18+346.82
3.15' from STA. 18+346.82 to STA. 19+547.79

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
- 40.0 - 50.6
- 39.0 - 40.0
- 38.0 - 39.0
- 37.0 - 38.0
- 36.0 - 37.0
- 35.0 - 36.0
- 1.48 - 35.0

DISCLAIMER
This data is provided for general information only. It was compiled from the best information available at the time of publication for official navigation charts to be used in conjunction with current notices to mariners. Users are cautioned to use this data at their own risk. The Corps of Engineers makes no representations or warranties regarding its accuracy at all the time they are accessed and only applicable at the time of publication. Hydrographic surveys are conducted using various sensors, printers and other tools and equipment owned by products. Due to the nature of the data collection process, certain effects are constantly changing the topography of the waterways such as currents, storms, and tides. Also, computer plotting software have inherent inaccuracies, and printers and displays can also create inaccuracies.

The mention on products' by a 3rd party government makes no representations or warranties, expressed or implied, including warranties of merchantability, fitness for a particular purpose, or non-infringement of proprietary rights. It makes no warranties, guarantees 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. Such information should not be used for any damages suffered as a result of using, modifying, contributing, or distributing this information.

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

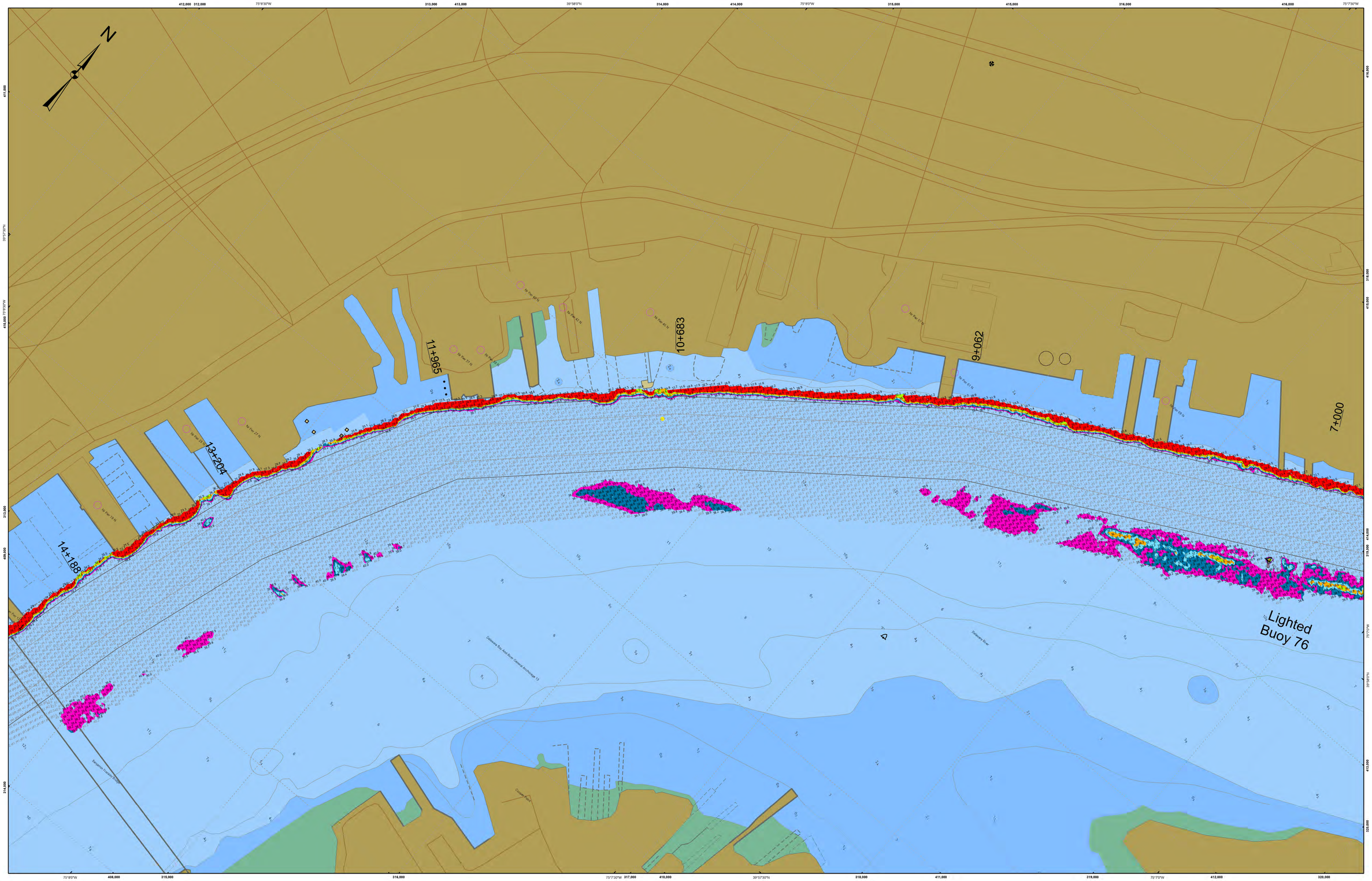
Surveyed by:
Plotted by: E. Anthony
Checked by:
Drawing No.
Plot Scale
Approved: _____ Chief, Survey Section

DELAWARE RIVER, PHILADELPHIA TO THE SEA
CAMDEN WATERFRONT TO ALLEGHENY
EXAMINATION
STA. -0+131 to STA. 19+417

E-PS-349

US Army Corps of Engineers
Philadelphia District

STA. -0+131 to STA. 14+929 -- 14 JAN 25
STA. 14+929 to STA. 19+417 -- 07 MAR 25



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:
3.21' from STA. -0+131 to STA. 2+901.25
3.22' from STA. 2+901.25 to STA. 12+096.69
3.23' from STA. 12+096.69 to STA. 15+676.31
3.21' from STA. 15+676.31 to STA. 16+914.64
3.18' from STA. 16+914.64 to STA. 18+346.82
3.15' from STA. 18+346.82 to STA. 19+547.79

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
- 40.0 - 50.6
- 39.0 - 40.0
- 38.0 - 39.0
- 37.0 - 38.0
- 36.0 - 37.0
- 35.0 - 36.0
- 1.48 - 35.0

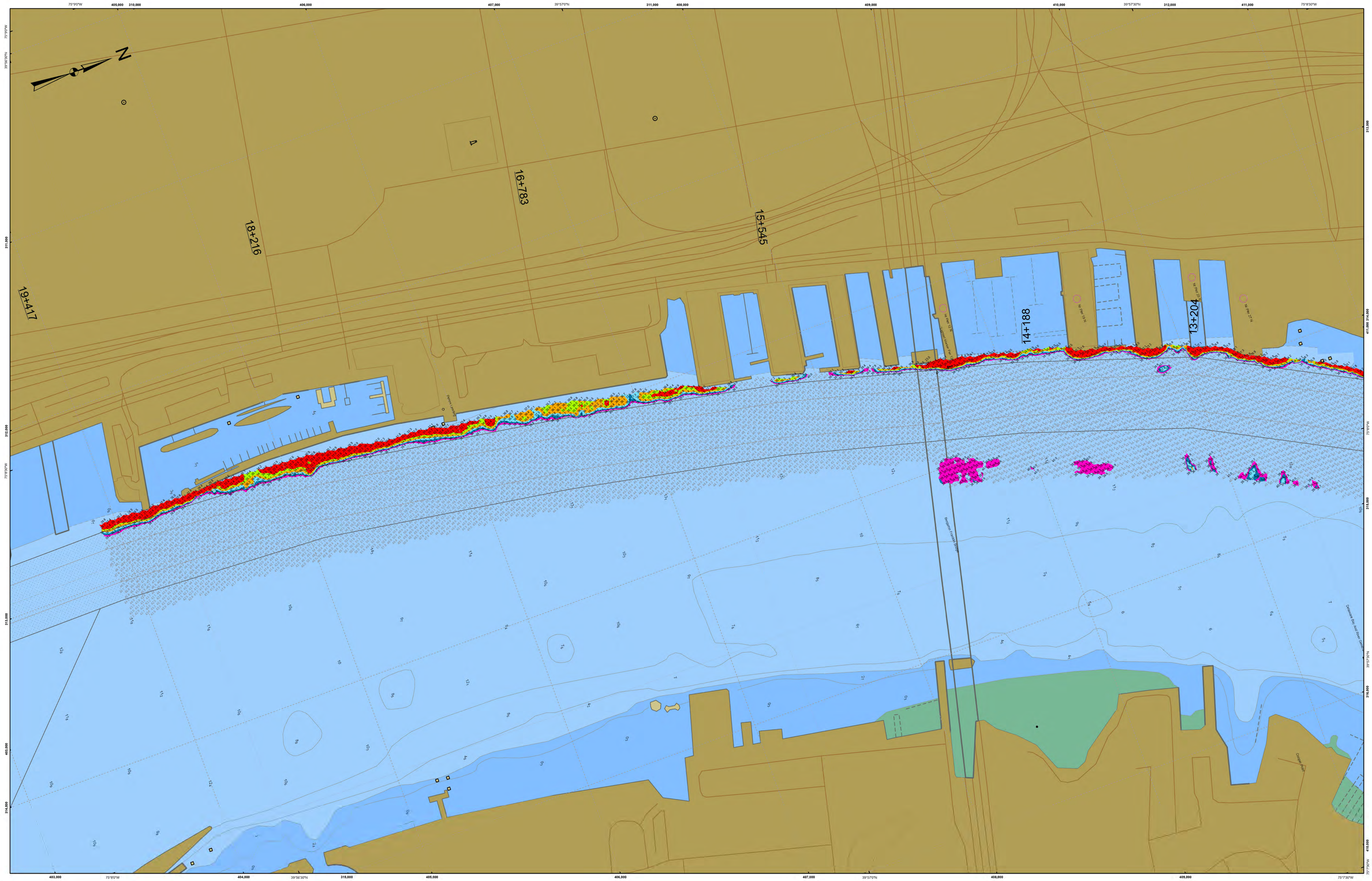
DISCLAIMER:
This data is provided for general information only. It was compiled from the best information available at the time and may not be suitable for navigation purposes. Users should be cautioned that the Corps of Engineers makes no representations or warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose, or warranties of accuracy, completeness, or timeliness, and assumes no responsibility for anyone's use of the data or 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:
Plotted By: E. Anthony
Checked By:
Drawing No.
Plot Scale:
Approved: _____
Chief, Survey Section

DELAWARE RIVER, PHILADELPHIA TO THE SEA
CAMDEN WATERFRONT TO ALLEGHENY
EXAMINATION
STA. -0+131 to STA. 19+417

E-PS-349



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:
3.21' from STA. -0+131 to STA. 2+901.25
3.22' from STA. 2+901.25 to STA. 12+096.69
3.23' from STA. 12+096.69 to STA. 15+676.31
3.21' from STA. 15+676.31 to STA. 16+914.64
3.18' from STA. 16+914.64 to STA. 18+346.82
3.15' from STA. 18+346.82 to STA. 19+547.79

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
- 40.0 - 50.6
- 39.0 - 40.0
- 38.0 - 39.0
- 37.0 - 38.0
- 36.0 - 37.0
- 35.0 - 36.0
- 1.48 - 35.0

US Army Corps of Engineers
Philadelphia District

STA. -0+131 to STA. 14+929 -- 14 JAN 25
STA. 14+929 to STA. 19+417 -- 07 MAR 25

DISCLAIMER
This data is provided for general information only. It was collected and prepared for the Corps of Engineers, U.S. Army, to facilitate the planning, performance, and management of water resources and related land resources within the United States. This data may not be accurate enough or in the form or format required for other purposes or uses. The Corps of Engineers cannot guarantee that the data is accurate or complete or accurate only at the time they are measured and may contain errors or omissions. The Corps of Engineers cannot be held liable for any improper or incorrect use of the data. Depth measurements are affected by many factors including, but not limited to, water density, tides, currents, and the movement of sediment. Navigation charts are compiled from the best available data and are updated periodically to reflect the most current conditions. However, navigation charts may not show all features, structures, and obstructions, temporary or permanent, that may affect navigation. Users should exercise caution when using navigation charts. The Corps of Engineers makes no representations or warranties, expressed or implied, including warranties of merchantability, fitness for a particular purpose, or noninfringement of third party rights, and makes no warranties, guarantees 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 any liability for any decisions made or for any damages suffered as a result of using, modifying, distributing, or distributing this information.

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

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

DELAWARE RIVER, PHILADELPHIA TO THE SEA
CAMDEN WATERFRONT TO ALLEGHENY
EXAMINATION
STA. -0+131 to STA. 19+417

E-PS-349