

D00223

NOAA Form 76-35A

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Survey

DESCRIPTIVE REPORT

Type of Survey: Navigable Area

Registry Number: D00223

LOCALITY

State: New York

General Locality: East River

Sub-locality: East River

2016

CHIEF OF PARTY
LT Andrew Clos, NOAA

LIBRARY & ARCHIVES

Date:

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| NOAA FORM 77-28 (11-72) | | U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | REGISTRY NUMBER: |
| HYDROGRAPHIC TITLE SHEET | | | D00223 |
| INSTRUCTIONS: The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office. | | | |
| State: | New York | | |
| General Locality: | East River | | |
| Sub-Locality: | East River | | |
| Scale: | 1: 2500 | | |
| Dates of Survey: | 10/11/2016 to 10/11/2016 | | |
| Instructions Dated: | 10/11/2016 | | |
| Project Number: | S-B916-NRT5-16 | | |
| Field Unit: | NRT5 | | |
| Chief of Party: | LT Andrew Clos, NOAA | | |
| Soundings by: | Multibeam Echo Sounder | | |
| Imagery by: | | | |
| Verification by: | Pacific Hydrographic Branch | | |
| Soundings Acquired in: | meters at Mean Lower Low Water | | |
| H-Cell Compilation Units: | <i>meters at Mean Lower Low Water</i> | | |
| Remarks: | | | |
| <p><i>The purpose of this survey was to respond to a request from NOAA's National Marine Sanctuaries in partnership with the Green Point Monitor Museum. During review at the processing branch it was determined that the data were suitable for application to the chart. All separates are filed with the hydrographic data. Any revisions to the Descriptive Report (DR) generated during office processing are shown in bold red italic text. The processing branch maintains the DR as a field unit product, therefore, all information and recommendations within the body of the DR are considered preliminary unless otherwise noted. The final disposition of surveyed features is represented in the OCS nautical chart update products. All pertinent records for this survey, including the DR, are archived at the National Centers for Environmental Information (NCEI) and can be retrieved via http://www.ncei.noaa.gov/.</i></p> | | | |



UNITED STATES DEPARTMENT COMMERCE

National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Office of Coast Survey
Silver Spring, Maryland 20910-3282

17 February 2017

MEMORANDUM FOR: Commander Benjamin K. Evans, NOAA
Chief, Pacific Hydrographic Branch

FROM: Lieutenant Andrew R. Clos, NOAA
Team Lead, Navigation Response Team 5

SUBJECT: Submission of Survey D00223


Digitally signed by CLOS ANDREW ROBERT.1381291734
DN: cn=CLOS, o=U.S. Government, ou=DoD, ou=PKI,
yp=NOAA, cn=CLOS ANDREW ROBERT.1381291734
Date: 2017.04.27 16:07:54 -0400

The purpose of this survey was to respond to a request from NOAA's National Marine Sanctuaries in partnership with the Green Point Monitor Museum, where the USS Monitor was launched in 1862 on the shores of the East River in Green Point-Brooklyn, New York. They are interested in potential features in the area. The data from this survey is not intended to be applied to the nautical chart with the exception of hazards to navigation (DTONs).

Data was generally collected to Object Detection standards using 200 percent side scan coverage with concurrent multibeam echosounder (MBES). However, due to the extremely shallow and constricted operating area, 200% coverage with appropriate line spacing and range scales could not be achieved. Furthermore, since data acquisition was carried out over the course of a few hours during a single afternoon, detailed office processing and contact analysis was not performed before leaving the survey area. This data is not intended to be charted. However, several areas within the survey currently have no soundings on the chart. Additionally, an area DtoN report was submitted to MCD on April 24th, 2017 that covers the northeastern portion of the sheet. A sounding and contour set has been included in case the cartographer decides that additional soundings could assist with navigation in the area.

Cleaning of egregious fliers that could negatively affect the sounding was performed. The area was also scanned thoroughly for DtoNs and it was determined that one area DtoN exists. See Appendix III for a copy of this report and relating correspondence. Existing features, mainly consisting for pier ruins and rubble, were scrutinized and determined to be well charted.

NRT5 personnel processed the data it acquired and then provided several data products for distribution to the USS Monitor Museum and other NOAA constituents. These data products consist of high resolution side scan mosaics and a multibeam surface that the museum plans to use to show bathymetry to the public. These products are included in the Public Relations & Constituent Products folder.

TCARI tides were utilized for this survey. CO-OPS accepted the preliminary grid as final on April 6th, 2017. Soundings are in Mean Lower Low Water (MLLW).

No individual Data Acquisition and Processing Report (DAPR) was created for this survey, but the DAPR for OPR-B396-NRT5BH2-16 has been provided with this submission. All descriptions of survey methods and calibrations performed for this survey are covered by this DAPR.

MBES data was processed in CARIS HIPS/SIPS 9.1.8.

| Metadata | |
|---------------------------|---|
| Project | S-B916-NRT5-16 |
| Survey | D00223 |
| State | New York |
| Locality | East River |
| Sub Locality | East River |
| Scale of Survey | 1:2500 |
| Sonars Used | Kongsberg EM3002; Edgetech 4125 |
| Horizontal Datum | North American Datum of 1983 (NAD83) |
| Vertical Datum | Mean Lower Low Water (MLLW) |
| Vertical Datum Correction | TCARI: B916NRT52016.tc, tide: 8518750.tid |
| Projection | Latitude-Longitude (NAD83) - UTM Zone 18N |
| Field Unit | NRT5 |
| Survey Dates | 10/11/2016 – 10/11/2016 |
| Chief of Party | Andrew Clos |
| Submission Date | 4/27/2017 |



Figure 1. Overview of current Tappan Zee Bridge with new bridge piers under construction nearby.



Figure 2. Barges rafted to bridge pier.

D00223 Area DtoN

Registry Number: D00223
State: New York
Locality: East River
Sub-locality: East River at Green Point
Project Number: S-B916-NRT5-16
Survey Dates: 10/11/2016 - 10/11/2016
Raster Chart (ENC): 12338 (US5NY11M)

Remarks:

During data acquisition for hydrographic survey D00223, significant discrepancies were observed between survey data and charted depths on the east side of the river, 0.3 kilometers north of Bushwick Inlet. The area nearshore contains pier ruins, which are charted accurately, but old soundings and contours remain for this northern portion. These soundings likely date back to when the area was actively dredged, and since the piers were removed, the area has naturally started to fill back in.

The largest discrepancy occurs where a charted 32 foot sounding exists just very near the shoreline, at the shoreward extent of one of the pier ruins found in the area. Surveyed soundings over this charted depth are about 6 feet. See figure 1 for clarification.

The shoaling is too widespread to be depicted with a point feature; therefore a survey scale sounding plot was generated, and is included with this report. Additionally, a contour shape and .000 file have been included. All shape and .000 files were exported from CARIS HIPS and SIPS in the Geographic Lat/Lon NAD83 "projection."

TCARI tides were applied to this data and the preliminary grid was accepted as final by CO-OPS on April 6th.

Hydrographer Recommendations:

Update contours, "blue tint," and soundings to reflect the current survey data.

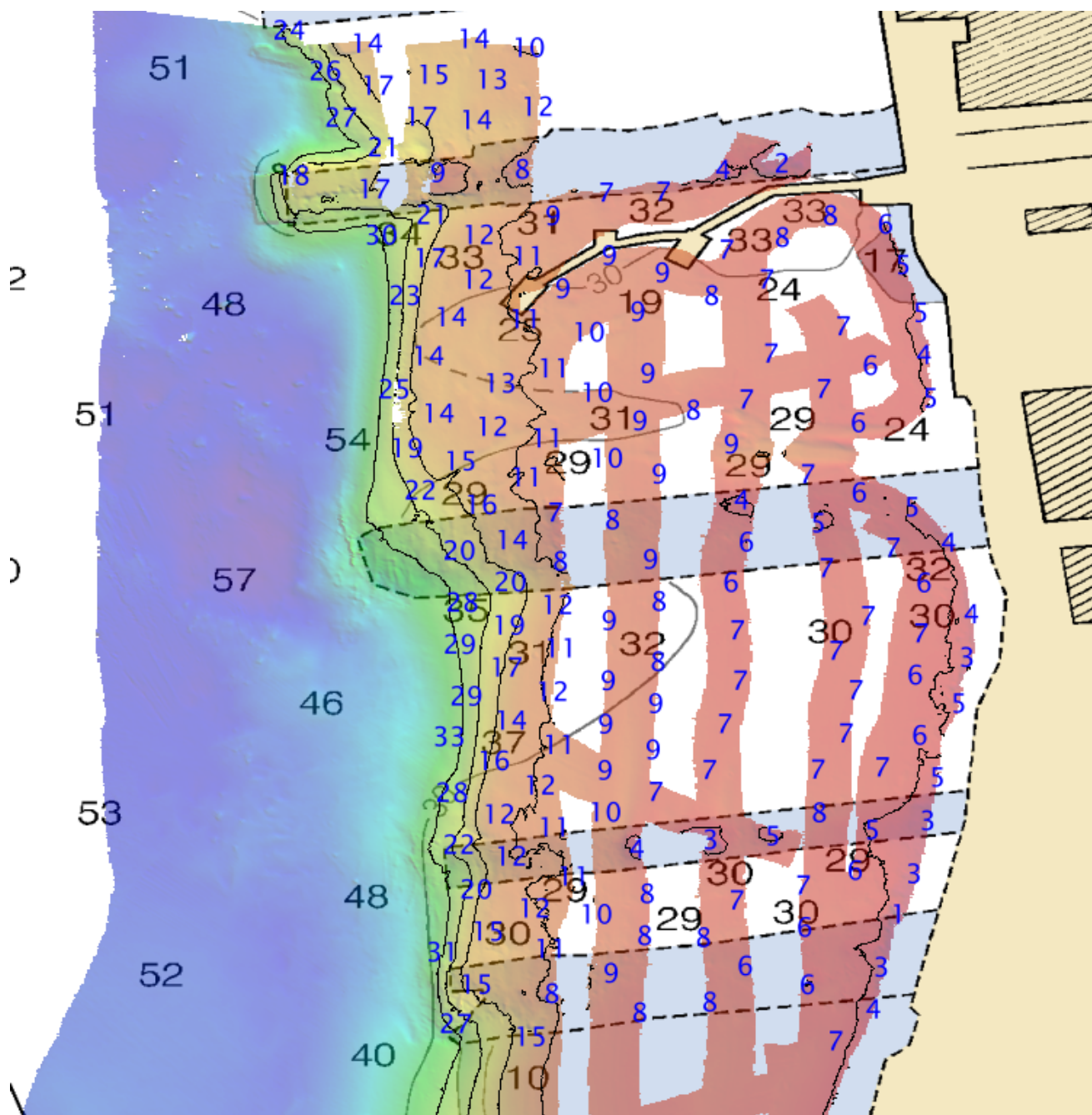


Figure 1: Overview of area DtoN showing soundings and transparent MBES surface.

APPROVAL PAGE

D00223

Data meet or exceed current specifications as certified by the OCS survey acceptance review process. Descriptive Report and survey data except where noted are adequate to supersede prior surveys and nautical charts in the common area.

The following products will be sent to NCEI for archive

- D00223_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- D00223_GeoImage.pdf

The survey evaluation and verification has been conducted according current OCS Specifications.

Approved: _____

Pete Holmberg

Cartographic Team Lead, Pacific Hydrographic Branch

The survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: _____

LCDR Olivia Hauser, NOAA

Chief, Pacific Hydrographic Branch