

W00721

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

DESCRIPTIVE REPORT

Type of Survey: Navigable Area

Registry Number: W00721

LOCALITY

State(s): Maine

General Locality: Kennebec River

Sub-locality: Bath Iron Works Dry
Dock and Pier 2

2023

CHIEF OF PARTY
Nathan Power

LIBRARY & ARCHIVES

Date:

HYDROGRAPHIC TITLE SHEET

W00721

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(s): **Maine**

General Locality: **Kennebec River**

Sub-Locality: **Bath Iron Works Dry Dock and Pier 2**

Scale: **1:768**

Dates of Survey: **03/29/2023 to 03/29/2023**

Instructions Dated: **N/A**

Project Number: **ESD-AHB-23**

Field Unit: **USACE New England District**

Chief of Party: **Nathan Power**

Soundings by: **Multibeam**

Imagery by: **N/A**

Verification by: **Atlantic Hydrographic Branch**

Soundings Acquired in: **Meters at Mean Lower Low Water**

Remarks:

Any revisions to the Descriptive Report (DR) applied during office processing are shown in red italic text. The DR is maintained as a field unit product, therefore all information and recommendations within this report are considered preliminary unless otherwise noted. The final disposition of survey data is represented in the NOAA nautical chart products. All pertinent records for this survey are archived at the National Centers for Environmental Information (NCEI) and can be retrieved via <https://www.ncei.noaa.gov/>. Products created during office processing were generated in NAD83 UTM 19N, MLLW. All references to other horizontal or vertical datums in this report are applicable to the processed hydrographic data provided by the field unit.

DESCRIPTIVE REPORT MEMO

June 29, 2023

MEMORANDUM FOR: Jennifer.Orbin@gdbiw.com, northeast.navmanager@noaa.gov

FROM: Report prepared by AHB on behalf of field unit
Bryan Chauveau
Physical Scientist, NOAA Atlantic Hydrographic Branch

SUBJECT: Submission of Survey W00721

Survey was conducted by USACE New England District around two piers for the Bath Iron Works Corp. in Bath, Maine.

There were no products created for this survey.

The vertical datum for this project is Mean Lower Low Water. The horizontal datum for this project is North American Datum of 1983 (NAD 83). The projection used for this project is Universal Transverse Mercator (UTM) Zone 18.

The GRD files were opened in ArcPro and did not have spatial reference defined. They were assigned NAD83(2011) Maine State Plane West, USft using the Define Projection tool.

The GRD files were transformed from SPC to UTM using the Project Raster tool and cubic convolution resampling technique.

The horizontally transformed GRD files were exported to GeoTiff.

The GeoTiffs were opened in Caris BDB, exported to XYZ.

The XYZ files were imported into BDB as point clouds to convert the depth units from feet to meters.

Due to difficulties with Vdatum, a single value shift was applied to the CSAR point clouds in Caris BDB using datum information from the Bath, ME tide station (8417227) to transform the data from MLW to MLLW.

The CSAR point clouds were imported into BDB as 4-meter gridded surfaces. The resolutions were selected based on data density of the source files.

Uncertainty layers were generated using CATZOC C parameters.

This report does not include data acquisition and processing information.

All data were reviewed for DTONs and none were identified in this survey.

The data was received from General Dynamics via NDB. acquired the data outlined in this report. Additional documentation from the data provider may be attached to this report.

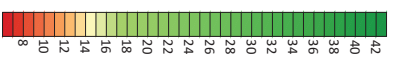
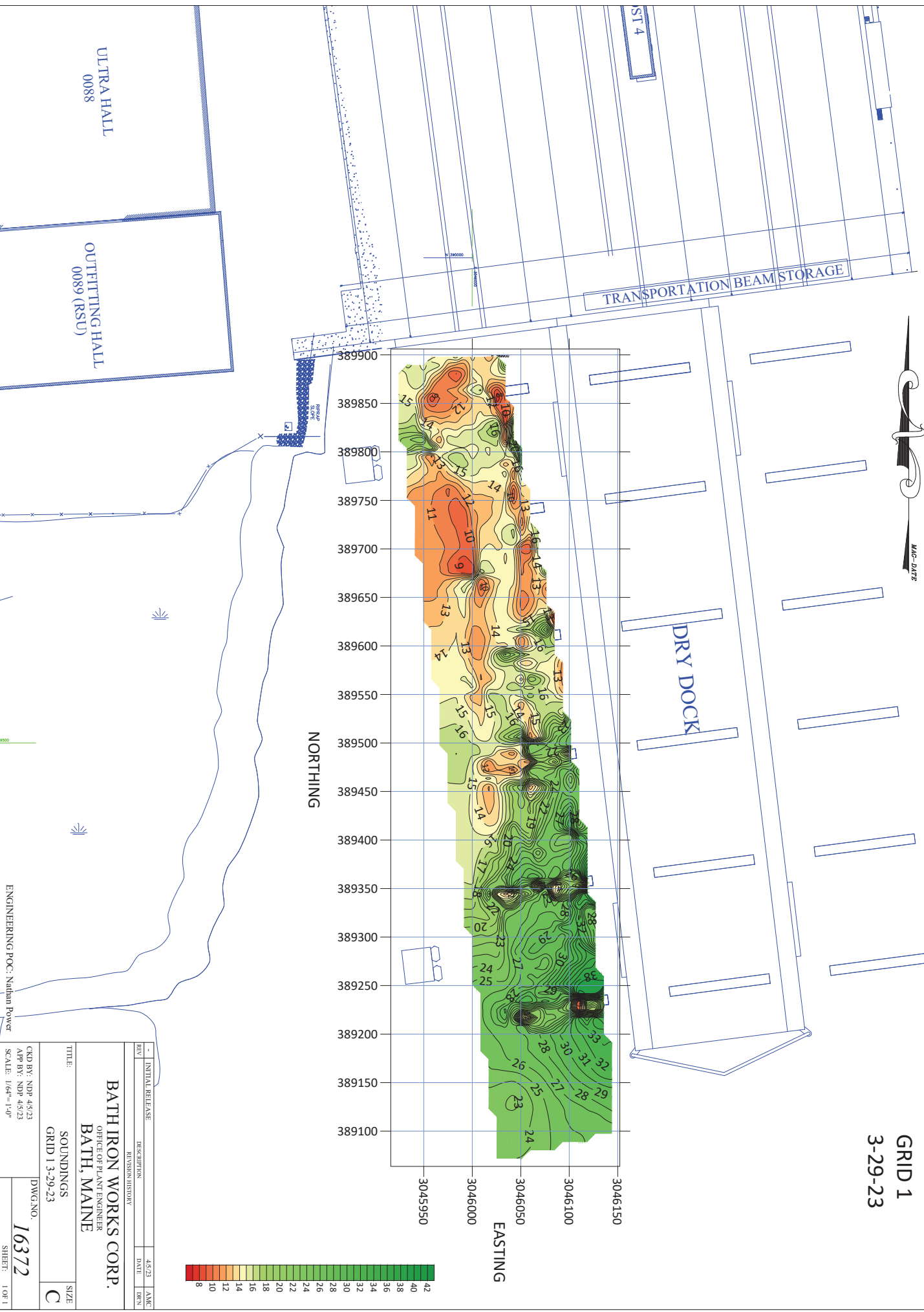
The data obtained was two ESRI GRD files in State Plane Maine West, MLW, US survey feet. The data was converted to NAD83 (2011) UTM 18N, meters using the ArcPro Project Raster tool and cubic convolution resampling technique. The data was reduced to MLLW using a single value shift (0.24m) that was applied to the NAD83 (2011) UTM 18N CSAR point cloud in Caris BDB using datum information from the Bath, ME tide station (8417227) . Depths were converted to meters via the Caris Info file upon the XYZ import into BDB.

This survey does meet charting specifications and is adequate to supersede prior data. The current M_QUALs for this area are CATZOC B (1949, 2022). Given the unusual steps taken to process this survey for branch review, it is recommended that this survey supersede charted data only in areas covered by the M_QUAL from 1949.

CONVENTIONS:
 NATIONAL GEODETIC VERTICAL DATUM: NGVD 29
 SURVEY DATUM: NAD 83 MAINE EAST
 DEPTHS ARE WITH RESPECT TO MLW OF 97.56FT



DATA FROM
 GRID 1
 3-29-23



REV	INITIAL RELEASE	DESCRIPTION	DATE	AMC
-	INITIAL RELEASE		4/5/23	AMC

REVISION HISTORY	
REV	DATE

BATH IRON WORKS CORP. OFFICE OF PLANT ENGINEER BATH, MAINE	
TITLE:	SOUNDINGS
GRID 1 3-29-23	GRID 1 3-29-23
SIZE:	C
DWG. NO.	16372
SHEET:	1 OF 1

ENGINEERING POC: Nathan Power