

**W00666**

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

**DESCRIPTIVE REPORT**

Type of Survey: Basic Hydrographic Survey

Registry Number: W00666

**LOCALITY**

State(s): Rhode Island

General Locality: Rhode Island Sound

Sub-locality: Orsted Revolution Wind Lease Area

**2020**

CHIEF OF PARTY  
Karin Gunnesson, MMT AB (contracted by Orsted)

**LIBRARY & ARCHIVES**

Date:

**HYDROGRAPHIC TITLE SHEET**

**W00666**

**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): **Rhode Island**

General Locality: **Rhode Island Sound**

Sub-Locality: **Orsted Revolution Wind Lease Area**

Scale: **40000**

Dates of Survey: **07/21/2020 to 11/18/2020**

Instructions Dated: **N/A**

Project Number: **ESD-PHB-22**

Field Unit: **Orsted**

Chief of Party: **Karin Gunnesson, MMT AB (contracted by Orsted)**

Soundings by: **Kongsberg Maritime EM 2040D (MBES)**

Imagery by: **N/A**

Verification by: **Pacific 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

November 15, 2022

**MEMORANDUM FOR:** Pacific Hydrographic Branch

**FROM:** Report prepared by PHB on behalf of field unit  
Karin Gunnesson  
Chief of Party, MMT AB (contracted by Orsted)

**SUBJECT:** Submission of Survey W00666

The survey purpose as described in the provided metadata sheet for this survey: "REV01 Survey Details: The REV01 Site Area is located approximately 24 kilometres (km) east of Block Island, Rhode Island in Rhode Island Sound on the Atlantic Outer Continental Shelf (OCS). MMT AB were contracted by Orsted to conduct a geophysical survey on the lease area OCS-A 0486 in support of the Revolution Wind Wind Farm (REV01) site investigations."

Survey data was provided to the ESD team as several 20cm resolution geotiffs in NAD83 UTM19 coordinate system and MLLW vertical datum. The geotiffs were mosaiced together with a shoal bias using ArcGIS Pro into a single geotiff. The resulting geotiff was then exported to a 20cm csar grid using CARIS Base Editor. This csar file was then exported to a generalized 2 meter resolution csar grid.

All soundings were reduced to Mean Lower Low Water using VDatum. 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 19.

The processing steps as described in the provided metadata sheet for this survey: "Data processing / interpretation summary: Integrate post-processed navigation (SBET) with MBES. Apply tidal correction to MLLW and apply sound velocity corrections. Verify that DTM surface meets Orsted standards in vertical and horizontal alignment. Clean data and verify that outliers have been rejected in line with Orsted standards, export average 20cm surface DTM."

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

Orsted acquired the data outlined in this report. Additional documentation from the data provider may be attached to this report.

The provided data is of exceptional quality and shows good agreement with the latest ENC. New sandwave areas were generated based of the gridded data and are recommended to be added to the latest ENCs.

This survey does meet charting specifications and is adequate to supersede prior data. This ESD survey is higher quality and more recent the currently charted data (CATZOC C, 1930-1939). It is recommended that this survey be designated as CATZOC B and supersede charted data in areas where the existing charted data is older and/or of lower quality as determined by the attribution of the M\_QUAL objects in the latest ENCs.