W00530

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

DESCRIPTIVE REPORT

Type of Survey:	Navigable Area
Registry Number:	W00530

LOCALITY

State(s):	Massachusetts
General Locality:	Cape Cod, Massachusetts
Sub-locality:	Hyannis Harbor

2020

CHIEF OF PARTY
Wayne Kurker

LIBRARY & ARCHIVES

Date:

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

REGISTRY NUMBER:

HYDROGRAPHIC TITLE SHEET

W00530

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):	**Massachusetts**
General Locality:	**Cape Cod, Massachusetts**
Sub-Locality:	**Hyannis Harbor**
Scale:	**20000**
Dates of Survey:	**05/12/2020 to 06/23/2020**
Instructions Dated:	**N/A**
Project Number:	**ESD-AHB-20**
Field Unit:	**Hyannis Marina**
Chief of Party:	**Wayne Kurker**
Soundings by:	**SyQwest P04515 (SBES)**
Imagery by:	**N/A**
Verification by:	**Atlantic Hydrographic Branch**
Soundings Acquired in:	**US Survey feet 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

July 27, 2020

MEMORANDUM FOR: Atlantic Hydrographic Branch

FROM: Report prepared by AHB on behalf of field unit
Wayne Kurker
Owner, Hyannis Marina, Hyannis Marina

SUBJECT: Submission of Survey W00530

This was a post dredge survey conducted by Coastal Engineering Co. and provided by Hyannis Marina.

Survey products were created by the hydrographic branch.

All soundings were reduced to Mean Lower Low Water using Constant Separation. 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.

This survey does not include data acquisition and processing information.

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

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

This survey does meet charting specifications and is adequate to supersede prior data. This survey will be used to update NOAA navigational products.

Hyannis Marina
Hydrographic Survey Report

Project: **Hyannis Marina – Hydrographic Survey** CEC Project Number: C19247.00
Soundings for NOAA Chart

To: James Miller – NOAA Federal
Colleen Roche– NOAA Federal
Wayne Kurker – Hyannis Marina
John Crowell – Hyannis Marina
Samantha Silva - Hyannis Marina

Date: 07/10/2020

Survey Dates: 1.) 05/12/2020; 2.) 05/22/2020; 3.) 05/28/2020; 4.) 06/04/2020; 5.) 06/23/2020

Hydrographic Survey Dates & Daily Information

Survey 1.) 05/12/2020
Survey Start: 0829 Survey End: 1416

Personnel:
- Boat Operator – Charlie Agro
- Hydrographic Surveyors– Charlie Agro & Keith Silva

Sound Velocity: (Determined using salinity & temperature measurements)
- Reading at 0830
- Salinity = 29.1 PPT
- Water Temperature = 51.2 degF
- Sound Velocity = 4764 FPS

Survey 2.) 05/22/2020
Survey Start: 0829 Survey End: 1014

Personnel:
- Boat Operator – Charlie Agro
- Hydrographic Surveyors– Charlie Agro & Liam Cahill

Sound Velocity: (Determined using salinity & temperature measurements)

- Reading at 0830
- Salinity = 29.7 PPT
- Water Temperature = 59.2 degF
- Sound Velocity = 4815 FPS

Survey 3.) 05/28/2020
Survey Start: 1325 Survey End: 1641

Personnel:
- Boat Operator – Charlie Agro
- Hydrographic Surveyors– Charlie Agro & Keith Silva

Sound Velocity: (Determined using salinity & temperature measurements)
- Reading at 1320
- Salinity = 29.9 PPT
- Water Temperature = 64.7 degF
- Sound Velocity = 4846 FPS

Survey 4.) 06/04/2020
Survey Start: 1006 Survey End: 1644

Personnel:
- Boat Operator – Charlie Agro
- Hydrographic Surveyors– Charlie Agro & Keith Silva

Sound Velocity: (Determined using salinity & temperature measurements)
- Reading at 1320
- Salinity = 30.4 PPT
- Water Temperature = 65.1 degF
- Sound Velocity = 4850 FPS

Survey 5.) 06/23/2020
Survey Start: 0959 Survey End: 1052

Personnel:
- Boat Operator – Charlie Agro
- Hydrographic Surveyors– Charlie Agro & Keith Silva

Sound Velocity: (Determined using salinity & temperature measurements)
- Reading at 1320
- Salinity = 30.1 PPT
- Water Temperature = 74.8 degF
- Sound Velocity = 4895 FPS

Hydrographic Survey Equipment & Configuration Settings

Survey Equipment:

- Transducer: Syqwest P04515 210 Khz 10deg Single Beam
- Echosounder: Syqwest Hydro Box
- Location horizontal and vertical (tide): RTK GPS
    - GNSS Antenna – Leica GS14
    - GNSS Data Collector – Leica CS15
    - Base station: Smart Net RTK Network; RTCM-Ref 0181
- Survey Program: Hypack 2012A (survey) 2017 Data processing

Survey Vessell

- CEC Hydro Survey – 22' Chawk

Equipment Configuration:

- Over-the-side transducer pole mount with GPS Antenna installed 6.77' directly above the transducer.

Coordinate System:

- Grid: State Plane NAD-83
- Zone MA-2001 MA Mainland
- Geoid Model: G2012A CONUS
- Survey Datum – NAVD88 converted to MLLW (in single beam editor under tidal offsets) using the conversion: MLLW = NAVD88-2.251'

Please contact Charlie Agro with any questions or concerns.

Submitted by:

Charlie Agro, EIT, OUPV
Coastal Engineering Co., Inc.

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APPROVAL PAGE

W00530

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

- Descriptive Report
- Collection of Bathymetric Attributed Grids (BAGs)
- Geospatial PDF of survey products

The survey evaluation and verification have been conducted according to current OCS specifications, and the survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: Meghan Mcgovern Date: 2020.07.29 09:44:28 -04'00'

Commander Meghan McGovern, NOAA
Chief, Atlantic Hydrographic Branch