SURVEY PROCESSING SOFTWARE: HYPACK SINGLE BEAM EDITOR VERSION 2020
NAVIGATION SYSTEMS: SBG EKINOX 2 INERTIA SYSTEM, IN REAL TIME KINEMATIC (RTK) MODE.
CONTours ON THIS MAP WERE GENERATED USING THE MAP DATA SET, PROJECT DEPTH IS 15' AND 18'.

PROJECT SPECIFIC NOTES:
<table>
<thead>
<tr>
<th>Date</th>
<th>Northing</th>
<th>Easting</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/23</td>
<td>123456</td>
<td>654321</td>
<td>12.3</td>
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<tr>
<td>01/02/23</td>
<td>789012</td>
<td>210987</td>
<td>13.4</td>
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<tr>
<td>01/03/23</td>
<td>345678</td>
<td>876543</td>
<td>14.5</td>
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</table>

This map was prepared in accordance with the current existing code of practice for land surveying. Due to shoaling events, a prudent mariner should not rely exclusively on the information presented on this drawing. Because these conditions are subject to rapid change, the information presented on this drawing represents the results of a survey performed using the following software: Hypack Version 2020. The survey was conducted by McKim & Creed using the following equipment:

- Total Stations
- GNSS Receivers

This map is CEPD compliant in accordance with ER 1110-2-8160 and EM 1110-2-6056. The ortho images were retrieved from the New York GIS Clearing House website. The soundings on this map meet EM 1110-2-1003 accuracy standards. The information depicted on this map represents the results of surveys made on the dates specified above.
ELEVATION: 9.84' NAVD 88

STAMPED: 8902 B 2014
STAMPED: 8643 G 2014

NSRS/NGS CONTROL DATA

PROJECT SPECIFIC NOTES:

The information presented on this drawing represents the results of a survey performed using an Odom Digibar S Sound Velocity Probe. Sound velocity casts were taken during acquisition for accurate speed of sound profiles. Survey acquisition software: HYPACK Version 2020. Navigation systems: SBG Ekinox 2 Inertial System, in Real Time Kinematic (RTK) mode.

The data depicted on this map should not be used for volume calculation purposes. Using the full data set. Soundings depicted on this map have been sorted to a 10' radial sort with no channel priority.

The information depicted on this map represents the results of surveys made on the dates...
TO MCKIM & CREED.
WORK FOR WHICH IT WAS ACQUIRED SHALL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY
BY MCKIM & CREED ON MAY 12-19, 2020 AND CAN ONLY BE CONSIDERED AS INDICATING THE
NAVIGATION SYSTEMS: SBG EKINOX 2 INERTIA SYSTEM, IN REAL TIME KINEMATIC (RTK)MODE.

SURVEY VESSELS: SV SOUNDS DEEP
THIS SURVEY WAS PERFORMED USING OPUS CONTROL AS LISTED RECOVERED BY MCKIM & CREED.

SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' RADIAL SORT WITH NO CHANNEL PRIORITY
SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES
COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011,

ELEVATION: 16.22' NAVD 88

256,085.32  1,003,189.67
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<th>EASTING</th>
<th>ELEVATION</th>
<th>BENCHMARK: NAVD 88</th>
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<tbody>
<tr>
<td>16.22</td>
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</table>

**Survey Details**

- **Survey Acquired By**: Mckim & Creed
- **Survey Vessels**: SV Sounds Deep
- **Survey Conducted By**: Mckim & Creed

**Survey Equipment**

- **Navigation Systems**: SBG Ekinox 2 Inertia System in Real Time Kinematic (RTK) Mode
- **Survey Acquisition Software**: HYPACK Version 2020
- **Sound Velocity Cast**: Sounding Deep
- **Survey Cast Taked During**: Acquisition for Accurate Speed of Sound Profiles

**Note:**

- Conditions existing at that time due to shoaling events, a prudent mariner should not rely exclusively on the information.
- The survey was conducted by Mckim & Creed using the following:
- This survey was performed using Opus Control as listed recovered by Mckim & Creed.
Date of Survey: 2/18

New York District Corps of Engineers

Benchmark: 851 8643 G
PID# BBDM52
NORTHING EASTING

NSRS/NGS CONTROL DATA

Project Specific Notes:

Of the Author and/or Copyright Holder is obtained.

Work for which it was acquired shall be at the sole risk of the user and without liability.

Due to shoaling events, a prudent mariner should not rely exclusively on the information.

Sound velocity cast were taken during acquisition for accurate speed of sound profiles.

The survey was conducted by McKim & Creed using the following:

The ortho images were retrieved from the New York GIS Clearing House website.

Contours on this map were generated using the map data set, project depth is 15' and 18'.

Using the full data set.

A copy of this document without a proper application of the surveyor's embossed or red electronic echosounder:

Single Beam Odom CVM 200KHz.

The survey was conducted by McKim & Creed using the following:

The data depicted on this map should not be used for volume calculation purposes.

The soundings on this map meet EM 1110-2-1003 accuracy standards.
The document contains a map with various coordinates marked on it. The coordinates are given in decimal format. The map is likely a survey or topographic map, possibly for navigation or construction purposes. The document includes a disclaimer about the information being presented, indicating that the information was obtained from a specific source and that the user should proceed with caution.

The information presented on this drawing represents the results of a survey performed. Due to shoaling events, a prudent mariner should not rely exclusively on the information provided. Reuse of this information by clients or others beyond the specific scope of work for which it was acquired shall be at the sole risk of the user and without liability provided here.
SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:

- Survey Vessels: SV Sounds Deep
- Echosounder: Single Beam ODOM CVM 200KHz.

THE ORTHO IMAGES WERE RETRIEVED FROM THE NEW YORK GIS CLEARING HOUSE WEBSITE.

THE PLANIMETRICS AND ORTHO PHOTOS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY, SOUNDCINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' RADIAL SORT WITH NO CHANNEL PRIORITY.

WORK FOR WHICH IT WAS ACQUIRED SHALL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY.

REUSE OF THIS INFORMATION BY CLIENT OR OTHERS BEYOND THE SPECIFIC SCOPE OF THE DATA PROVIDED HERE.

PROVIDED HERE. THE DATA PROVIDED HERE IS FOR THE USER'S CONSIDERATION ONLY.

SOUND VELOCITY CAST WERE TAKEN DURING ACQUISITION FOR ACCURATE SPEED OF SOUND PROFILES.

SCALE 1" = 50'
The survey was conducted by Mckim & Creed using the following:

- Survey vessels: SV Sounds Deep
- Coordinates refer to US State Plane Coordinate System NAD 1983/2011
- This survey was performed using Opus Control as listed recovered by Mckim & Creed.

Mean lower low water is 2.2-2.7 feet below NAVD 88 as determined using HYPACK VDATUM 2020.

Due to shoaling events, a prudent mariner should not rely exclusively on the information provided here. Reuse of this information by client or others beyond the specific scope of operations division is not authorized. Reproduction or copying of this document may be a violation of copyright law unless permission is granted. Unauthorized alteration or addition to a survey map bearing a licensed land surveyor's seal is prohibited.

Approved: Operations Division

Date: June 18, 2020

Location: New York, New York 10278

Corps of Engineers

John A. Lamberton

VH-128

Mckim

Creed

Operations Division

(910) 343-1048

Prepared: May 12-19, 2020

Elevation: 9.84' NAVD 88