CORPS OF ENGINEERS

U.S. ARMY

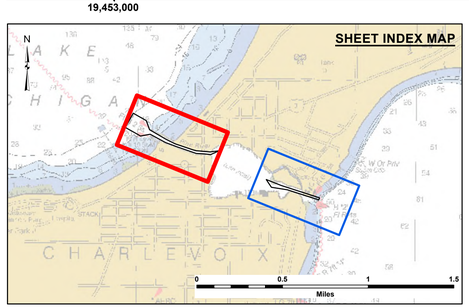
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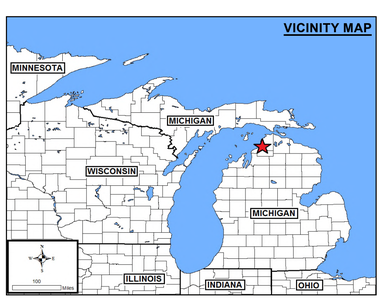
731,000 19,456,000 732,000 19,453,000

19,453,000 19,454,000 19,455,000

PROJECT DEPTH = 18.0'

Microsoft, Vantor





LEGEND

- Cable Submarine
- Cable Overhead
- Beacon, General
- Contour Lines
- Channel Limits

SOUNDING LEGEND

- LESS THAN PROJECT DEPTH
- PROJECT DEPTH
- PROJECT DEPTH +1'
- PROJECT DEPTH +2'
- PROJECT DEPTH +3'
- PROJECT DEPTH +4'
- PROJECT DEPTH +5'

N E S W

1 inch = 100 feet

Feet

0 100 200 300 400 500 600

NOTES:

1. THE SOUNDINGS INDICATED HEREON ARE GENERALIZED DEPTHS AND NOT REPRESENTATIVEOF THE FULL DATASET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10 FOOT BY 10 FOOT AREA CENTERED ON THE TEXT. DERIVED FROM A 1 FOOT BY 1 FOOT AVERAGE DATASET AT CELL CENTER. THIS MAP SHOULD NOT BE USED FOR CHANNEL CLEARANCE OR VOLUME COMPUTATIONS. MINIMUM DEPTH DATA ARE PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.

2. THE GRID SHOWN REFERENCES LATITUDE/LONGITUDE DISPLAYED AS DEGREES, MINUTES, SECONDS IN 10 SECOND INCREMENTS. THE SURVEY DATA REPRESENTED HEREIN ARE PROJECTED TO THE MICHIGAN STATE PLANE, CENTRAL ZONE (2112), NORTH AMERICAN DATUM 1983 (NAD83), US SURVEY FOOT.

3. ALL SOUNDINGS ARE REFERENCED TO THE INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGLD85) FOR LAKE MICHIGAN, ELEVATION 577.5 FEET ABOVE MEAN SEA LEVEL AT RIMOUSKI, QUEBEC.

4. WATER LEVEL READINGS WERE OBTAINED WITH REAL TIME KINEMATIC (RTK) GLOBAL POSITIONING SYSTEM (GPS) VALUES VERIFIED TO MATCH READINGS TAKEN FROM A FIXED TIDE GAGE MARK ALONG THE SHEET STEEL WALL NEAR CROSS SECTION 53+30E ON THE EAST SIDE OF THE COAST GUARD DOCK IN CHARLEVOIX HARBOR, MI.

5. PROJECT DEPTH = 18.0 FEET

6. POSITIONING SYSTEM: APPLANIX POS M/V OCEANMASTER
CORRECTIONS: CENTERPOINT RTX
SURVEY METHOD: RTK TIDES
SONAR: R2SONIC 2024-V MULTIBEAM ECHOSOUNDER
STA. -07+00 to 22+00, SURVEY DATE 20260518
STA. 40+00 to 56+00, SURVEY DATE 20260423
SOFTWARE: HYPACK 2024
VESSEL: LAUNCH 3058

IMAGERY SOURCED FROM: MAXAR, MICROSOFT

US Army Corps of Engineers District: CELRE

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U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

Surveyed By:	
Submitted:	
Plotted By:	
Recommended: Chief, Survey Section	
Checked By:	
Approved: Chief, Technical Services Branch	

Charlevoix Harbor, MI
Charlevoix Harbor
CH_01_CVH_20260518_XA
18 May 2026

Sheet Reference Number
1 of 2

Revision Number:
5.26.04.06-5.26.04.06

CORPS OF ENGINEERS

U.S. ARMY

19,458,000 731,000 19,459,000 19,460,000

731,000 730,000 729,000 19,457,000

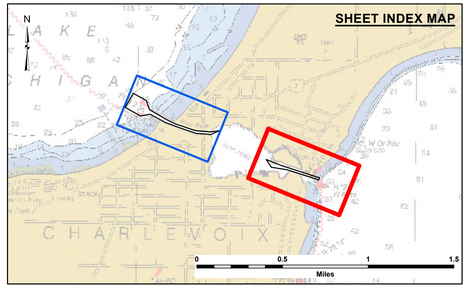
40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00 52+00 53+00 54+00 55+00 56+00

PROJECT DEPTH = 18.0'

Microsoft, Vantor

19,457,000 19,458,000 19,459,000 19,460,000

SHEET INDEX MAP



VICINITY MAP



LEGEND

- Cable Submarine
- Cable Overhead
- Beacon, General
- Contour Lines
- Channel Limits

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US Army Corps of Engineers
District: CELRE

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U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

Submitted:	Surveyed By: ____	Plotted By: ____
Recommended: Chief, Survey Section		Checked By: ____
Approved: Chief, Technical Services Branch		

Charlevoix Harbor, MI
Charlevoix Harbor
CH_01_CVH_20260518_XA
18 May 2026

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2 of 2

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