

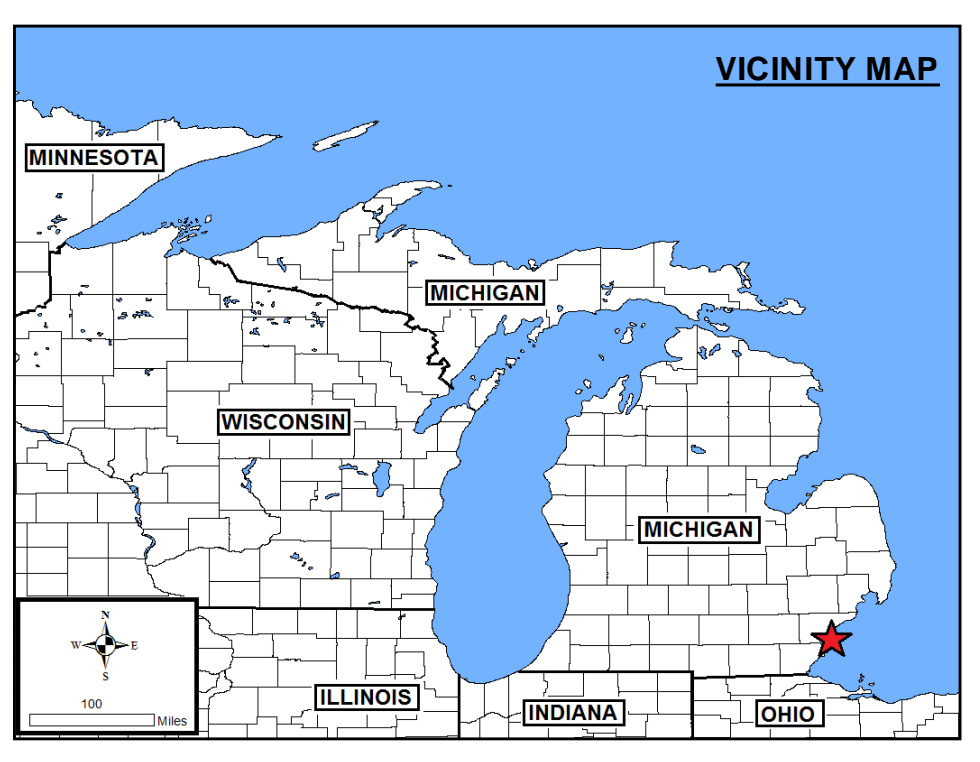
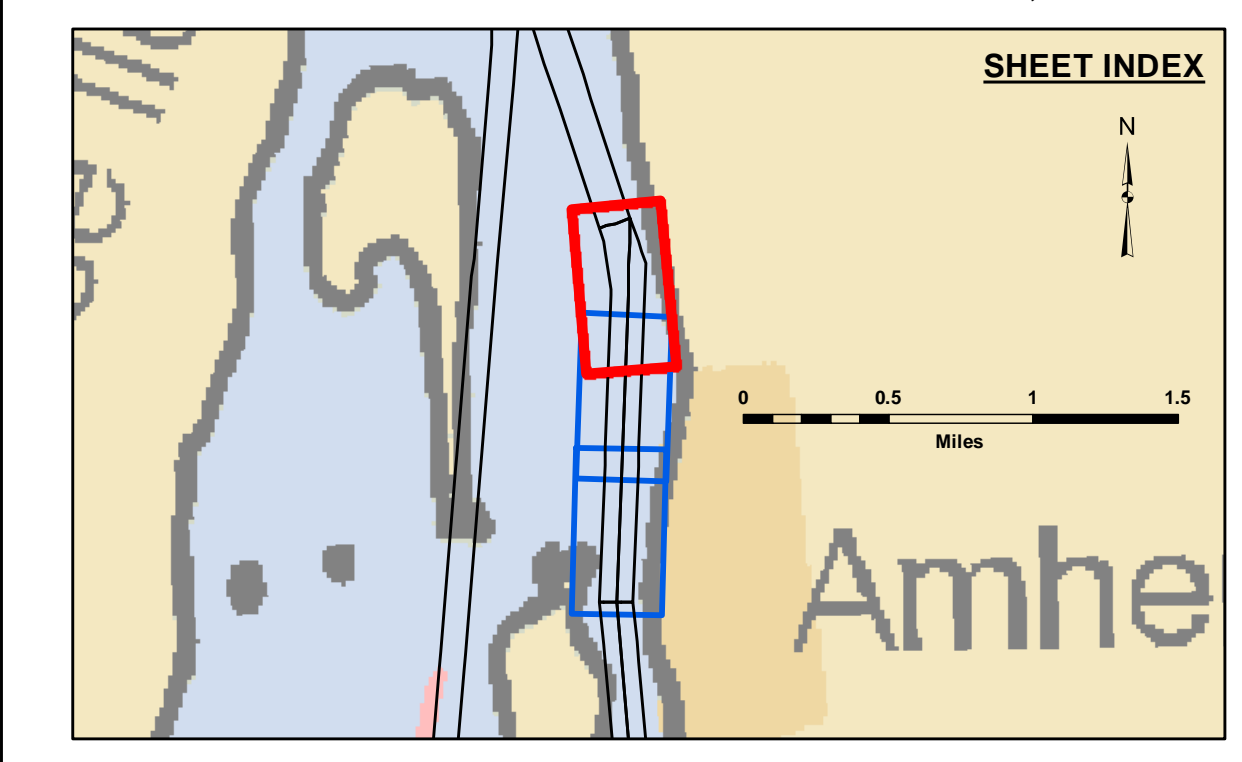
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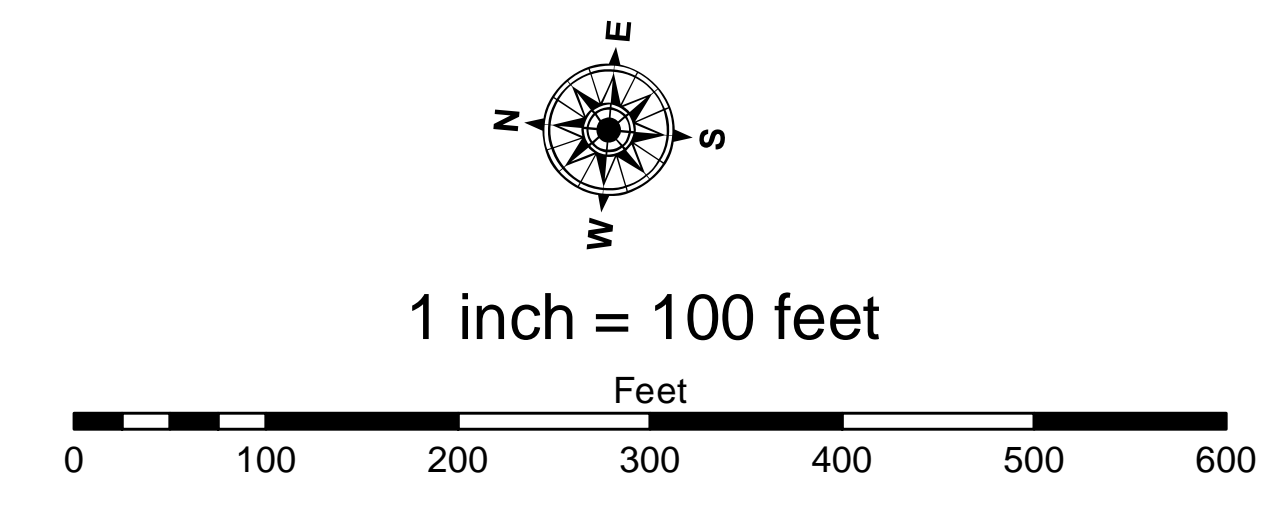
Submitted:	Surveyed By:
Recommended:	Plotted By:
Approved:	Checked By:

Detroit River, MI
Lime Kin Reach
DR_01_LIM_20201203_CS
03 December 2020

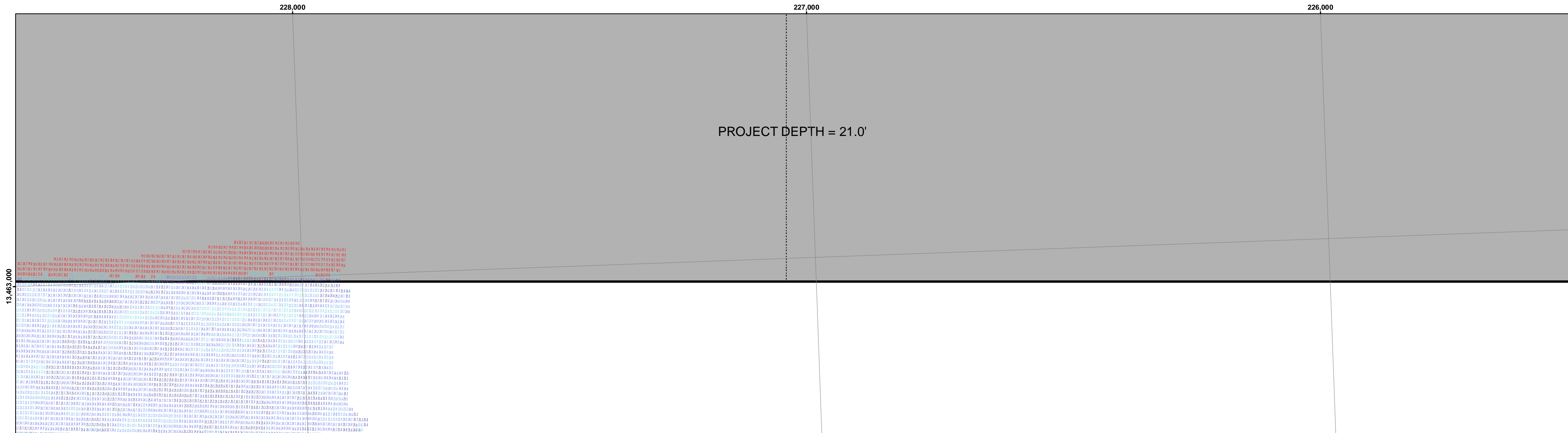
Sheet Reference Number
1 of 3



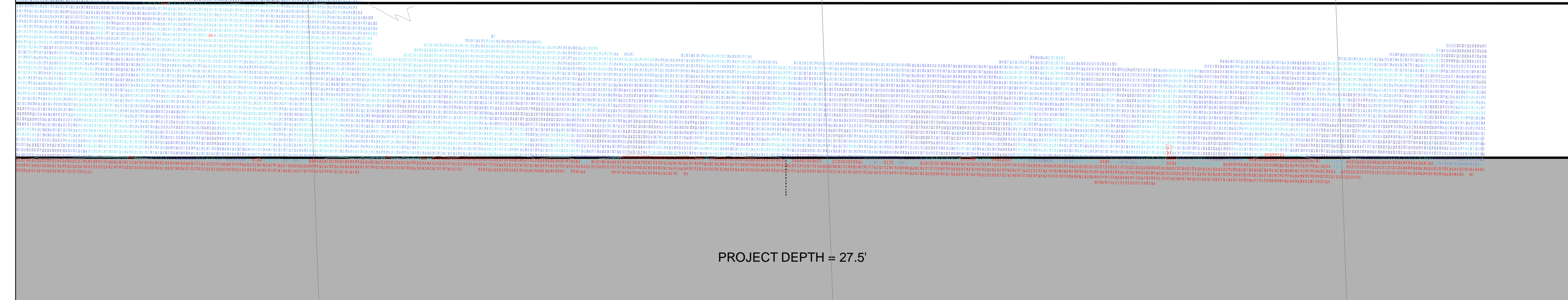
- Legend: Cable Submarine, Cable Overhead, Placement Area, Beacon, General, Contour Lines, Channel Limits
- SOUNDING LEGEND: LESS THAN PROJECT DEPTH, PROJECT DEPTH, PROJECT DEPTH +1', PROJECT DEPTH +2', PROJECT DEPTH +3', PROJECT DEPTH +4', PROJECT DEPTH +5'



NOTES: THE SOUNDINGS INDICATED HEREIN ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATASET... HORIZONTAL GRID DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM LAMBERT PROJECTION, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983, U.S. SURVEY FOOT. ALL SOUNDINGS ARE REFERENCED TO INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGLD85). PROJECT DEPTHS FOR LIME KILN, AMHERSTBURG AND HACKETT CHANNELS = 21.0' & 27.5'. TIDE VALUES ARE DERIVED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) WATER LEVEL STATIONS. POSITIONING APPLIXAN POS-MV4 W/ VR/RTK OR MARINESTAR GNSS. MOTION COMPENSATION: APPLIXAN POS-MV4 SONAR: R2SONIC 2024 (MULTIBEAM TRANSDUCER) SOFTWARE: HYPACK 2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS ALL COORDINATES ARE IN U.S. SURVEY FEET.



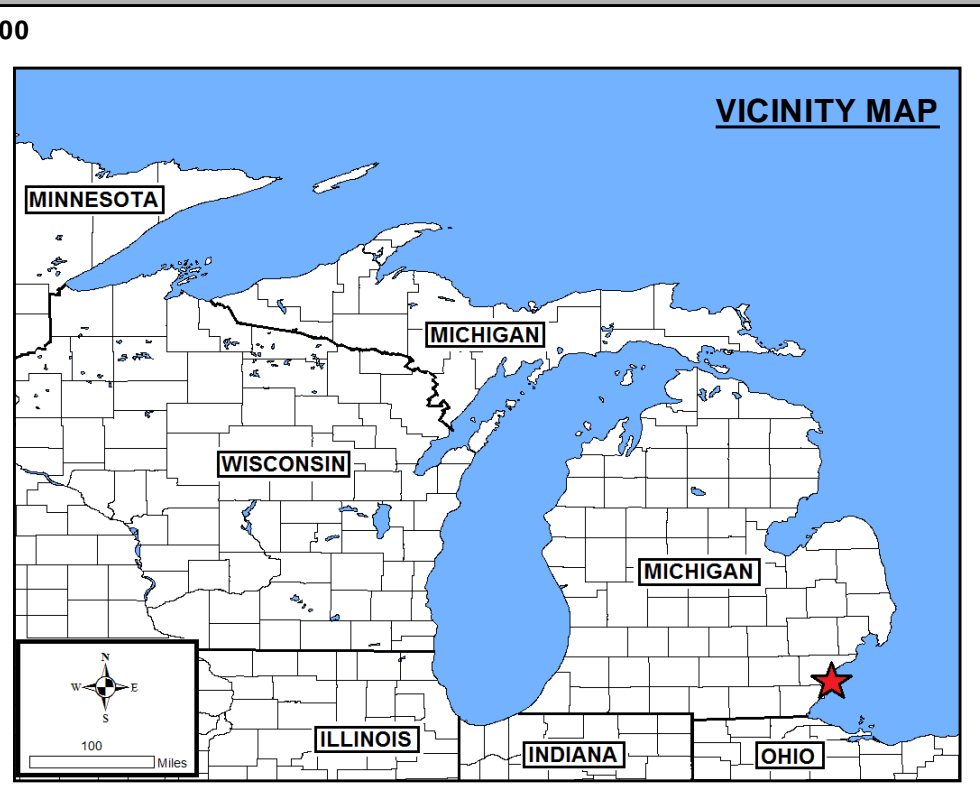
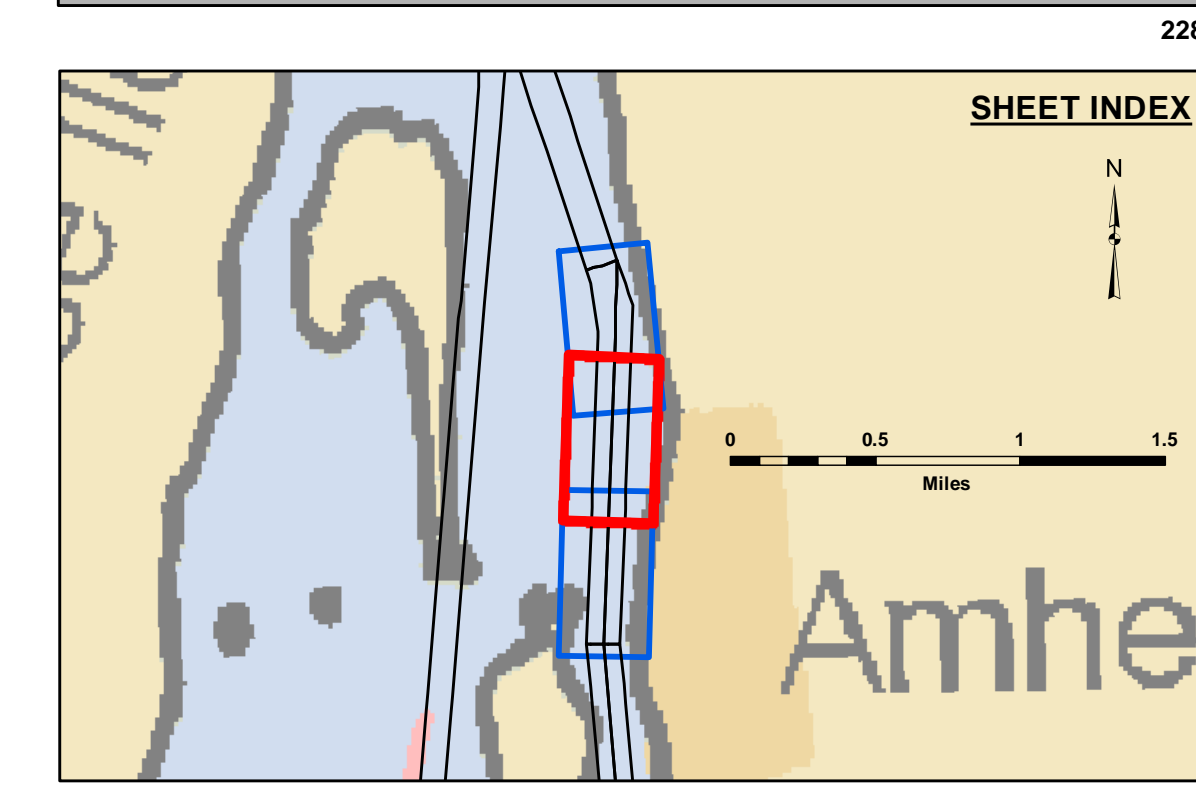
PROJECT DEPTH = 21.0'



PROJECT DEPTH = 27.5'

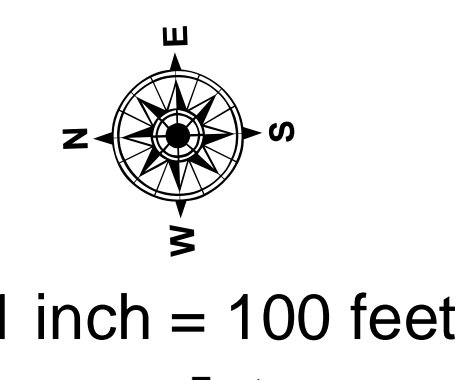


PROJECT DEPTH = 27.5'

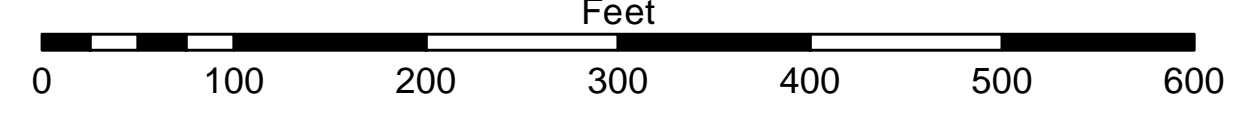


- LEGEND**
- Cable Submarine
 - - - Cable Overhead
 - Placement Area
 - ⊥ Beacon, General
 - Contour Lines
 - ▭ Channel Limits

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



1 inch = 100 feet



NOTES:

THE SOUNDINGS INDICATED HEREIN ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATASET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10X10 FOOT AREA CENTERED ON THE TEXT, DERIVED FROM A 1X1 FOOT AVERAGE DATASET AT CELL CENTER. THIS MAP SHOULD NOT BE USED FOR CHANNEL CLEARANCE OR VOLUME COMPUTATIONS. MINIMUM DEPTH DATA IS PROVIDED FOR STRIKE/SWAL REMOVAL OPERATIONS AND NOTICE TO NAVIGATION INTERESTS.

HORIZONTAL GRID DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM LAMBERT PROJECTION, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983, U.S. SURVEY FOOT.

ALL SOUNDINGS ARE REFERENCED TO INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGLD85).

PROJECT DEPTHS FOR LIME KILN, AMHERSTBURG AND HACKETT CHANNELS = 21.0' & 27.5'

TIDE VALUES ARE DERIVED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) WATER LEVEL STATIONS:

WYANDOTTE, MI (#9044030)
 GIBRALTAR (#9044020)
 FERMI POWER PLANT, MI (#9063090)

POSITIONING APPLINX POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS.
 MOTION COMPENSATION: APPLINX POS-MV4
 SONAR: R2SONIC 2024 (MULTIBEAM TRANSDUCER)
 SOFTWARE: HYPACK

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS

ALL COORDINATES ARE IN U.S. SURVEY FEET.



DISCLAIMER: The data presented in this report is the result of data collection and processing for a specific US Army Corps of Engineers project and does not represent the general engineering conditions of any of the application of the data for other than its intended purpose.

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U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

Submitted: _____
 Recommended: Chief, Survey Section
 Approved: _____
 Chief, Technical Services

Surveyed By: _____
 Plotted By: _____
 Checked By: _____

Detroit River, MI
Lime Kiln Reach
DR_01_LIM_20201203_CS
03 December 2020

Sheet Reference Number
2 of 3

Revision Number:
 4.1-2019105

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13,465,000

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PROJECT DEPTH = 21.0'

PROJECT DEPTH = 27.5'

Vertical text block containing coordinate data and project information.

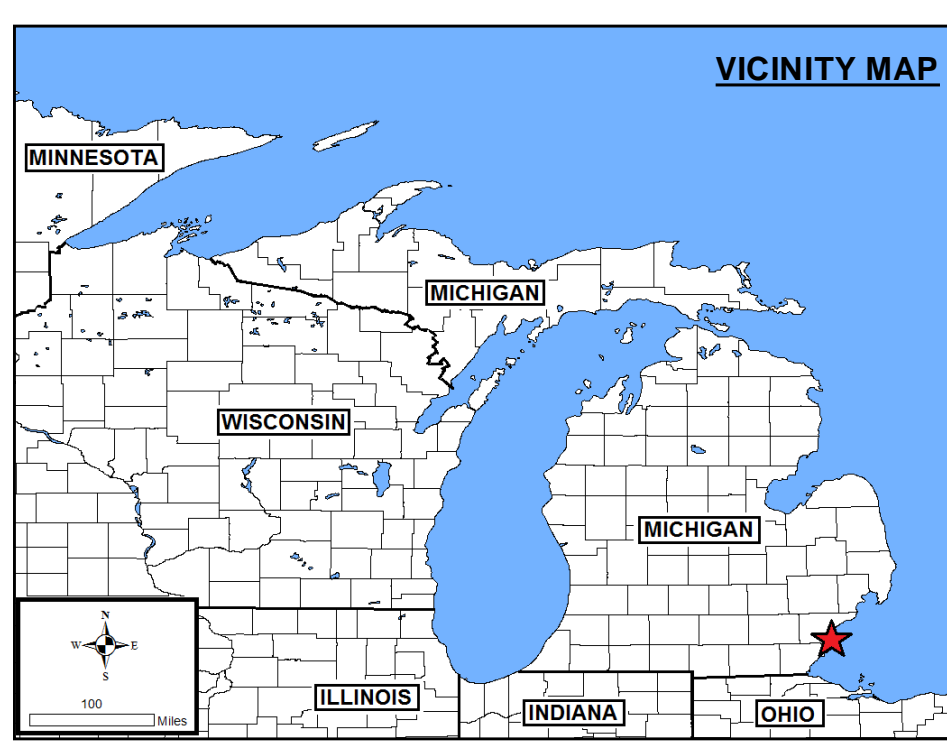
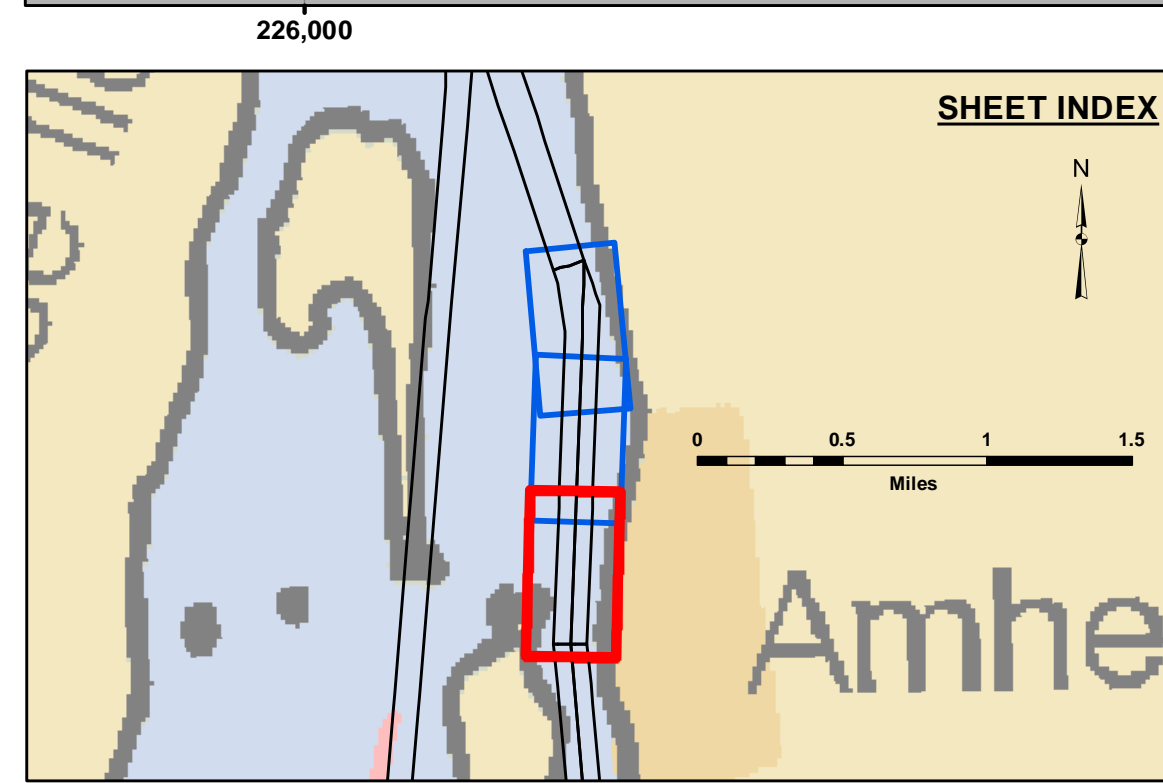


Disclaimer: The data represents the results of data collection... The United States Government... These data are provided for informational purposes only...

Approval table with columns for Submitted, Recommended, and Approved, and rows for Surveyed, Plotted, and Checked.

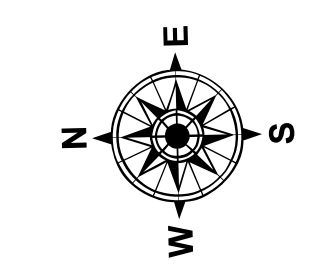
Detroit River, MI
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Sheet Reference Number
3 of 3

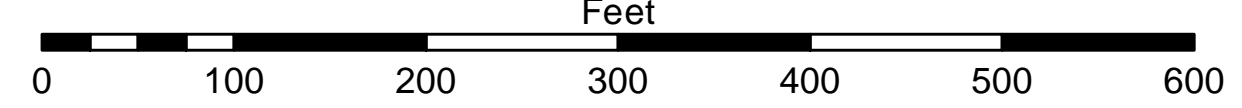


LEGEND table with symbols for Cable Submarine, Cable Overhead, Placement Area, Beacon, Contour Lines, and Channel Limits.

SOUNDING LEGEND table with color-coded boxes for depth ranges from 'LESS THAN PROJECT DEPTH' to 'PROJECT DEPTH +5'.



1 inch = 100 feet



NOTES: THE SOUNDINGS INDICATED HEREIN ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATASET... ALL SOUNDINGS ARE REFERENCED TO INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGLD85)... POSITIONING: APPLANIX POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS...