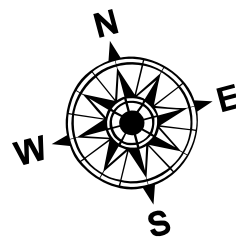


- LEGEND**
- ..... Cable Submarine
  - - Cable Overhead
  - Placement Area
  - ⊥ Beacon, General
  - Contour Lines
  - ▭ Channel Limits

- 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



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SONAR: RESONIC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM)  
SOFTWARE: HYPACK

2018 NAIP AERIAL PHOTOGRAPHY DATA SOURCE: NOAA  
ALL COORDINATES ARE IN U.S. SURVEY FEET.



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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: \_\_\_\_\_

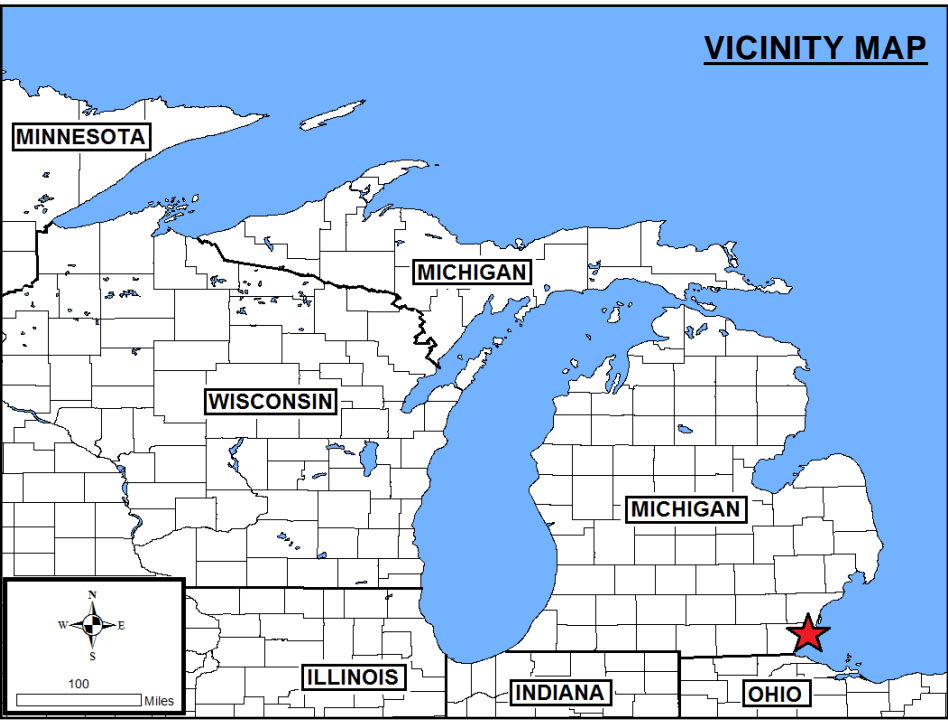
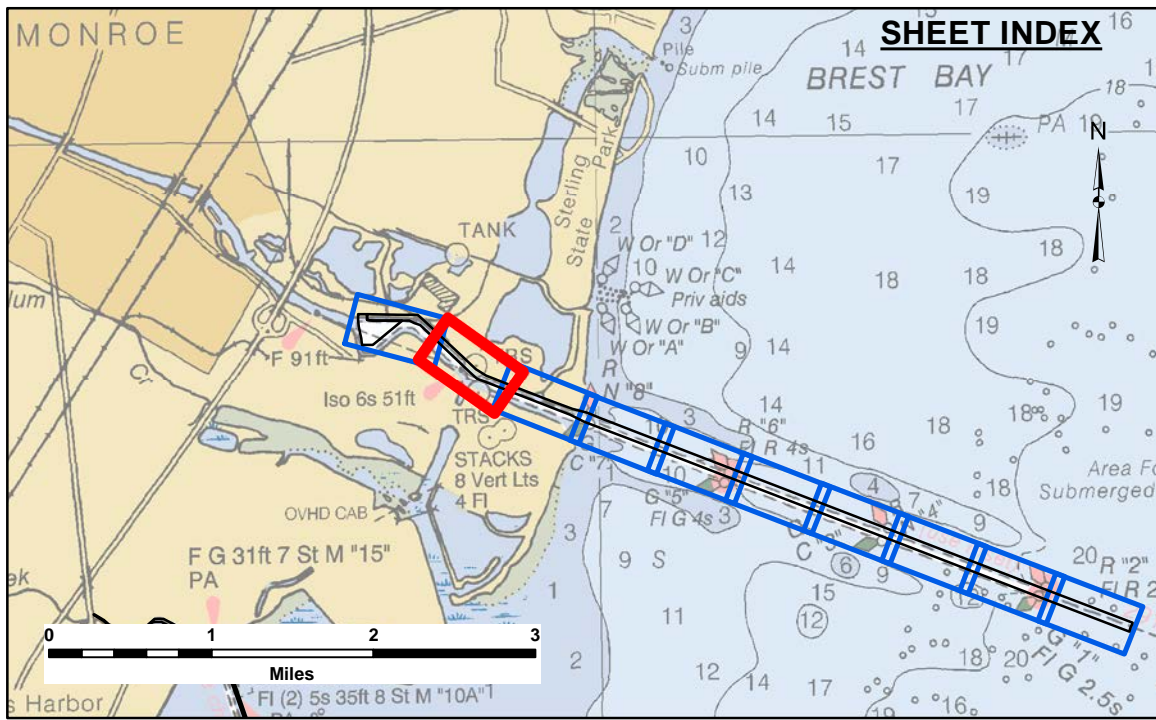
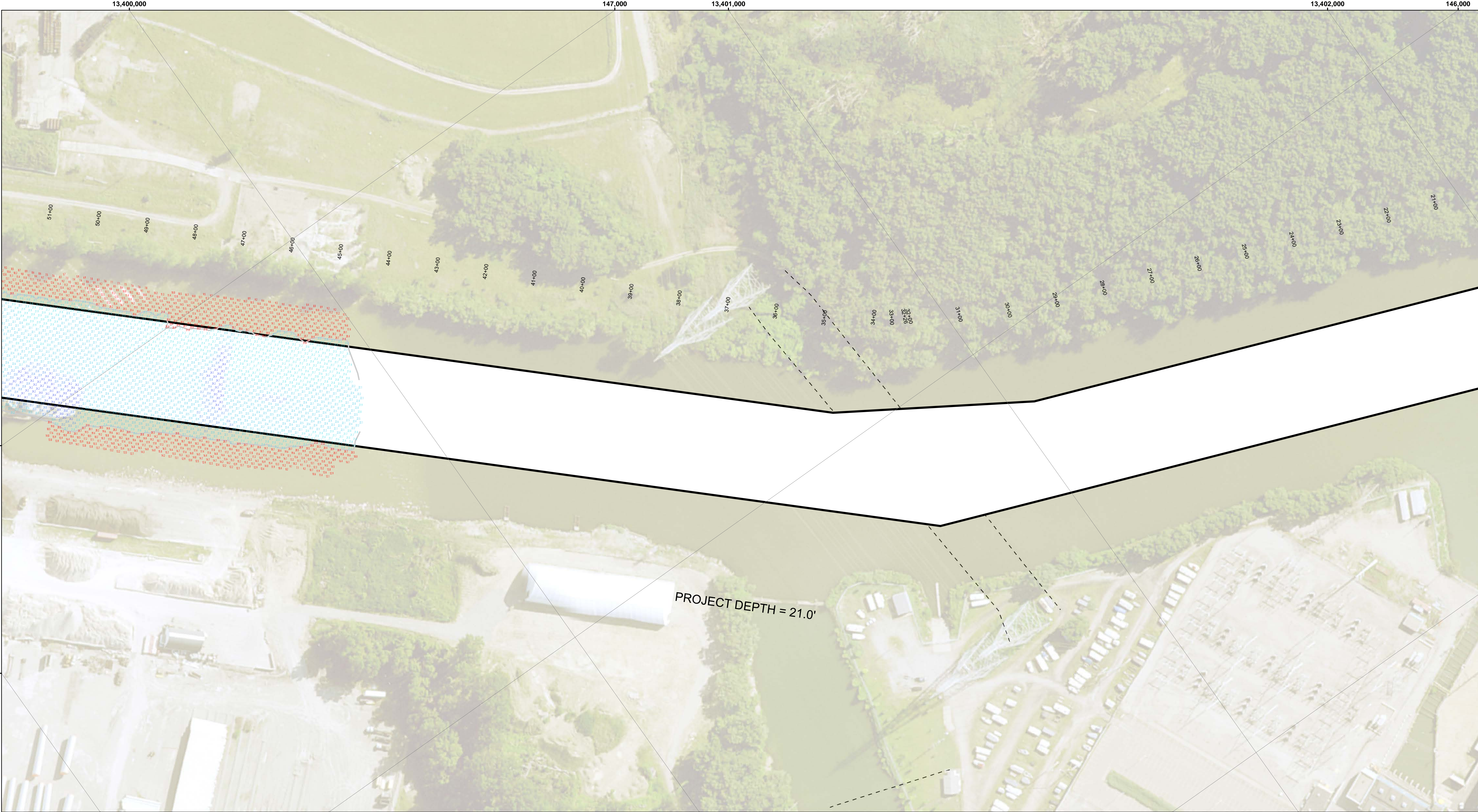
Checked By: \_\_\_\_\_

**Monroe Harbor, MI**  
**Monroe Harbor**  
**MH\_01\_MNH\_20230911\_AD**  
**11 September 2023**

**Sheet**  
**Reference**  
**Number**  
**1 of 10**

Revision Number:  
4.2-20230911



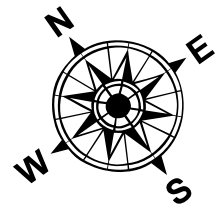


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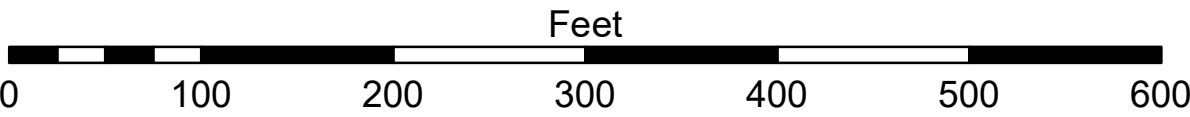
- ..... Cable Submarine
- - Cable Overhead
- Placement Area
- └ Beacon, General
- Contour Lines
- ▭ Channel Limits

**SOUNDING LEGEND**

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



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SONAR: RESONIC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM)  
SOFTWARE: HYPACK

2019 NAD AERIAL PHOTOGRAPHY DATA SOURCE: NOAA  
ALL COORDINATES ARE IN U.S. SURVEY FEET.

  
**US Army Corps  
of Engineers**  
District: CELRE

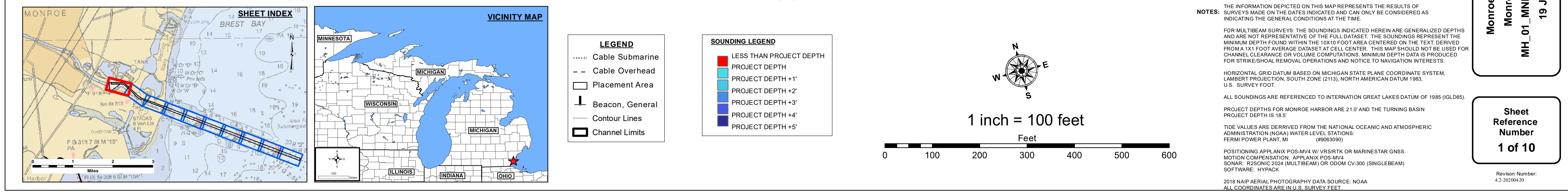
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U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT			
Submitted:	Surveyed By:	Plotted By:	Checked By:
Recommended:	Chief, Survey Section		
Approved:	Chief, Technical Services		

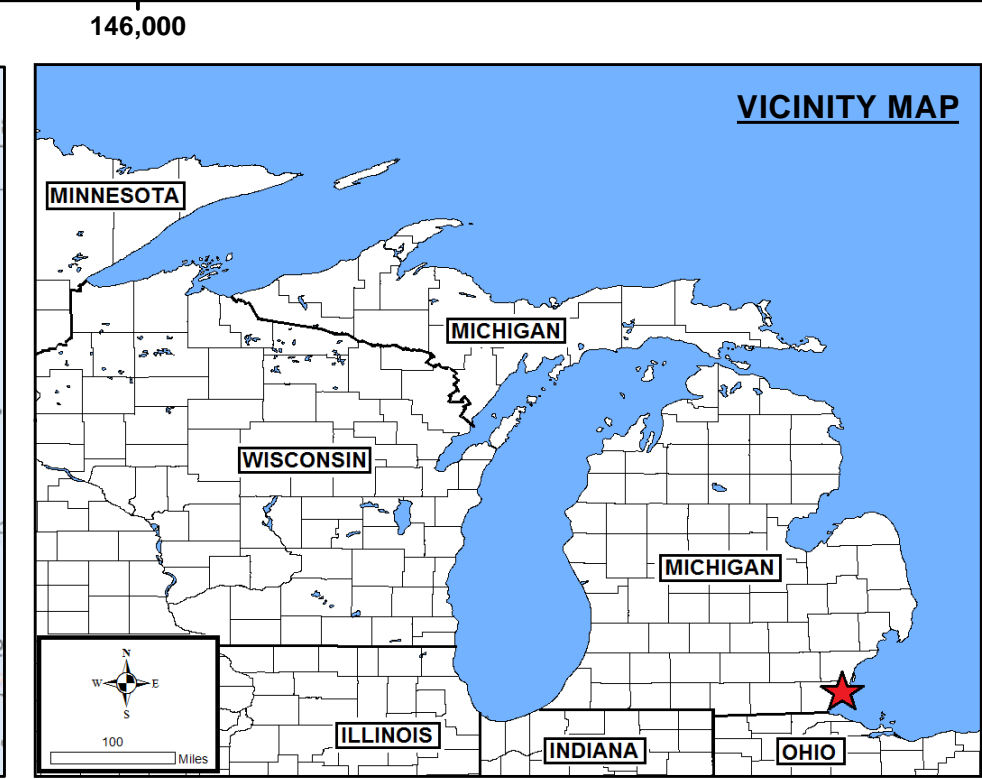
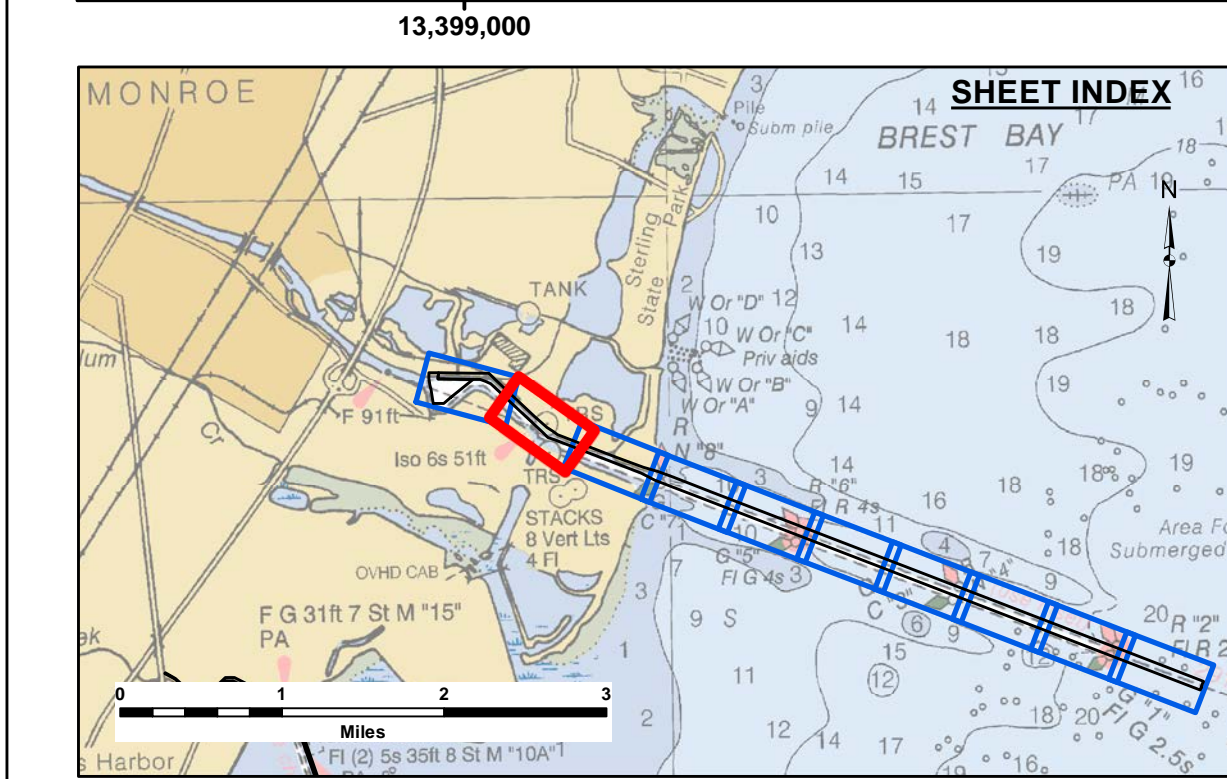
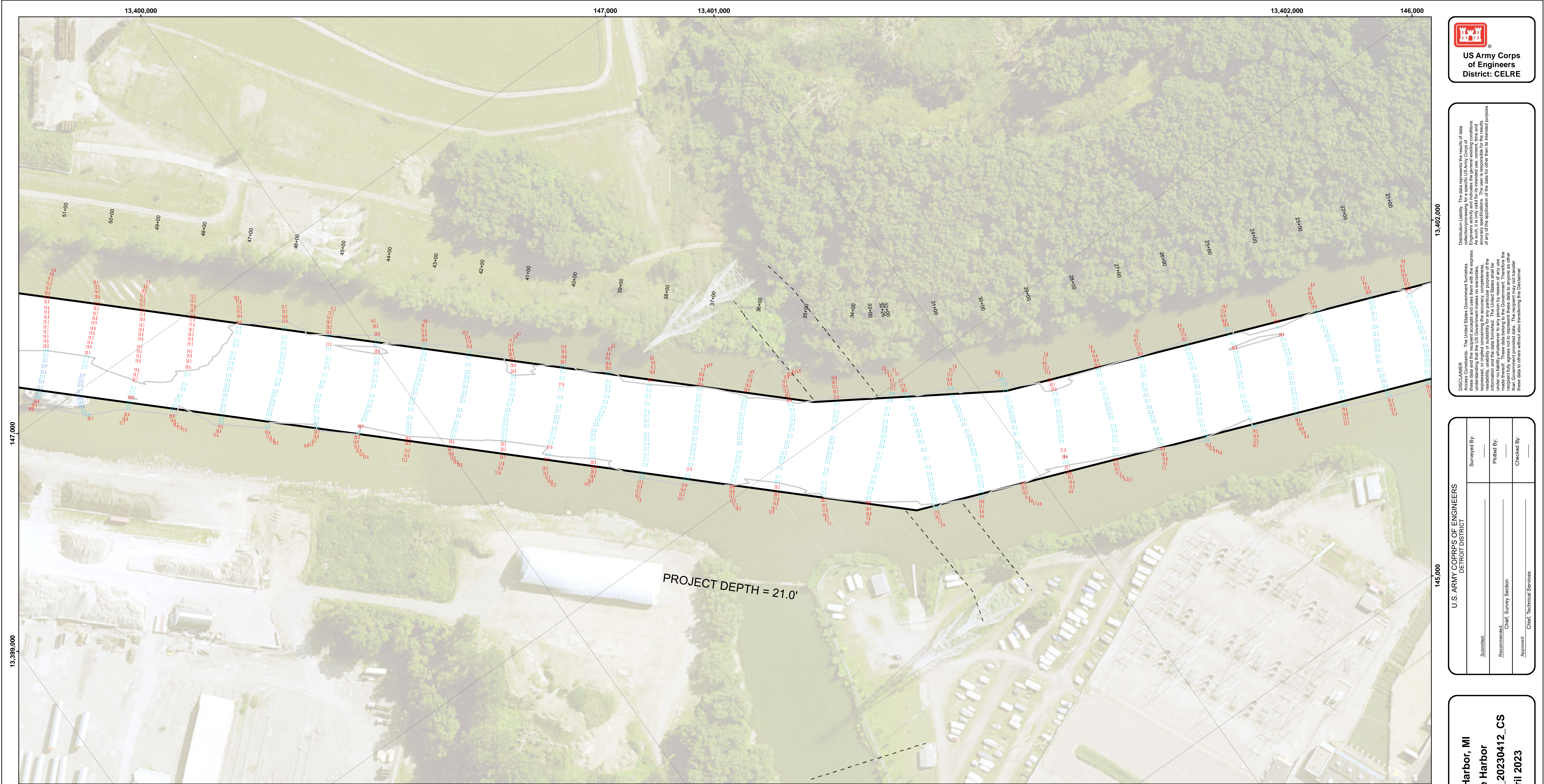
**Monroe Harbor, MI**  
**Monroe Harbor**  
**MH\_01\_MNH\_20230911\_AD**  
**11 September 2023**

**Sheet  
Reference  
Number**  
**2 of 10**





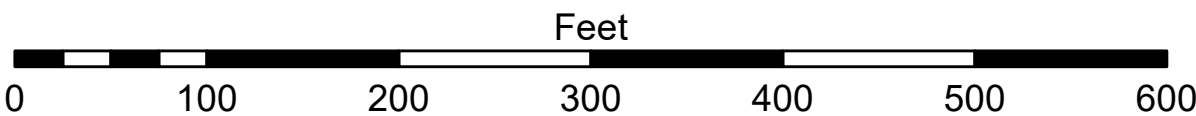




- LEGEND**
- ..... Cable Submarine
  - Cable Overhead
  - Placement Area
  - └ Beacon, General
  - Contour Lines
  - Channel Limits

- SOUNDING LEGEND**
- LESS THAN PROJECT DEPTH
  - PROJECT DEPTH
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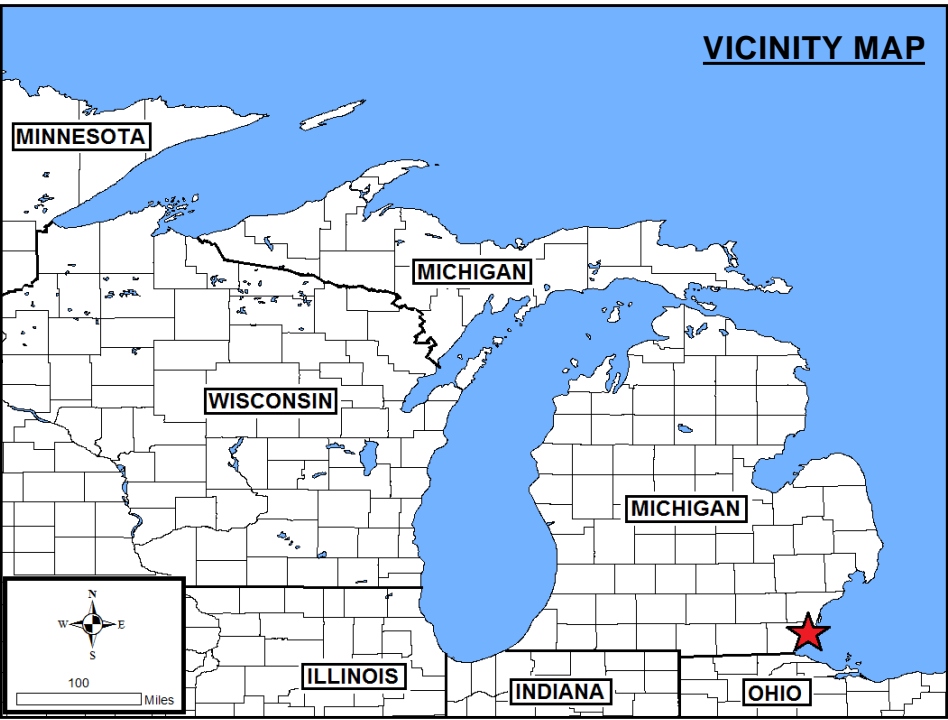
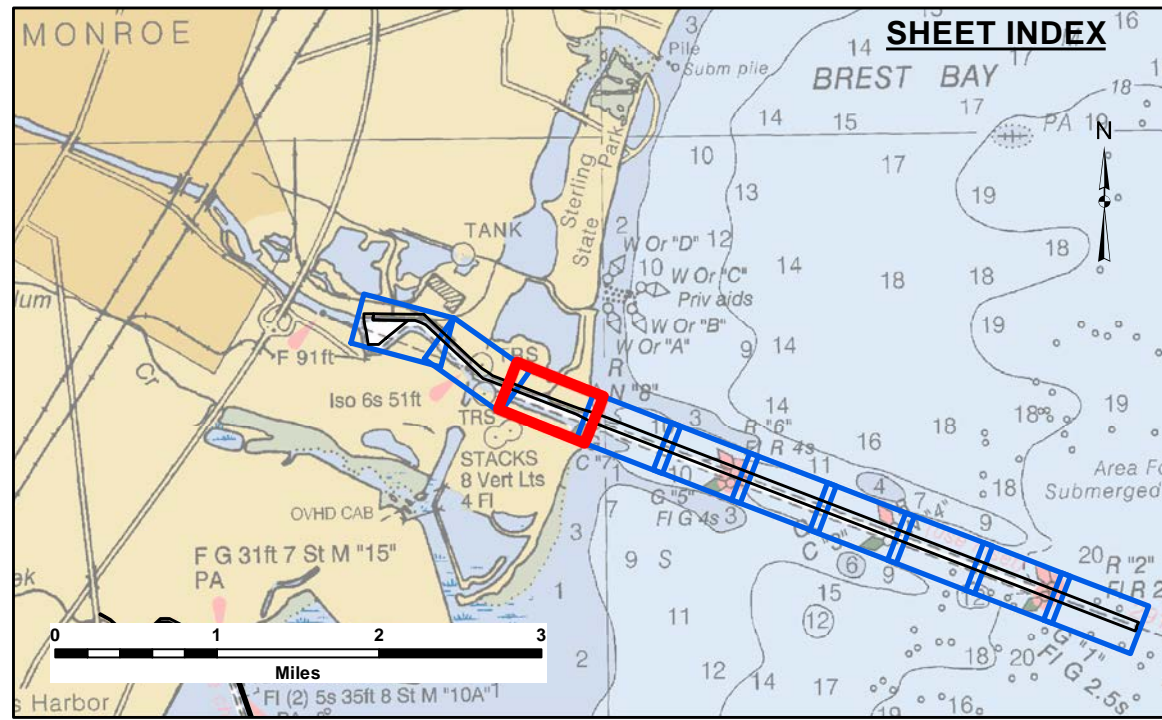
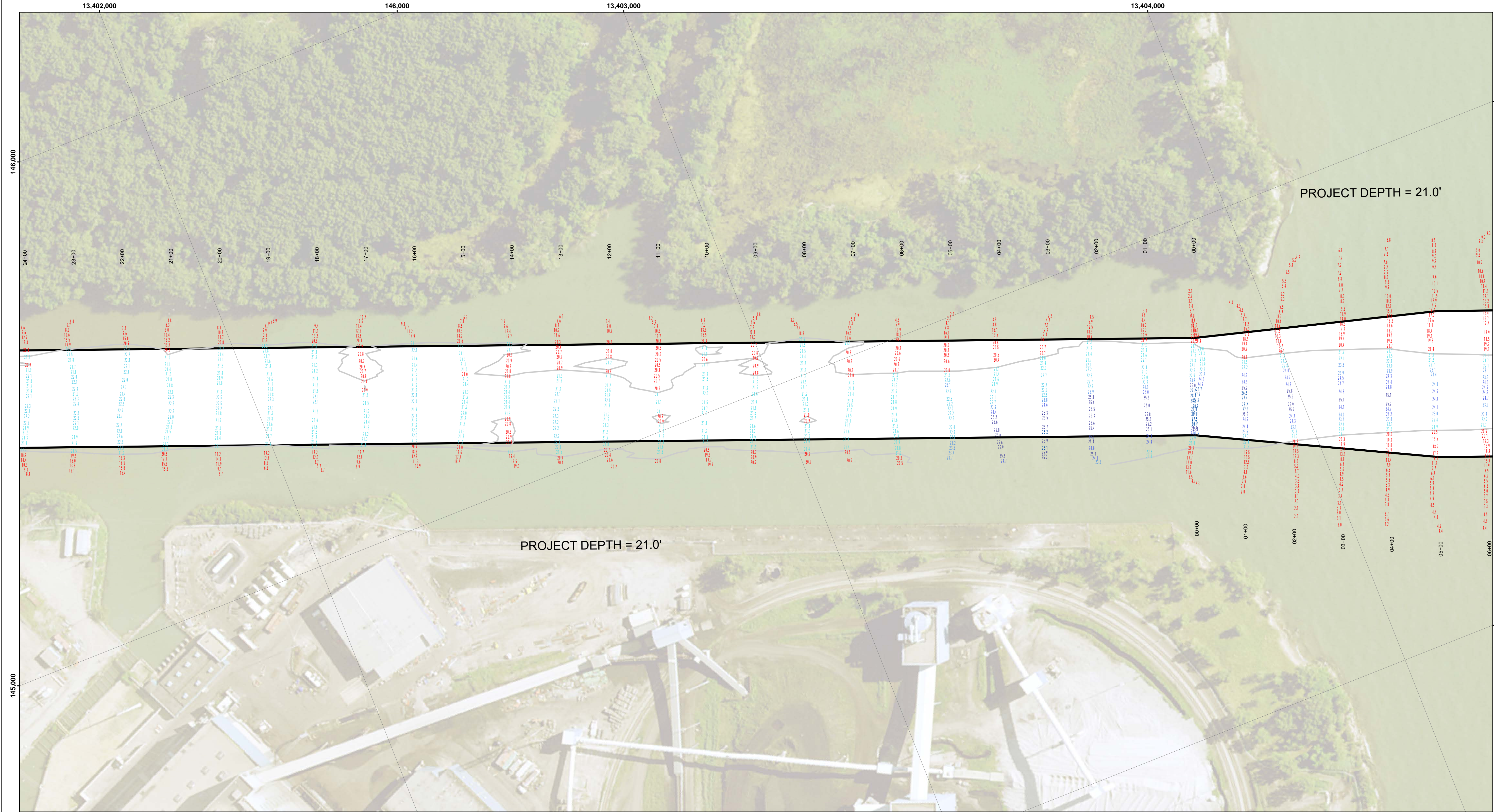
U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT		
Submitted:	Surveyed By:	
Recommended:	Plotted By:	
Approved:	Chief, Survey Section	Checked By:
	Chief, Technical Services	

Monroe Harbor, MI  
Monroe Harbor  
MH\_01\_MNH\_20230412\_CS  
12 April 2023

Sheet  
Reference  
Number  
2 of 10

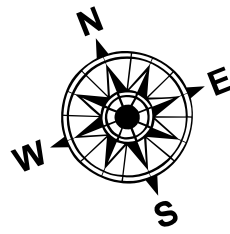
Revision Number:  
4.2-310(MW20)



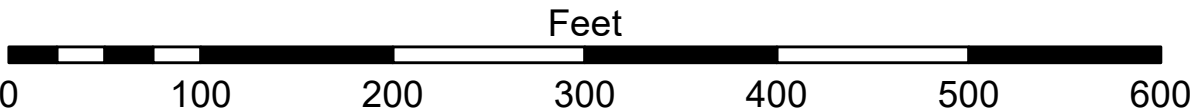


- LEGEND**
- ..... Cable Submarine
  - - Cable Overhead
  - Placement Area
  - └ Beacon, General
  - Contour Lines
  - ▭ Channel Limits

- SOUNDING LEGEND**
- LESS THAN PROJECT DEPTH
  - PROJECT DEPTH
  - PROJECT DEPTH +1'
  - PROJECT DEPTH +2'
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2018 NAIP AERIAL PHOTOGRAPHY DATA SOURCE: NOAA  
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**U.S. ARMY CORPS OF ENGINEERS**  
**DETROIT DISTRICT**

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

**Monroe Harbor, MI**  
**Monroe Harbor**  
**MH\_01\_MNH\_20230412\_CS**  
**12 April 2023**

**Sheet**  
**Reference**  
**Number**  
**3 of 10**

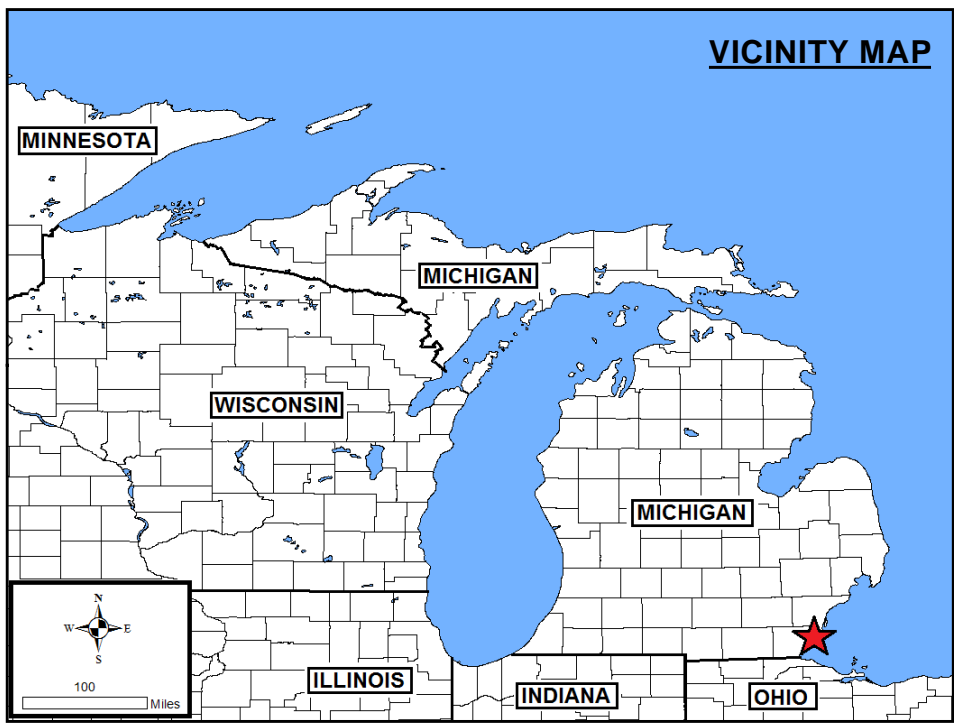
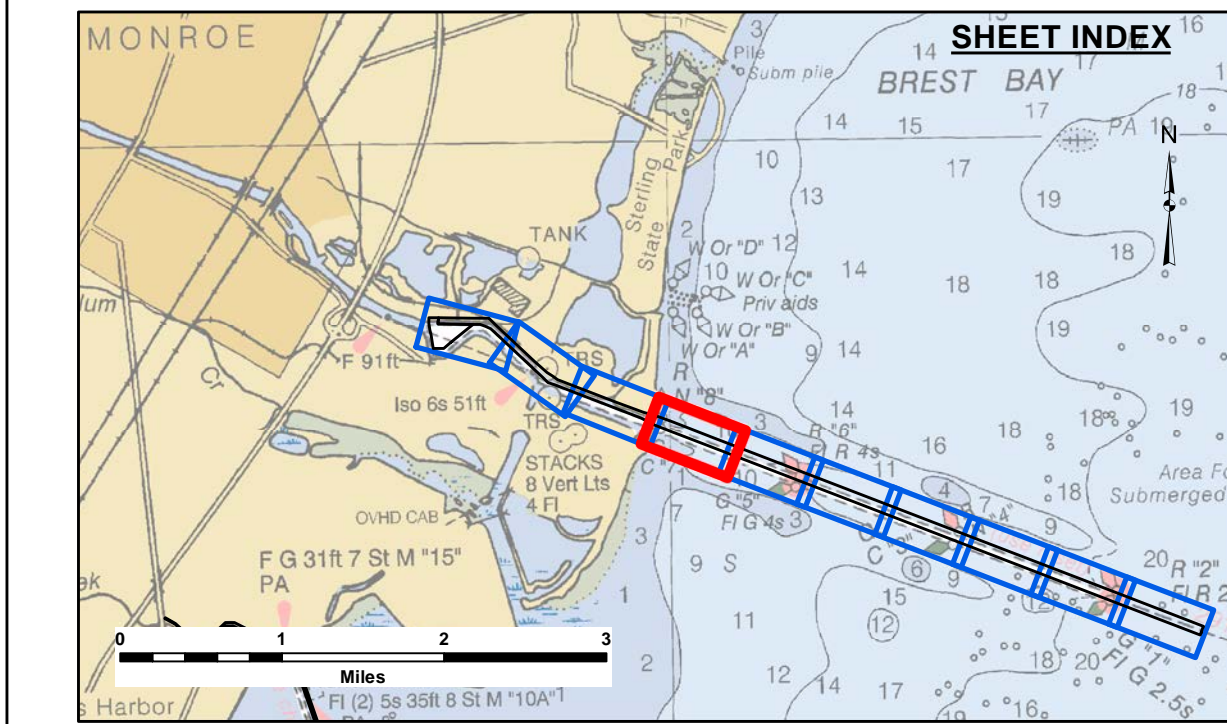
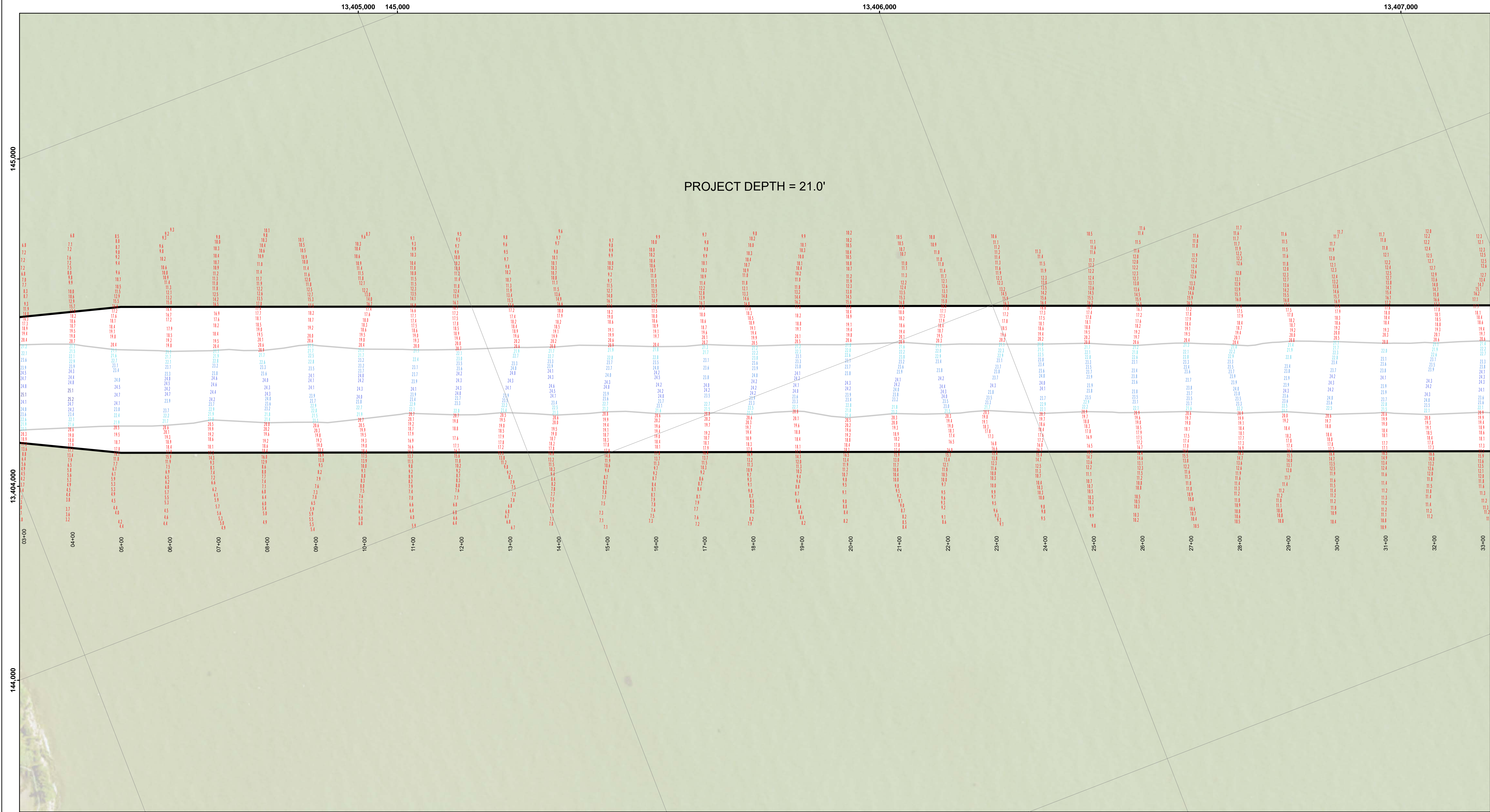
Revision Number:  
4.2-310X(M20)

**US Army Corps of Engineers**  
District: CELRE

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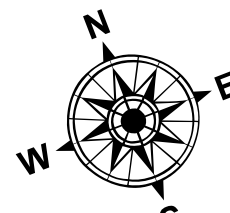
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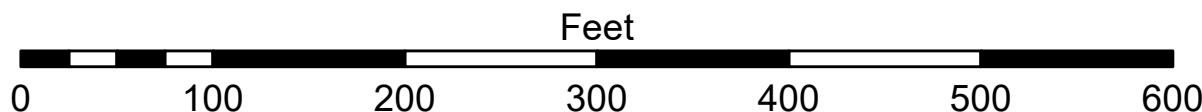


- LEGEND**
- Cable Submarine
  - - - Cable Overhead
  - Placement Area
  - └ Beacon, General
  - Contour Lines
  - ▭ Channel Limits

- SOUNDING LEGEND**
- LESS THAN PROJECT DEPTH
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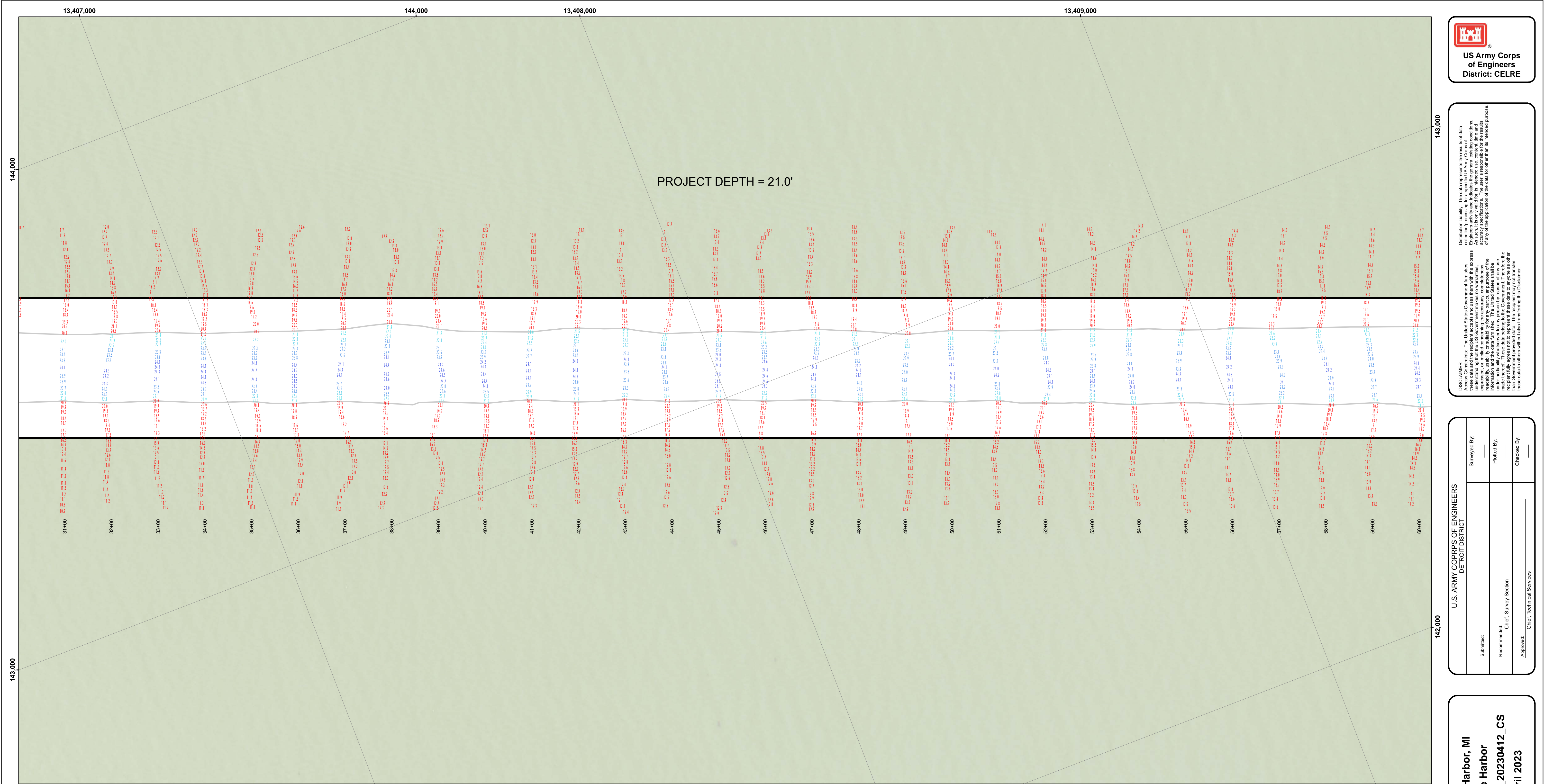
Submitted:	Surveyed By:
Recommended:	Plotted By:
Approved:	Checked By:

U.S. ARMY CORPS OF ENGINEERS  
DETROIT DISTRICT

Monroe Harbor, MI  
Monroe Harbor  
MH\_01\_MNH\_20230412\_CS  
12 April 2023

Sheet  
Reference  
Number  
4 of 10





**LEGEND**

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

**SOUNDING LEGEND**

- LESS THAN PROJECT DEPTH
- PROJECT DEPTH
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**U.S. ARMY CORPS OF ENGINEERS**  
DETROIT DISTRICT

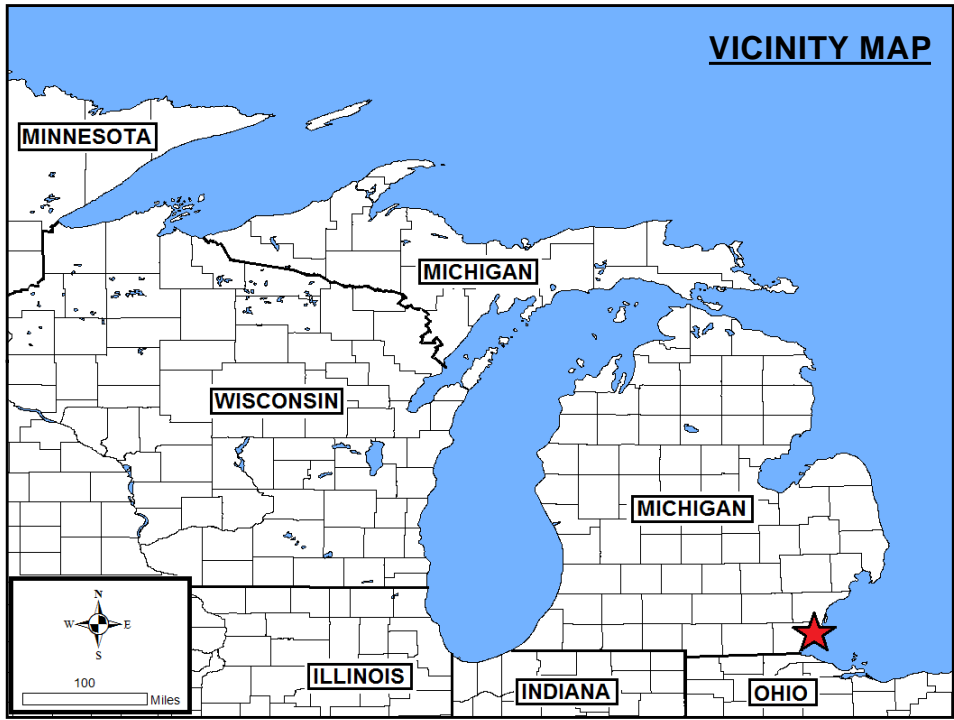
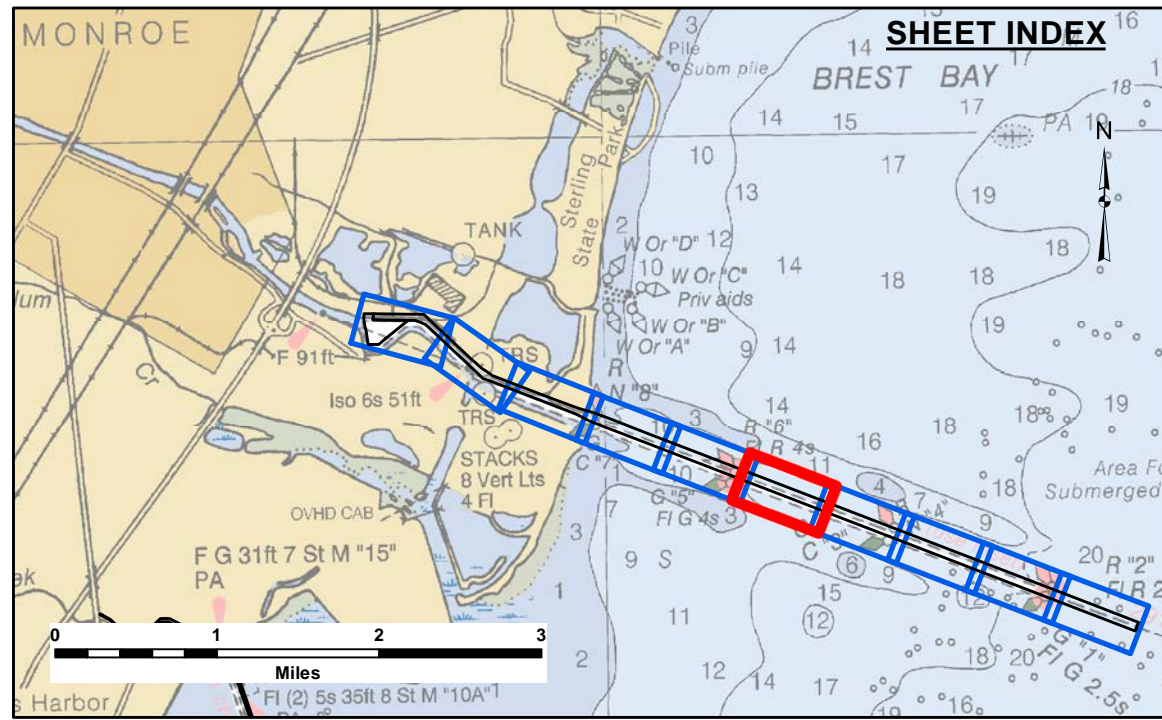
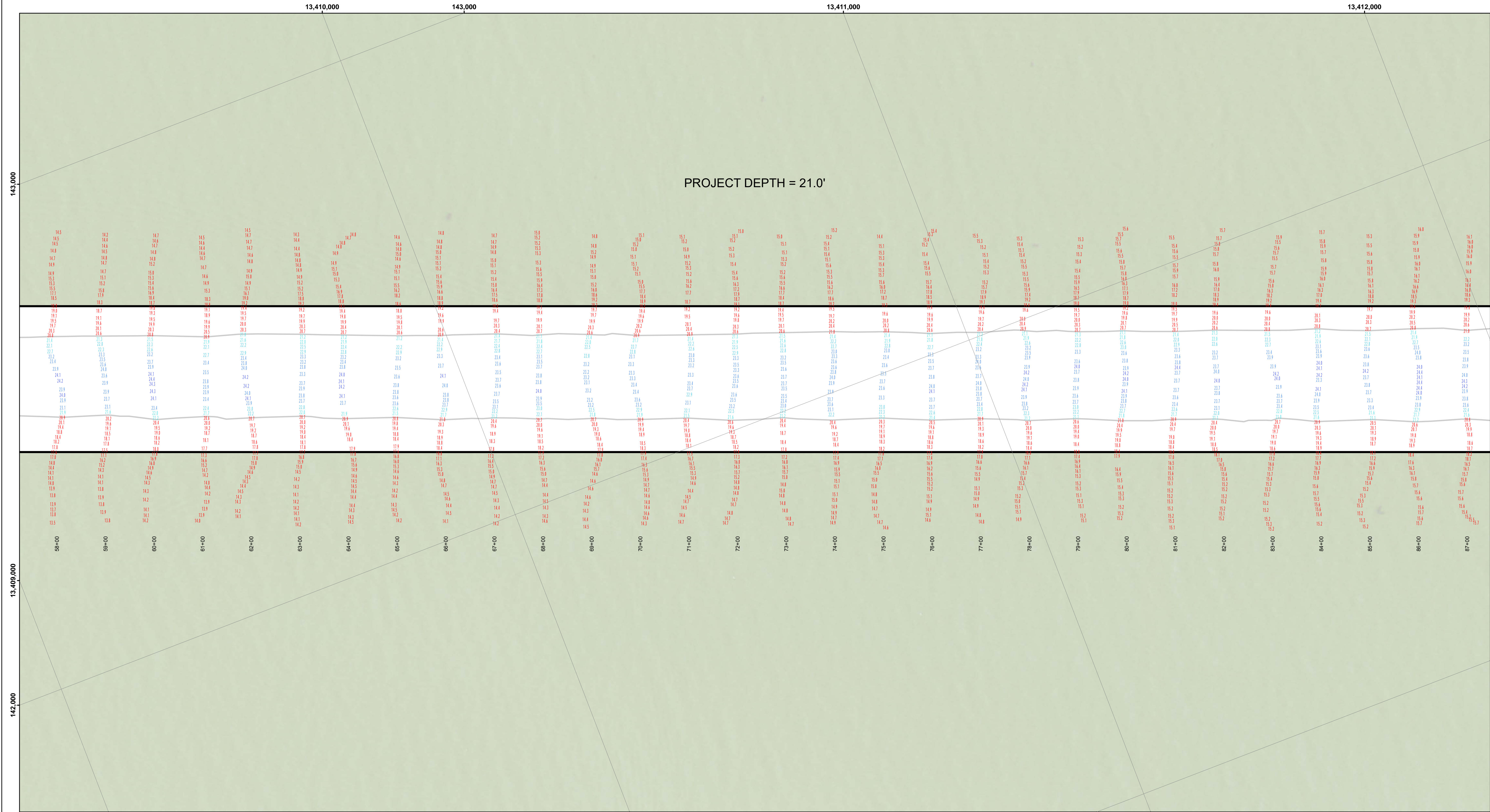
Submitted:	Surveyed By:
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Approved:	Checked By:

**Monroe Harbor, MI**  
**Monroe Harbor**  
**MH\_01\_MNH\_20230412\_CS**  
**12 April 2023**

**Sheet Reference Number**  
**5 of 10**

Revision Number:  
4.2-310XW20



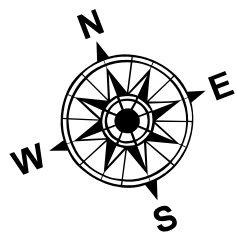


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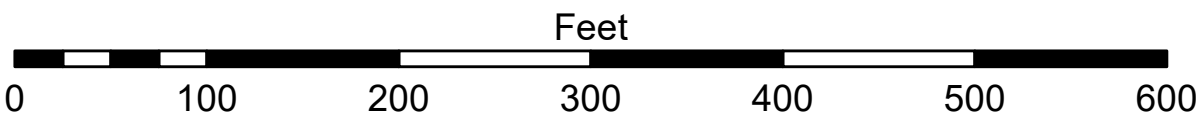
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HORIZONTAL GRID DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983, U.S. SURVEY FOOT.

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

PROJECT DEPTHS FOR MONROE HARBOR ARE 21.0' AND THE TURNING BASIN PROJECT DEPTH IS 18.5'.

TIDE VALUES ARE DERIVED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) WATER LEVEL STATIONS: FERRIS POWER PLANT, MI (#9063090).

POSITIONING: APPLANIX POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS. MOTION COMPENSATION: APPLANIX POS-MV4. SONAR: RESONAC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM) SOFTWARE: HYPACK

2019 NAIP AERIAL PHOTOGRAPHY DATA SOURCE: NOAA. ALL COORDINATES ARE IN U.S. SURVEY FEET.



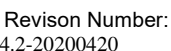
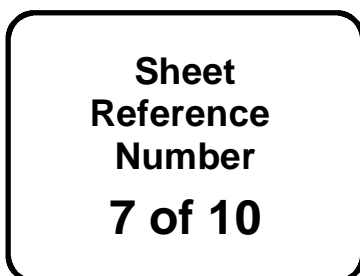
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Submitted:	Surveyed By:
	Plotted By:
	Checked By:
Recommended:	Chief, Survey Section
Approved:	Chief, Technical Services

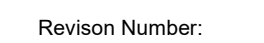
**Monroe Harbor, MI**  
**Monroe Harbor**  
**MH\_01\_MNH\_20230412\_CS**  
**12 April 2023**

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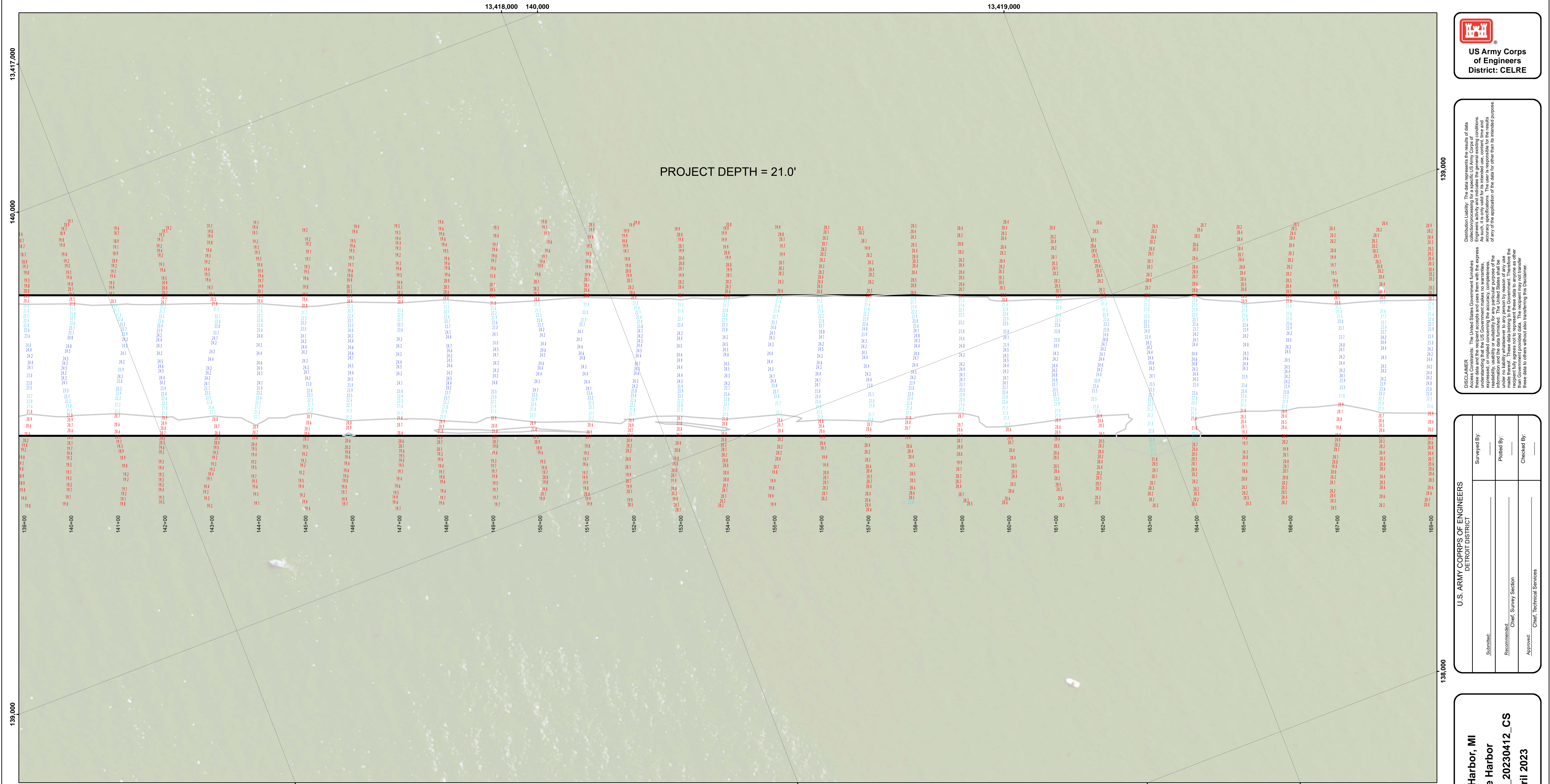
PROJECT DEPTHS FOR MONROE HARBOR ARE 21.0' AND THE TURNING BASIN PROJECT DEPTH IS 18.5'

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POSITIONING: APPLANIX POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS.  
MOTION COMPENSATION: APPLANIX POS-MV4  
SONAR: R2SONIC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM)  
SOFTWARE: HYPAACK

2018 NAIP AERIAL PHOTOGRAPHY DATA SOURCE: NOAA  
2 COORDINATES ARE IN U.S. SURVEY FEET





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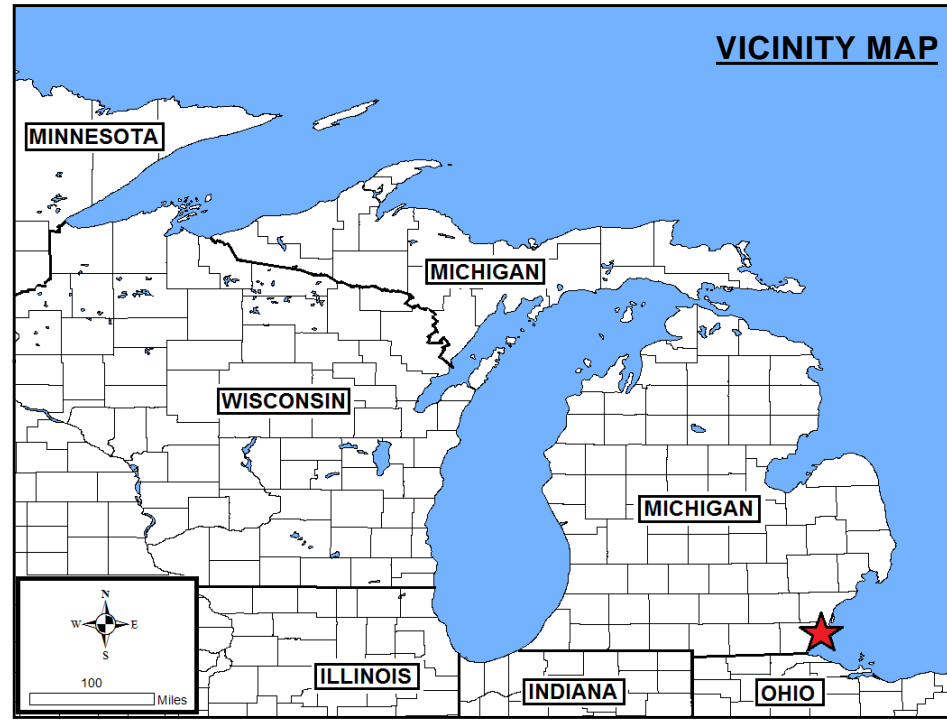
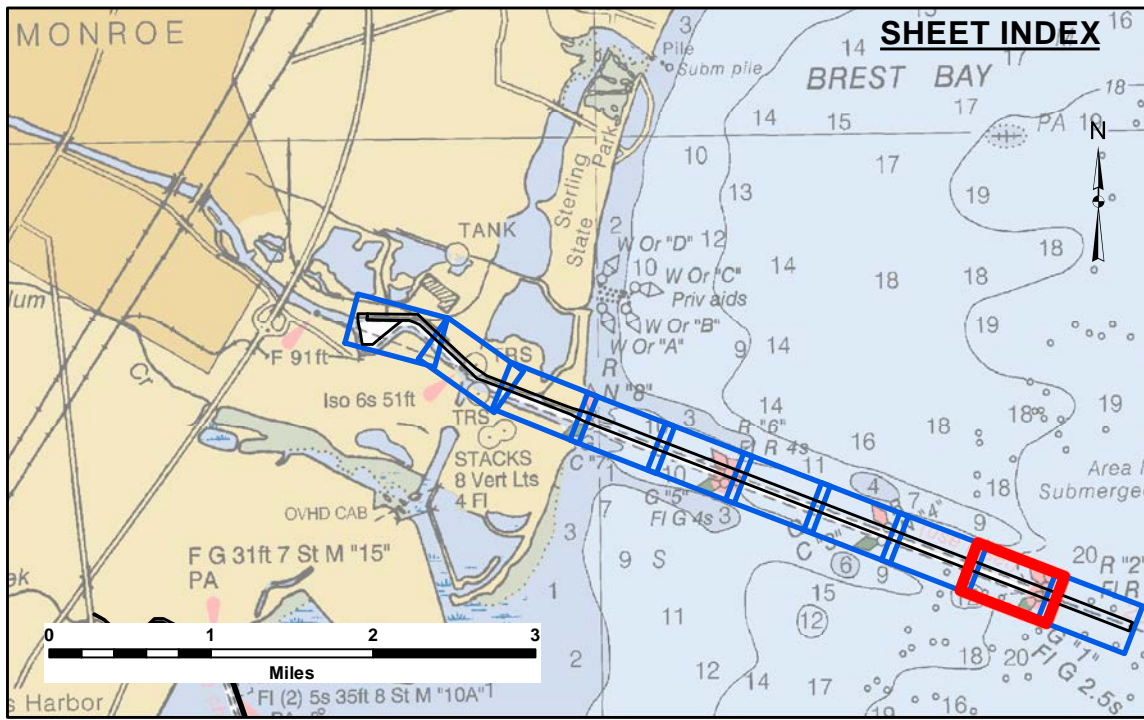
Submitted:	Surveyed By:
	Plotted By:
	Recommended:
	Checked By:

U.S. ARMY CORPS OF ENGINEERS  
DETROIT DISTRICT

Monroe Harbor, MI  
Monroe Harbor  
MH\_01\_MNH\_20230412\_CS  
12 April 2023

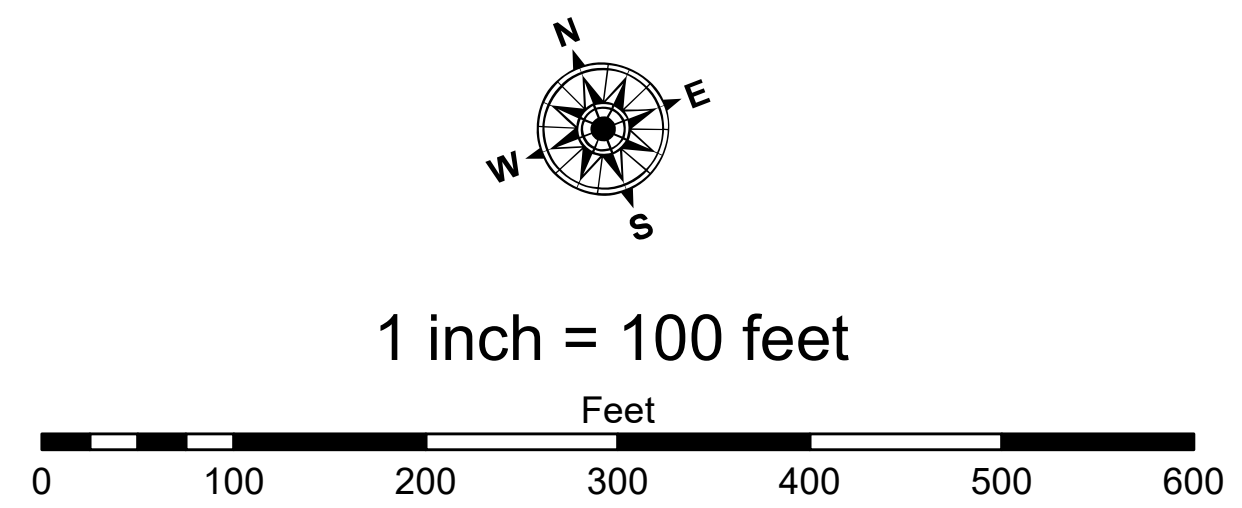
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Revision Number:  
4.2-3101W020



- 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'



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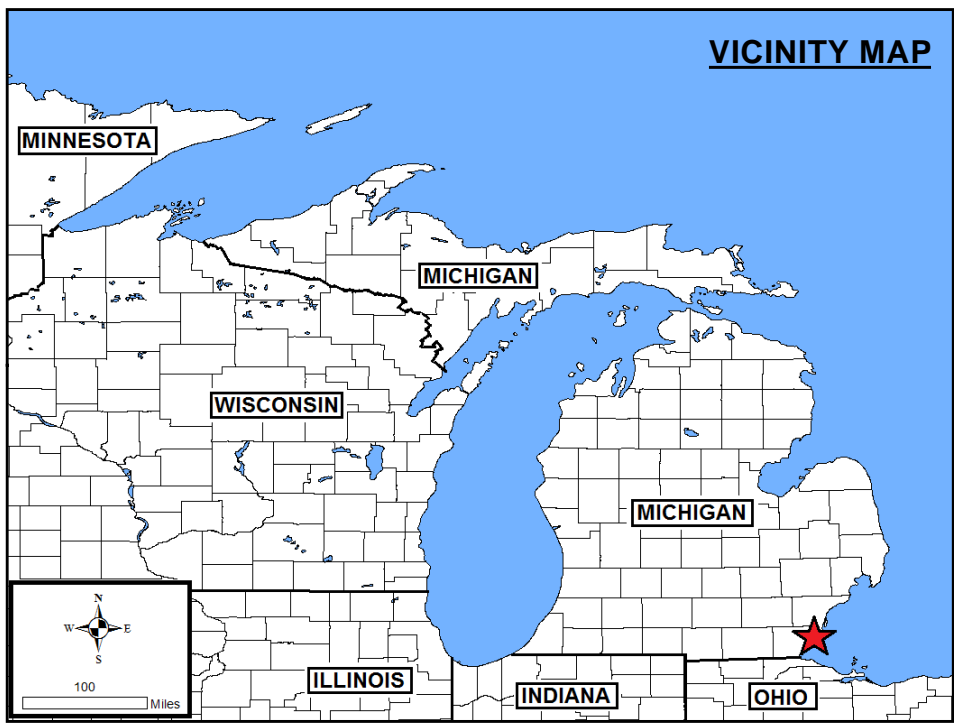
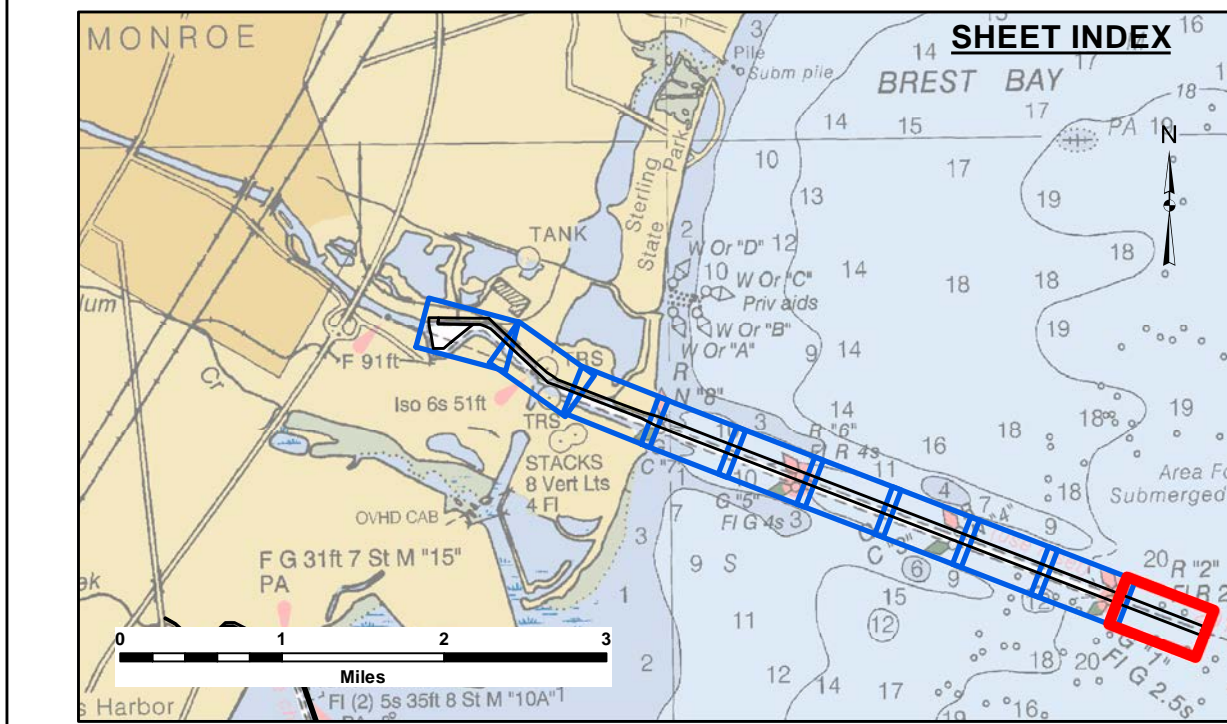
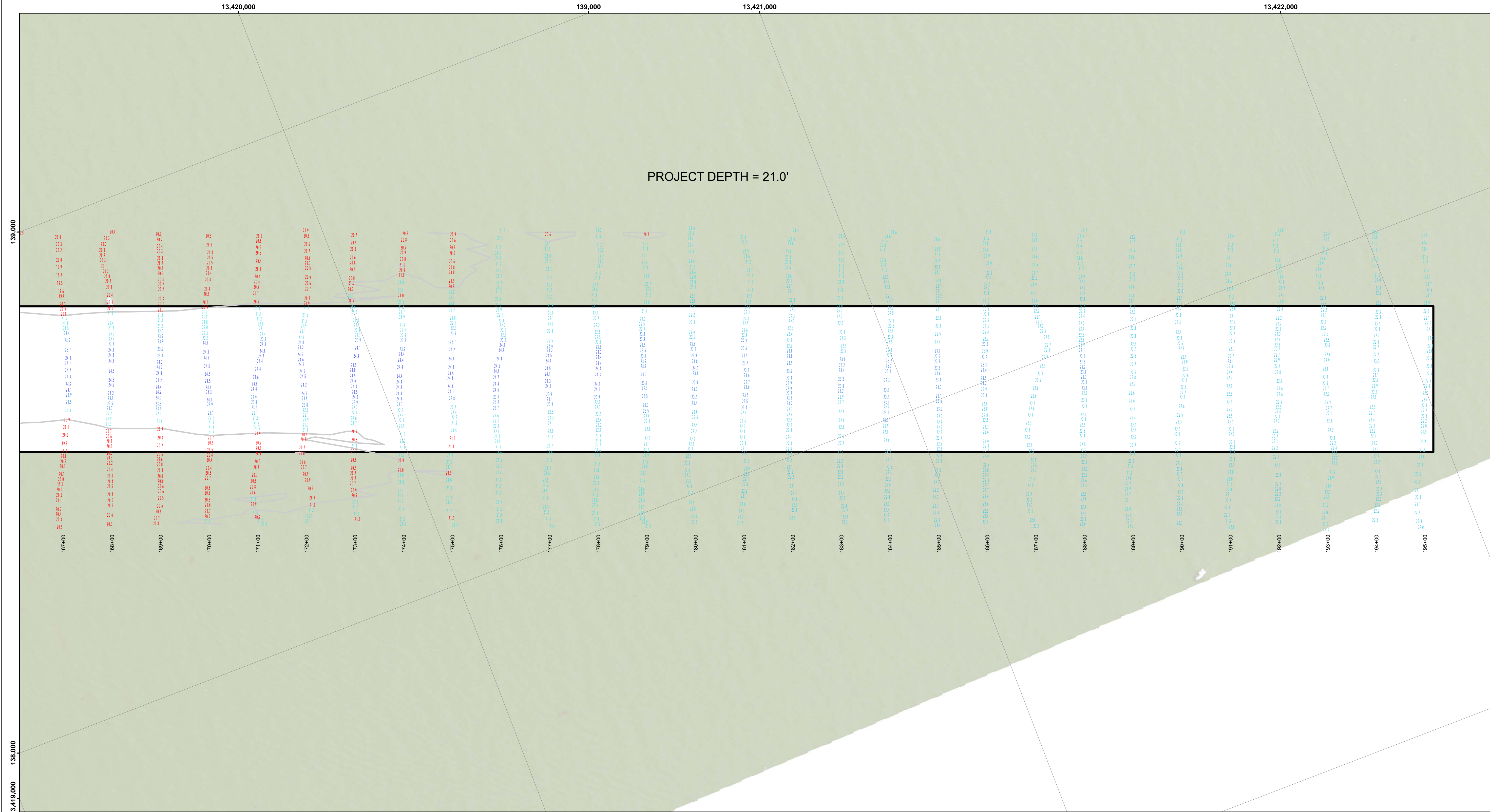
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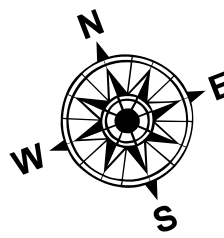
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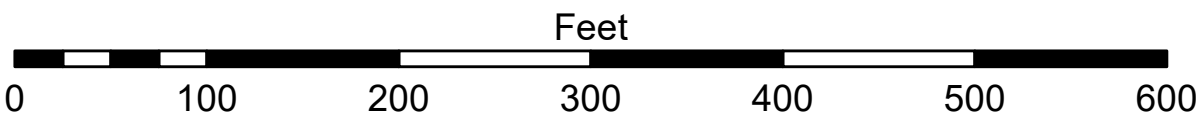


- LEGEND**
- ..... Cable Submarine
  - - Cable Overhead
  - Placement Area
  - Beacon, General
  - Contour Lines
  - Channel Limits

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



1 inch = 100 feet



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U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT	
Submitted By:	Surveyed By:
Recommended By:	Plotted By:
Chief, Survey Section	Chief, Technical Services
Approved:	Checked By:

**Monroe Harbor, MI**  
**Monroe Harbor**  
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