

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

Feet

0 100 200 300 400 500 600

NOTES: THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

GRIDS SHOWN ARE BASED ON THE NATIONAL GEODETIC SURVEY PROJECTION TABLES, STATE OF MICHIGAN, SOUTH ZONE (2113), LAMBERT PROJECTION, 1983 NORTH AMERICAN DATUM, US SURVEY FOOT.

ALL SOUNDINGS ARE REFERENCED TO I.G.L.D. 1985 FOR LAKE MICHIGAN, ELEVATION 577.5 FT. ABOVE MEAN SEA LEVEL AT RIMOUSKI, QUEBEC.

VERTICAL WATER LEVEL READINGS WERE TAKEN FROM A FIXED GAGE MARK ALONG THE SHEET STEEL WALL IN BY CROSS SECTION 8+00E IN ST. JOSEPH HARBOR, MI.

PROJECT DEPTHS FOR THIS HARBOR RANGE FROM 23.0' TO 18.0'

POSITIONING METHOD: MARINESTAR GNSS G2
MOTION COMPENSATION: APPLANIX OCEAN MASTER POS M/V
EQUIPMENT: ODOM CV SINGLE BEAM ECHOSOUNDER
SOFTWARE: HYPACK 2021
VESSEL: LAUNCH 3058

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS

U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT			
Submitted:	Surveyed By: _____		
Recommended:	Plotted By: _____		
Approved:	Checked By: _____		

ST. JOSEPH HARBOR, MI

St Joseph Harbor

ST_01_JOE_20221116_CS

16 November 2022

Sheet Reference Number

1 of 4

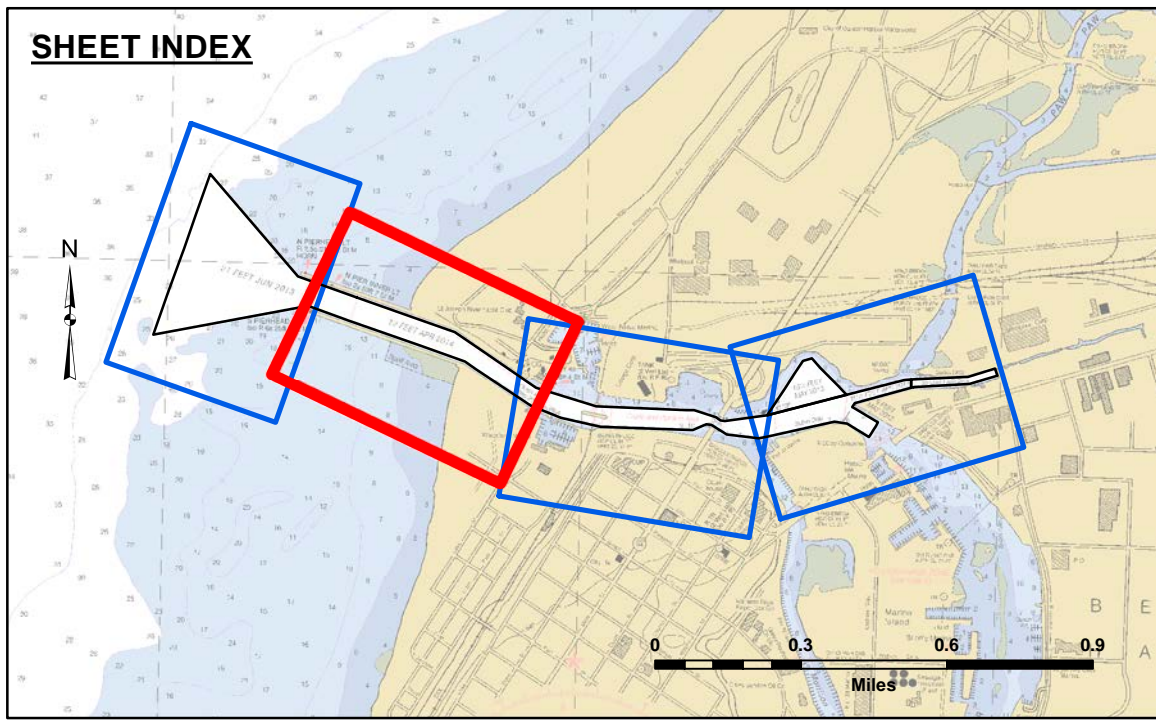
US Army Corps of Engineers
District: CELRE

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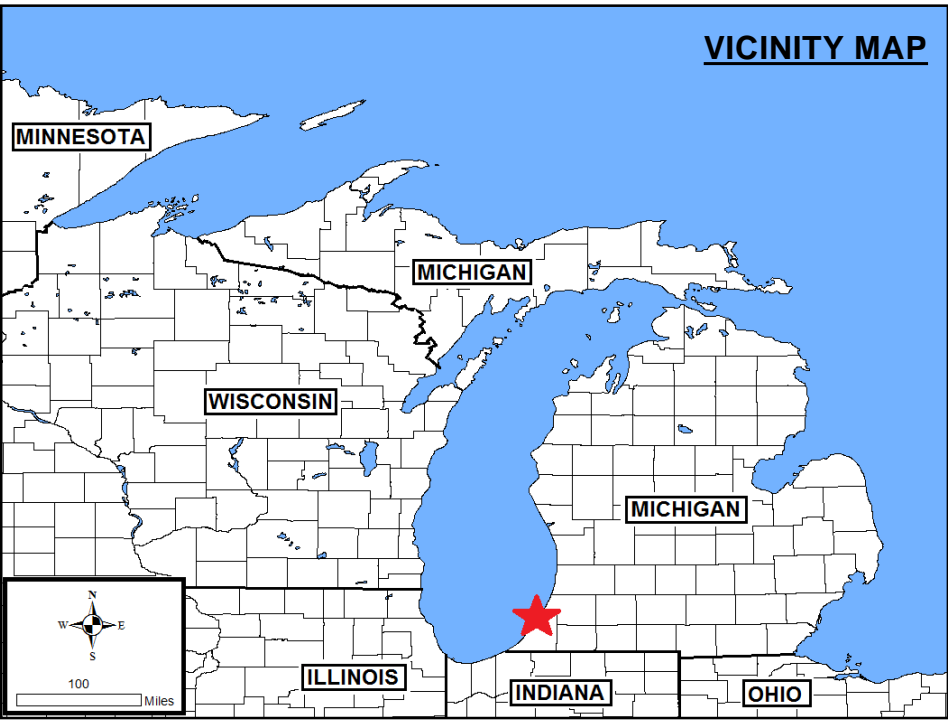
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SHEET INDEX



VICINITY MAP

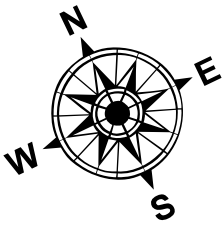


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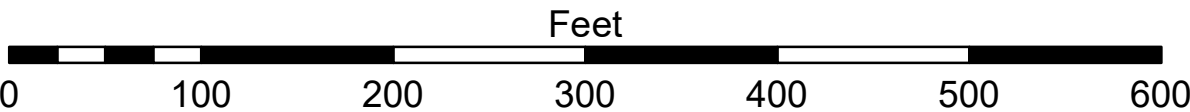
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SOUNDING LEGEND

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1 inch = 100 feet



- NOTES:
1. THE SOUNDINGS INDICATED HEREIN ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATA SET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10X10 AREA CENTERED ON THE TEXT, DERIVED FROM A 1X1 AVERAGE DATASET AT CELL CENTER. THIS MAP SHOULD NOT BE USED FOR CHANNEL CLEARANCE OR VOLUME COMPUTATIONS.
 2. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SOAL REMOVAL OPERATIONS AND NOTICE TO NAVIGATION INTERESTS.
 3. GRID SYSTEM BASED ON LAMBERT PROJECTION, MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (2115) 1983 NORTH AMERICAN DATUM, U.S. FOOT.
 4. ALL SOUNDINGS ARE REFERENCED TO I.G.L.D. 1985 FOR LAKE MICHIGAN, ELEVATION 577.5 FT. ABOVE MEAN SEA LEVEL AT RIMOUSKI, QUEBEC.
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 6. PROJECT DEPTHS FOR THIS HARBOR RANGE FROM 21.0' TO 18.0'.
 7. POSITIONING METHOD: MARINESTAR GNSS G2
MOTION COMPENSATION: APPLANIX OCEAN MASTER POS MV
EQUIPMENT: 2024 MULTIBEAM ECHOSOUNDER
SOFTWARE: HYPACK
VESSEL: LAUNCH 3058

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS



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:

ST JOSEPH HARBOR, MI

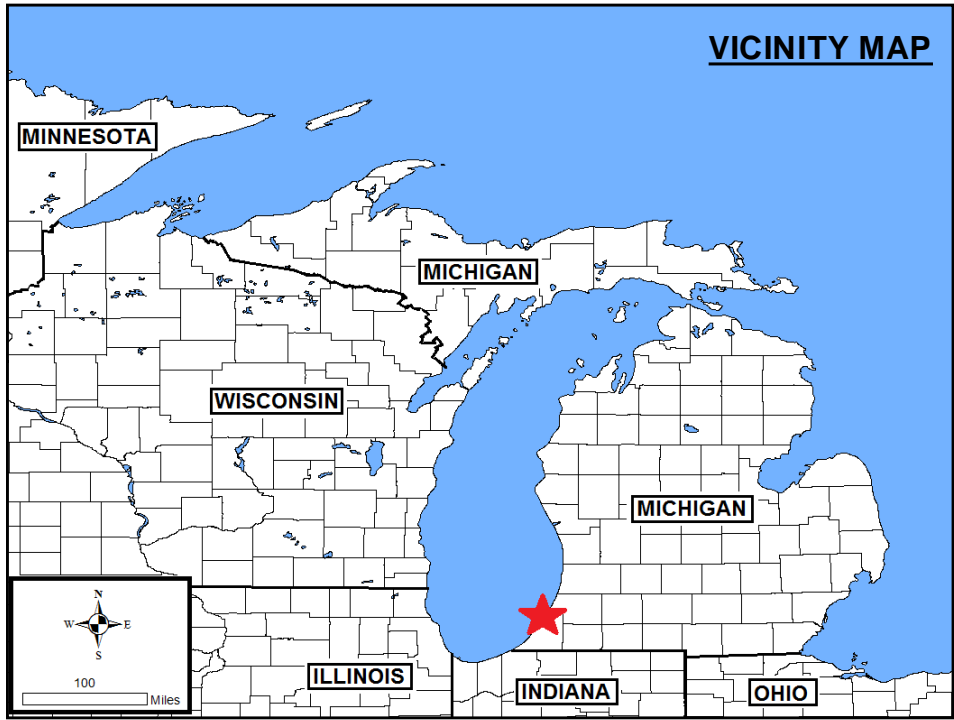
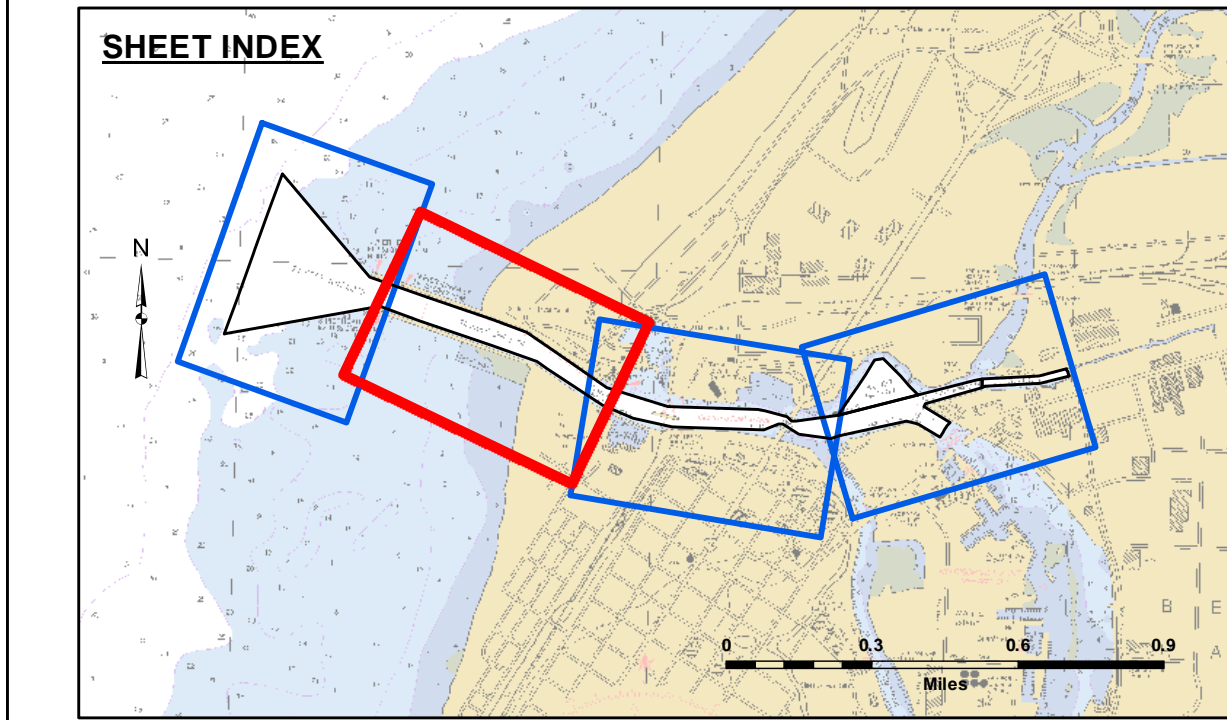
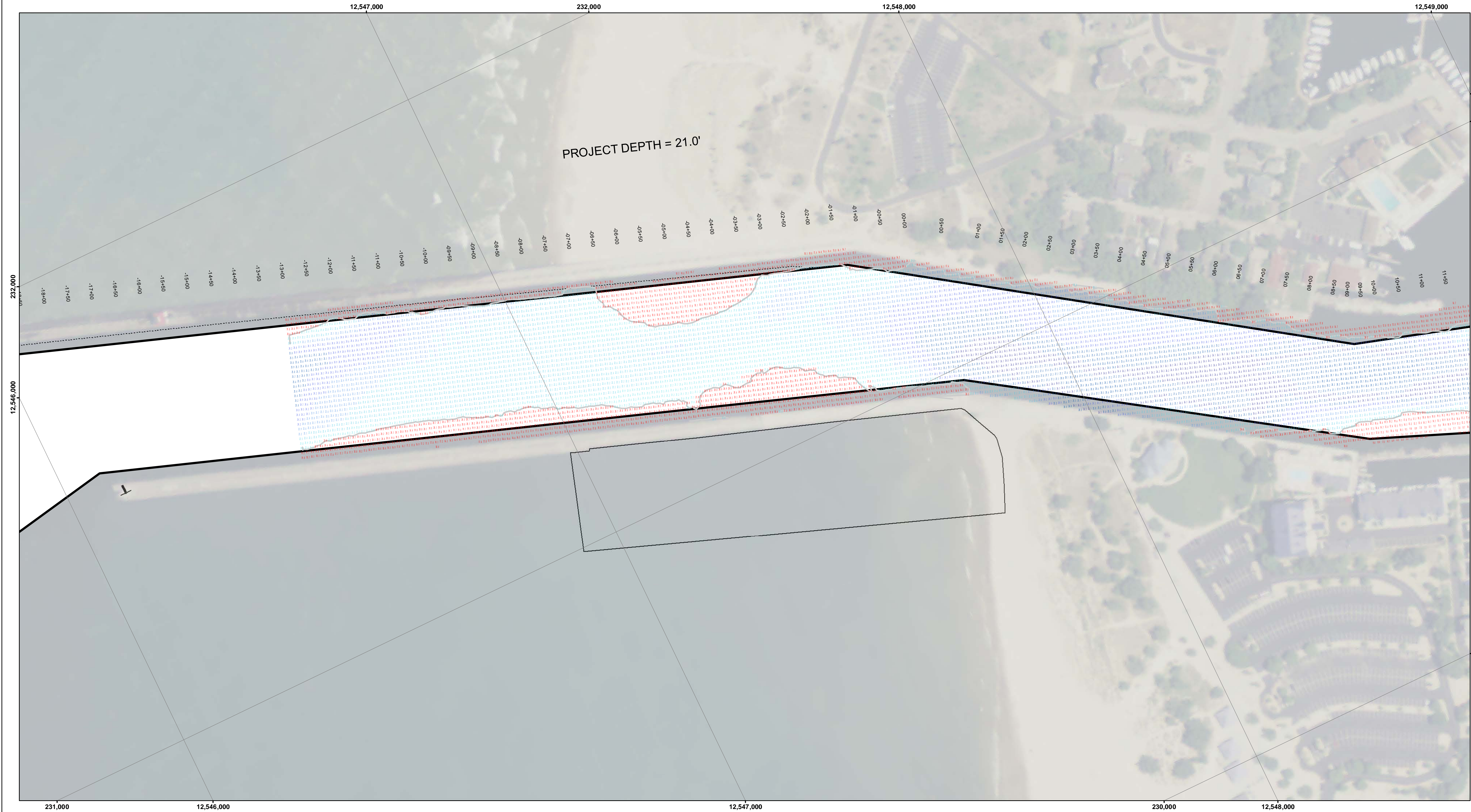
St Joseph Harbor

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14 March 2022

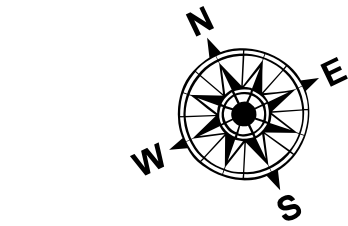
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Revision Number:
4.2-2020MAY20

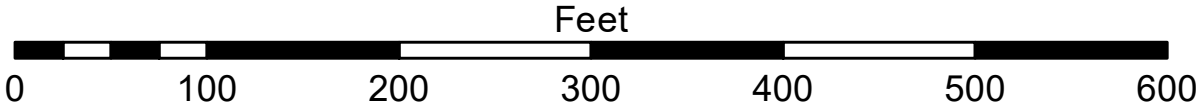


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U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

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

Chief, Survey Section
Chief, Technical Services

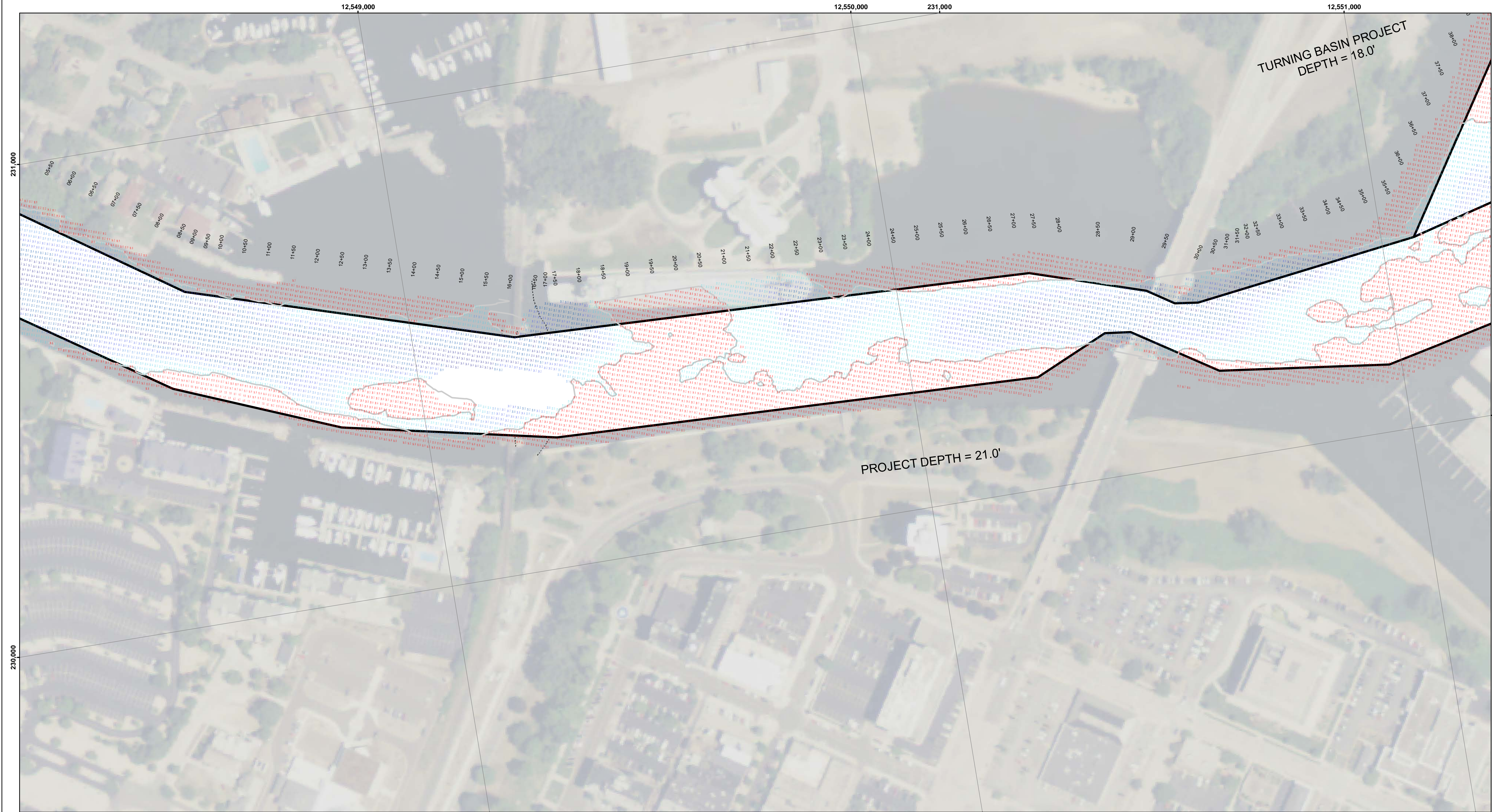
ST JOSEPH HARBOR, MI
St Joseph Harbor
ST_01_JOE_20220316_CS
16 March 2022

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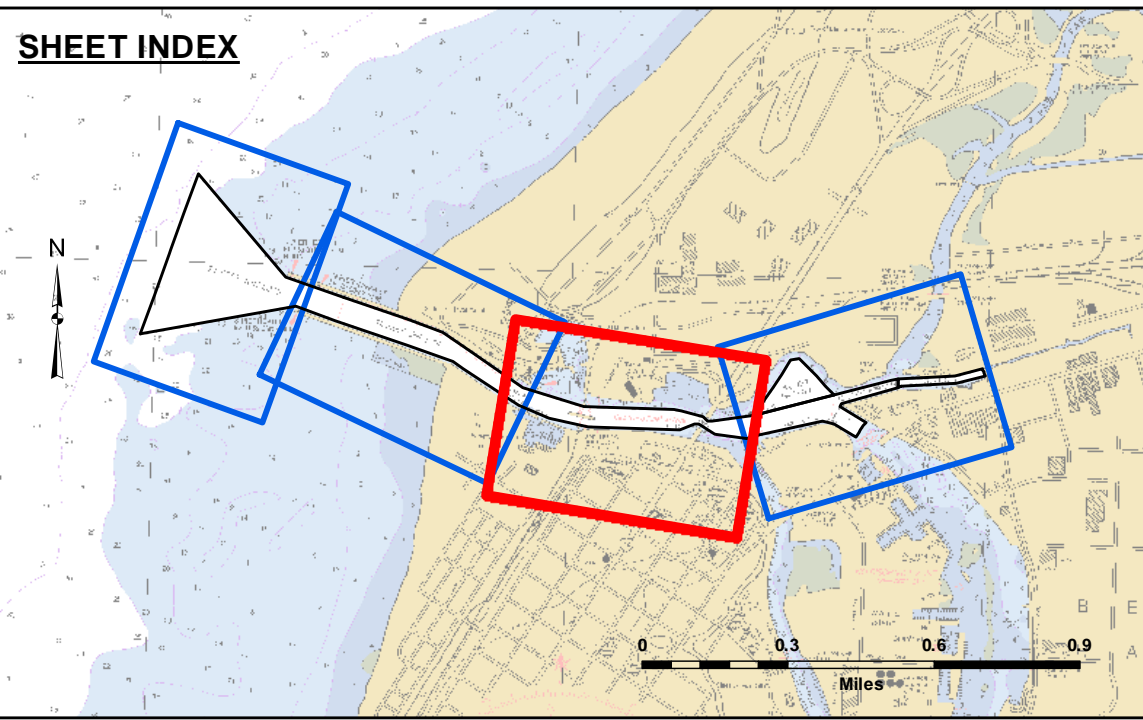


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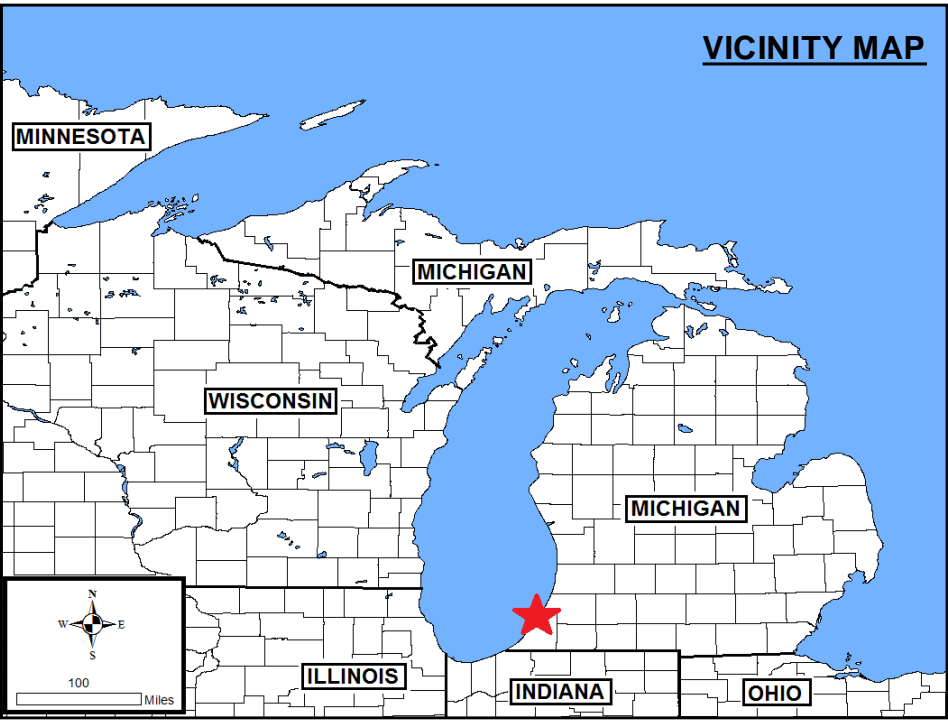
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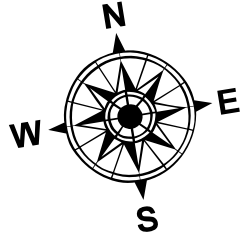


VICINITY MAP

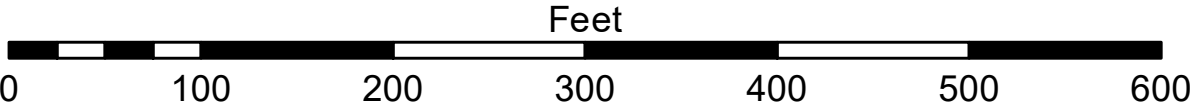


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US Army Corps
of Engineers
District: CELRE

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U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

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

ST JOSEPH HARBOR, MI

St Joseph Harbor

ST_01_JOE_20220316_CS

16 March 2022

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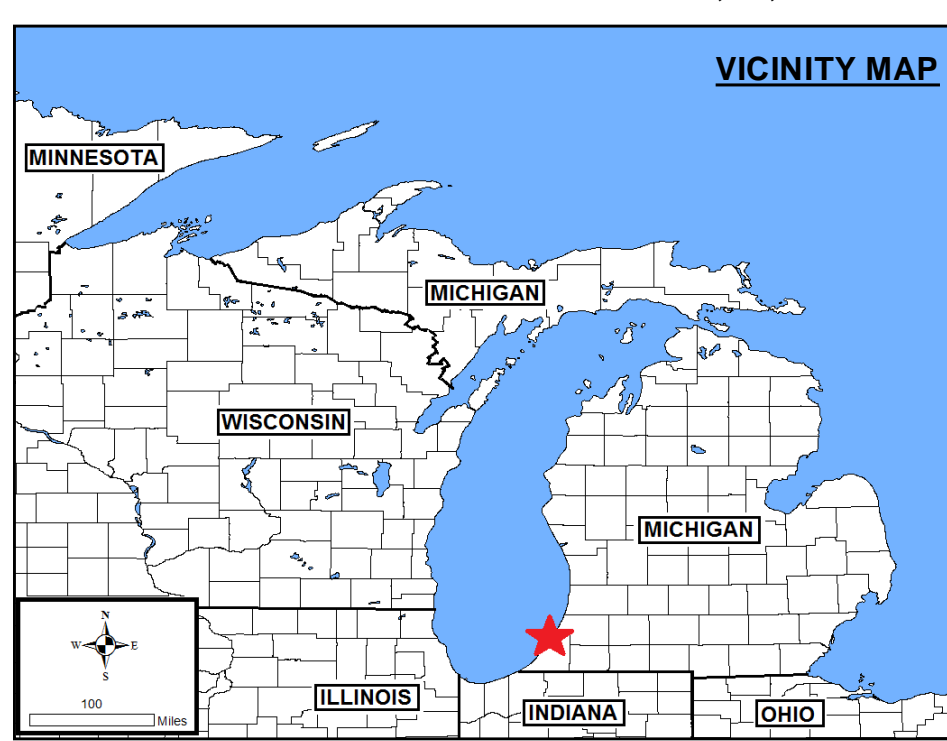
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U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT	
Submitted: _____	Surveyed By: _____
Recommended: Chief, Survey Section	Plotted By: _____
Approved: Chief, Technical Services	Checked By: _____

ST JOSEPH HARBOR, MI
St Joseph Harbor
ST_01_JOE_20220316_CS
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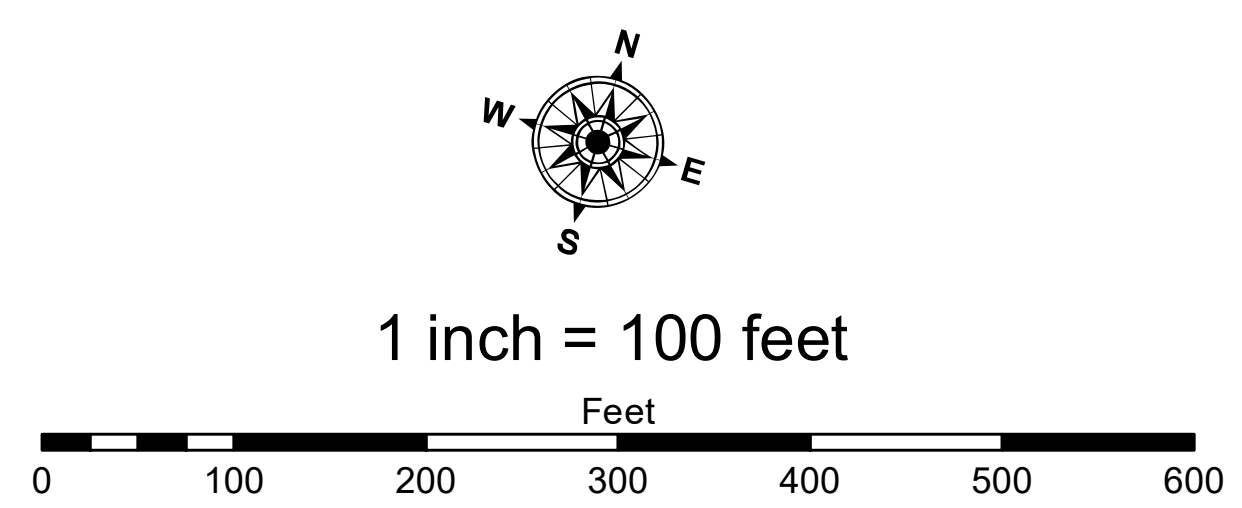


LEGEND

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