

**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 SOUNDINGS AND ASSOCIATED INFORMATION REPRESENTED HEREIN ARE THE RESULT OF SURVEYS MADE ON THE DATE AS INDICATED AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF THE GENERAL CONDITIONS EXISTING AT THE TIME OF SURVEY.

THE SOUNDINGS DEPICTED HEREIN ARE EXPRESSED IN U.S. SURVEY FEET AND TENTHS THEREOF AND ARE REFERENCED TO THE FOLLOWING DATUMS:  
HORIZONTAL: MICHIGAN STATE PLANE COORDINATE SYSTEM, MICHIGAN SOUTH ZONE #2113, NORTH AMERICAN DATUM (NAD) OF 1983  
VERTICAL: INTERNATIONAL GREAT LAKES DATUM (IGLD) OF 1985.

THE ABOVE LAKE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY LAUNCH #3053 EMPLOYING THE FOLLOWING COMPONENTS:  
POSITIONING: APPLANIX POS-MV4 W/DGPS CORRECTIONS, U.S.C.G. BEACON #319  
MOTION COMPENSATION: APPLANIX POS-MV4, SONAR: ODOM CV-300  
SOFTWARE: HYPACK 2015

THE ABOVE RIVER SURVEY WAS ALSO CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL SKIFF EMPLOYING THE FOLLOWING COMPONENTS:  
POSITIONING: TRIMBLE R-10 GPS W/RTN-VRS CORRECTIONS, SONAR: ODOM CV-300, SOFTWARE: HYPACK 2015

TIDE GAGE USED FOR RIVER WERE REFERENCED FROM A CHISELED MARK ON STEEL WALL LOCATED ACROSS FROM BOLLES HARBOR DNR BOAT RAMP, AT APPROXIMATELY C.S. 2+00N, SET OFF NGS B.M. 14DTSRR, PID -- MC0305.

TIDE GAGE USED FOR LAKE WERE DERIVED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) WATER LEVEL STATION(S) AS FOLLOWS: FERM POWER PLANT, MI (#9063090) L.W.D. = 569.2

IMAGERY SOURCED FROM: 2014 MICHIGAN NAIP IMAGERY

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

**DISCLAIMER:** The data represents the results of data collection and processing for a specific US Army Corps of Engineers activity and indicates the general existing conditions. The data is not intended to be used for any other purpose, accuracy, specifications. The user is responsible for the results of any of the application of the data for other than its intended purpose.

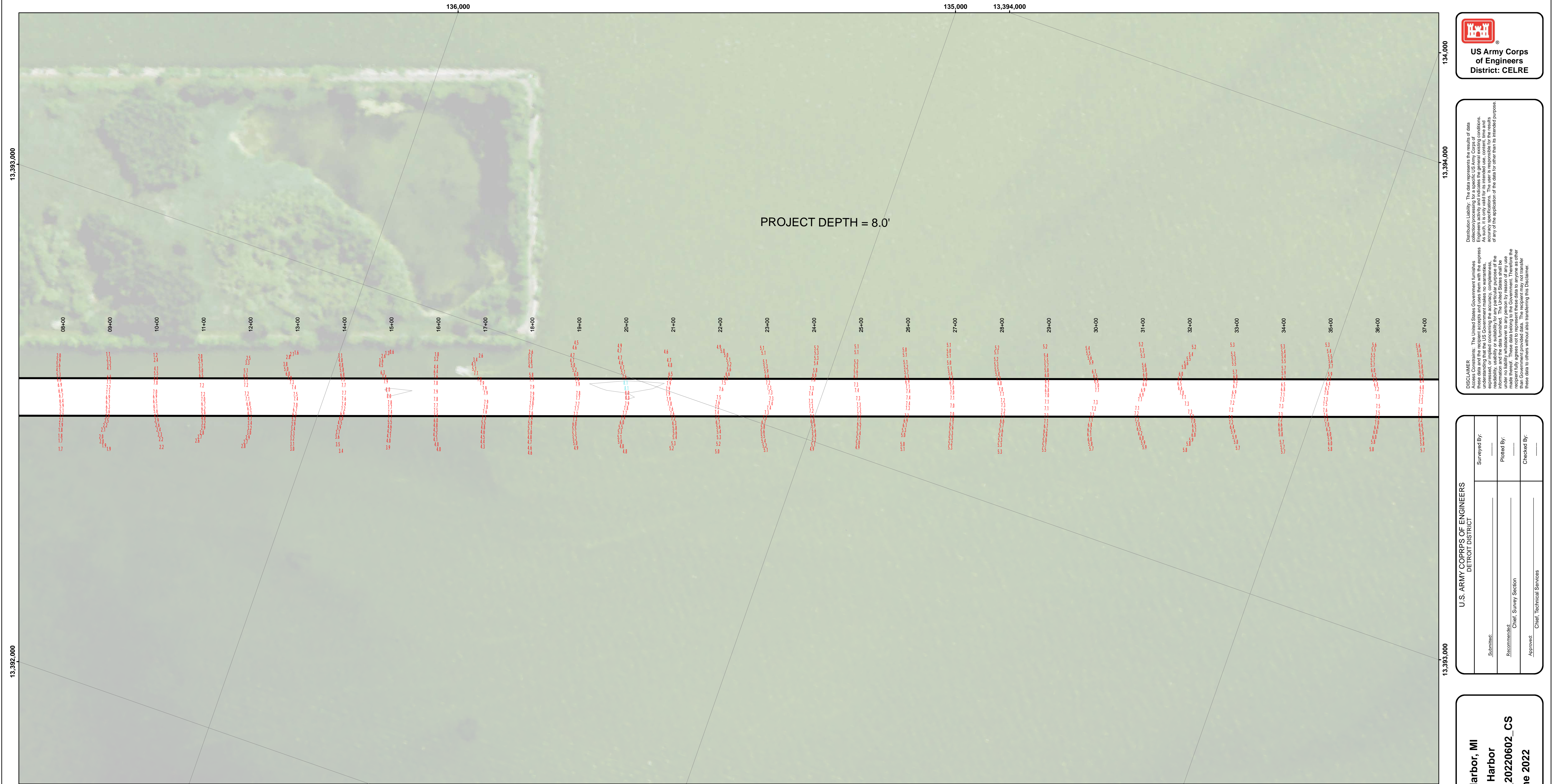
**DISCLAIMER:** The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not intended to be used for any other purpose, accuracy, specifications. The user is responsible for the results of any of the application of the data for other than its intended purpose.

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

**Bolles Harbor, MI**  
**Bolles Harbor**  
**BO\_01\_LES\_20220602\_CS**  
**02 June 2022**

**Sheet Reference Number**  
**1 of 4**





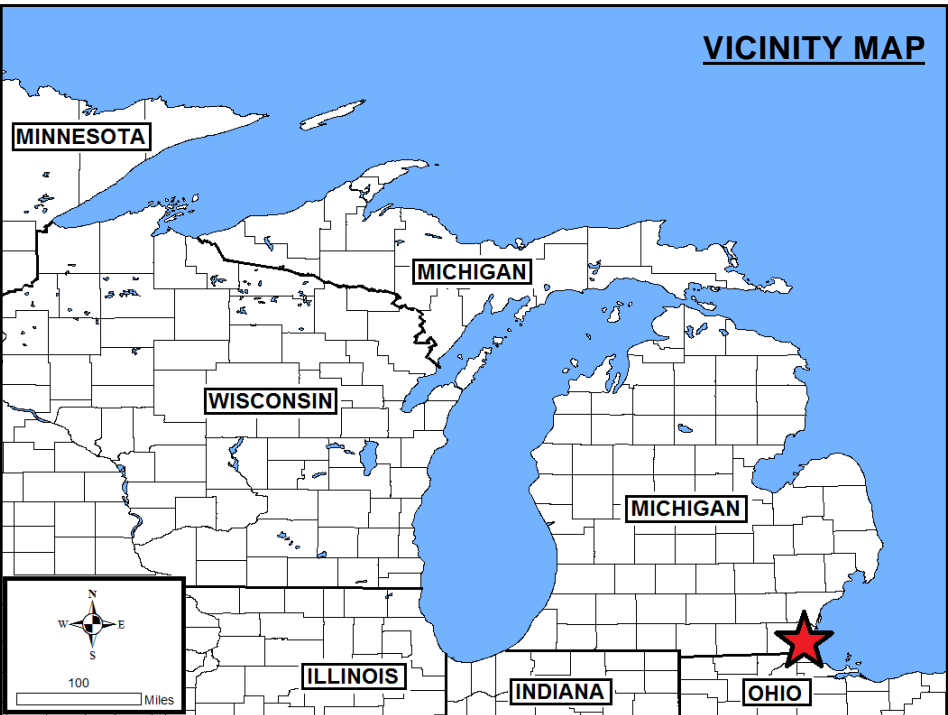
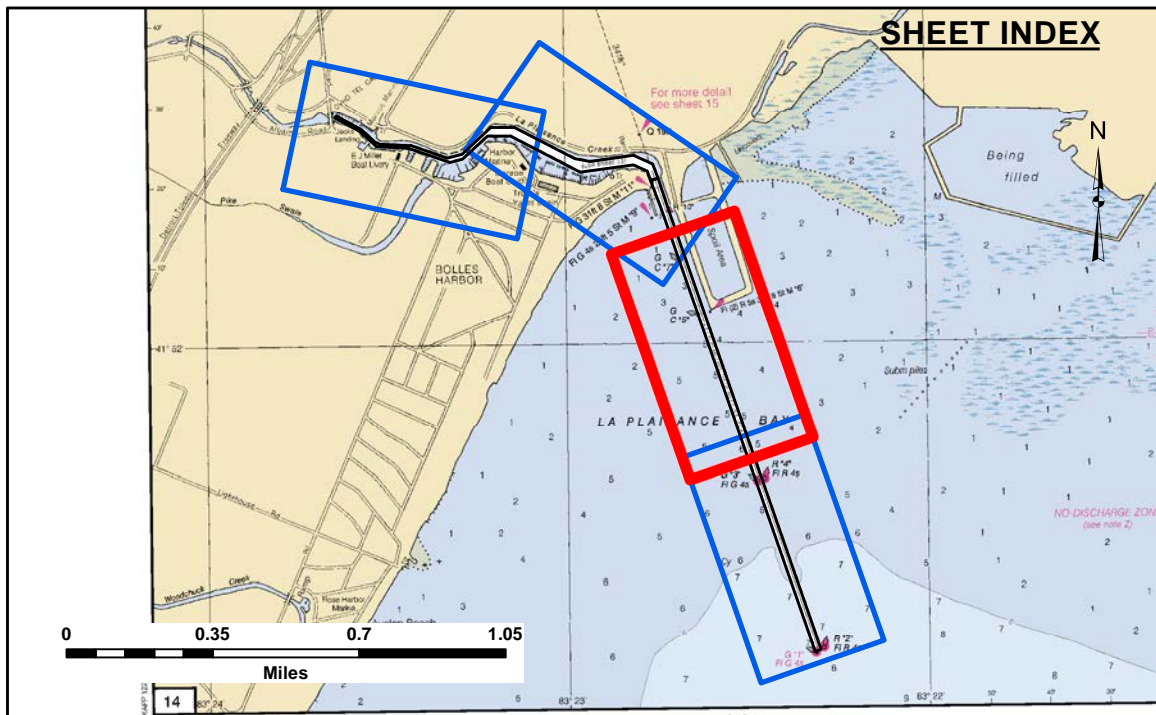
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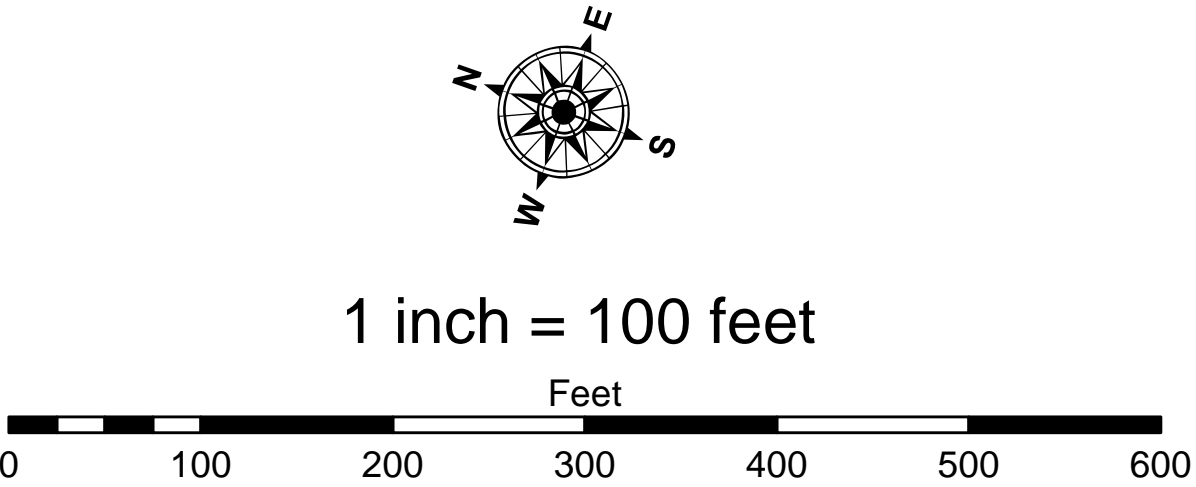
**Bolles Harbor, MI**  
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**BO\_01\_LES\_20220602\_CS**  
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