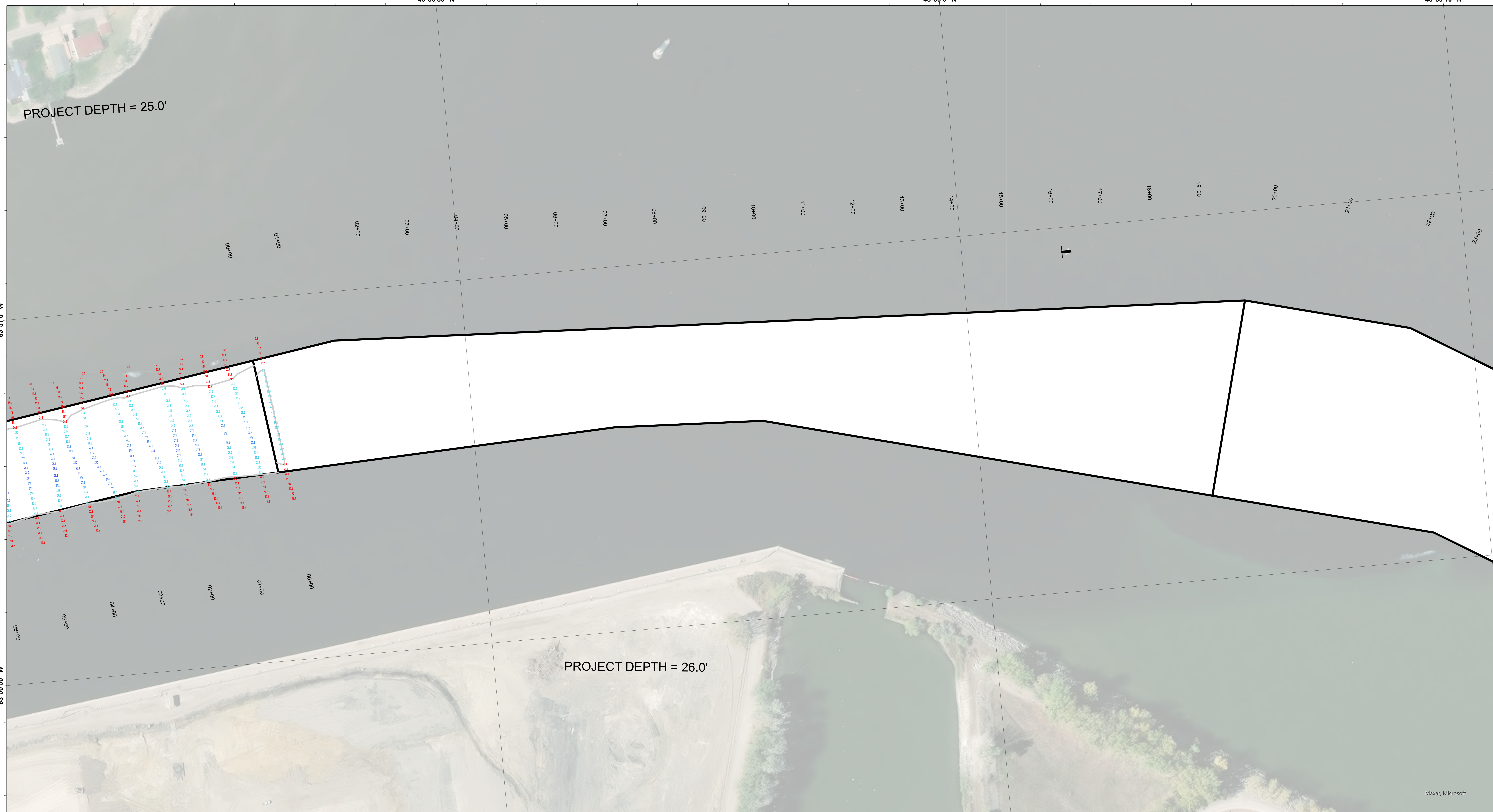


US Army Corps of Engineers
District: CELRE

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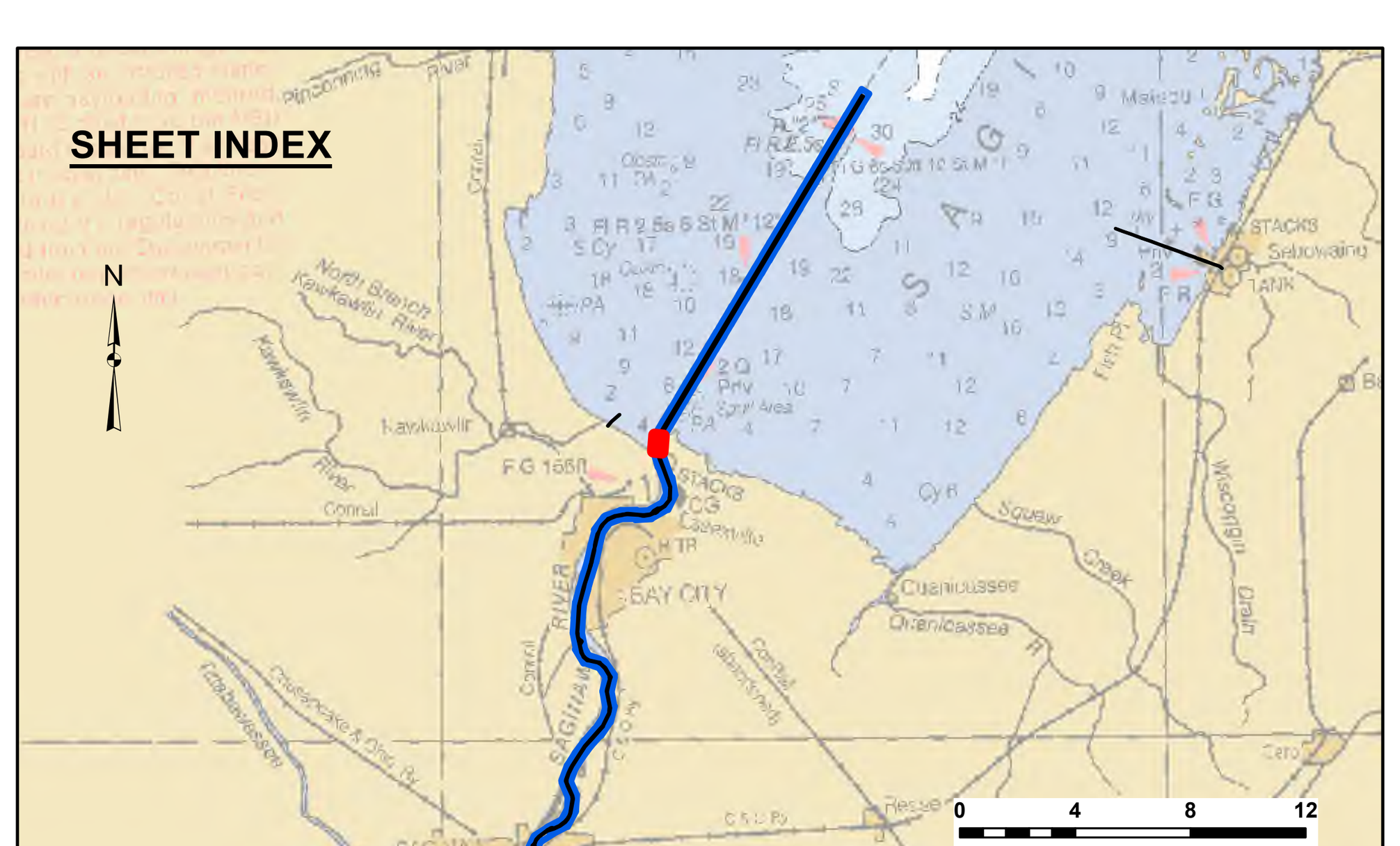
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DETROIT DISTRICT

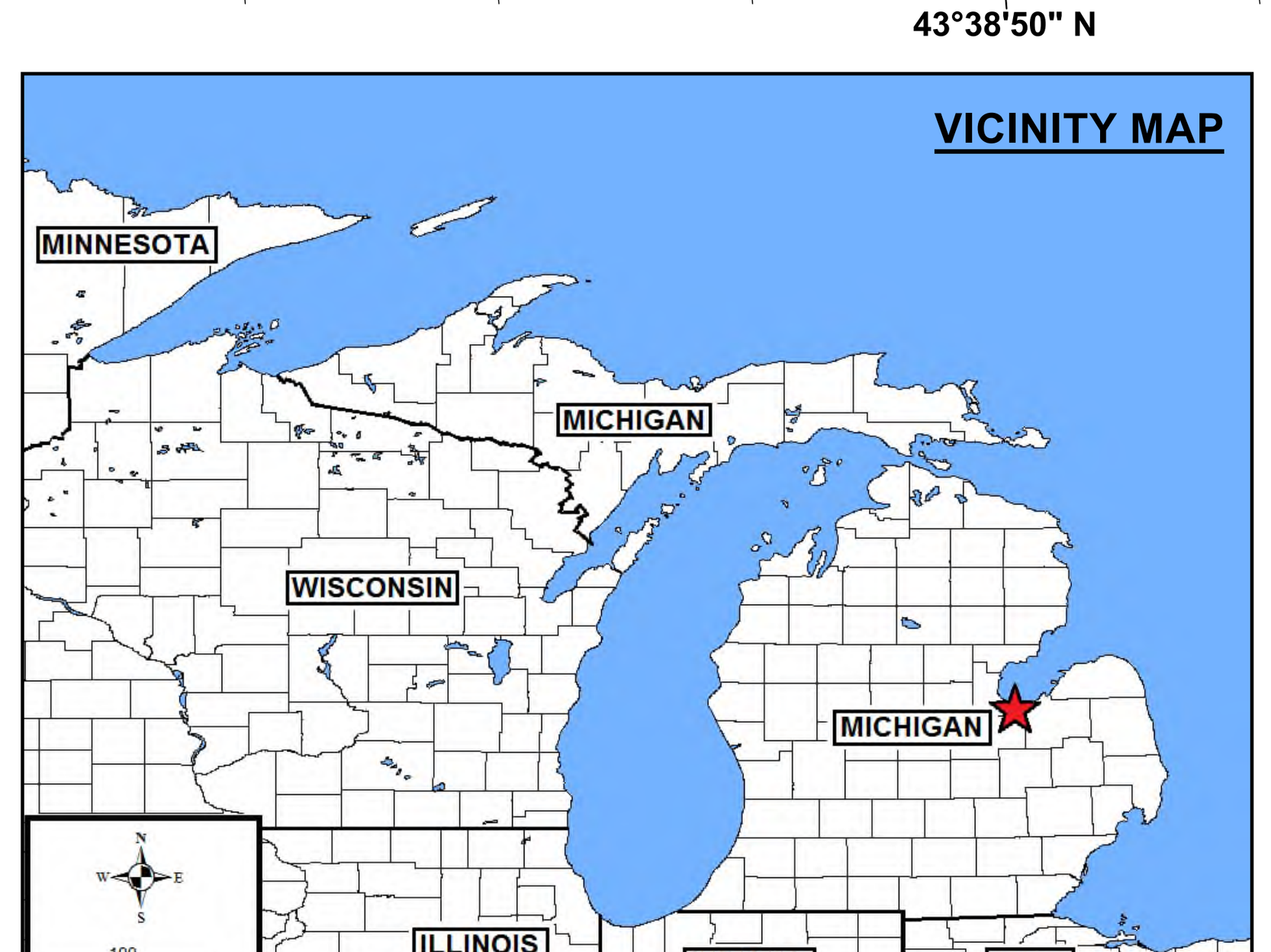
Surveyed By: ____
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Checked By: ____
Submitted: ____
Recommended: ____ Chief, Survey Section
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Saginaw, MI
Saginaw River
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LEGEND
- Cable Submarine
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W S N E

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Feet
0 100 200 300 400

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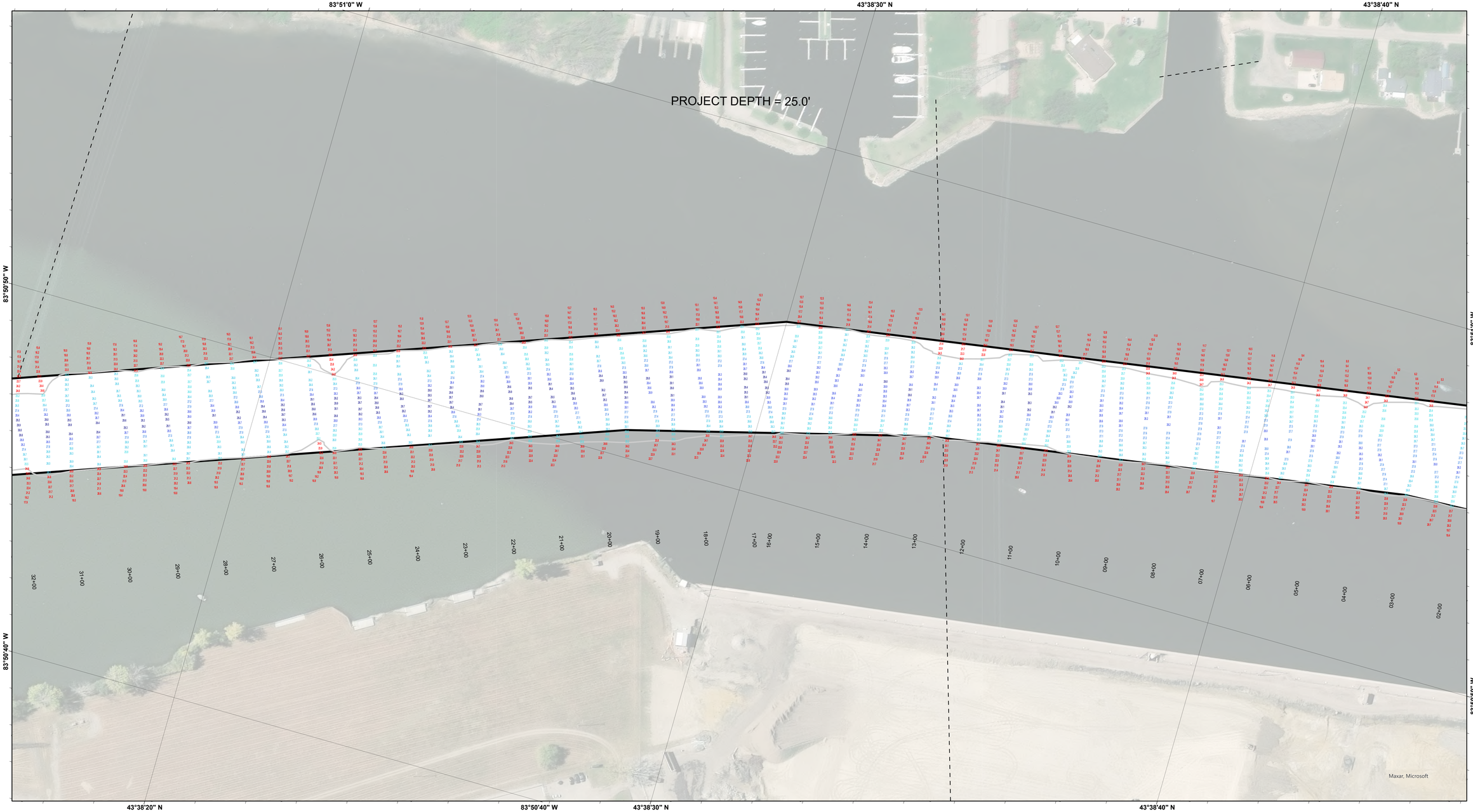
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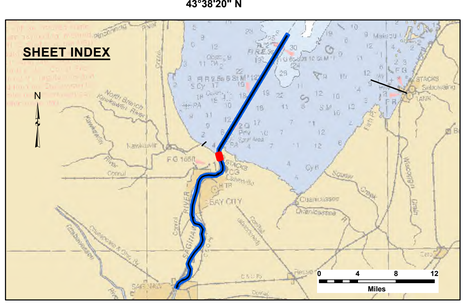
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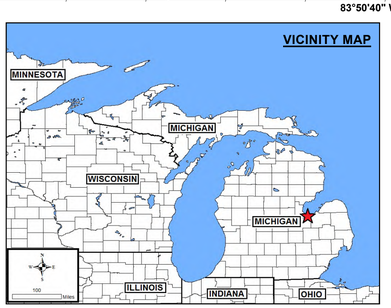
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Surveyed By:	Plotted By:	Checked By:
Submitted:	Recommended: Chief, Survey Section	Approved: Chief, Technical Services

Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
05 August 2025

Sheet Reference Number
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CORPS OF ENGINEERS

U.S. ARMY

43°37'50" N

83°50'40" W

83°50'50" W

43°38'10" N

83°50'50" W

83°50'40" W

PROJECT DEPTH = 25.0'

59+00 58+00 57+00 56+00 55+00 54+00 53+00 52+00 51+00 50+00 49+00 48+00 47+00 46+00 45+00 44+00 43+00 42+00 41+00 40+00 39+00 38+00 37+00 36+00 35+00 34+00 33+00 32+00 31+00 30+00

43°37'50" N

83°50'30" W

43°38'0" N

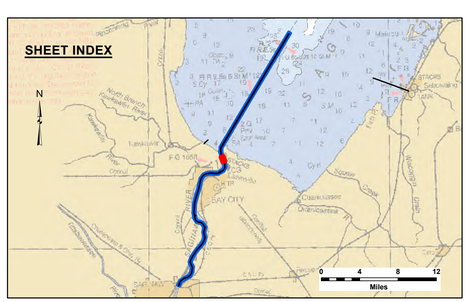
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43°38'10" N

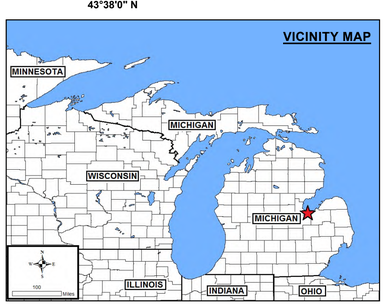
43°38'20" N

Maxar, Microsoft

SHEET INDEX



VICINITY MAP



LEGEND

- Cable Submarine
- Cable Overhead
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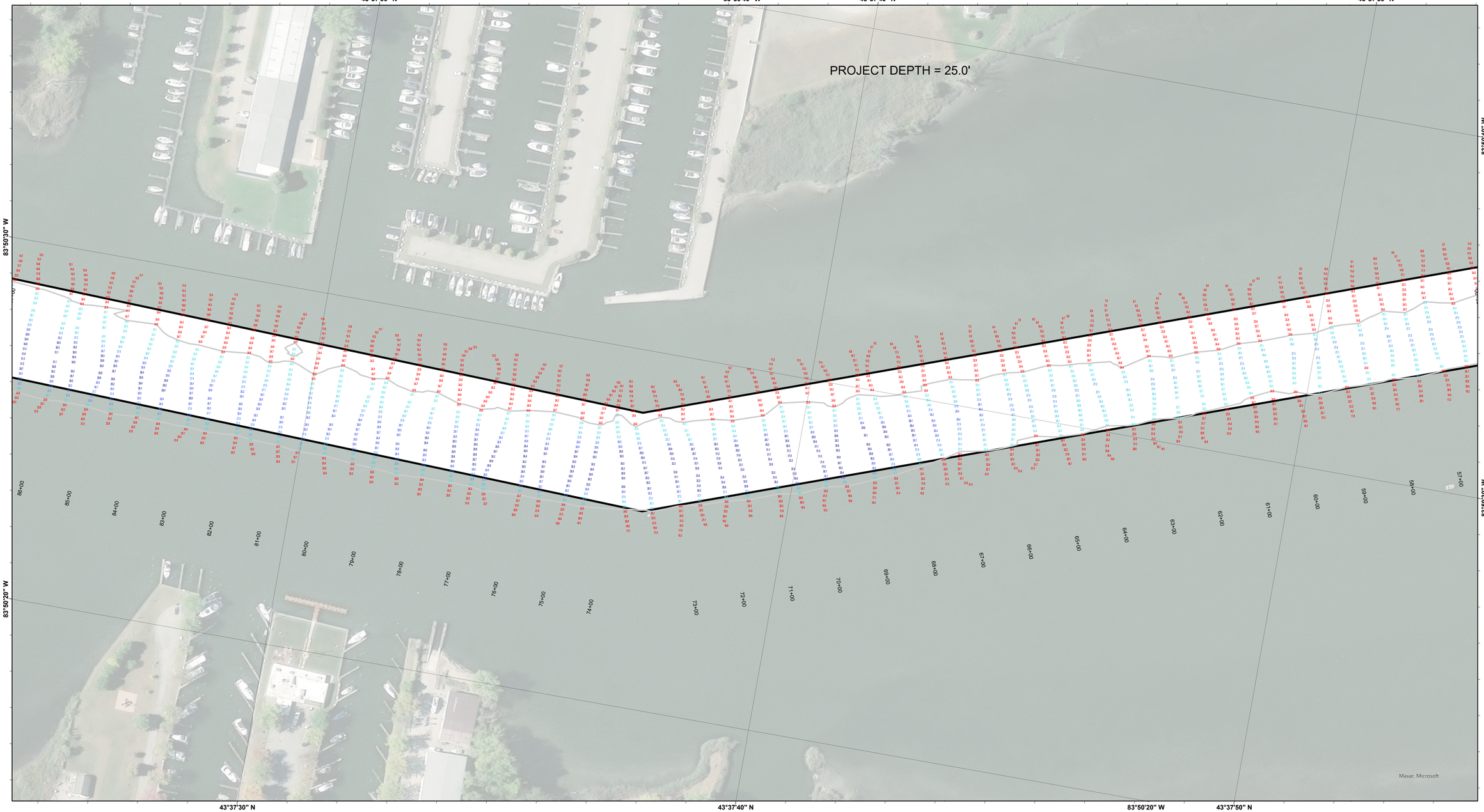
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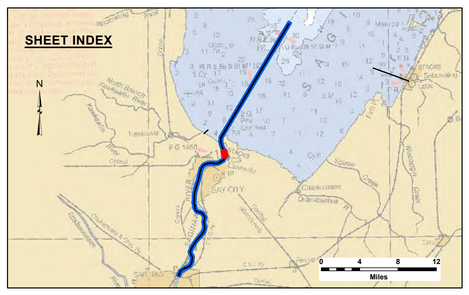
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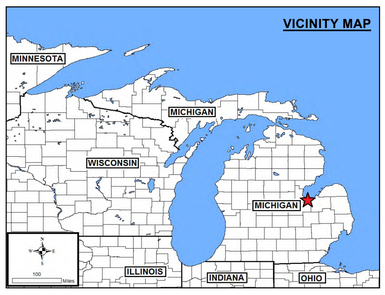
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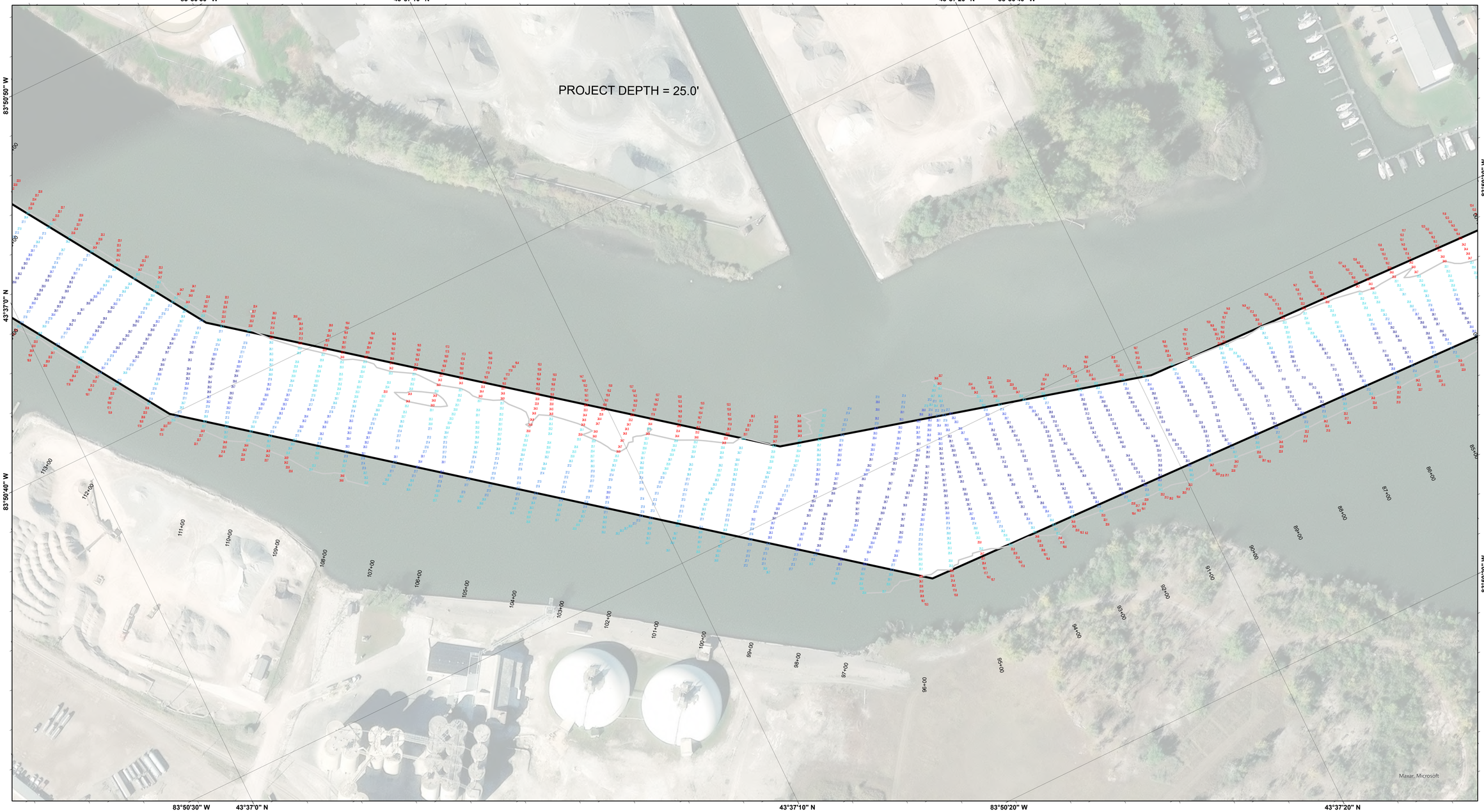
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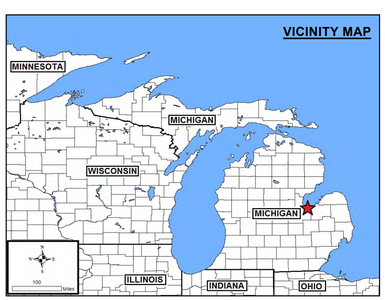
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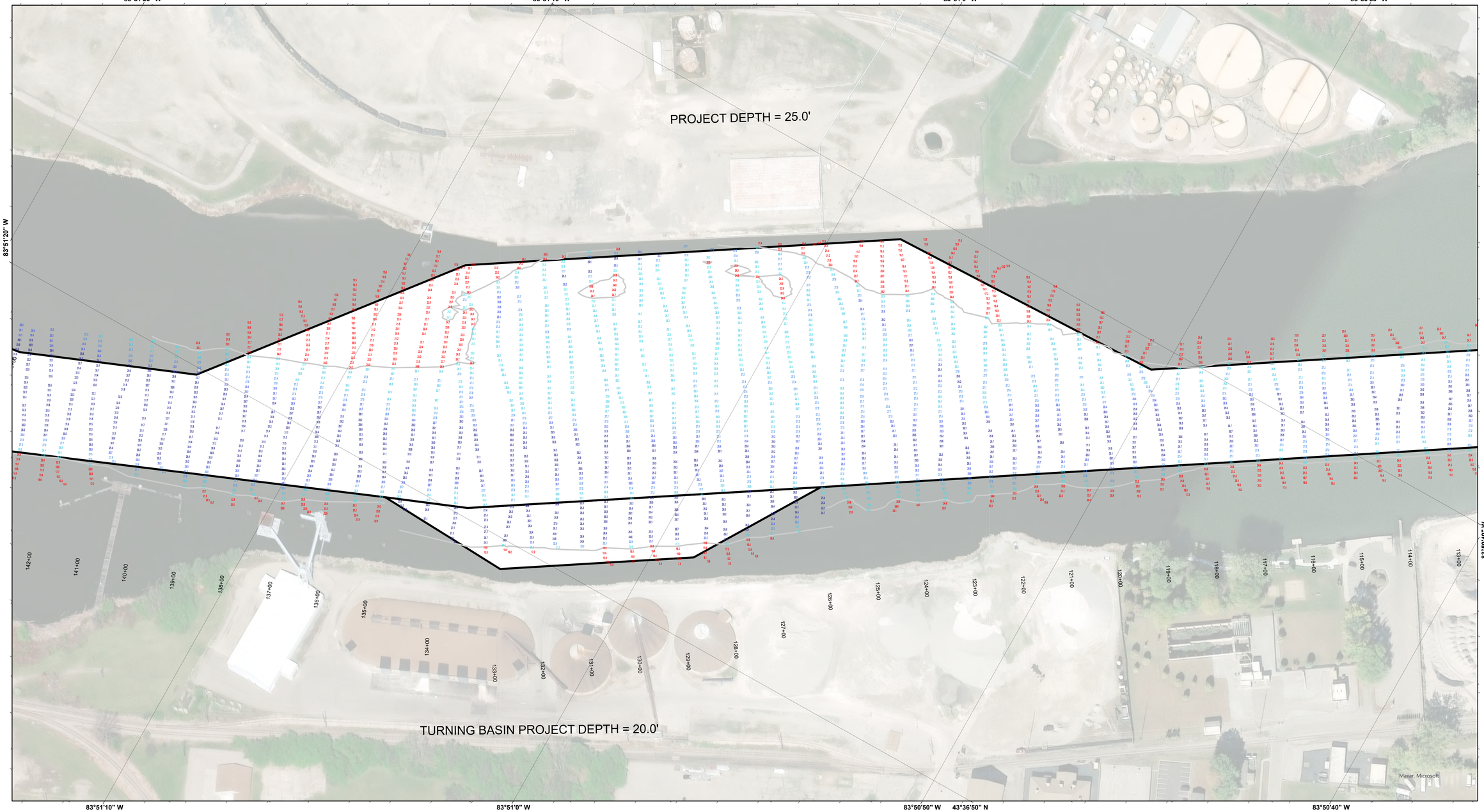
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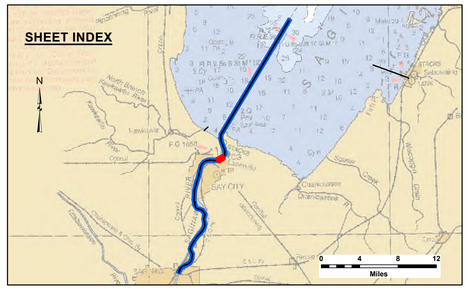
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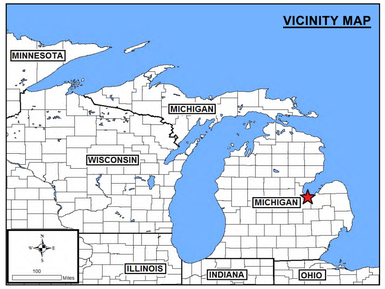
AERIAL PHOTOGRAPHY DATA SOURCE: MAXAR, MICROSOFT
ALL COORDINATES ARE IN U.S. SURVEY FEET.



SHEET INDEX



VICINITY MAP



LEGEND

- Cable Submarine
- Cable Overhead
- Placement Area
- Beacon, General
- Contour Lines
- Channel_Limits

SOUNDING LEGEND

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

N W E S

1 inch = 100 feet

Feet
0 100 200 300 400

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US Army Corps of Engineers
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DETROIT DISTRICT

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

Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
05 August 2025

Sheet Reference Number
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CORPS OF ENGINEERS

U.S. ARMY

83°51'50" W

83°51'40" W

83°51'30" W

83°51'20" W

43°36'50" N

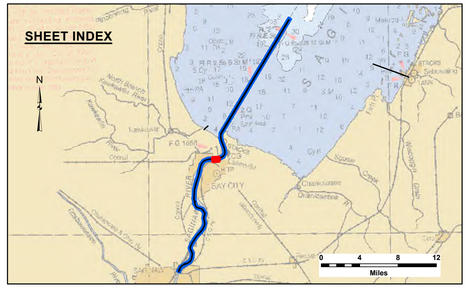
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PROJECT DEPTH = 25.0'

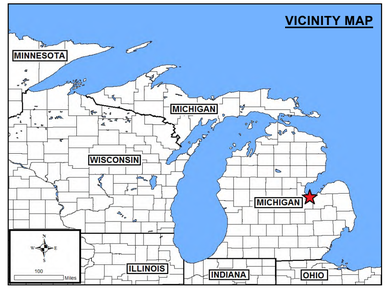
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Maxar, Microsoft

SHEET INDEX



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US Army Corps of Engineers
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Submitted: _____ Chief, Technical Services

Recommended: _____ Chief, Survey Section

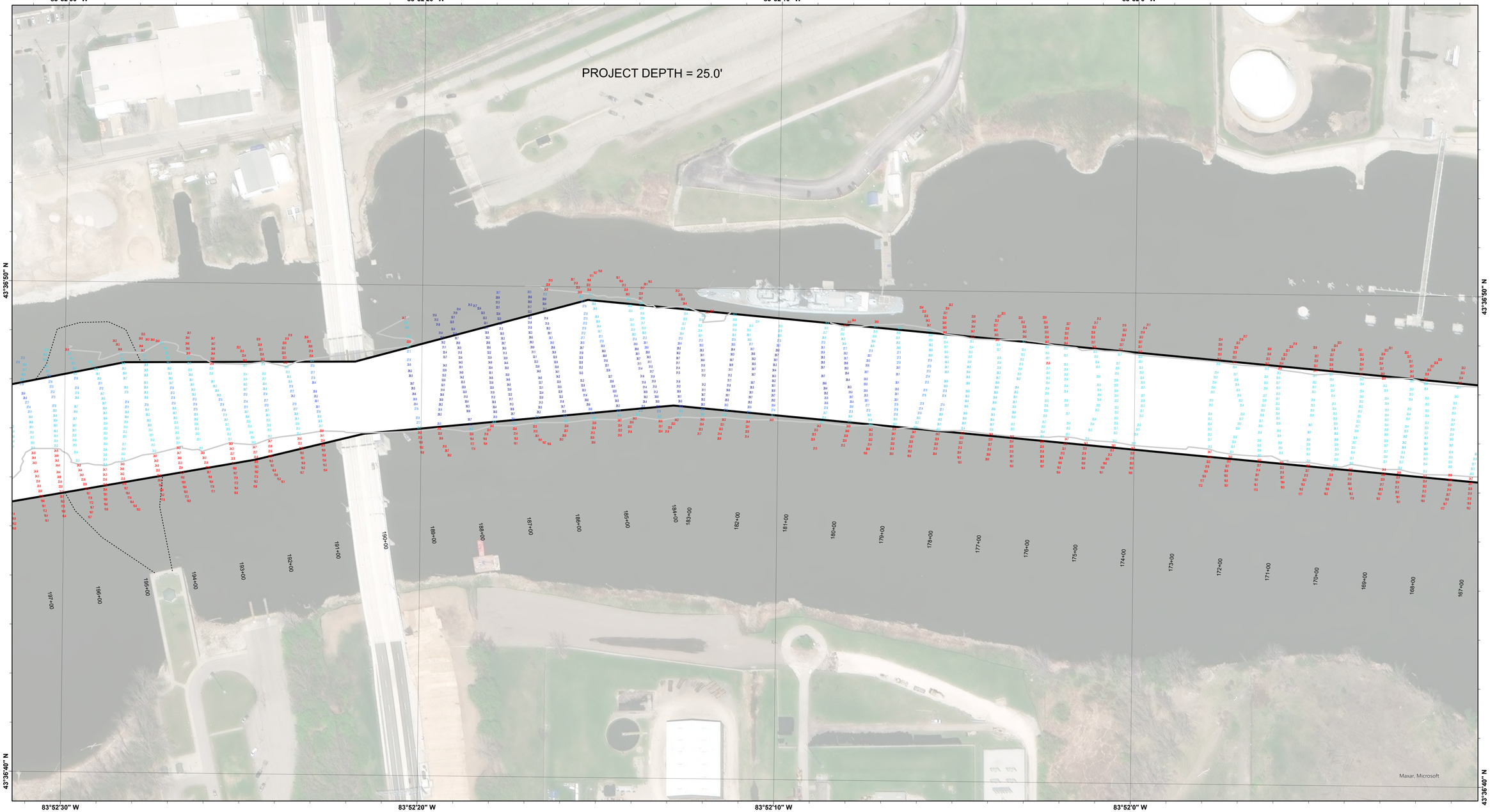
Approved: _____

Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
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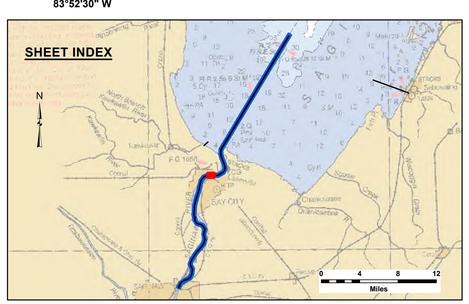
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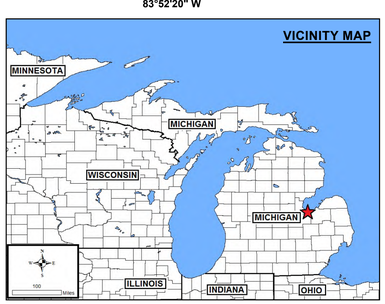
CORPS OF ENGINEERS U.S. ARMY



SHEET INDEX



VICINITY MAP



LEGEND

- Cable Submarine
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SOUNDING LEGEND

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N
W E
S

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Checked By: _____

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

Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
05 August 2025

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Revision Number:
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83°53'10" W | 83°53'0" W | 43°36'50" N | 83°52'50" W | 83°52'40" W

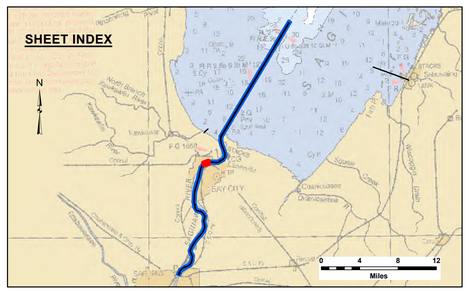
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PROJECT DEPTH = 25.0'

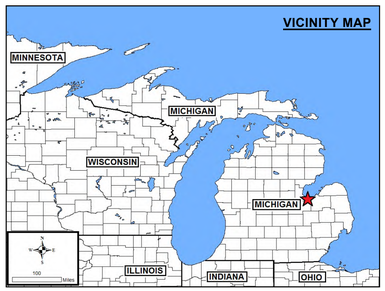
Maxar, Microsoft

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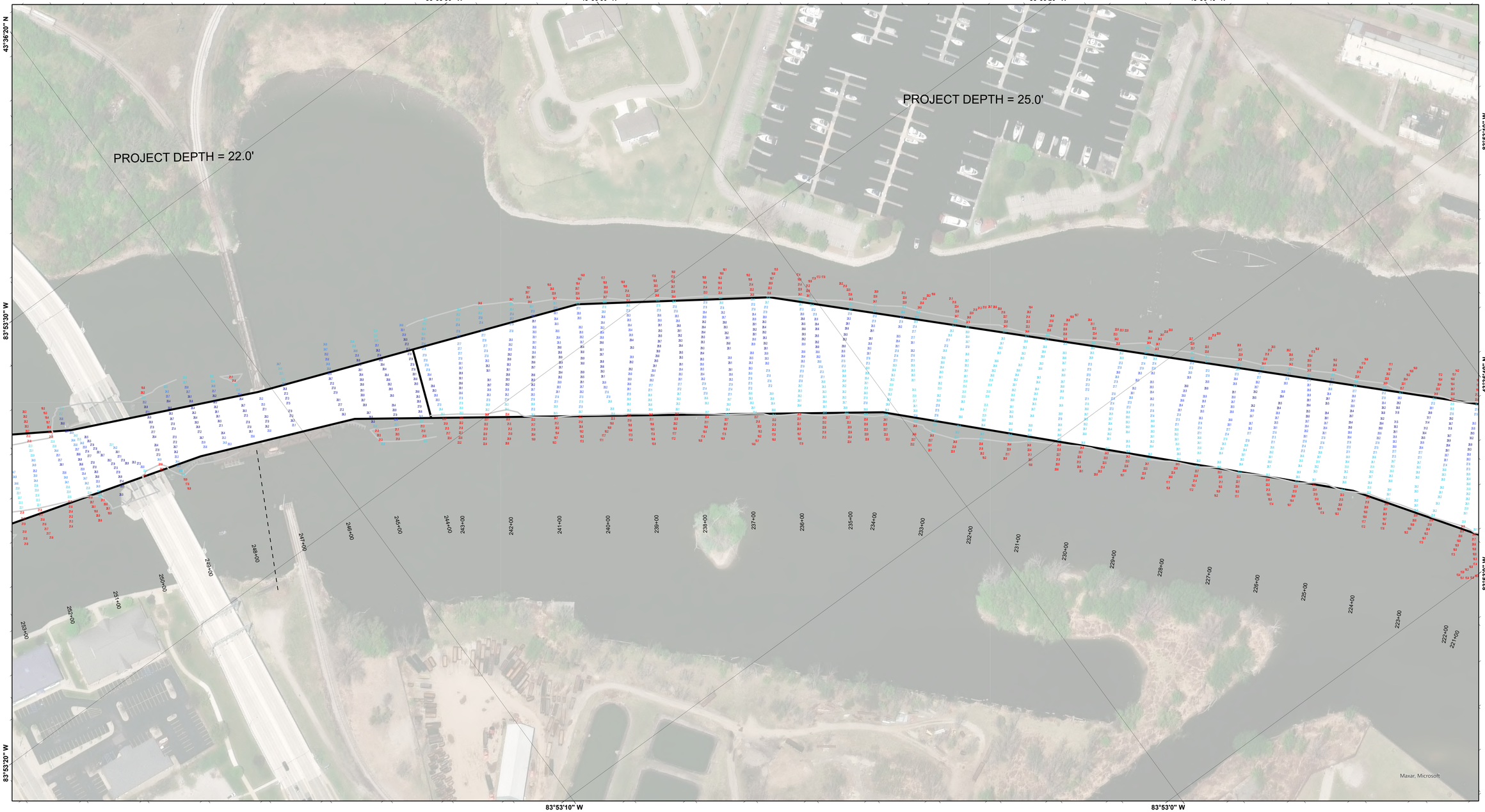
U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

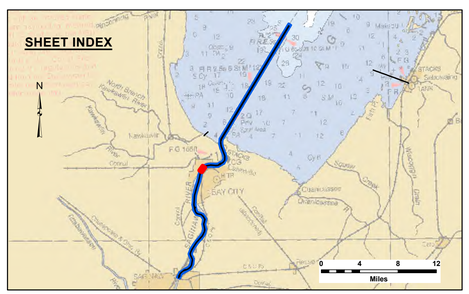
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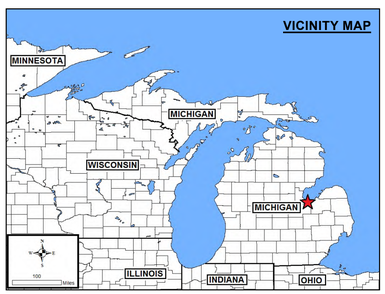
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SONAR: ODOM CV-300
SOFTWARE: HYPACK

AERIAL PHOTOGRAPHY DATA SOURCE: MAXAR, MICROSOFT
ALL COORDINATES ARE IN U.S. SURVEY FEET.

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U.S. ARMY CORPPS OF ENGINEERS
DETROIT DISTRICT

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

Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
05 August 2025

Sheet Reference Number
37 of 62

Revision Number:
5.25.07.03-5.25.07.03

43°36'0" N

83°53'40" W

43°36'10" N

83°53'30" W

PROJECT DEPTH = 22.0'

279+00 278+00 277+00 276+00 275+00 274+00 273+00 272+00 271+00 270+00 269+00 268+00 267+00 266+00 265+00 264+00 263+00 262+00 261+00 260+00 259+00 258+00 257+00 256+00 255+00 254+00 253+00 252+00 251+00 250+00 249+00

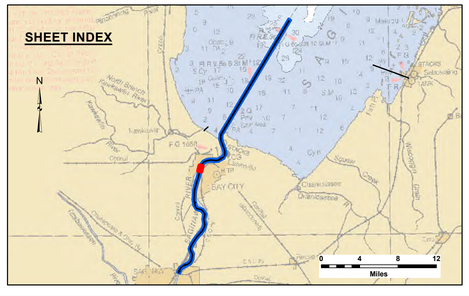
Maxar, Microsoft

43°35'50" N

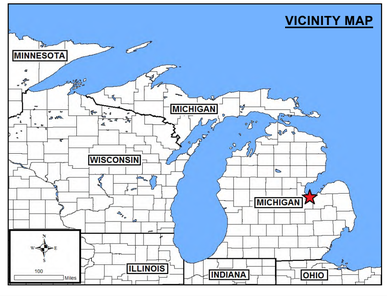
83°53'20" W

43°36'10" N

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VICINITY MAP



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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- PROJECT DEPTH +2'
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- PROJECT DEPTH +4'
- PROJECT DEPTH +5'

1 inch = 100 feet

Feet

0 100 200 300 400

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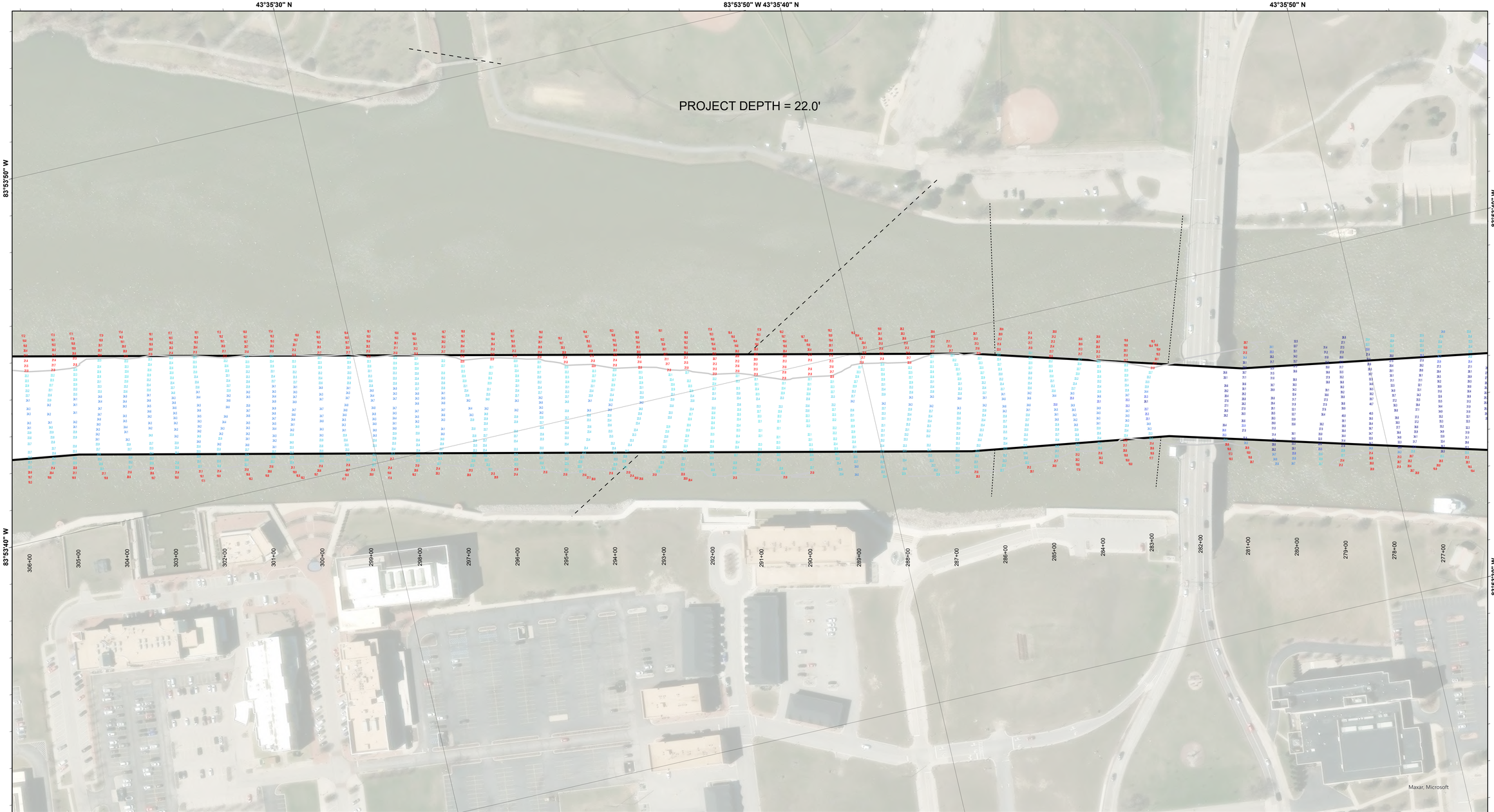
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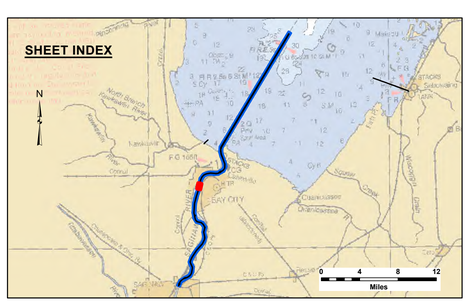
Surveyed By:	Plotted By:	Checked By:
Submitted:	Recommended: Chief, Survey Section	Approved: Chief, Technical Services

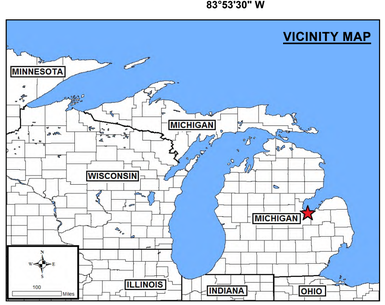
Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
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U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

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

Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
05 August 2025

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Revision Number:
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43°35'0" N 43°35'10" N 83°54'0" W 43°35'20" N

83°54'0" W

83°53'50" W

83°53'40" W

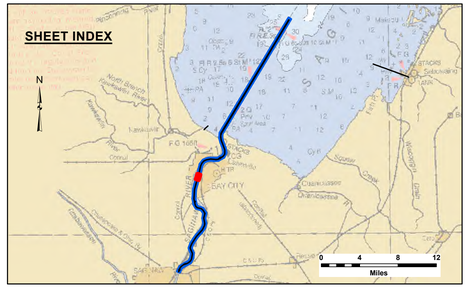
PROJECT DEPTH = 22.0'

333+00 332+00 331+00 330+00 329+00 328+00 327+00 326+00 325+00 324+00 323+00 322+00 321+00 320+00 319+00 318+00 317+00 316+00 315+00 314+00 313+00 312+00 311+00 310+00 309+00 308+00 307+00 306+00 305+00 304+00

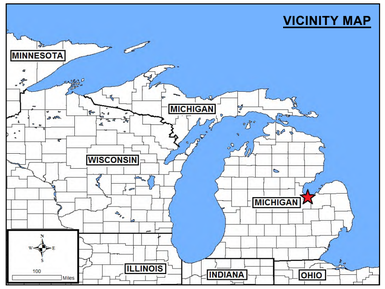
Maxar, Microsoft

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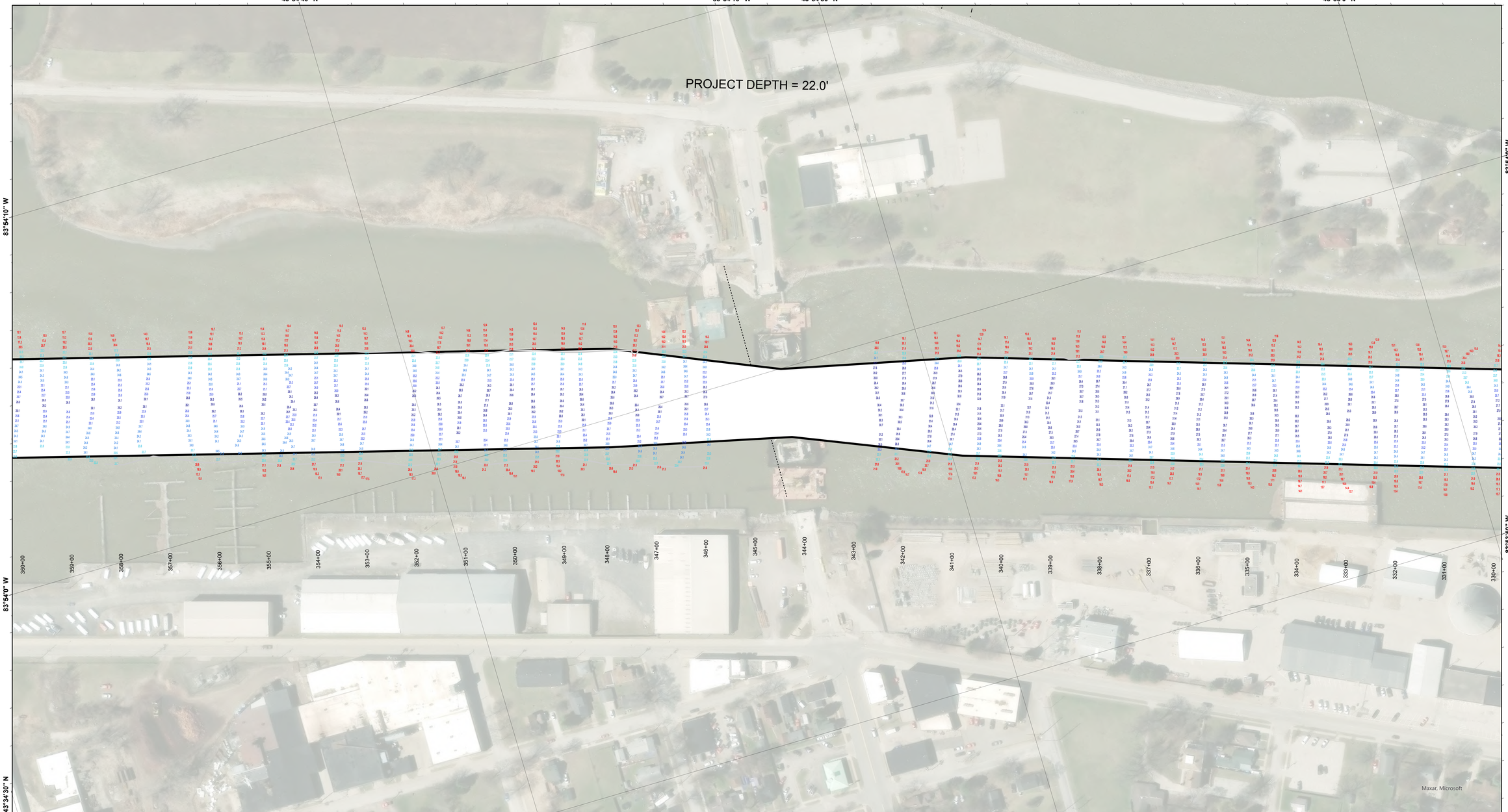
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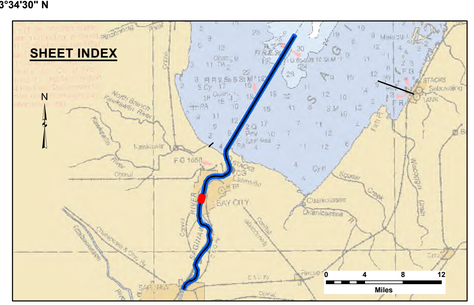
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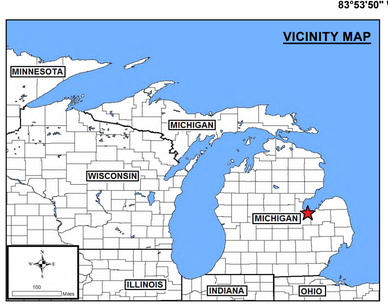
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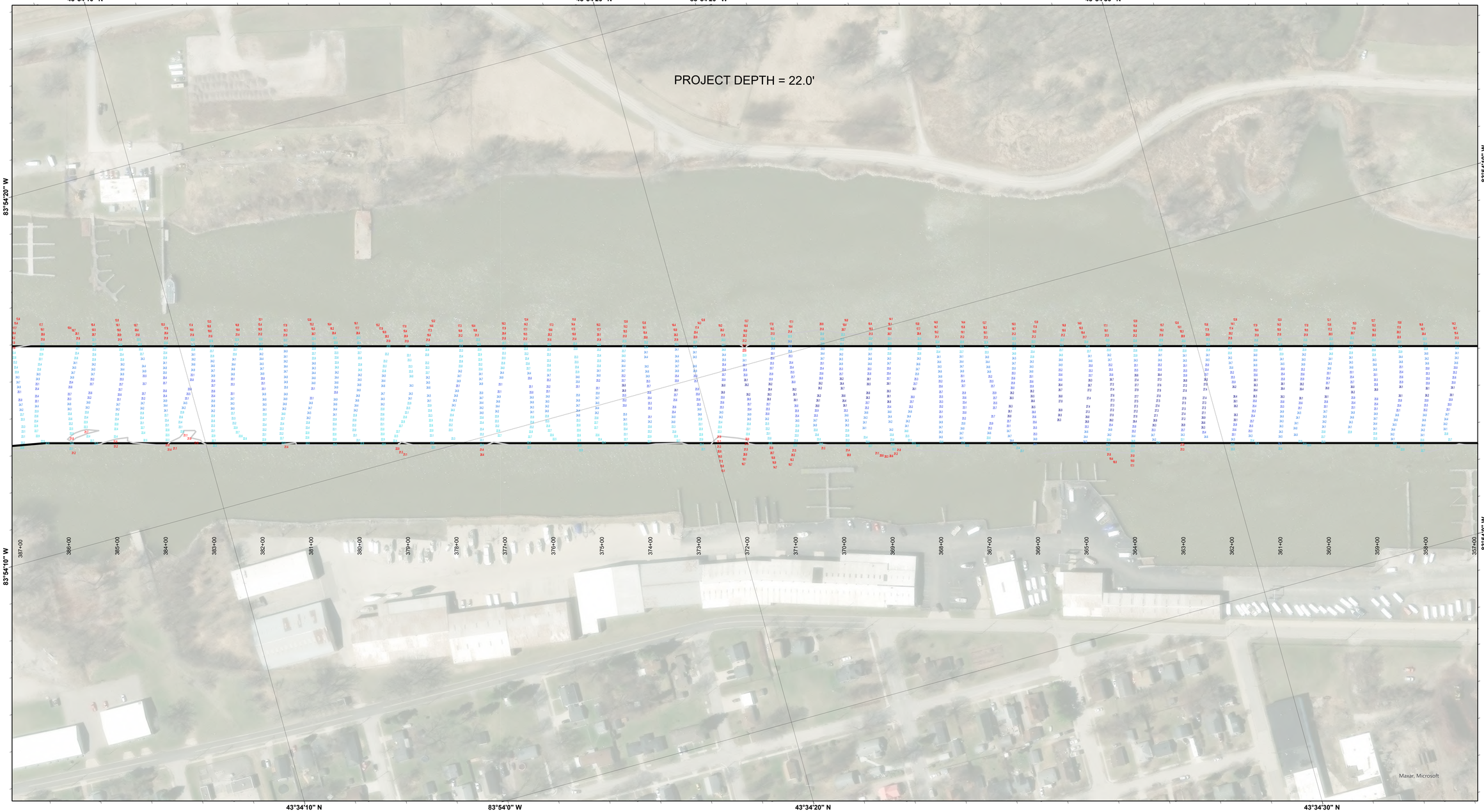
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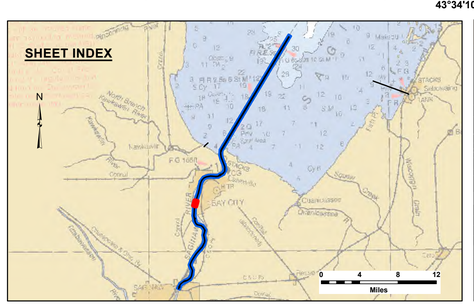
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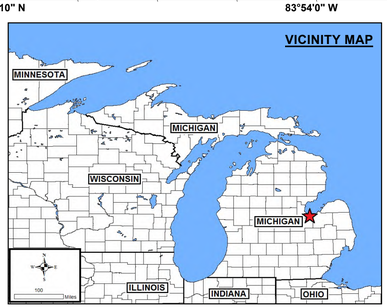
Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
05 August 2025

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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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- PROJECT DEPTH +4'
- PROJECT DEPTH +5'

1 inch = 100 feet

Feet 0 100 200 300 400

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SONAR: ODOM CV-300
SOFTWARE: HYPACK

AERIAL PHOTOGRAPHY DATA SOURCE: MAXAR, MICROSOFT
ALL COORDINATES ARE IN U.S. SURVEY FEET.

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DETROIT DISTRICT

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

Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
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CORPS OF ENGINEERS

U.S. ARMY

43°33'50" N

43°34'0" N

43°34'10" N

83°54'20" W

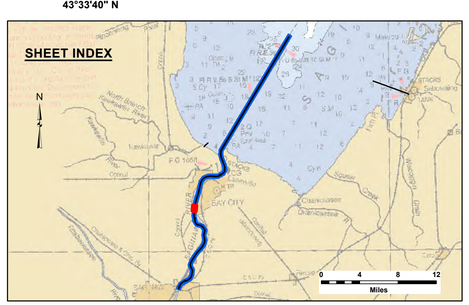
83°54'10" W

PROJECT DEPTH = 22.0'

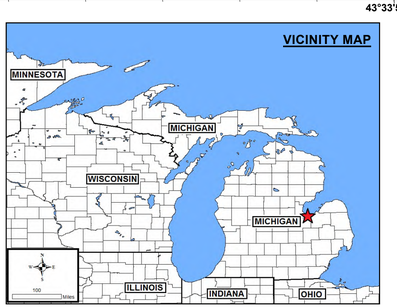
Maxar, Microsoft

414+00 413+00 412+00 411+00 410+00 409+00 408+00 407+00 406+00 405+00 404+00 403+00 402+00 401+00 400+00 399+00 398+00 397+00 396+00 395+00 394+00 393+00 392+00 391+00 390+00 389+00 388+00 387+00 386+00 385+00 384+00

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VICINITY MAP



LEGEND

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N S E W

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DETROIT DISTRICT

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

Saginaw, MI
Saginaw River
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05 August 2025

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CORPS OF ENGINEERS

U.S. ARMY

43°33'20" N

83°54'30" W

83°54'20" W

83°54'10" W

43°33'30" N

43°33'40" N

PROJECT DEPTH = 22.0'

Maxar, Microsoft

US Army Corps of Engineers
District: CELRE

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DETROIT DISTRICT

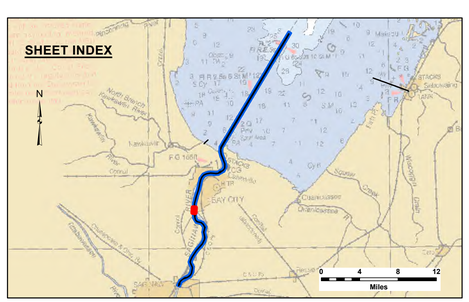
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Saginaw, MI
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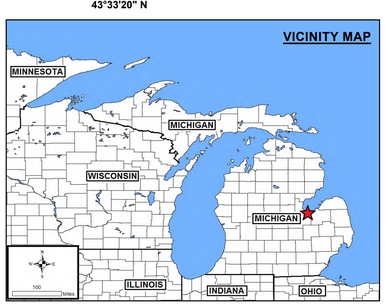
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VICINITY MAP



LEGEND

- Cable Submarine
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- Channel_Limits

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Feet
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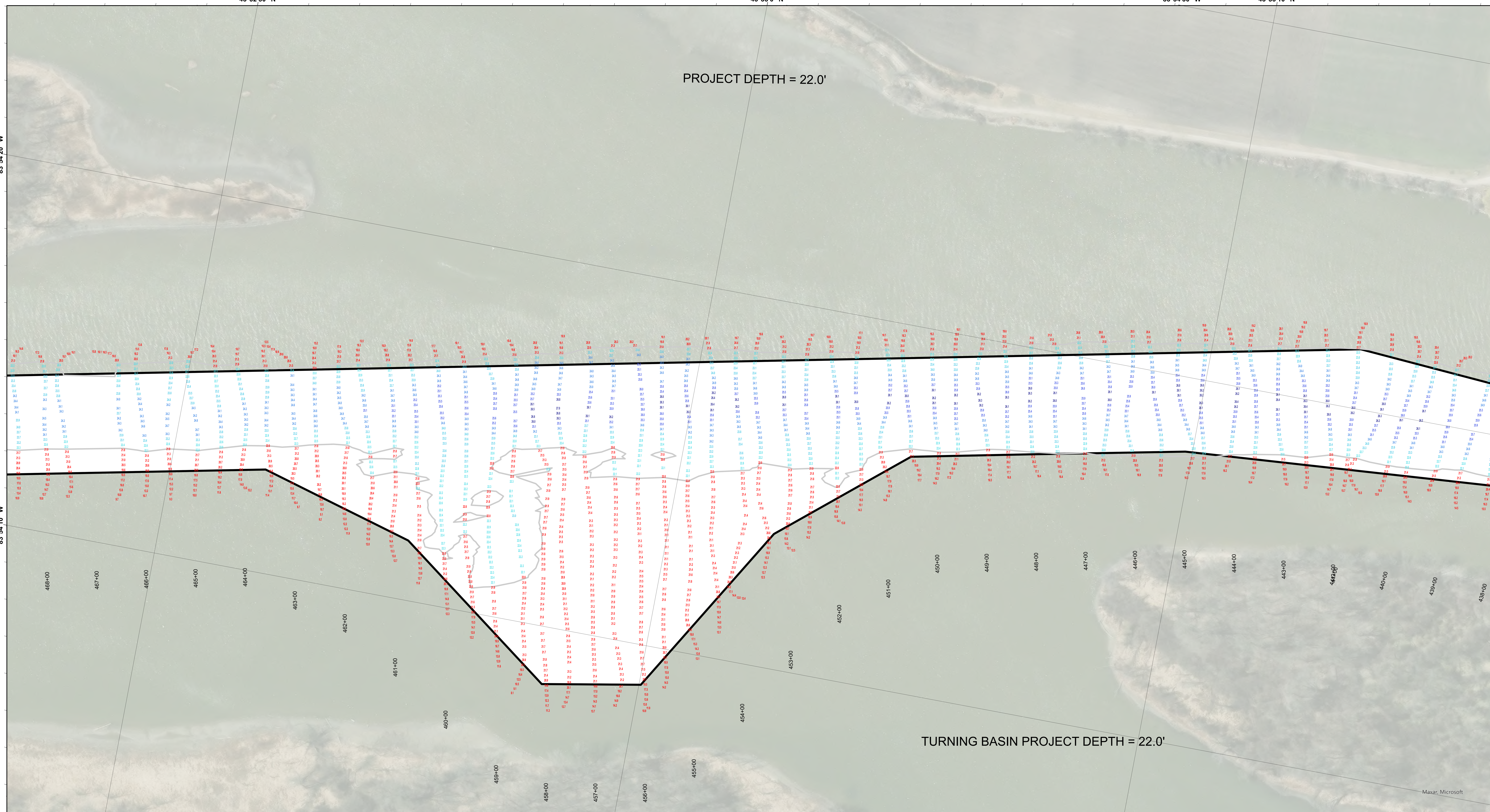
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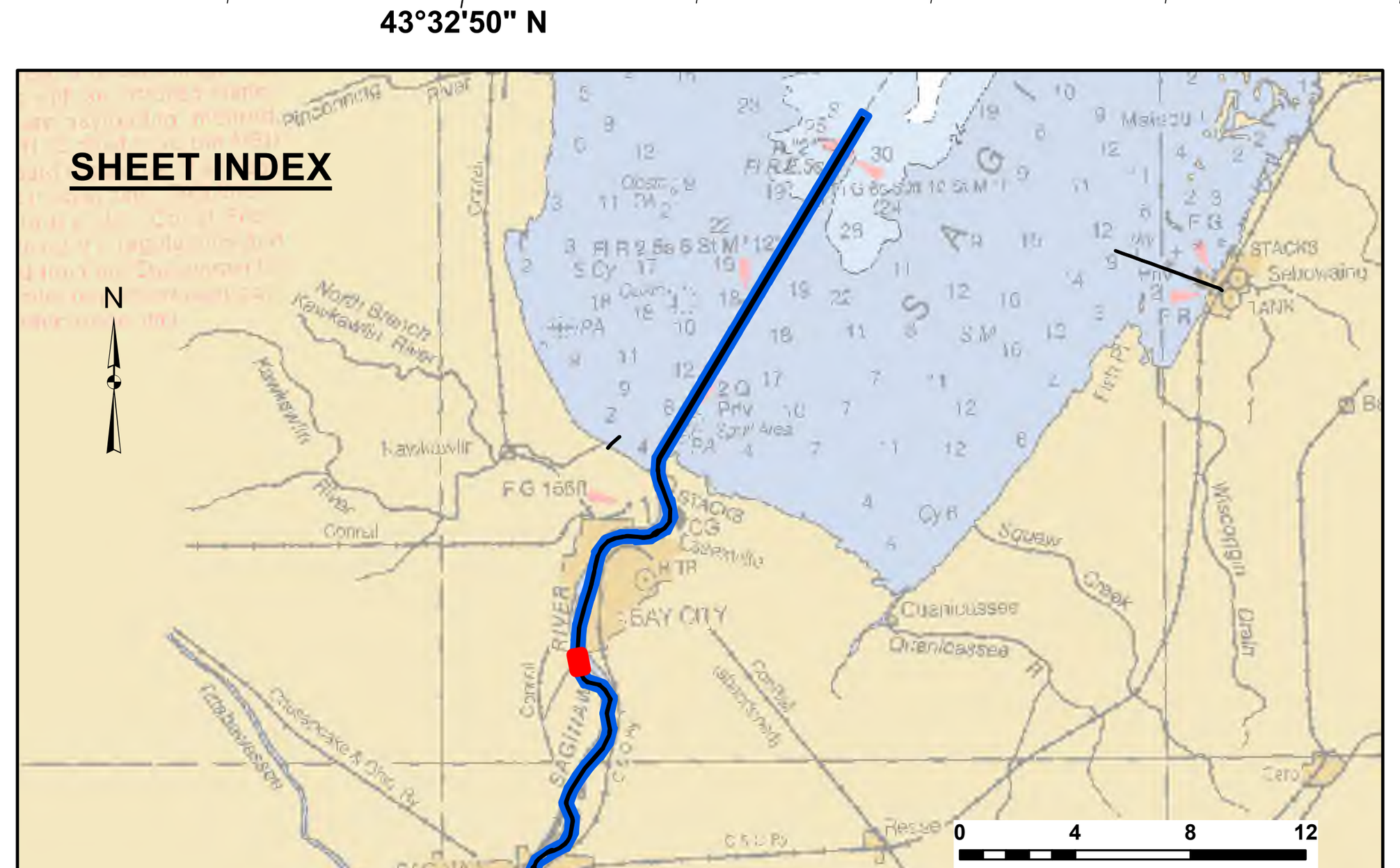
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DETROIT DISTRICT

Surveyed By: ____
Plotted By: ____
Checked By: ____

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

Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
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LEGEND
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5.25.07.03-5.25.07.03

43°32'20" N 83°54'10" W 43°32'30" N 83°54'20" W 43°32'40" N

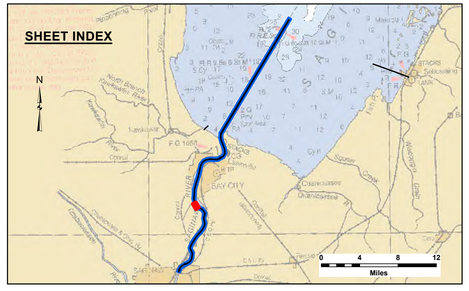
PROJECT DEPTH = 22.0'

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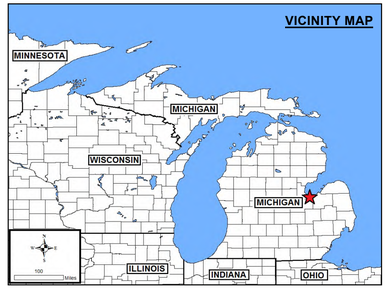
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Maxar, Microsoft

SHEET INDEX



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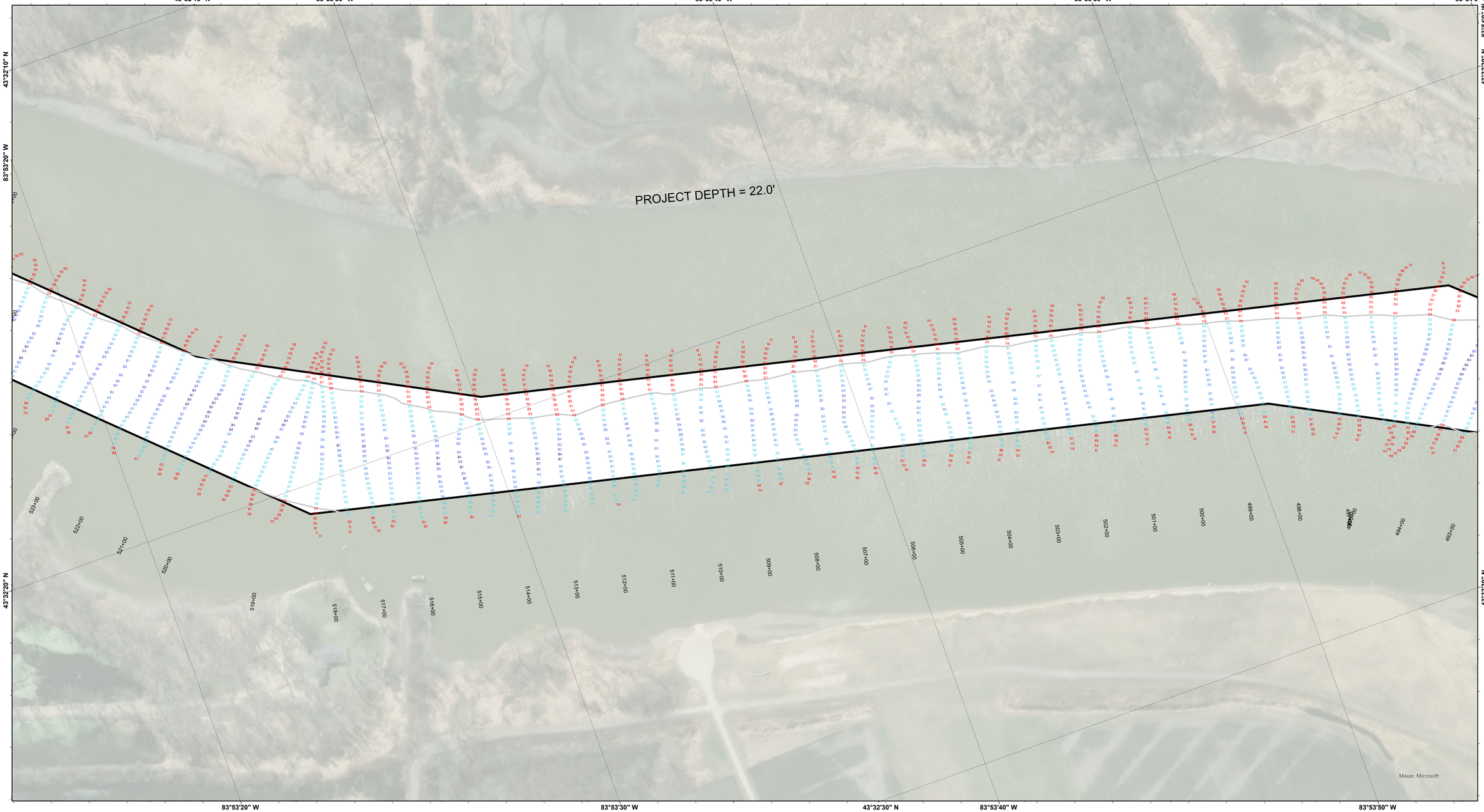
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DETROIT DISTRICT

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

Saginaw, MI
Saginaw River
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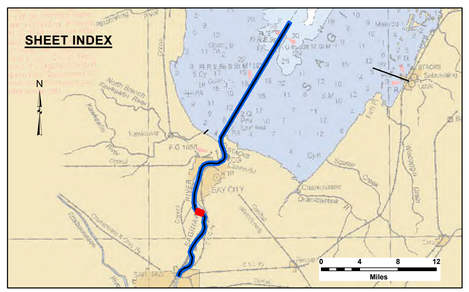
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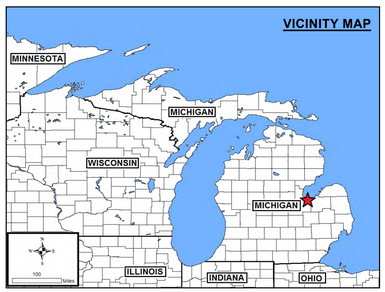
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- Cable Overhead
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- Contour Lines
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US Army Corps of Engineers
District: CELRE

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Submitted: ____

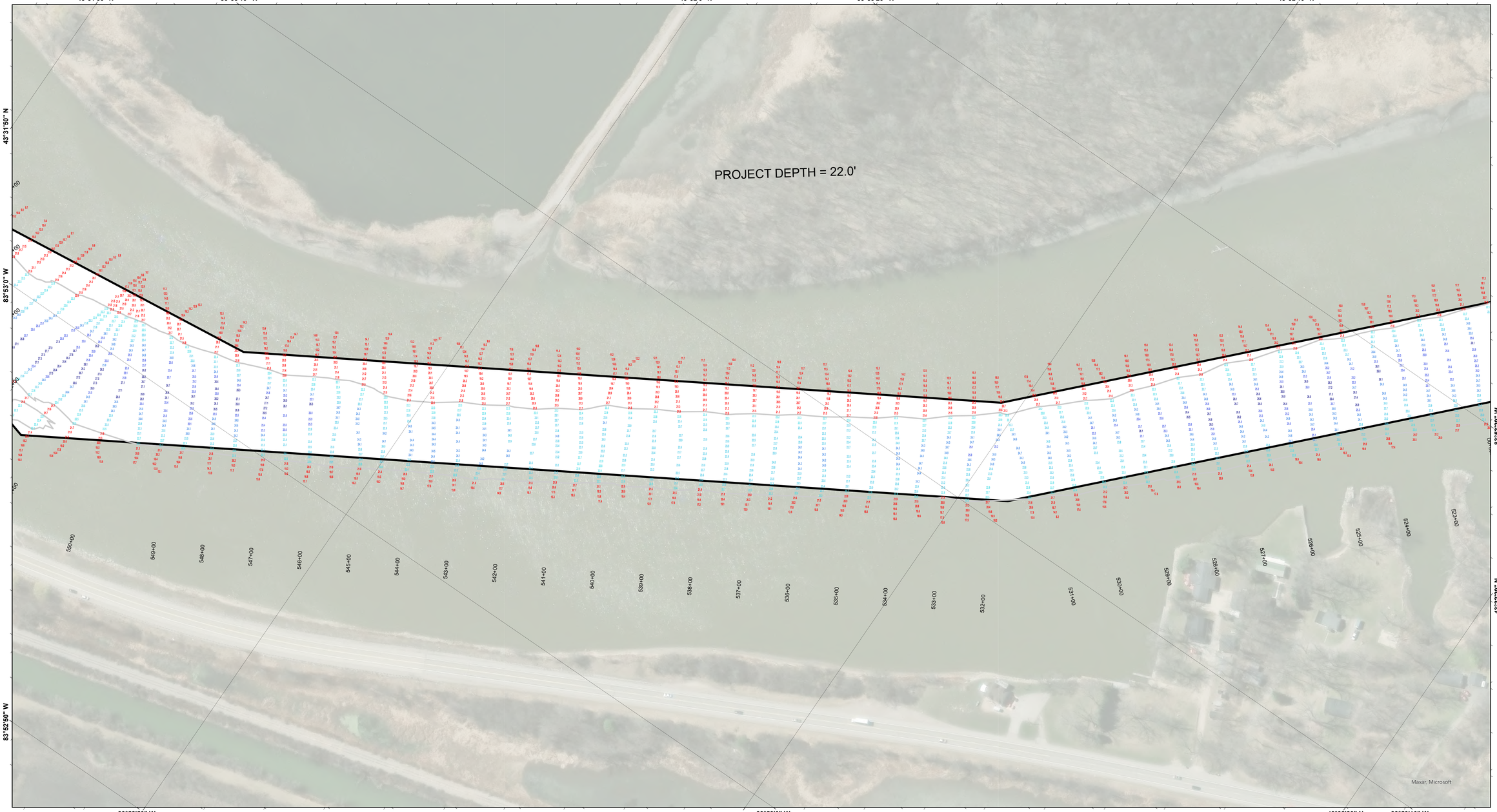
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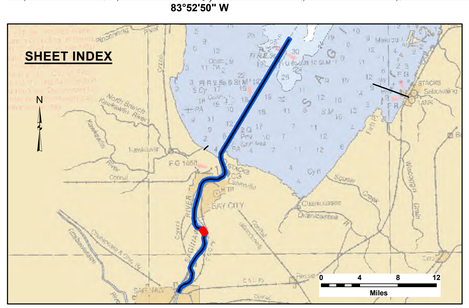
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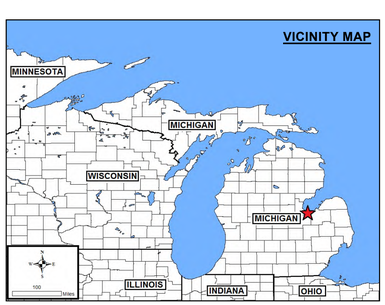
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US Army Corps of Engineers
District: CELRE

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DETROIT DISTRICT

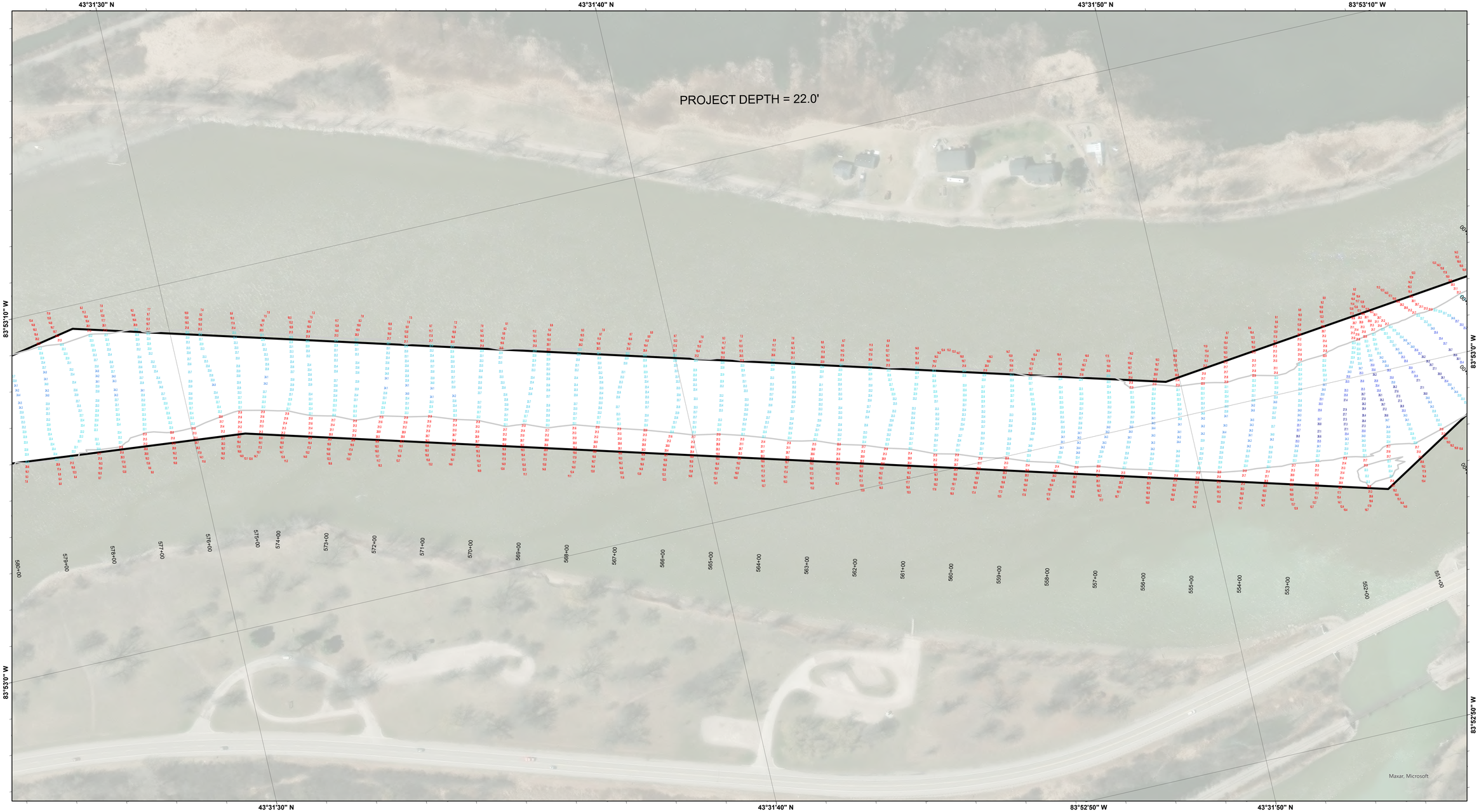
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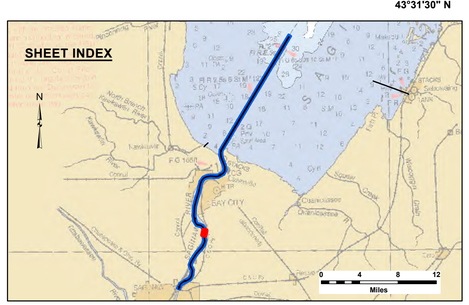
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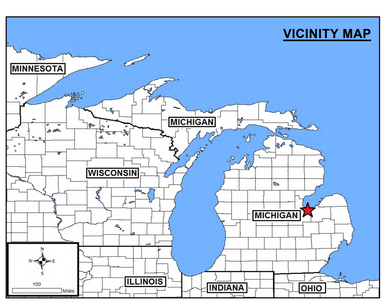
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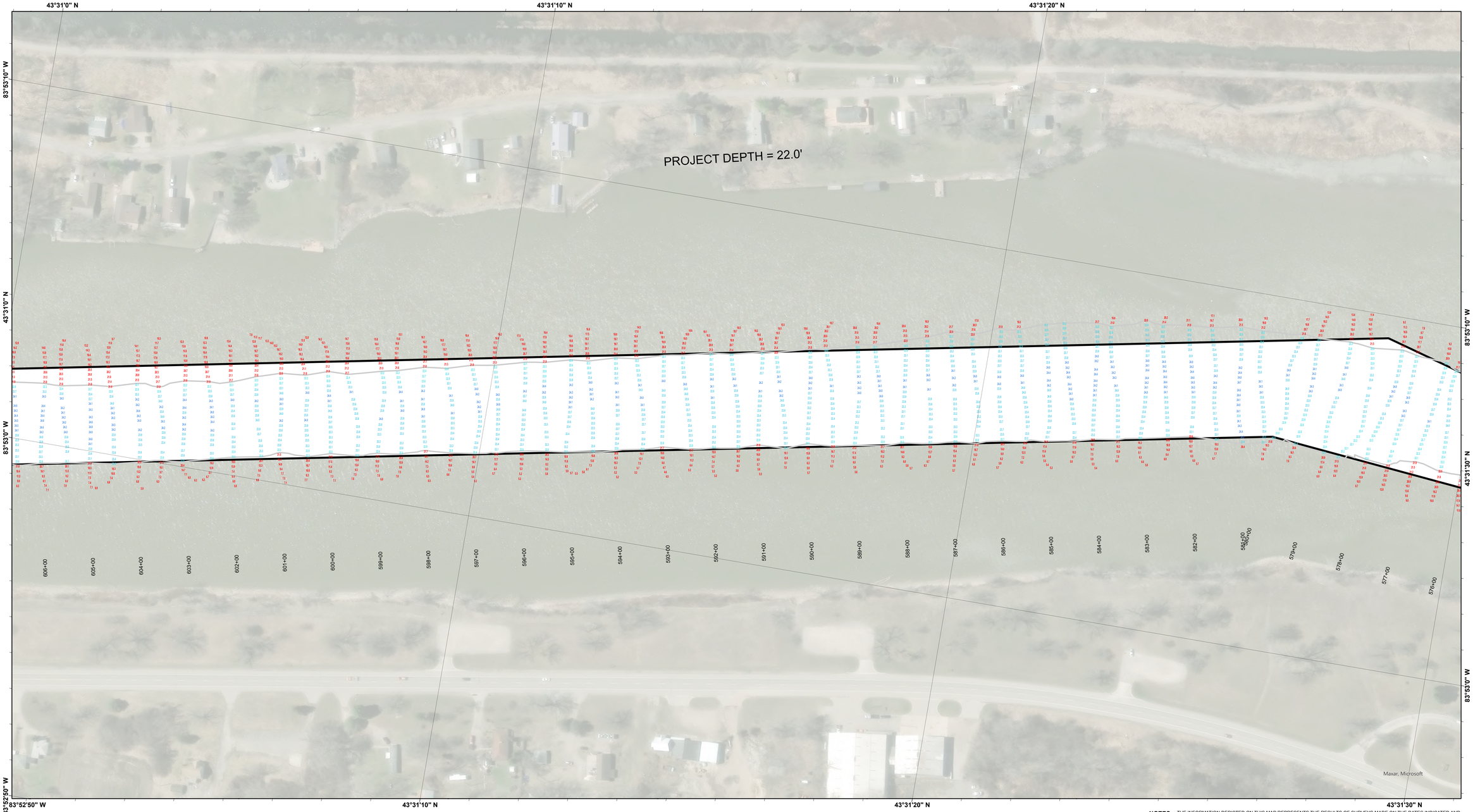
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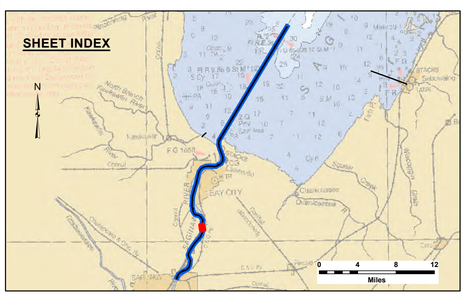
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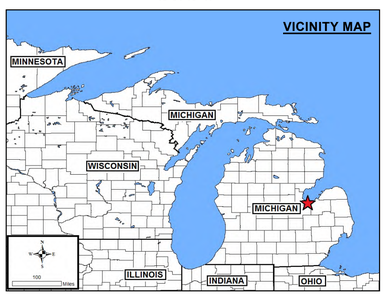
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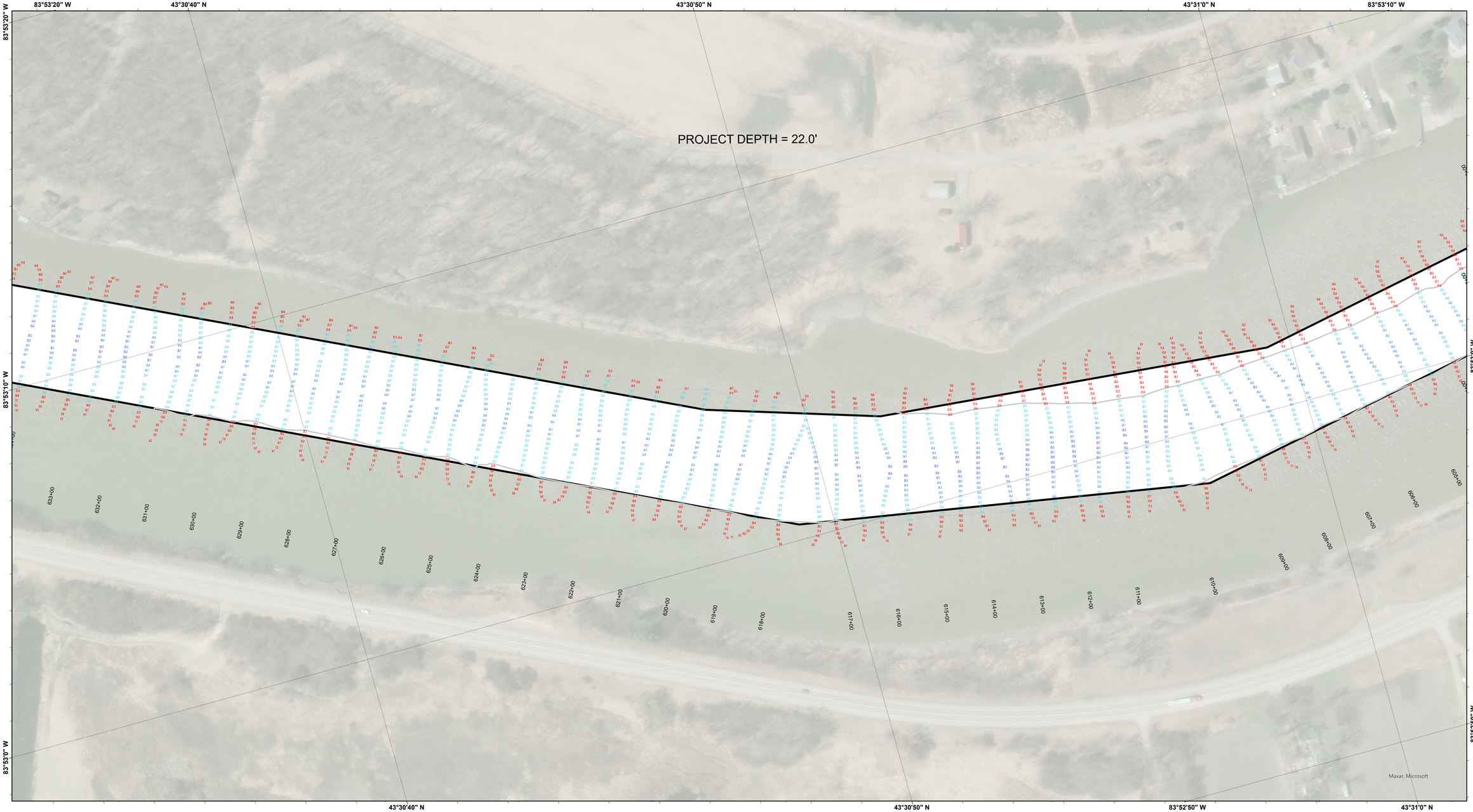
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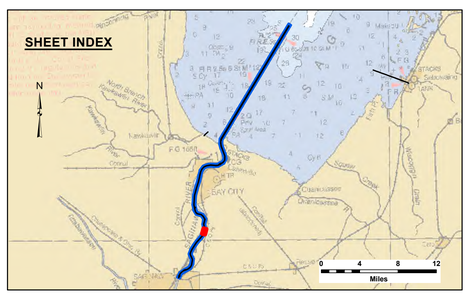
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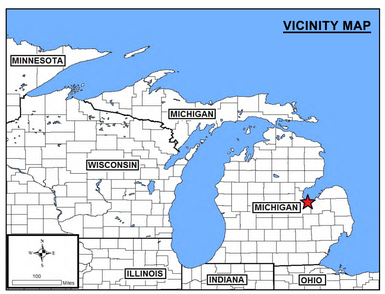
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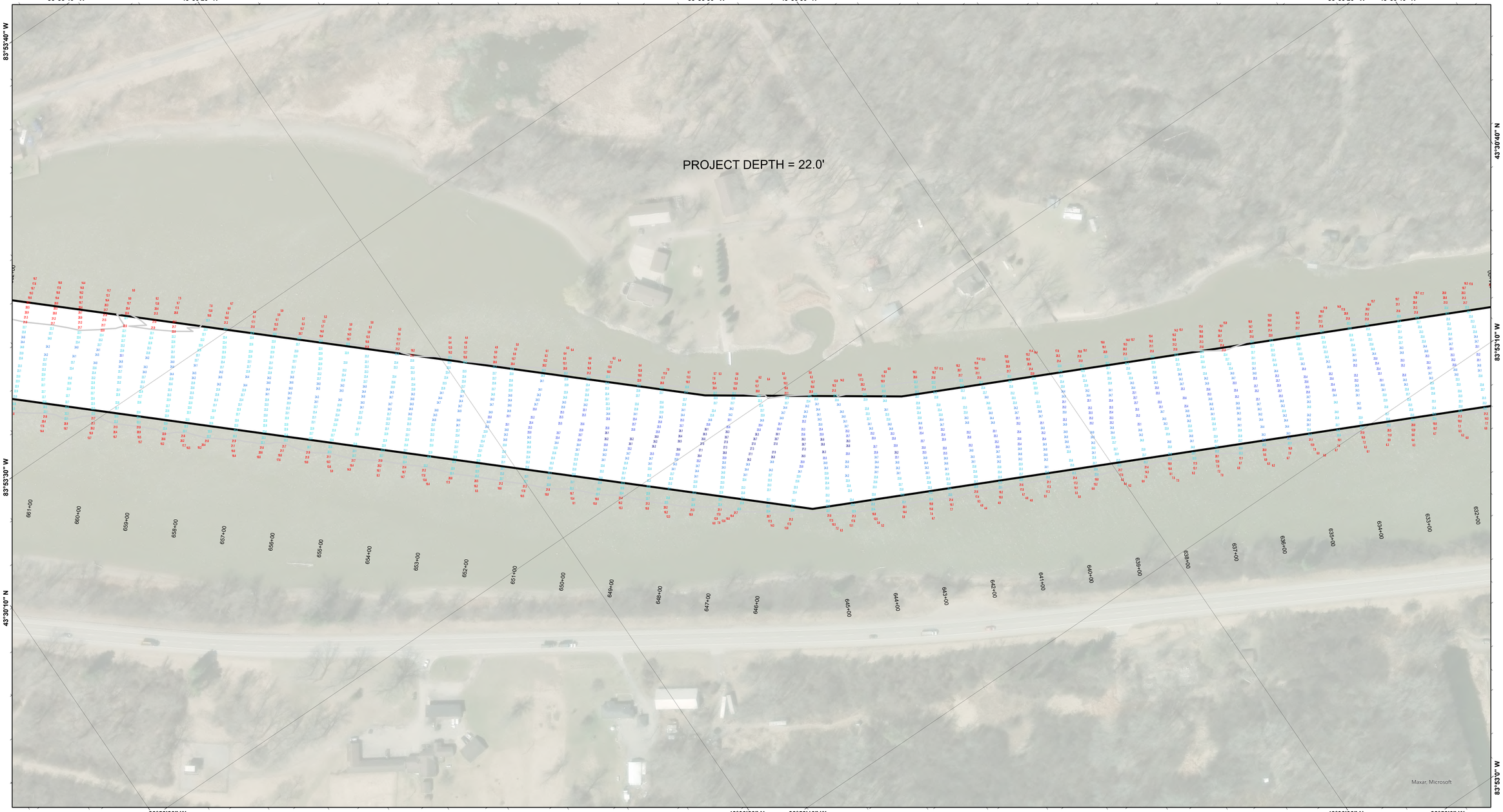
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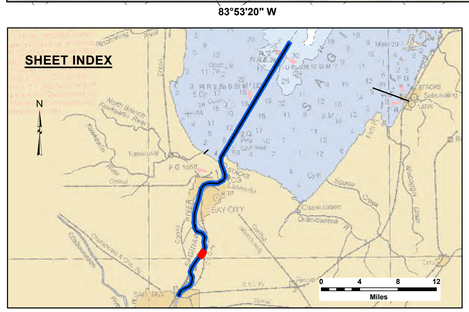
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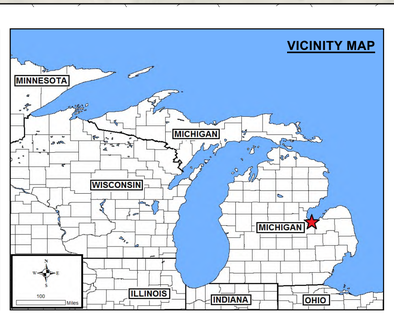
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SONAR: ODOM CV-300
SOFTWARE: HYPACK

AERIAL PHOTOGRAPHY DATA SOURCE: MAXAR, MICROSOFT
ALL COORDINATES ARE IN U.S. SURVEY FEET.

CORPS OF ENGINEERS U.S. ARMY







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'
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U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

Surveyed By: ____
Plotted By: ____
Checked By: ____

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

Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
05 August 2025

Sheet Reference Number
52 of 62

Revision Number:
5.25.07.03-5.25.07.03

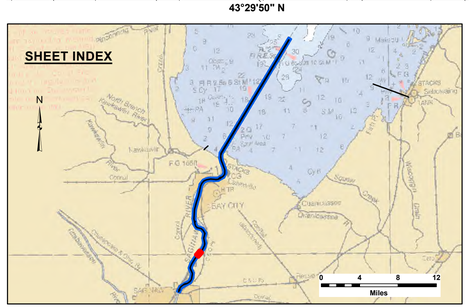
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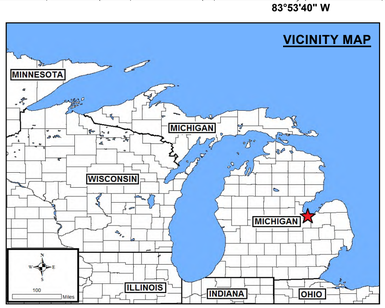
PROJECT DEPTH = 22.0'

688+00 687+00 686+00 685+00 684+00 683+00 682+00 681+00 680+00 679+00 678+00 677+00 676+00 675+00 674+00 673+00 672+00 671+00 670+00 669+00 668+00 667+00 666+00 665+00 664+00 663+00 662+00 661+00 660+00 659+00

43°30'20" N 83°53'30" W 43°29'50" N 83°53'50" W 43°29'50" N 83°53'40" W 43°30'0" N 83°53'30" W 43°30'10" N

Maxar, Microsoft





LEGEND

- Cable Submarine
- Cable Overhead
- Placement Area
- Beacon, General
- Contour Lines
- Channel_Limits

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DETROIT DISTRICT

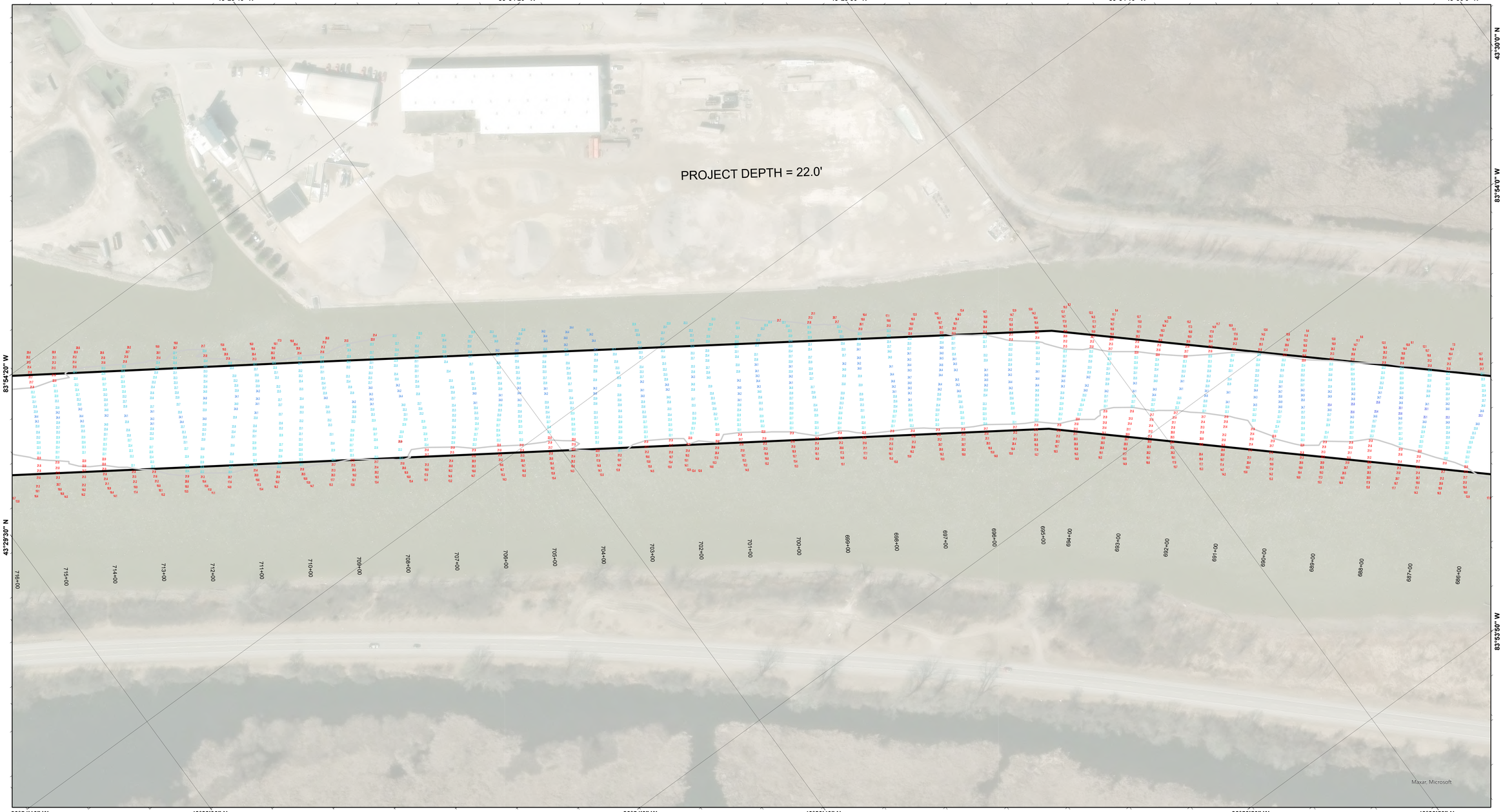
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Plotted By: ____
Checked By: ____

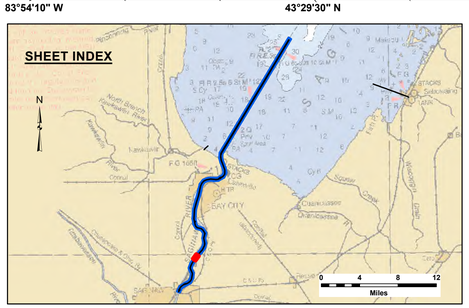
Submitted: ____ Chief, Survey Section
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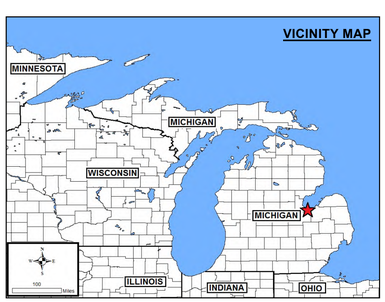
Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
05 August 2025

Sheet Reference Number
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LEGEND

- Cable Submarine
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- Contour Lines
- Channel_Limits

SOUNDING LEGEND

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District: CELRE

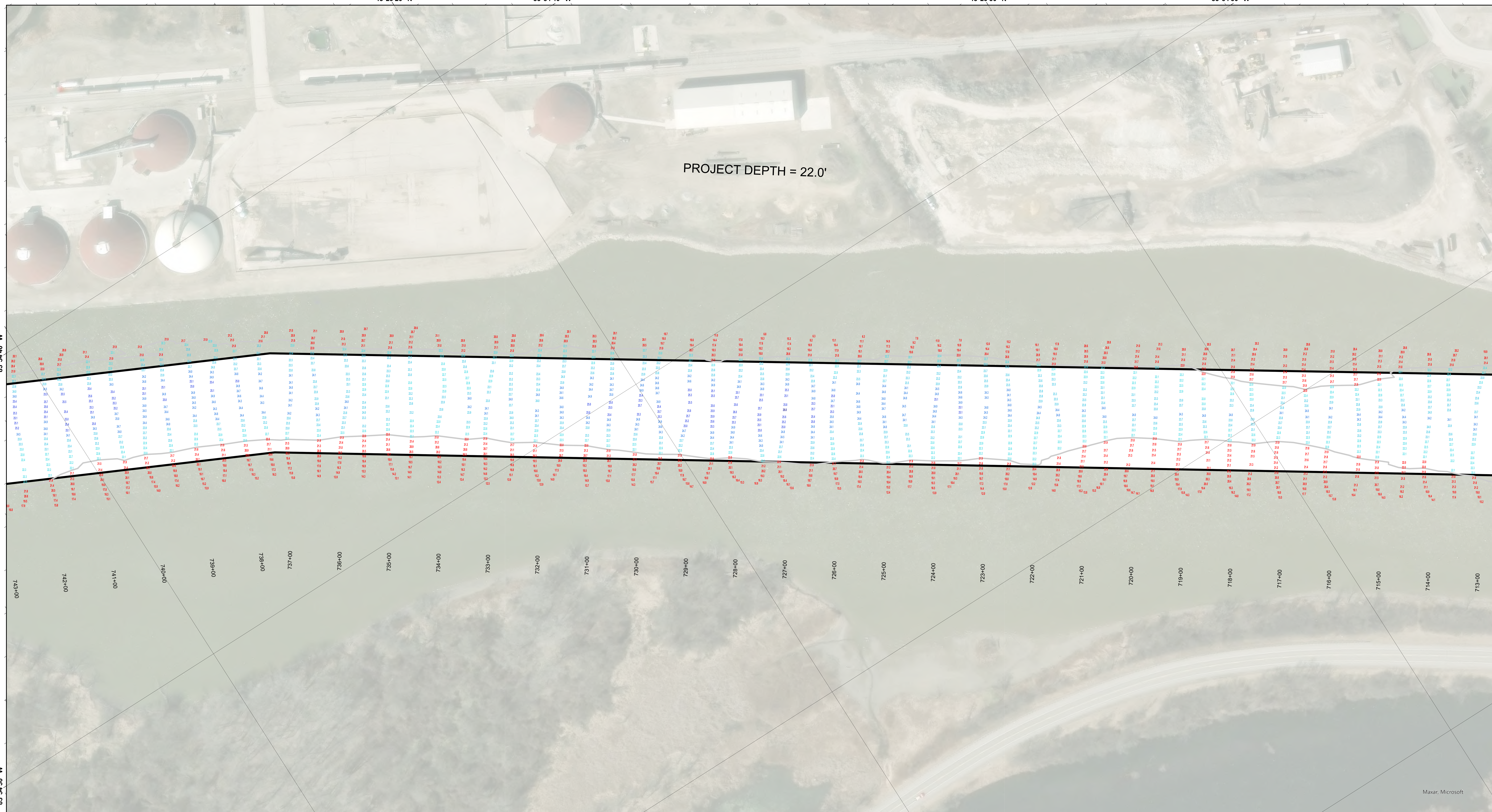
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DETROIT DISTRICT

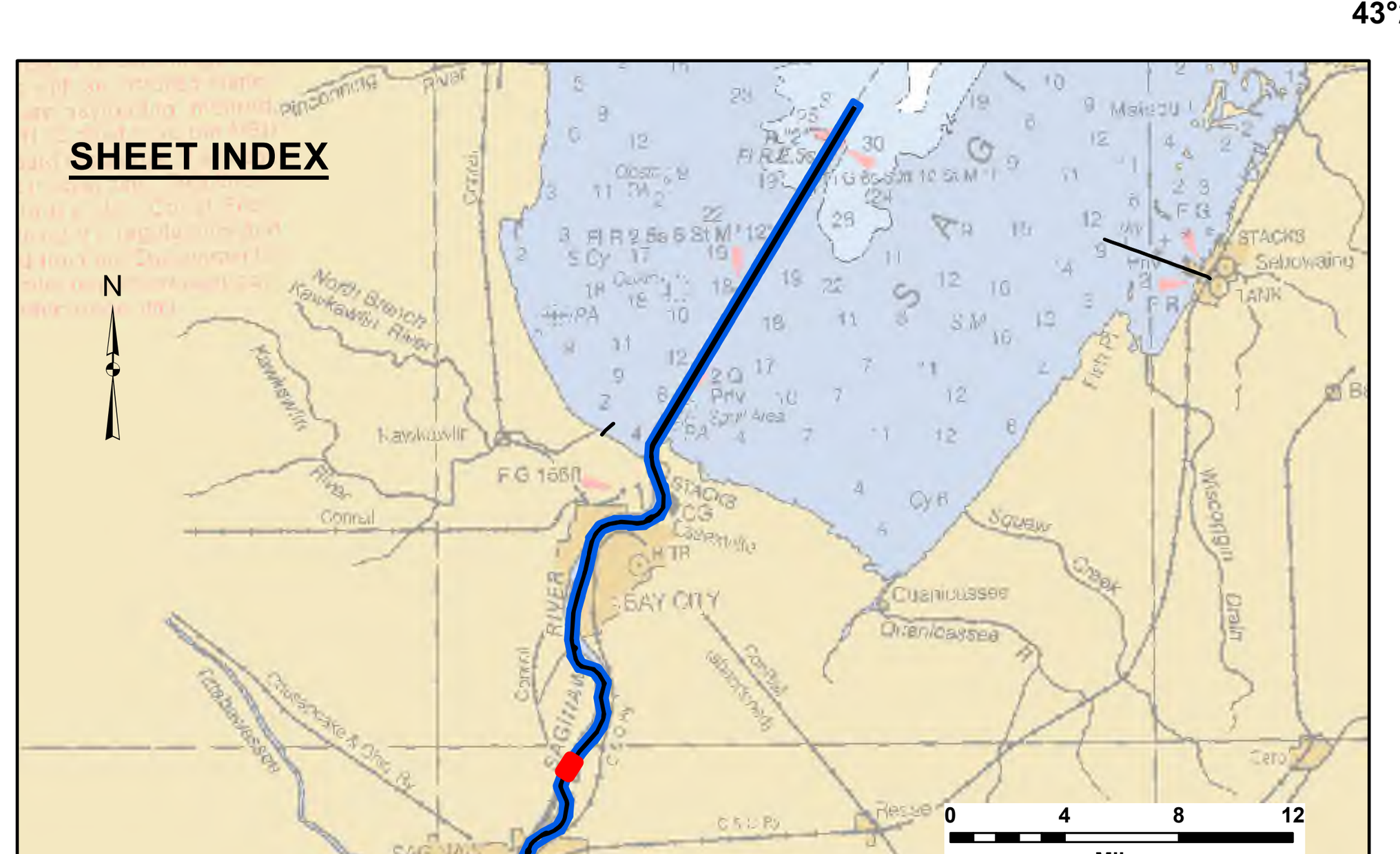
Surveyed By:	Plotted By:	Checked By:
Submitted:	Recommended: Chief, Survey Section	Approved: Chief, Technical Services

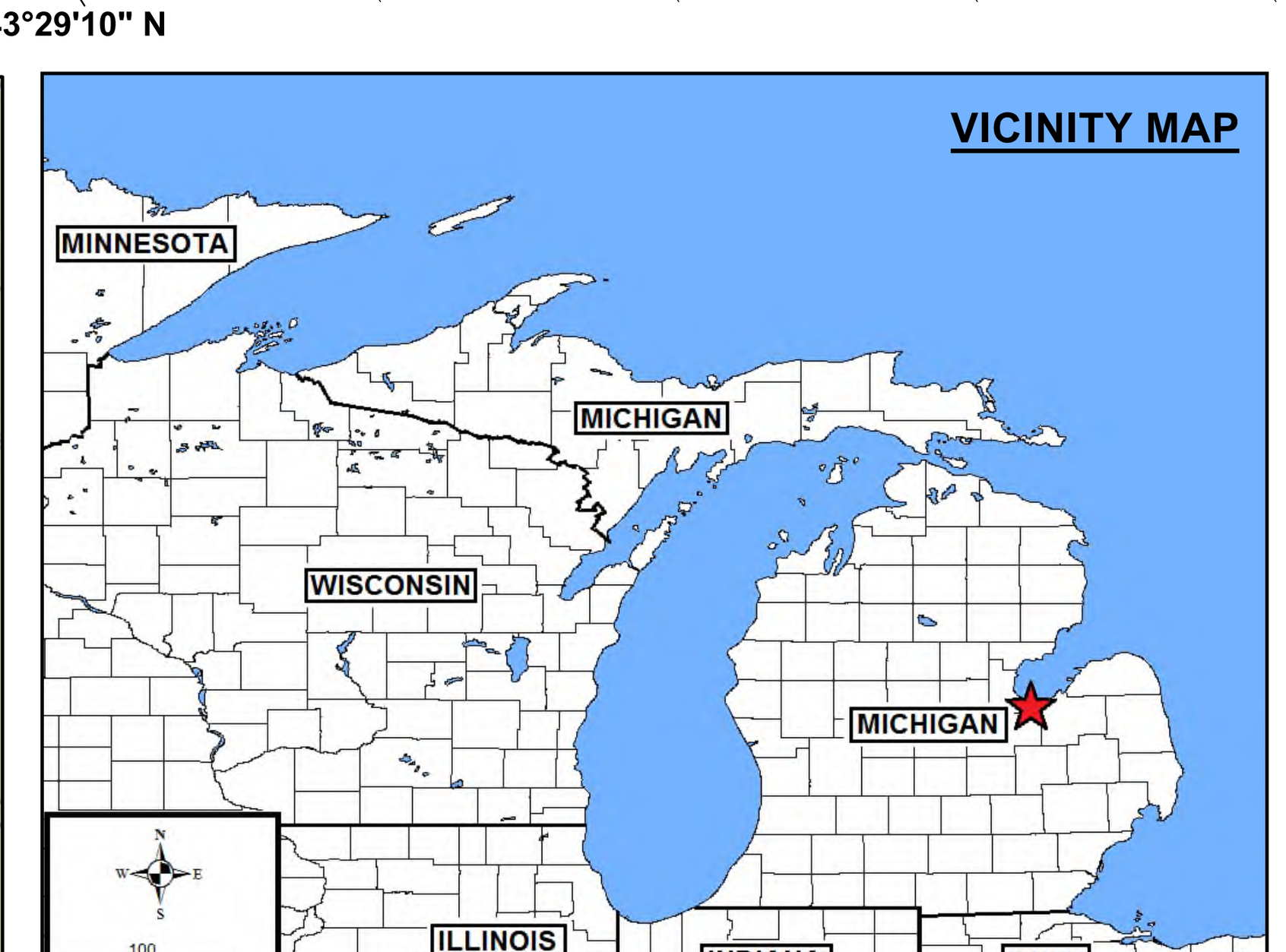
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US Army Corps of Engineers
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U.S. ARMY COPRPS OF ENGINEERS
DETROIT DISTRICT

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

Surveyed By:
Plotted By:
Checked By:

Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
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Sheet Reference Number
55 of 62

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83°55'0" W 43°29'0" N 83°54'50" W

83°55'0" W

83°54'50" W

PROJECT DEPTH = 22.0'

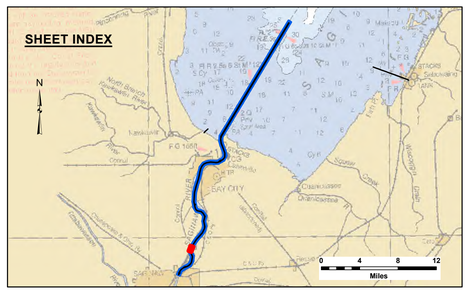
83°54'40" W

83°54'30" W

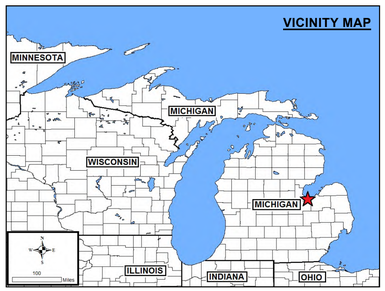
Maxar, Microsoft

83°54'40" W 43°28'50" N 43°29'0" N 83°54'30" W

SHEET INDEX



VICINITY MAP



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N W E S

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SONAR: ODOM CV-300
SOFTWARE: HYPACK

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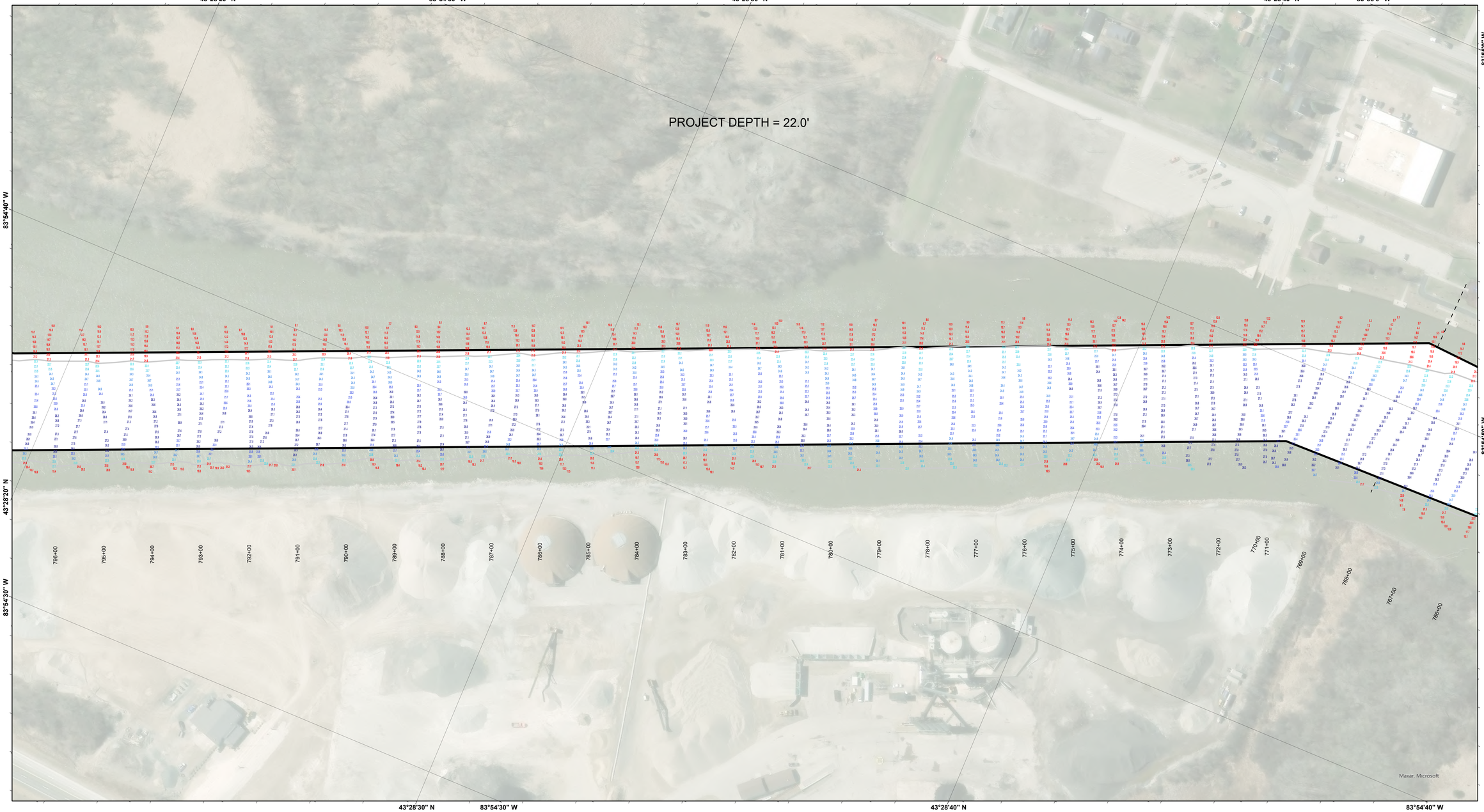
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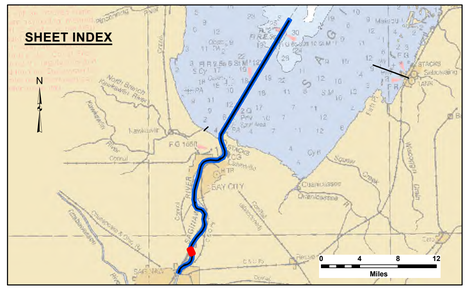
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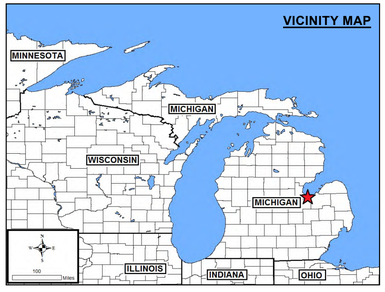
Saginaw, MI
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LEGEND

- Cable Submarine
- Cable Overhead
- Placement Area
- Beacon, General
- Contour Lines
- Channel_Limits

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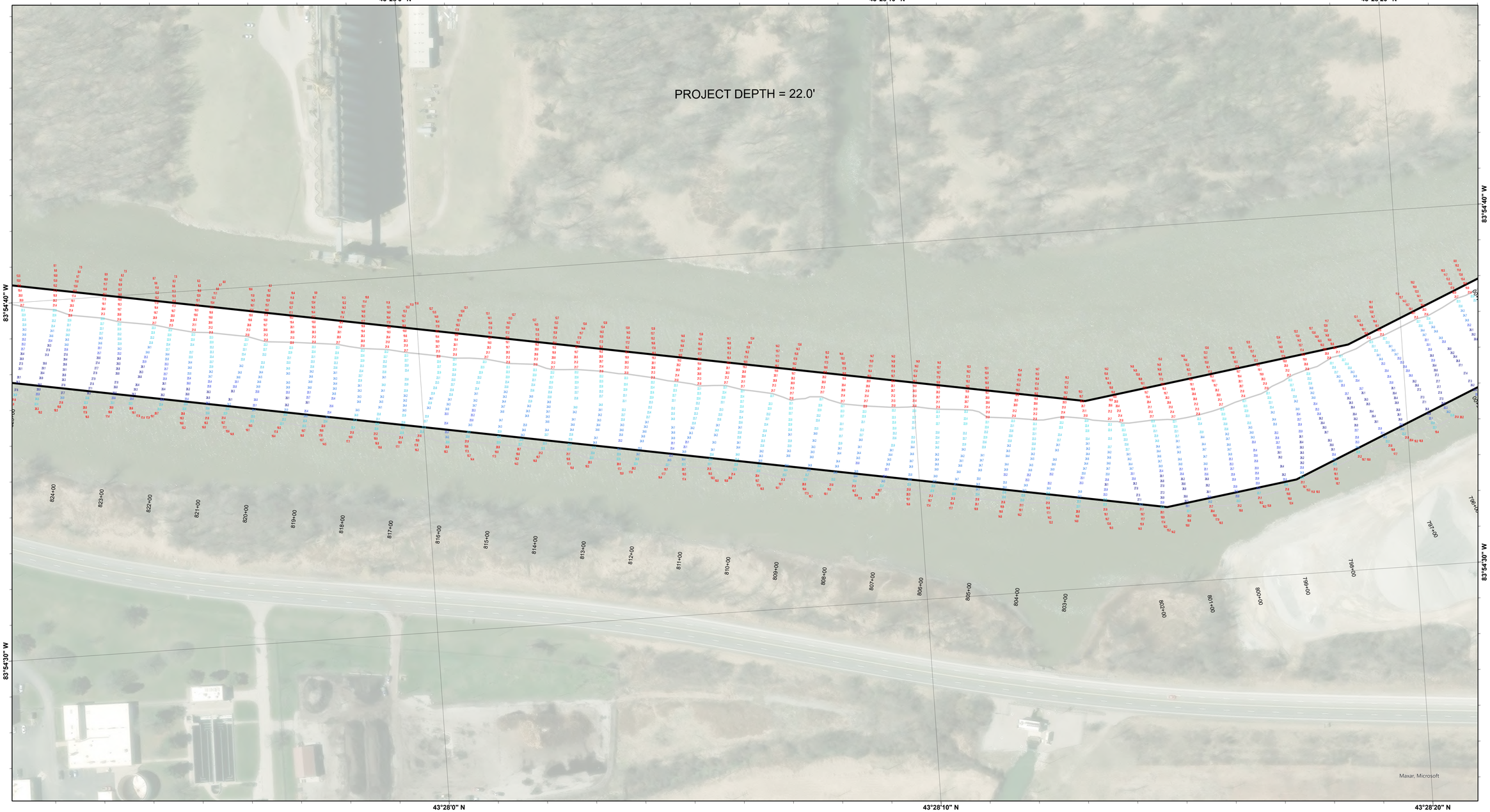
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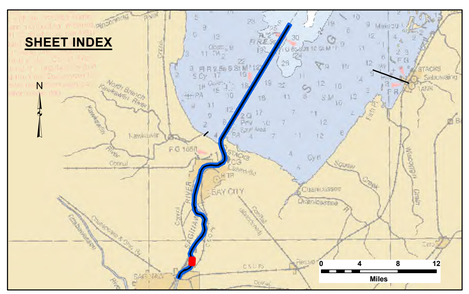
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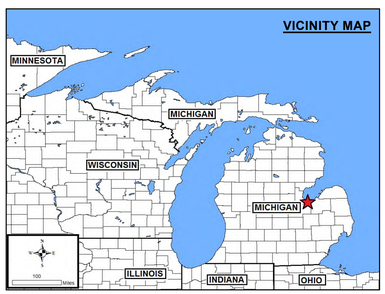
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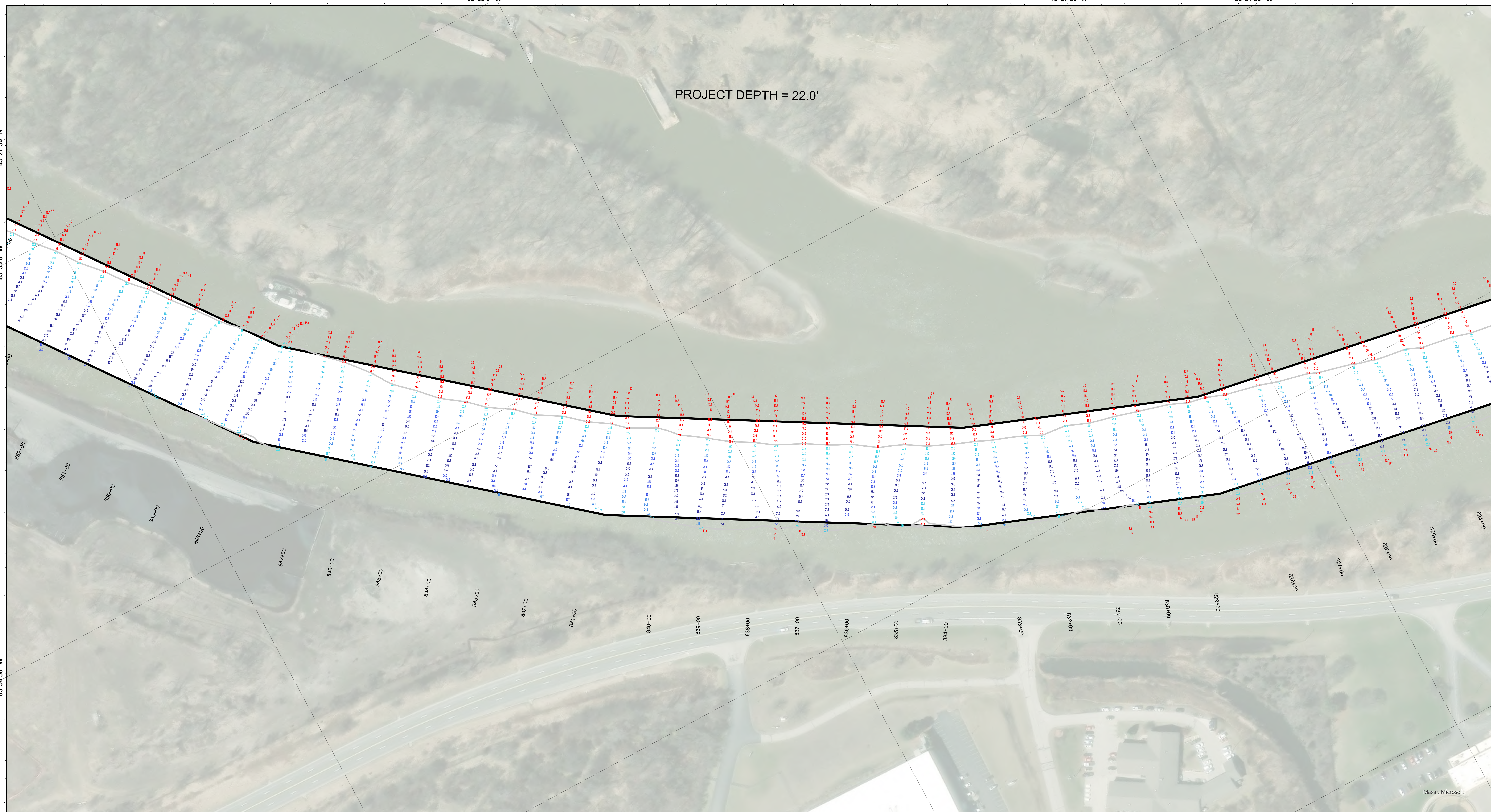
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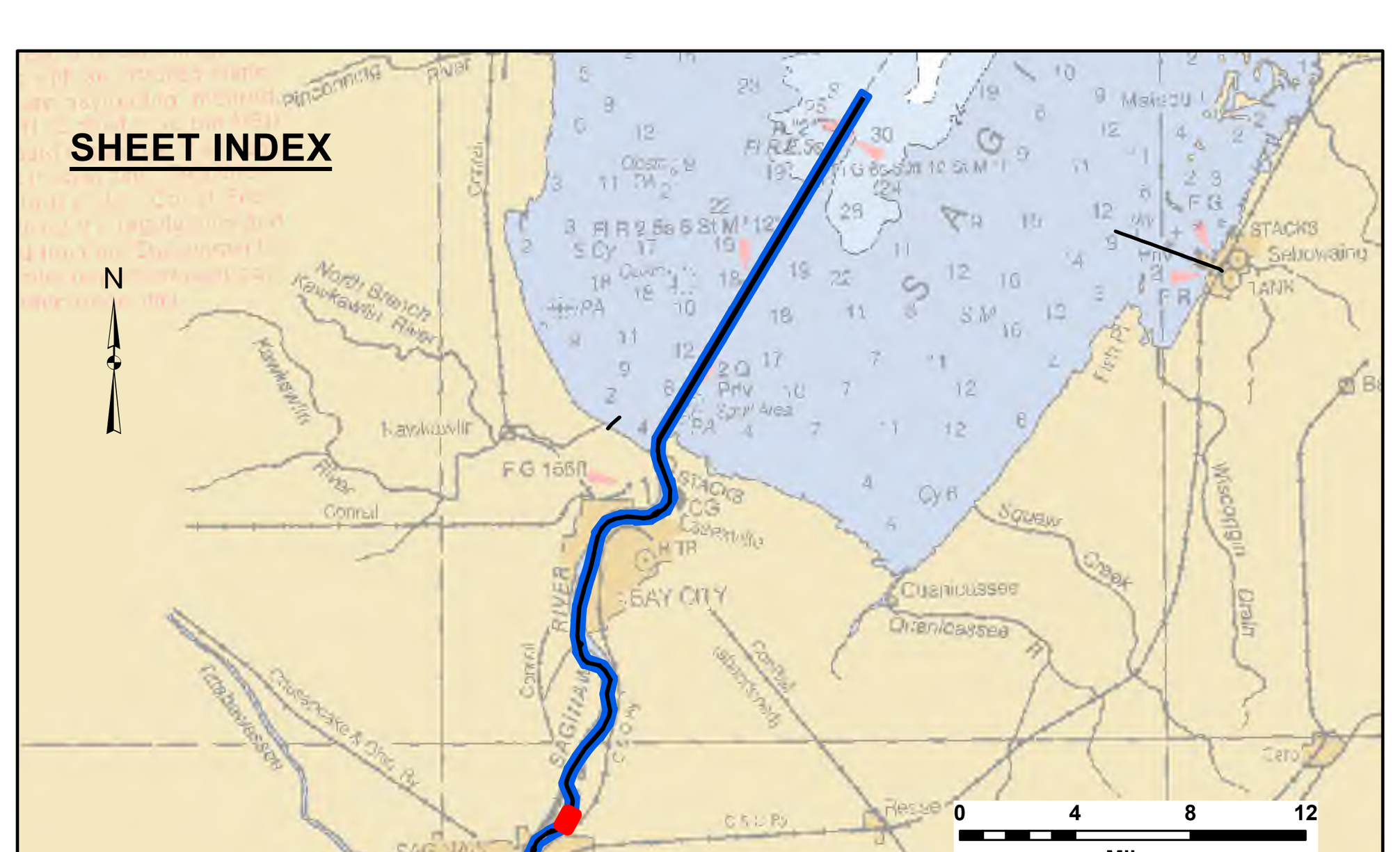
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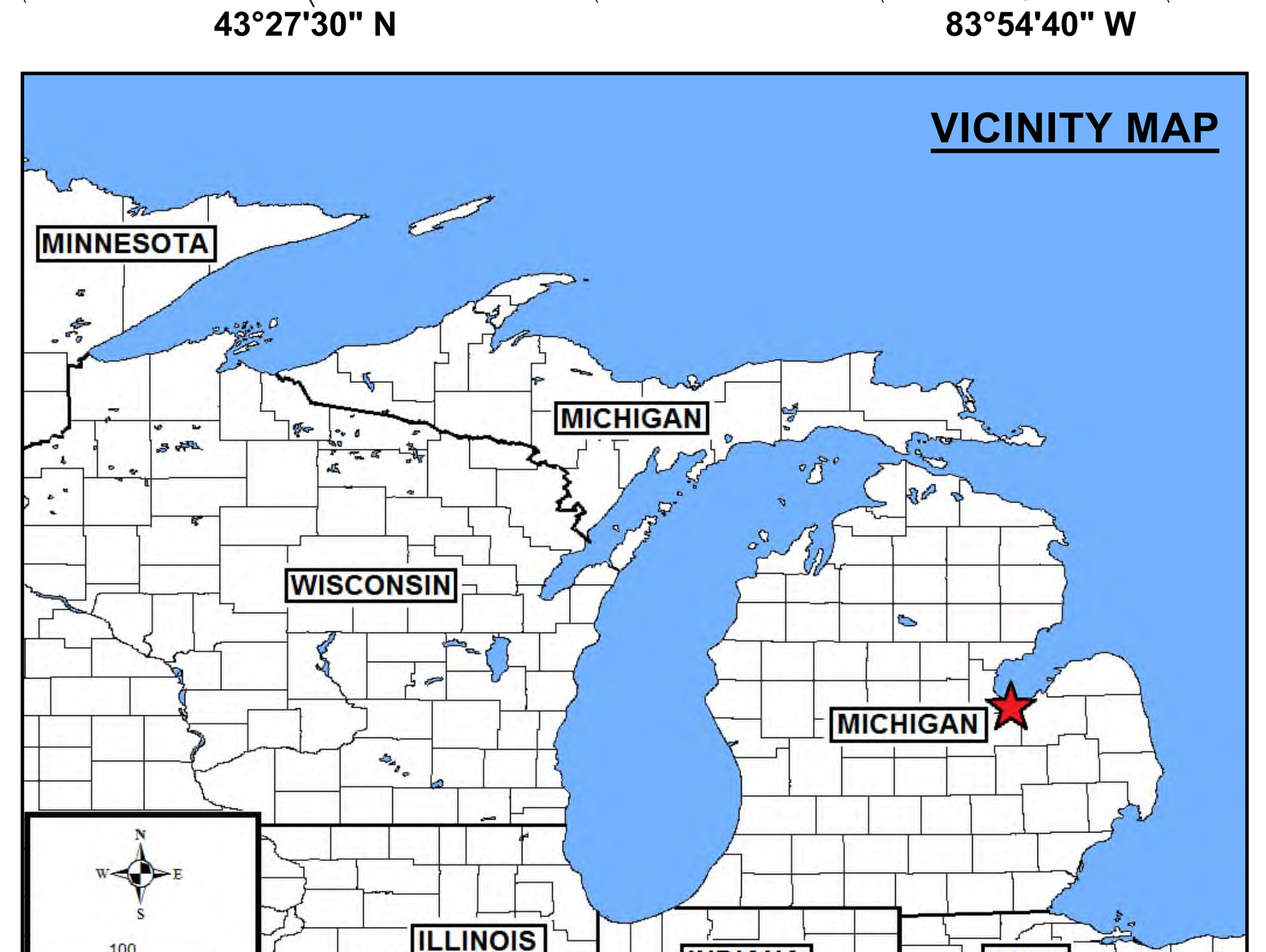
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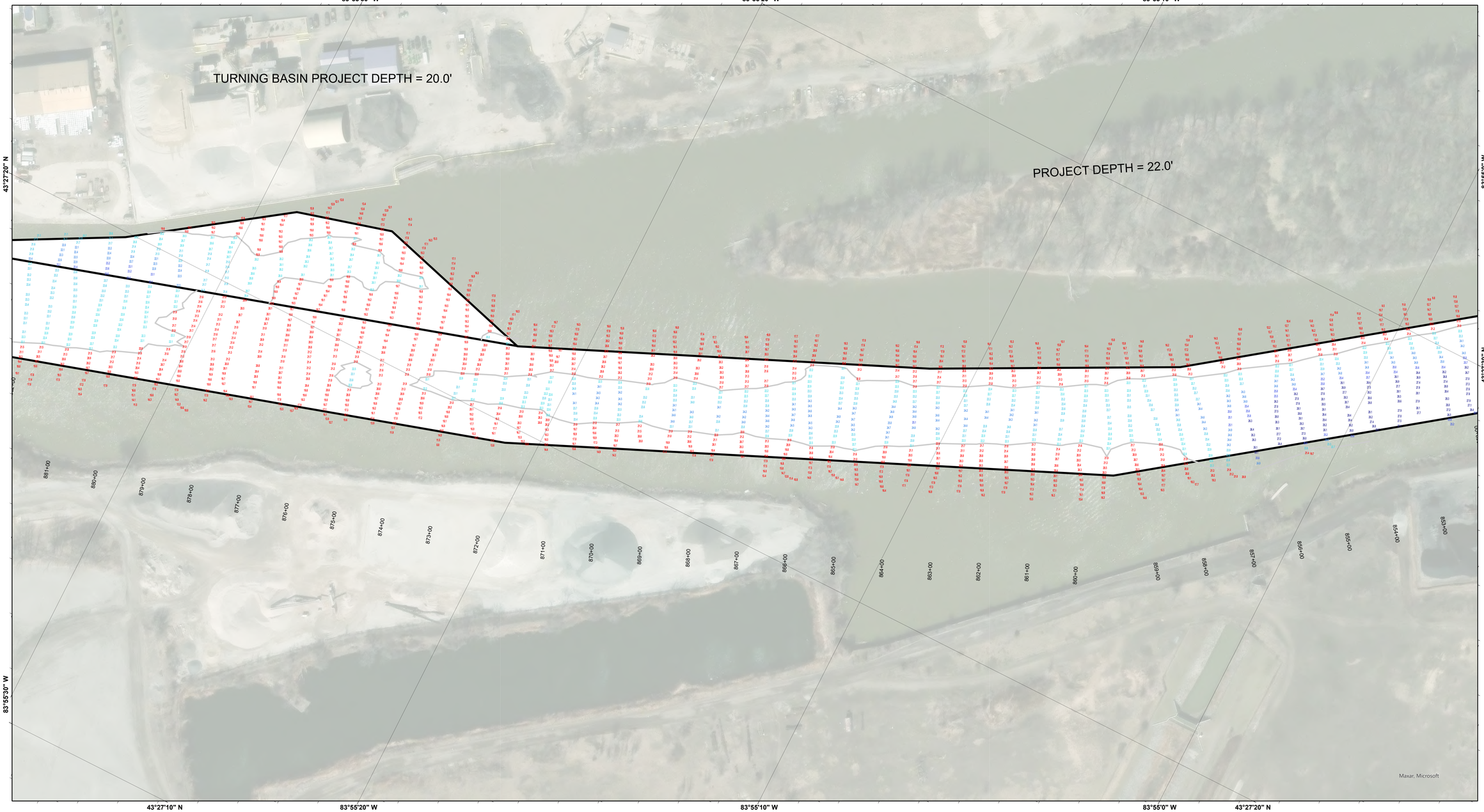
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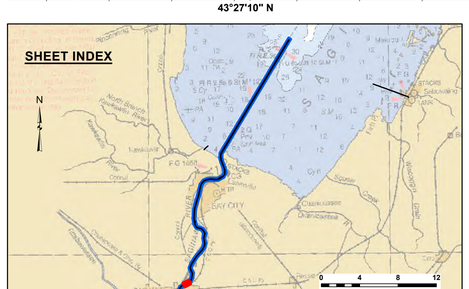
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CORPS OF ENGINEERS

U.S. ARMY



SHEET INDEX



VICINITY MAP



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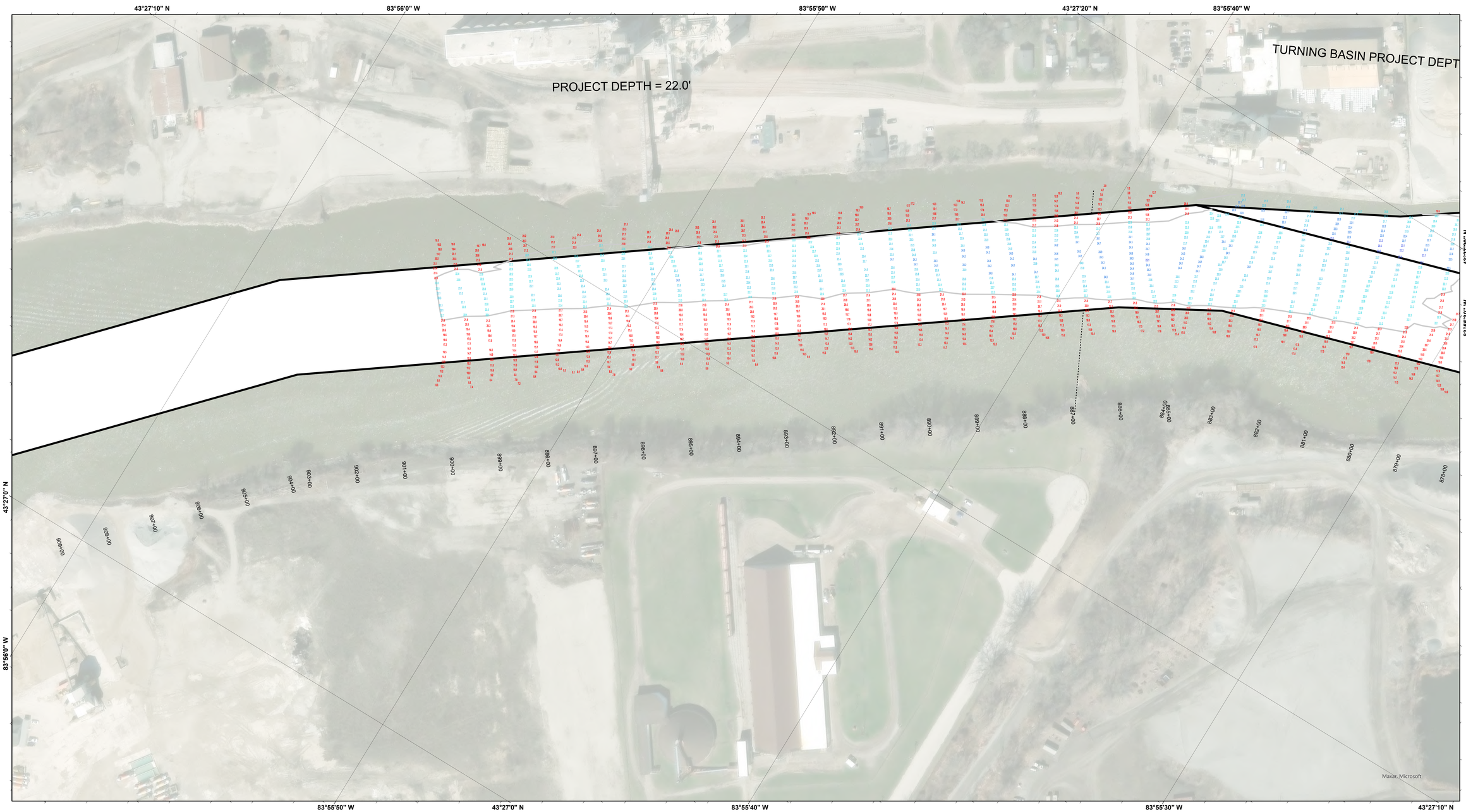
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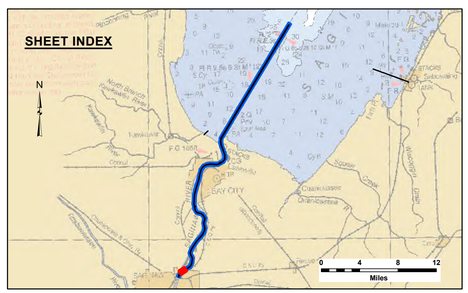
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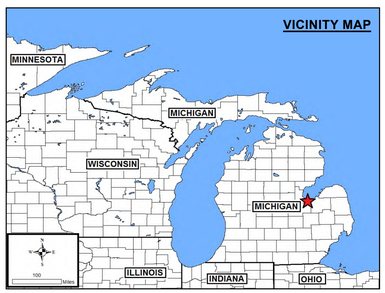
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LEGEND

- Cable Submarine
- Cable Overhead
- Placement Area
- Beacon, General
- Contour Lines
- Channel_Limits

SOUNDING LEGEND

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

1 inch = 100 feet

Feet
0 100 200 300 400

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 AT THE TIME.

FOR MULTIBEAM SURVEYS: 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 PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICE TO NAVIGATION INTERESTS.

THE GRID SHOWN REFERENCES LATITUDE/LONGITUDE DISPLAYED AS DEGREES, MINUTE, SECONDS IN 10 SECOND INCREMENTS. THE SURVEY DATA REPRESENTED HEREIN IS PROJECTED TO THE MICHIGAN STATE PLANE, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983 (NAD83), US SURVEY FOOT.

ALL SOUNDINGS ARE REFERENCED TO INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGLD 1985)
PROJECT DEPTH RANGE FROM 20.0' TO 27.0'

TIDE VALUES ARE DERRIVED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) WATER LEVEL STATIONS: ESSEXVILLE, MI (#9075035)ALONG WITH THE FOLLOWING GAGES: G.BOARD ON PILING NEAR CS 820+00, TBM ZILL RAMP, TBM CHEB, TBM CASS RAMP, TBM RAILROAD [ESTABLISHED FROM COE VERTICAL CP BM 36], TBM SAIL AT THE FOOT OF THE 5TH STREET, G.BOARD
ON THE D.STREAM WESTERN PIER OF THE CENTRAL MICHIGAN R.R. BRIDGE [GAGE BOARD WAS ESTABLISHED FROM NGS BM HL MON 25 USE], G.BOARD ON THE DOWNSTREAM END OF THE CENTER PIER OF THE LAKE STATE RAILROAD BRIDGE [ESTABLISHED FROM NGS BM HL MON 16 USE (PID QJ0534)], G.BOARD ON THE D.STREAM END OF THE CTR PIER OF LAKE STATE R.R. BRIDGE, G.BOARD SET ON THE PILING AT THE MOUTH OF THE BLACK RIVER ON THE NORTH SIDE NEAR THE RAILROAD TRESTLE

THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL LAUNCH 3053 EMPLOYING THE FOLLOWING COMPONENTS:
POSITIONING: APPLANIX POS-MV 4 MARINESTAR G2+ GNSS .
MOTION COMPENSATION: APPLANIX POS-MV 4
SONAR: ODOM CV-300
SOFTWARE: HYPACK

AERIAL PHOTOGRAPHY DATA SOURCE: MAXAR, MICROSOFT
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

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

Saginaw, MI
Saginaw River
SH_01_SAG_20250805_CS
05 August 2025

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