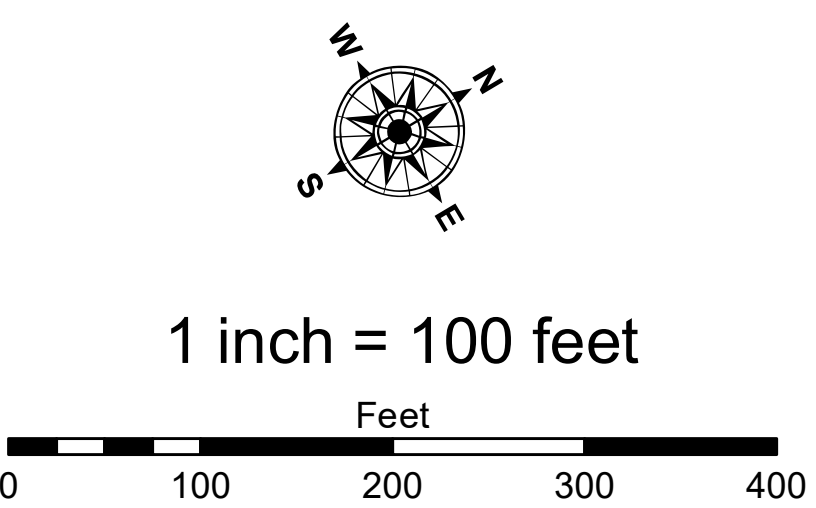


- LEGEND**
- Cable Submarine
 - - - Cable Overhead
 - Placement Area
 - Beacon, General
 - Contour Lines
 - Channel_Limits

- 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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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: HYPACK

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS
ALL COORDINATES ARE IN U.S. SURVEY FEET.

Saginaw, MI
Saginaw River
SH_01_SAG_20200714_CS
14 July 2020

Sheet Reference Number
4 of 62

Revision Number:
4.1-20191105



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U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

Submitted: _____

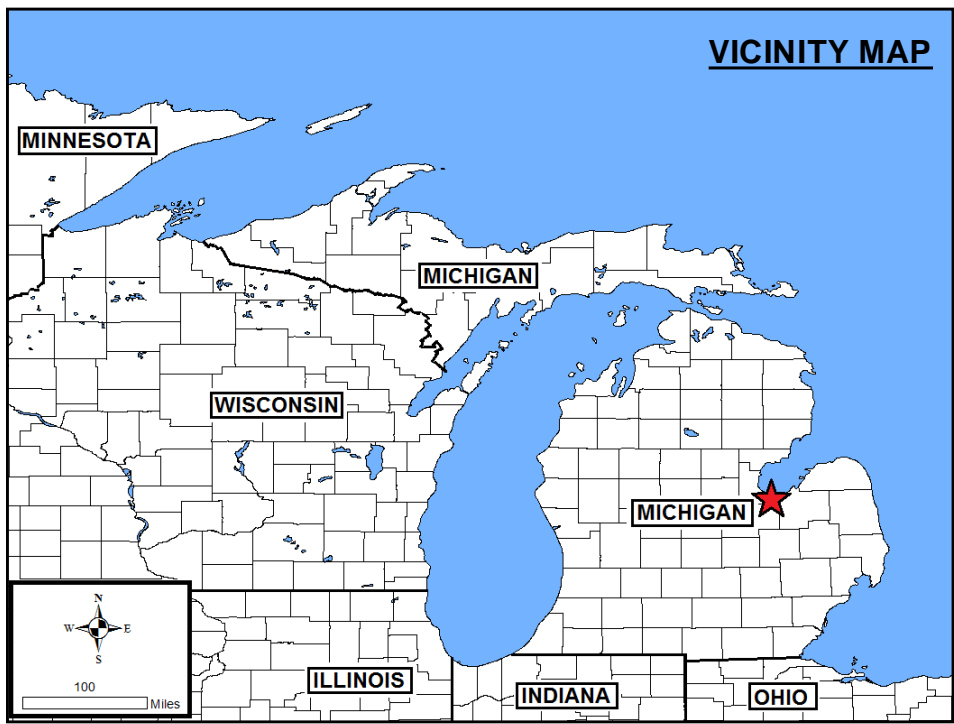
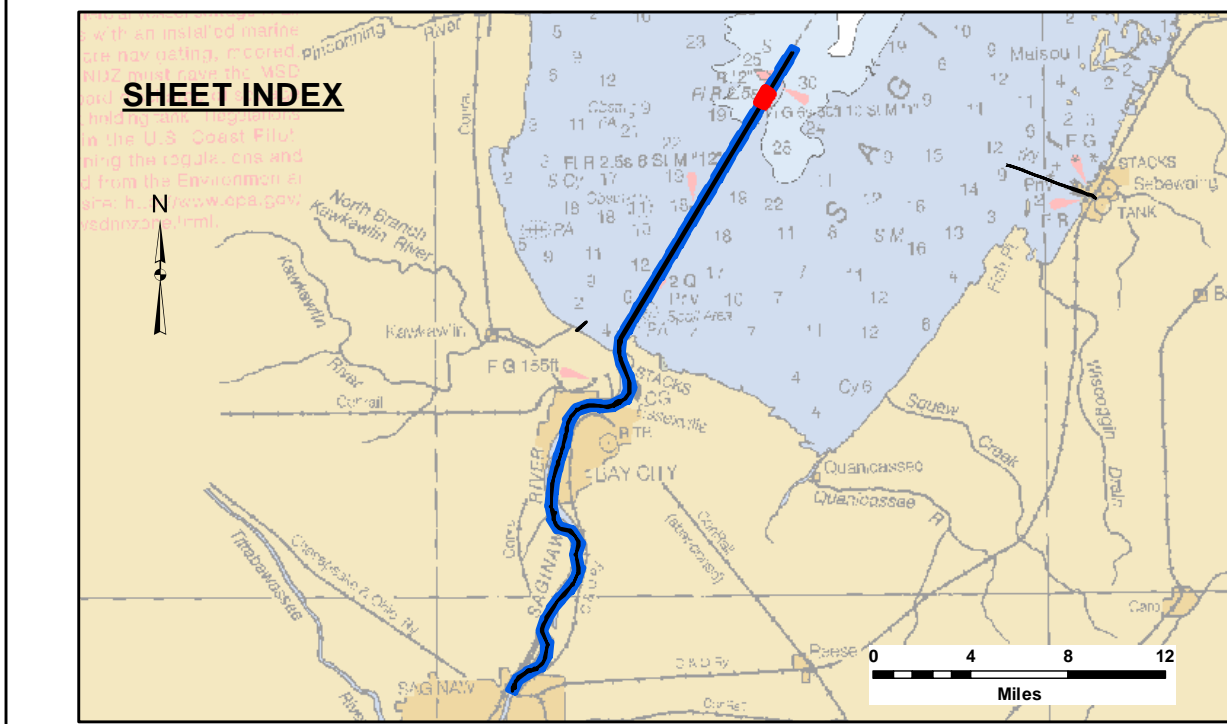
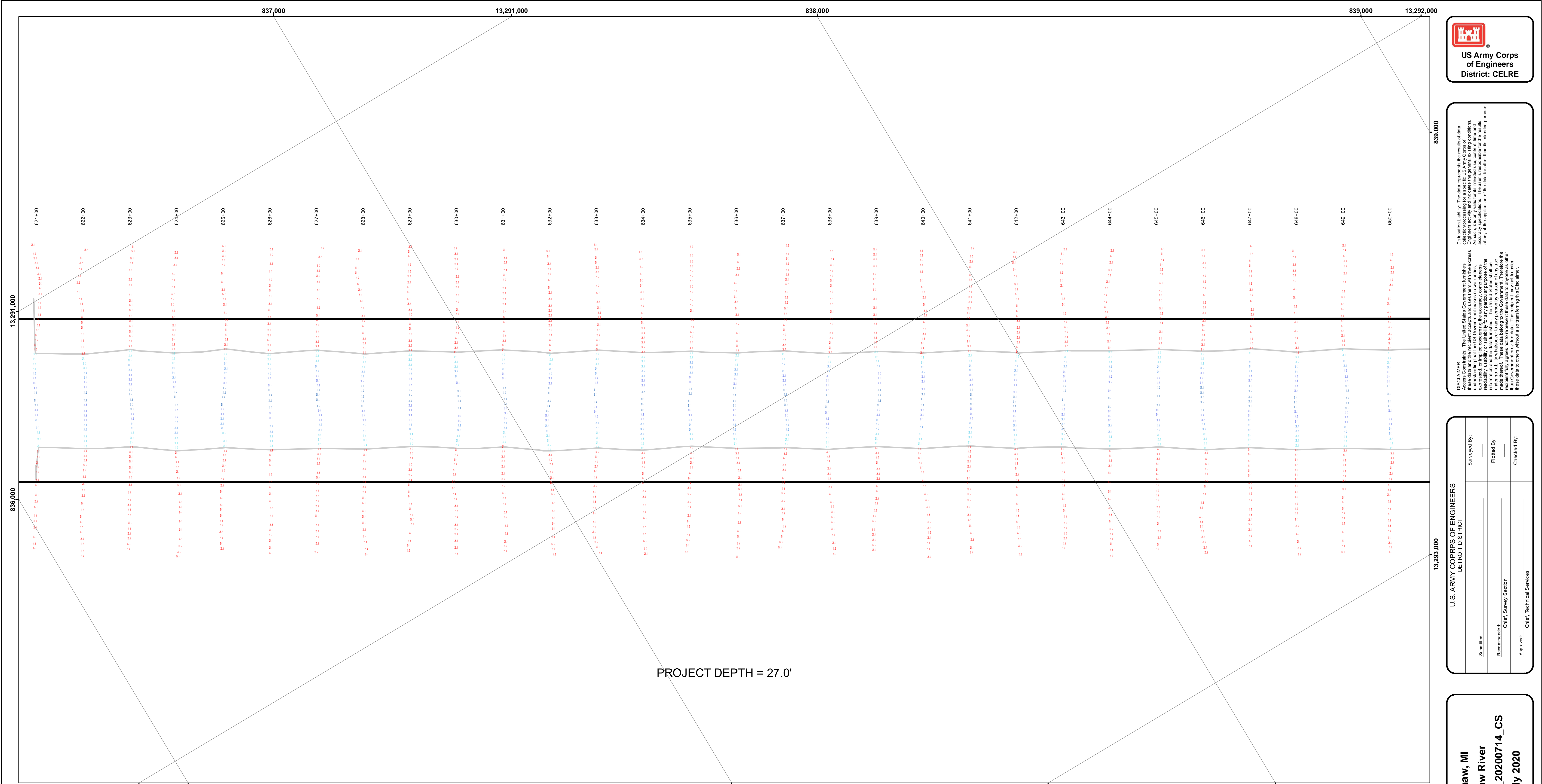
Recommended: _____
Chief, Survey Section

Approved: _____
Chief, Technical Services

Surveyed By: _____

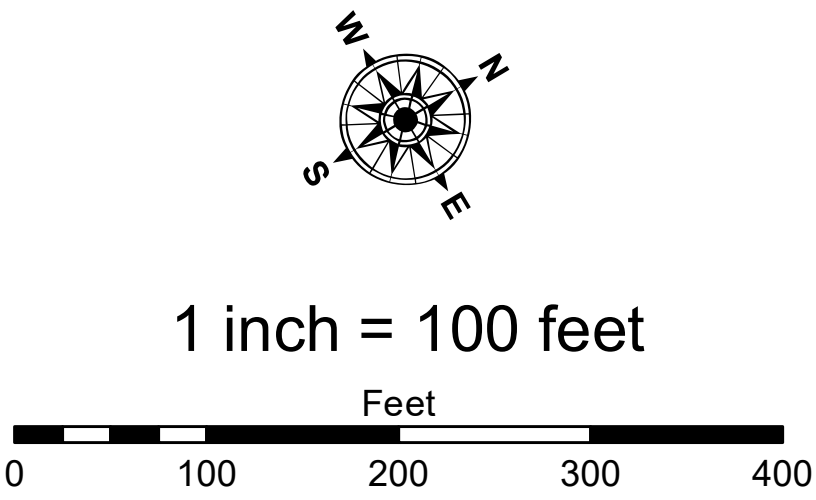
Plotted By: _____

Checked By: _____



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

- SOUNDING LEGEND**
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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: HYPACK

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS

ALL COORDINATES ARE IN U.S. SURVEY FEET.

Saginaw, MI
Saginaw River
SH_01_SAG_20200714_CS
14 July 2020

Sheet Reference Number
5 of 62

Revision Number:
4.1-20191105



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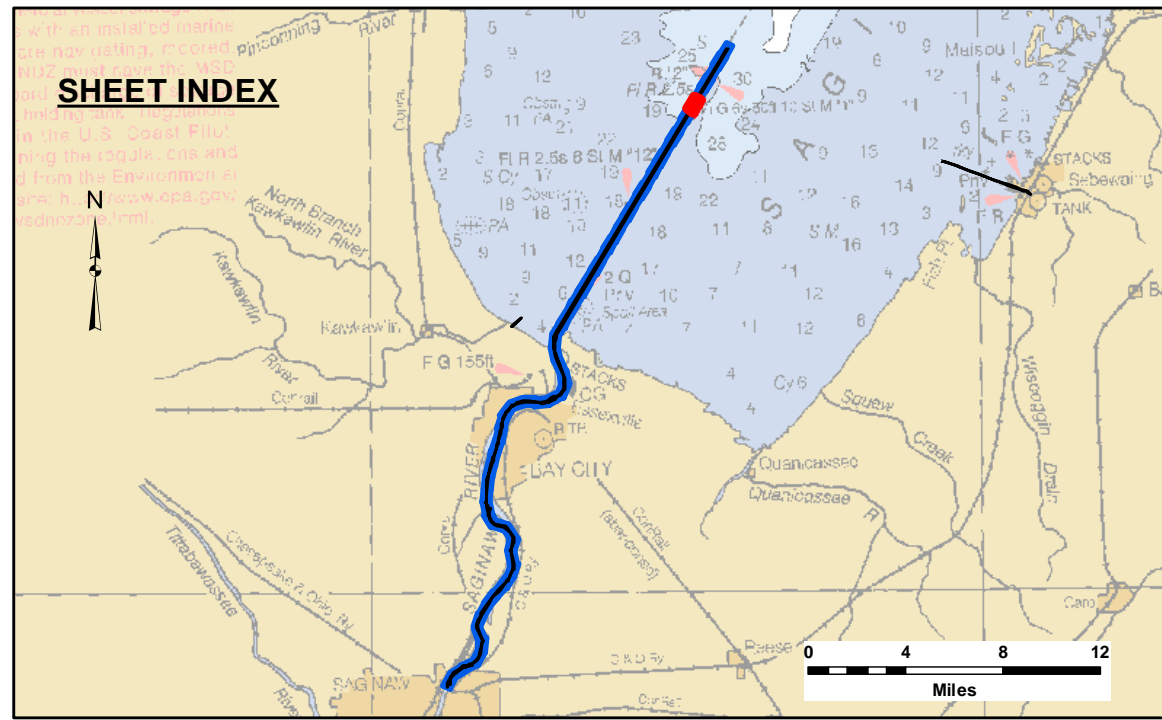
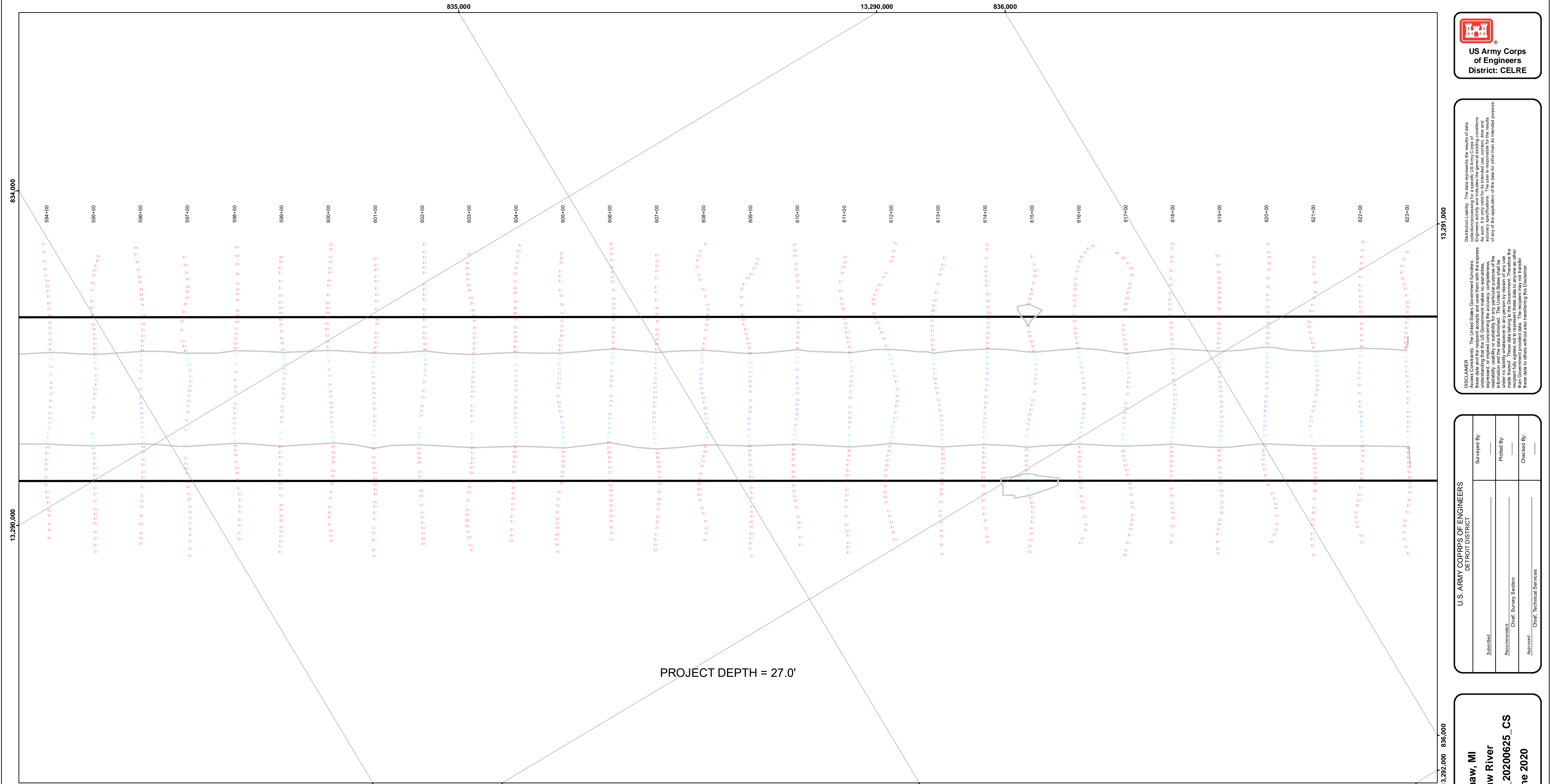
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Submitted:	Surveyed By:
Recommended:	Plotted By:
Approved:	Checked By:

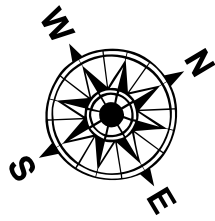
Saginaw, MI
Saginaw River
SH_01_SAG_20200714_CS
14 July 2020

Sheet Reference Number
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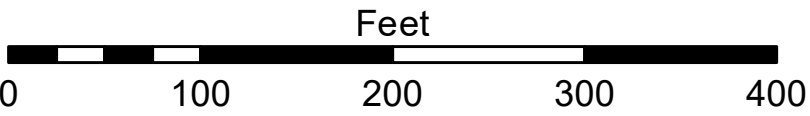


- LEGEND**
- Cable Submarine
 - - Cable Overhead
 - Placement Area
 - ⊥ Beacon, General
 - Contour Lines
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- SOUNDING LEGEND**
- LESS THAN PROJECT DEPTH
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POSITIONING: APPLANIX POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS. MOTION COMPENSATION: APPLANIX POS-MV4 SONAR: R2SONIC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM) SOFTWARE: HYPACK

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS 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

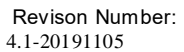
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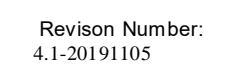
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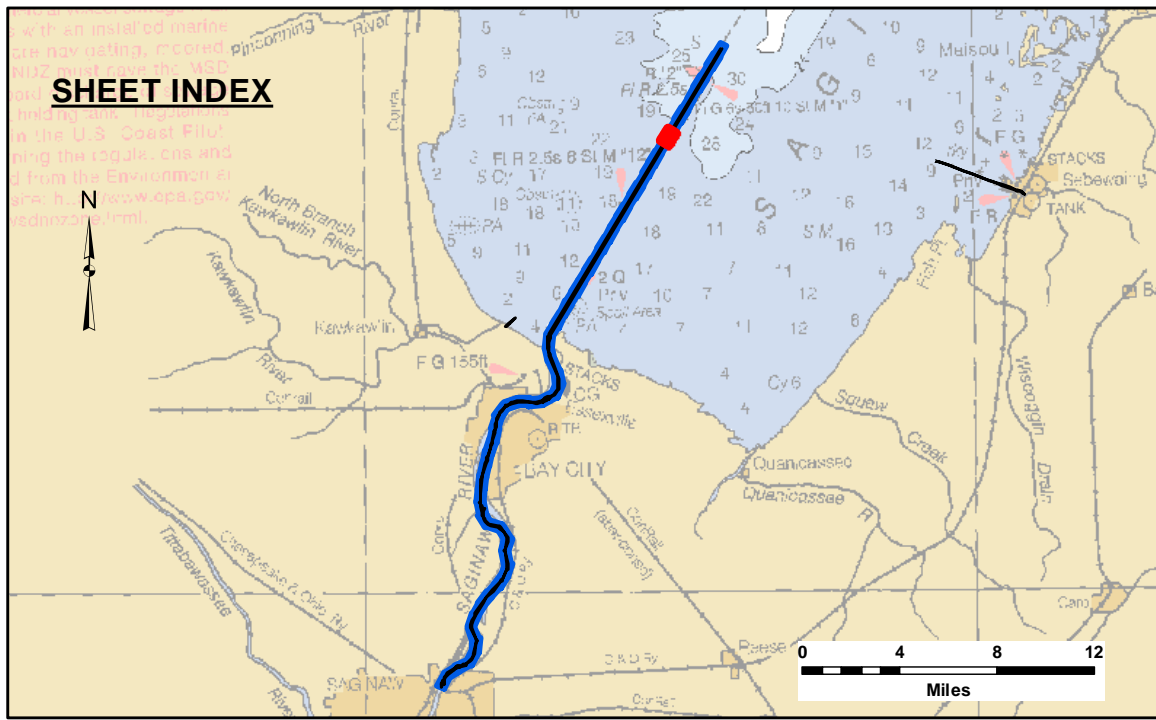
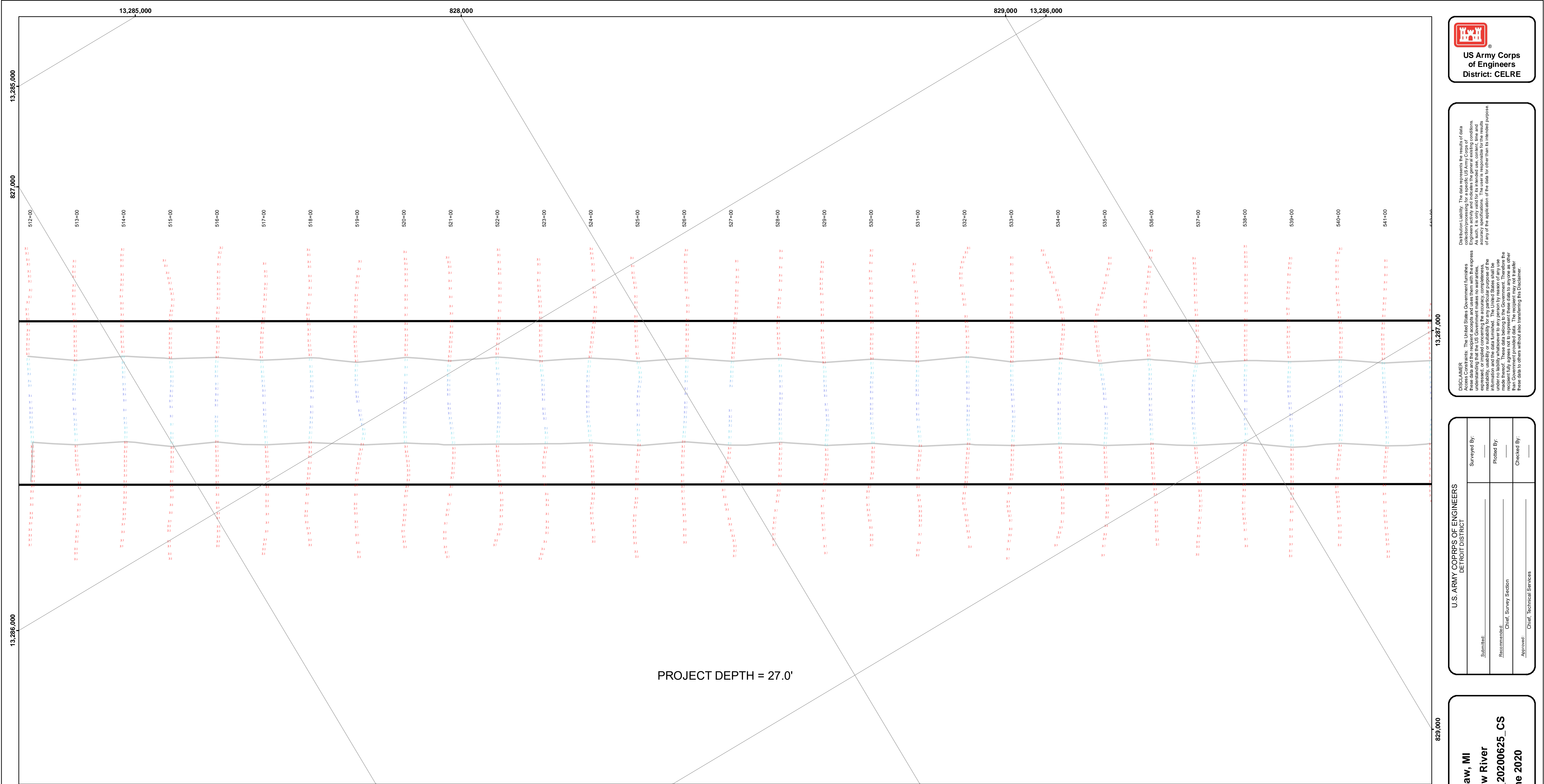
25 June 2020

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6 of 62

Revision Number:
4.1-20191105







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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Feet

0 100 200 300 400

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SOFTWARE: HYPACK

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US Army Corps of Engineers
District: CELRE

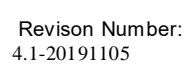
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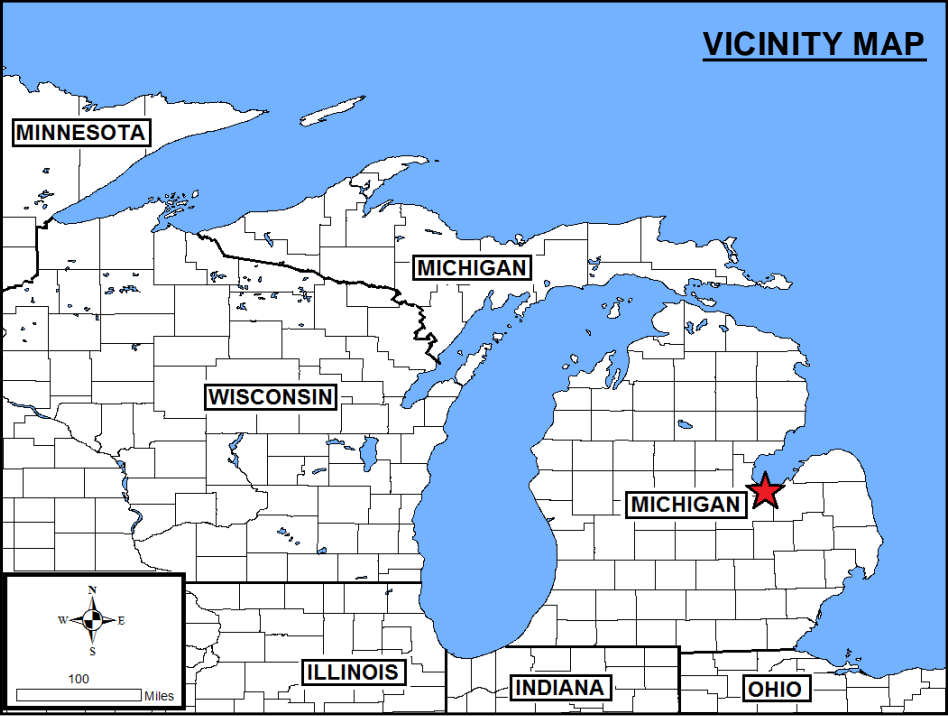
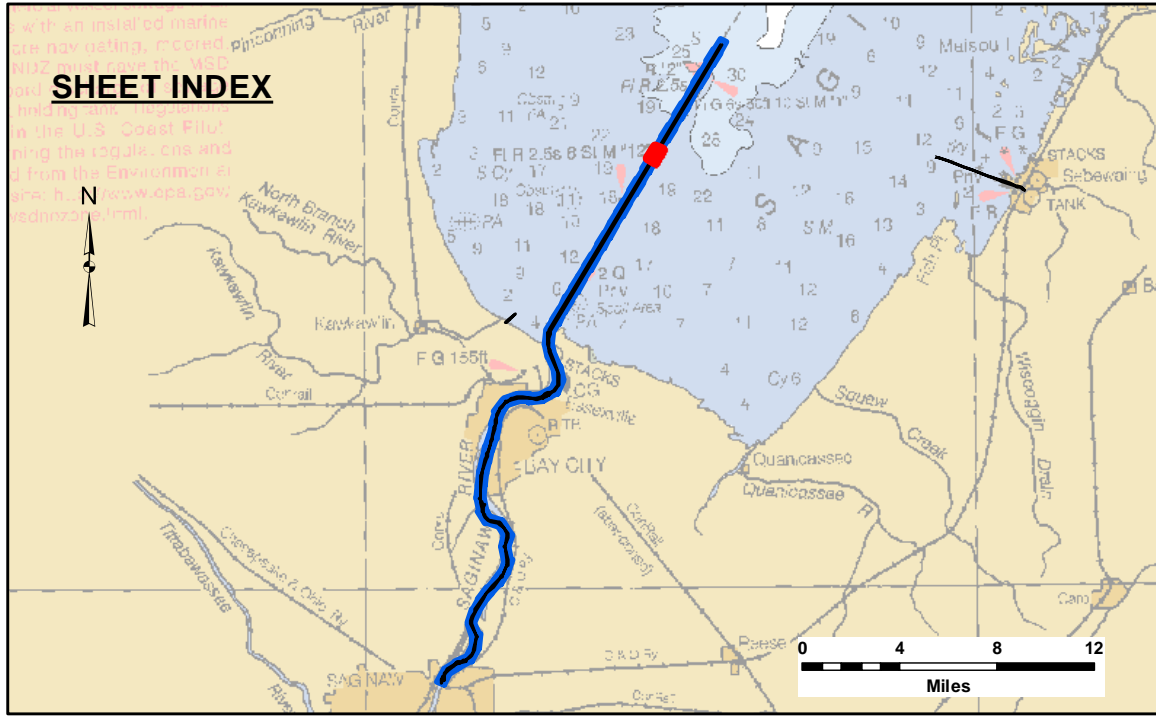
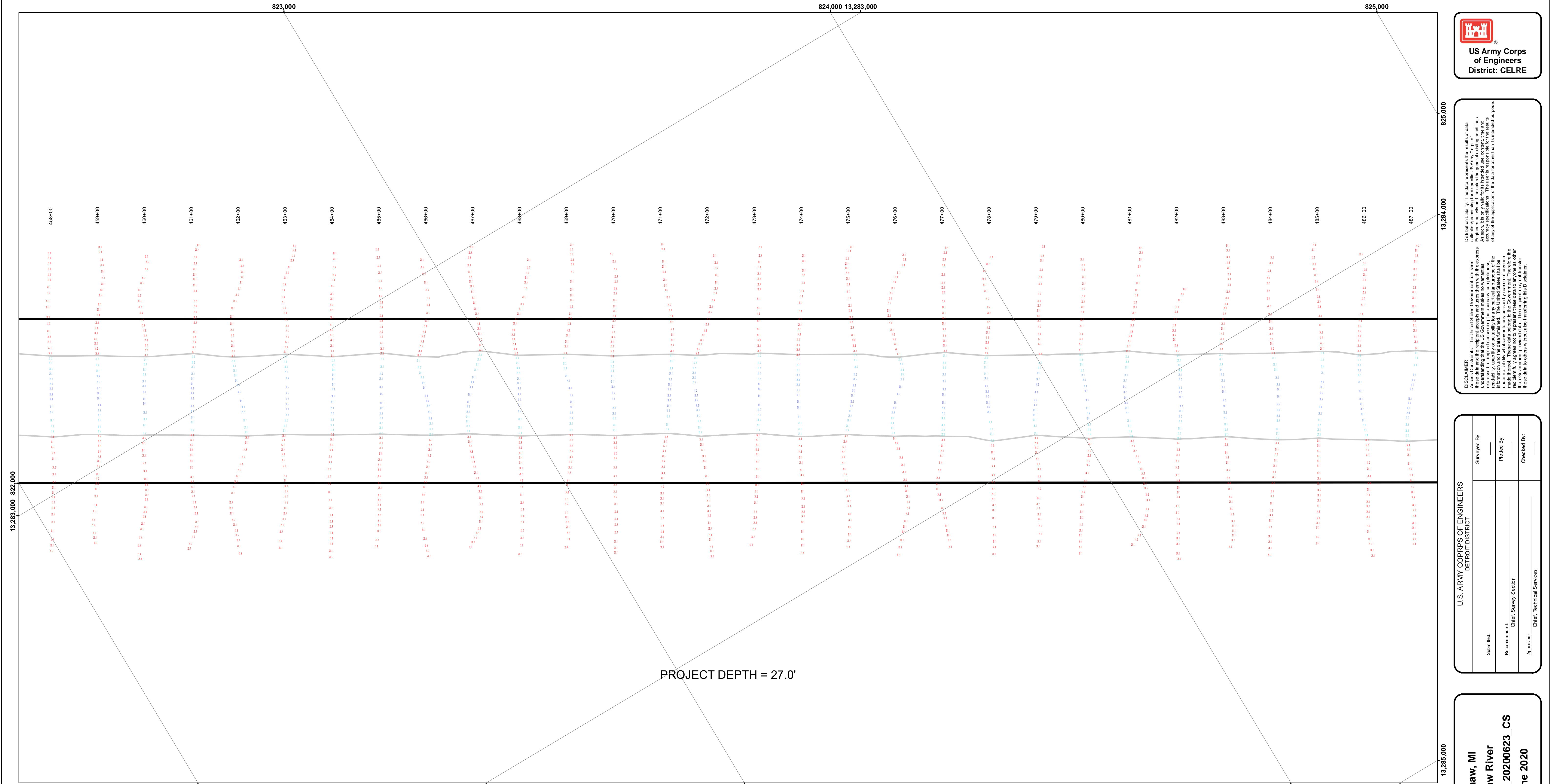
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U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT	Submitted By: _____	Surveyed By: _____
	Recommended By: _____	Plotted By: _____
	Checked By: _____	Checked By: _____

Saginaw, MI
Saginaw River
SH_01_SAG_20200625_CS
25 June 2020

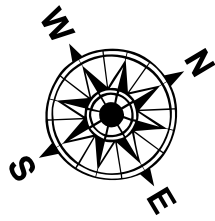
Sheet Reference Number
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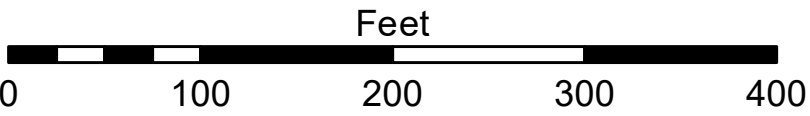


- LEGEND**
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US Army Corps of Engineers
District: CELRE

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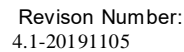
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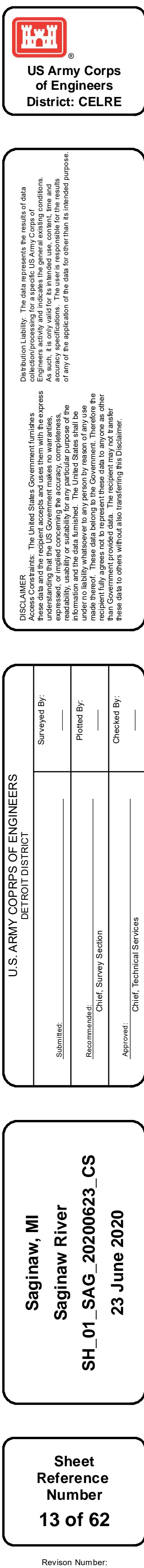
U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT	Surveyed By:
	Submitted:
	Recommended: Chief, Survey Section
	Filed By:
	Checked By:
	Approved: Chief, Technical Services

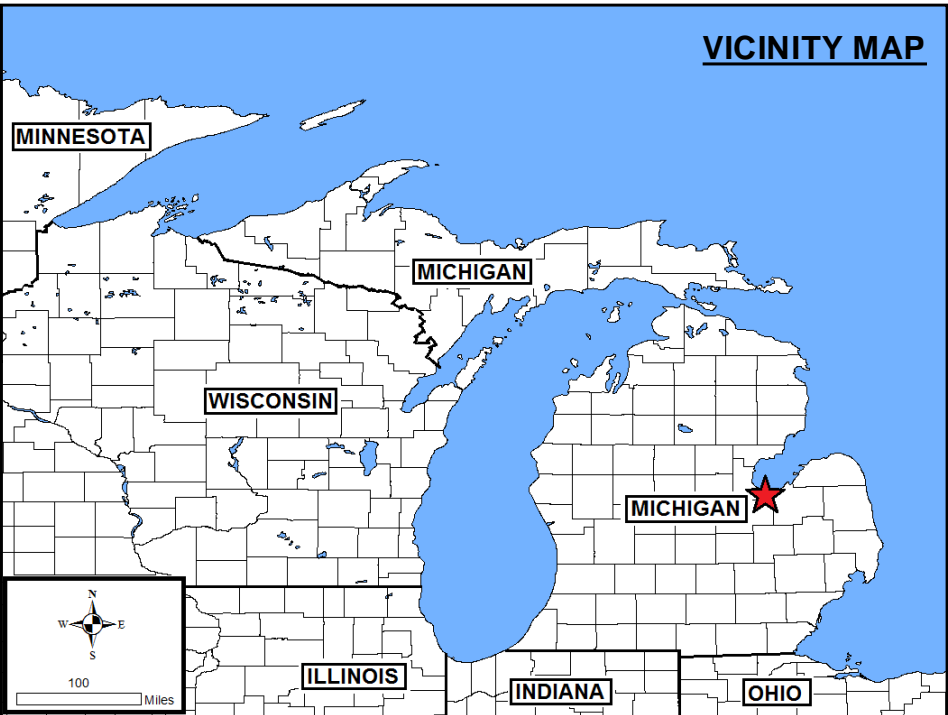
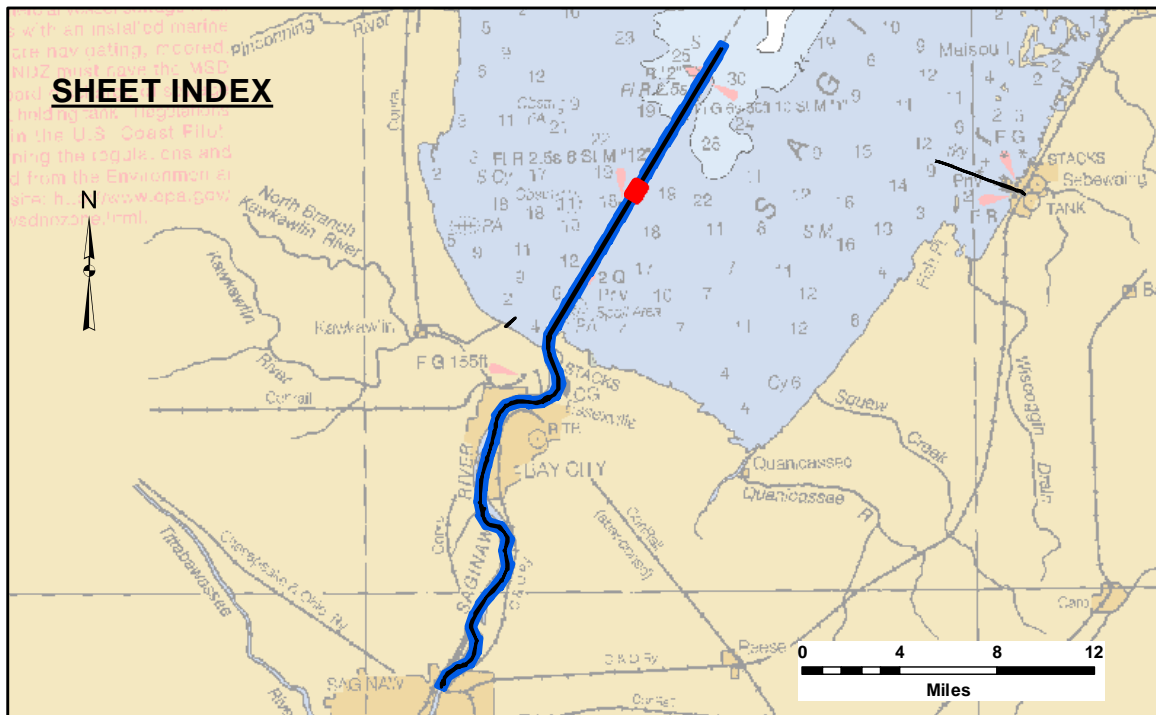
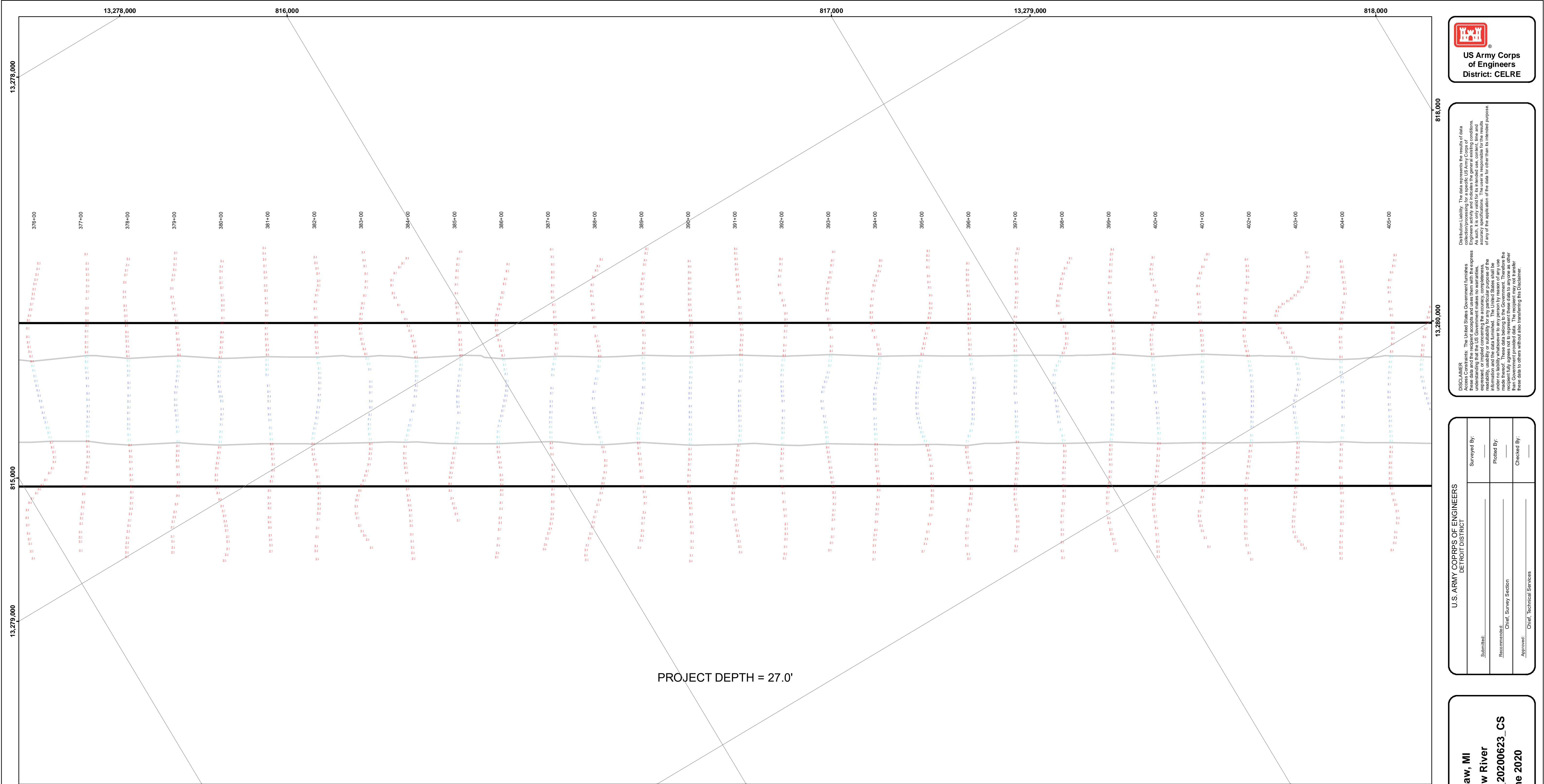
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SH_01_SAG_20200623_CS
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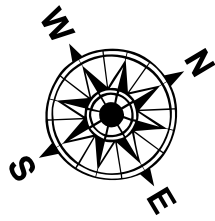




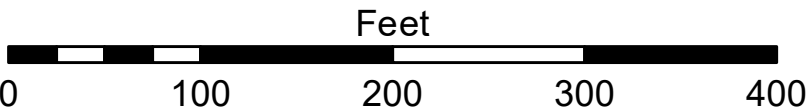


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1 inch = 100 feet



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2016 AERIAL PHOTOGRAPHY DATA SOURCE: USGS. ALL COORDINATES ARE IN U.S. SURVEY FEET.



US Army Corps of Engineers
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DETROIT DISTRICT

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Plotted By:

Checked By:

Saginaw, MI

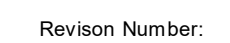
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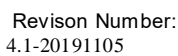
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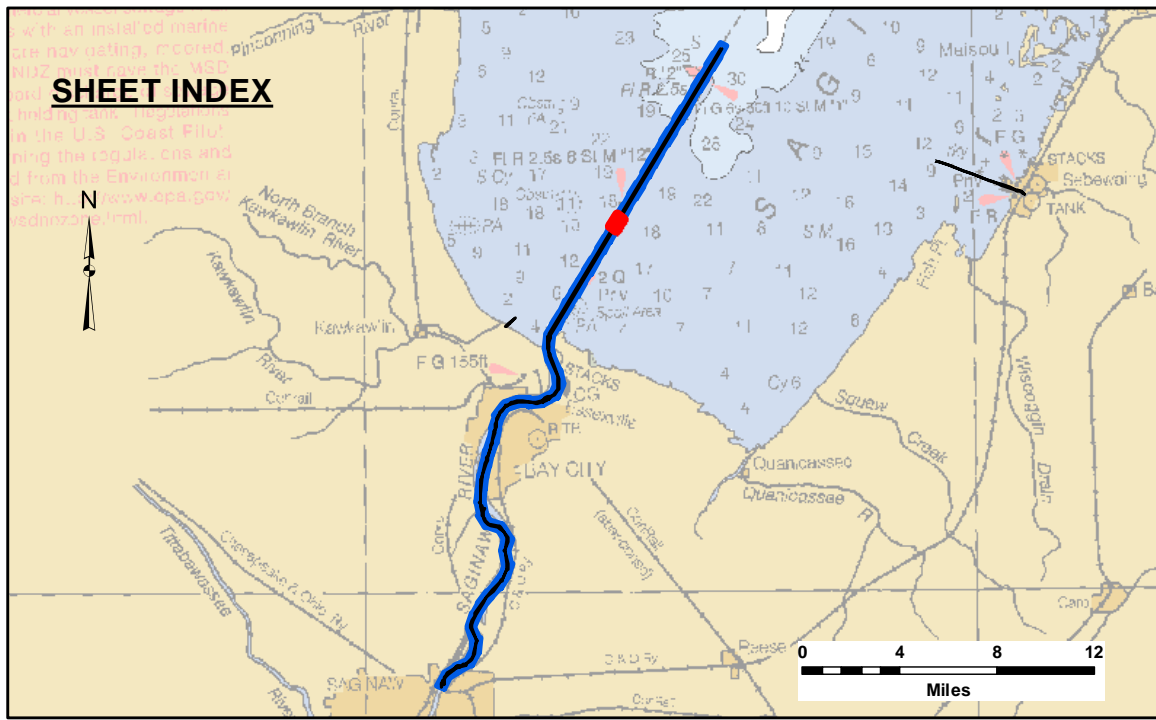
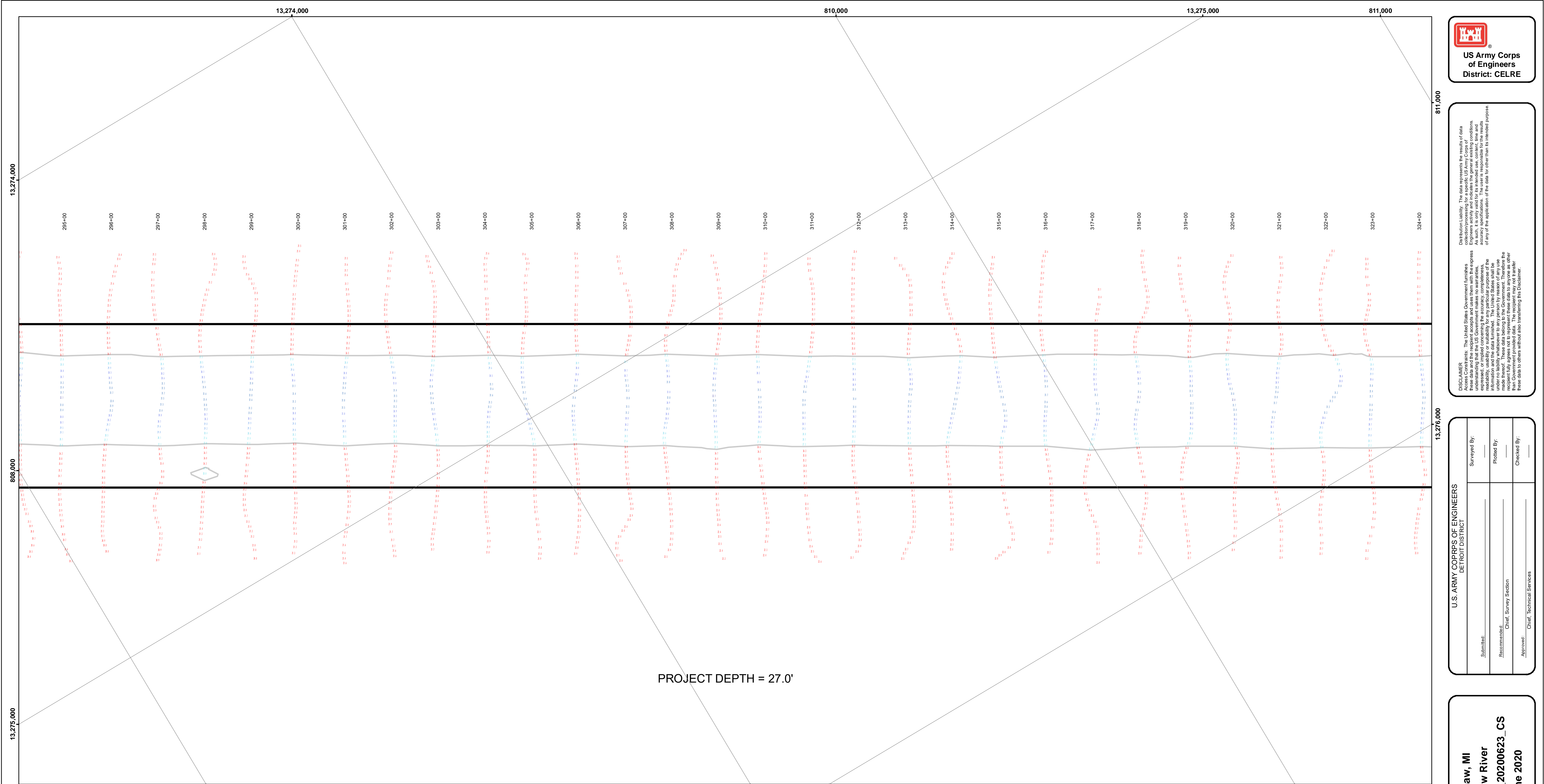
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0 100 200 300 400 Feet

North Arrow

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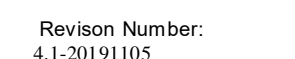
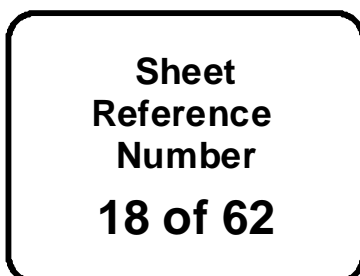
POSITIONING: APPLANIX POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS.
MOTION COMPENSATION: APPLANIX POS-MV4
SONAR: R2SONIC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM)
SOFTWARE: HYPACK

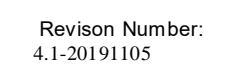
2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS
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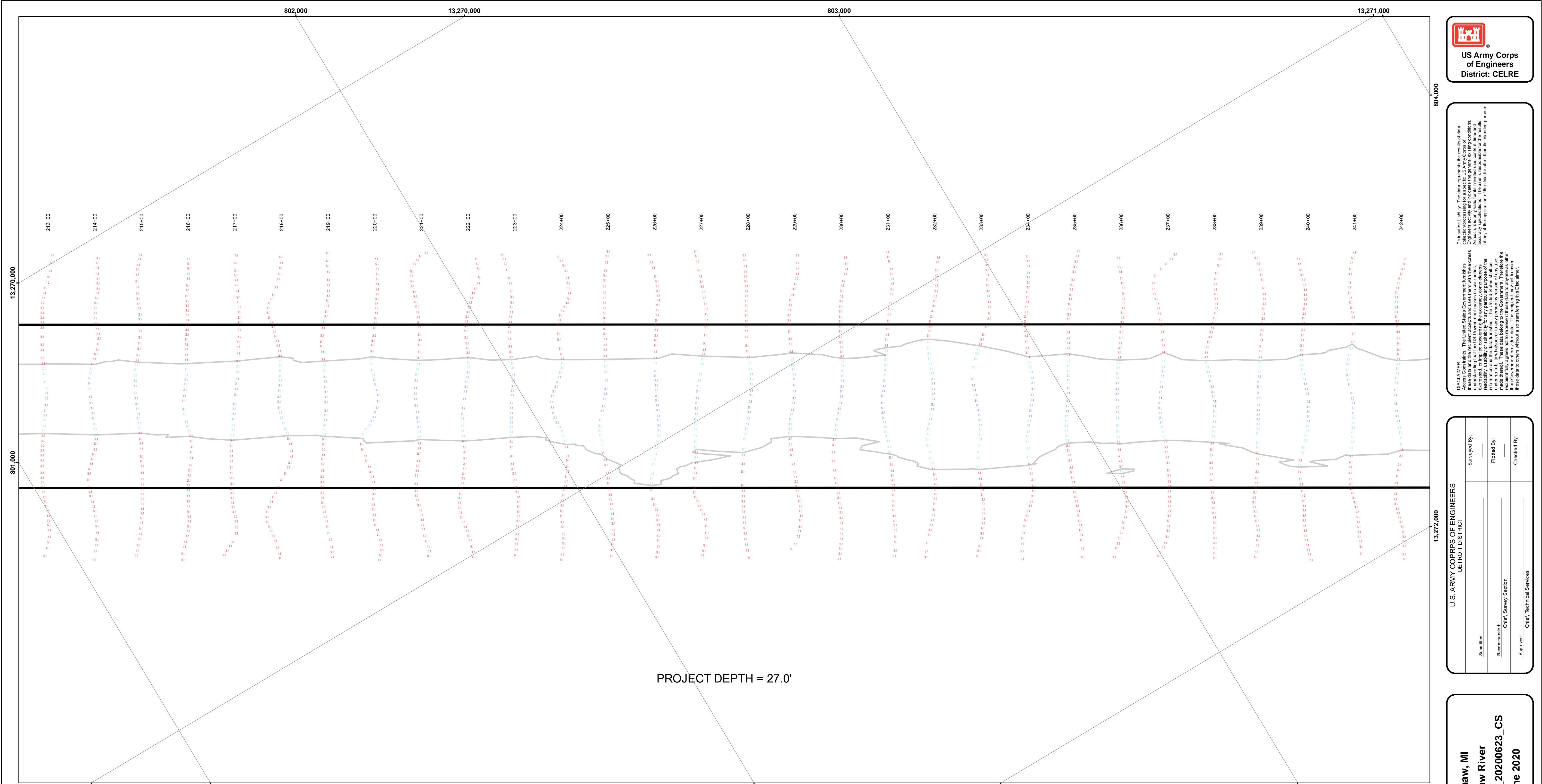
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SOFTWARE: HYPACK

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS

ALL COORDINATES ARE IN U.S. SURVEY FEET.

US Army Corps of Engineers
District: CELRE

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DETROIT DISTRICT

Submitted By: _____

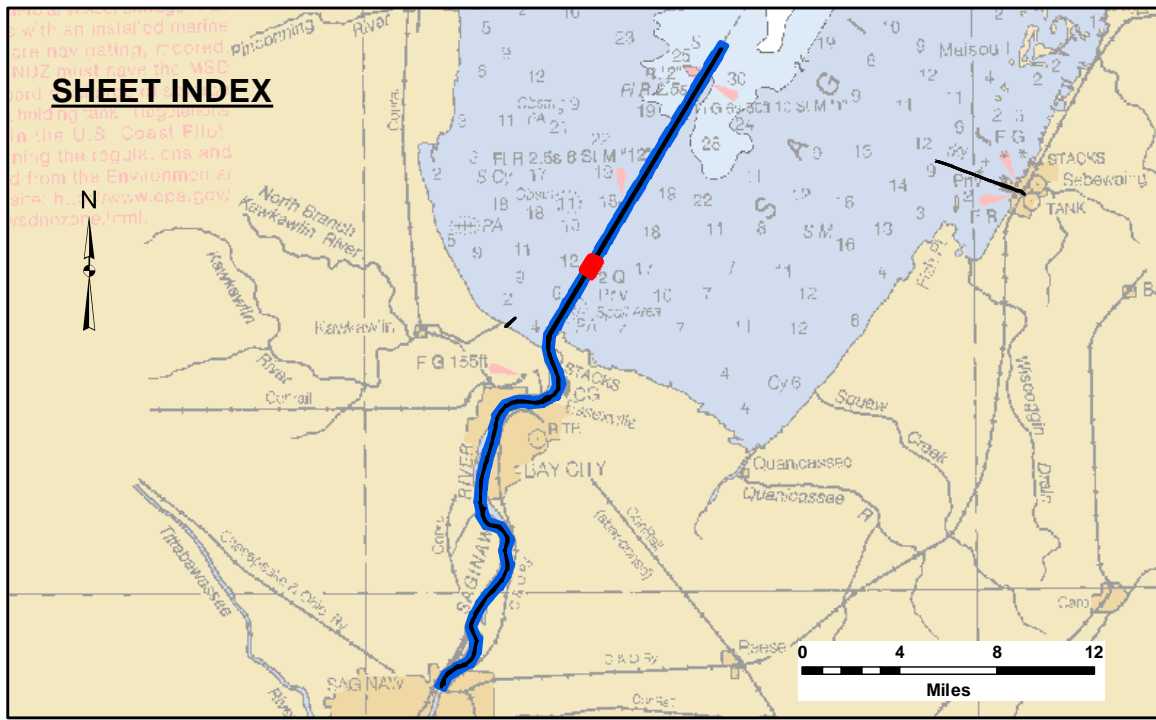
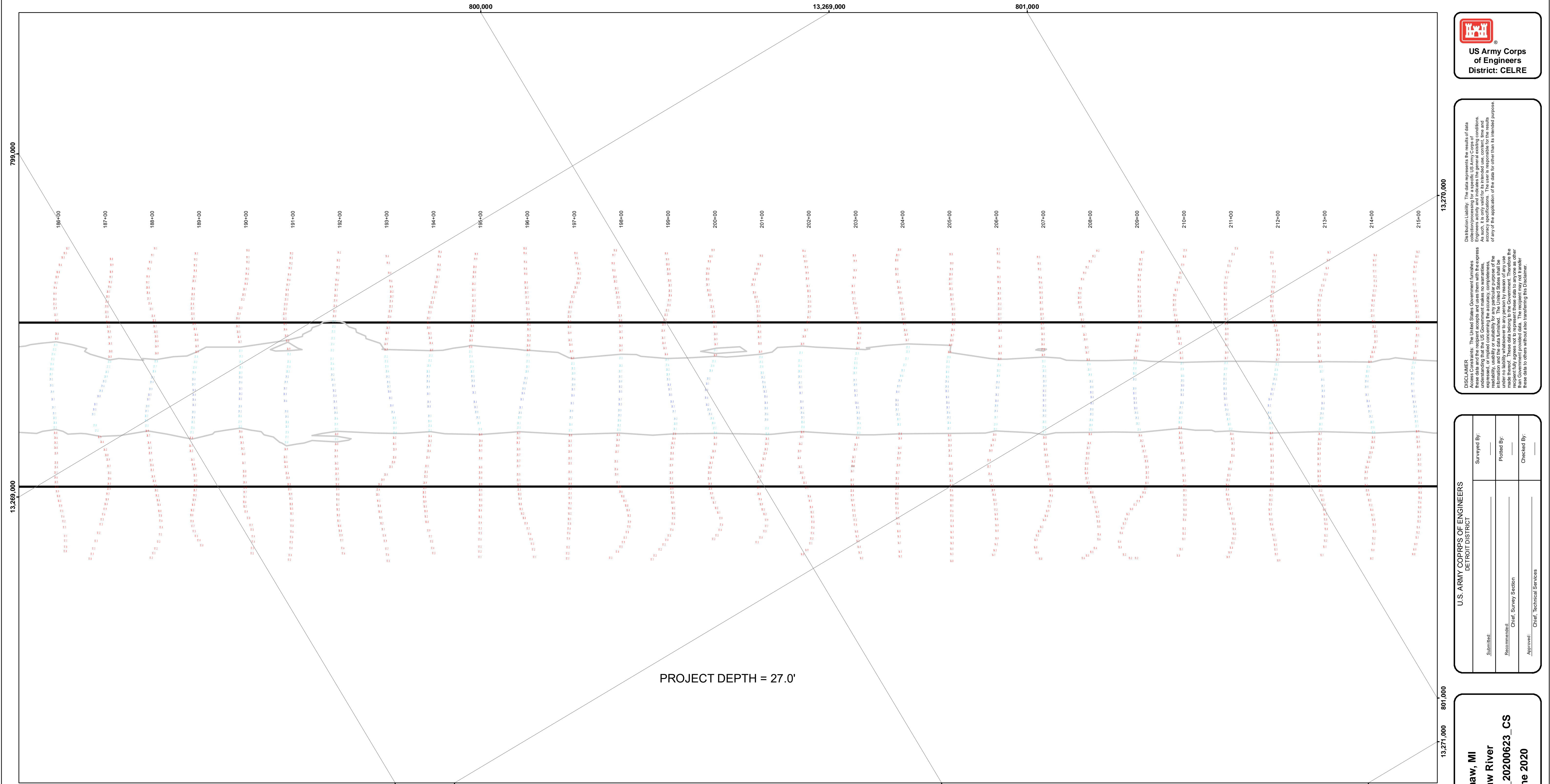
Reviewed By: _____

Checked By: _____

Saginaw, MI
Saginaw River
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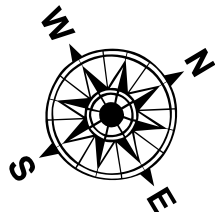
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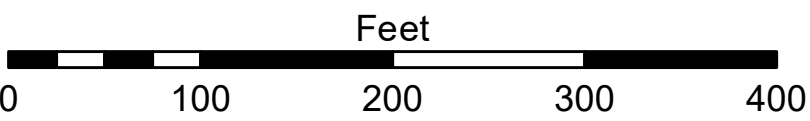


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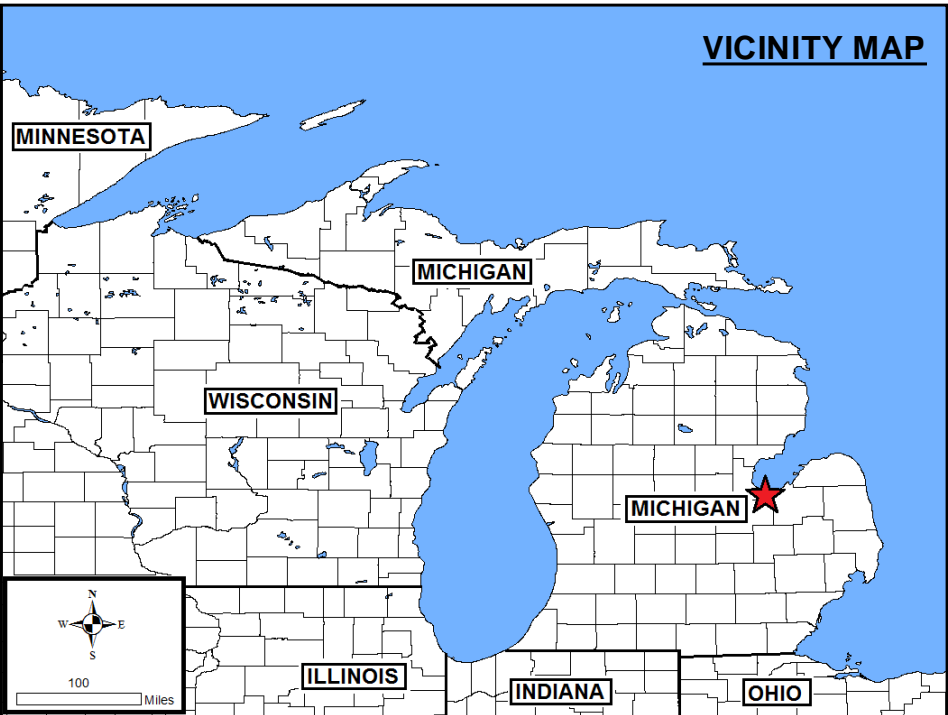
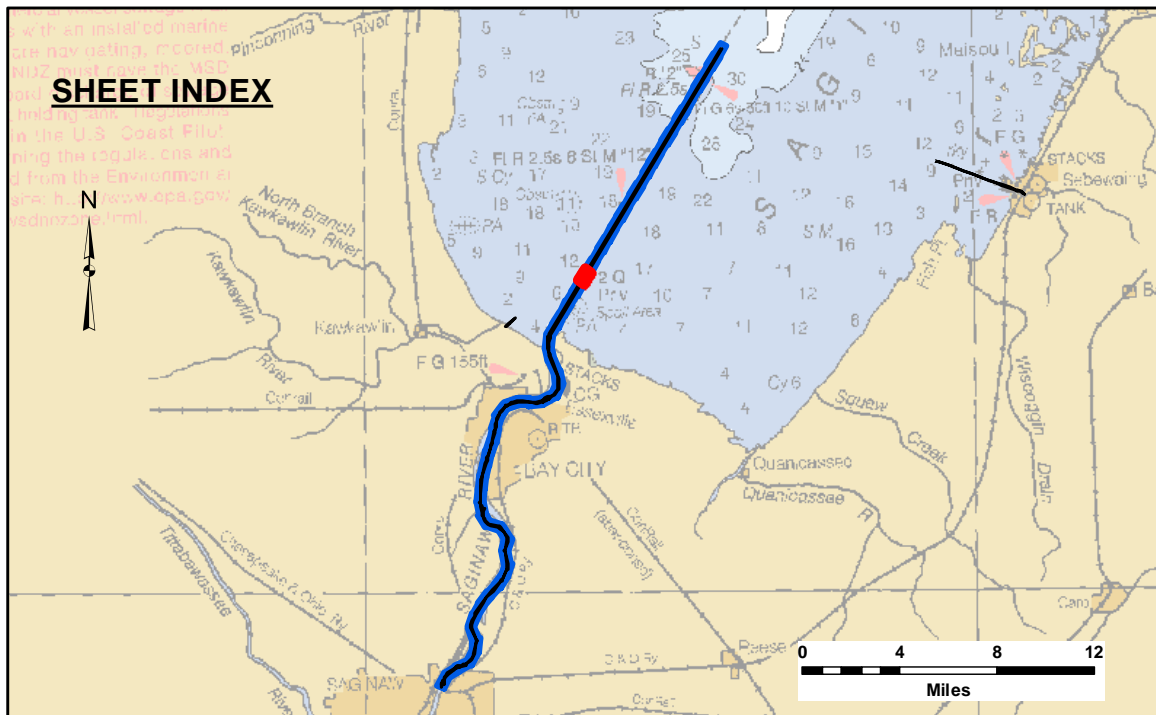
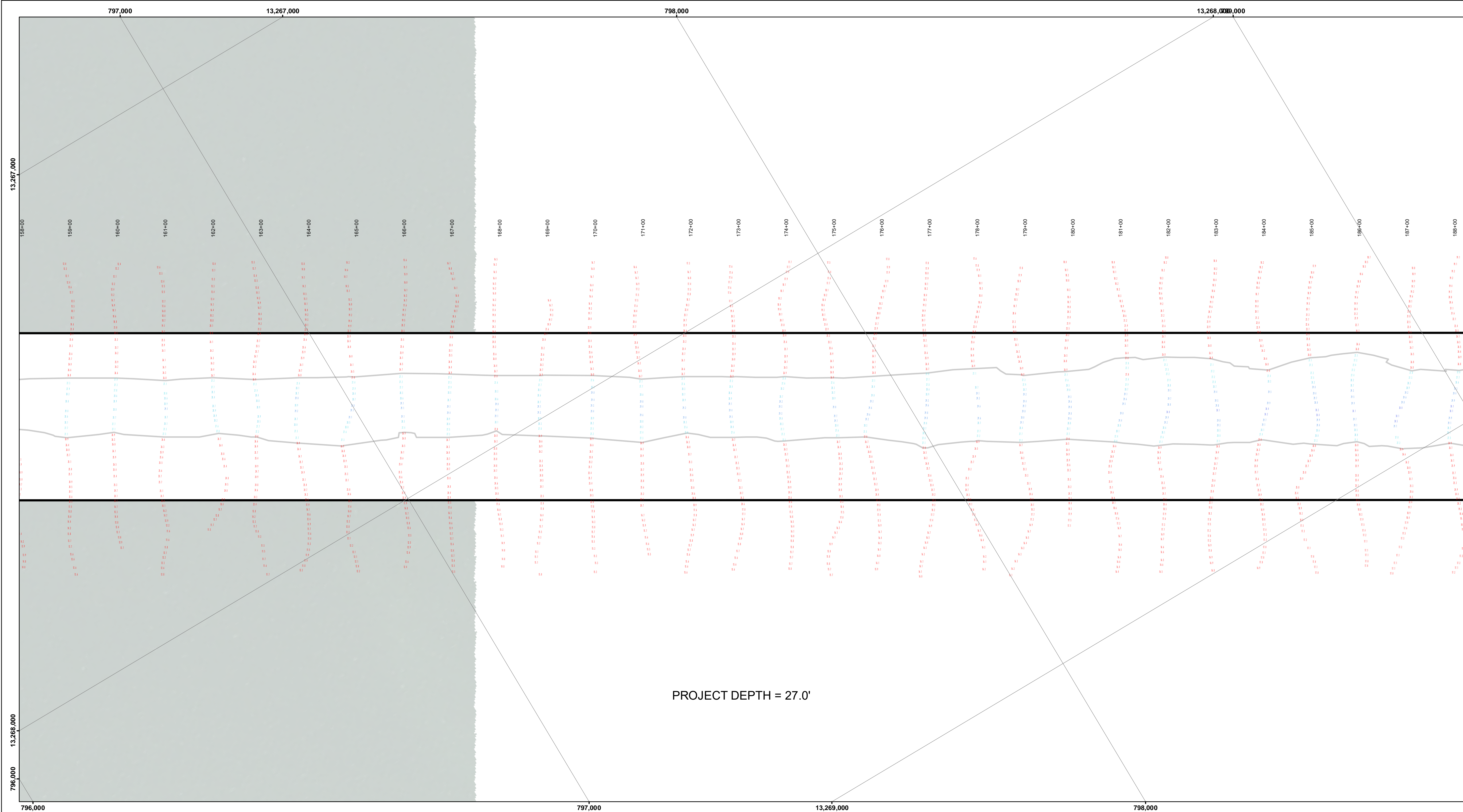
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	Plotted By:
	Checked By:

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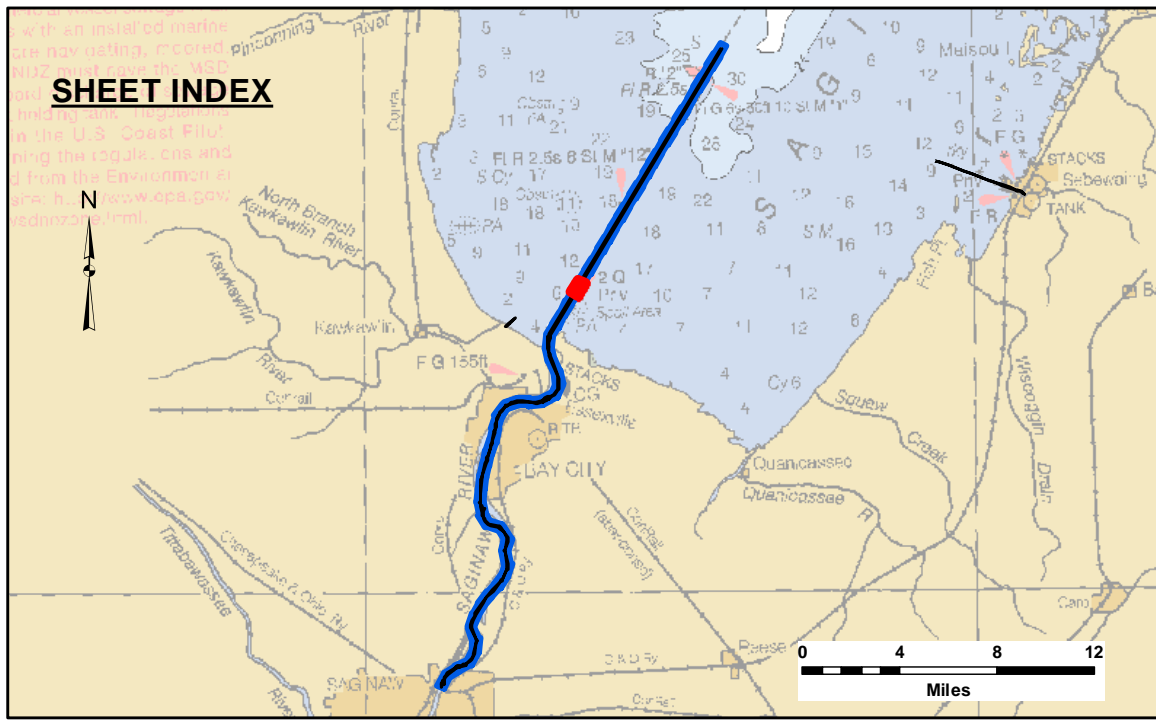
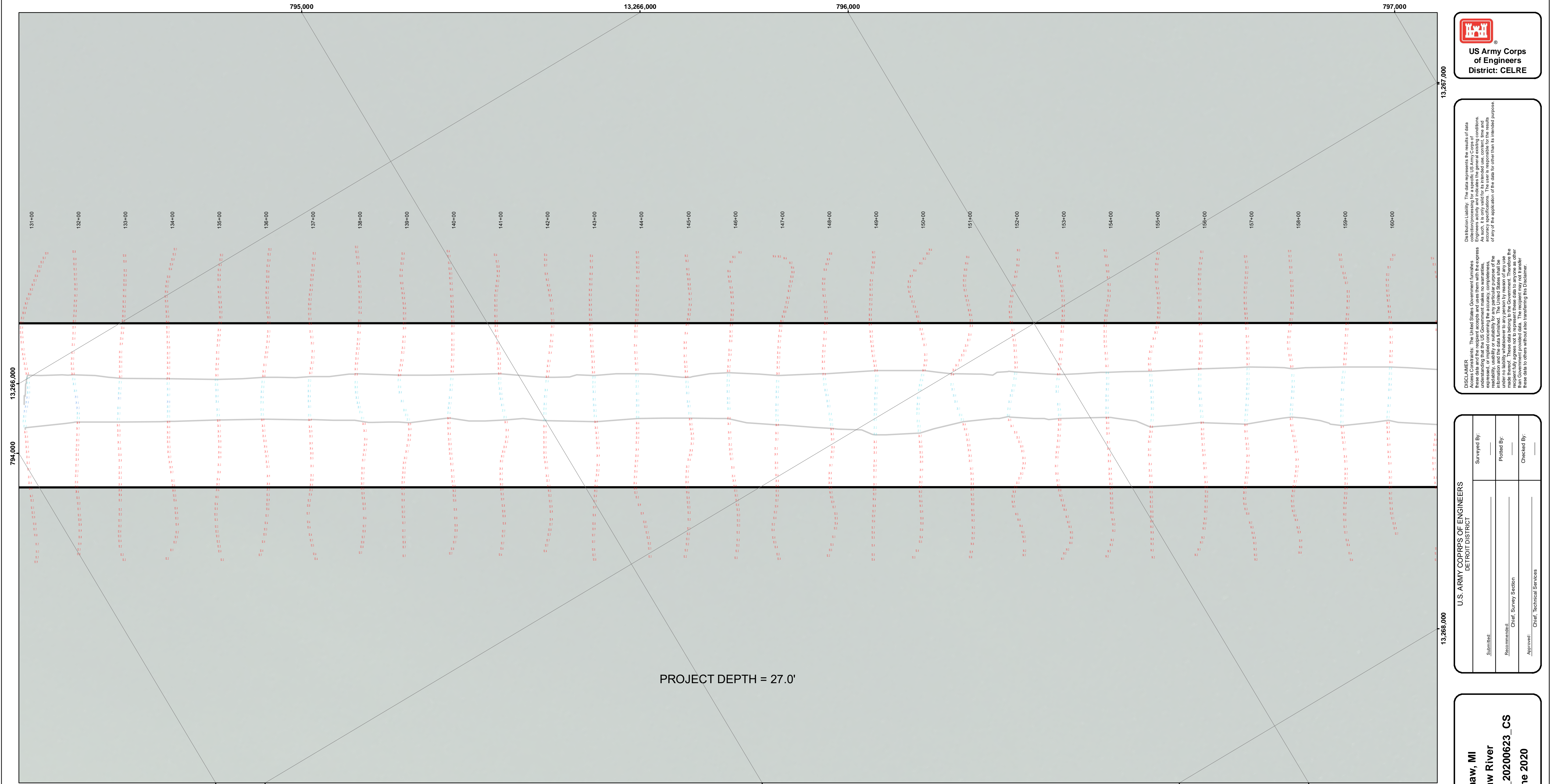
U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

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

Chief, Survey Section
Chief, Technical Services

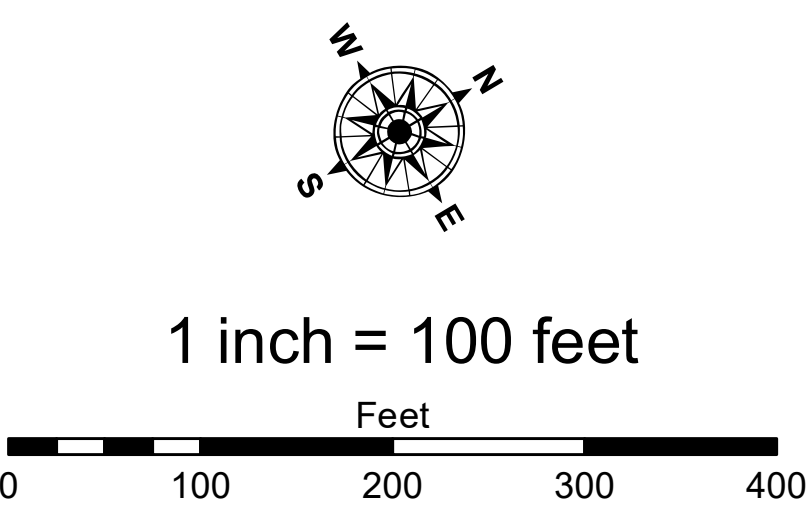
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District: CELRE

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U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

Surveyed By:

Plotted By:

Checked By:

Saginaw, MI

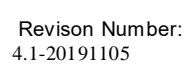
Saginaw River

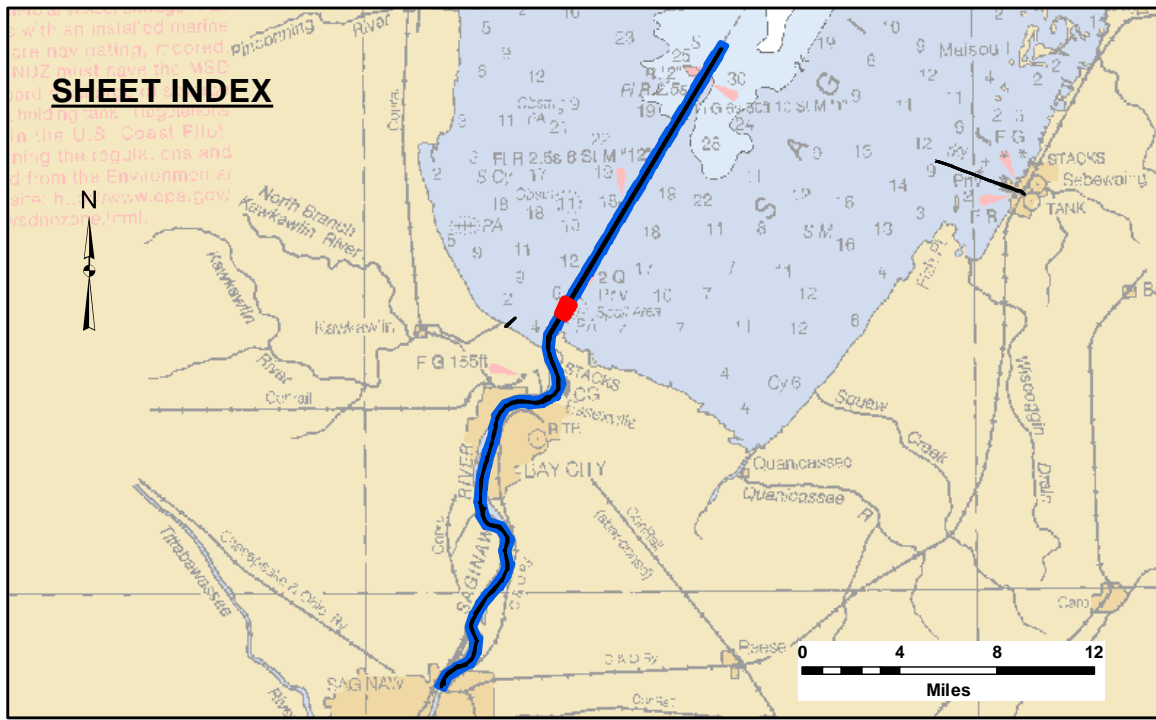
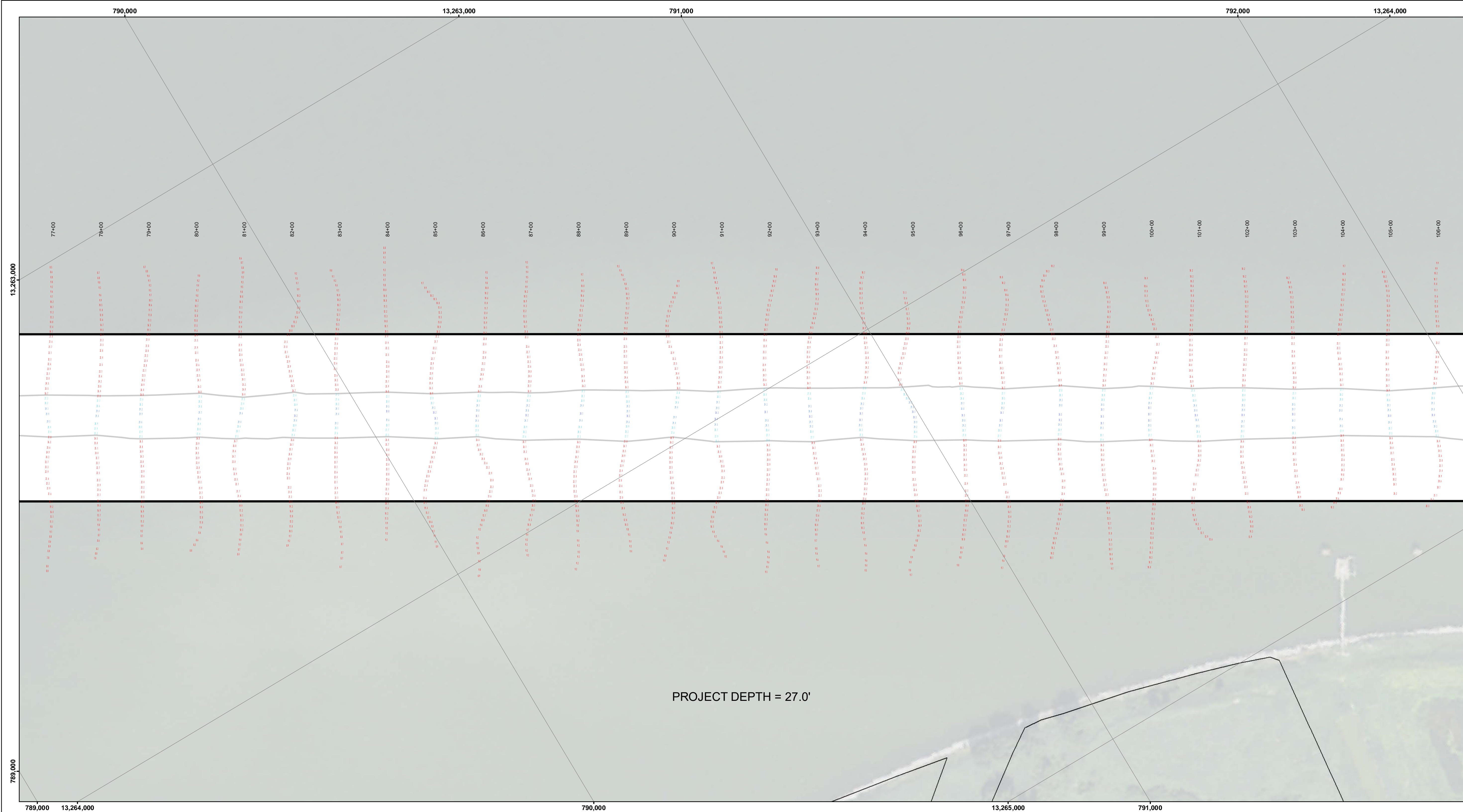
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23 June 2020

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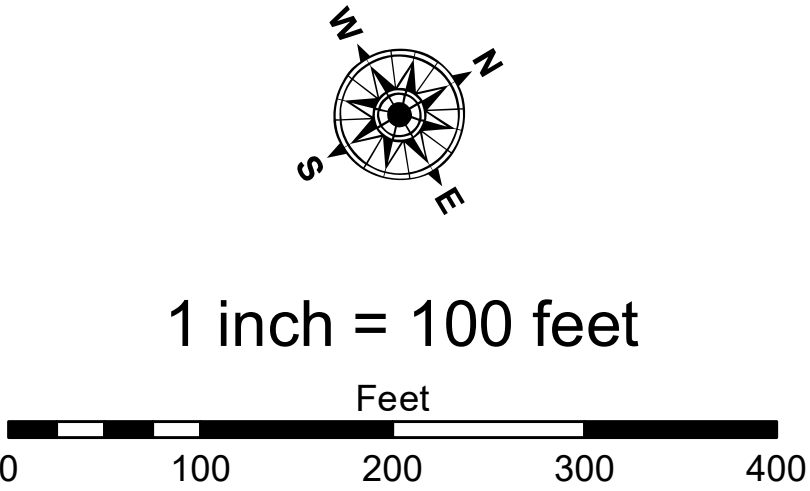
Revision Number:
4.1-20191105





- 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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POSITIONING APPLIXAN POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS. MOTION COMPENSATION: APPLIXAN POS-MV4 SONAR: RS2SONIC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM) SOFTWARE: HYPACK

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS ALL COORDINATES ARE IN U.S. SURVEY FEET.



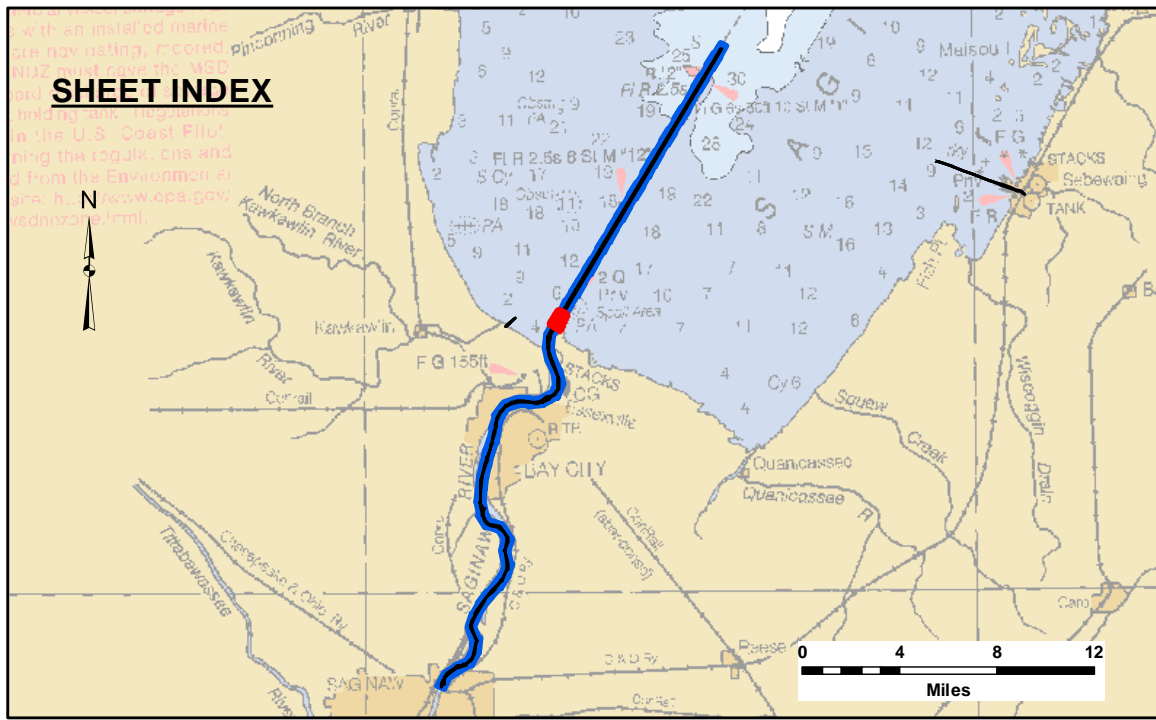
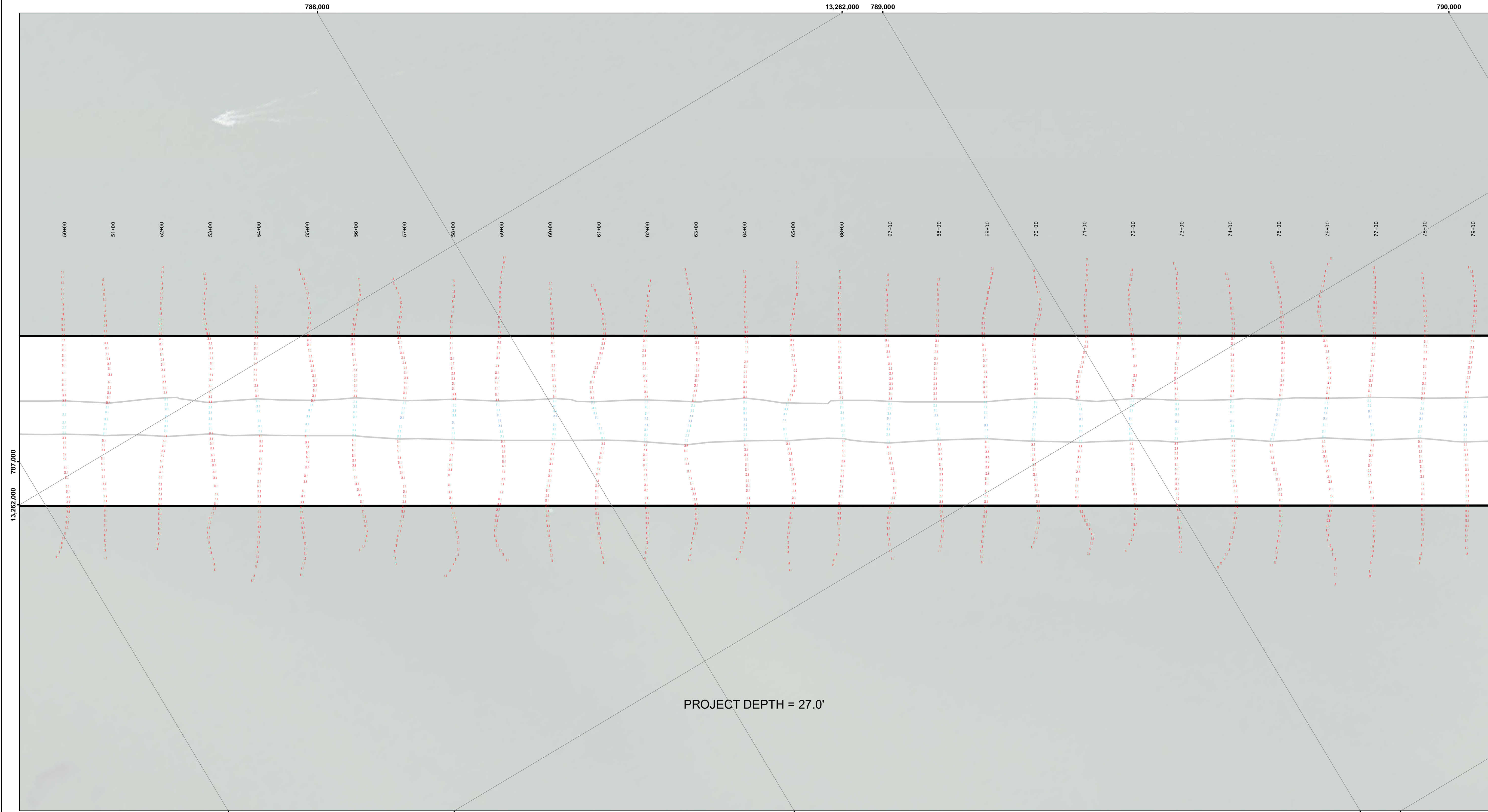
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Submitted:	Surveyed By:
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	Checked By:

Saginaw, MI
Saginaw River
SH_01_SAG_20200609_CS
09 June 2020

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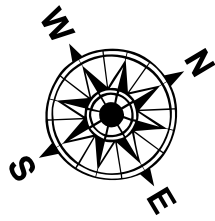


LEGEND

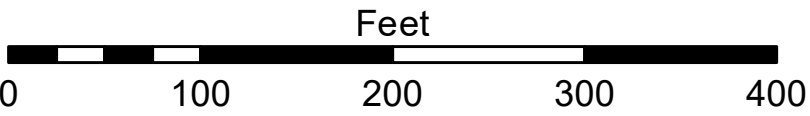
- Cable Submarine
- - Cable Overhead
- Placement Area
- Beacon, General
- Contour Lines
- Channel_Limits

SOUNDING LEGEND

- LESS THAN PROJECT DEPTH
- PROJECT DEPTH
- PROJECT DEPTH +1'
- PROJECT DEPTH +2'
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1 inch = 100 feet



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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: HYPACK

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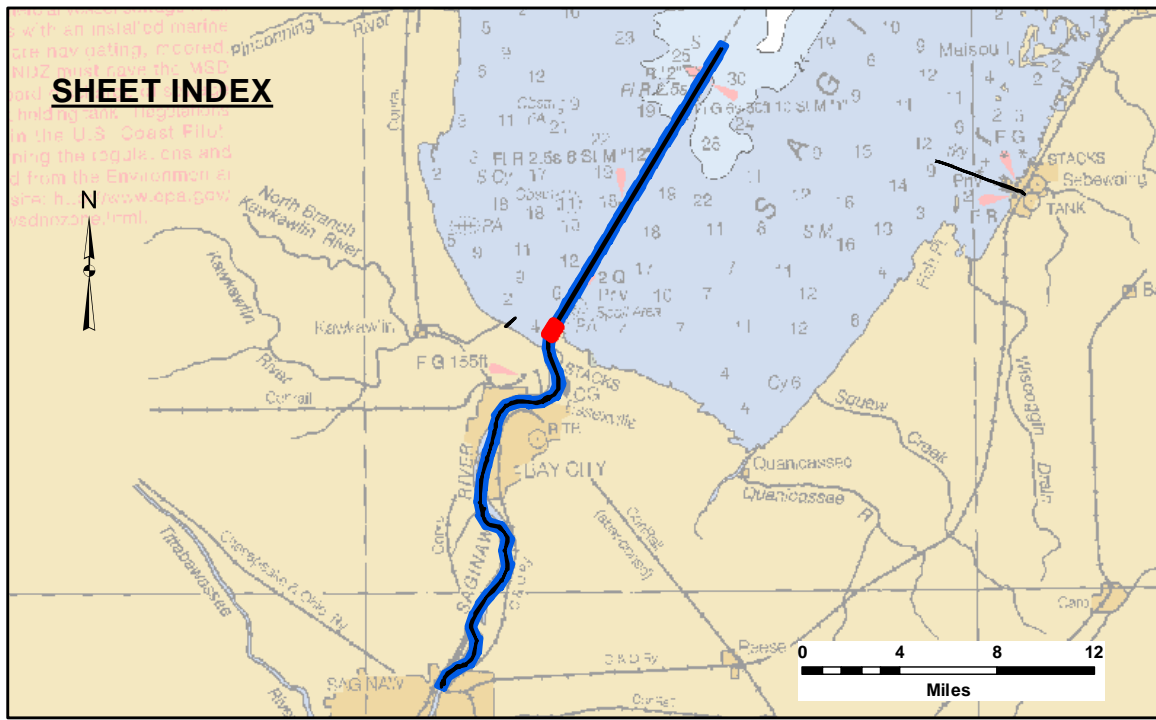
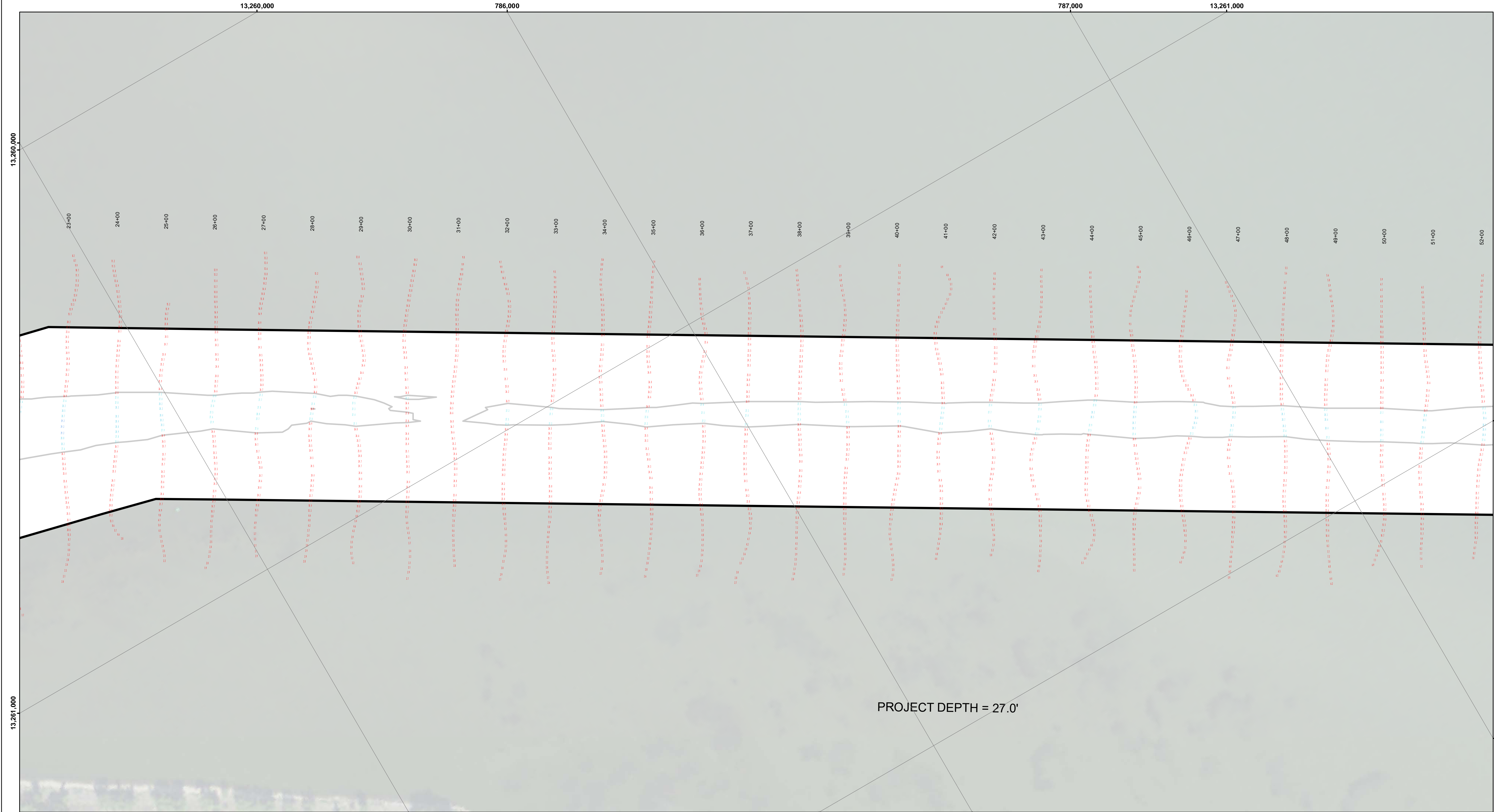
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	Plotted By: _____
	Checked By: _____

Saginaw, MI Saginaw River SH_01_SAG_20200609_CS 09 June 2020

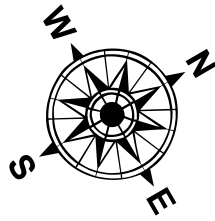
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Revision Number:
4.1-20191105

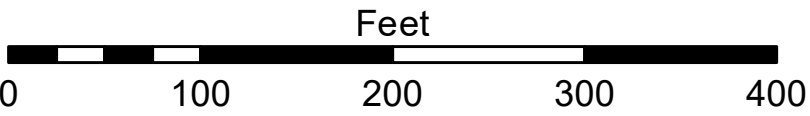


- LEGEND**
- Cable Submarine
 - - Cable Overhead
 - Placement Area
 - Beacon, General
 - Contour Lines
 - Channel_Limits

- SOUNDING LEGEND**
- LESS THAN PROJECT DEPTH
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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

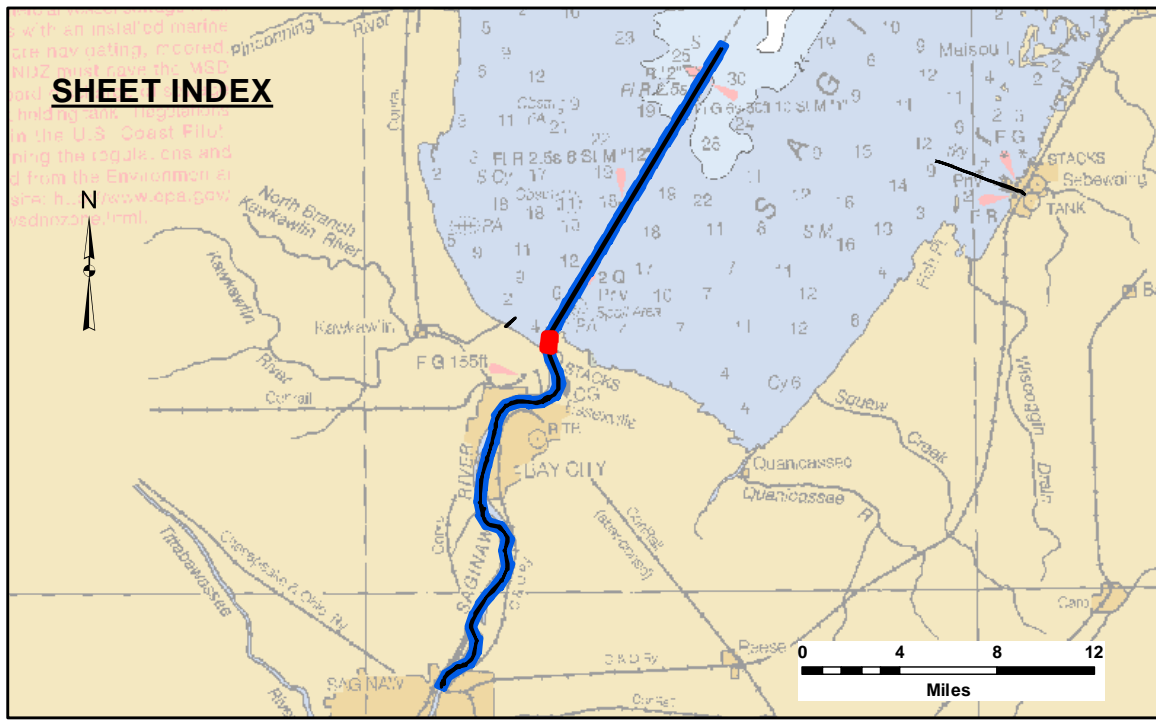
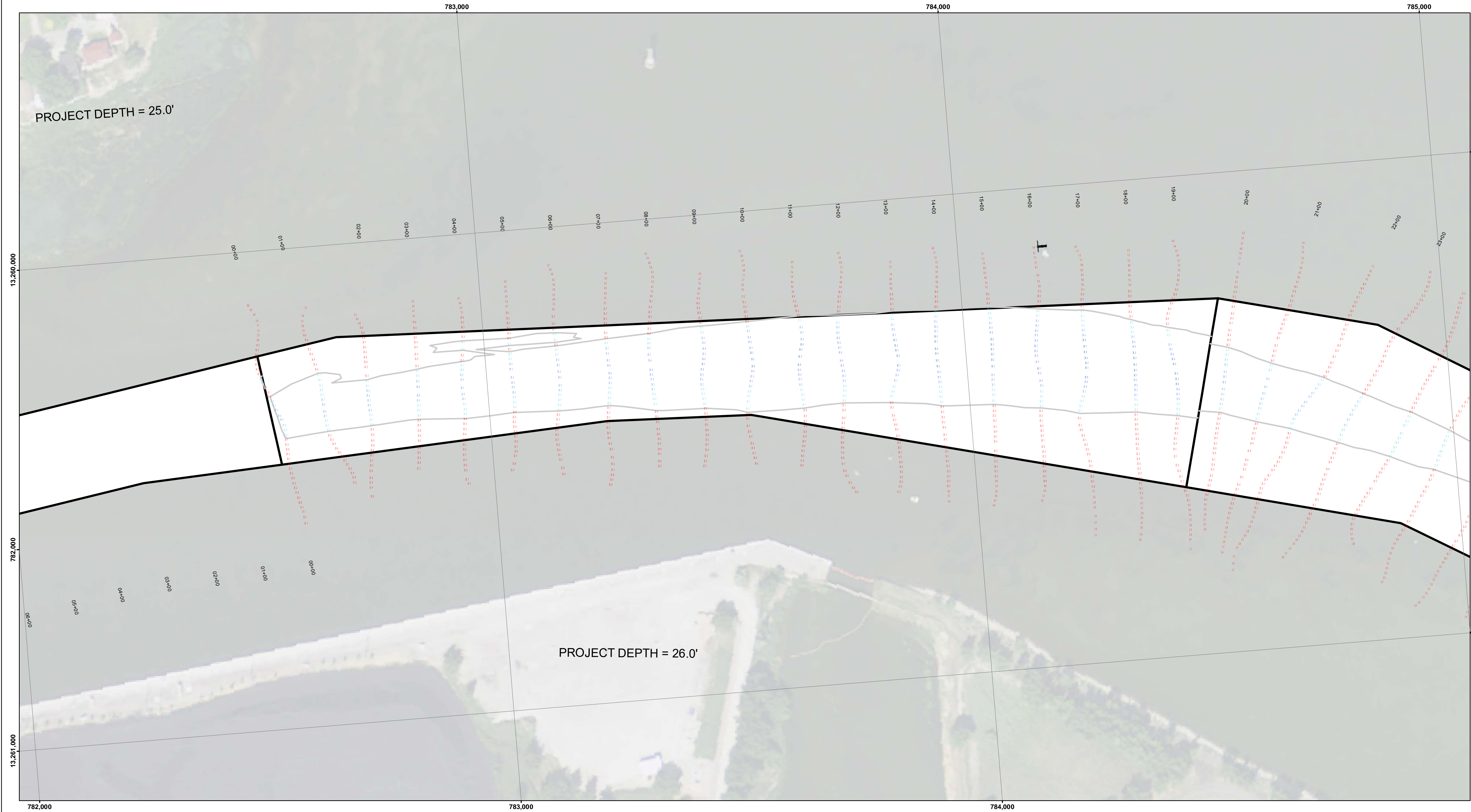
Saginaw River

SH_01_SAG_20200609_CS

09 June 2020

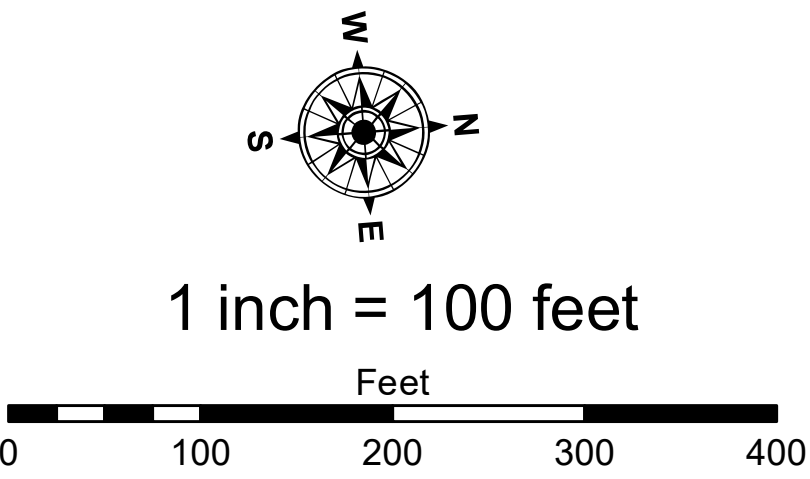
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- LEGEND**
- Cable Submarine
 - - Cable Overhead
 - Placement Area
 - ⊥ Beacon, General
 - Contour Lines
 - ▭ Channel_Limits

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

Saginaw, MI
Saginaw River
SH_01_SAG_20200609_CS
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