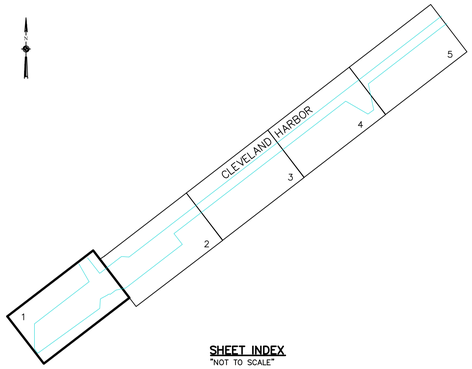



**SHEET INDEX**
"NOT TO SCALE"

| SOUNDING COLOR LEGEND | |
|---|---|
| | DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH |
| | DEPTHS AT OR BELOW PROJECT DEPTH |
| XX.X | PROJECT DEPTH |

| LEGEND OF SYMBOLS | |
|---|---|
| 17+00 | CHANNEL STATIONING |
| ⊙ 417 | CHANNEL CORNER |
| ◎ H.L.F. | HARBOR LINE CORNER |
| | FEDERAL CHANNEL |
| | HARBOR LINE |
| | SUBMARINE CABLE |
| | CAN BUOY |
| | NUN BUOY |
| | LIGHTED BUOY |
| | FIXED LIGHT |
| | LIGHT HOUSE |
| | SUBMERGED WRECK |

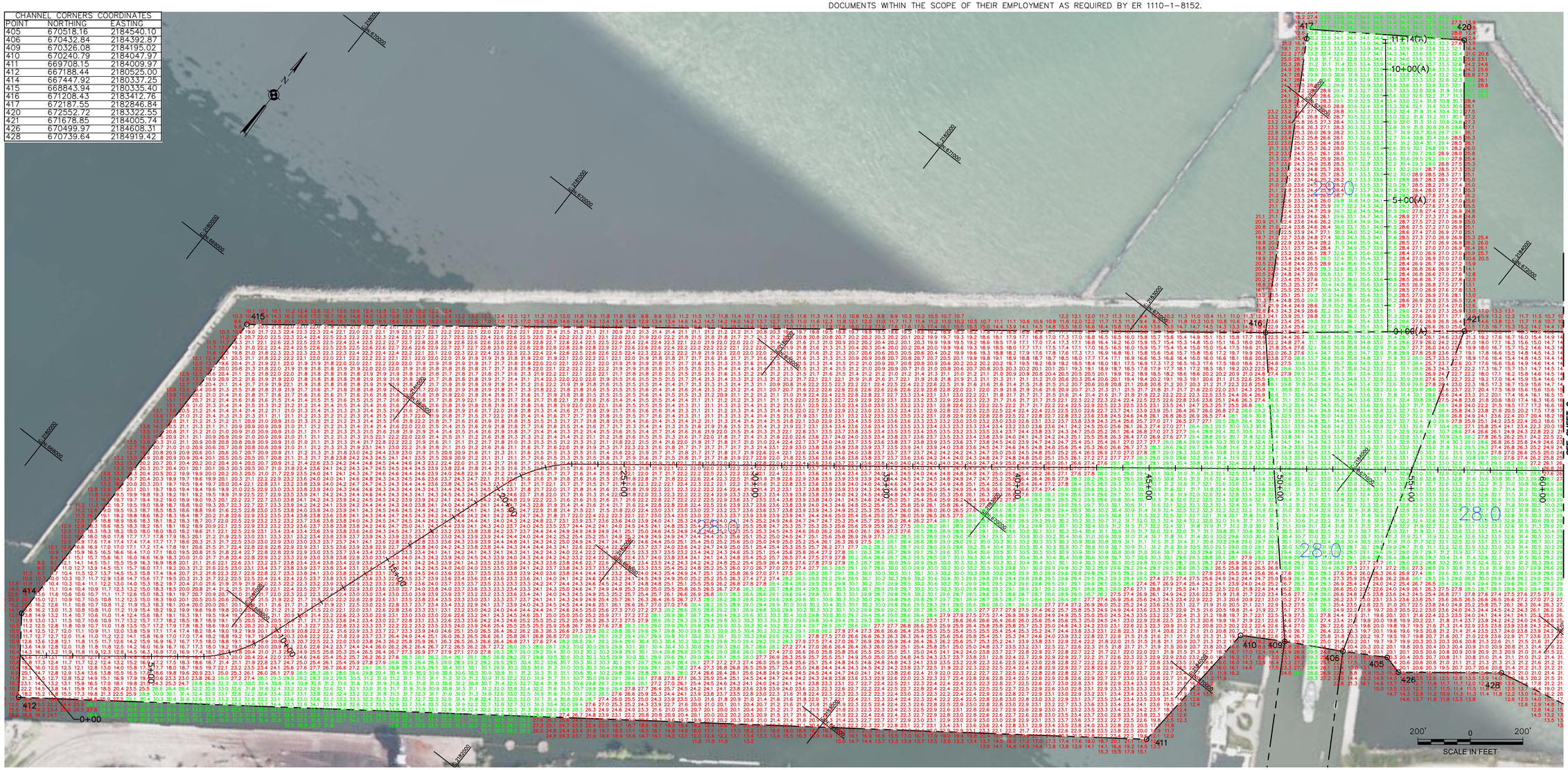
SITE SPECIFIC NOTES:

1. PROJECT DEPTHS AND SOUNDINGS ARE REFERRED TO LOW WATER DATUM OF 569.2 FEET IGLD 1985.
2. HORIZONTAL CONTROL IS REFERRED TO NORTH AMERICAN DATUM 1983 (2011 ADJUSTMENT) OHIO STATE PLANE COORDINATE SYSTEM–NORTH ZONE, U.S. SURVEY FEET.
3. SOUNDINGS SHOWN REPRESENT THE SHOALEST SOUNDING SORTED FROM FULL MULTIBEAM COVERAGE USING A 50' X 20' HYPACK MATRIX.
4. SOUNDINGS WERE TAKEN BY THE BUFFALO DISTRICT ARMY CORPS OF ENGINEERS BY B. VERSO AND PARTY ON JUNE 30, 2025 THROUGH AUGUST 13, 2025 USING:
   GPS POSITIONING: GPS BASE STATION W/RTK TIDES
   SONAR HEAD: 200 KHZ, R2 SONIC 2024 MULTIBEAM
   1X2 DEGREE BEAMS
   160 DEGREE ARC
   HEAVE PITCH AND ROLL: APPLANIX POS–MV VER. 5
   VELOCITY PROFILER: SONTEK CASTAWAY
   HYPACK SURVEY SOFTWARE
   SURVEY LAUNCH "WITMER"
5. THE SOUNDING INFORMATION DEPICTED ON THE MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION AT THAT TIME.
6. THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OUTLINED IN CORPS OF ENGINEERS HYDROGRAPHIC SURVEY MANUAL EM 1110–2–1003.
7. THIS PROJECT WAS DESIGNED BY THE BUFFALO DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110–1–8152.




**VICINITY MAP**
"NOT TO SCALE"

| CHANNEL CORNERS COORDINATES | | |
|---|---|---|
| POINT | NORTHING | EASTING |
| 405 | 670518.16 | 2184540.10 |
| 406 | 670432.84 | 2184392.87 |
| 409 | 670326.08 | 2184195.02 |
| 410 | 670240.79 | 2184047.97 |
| 411 | 669708.15 | 2184009.97 |
| 412 | 667188.44 | 2180525.00 |
| 414 | 667447.92 | 2180337.25 |
| 415 | 668843.94 | 2180335.40 |
| 416 | 671208.43 | 2183412.76 |
| 417 | 672187.55 | 2182846.84 |
| 420 | 672552.72 | 2183322.55 |
| 421 | 671678.85 | 2184005.74 |
| 426 | 670499.97 | 2184608.31 |
| 428 | 670739.64 | 2184919.42 |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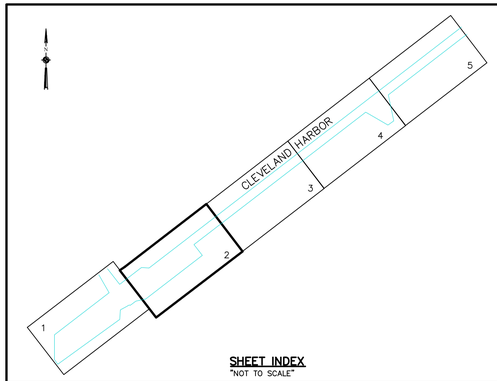
***SAFETY PAYS***




SHEET INDEX
"NOT TO SCALE"

## SOUNDING COLOR LEGEND

- DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH
- DEPTHS AT OR BELOW PROJECT DEPTH
- XX.X PROJECT DEPTH

## LEGEND OF SYMBOLS

| | |
|---|---|
| 17+00 | CHANNEL STATIONING |
| 417 | CHANNEL CORNER |
| H.L.F. | HARBOR LINE CORNER |
| | FEDERAL CHANNEL |
| | HARBOR LINE |
| | SUBMARINE CABLE |
| | CAN BUOY |
| | NUN BUOY |
| | LIGHTED BUOY |
| | FIXED LIGHT |
| | LIGHT HOUSE |
| | SUBMERGED WRECK |

SITE SPECIFIC NOTES:

1. PROJECT DEPTHS AND SOUNDINGS ARE REFERRED TO LOW WATER DATUM OF 569.2 FEET IGLD 1985.
2. HORIZONTAL CONTROL IS REFERRED TO NORTH AMERICAN DATUM 1983 (2011 ADJUSTMENT) OHIO STATE PLANE COORDINATE SYSTEM–NORTH ZONE, U.S. SURVEY FEET.
3. SOUNDINGS SHOWN REPRESENT THE SHOALEST SOUNDING SORTED FROM FULL MULTIBEAM COVERAGE USING A 50' X 20' HYPACK MATRIX.
4. SOUNDINGS WERE TAKEN BY THE BUFFALO DISTRICT ARMY CORPS OF ENGINEERS BY B. VERSO AND PARTY ON JUNE 30, 2025 THROUGH AUGUST 13, 2025 USING:
   GPS POSITIONING: GPS BASE STATION W/RTK TIDES
   SONAR HEAD: 200 KHZ, R2 SONIC 2024 MULTIBEAM
   1X2 DEGREE BEAMS
   160 DEGREE ARC
   HEAVE PITCH AND ROLL; APPLANIX POS–MV VER. 5
   VELOCITY PROFILER; SONTEK CASTAWAY
   HYPACK SURVEY SOFTWARE
   SURVEY LAUNCH "WITMER"
5. THE SOUNDING INFORMATION DEPICTED ON THE MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION AT THAT TIME.
6. THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OUTLINED IN CORPS OF ENGINEERS HYDROGRAPHIC SURVEY MANUAL EM 1110–2–1003.
7. THIS PROJECT WAS DESIGNED BY THE BUFFALO DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110–1–8152.




VICINITY MAP
"NOT TO SCALE"

| CHANNEL CORNERS COORDINATES | | |
|---|---|---|
| POINT | NORTHING | EASTING |
| 11 | 670971.81 | 2185623.98 |
| 402 | 672197.72 | 2184678.88 |
| 422 | 672625.03 | 2185233.28 |
| 426 | 670499.97 | 2184608.31 |
| 429 | 670849.80 | 2185465.57 |
| 590 | 672596.76 | 2185655.20 |
| 591 | 674310.93 | 2187879.24 |
| 598 | 673914.95 | 2188184.42 |
| 599 | 673305.67 | 2188654.00 |




US Army Corps of Engineers
Buffalo District

Original sheet size = ANSI D

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Drawn by: KPL
Checked by: DMD
Reviewed by:
Aaron C. Kennerly, PLS
Chief, Survey Section
Approved by:
Vincent M. Lovullo
Date: September 19, 2025
Chief, NY/PA Navigation and Maintenance Section

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U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
BUFFALO, NEW YORK 14207–3199

CLEVELAND HARBOR, OH

PROJECT CONDITION SOUNDINGS 2025

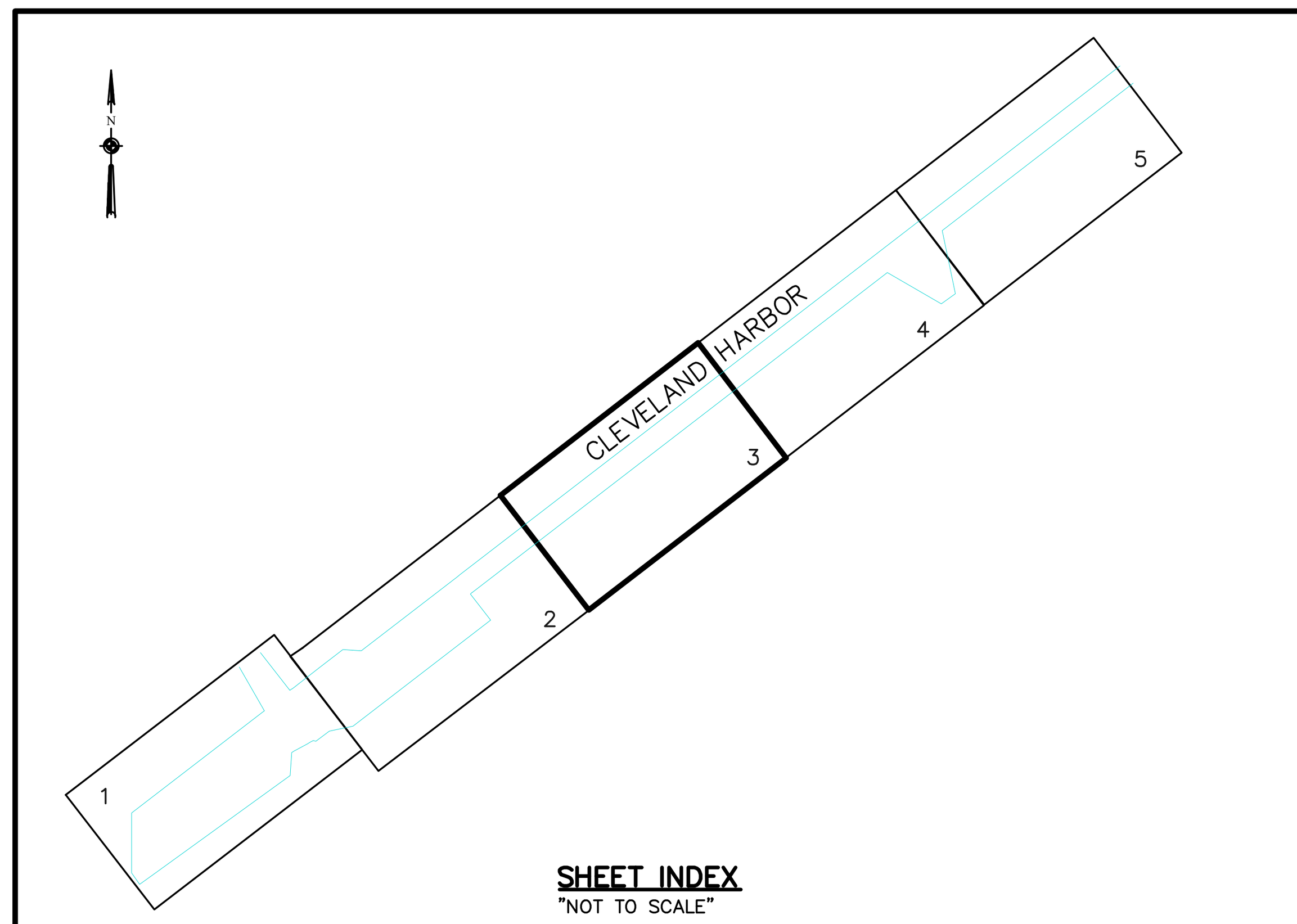
SCALE: 1"=200'

Sheet reference number
VH–102

Sheet 2 of 5

***SUPPORT VALUE ENGINEERING – IT PAYS***

***SAFETY PAYS***

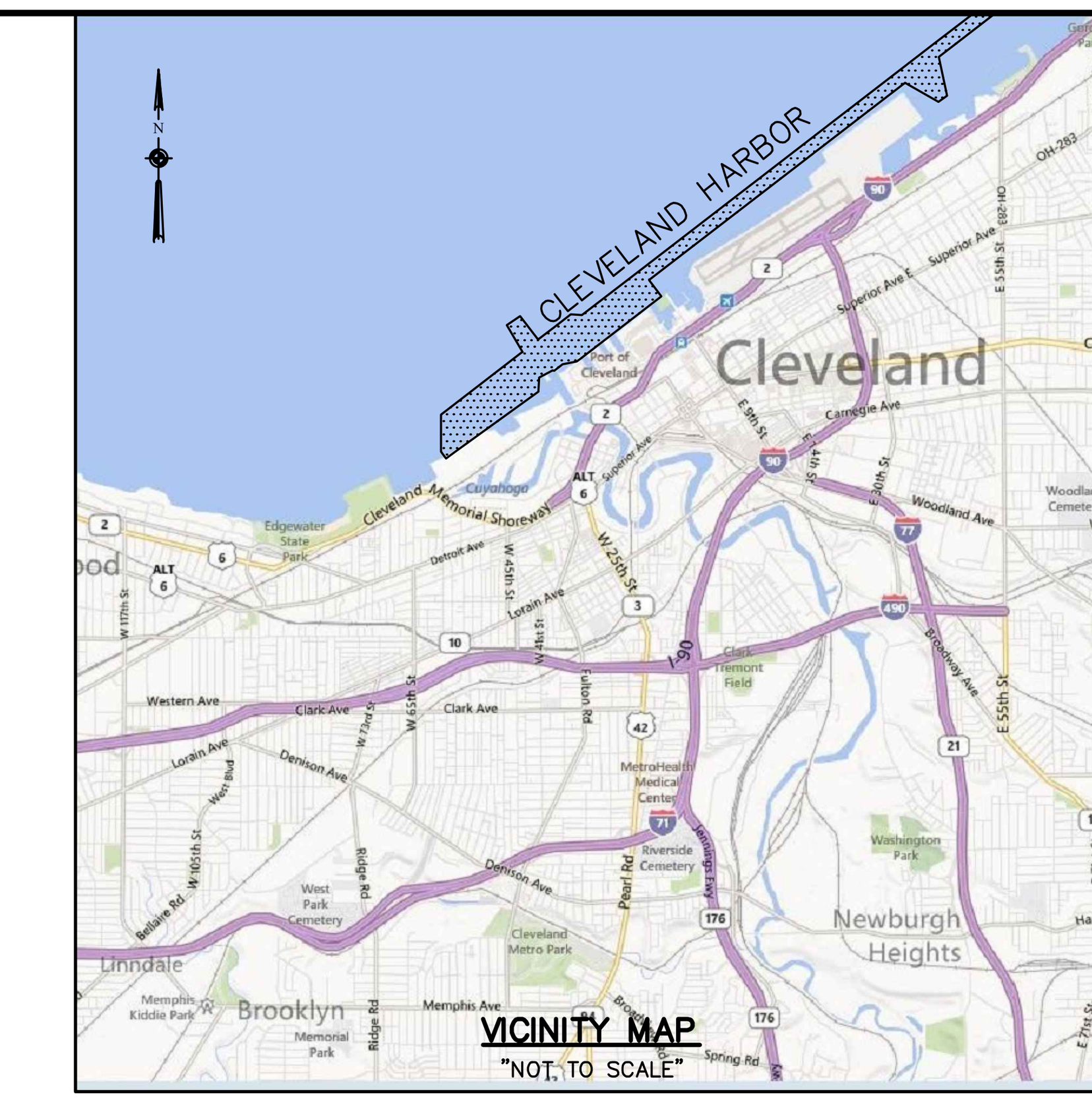



| SOUNDING COLOR LEGEND | |
|---|---|
| (red) | DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH |
| (green) | DEPTHS AT OR BELOW PROJECT DEPTH |
| XX.X | PROJECT DEPTH |

| LEGEND OF SYMBOLS | |
|---|---|
| 17+00 | CHANNEL STATIONING |
| ⊙ 417 | CHANNEL CORNER |
| ◎ H.L.F. | HARBOR LINE CORNER |
| | FEDERAL CHANNEL |
| | HARBOR LINE |
| | SUBMARINE CABLE |
| | CAN BUOY |
| | NUN BUOY |
| | LIGHTED BUOY |
| | FIXED LIGHT |
| | LIGHT HOUSE |
| | SUBMERGED WRECK |

SITE SPECIFIC NOTES:

1. PROJECT DEPTHS AND SOUNDINGS ARE REFERRED TO LOW WATER DATUM OF 569.2 FEET IGLD 1985.
2. HORIZONTAL CONTROL IS REFERRED TO NORTH AMERICAN DATUM 1983 (2011 ADJUSTMENT) OHIO STATE PLANE COORDINATE SYSTEM–NORTH ZONE, U.S. SURVEY FEET.
3. SOUNDINGS SHOWN REPRESENT THE SHOALEST SOUNDING SORTED FROM FULL MULTIBEAM COVERAGE USING A 50' X 20' HYPACK MATRIX.
4. SOUNDINGS WERE TAKEN BY THE BUFFALO DISTRICT ARMY CORPS OF ENGINEERS BY B. VERSO AND PARTY ON JUNE 30, 2025 THROUGH AUGUST 13, 2025 USING:
   GPS POSITIONING: GPS BASE STATION W/RTK TIDES
   SONAR HEAD: 200 KHZ, R2 SONIC 2024 MULTIBEAM
   1X2 DEGREE BEAMS
   160 DEGREE ARC
   HEAVE PITCH AND ROLL; APPLANIX POS–MV VER. 5
   VELOCITY PROFILER; SONTEK CASTAWAY
   HYPACK SURVEY SOFTWARE
   SURVEY LAUNCH "WITMER"
5. THE SOUNDING INFORMATION DEPICTED ON THE MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION AT THAT TIME.
6. THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OUTLINED IN CORPS OF ENGINEERS HYDROGRAPHIC SURVEY MANUAL EM 1110–2–1003.
7. THIS PROJECT WAS DESIGNED BY THE BUFFALO DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110–1–8152.







US Army Corps of Engineers Buffalo District

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Approved by: Vincent M. Lovullo, Chief, NY/PA Navigation and Maintenance Section
Date: September 19, 2025

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U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
BUFFALO, NEW YORK 14207–3199

CLEVELAND HARBOR, OH
**PROJECT CONDITION SOUNDINGS 2025**
SCALE: 1"=200'

Sheet reference number
**VH–103**
Sheet 3 of 5

***SUPPORT VALUE ENGINEERING – IT PAYS***

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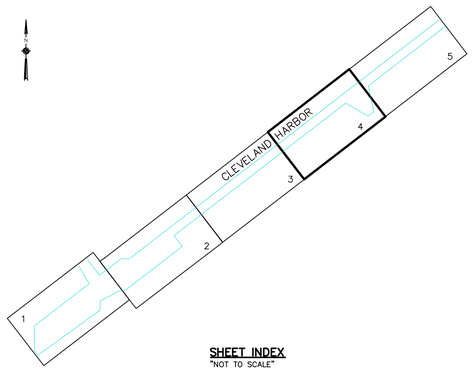
***SAFETY PAYS***




SHEET INDEX
"NOT TO SCALE"

## SOUNDING COLOR LEGEND

- DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH
- DEPTHS AT OR BELOW PROJECT DEPTH
- XX.X PROJECT DEPTH

## LEGEND OF SYMBOLS

| | |
|---|---|
| 17+00 | CHANNEL STATIONING |
| o 417 | CHANNEL CORNER |
| H.L.F. | HARBOR LINE CORNER |
| | FEDERAL CHANNEL |
| | HARBOR LINE |
| | SUBMARINE CABLE |
| | CAN BUOY |
| | NUN BUOY |
| | LIGHTED BUOY |
| | FIXED LIGHT |
| | LIGHT HOUSE |
| | SUBMERGED WRECK |

SITE SPECIFIC NOTES:

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   SONAR HEAD: 200 KHZ, R2 SONIC 2024 MULTIBEAM
   1X2 DEGREE BEAMS
   160 DEGREE ARC
   HEAVE PITCH AND ROLL; APPLANIX POS–MV VER. 5
   VELOCITY PROFILER; SONTEK CASTAWAY
   HYPACK SURVEY SOFTWARE
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VICINITY MAP
"NOT TO SCALE"

| CHANNEL CORNERS COORDINATES | | |
|---|---|---|
| POINT | NORTHING | EASTING |
| 595 | 680870.81 | 2199424.48 |
| 596 | 680638.32 | 2199098.67 |




US Army Corps of Engineers
Buffalo District

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Drawn by: KPL
Checked by: DMD
Reviewed by: Aaron C. Kennerly, PLS
Chief, Survey Section
Approved by: Vincent M. Lovullo
Chief, NY/PA Navigation and Maintenance Section
Date: September 19, 2025

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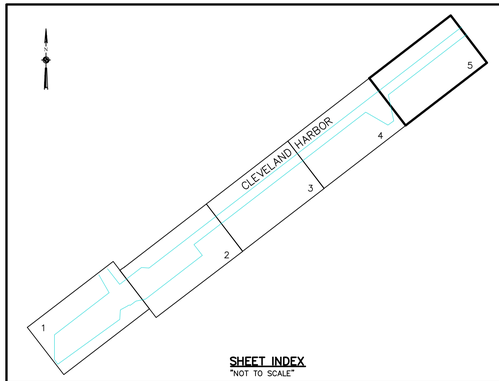
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
BUFFALO, NEW YORK 14207–3199

CLEVELAND HARBOR, OH
PROJECT CONDITION SOUNDINGS 2025
SCALE: 1"=200'

Sheet reference number
VH–104
Sheet 4 of 5

***SUPPORT VALUE ENGINEERING – IT PAYS***

***SAFETY PAYS***




SHEET INDEX
"NOT TO SCALE"

## SOUNDING COLOR LEGEND

- DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH
- DEPTHS AT OR BELOW PROJECT DEPTH
- XX.X PROJECT DEPTH

## LEGEND OF SYMBOLS

| | |
|---|---|
| 17+00 | CHANNEL STATIONING |
| o 417 | CHANNEL CORNER |
| H.L.F. | HARBOR LINE CORNER |
| | FEDERAL CHANNEL |
| | HARBOR LINE |
| | SUBMARINE CABLE |
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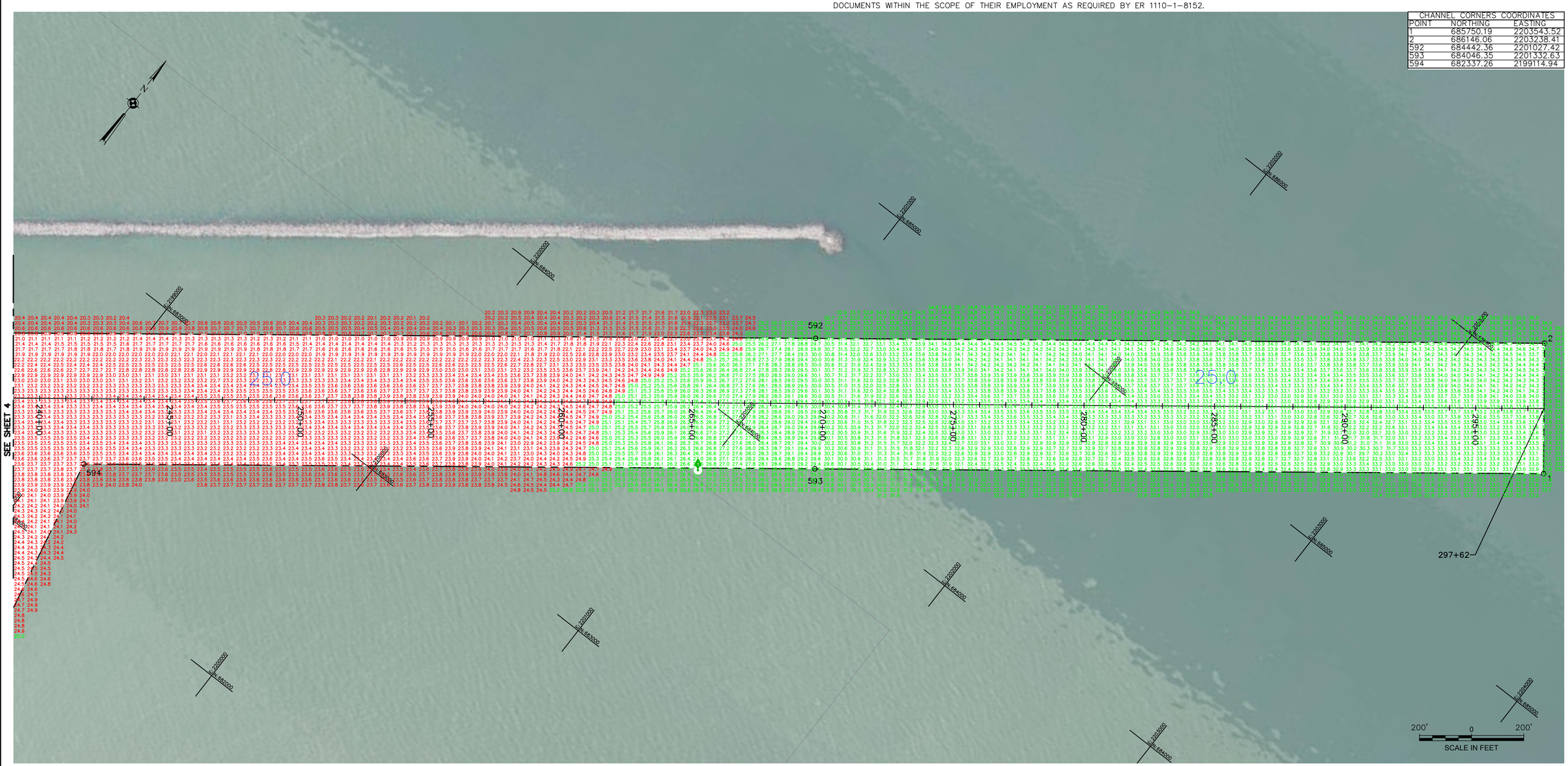
VICINITY MAP
"NOT TO SCALE"

| CHANNEL CORNERS COORDINATES | | |
|---|---|---|
| POINT | NORTHING | EASTING |
| 1 | 685750.19 | 2203543.52 |
| 2 | 686146.06 | 2203238.41 |
| 592 | 684442.36 | 2201027.42 |
| 593 | 684046.35 | 2201332.63 |
| 594 | 682337.26 | 2199114.94 |




US Army Corps of Engineers
Buffalo District

Original sheet size = ANSI D

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CLEVELAND HARBOR, OH

PROJECT CONDITION SOUNDINGS 2025

SCALE: 1"=200'

Sheet reference number
VH–105

Sheet 5 of 5

***SUPPORT VALUE ENGINEERING – IT PAYS***