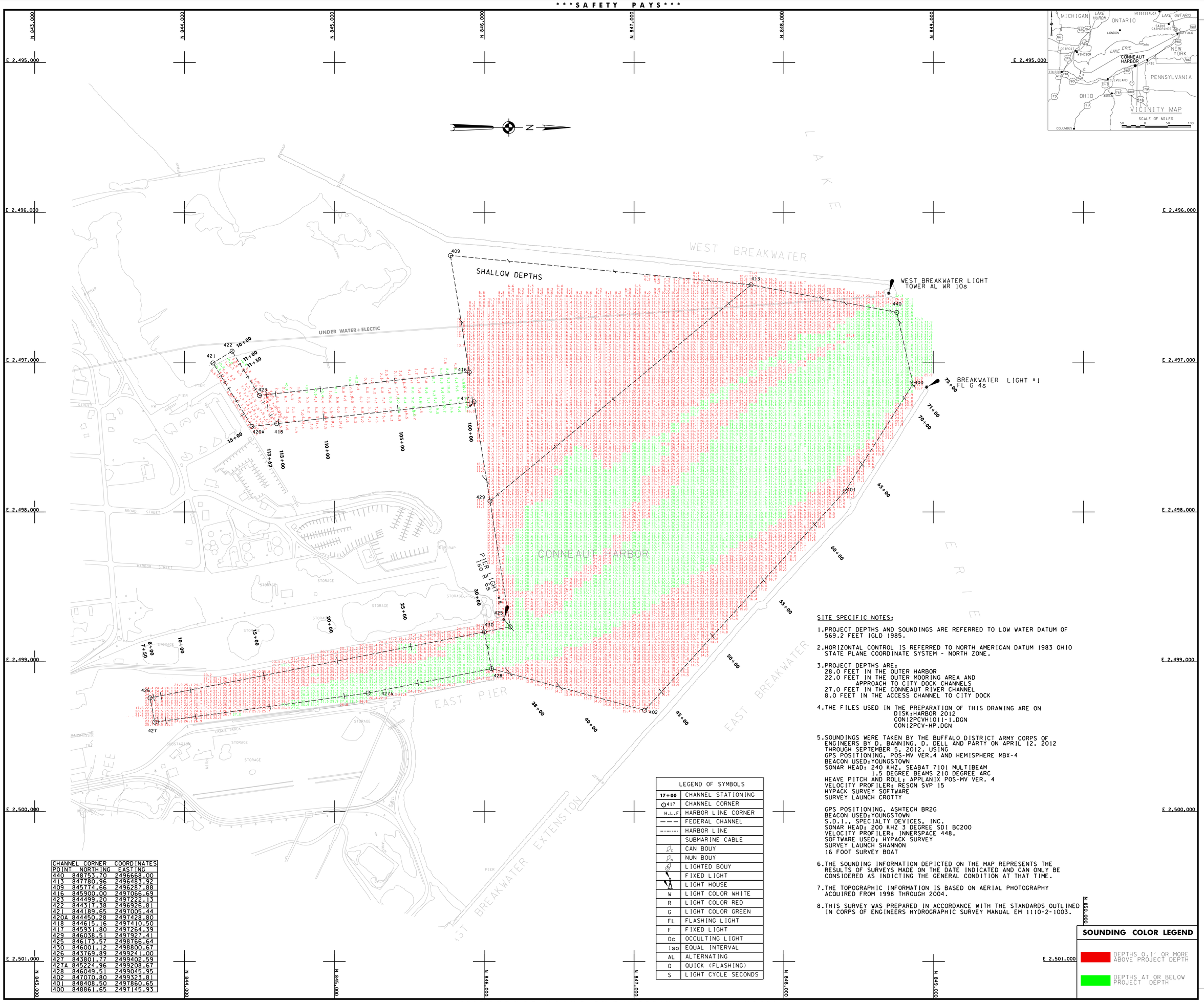





US Army Corps of Engineers
Buffalo District

| CHANNEL CORNER COORDINATES | | |
|---|---|---|
| POINT | NORTHING | EASTING |
| 440 | 848753.70 | 2496668.00 |
| 413 | 847780.96 | 2496483.92 |
| 409 | 845774.66 | 2496287.88 |
| 416 | 845900.00 | 2497066.69 |
| 423 | 844499.20 | 2497222.13 |
| 422 | 844317.38 | 2496926.81 |
| 421 | 844189.65 | 2497005.44 |
| 420A | 844450.28 | 2497428.80 |
| 418 | 844615.16 | 2497410.50 |
| 417 | 845931.80 | 2497264.39 |
| 429 | 846038.51 | 2497927.41 |
| 425 | 846173.57 | 2498766.64 |
| 430 | 846001.12 | 2498800.67 |
| 426 | 843769.89 | 2499241.00 |
| 427 | 843801.77 | 2499402.59 |
| 427A | 845224.96 | 2499208.67 |
| 428 | 846049.51 | 2499045.95 |
| 402 | 847070.80 | 2499323.81 |
| 401 | 848408.50 | 2497860.65 |
| 400 | 848861.65 | 2497145.93 |

| LEGEND OF SYMBOLS | |
|---|---|
| 17+00 | CHANNEL STATIONING |
| 417 | CHANNEL CORNER |
| H.L.F | HARBOR LINE CORNER |
| — — — | FEDERAL CHANNEL |
| -·-·-·-·- | HARBOR LINE |
| | SUBMARINE CABLE |
| C | CAN BOUY |
| N | NUN BOUY |
| | LIGHTED BOUY |
| | FIXED LIGHT |
| | LIGHT HOUSE |
| W | LIGHT COLOR WHITE |
| R | LIGHT COLOR RED |
| G | LIGHT COLOR GREEN |
| FL | FLASHING LIGHT |
| F | FIXED LIGHT |
| Oc | OCCULTING LIGHT |
| Iso | EQUAL INTERVAL |
| AL | ALTERNATING |
| Q | QUICK (FLASHING) |
| S | LIGHT CYCLE SECONDS |

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 OHIO STATE PLANE COORDINATE SYSTEM - NORTH ZONE.

3. PROJECT DEPTHS ARE;
   28.0 FEET IN THE OUTER HARBOR
   22.0 FEET IN THE OUTER MOORING AREA AND APPROACH TO CITY DOCK CHANNELS
   27.0 FEET IN THE CONNEAUT RIVER CHANNEL
   8.0 FEET IN THE ACCESS CHANNEL TO CITY DOCK

4. THE FILES USED IN THE PREPARATION OF THIS DRAWING ARE ON
   DISK:HARBOR 2012
   CON12PCVH101-1.DGN
   CON12PCV-HP.DGN

5. SOUNDINGS WERE TAKEN BY THE BUFFALO DISTRICT ARMY CORPS OF ENGINEERS BY D. BANNING, D. DELL AND PARTY ON APRIL 12, 2012 THROUGH SEPTEMBER 5, 2012. USING
   GPS POSITIONING, POS-MV VER.4 AND HEMISPHERE MBX-4
   BEACON USED:YOUNGSTOWN
   SONAR HEAD: 240 KHZ, SEABAT 7101 MULTIBEAM
   1.5 DEGREE BEAMS 210 DEGREE ARC
   HEAVE PITCH AND ROLL: APPLANIX POS-MV VER. 4
   VELOCITY PROFILER: RESON SVP 15
   HYPACK SURVEY SOFTWARE
   SURVEY LAUNCH CROTTY

   GPS POSITIONING, ASHTECH BR2G
   BEACON USED:YOUNGSTOWN
   S.D.I., SPECIALTY DEVICES, INC.
   SONAR HEAD: 200 KHZ 3 DEGREE SDI BC200
   VELOCITY PROFILER: INNERSPACE 448,
   SOFTWARE USED: HYPACK SURVEY
   SURVEY LAUNCH SHANNON
   16 FOOT SURVEY BOAT

6. THE SOUNDING INFORMATION DEPICTED ON THE MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED AS INDICTING THE GENERAL CONDITION AT THAT TIME.

7. THE TOPOGRAPHIC INFORMATION IS BASED ON AERIAL PHOTOGRAPHY ACQUIRED FROM 1998 THROUGH 2004.

8. THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OUTLINED IN CORPS OF ENGINEERS HYDROGRAPHIC SURVEY MANUAL EM 1110-2-1003.

**SOUNDING COLOR LEGEND**

- DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH
- DEPTHS AT OR BELOW PROJECT DEPTH

This drawing was prepared using a CADD system. Scaling may be distorted.

To view a color version of this map, point a web browser to http://www.lrb.usace.army.mil/WebBafe/WaterMgt/survey/survey.html

Drawn by: PAN
Checked by: ACK
Reviewed by: Roman H. Figler III PLS
Chief, Survey Section
Approved: Raymond N. Lewis
Chief, NY/PA Navigation and Maintenance Section
Date: October 3, 2012

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

CONNEAUT HARBOR, OHIO

**PROJECT CONDITION SOUNDINGS 2012**

SCALE: 1" = 200'
SCALE OF FEET 50 0 100 200

Sheet reference number:
**VH - 101**
Sheet **1** of **1**

**12S-CON-1/1**