

**SURVEY NOTES:**

- 1) HORIZONTAL DATUM: NAD83 ILLINOIS WEST 1202, US SURVEY FOOT
- 2) VERTICAL DATUM: NAVD88, FOOT
- 3) DEPTHS SHOWN ARE BELOW MINIMUM POOL.
- 4) SURVEY INFORMATION:  
 SURVEY VESSEL: BOWEN1 (24' SCULLY'S WORK BOAT)  
 ECHO SOUNDER: TELEDYNE ECHOTRAC E20  
 TRANSDUCER: ODOM SMSW200-4 (4° BEAM, 200 kHz)  
 SOUND VELOCITY SOURCE: VALEPORT SWIFT SVP  
 INS: SBG ELLIPSE2-E-G4A2-B1  
 GNSS RECEIVER: TRIMBLE MPS865 WITH DUAL ANTENNAS  
 GNSS SOURCE: TRIMBLE CENTERPOINT RTX  
 TIDE METHOD: REAL-TIME KINEMATIC  
 TIDE SOURCE: TRIMBLE CENTERPOINT RTX
- 5) THE SURVEY WAS COMPLETED IN ACCORDANCE WITH QUALITY CONTROL PLAN PROCEDURES.

JUNE 20, 2023  
 INTERPOLATED WATER SURFACE ELEVATIONS

DATE	GAGE	RIVER MILE	DMG	ZERO NAVD88	TIME	STAGE	NAVD88 WS ELEV	NAVD88 MIN. POOL	DIFFERENCE
20230620	HARDIN	21.5	113378	399.10	11:30	19.42	418.52	417.30	1.22
20230620	HARDIN	21.5	113378	399.10	16:00	19.44	418.54	417.30	1.24
20230620	FLORENCE	56.0	294803	399.04	11:30	20.39	419.43	417.84	1.59
20230620	FLORENCE	56.0	294803	399.04	16:00	20.40	419.44	417.84	1.60




**DATES OF SURVEY:**  
 JUNE 20, 2023  
 FILE NO.: 039F2023  
 REQUEST NO.: W01P023P0113

**SCALE:**  
 1" = 400' (ANSI B)

**FIELD BOOKS:**

**Approved:**

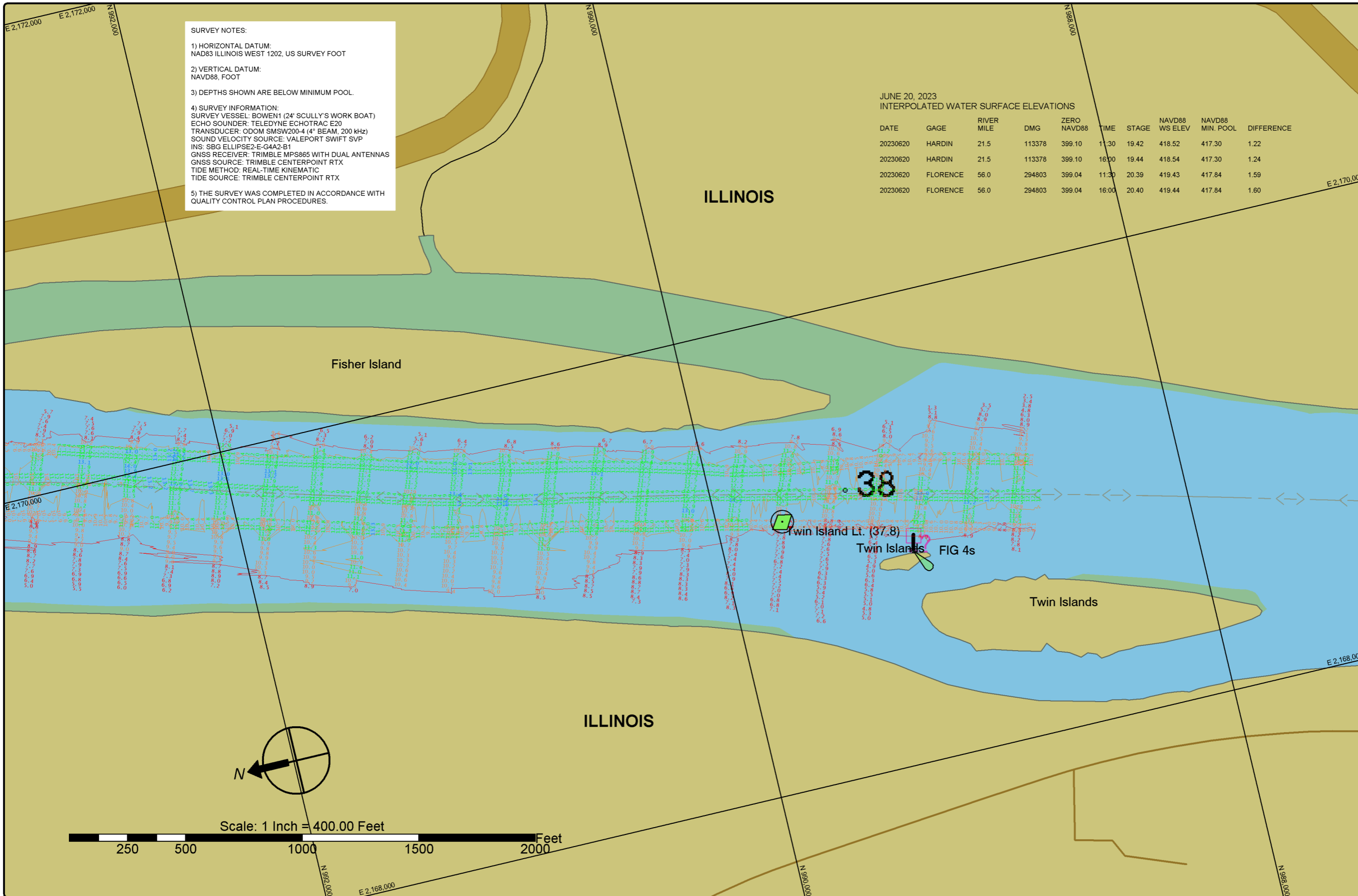
FIELD CARTOGRAPHER  
 CIVIL ENGINEERING TECHNICIAN  
 ASST. CHIEF OF SURVEY  
 CHIEF OF SURVEY  
 Date:

U.S. ARMY CORPS OF ENGINEERS  
 ST. LOUIS DISTRICT  
 ST. LOUIS, MISSOURI

SURVEYED BY:  
 BOWEN ENGINEERING AND SURVEYING, P.C.  
 2121 MEGAN DRIVE  
 CAPE GIRARDEAU, MO 63701

UPPER MISSISSIPPI RIVER  
 BASIN  
 ILLINOIS RIVER  
 PRE DREDGE SURVEY  
 RIVER MILES 39.2 - 37.9

SHEET NO.



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CIVIL ENGINEERING TECHNICIAN  
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