SURVEY NOTES:

1) HORIZONTAL DATUM:
NAD83 (2011) MISSOURI EAST 2401, US SURVEY FOOT

2) VERTICAL DATUM:
NAVD88 (GEOID18), FOOT

3) DEPTHS SHOWN ARE BELOW LWRP2014 SURFACE.

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 29, 2023
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 8:00	WSE @ 12:00	LWRP 2014	LWRP DIF @ 8:00	LWRP DIF @ 12:00
116	346.70	346.78	343.40	3.30	3.38
117	347.21	347.28	343.79	3.42	3.49

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
109.9	Chester, IL	340.73	8:00	2.87	12:00	2.96
151.9	Herculaneum, MO	368.23	8:00	-3.28	12:00	-3.28

ILLINOIS

Ellis Grove Ldg

Fort Gage Lt. (116.3)

Fl(2)R 5s

117

116

ver Entrance Dbn. (117.3)

ILLINOIS

Kaskaskia Chute

Beaver Island

ILLINOIS

Mid America

N

Scale: 1 Inch = 800.00 Feet

500 1000 2000 3000 4000 Feet

St. Louis District

DATES OF SURVEY: JUNE 29, 2023

FILE NO.: 116F2323
REQUEST NO.: W912P923R0086

SCALE: 1" = 800' (ANSI B)

FIELD BOOKS:

Approved: FIELD CARTOGRAPHER
Approved: CIVIL ENGINEERING TECHNICIAN
Approved: ASST. CHIEF OF SURVEY
Approved: 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
MISSISSIPPI RIVER
PRE DREDGE SURVEY
RIVER MILES 116.7 - 116.5

SHEET NO.
1 OF 1