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 SMSIW200-4 (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.

E 1,004,000 N 762,000 E 1,006,000 E 1,008,000 N 760,000 E 1,010,000 E 1,012,000

Chester, IL

ILLINOIS

ILLINOIS

Chester, IL

Fl(2)R 5s

Fl(2)R 5s

112

110

Horseshoe Ldg

Klondike Ldg

MISSOURI

Horse Island

N

Scale: 1 Inch = 800.00 Feet

500 1000 2000 3000 4000 Feet

E 1,000,000 N 750,000 E 1,002,000 E 1,004,000 N 754,000 E 1,006,000 E 1,008,000 N 752,000 E 1,010,000

NOVEMBER 23, 2022
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 9:00	WSE @ 13:00	LWRP 2014	LWRP DIF @ 9:00	LWRP DIF @ 13:00
110	345.05	344.90	340.55	4.30	4.35
111	345.37	345.42	341.05	4.32	4.37

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
94.1	Red Rock Landing, MO	328.38	9:00	7.07	13:00	7.10
109.9	Chester, IL	340.73	9:00	4.07	13:00	4.12
151.9	Herculaneum, MO	368.23	9:00	-1.62	13:00	-1.70

St. Louis District

DATES OF SURVEY:
NOVEMBER 23, 2022

FILE NO.: 111K2322
REQUEST NO.: W912P923F0004

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 111.0 - 110.2

SHEET NO.
1 OF 1