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: ODOM DIGIBAR S VELOCIMETER
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.

ILLINOIS

Thebes, IL

MISSOURI

FIG 4s

Dorrity Ldg (Manning Ldg)

oint

Clr 31.9

FFR

FFG

N

Scale: 1 Inch = 800.00 Feet

500 1000 2000 3000 4000 Feet

SEPTEMBER 4, 2022
INTERPOLATED WATER SURFACE ELEVATIONS

| MILE | WSE @ 8:00 | WSE @ 10:00 | LWRP 2014 | LWRP DIF @ 8:00 | LWRP DIF @ 10:00 |
|---|---|---|---|---|---|
| 44 | 309.81 | 309.87 | 304.53 | 5.28 | 5.34 |
| 45 | 310.45 | 310.51 | 305.11 | 5.34 | 5.39 |
| 46 | 311.09 | 311.14 | 305.71 | 5.38 | 5.43 |

GAGE RECORD

| River Mile | River Gage | Zero NAVD88 | Time 1 | Stage 1 | Time 2 | Stage 2 |
|---|---|---|---|---|---|---|
| 43.7 | Thebes, IL | 299.71 | 8:00 | 9.91 | 10:00 | 9.97 |
| 46.3 | Grays Point, MO | 300.79 | 8:00 | 10.49 | 10:00 | 10.54 |

St. Louis District

DATES OF SURVEY:
SEPTEMBER 4, 2022

FILE NO.: 04510422
REQUEST NO.: W912P922F0051

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 45.1 - 44.0

SHEET NO.
1 OF 1