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 26, 2023
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 9:00	WSE @ 15:00	LWRP 2014	LWRP DIF @ 9:00	LWRP DIF @ 15:00
58	317.41	317.38	313.01	4.40	4.37
59	317.95	317.92	313.58	4.37	4.34
60	318.49	318.46	314.14	4.35	4.32

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
52.1	Cape Girardeau, MO	304.27	9:00	9.94	15:00	9.91
66.3	Moccasin Springs, MO	313.33	9:00	8.57	15:00	8.54

ILLINOIS

Swift Sure Towhead

Devils Island / Swiftsure Tow

59

58

Cayune Lt. (57.8)

Fl(2)R 5s

MISSOURI

N

Scale: 1 Inch = 800.00 Feet

500 1000 2000 3000 4000 Feet

N 560,000
N 558,000
N 556,000
N 554,000
N 552,000
N 550,000
N 548,000
E 1,136,000
E 1,134,000
E 1,132,000
E 1,130,000
E 1,128,000
E 1,126,000

St. Louis District

DATES OF SURVEY:
JUNE 26, 2023

FILE NO.: 059F2623
REQUEST NO.: W912P923F0086

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.
2721 MEGAN DRIVE
CAPE GIRARDEAU, MO 63701

UPPER MISSISSIPPI RIVER BASIN
MISSISSIPPI RIVER

PRE DREDGE SURVEY
RIVER MILES 59.1 - 58.0

SHEET NO.

1 OF 1