



St. Louis District

SURVEY NOTES:

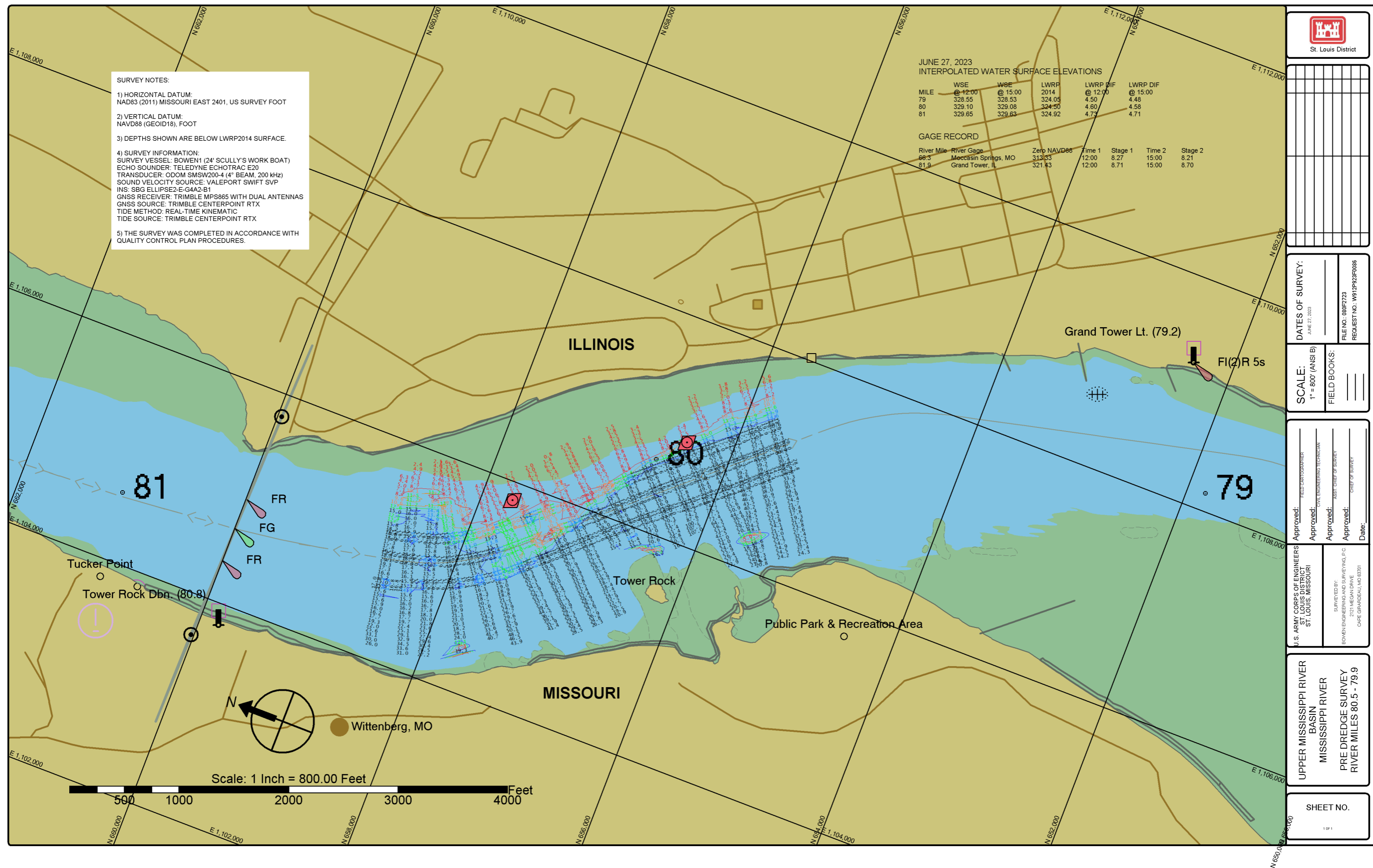
- 1) HORIZONTAL DATUM:
NAD83 (2011) MISSOURI EAST 2401, US SURVEY FOOT
- 2) VERTICAL DATUM:
NAVD88 (GEOID18), FOOT
- 3) DEPTHS SHOWN ARE BELOW LWRP2014 SURFACE.
- 4) SURVEY INFORMATION:
SURVEY VESSEL: BOWEN1 (24' SCULLY'S WORK BOAT)
ECHO SOUNDER: TELDYNE ECHOTRAC E20
TRANSDUCER: ODOM SMSW200-4 (4" BEAM, 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 27, 2023
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 12:00	WSE @ 15:00	LWRP 2014	LWRP DIF @ 12:00	LWRP DIF @ 15:00
79	328.55	328.53	324.05	4.50	4.48
80	329.10	329.08	324.50	4.60	4.58
81	329.65	329.63	324.92	4.73	4.71

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
68.3	Moccasin Springs, MO	313.33	12:00	8.27	15:00	8.21
81.9	Grand Tower, IL	321.43	12:00	8.71	15:00	8.70



DATES OF SURVEY:
JUNE 27, 2023

SCALE:
1" = 800' (ANSI B)

FIELD BOOKS:

FILE NO.: 08072723
REQUEST NO.: W91P23086

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
MISSISSIPPI RIVER
PRE DREDGE SURVEY
RIVER MILES 80.5 - 79.9

SHEET NO.
1 OF 1

