



St. Louis District

DECEMBER 1, 2023 INTERPOLATED WATER SURFACE ELEVATIONS

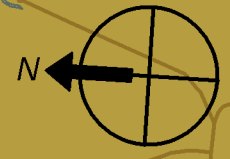
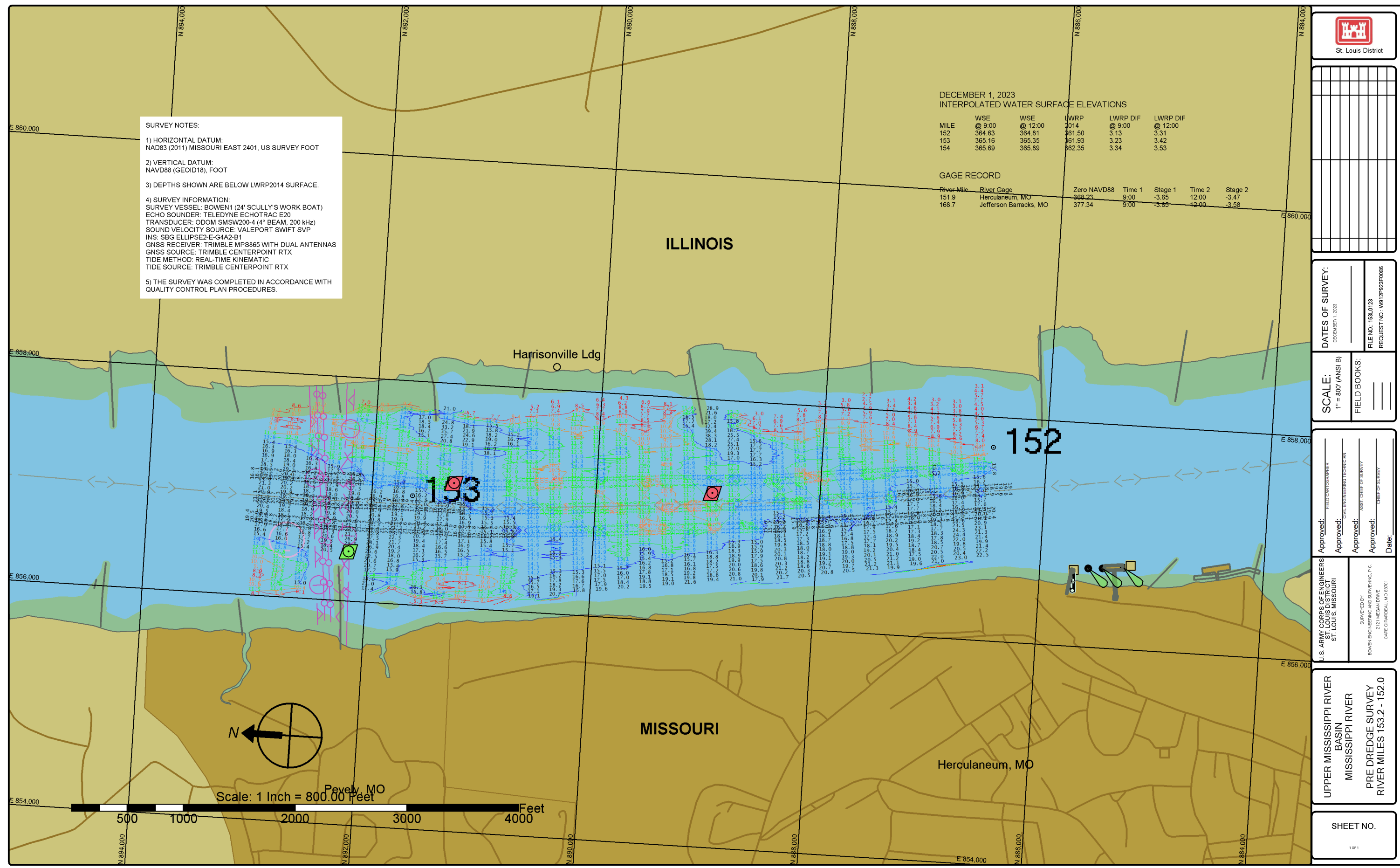
MILE	WSE @ 9:00	WSE @ 12:00	LWRP 2014	LWRP DIF @ 9:00	LWRP DIF @ 12:00
152	364.63	364.81	361.50	3.13	3.31
153	365.16	365.35	361.93	3.23	3.42
154	365.69	365.89	362.35	3.34	3.53

GAGE RECORD

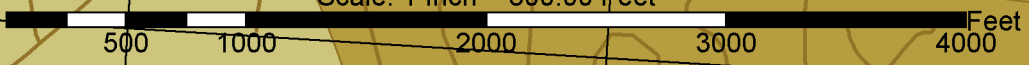
River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
151.9	Herculaneum, MO	368.23	9:00	-3.65	12:00	-3.47
168.7	Jefferson Barracks, MO	377.34	9:00	-3.65	12:00	-3.58

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.



Scale: 1 Inch = 800.00 Feet



DATES OF SURVEY:
DECEMBER 1, 2023

FIELD BOOKS:
FILE NO.: 153L0123
REQUEST NO.: W91P23P086

SCALE:
1" = 800' (ANSI B)

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, 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 153.2 - 152.0

SHEET NO.
1 OF 1