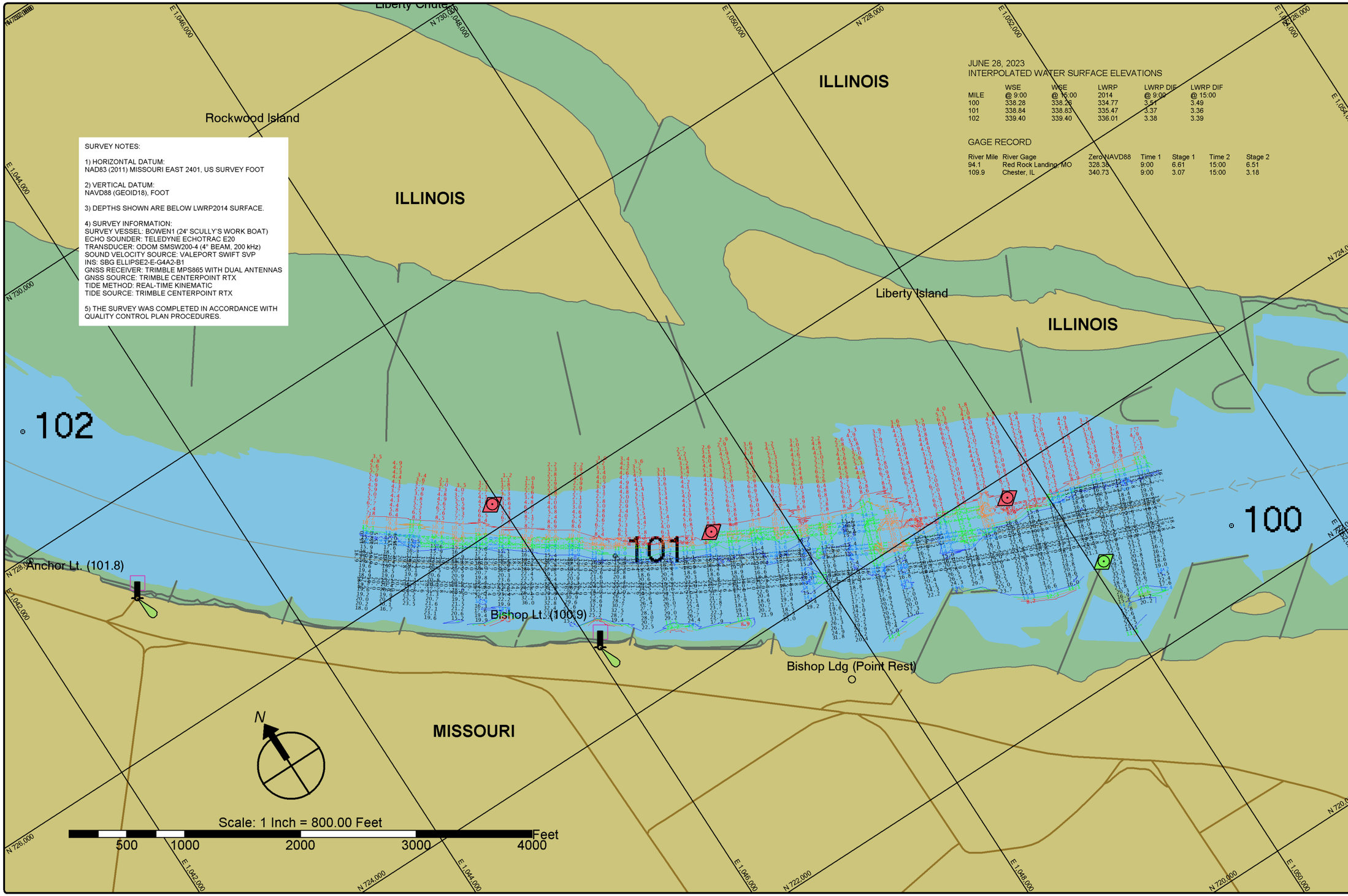


SURVEY NOTES:

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 28, 2023
INTERPOLATED WATER SURFACE ELEVATIONS

| MILE | WSE @ 9:00 | WSE @ 15:00 | LWRP 2014 | LWRP DIF @ 9:00 | LWRP DIF @ 15:00 |
|---|---|---|---|---|---|
| 100 | 338.28 | 338.26 | 334.77 | 3.51 | 3.49 |
| 101 | 338.84 | 338.83 | 335.47 | 3.37 | 3.36 |
| 102 | 339.40 | 339.40 | 336.01 | 3.38 | 3.39 |

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 | 6.61 | 15:00 | 6.51 |
| 109.9 | Chester, IL | 340.73 | 9:00 | 3.07 | 15:00 | 3.18 |

St. Louis District

DATES OF SURVEY:
JUNE 28, 2023

FILE NO.: 101F2823
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.
2121 MEGAN DRIVE
CAPE GIRARDEAU, MO 63701

UPPER MISSISSIPPI RIVER BASIN
MISSISSIPPI RIVER

PRE DREDGE SURVEY
RIVER MILES 101.4 - 100.2

SHEET NO.
1 OF 1