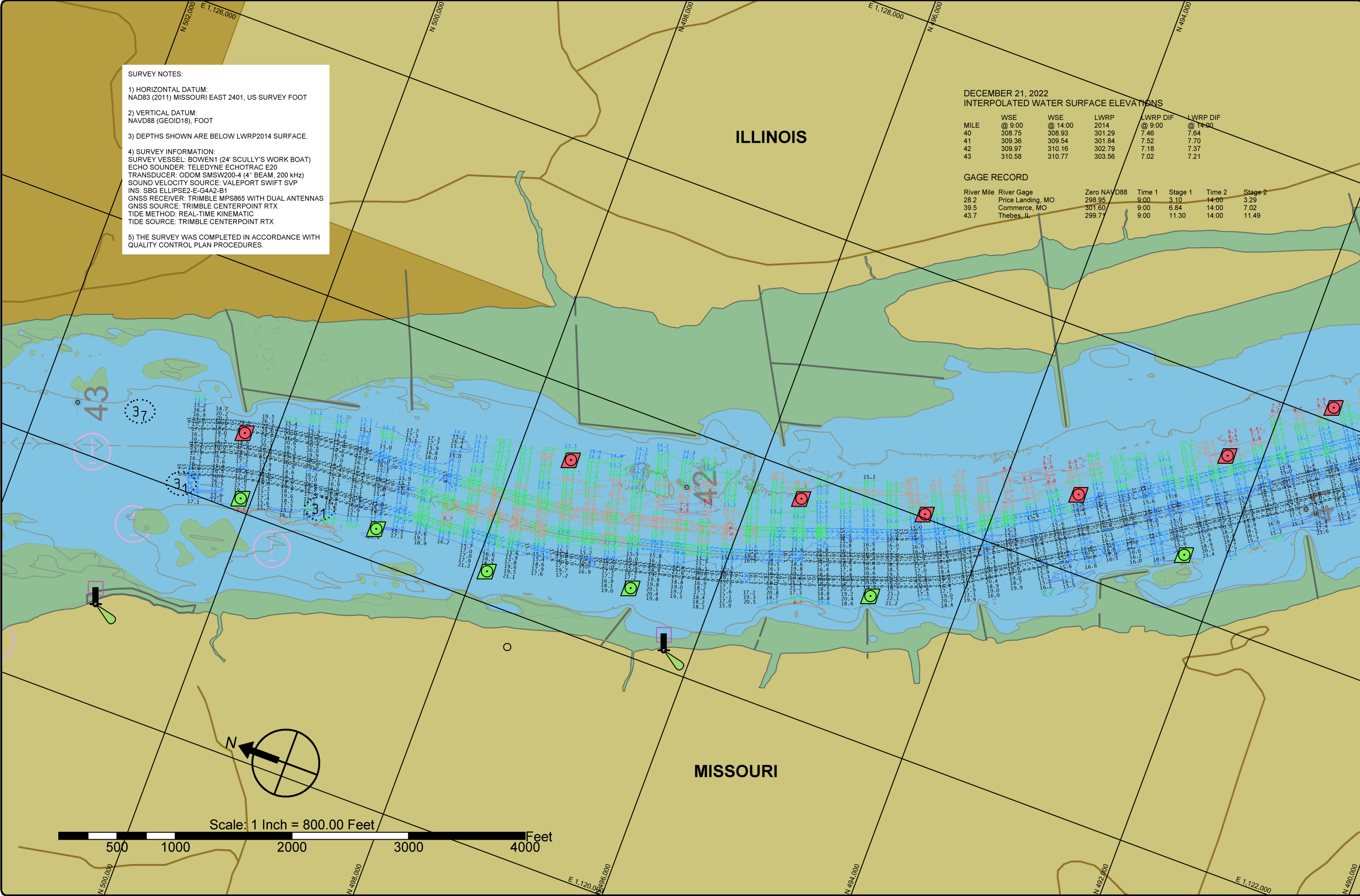




SURVEY NOTES:

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.

DECEMBER 21, 2022
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 9:00	WSE @ 14:00	LWRP 2014	LWRP DIF @ 9:00	LWRP DIF @ 14:00
40	308.75	308.93	301.29	7.46	7.64
41	309.36	309.54	301.84	7.52	7.70
42	309.97	310.16	302.79	7.18	7.37
43	310.58	310.77	303.56	7.02	7.21

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
28.2	Price Landing, MO	298.95	9:00	3.10	14:00	3.29
39.5	Commerce, MO	301.60	9:00	6.84	14:00	7.02
43.7	Thebes, IL	299.71	9:00	11.30	14:00	11.49



St. Louis District

DATES OF SURVEY:
DECEMBER 21, 2022

FILE NO.: 042L2122
REQUEST NO.: W912P22F0004

SCALE:
1" = 800' (ANSI B)

FIELD BOOKS:

Approved: _____
FIELD CARTOGRAPHER

Approved: _____
CIVIL ENGINEERING TECHNICIAN

Approved: _____
ASST. CHIEF OF SURVEY

Approved: _____
CHIEF OF SURVEY

Date: _____

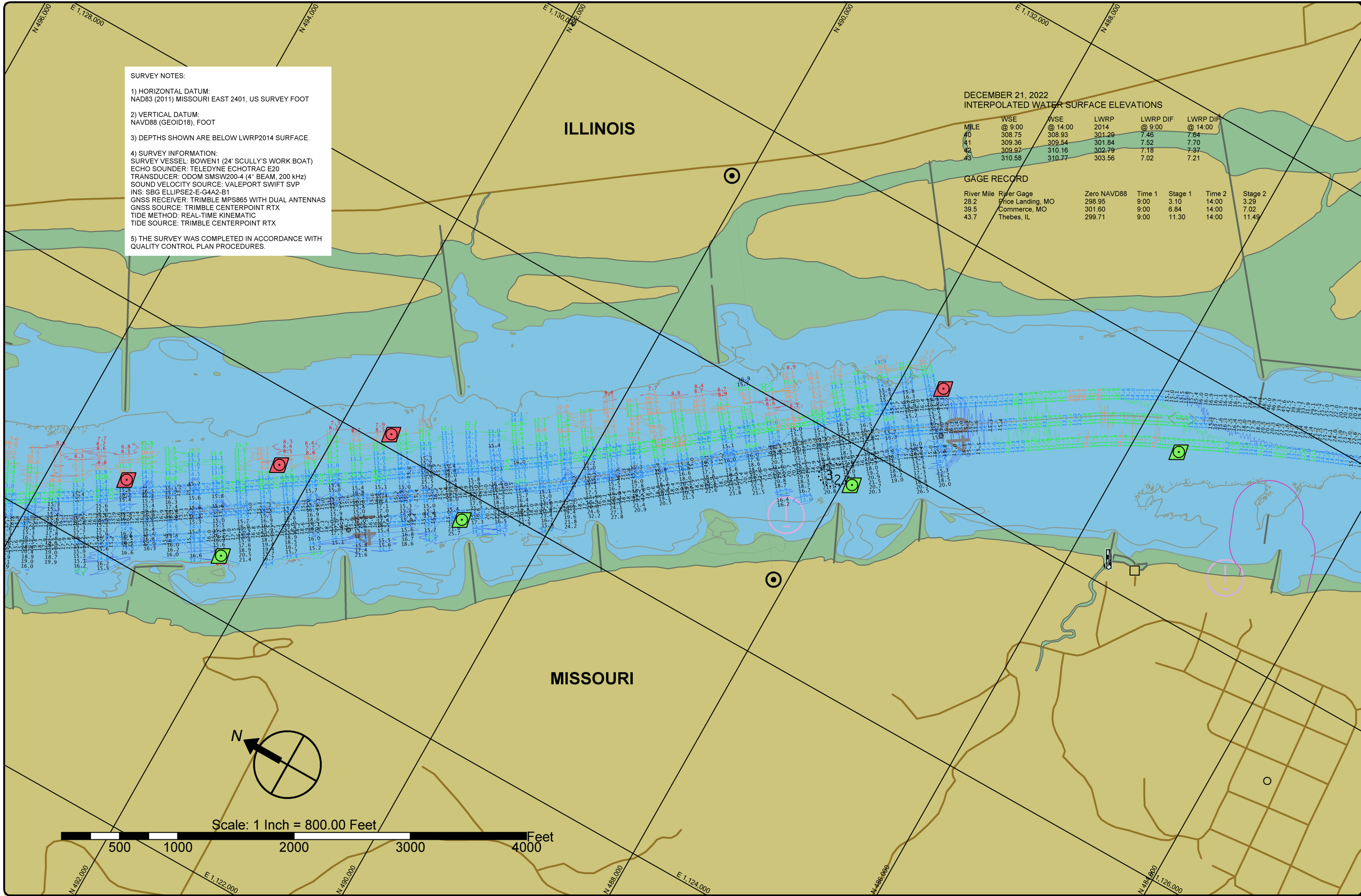
U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

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 42.8 - 40.0

SHEET NO.

1 OF 2



SURVEY NOTES:

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Approved: _____
CHIEF OF SURVEY

Date: _____

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

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