



St. Louis District

SURVEY NOTES:

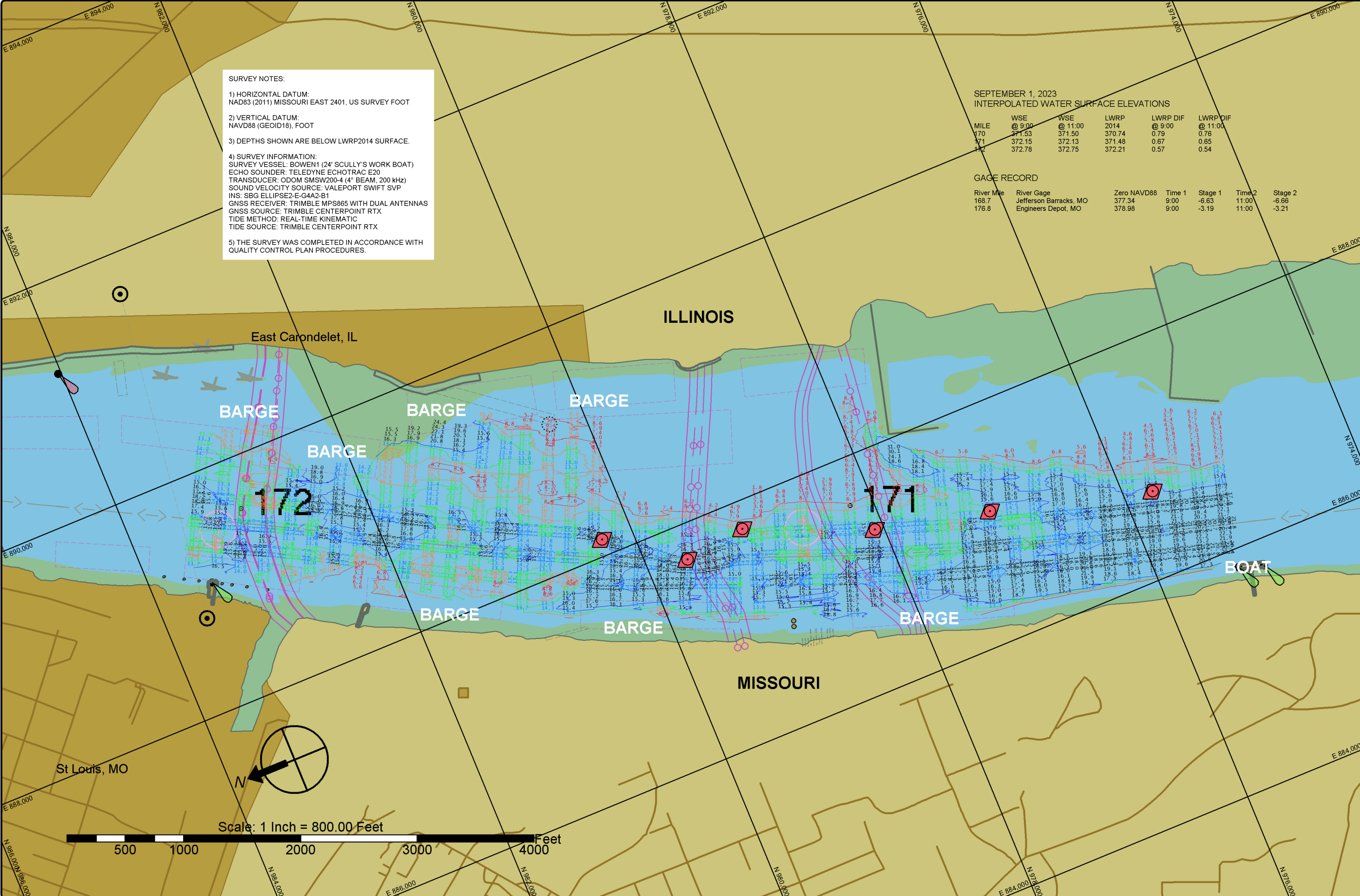
- 1) HORIZONTAL DATUM:
NAD83 (2011) MISSOURI EAST 2401, US SURVEY FOOT
- 2) VERTICAL DATUM:
NAVD88 (GEOID18), FOOT
- 3) DEPTHS SHOWN ARE BELOW LWRP2014 SURFACE.
- 4) SURVEY INFORMATION:
SURVEY VESSEL: BOWEN1 (24' SCULLY'S WORK BOAT)
ECHO SOUNDER: TELEDYNE ECHOTRAC E20
TRANSDUCER: ODOM SMSW200-4 (4" BEAM,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

SEPTEMBER 1, 2023
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 9:00	WSE @ 11:00	LWRP 2014	LWRP DIF @ 9:00	LWRP DIF @ 11:00
170	371.53	371.50	370.74	0.79	0.76
171	372.15	372.13	371.48	0.67	0.65
172	372.78	372.75	372.21	0.57	0.54

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
168.7	Jefferson Barracks, MO	377.34	9:00	-6.63	11:00	-6.66
176.8	Engineers Depot, MO	378.98	9:00	-3.19	11:00	-3.21



DATES OF SURVEY:
SEPTEMBER 1, 2023

FIELD BOOKS:

FILE NO.: 17210123
REQUEST NO.: W91P023F086

SCALE:
1" = 800' (ANSI B)

Approved: [Signature Lines]

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 172.0 - 170.4

SHEET NO.

1 OF 1

