



St. Louis District

**SURVEY NOTES:**

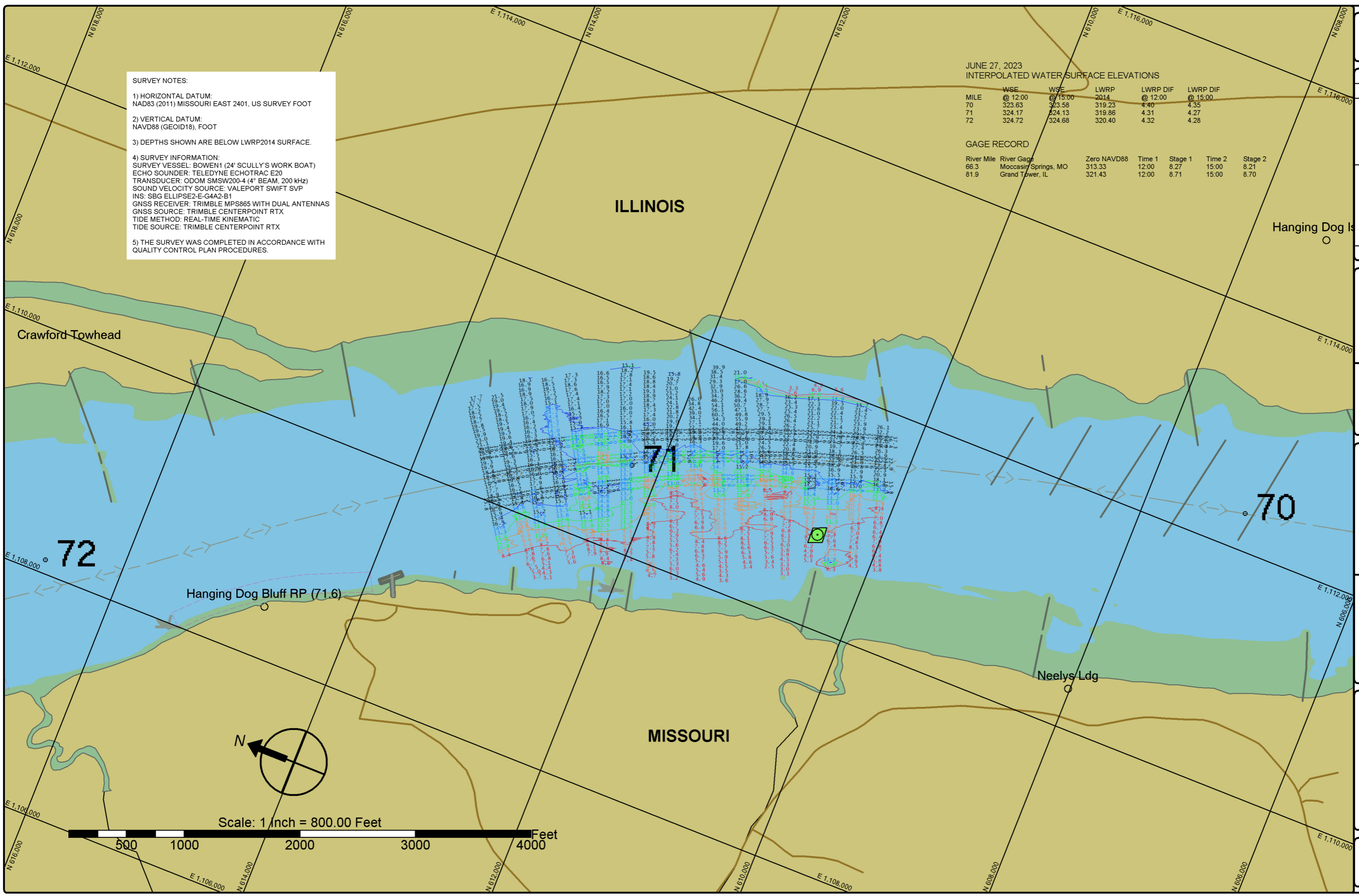
- HORIZONTAL DATUM:  
NAD83 (2011) MISSOURI EAST 2401, US SURVEY FOOT
- VERTICAL DATUM:  
NAVD88 (GEOID18), FOOT
- DEPTHS SHOWN ARE BELOW LWRP2014 SURFACE.
- SURVEY INFORMATION:  
SURVEY VESSEL: BOWEN1 (24' SCULLY'S WORK BOAT)  
ECHO SOUNDER: TELEDYNE ECHOTRAC E20  
TRANSDUCER: ODOM SMSW200-4 (4" BEAM, 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
- 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
70	323.63	323.58	319.23	4.40	4.35
71	324.17	324.13	319.86	4.31	4.27
72	324.72	324.68	320.40	4.32	4.28

**GAGE RECORD**

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
66.3	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.: 071F2723  
REQUEST NO.: W91P923F086

**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 71.2 - 70.6

SHEET NO.  
1 OF 1