

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.

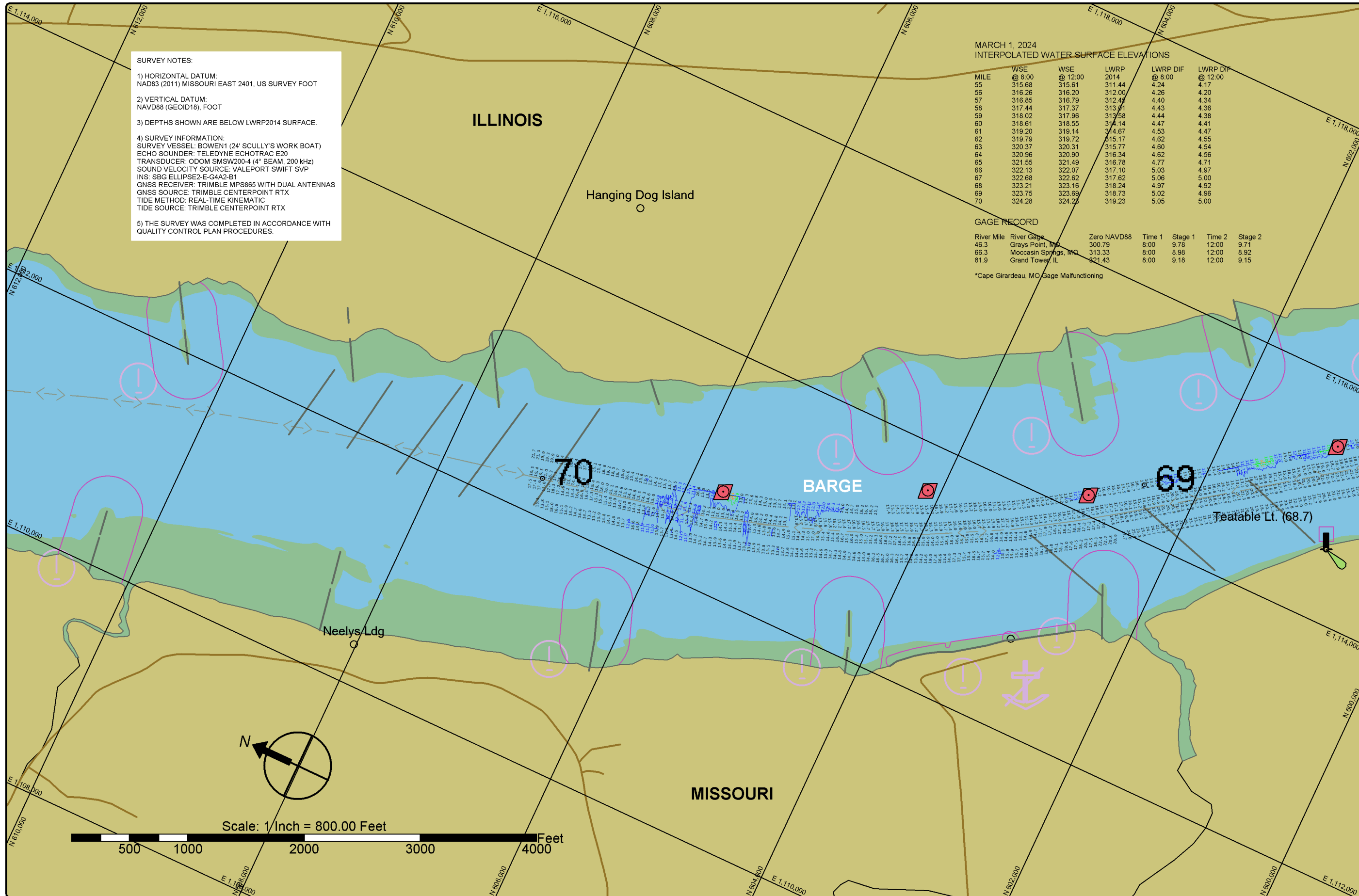
**MARCH 1, 2024
INTERPOLATED WATER SURFACE ELEVATIONS**


MILE	WSE @ 8:00	WSE @ 12:00	LWRP 2014	LWRP DIF @ 8:00	LWRP DIF @ 12:00
55	315.68	315.61	311.44	4.24	4.17
56	316.26	316.20	312.00	4.26	4.20
57	316.85	316.79	312.45	4.40	4.34
58	317.44	317.37	313.01	4.43	4.36
59	318.02	317.96	313.58	4.44	4.38
60	318.61	318.55	314.14	4.47	4.41
61	319.20	319.14	314.67	4.53	4.47
62	319.79	319.72	315.17	4.62	4.55
63	320.37	320.31	315.77	4.60	4.54
64	320.96	320.90	316.34	4.62	4.56
65	321.55	321.49	316.78	4.77	4.71
66	322.13	322.07	317.10	5.03	4.97
67	322.68	322.62	317.62	5.06	5.00
68	323.21	323.16	318.24	4.97	4.92
69	323.75	323.69	318.73	5.02	4.96
70	324.28	324.23	319.23	5.05	5.00

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
46.3	Grays Point, MO	300.79	8:00	9.78	12:00	9.71
66.3	Moccasin Springs, MO	313.33	8:00	8.98	12:00	8.92
81.9	Grand Tower, IL	321.43	8:00	9.18	12:00	9.15

*Cape Girardeau, MO Gage Malfunctioning





St. Louis District

DATES OF SURVEY:
MARCH 1, 2024

FILE NO.: 070_0500124
REQUEST NO.: W912P23F086

SCALE:
1" = 800' (ANSI B)

FIELD BOOKS:

APPROVED:
 FIELD CARTOGRAPHER: _____
 CIVIL ENGINEERING TECHNICIAN: _____
 ASST. CHIEF OF SURVEY: _____
 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
CHANNEL PATROL
RIVER MILES 68.7 - 70.7**

SHEET NO.
1 OF 1

SURVEY NOTES:

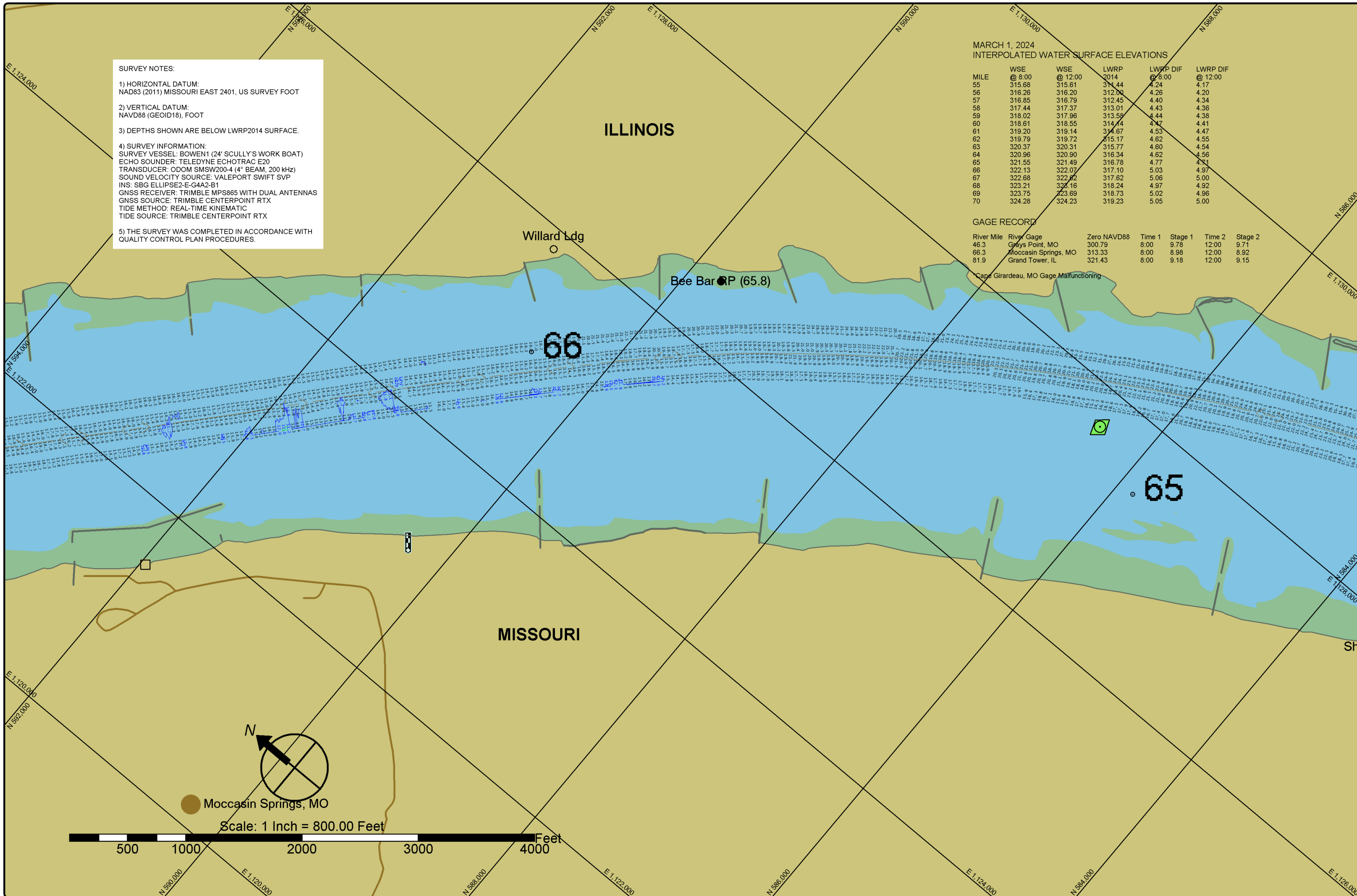
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St. Louis District

DATES OF SURVEY: MARCH 1, 2024	FIELD BOOKS: FILE NO.: 070_050C0124 REQUEST NO.: W912P23F086
SCALE: 1" = 800' (ANSI B)	APPROVED BY:
APPROVED BY:	APPROVED BY:
APPROVED BY:	APPROVED BY:
APPROVED BY:	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
CHANNEL PATROL
RIVER MILES 64.7 - 66.7

SHEET NO. _____

1 OF 1

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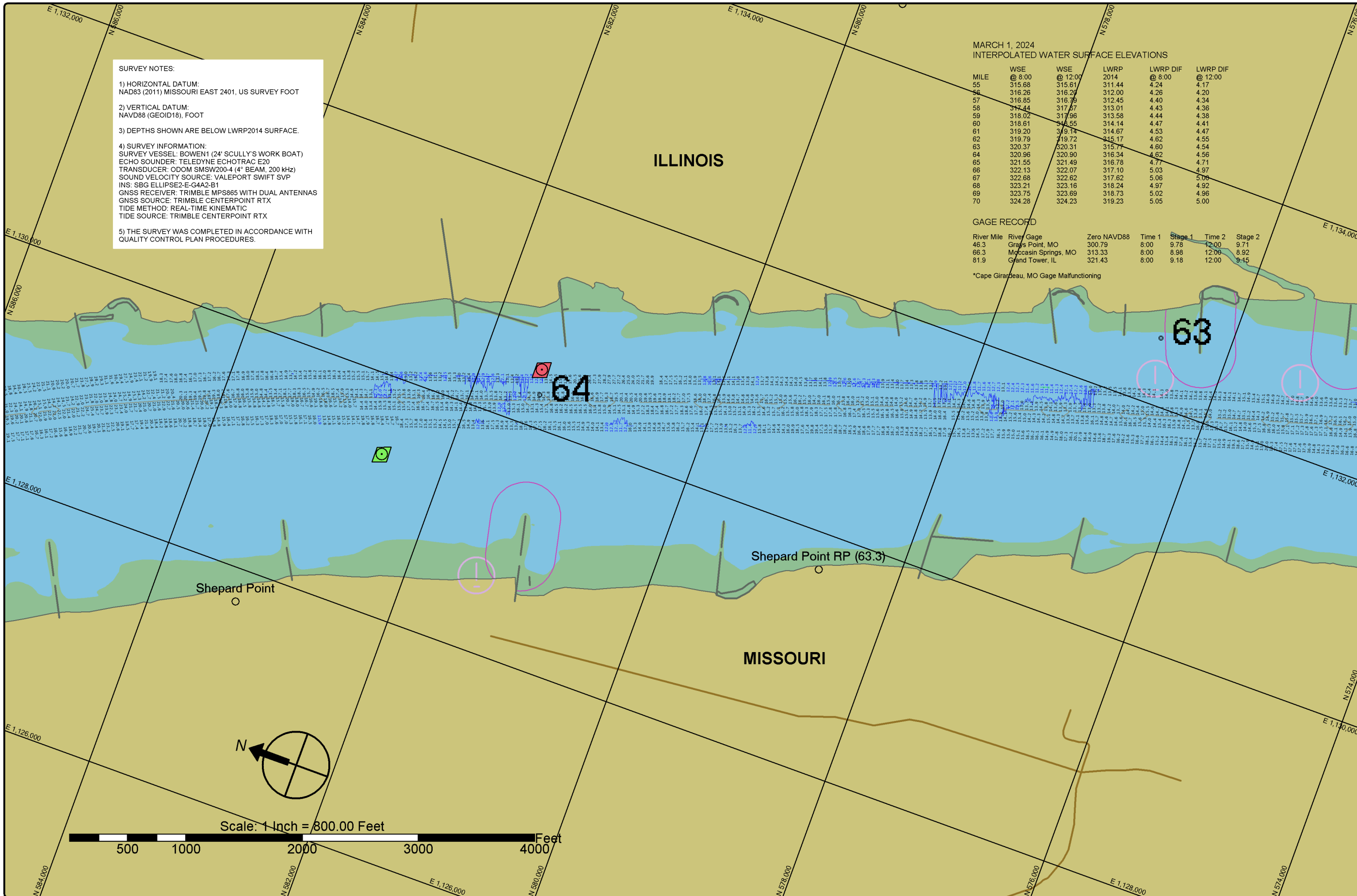
**MARCH 1, 2024
INTERPOLATED WATER SURFACE ELEVATIONS**


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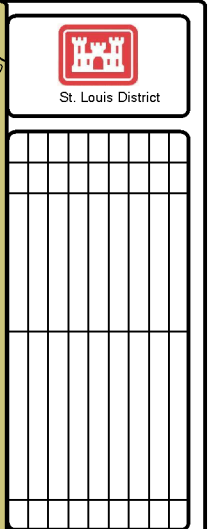
*Cape Girardeau, MO Gage Malfunctioning





St. Louis District

DATES OF SURVEY: MARCH 1, 2024	FIELD BOOKS: FILE NO.: 070_0500124 REQUEST NO.: W91P23230886
SCALE: 1" = 800' (ANSI B)	FIELD BOOKS: _____
APPROVED: FIELD CARTOGRAPHER CIVIL ENGINEERING TECHNICIAN	APPROVED: ASST. CHIEF OF SURVEY CHIEF OF SURVEY
APPROVED: U.S. ARMY CORPS OF ENGINEERS ST. LOUIS, MISSOURI	APPROVED BY: BOWEN ENGINEERING AND SURVEYING, P.C. 2121 MEGAN DRIVE CAPE GIRARDEAU, MO 63701
UPPER MISSISSIPPI RIVER BASIN MISSISSIPPI RIVER CHANNEL PATROL RIVER MILES 62.7 - 64.7	
SHEET NO. 1 OF 1	



DATES OF SURVEY:
MARCH 1, 2024

SCALE:
1" = 800' (ANSI B)

FIELD BOOKS:
FILE NO.: 070_0500124
REQUEST NO.: W91P23250086

APPROVED:

FIELD SUPERVISOR: _____
 CIVIL ENGINEERING TECHNICIAN: _____
 ASST. CHIEF OF SURVEY: _____
 CHIEF OF SURVEY: _____

Date: _____

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

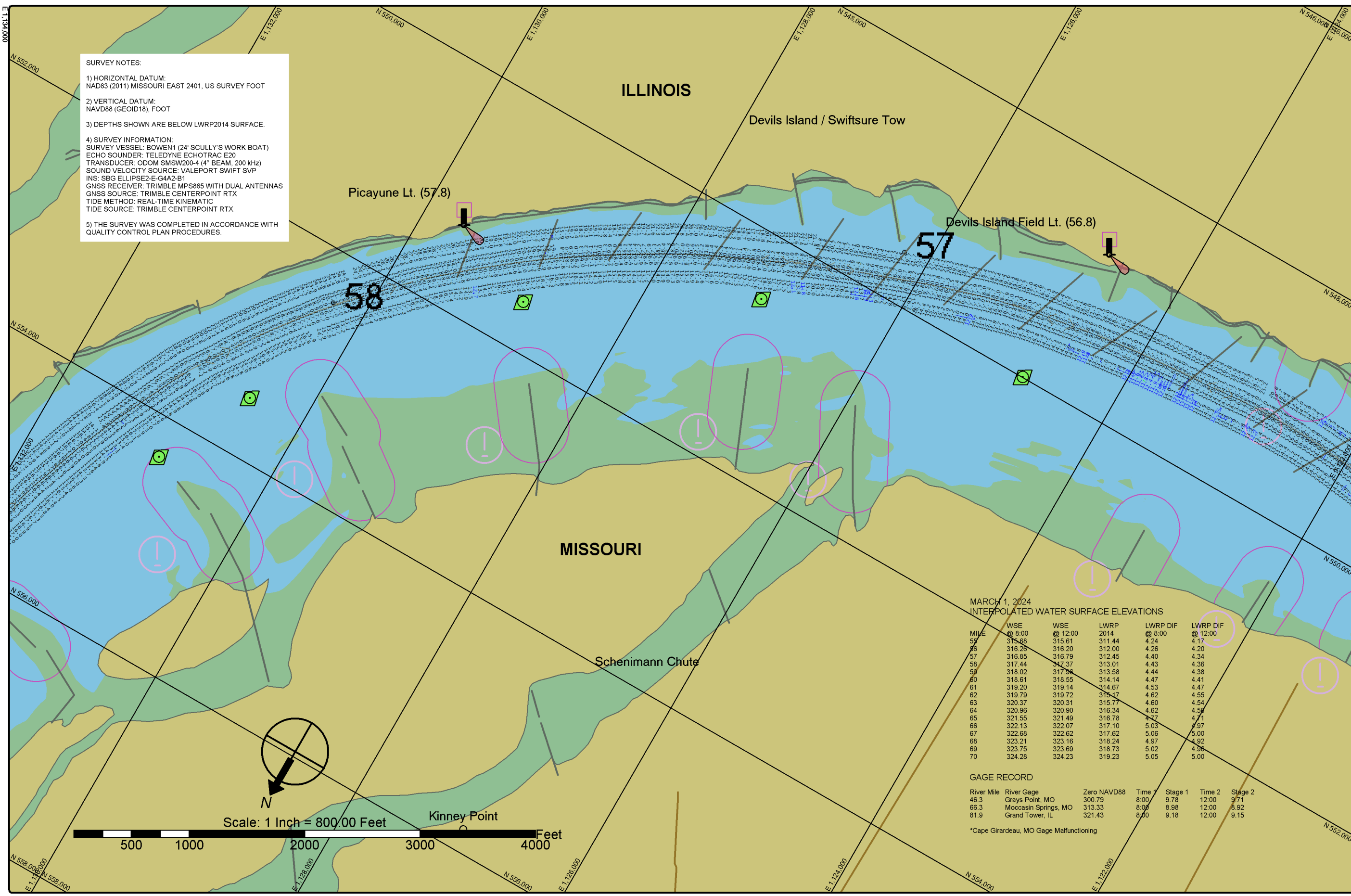
SURVEYED BY:
BOWEN ENGINEERING AND SURVEYING, P.C.
2121 MEGAN DRIVE
CAPE GIRARDEAU, MO 63701

UPPER MISSISSIPPI RIVER
BASIN
MISSISSIPPI RIVER
CHANNEL PATROL
RIVER MILES 56.1 - 58.5

SHEET NO.
1 OF 1

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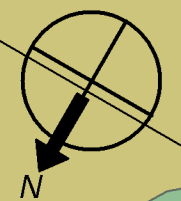
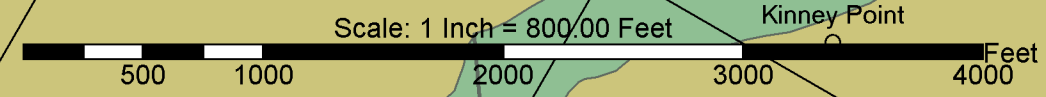
MARCH 1, 2024
INTERPOLATED WATER SURFACE ELEVATIONS

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*Cape Girardeau, MO Gage Malfunctioning





St. Louis District

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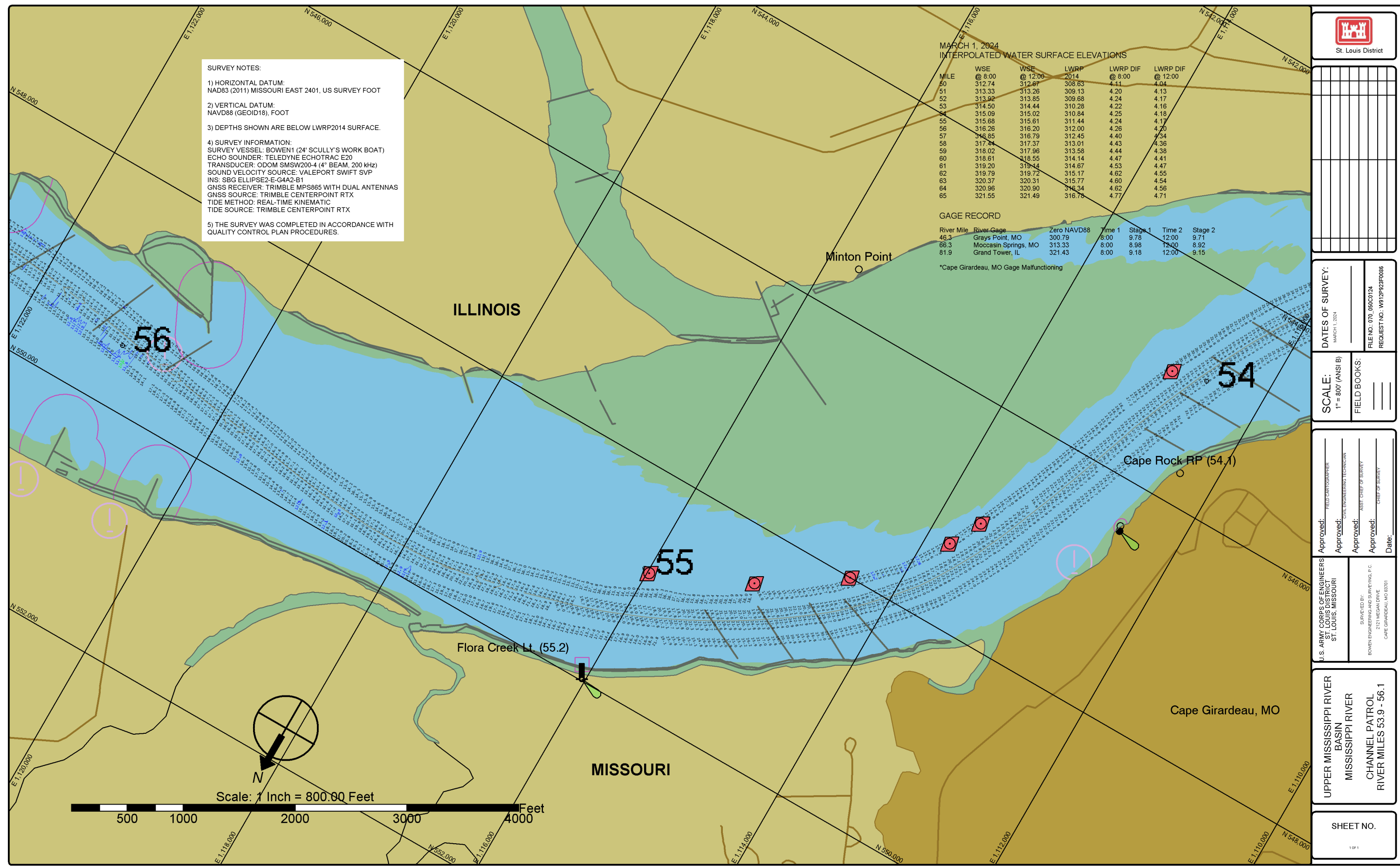
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51	313.33	313.26	309.13	4.20	4.13
52	313.92	313.85	309.68	4.24	4.17
53	314.50	314.44	310.28	4.22	4.16
54	315.09	315.02	310.84	4.25	4.18
55	315.68	315.61	311.44	4.24	4.17
56	316.26	316.20	312.00	4.26	4.20
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63	320.37	320.31	315.77	4.60	4.54
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MARCH 1, 2024

FILE NO.: 070_050C0124
REQUEST NO.: W912P23F0886

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FIELD BOOKS:

Approved: FIELD CARTOGRAPHER
Approved: CIVIL ENGINEERING TECHNICIAN
Approved: ASST. CHIEF OF SURVEY
Approved: CHIEF OF SURVEY
Date:

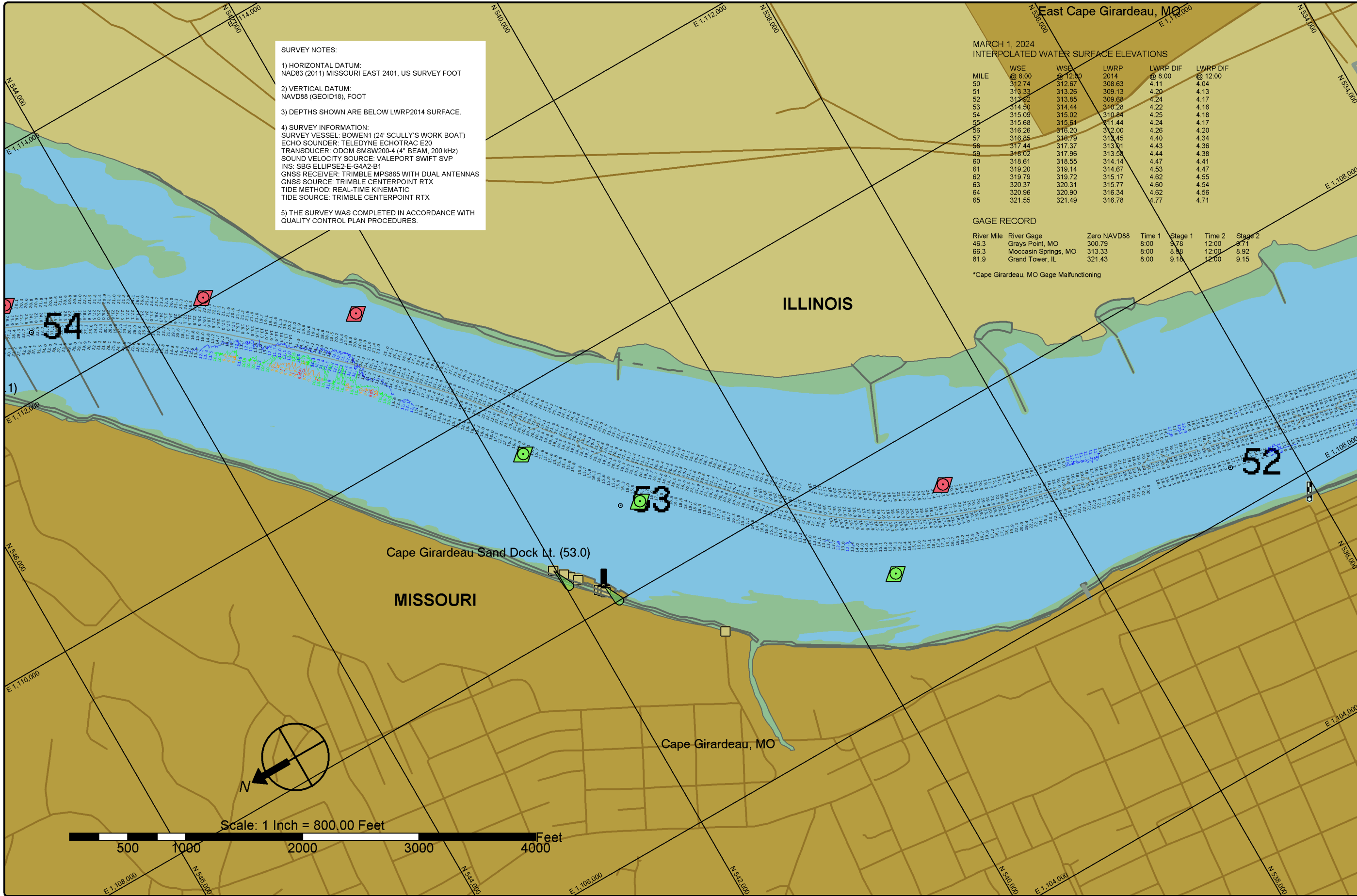
U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

SURVEYED BY:
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2121 MEGAN DRIVE
CAPE GIRARDEAU, MO 63701

UPPER MISSISSIPPI RIVER
BASIN
MISSISSIPPI RIVER
CHANNEL PATROL
RIVER MILES 53.9 - 56.1

SHEET NO.

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UPPER MISSISSIPPI RIVER BASIN MISSISSIPPI RIVER CHANNEL PATROL RIVER MILES 51.8 - 53.9	
SHEET NO.	
1 of 1	

