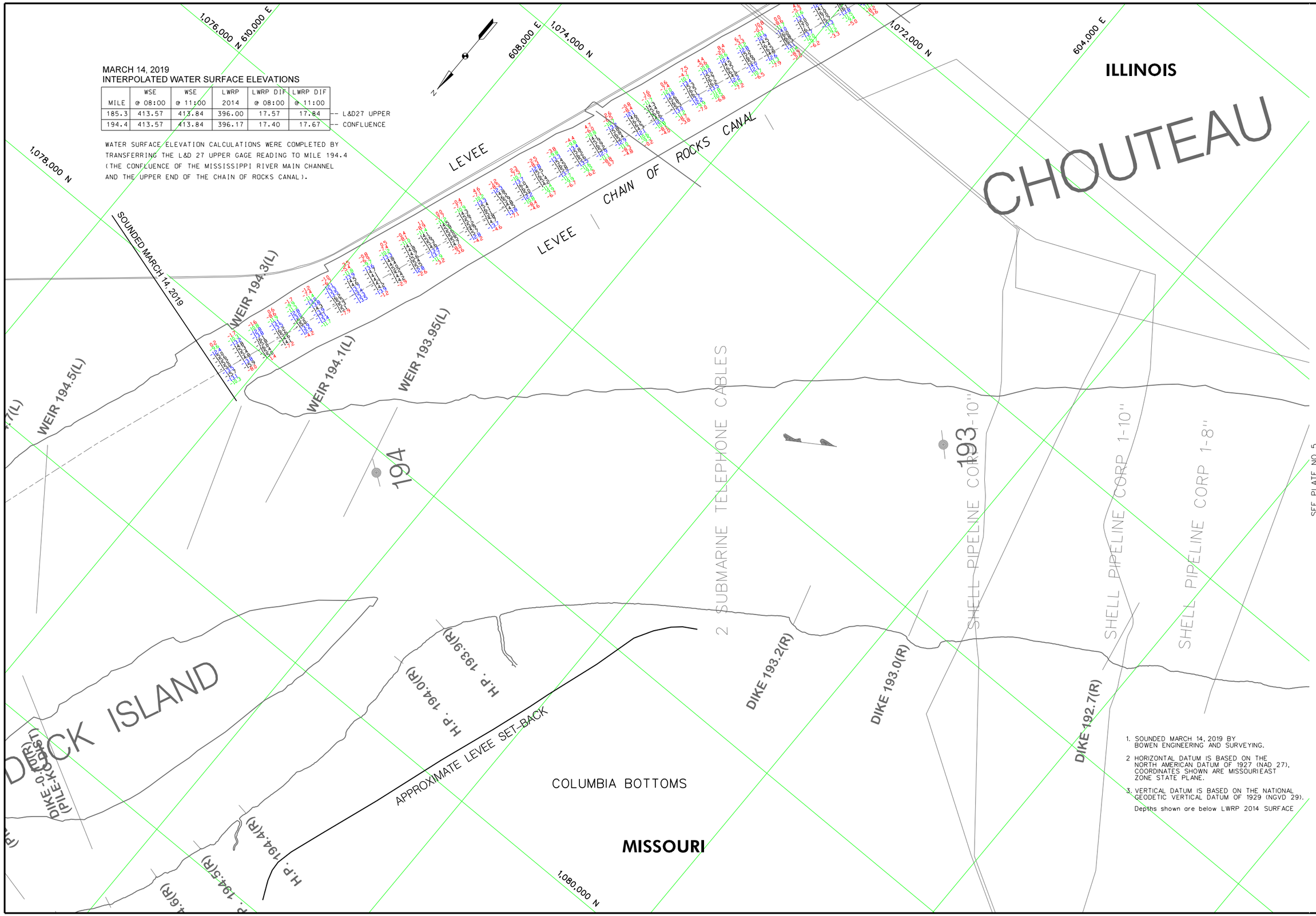
SEE PLATE NO. 4A

MARCH 14, 2019
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 08:00	WSE @ 11:00	LWRP 2014	LWRP DIF @ 08:00	LWRP DIF @ 11:00	
185.3	413.57	413.84	396.00	17.57	17.84	-- L&D27 UPPER
194.4	413.57	413.84	396.17	17.40	17.67	-- CONFLUENCE

WATER SURFACE ELEVATION CALCULATIONS WERE COMPLETED BY TRANSFERRING THE L&D 27 UPPER GAGE READING TO MILE 194.4 (THE CONFLUENCE OF THE MISSISSIPPI RIVER MAIN CHANNEL AND THE UPPER END OF THE CHAIN OF ROCKS CANAL).



1. SOUNDED MARCH 14, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below LWRP 2014 SURFACE

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	MEL PRICE L&D TW	L&D 27 UPPER	L&D 27 LOWER	ST. LOUIS, MO
ZERO N.G.V.D.	395.48	350.00	350.00	379.94
MILE	200.5	185.3	185.1	180.0
LWRP 2014	396.30	396.00	376.74	376.74
14 MAR 2019	21.05/8:00 21.41/11:00	63.57/8:00 63.84/11:00	X	X

Survey Date: MARCH 14, 2019
Surveyed by: BOWEN ENGINEERING
Drawn by: X
Checked by: X
Reviewed by: X
SUBMITTED: X
APPROVED: X
File name:
Plot date:

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

120 400 0 0 120 240 METERS
400 800 FEET

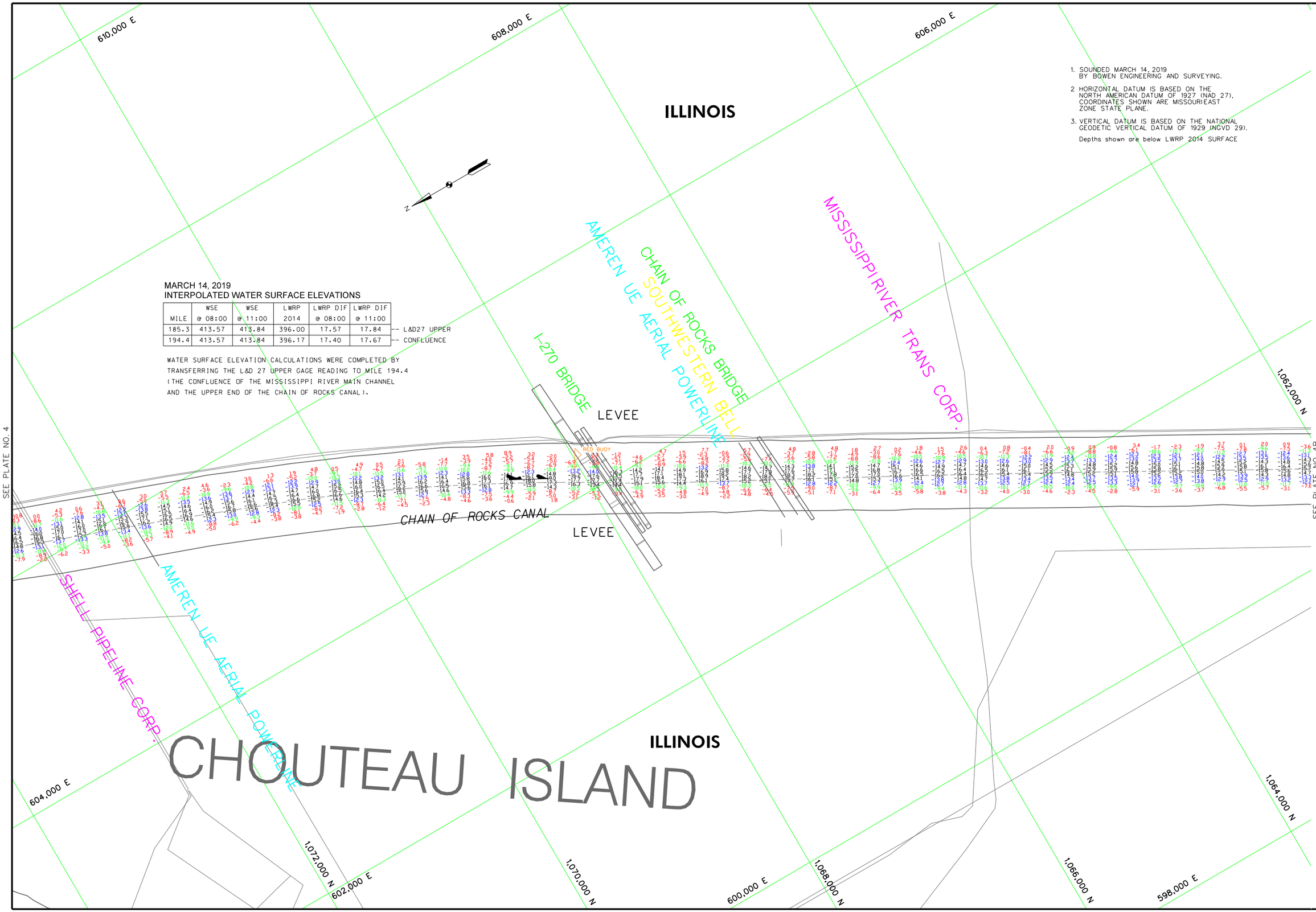
THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE BY THE ST. LOUIS DISTRICT, CORPS OF ENGINEERS AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

RIVER MILES 192.6 – 194.5

PLATE NUMBER

4



1. SOUNDED MARCH 14, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27). COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below LWRP 2014 SURFACE

MARCH 14, 2019
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 08:00	WSE @ 11:00	LWRP 2014	LWRP DIF @ 08:00	LWRP DIF @ 11:00	
185.3	413.57	413.84	396.00	17.57	17.84	-- L&D27 UPPER
194.4	413.57	413.84	396.17	17.40	17.67	-- CONFLUENCE

WATER SURFACE ELEVATION CALCULATIONS WERE COMPLETED BY TRANSFERRING THE L&D 27 UPPER GAGE READING TO MILE 194.4 (THE CONFLUENCE OF THE MISSISSIPPI RIVER MAIN CHANNEL AND THE UPPER END OF THE CHAIN OF ROCKS CANAL).

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	MEL PRICE L&D TW	L&D 27 UPPER	L&D 27 LOWER	ST. LOUIS, MO
ZERO N.G.V.D.	395.48	350.00	350.00	379.94
MILE	200.5	185.3	185.1	180.0
LWRP 2014	396.30	396.00	376.74	376.74
14 MAR 2019	21:05/8:00/ 21.41/11:00/	63.57/8:00/ 63.84/11:00/	X	X

Survey Date: MARCH 14, 2019
Reviewed by: X
Ckd by: X
APPROVED: X
Plot date: 8/8/2019 5:19:47 PM EDT
File name: 1989 Survey Data\Plots\CH70.dgn

Surveyed by: BOWEN ENGINEERING
Drawn by: X
SUBMITTED: X

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER
CHAIN OF ROCKS CANAL

240 METERS
800 FEET
120 0 120 400
400 0 400

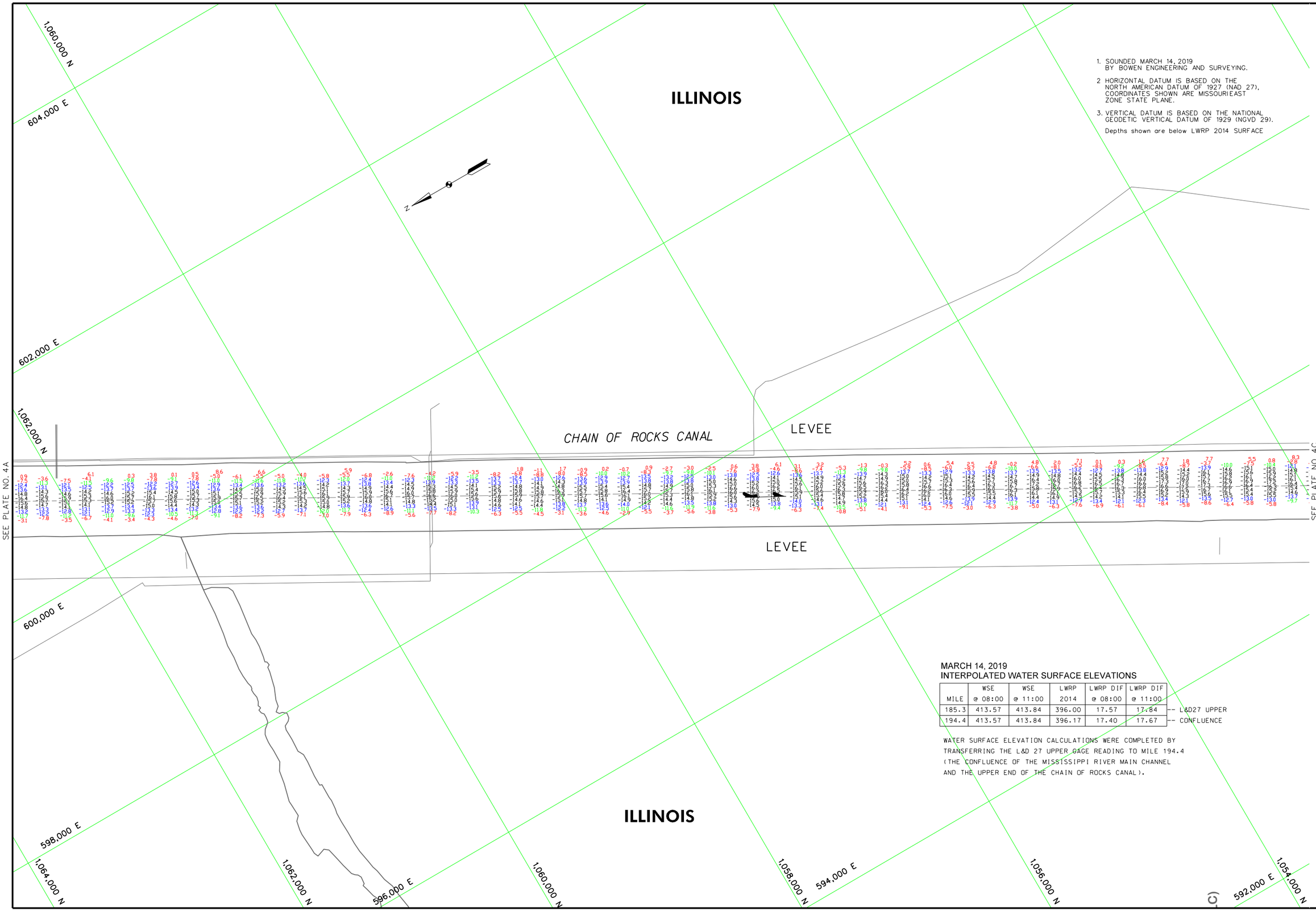
THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE BY THE ST. LOUIS DISTRICT, CORPS OF ENGINEERS AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

RIVER MILES 184.5 – 185.1

PLATE NUMBER

4A



1. SOUNDED MARCH 14, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below LWRP 2014 SURFACE

MARCH 14, 2019
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 08:00	WSE @ 11:00	LWRP 2014	LWRP DIF @ 08:00	LWRP DIF @ 11:00	
185.3	413.57	413.84	396.00	17.57	17.84	-- L&D27 UPPER
194.4	413.57	413.84	396.17	17.40	17.67	-- CONFLUENCE

WATER SURFACE ELEVATION CALCULATIONS WERE COMPLETED BY TRANSFERRING THE L&D 27 UPPER GAGE READING TO MILE 194.4 (THE CONFLUENCE OF THE MISSISSIPPI RIVER MAIN CHANNEL AND THE UPPER END OF THE CHAIN OF ROCKS CANAL).

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	MEL PRICE L&D TW	L&D 27 UPPER	L&D 27 LOWER	ST. LOUIS, MO
ZERO N.G.V.D.	395.48	350.00	350.00	379.94
MILE	200.5	185.3	185.1	180.0
LWRP 2014	396.30	396.00	376.74	376.74
14 MAR 2019	21.05(8:00) 21.41(11:00)	63.57(8:00) 63.84(11:00)	X	X

Survey Date: MARCH 14, 2019

Surveyed by: BOWEN ENGINEERING
Reviewed by: X
Ckd by: X
Drawn by: X
SUBMITTED: X
APPROVED: X
Plot date: ########
File name: ##########

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER
CHAIN OF ROCKS CANAL

240 METERS
800 FEET
120 0 120
400 0 400

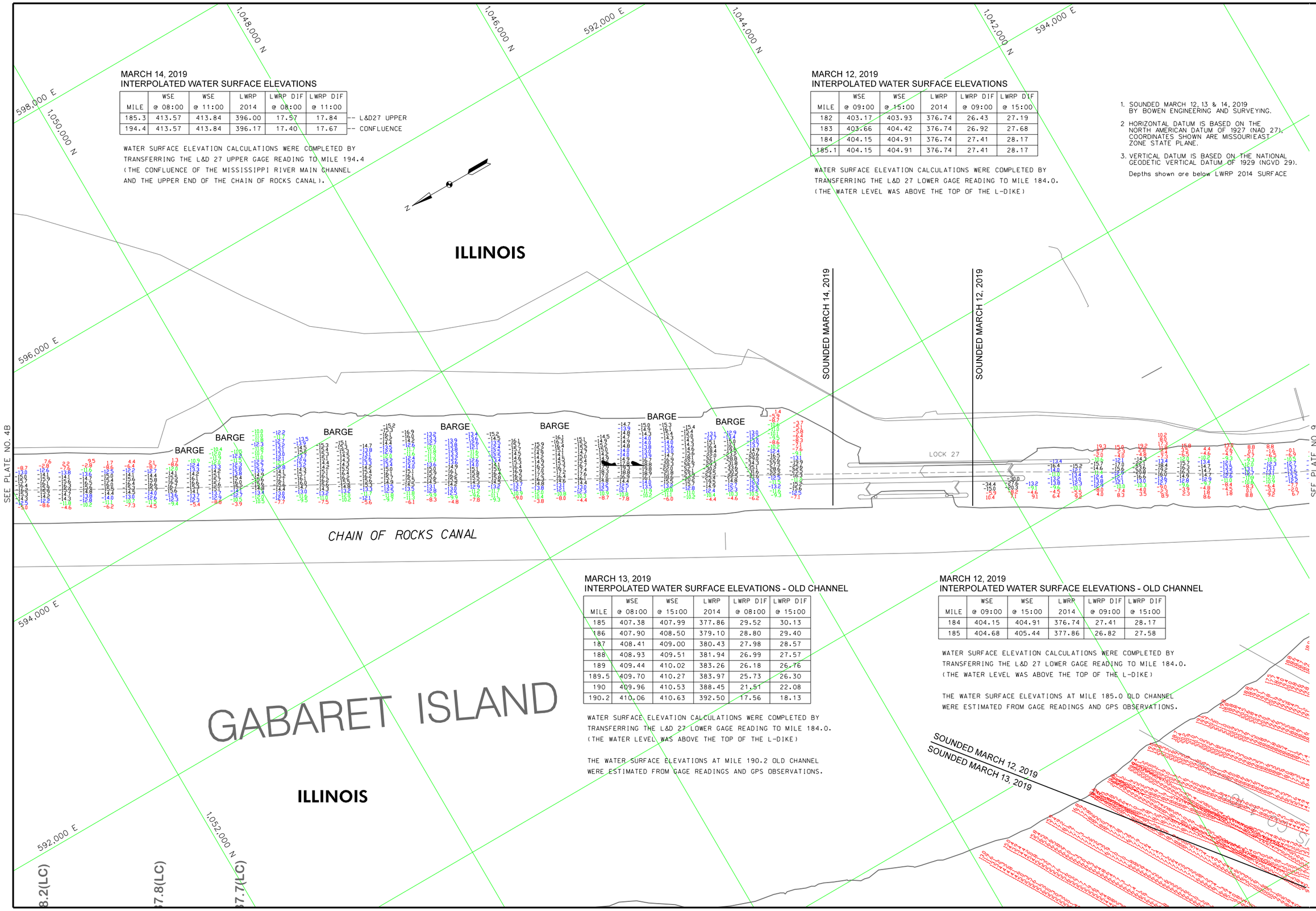
THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE AT THE TIME SHOWN AND IS INTENDED TO REPRESENT AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

RIVER MILES 184.5 – 185.1

PLATE NUMBER

4B



MARCH 14, 2019
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 08:00	WSE @ 11:00	LWRP 2014	LWRP DIF @ 08:00	LWRP DIF @ 11:00	
185.3	413.57	413.84	396.00	17.57	17.84	-- L&D27 UPPER
194.4	413.57	413.84	396.17	17.40	17.67	-- CONFLUENCE

WATER SURFACE ELEVATION CALCULATIONS WERE COMPLETED BY TRANSFERRING THE L&D 27 UPPER GAGE READING TO MILE 194.4 (THE CONFLUENCE OF THE MISSISSIPPI RIVER MAIN CHANNEL AND THE UPPER END OF THE CHAIN OF ROCKS CANAL).

MARCH 12, 2019
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 09:00	WSE @ 15:00	LWRP 2014	LWRP DIF @ 09:00	LWRP DIF @ 15:00
182	403.17	403.93	376.74	26.43	27.19
183	403.66	404.42	376.74	26.92	27.68
184	404.15	404.91	376.74	27.41	28.17
185.1	404.15	404.91	376.74	27.41	28.17

WATER SURFACE ELEVATION CALCULATIONS WERE COMPLETED BY TRANSFERRING THE L&D 27 LOWER GAGE READING TO MILE 184.0. (THE WATER LEVEL WAS ABOVE THE TOP OF THE L-DIKE)

1. SOUNDED MARCH 12, 13 & 14, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27). COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below LWRP 2014 SURFACE

MARCH 13, 2019
INTERPOLATED WATER SURFACE ELEVATIONS - OLD CHANNEL

MILE	WSE @ 08:00	WSE @ 15:00	LWRP 2014	LWRP DIF @ 08:00	LWRP DIF @ 15:00
185	407.38	407.99	377.86	29.52	30.13
186	407.90	408.50	379.10	28.80	29.40
187	408.41	409.00	380.43	27.98	28.57
188	408.93	409.51	381.94	26.99	27.57
189	409.44	410.02	383.26	26.18	26.76
189.5	409.70	410.27	383.97	25.73	26.30
190	409.96	410.53	388.45	21.51	22.08
190.2	410.06	410.63	392.50	17.56	18.13

WATER SURFACE ELEVATION CALCULATIONS WERE COMPLETED BY TRANSFERRING THE L&D 27 LOWER GAGE READING TO MILE 184.0. (THE WATER LEVEL WAS ABOVE THE TOP OF THE L-DIKE)

THE WATER SURFACE ELEVATIONS AT MILE 190.2 OLD CHANNEL WERE ESTIMATED FROM GAGE READINGS AND GPS OBSERVATIONS.

MARCH 12, 2019
INTERPOLATED WATER SURFACE ELEVATIONS - OLD CHANNEL

MILE	WSE @ 09:00	WSE @ 15:00	LWRP 2014	LWRP DIF @ 09:00	LWRP DIF @ 15:00
184	404.15	404.91	376.74	27.41	28.17
185	404.68	405.44	377.86	26.82	27.58

WATER SURFACE ELEVATION CALCULATIONS WERE COMPLETED BY TRANSFERRING THE L&D 27 LOWER GAGE READING TO MILE 184.0. (THE WATER LEVEL WAS ABOVE THE TOP OF THE L-DIKE)

THE WATER SURFACE ELEVATIONS AT MILE 185.0 OLD CHANNEL WERE ESTIMATED FROM GAGE READINGS AND GPS OBSERVATIONS.

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	MEL PRICE L&D TW	L&D 27 UPPER	L&D 27 LOWER	ST. LOUIS, MO
ZERO N.G.V.D.	395.48	350.00	350.00	379.94
MILE	200.5	185.3	185.1	180.0
LWRP 2014	396.30	396.00	376.74	376.74
12 MAR 2019	x	x	54.59-9/00 54.9/15-00/1	22.25-9/00 23.0/15-00/1
13 MAR 2019	x	x	56.87/8-00/ 57.48/15-00/1	24.82/8-00/ 25.39/15-00/1
14 MAR 2019	21.05/8-00/ 21.4/11-00/1	63.57/8-00/1 63.84/11-00/1	x	x

Survey Date: MARCH 12, 13 & 14, 2019
Reviewed by: X
Ckd by: X
Drawn by: X
APPROVED: X
SUBMITTED: X
Plot date: ##/##/YY HH:MM:SS
File name: ##########.DGN

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER
CHAIN OF ROCKS CANAL

240 METERS 120 0 120 400 0 400 800 FEET

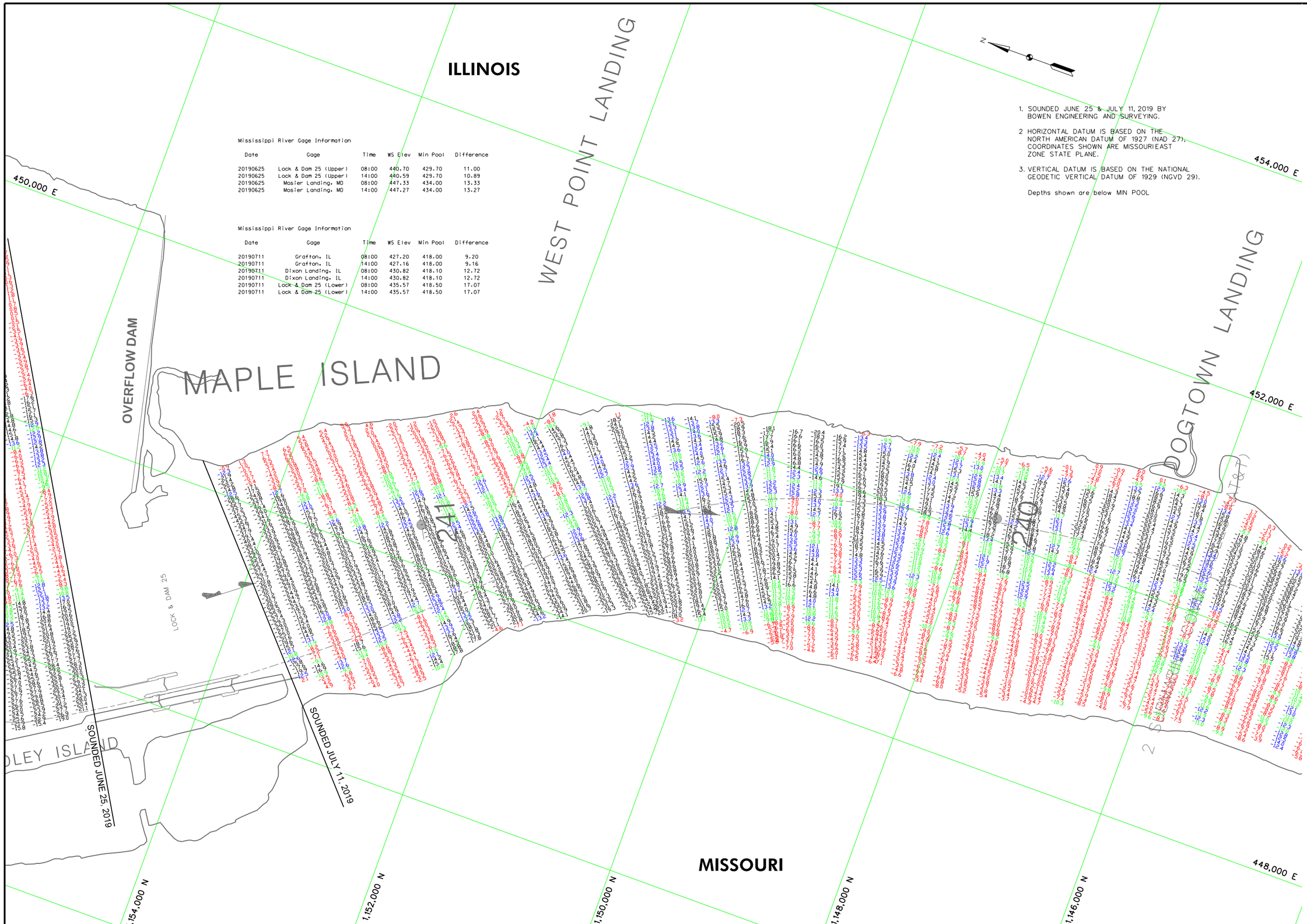
THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND ARE SHOWN AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

RIVER MILES 184.5 – 185.1

PLATE NUMBER

4C



Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190625	Lock & Dam 25 (Upper)	08:00	440.70	429.70	11.00
20190625	Lock & Dam 25 (Upper)	14:00	440.59	429.70	10.89
20190625	Mosier Landing, MO	08:00	447.33	434.00	13.33
20190625	Mosier Landing, MO	14:00	447.27	434.00	13.27

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190711	Grafton, IL	08:00	427.20	418.00	9.20
20190711	Grafton, IL	14:00	427.16	418.00	9.16
20190711	Dixon Landing, IL	08:00	430.82	418.10	12.72
20190711	Dixon Landing, IL	14:00	430.82	418.10	12.72
20190711	Lock & Dam 25 (Lower)	08:00	435.57	418.50	17.07
20190711	Lock & Dam 25 (Lower)	14:00	435.57	418.50	17.07

1. SOUNDED JUNE 25 & JULY 11, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27). COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	MOSIER	L&D 25 UPPER	L&D 25 LOWER	DIXON LANDING, IL
ZERO N.G.V.D.	400.0	407.0	407.00	410.62
MILE	260.3	241.5	241.2	228.3
MIN. POOL	434.0	429.7	418.5	418.1
25 JUN 2019	47.3308-001	47.2714-001	33.7008-001 33.5914-001	x
11 JUL 2019	x	x	x 28.5718-001 28.5714-001	20.2114-001

Surveyed by: BOWEN ENGINEERING
Survey Date: JUNE 25 & JULY 11, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: ##########
Plot date: ##########

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

240 METERS 0 120 400 800 FEET

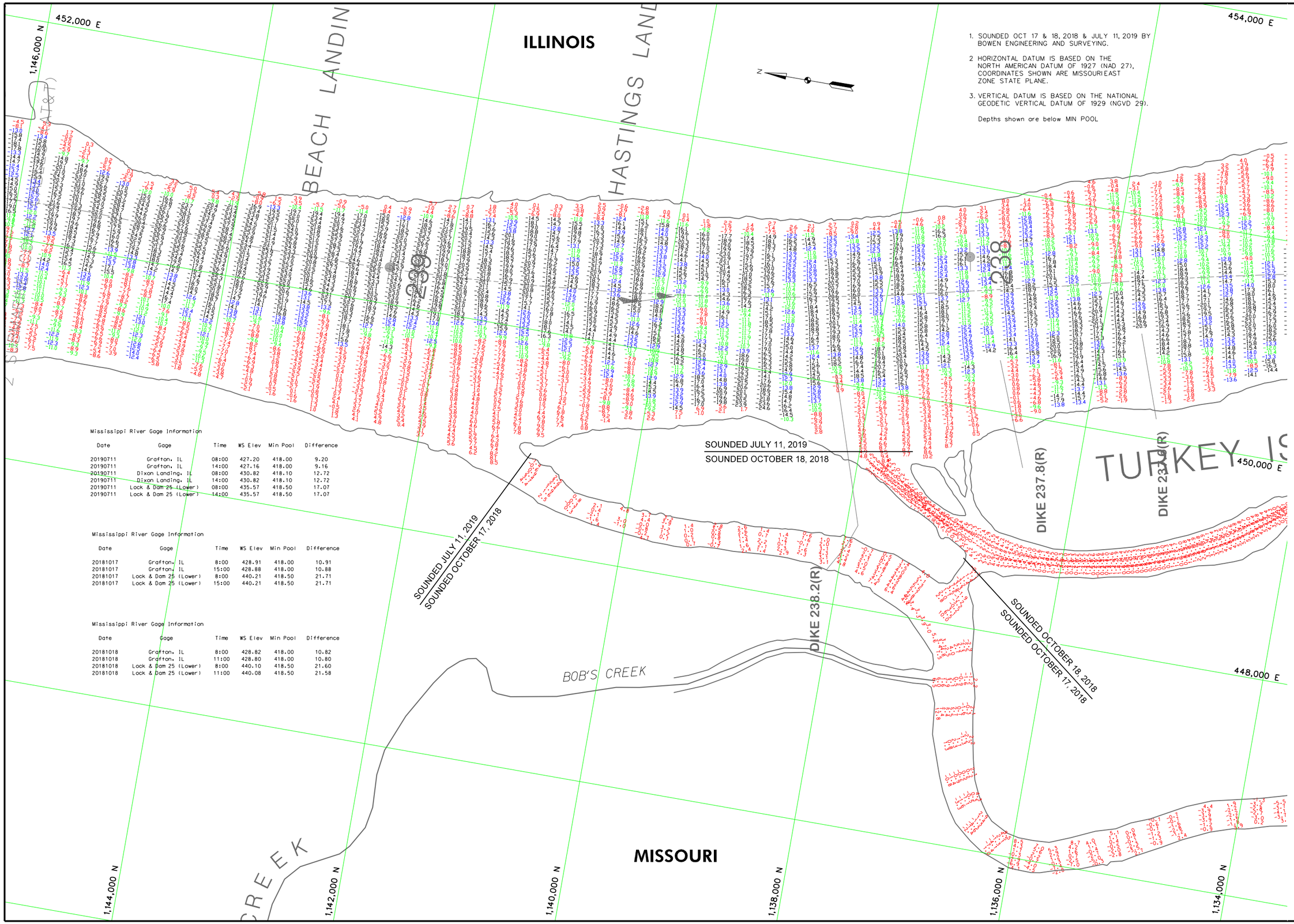
THE INFORMATION REPORTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND SHOULD BE INTERPRETED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

HYDROGRAPHIC SURVEYS

MILE: 239.6 – 241.6

PLATE NUMBER

30



1. SOUNDED OCT 17 & 18, 2018 & JULY 11, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190711	Grafton, IL	08:00	427.20	418.00	9.20
20190711	Grafton, IL	14:00	427.16	418.00	9.16
20190711	Dixon Landing, IL	08:00	430.82	418.10	12.72
20190711	Dixon Landing, IL	14:00	430.82	418.10	12.72
20190711	Lock & Dam 25 (Lower)	08:00	435.57	418.50	17.07
20190711	Lock & Dam 25 (Lower)	14:00	435.57	418.50	17.07

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181017	Grafton, IL	8:00	428.91	418.00	10.91
20181017	Grafton, IL	15:00	428.88	418.00	10.88
20181017	Lock & Dam 25 (Lower)	8:00	440.21	418.50	21.71
20181017	Lock & Dam 25 (Lower)	15:00	440.21	418.50	21.71

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181018	Grafton, IL	8:00	428.82	418.00	10.82
20181018	Grafton, IL	11:00	428.80	418.00	10.80
20181018	Lock & Dam 25 (Lower)	8:00	440.10	418.50	21.60
20181018	Lock & Dam 25 (Lower)	11:00	440.08	418.50	21.58

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L & D 25 (LOWER)	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.2	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
17 OCT 2018	33.21(8:00) 33.21(15:00)	UNDERWATER	25.12(8:00) 25.09(15:00)	x
18 OCT 2018	33.10(8:00) 33.08(11:00)	UNDERWATER	25.03(8:00) 25.02(11:00)	x
11 JUL 2019	28.57(8:00) 28.57(14:00)	20.21(14:00)	23.41(8:00) 23.37(14:00)	x

Surveyed by: BOWEN ENGINEERING
Survey Date: OCTOBER 17 & 18, 2018
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: 888801CHP-EBERPLATNO888
Plot date: 888801TIFFTIME888

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

240 METERS 120 0 120 400 800 FEET

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE BY THE ST. LOUIS DISTRICT, CORPS OF ENGINEERS AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 237.6 – 239.6

PLATE NUMBER

31

ILLINOIS

1. SOUNDED OCTOBER 18, 2018 & JULY 11, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

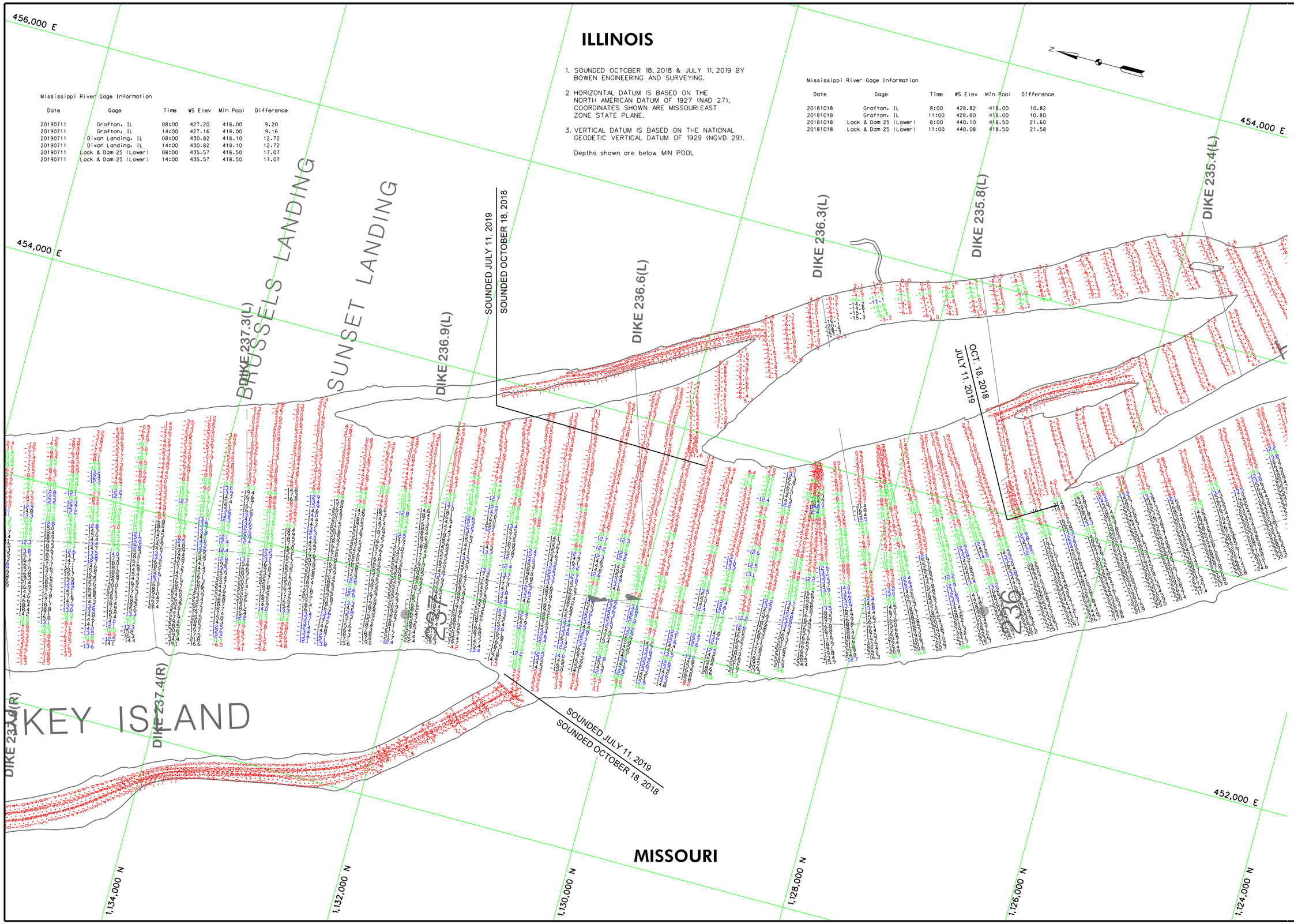
Depths shown are below MIN POOL

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190711	Grafton, IL	08:00	427.20	418.00	9.20
20190711	Grafton, IL	14:00	427.16	418.00	9.16
20190711	Dixon Landing, IL	08:00	430.82	418.10	12.72
20190711	Dixon Landing, IL	14:00	430.82	418.10	12.72
20190711	Lock & Dam 25 (Lower)	08:00	435.57	418.50	17.07
20190711	Lock & Dam 25 (Lower)	14:00	435.57	418.50	17.07

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181018	Grafton, IL	8:00	428.82	418.00	10.82
20181018	Grafton, IL	11:00	428.80	418.00	10.80
20181018	Lock & Dam 25 (Lower)	8:00	440.10	418.50	21.60
20181018	Lock & Dam 25 (Lower)	11:00	440.08	418.50	21.58



US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L & D 25 (LOWER)	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.2	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
18 OCT 2018	33.50ft-00/ 33.08ft-00)	UNDERWATER	25.03ft-00/ 25.01ft-00)	x
11 JUL 2019	28.57ft-00/ 28.57ft-00)	20.21ft-00)	23.41ft-00/ 23.37ft-00)	x

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 18, 2018 & JULY 11, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: 6181010-0181011-0190713-0190719
Plot date: 8/8/2019 11:19:17 AM CDT

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

HYDROGRAPHIC SURVEYS

MILE: 235.6 – 237.6

120 0 120 240 METERS
400 0 400 800 FEET

THE INFORMATION REPORTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND SHOULD BE USED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

PLATE NUMBER

32

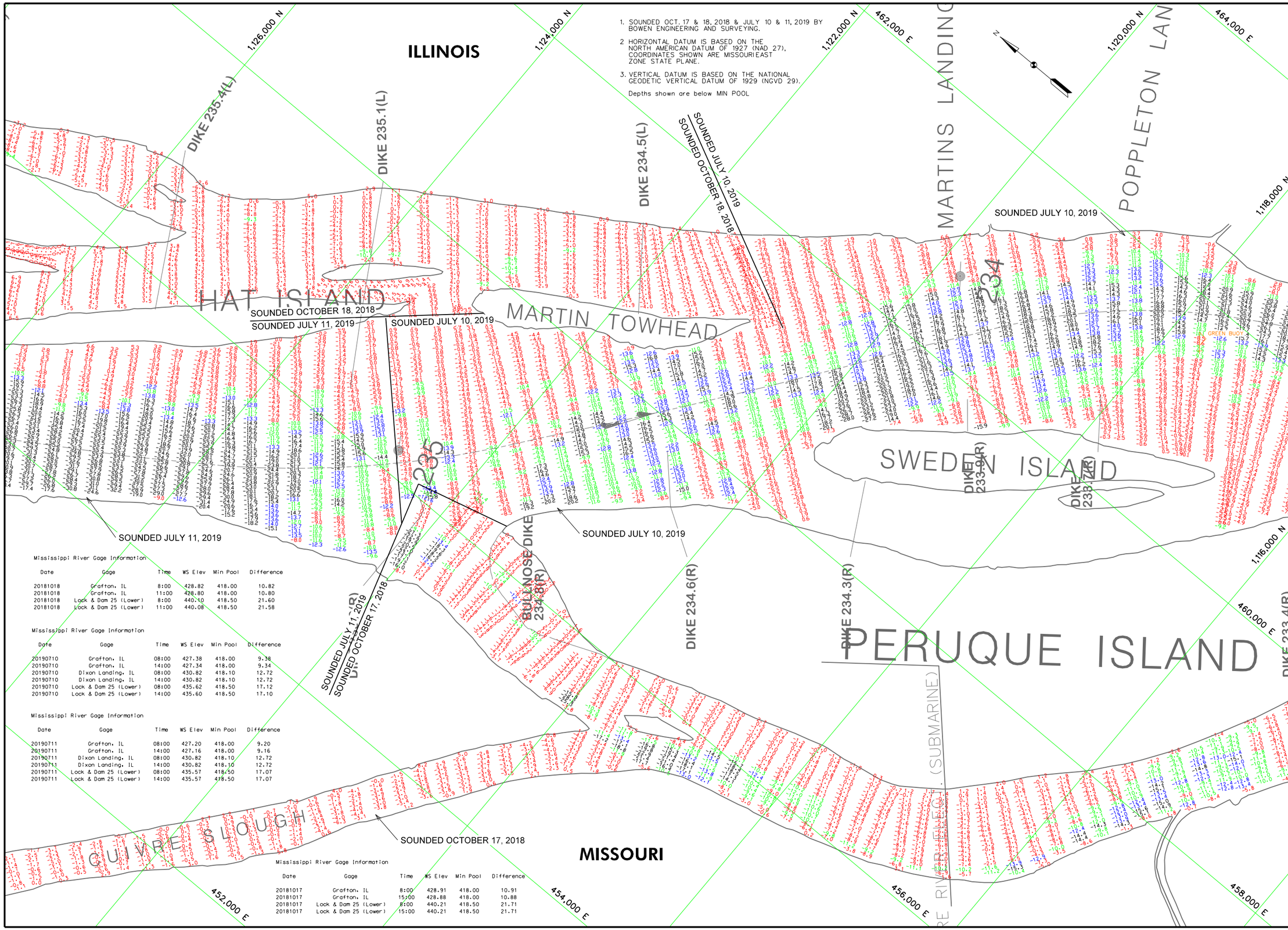
SEE PLATE NO. 32A

1. SOUNDED OCT. 17 & 18, 2018 & JULY 10 & 11, 2019 BY BOWEN ENGINEERING AND SURVEYING.

2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.

3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL



Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181018	Grafton, IL	8:00	428.82	418.00	10.82
20181018	Grafton, IL	11:00	428.80	418.00	10.80
20181018	Lock & Dam 25 (Lower)	8:00	440.10	418.50	21.60
20181018	Lock & Dam 25 (Lower)	11:00	440.08	418.50	21.58

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190710	Grafton, IL	08:00	427.38	418.00	9.38
20190710	Grafton, IL	14:00	427.34	418.00	9.34
20190710	Dixon Landing, IL	08:00	430.82	418.10	12.72
20190710	Dixon Landing, IL	14:00	430.82	418.10	12.72
20190710	Lock & Dam 25 (Lower)	08:00	435.62	418.50	17.12
20190710	Lock & Dam 25 (Lower)	14:00	435.60	418.50	17.10

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190711	Grafton, IL	08:00	427.20	418.00	9.20
20190711	Grafton, IL	14:00	427.16	418.00	9.16
20190711	Dixon Landing, IL	08:00	430.82	418.10	12.72
20190711	Dixon Landing, IL	14:00	430.82	418.10	12.72
20190711	Lock & Dam 25 (Lower)	08:00	435.57	418.50	17.07
20190711	Lock & Dam 25 (Lower)	14:00	435.57	418.50	17.07

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181017	Grafton, IL	8:00	428.91	418.00	10.91
20181017	Grafton, IL	15:00	428.88	418.00	10.88
20181017	Lock & Dam 25 (Lower)	8:00	440.21	418.50	21.71
20181017	Lock & Dam 25 (Lower)	15:00	440.21	418.50	21.71

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L & D 25 (LOWER)	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.2	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
17 OCT 2018	33.2(18:00) 33.21(5:00)	UNDERWATER	25.12(8:00) 25.09(15:00)	x
18 OCT 2018	33.10(8:00) 33.08(11:00)	UNDERWATER	25.03(8:00) 25.02(11:00)	x
10 JUL 2019	28.68(8:00) 28.67(14:00)	20.21(4:00)	23.59(8:00) 23.55(14:00)	x
11 JUL 2019	28.57(8:00) 28.57(14:00)	20.21(4:00)	23.41(8:00) 23.37(14:00)	x

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 17, 2018 - JULY 11, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: ##########\EDITPLATE\PLATE##.DGN
Plot date: ##########TIME##########

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

240 METERS 120 0 800 FEET 400 0

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE BY THE ST. LOUIS DISTRICT, CORPS OF ENGINEERS AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 233.6 – 235.6

PLATE NUMBER

33

1. SOUNDED OCT. 17, 2018 & JULY 10, 2019 BY BOWEN ENGINEERING AND SURVEYING.

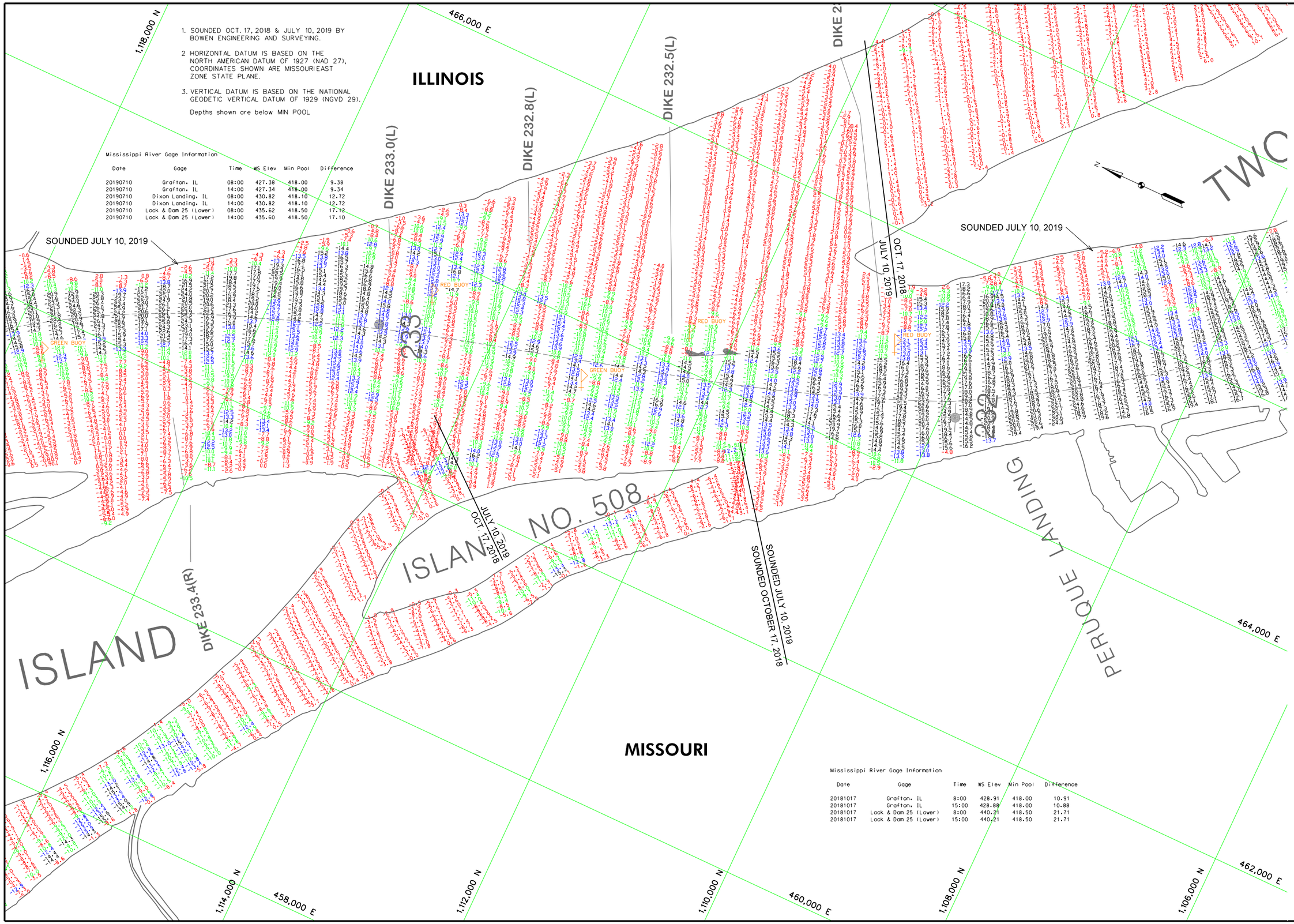
2 HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.

3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190710	Grafton, IL	08:00	427.38	418.00	9.38
20190710	Grafton, IL	14:00	427.34	418.00	9.34
20190710	Dixon Landing, IL	08:00	430.82	418.10	12.72
20190710	Dixon Landing, IL	14:00	430.82	418.10	12.72
20190710	Lock & Dam 25 (Lower)	08:00	435.62	418.50	17.12
20190710	Lock & Dam 25 (Lower)	14:00	435.60	418.50	17.10



Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181017	Grafton, IL	8:00	428.91	418.00	10.91
20181017	Grafton, IL	15:00	428.88	418.00	10.88
20181017	Lock & Dam 25 (Lower)	8:00	440.21	418.50	21.71
20181017	Lock & Dam 25 (Lower)	15:00	440.21	418.50	21.71

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L & D 25 (LOWER)	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.2	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
17 OCT 2018	33.2(18:00) 33.21(15:00)	UNDERWATER	25.12(8:00) 25.09(15:00)	x
10 JUL 2019	28.62(18:00) 28.60(14:00)	20.21(14:00)	23.59(8:00) 23.55(14:00)	x

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 17, 2018 & JULY 10, 2019
Drawn by: X
Ckd by: X
SUBMITTED: X
Reviewed by: X
APPROVED: X
File name: ##########
Plot date: ##########

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

120 0 120 240 METERS
400 0 400 800 FEET

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SITE SPECIFIC HYDROGRAPHIC SURVEYS, THE DATA SHOULD BE USED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 231.6 – 233.6

PLATE NUMBER

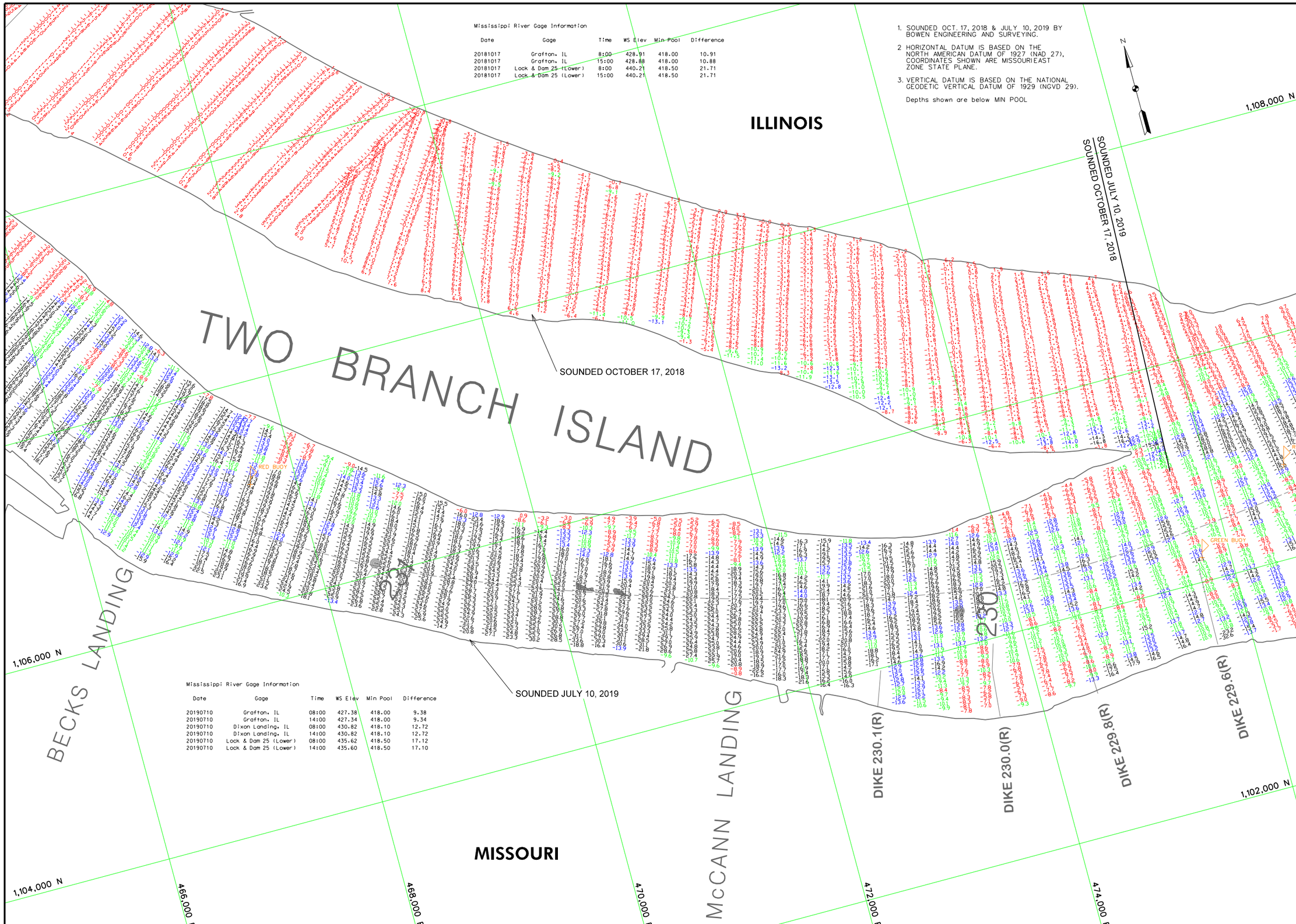
34

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181017	Grafton, IL	8:00	428.91	418.00	10.91
20181017	Grafton, IL	15:00	428.88	418.00	10.88
20181017	Lock & Dam 25 (Lower)	8:00	440.21	418.50	21.71
20181017	Lock & Dam 25 (Lower)	15:00	440.21	418.50	21.71

1. SOUNDED OCT. 17, 2018 & JULY 10, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL



Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190710	Grafton, IL	08:00	427.38	418.00	9.38
20190710	Grafton, IL	14:00	427.34	418.00	9.34
20190710	Dixon Landing, IL	08:00	430.82	418.10	12.72
20190710	Dixon Landing, IL	14:00	430.82	418.10	12.72
20190710	Lock & Dam 25 (Lower)	08:00	435.62	418.50	17.12
20190710	Lock & Dam 25 (Lower)	14:00	435.60	418.50	17.10

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L & D 25 (LOWER)	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.2	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
17 OCT 2018	33.2(18-001) 33.2(15-001)	UNDERWATER	25.12(18-001) 25.09(15-001)	x
10 JUL 2019	28.62(18-001) 28.60(14-001)	20.2(14-001)	23.59(18-001) 23.55(14-001)	x

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 17, 2018 & JULY 10, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: ##########
Plot date: ##########

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

240 METERS 120 0 120 240
800 FEET 400 0 400 800

THE INFORMATION REPORTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON THE DATE(S) SHOWN AND IS INTENDED ONLY AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 229.5 – 231.6

PLATE NUMBER

35

1. SOUNDED OCTOBER 16 & 17, 2018 AND JULY 9 & 10, 2019 BY BOWEN ENGINEERING AND SURVEYING.

2 HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.

3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190710	Grafton, IL	08:00	427.38	418.00	9.38
20190710	Grafton, IL	14:00	427.34	418.00	9.34
20190710	Dixon Landing, IL	08:00	430.82	418.10	12.72
20190710	Dixon Landing, IL	14:00	430.82	418.10	12.72
20190710	Lock & Dam 25 (Lower)	08:00	435.62	418.50	17.12
20190710	Lock & Dam 25 (Lower)	14:00	435.60	418.50	17.10

Mississippi River Gage Information

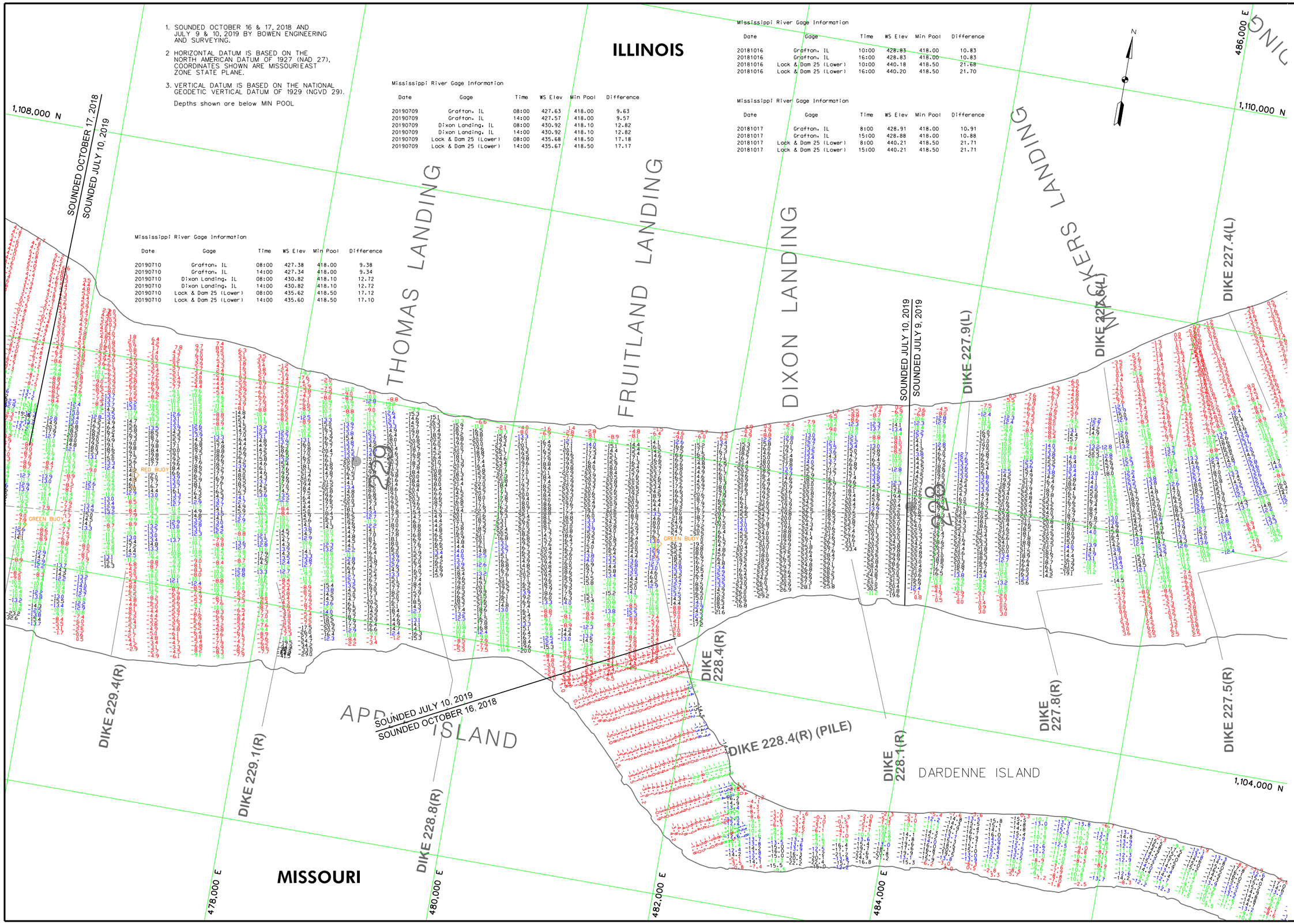
Date	Gage	Time	WS Elev	Min Pool	Difference
20190709	Grafton, IL	08:00	427.63	418.00	9.63
20190709	Grafton, IL	14:00	427.57	418.00	9.57
20190709	Dixon Landing, IL	08:00	430.92	418.10	12.82
20190709	Dixon Landing, IL	14:00	430.92	418.10	12.82
20190709	Lock & Dam 25 (Lower)	08:00	435.68	418.50	17.18
20190709	Lock & Dam 25 (Lower)	14:00	435.67	418.50	17.17

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181016	Grafton, IL	10:00	428.83	418.00	10.83
20181016	Grafton, IL	16:00	428.83	418.00	10.83
20181016	Lock & Dam 25 (Lower)	10:00	440.18	418.50	21.68
20181016	Lock & Dam 25 (Lower)	16:00	440.20	418.50	21.70

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181017	Grafton, IL	8:00	428.91	418.00	10.91
20181017	Grafton, IL	15:00	428.88	418.00	10.88
20181017	Lock & Dam 25 (Lower)	8:00	440.21	418.50	21.71
20181017	Lock & Dam 25 (Lower)	15:00	440.21	418.50	21.71



US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L & D 25 (LOWER)	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.2	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
16 OCT 2018	33.18(10:00) 33.20(16:00)	UNDERWATER	25.04(10:00) 25.04(16:00)	x
17 OCT 2018	33.21(8:00) 33.21(15:00)	UNDERWATER	25.12(8:00) 25.09(15:00)	x
09 JUL 2019	28.68(8:00) 28.67(14:00)	UNDERWATER	23.84(8:00) 23.78(14:00)	x
10 JUL 2019	28.62(8:00) 28.60(14:00)	20.31(4:00)	23.59(8:00) 23.55(14:00)	x

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

Surveyed by: BOWEN ENGINEERING
Drawn by: X
SUBMITTED: X
Reviewed by: X
APPROVED: X
Survey Date: OCT. 16, 2018 - JULY 10, 2019
Ckd by: X
Plot date: ########
File name: ##########

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

HYDROGRAPHIC SURVEYS

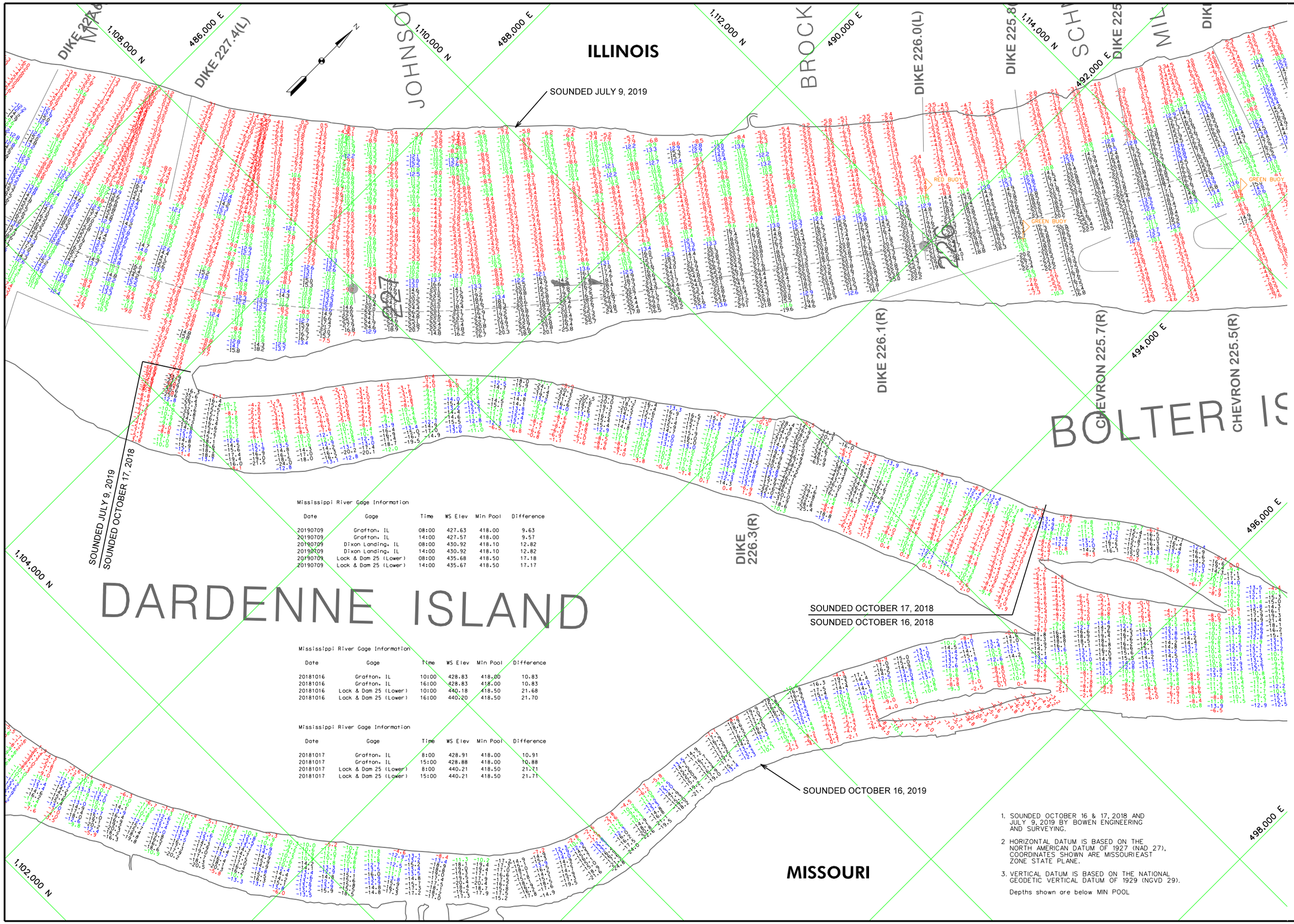
MILE: 227.5 – 229.5

240 METERS
800 FEET

THE INFORMATION REPRESENTED IN THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE AT THE TIME AND DATE SHOWN AND IS INTENDED TO BE USED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

PLATE NUMBER

36



Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190709	Grafton, IL	08:00	427.63	418.00	9.63
20190709	Grafton, IL	14:00	427.57	418.00	9.57
20190709	Dixon Landing, IL	08:00	430.92	418.10	12.82
20190709	Dixon Landing, IL	14:00	430.92	418.10	12.82
20190709	Lock & Dam 25 (Lower)	08:00	435.68	418.50	17.18
20190709	Lock & Dam 25 (Lower)	14:00	435.67	418.50	17.17

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181016	Grafton, IL	10:00	428.83	418.00	10.83
20181016	Grafton, IL	16:00	428.83	418.00	10.83
20181016	Lock & Dam 25 (Lower)	10:00	440.18	418.50	21.68
20181016	Lock & Dam 25 (Lower)	16:00	440.20	418.50	21.70

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181017	Grafton, IL	8:00	428.91	418.00	10.91
20181017	Grafton, IL	15:00	428.88	418.00	10.88
20181017	Lock & Dam 25 (Lower)	8:00	440.21	418.50	21.71
20181017	Lock & Dam 25 (Lower)	15:00	440.21	418.50	21.71

1. SOUNDED OCTOBER 16 & 17, 2018 AND JULY 9, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L & D 25 (LOWER)	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.2	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
16 OCT 2018	33.18(10:00) 33.20(16:00)	UNDERWATER	25.04(10:00) 25.04(16:00)	x
17 OCT 2018	33.21(8:00) 33.21(15:00)	UNDERWATER	25.12(8:00) 25.09(15:00)	x
09 JUL 2019	28.68(8:00) 28.67(14:00)	20.31(4:00)	23.84(8:00) 23.78(14:00)	x

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT.16, 2018 - JULY 9, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: 8888FEASIGNIFIERPLATES.DGN
Plot date: 8/8/2019 11:19:17 AM EDT

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

240 METERS 120 0 120 240
800 FEET 400 0 400 800

THE INFORMATION REPRESENTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE AT THE TIME SHOWN AND IS INTENDED ONLY AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 225.5 – 227.5

PLATE NUMBER

37

1. SOUNDED OCT. 10, 16 & 18, 2018 AND JULY 9, 2019 BY BOWEN ENGINEERING AND SURVEYING.

2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.

3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181018	Grafton, IL	8:00	428.82	418.00	10.82
20181018	Grafton, IL	11:00	428.80	418.00	10.80
20181018	Lock & Dam 25 (Lower)	8:00	440.10	418.50	21.60
20181018	Lock & Dam 25 (Lower)	11:00	440.08	418.50	21.98

Mississippi River Gage Information

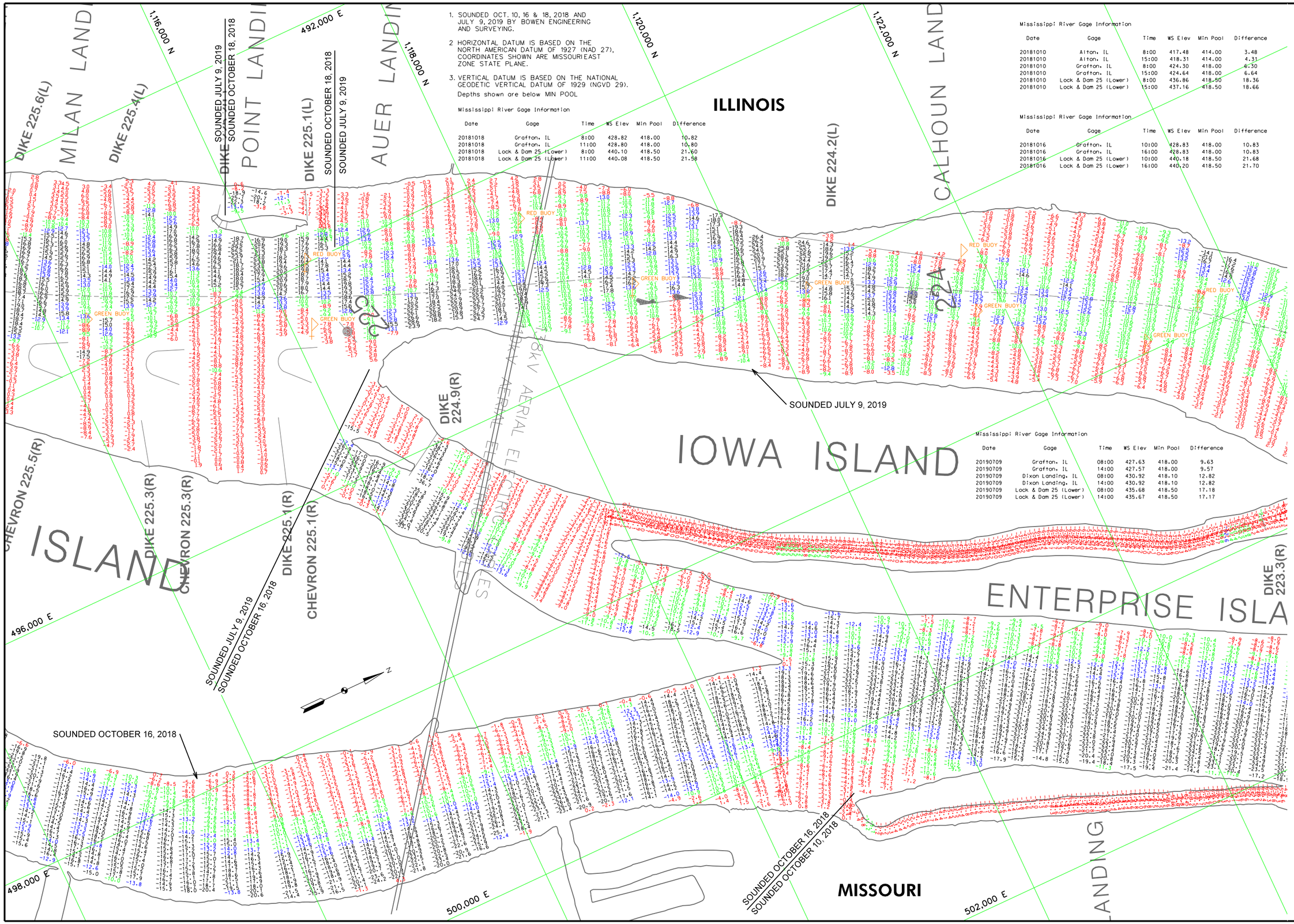
Date	Gage	Time	WS Elev	Min Pool	Difference
20181010	Alton, IL	8:00	417.48	414.00	3.48
20181010	Alton, IL	15:00	418.31	414.00	4.31
20181010	Grafton, IL	8:00	424.30	418.00	6.30
20181010	Grafton, IL	15:00	424.64	418.00	6.64
20181010	Lock & Dam 25 (Lower)	8:00	436.86	418.50	18.36
20181010	Lock & Dam 25 (Lower)	15:00	437.16	418.50	18.66

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181016	Grafton, IL	10:00	428.83	418.00	10.83
20181016	Grafton, IL	16:00	428.83	418.00	10.83
20181016	Lock & Dam 25 (Lower)	10:00	440.18	418.50	21.68
20181016	Lock & Dam 25 (Lower)	16:00	440.20	418.50	21.70

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190709	Grafton, IL	08:00	427.63	418.00	9.63
20190709	Grafton, IL	14:00	427.57	418.00	9.57
20190709	Dixon Landing, IL	08:00	430.92	418.10	12.82
20190709	Dixon Landing, IL	14:00	430.92	418.10	12.82
20190709	Lock & Dam 25 (Lower)	08:00	435.68	418.50	17.18
20190709	Lock & Dam 25 (Lower)	14:00	435.67	418.50	17.17



US Army Corps of Engineers
St. Louis District

GAGE RECORD	L & D 25 (LOWER)	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.2	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
10 OCT 2018	29.86(8/00) 30.16(15/00)	UNDERWATER	20.51(8/00) 20.85(15/00)	17.48(8/00) 18.31(15/00)
16 OCT 2018	33.18(10/00) 33.20(16/00)	UNDERWATER	25.04(10/00) 25.04(16/00)	X
18 OCT 2018	33.10(8/00) 33.08(11/00)	UNDERWATER	25.03(8/00) 25.01(11/00)	X
09 JUL 2019	28.68(8/00) 28.67(14/00)	20.31(4/00)	23.84(8/00) 23.78(14/00)	X

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 10, 2018 - JULY 9, 2019
Drawn by: X
Ckd by: X
Reviewed by: X
SUBMITTED: X
APPROVED: X
File name: 8888PROJECTS\PROJECTS\PLATES\8888
Plot date: 8888/01/01/TIME8888

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

240 METERS
800 FEET
120 0 120 400
400 0 400

THE INFORMATION REPORTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND IS ACCURATE AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 223.5 – 225.5

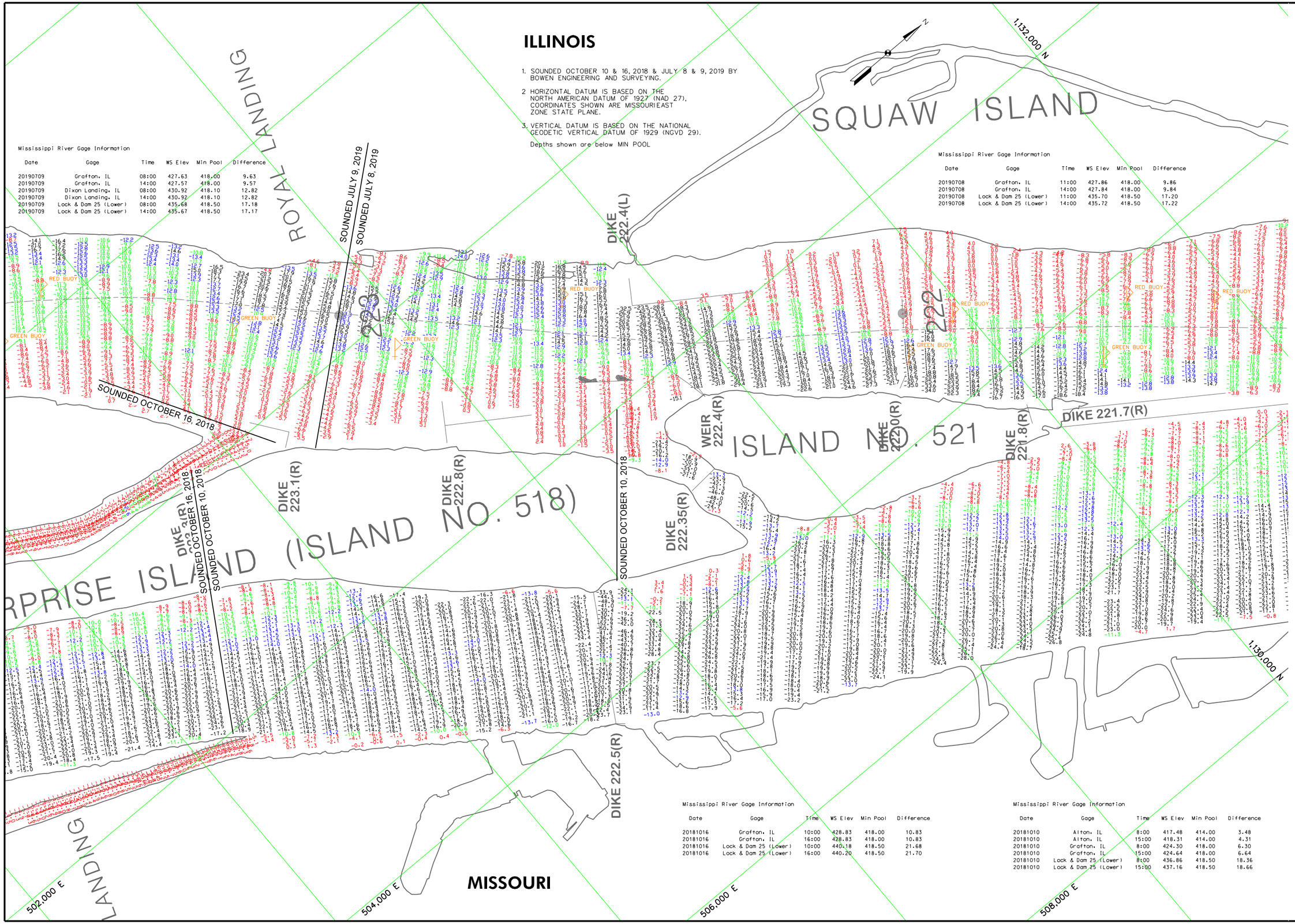
PLATE NUMBER

38

ILLINOIS

1. SOUNDED OCTOBER 10 & 16, 2018 & JULY 8 & 9, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL



Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190709	Grafton, IL	08:00	427.63	418.00	9.63
20190709	Grafton, IL	14:00	427.57	418.00	9.57
20190709	Dixon Landing, IL	08:00	430.92	418.10	12.82
20190709	Dixon Landing, IL	14:00	430.92	418.10	12.82
20190709	Lock & Dam 25 (Lower)	08:00	435.68	418.50	17.18
20190709	Lock & Dam 25 (Lower)	14:00	435.67	418.50	17.17

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190708	Grafton, IL	11:00	427.86	418.00	9.86
20190708	Grafton, IL	14:00	427.84	418.00	9.84
20190708	Lock & Dam 25 (Lower)	11:00	435.70	418.50	17.20
20190708	Lock & Dam 25 (Lower)	14:00	435.72	418.50	17.22

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181016	Grafton, IL	10:00	428.83	418.00	10.83
20181016	Grafton, IL	16:00	428.83	418.00	10.83
20181016	Lock & Dam 25 (Lower)	10:00	440.18	418.50	21.68
20181016	Lock & Dam 25 (Lower)	16:00	440.20	418.50	21.70

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181010	Alton, IL	8:00	417.48	414.00	3.48
20181010	Alton, IL	15:00	418.31	414.00	4.31
20181010	Grafton, IL	8:00	424.30	418.00	6.30
20181010	Grafton, IL	15:00	424.64	418.00	6.64
20181010	Lock & Dam 25 (Lower)	8:00	436.86	418.50	18.36
20181010	Lock & Dam 25 (Lower)	15:00	437.16	418.50	18.66

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L & D 25 (LOWER)	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.2	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
10 OCT 2018	29.86(8:00) 30.9(15:00)	UNDERWATER	20.51(8:00) 20.85(15:00)	17.48(8:00) 18.31(15:00)
16 OCT 2018	33.18(10:00) 33.20(16:00)	UNDERWATER	25.04(10:00) 25.04(16:00)	X
08 JUL 2019	28.70(11:00) 28.72(14:00)	UNDERWATER	24.07(11:00) 24.05(14:00)	X
09 JUL 2019	28.68(8:00) 28.67(14:00)	20.31(4:00)	23.84(8:00) 23.78(14:00)	X

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 10, 2018 - JULY 9, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: 8888101TE1TWE8888
Plot date: 8888101TE1TWE8888

240 METERS
800 FEET

THE INFORMATION REPORTED IN THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE AT THE TIME AND DATES INDICATED AND SHOULD BE USED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 221.4 – 223.5

PLATE NUMBER

39

1. SOUNDED OCTOBER 10, 2018, MARCH 21 & JULY 8, 2019 BY BOWEN ENGINEERING AND SURVEYING.

2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27). COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.

3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL

Mississippi River Gage Information

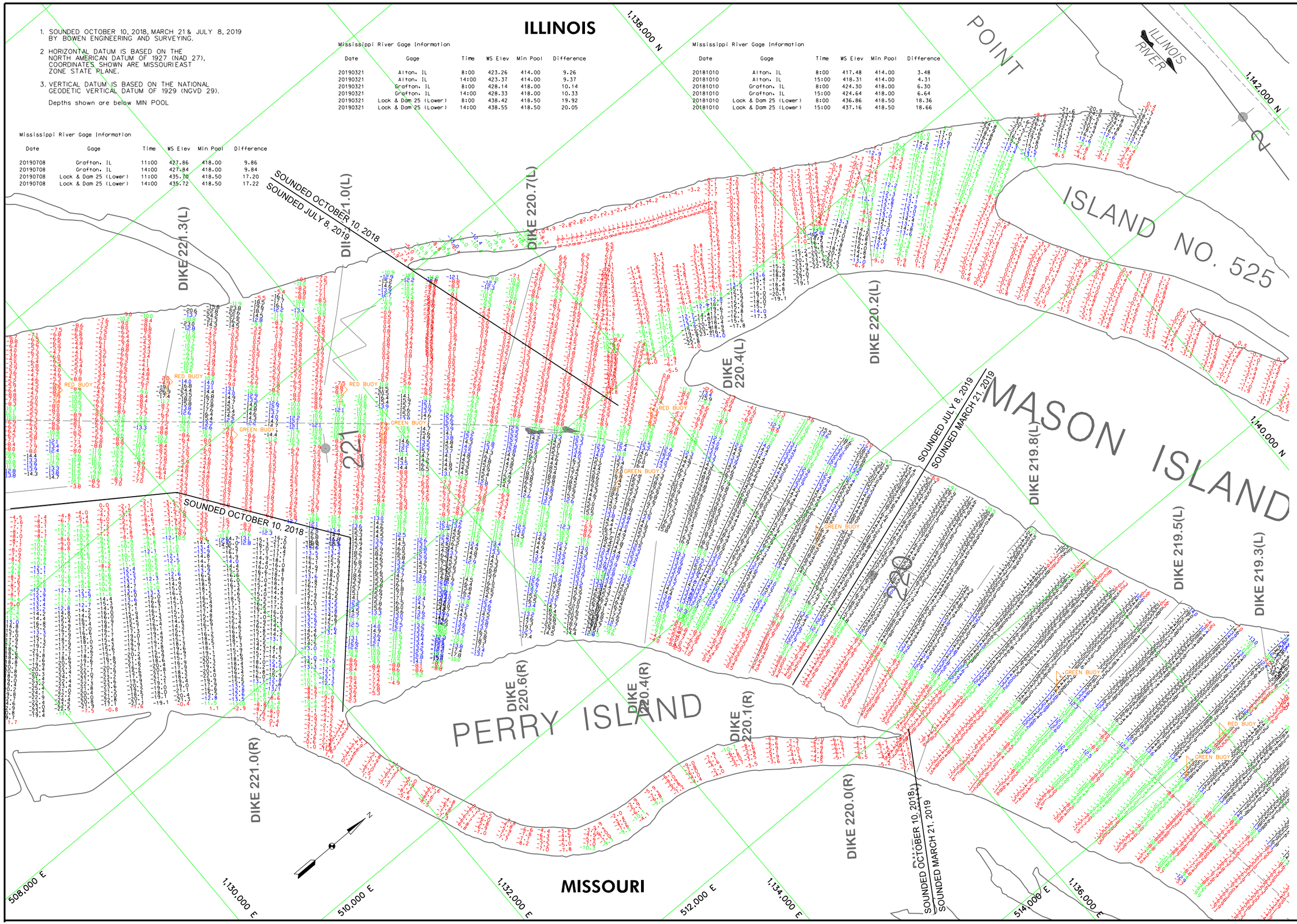
Date	Gage	Time	WS Elev	Min Pool	Difference
20190708	Grafton, IL	11:00	427.86	418.00	9.86
20190708	Grafton, IL	14:00	427.84	418.00	9.84
20190708	Lock & Dam 25 (Lower)	11:00	435.70	418.50	17.20
20190708	Lock & Dam 25 (Lower)	14:00	435.72	418.50	17.22

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190321	Alton, IL	8:00	423.26	414.00	9.26
20190321	Alton, IL	14:00	423.37	414.00	9.37
20190321	Grafton, IL	8:00	428.14	418.00	10.14
20190321	Grafton, IL	14:00	428.33	418.00	10.33
20190321	Lock & Dam 25 (Lower)	8:00	438.42	418.50	19.92
20190321	Lock & Dam 25 (Lower)	14:00	438.55	418.50	20.05

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181010	Alton, IL	8:00	417.48	414.00	3.48
20181010	Alton, IL	15:00	418.31	414.00	4.31
20181010	Grafton, IL	8:00	424.30	418.00	6.30
20181010	Grafton, IL	15:00	424.64	418.00	6.64
20181010	Lock & Dam 25 (Lower)	8:00	436.86	418.50	18.36
20181010	Lock & Dam 25 (Lower)	15:00	437.16	418.50	18.66



US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L&D 25 (LOWER), IL	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.20	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
10 OCT 2018	29.86(8:00) 30.9(15:00)	UNDERWATER	20.51(8:00) 20.85(15:00)	17.48(8:00) 18.31(15:00)
21 MAR 2019	31.42(8:00) 31.55(14:00)	UNDERWATER	24.35(8:00) 24.54(14:00)	23.26(8:00) 23.37(14:00)
08 JUL 2019	28.70(11:00) 28.72(14:00)	x	24.07(11:00) 24.05(14:00)	x

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 10, 2018 - JULY 8, 2019
Drawn by: x
Checked by: x
Reviewed by: x
SUBMITTED: x
APPROVED: x
File name: 888888\HYDROGRAPHIC\MISSISSIPPI\888888
Plot date: 888888\HYDROGRAPHIC\MISSISSIPPI\888888

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

240 METERS
800 FEET

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE BY THE ST. LOUIS DISTRICT, CORPS OF ENGINEERS AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 219.5 – 221.4

PLATE NUMBER

40

ILLINOIS

1. SOUNDED OCTOBER 10, 2018 & MARCH 21, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

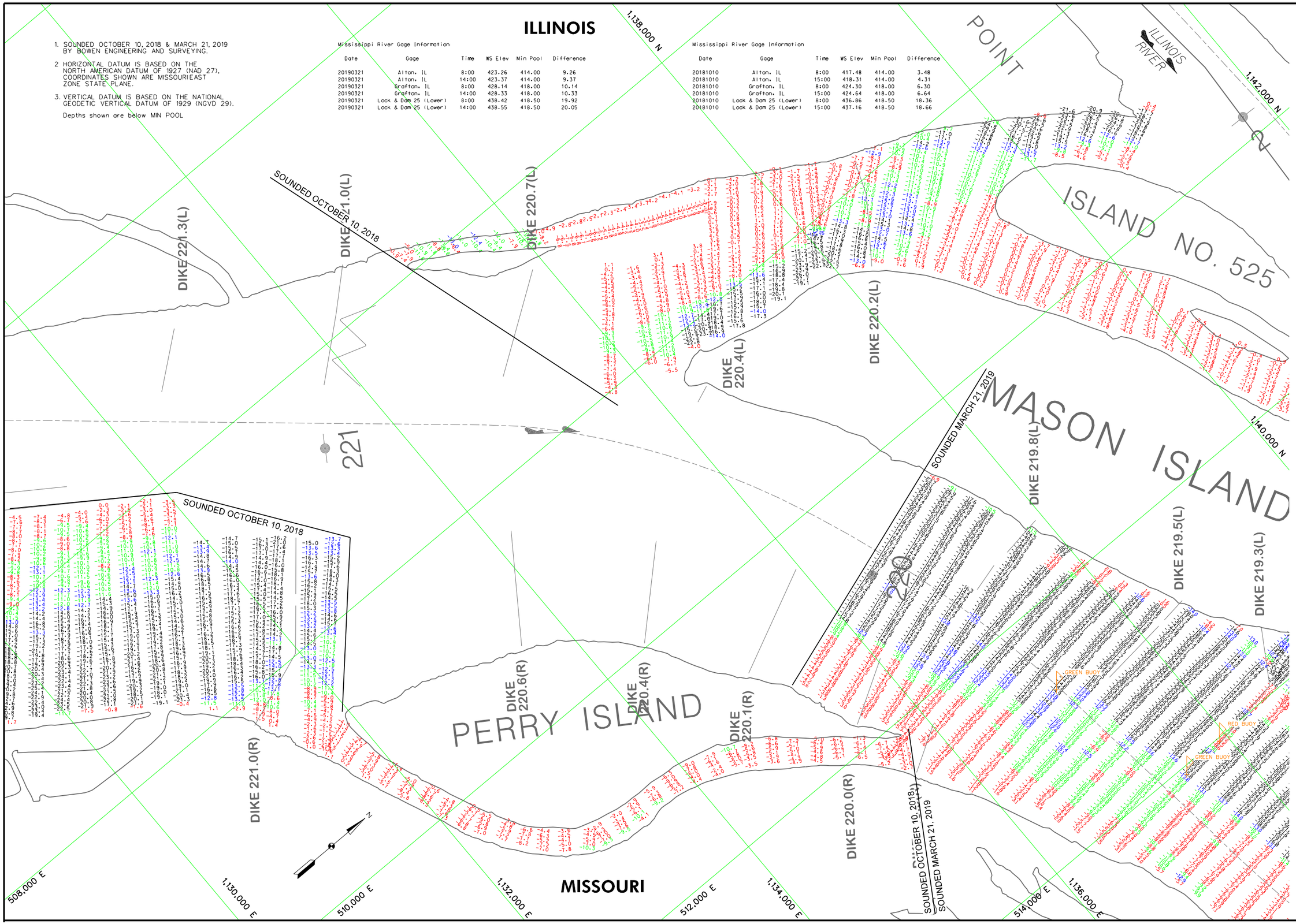
Depths shown are below MIN POOL

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190321	Alton, IL	8:00	423.26	414.00	9.26
20190321	Alton, IL	14:00	423.37	414.00	9.37
20190321	Grafton, IL	8:00	428.14	418.00	10.14
20190321	Grafton, IL	14:00	428.33	418.00	10.33
20190321	Lock & Dam 25 (Lower)	8:00	438.42	418.50	19.92
20190321	Lock & Dam 25 (Lower)	14:00	438.55	418.50	20.05

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181010	Alton, IL	8:00	417.48	414.00	3.48
20181010	Alton, IL	15:00	418.31	414.00	4.31
20181010	Grafton, IL	8:00	424.30	418.00	6.30
20181010	Grafton, IL	15:00	424.64	418.00	6.64
20181010	Lock & Dam 25 (Lower)	8:00	436.86	418.50	18.36
20181010	Lock & Dam 25 (Lower)	15:00	437.16	418.50	18.66



US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L&D 25 (LOWER), IL	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.20	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
10 OCT 2018	29.86(8:00) 30.9(15:00)	UNDERWATER	20.51(8:00) 20.85(15:00)	17.48(8:00) 18.31(15:00)
21 MAR 2019	31.42(8:00) 31.55(14:00)	UNDERWATER	24.35(8:00) 24.54(14:00)	23.26(8:00) 23.37(14:00)

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 10, 2018 & MAR. 21, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: 8888\11\15\11\11\8888
Plot date: 8888\11\15\11\11\8888

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

249 METERS
800 FEET
120 0 120 400 0 400

THE INFORMATION REPORTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE BY THE ST. LOUIS DISTRICT, CORPS OF ENGINEERS AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 219.5 – 221.4

PLATE NUMBER

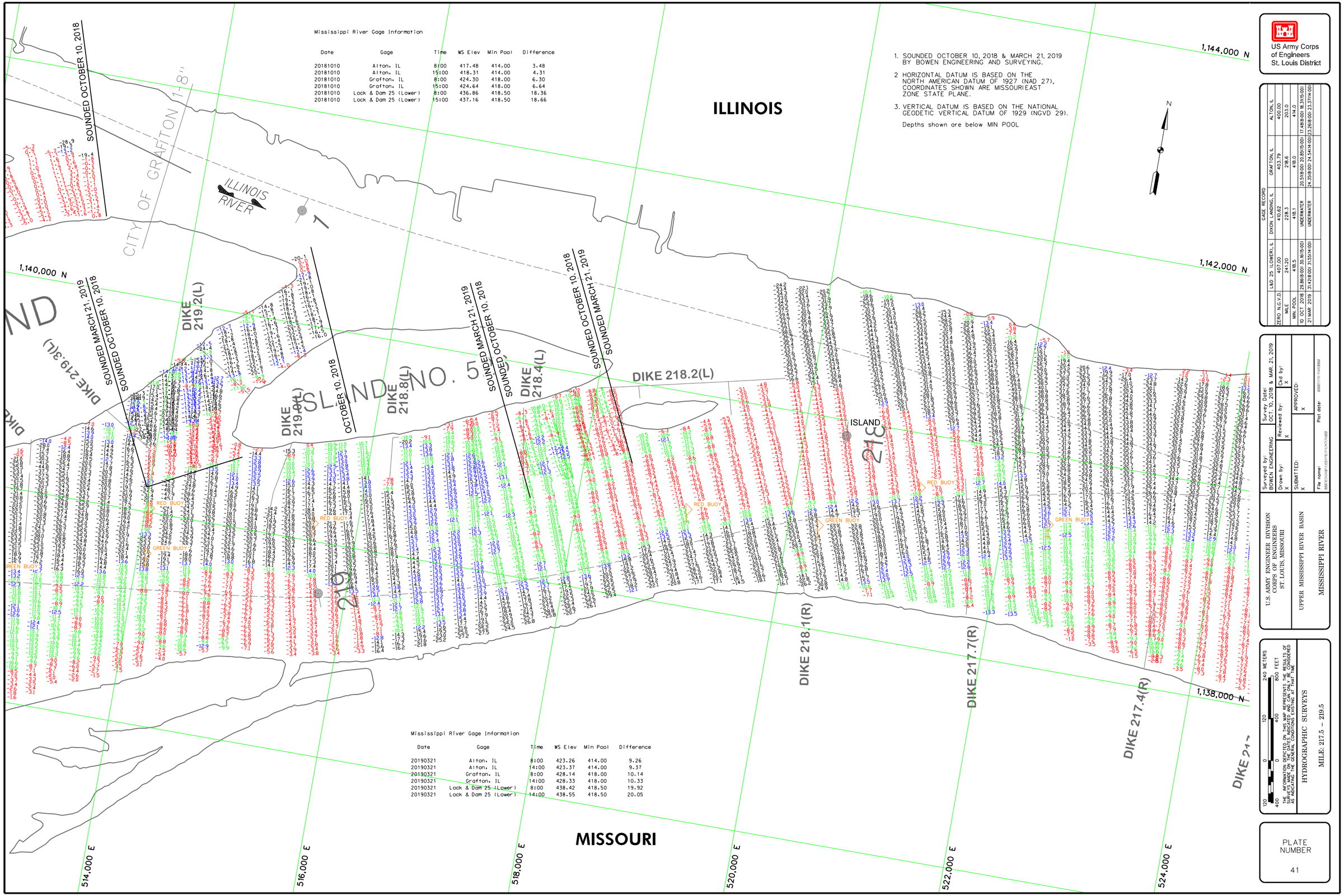
40

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181010	Alton, IL	8:00	417.48	414.00	3.48
20181010	Alton, IL	15:00	418.31	414.00	4.31
20181010	Grafton, IL	8:00	424.30	418.00	6.30
20181010	Grafton, IL	15:00	424.64	418.00	6.64
20181010	Lock & Dam 25 (Lower)	8:00	436.86	418.50	18.36
20181010	Lock & Dam 25 (Lower)	15:00	437.16	418.50	18.66

1. SOUNDED OCTOBER 10, 2018 & MARCH 21, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURIEAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL



Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190321	Alton, IL	8:00	423.26	414.00	9.26
20190321	Alton, IL	14:00	423.37	414.00	9.37
20190321	Grafton, IL	8:00	428.14	418.00	10.14
20190321	Grafton, IL	14:00	428.33	418.00	10.33
20190321	Lock & Dam 25 (Lower)	8:00	438.42	418.50	19.92
20190321	Lock & Dam 25 (Lower)	14:00	438.55	418.50	20.05

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L&D 25 (LOWER), IL	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.20	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
10 OCT 2018	29.86±0.00 30.9±15.00	UNDERWATER	20.51±0.00 20.8±15.00	17.48±0.00 18.3±15.00
21 MAR 2019	31.42±0.00 31.5±14.00	UNDERWATER	24.35±0.00 24.5±14.00	23.26±0.00 23.37±14.00

Survey Date: OCT. 10, 2018 & MAR. 21, 2019

Surveyed by: BOWEN ENGINEERING

Drawn by: X

Reviewed by: X

Ckd by: X

SUBMITTED: X

APPROVED: X

Plot date: ########

File name: ########

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

120 0 120 240 METERS
400 0 400 800 FEET

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND SHOULD BE REGARDED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 217.5 – 219.5

PLATE NUMBER

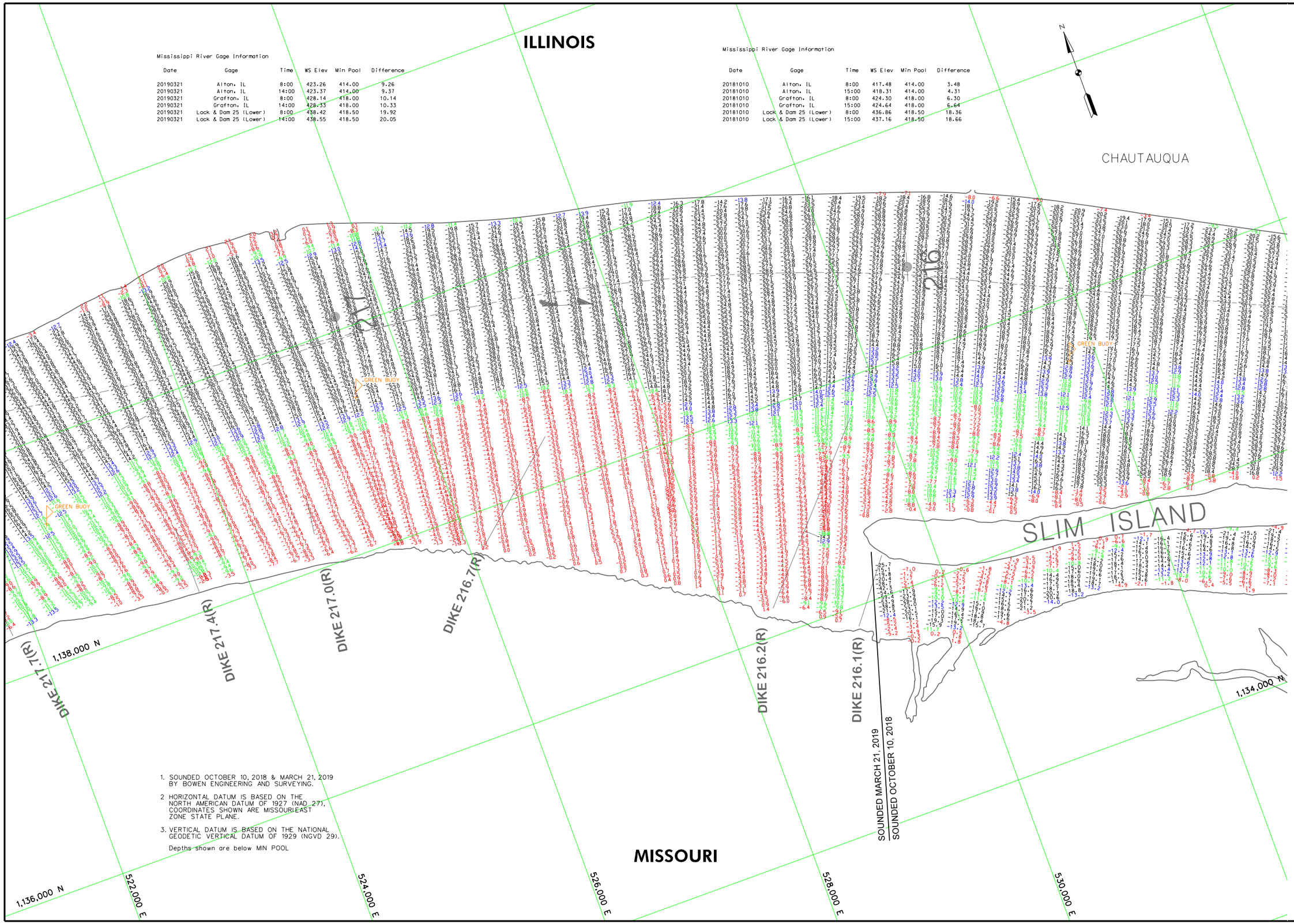
41

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190321	Alton, IL	8:00	423.26	414.00	9.26
20190321	Alton, IL	14:00	423.37	414.00	9.37
20190321	Grafton, IL	8:00	428.14	418.00	10.14
20190321	Grafton, IL	14:00	428.33	418.00	10.33
20190321	Lock & Dam 25 (Lower)	8:00	438.42	418.50	19.92
20190321	Lock & Dam 25 (Lower)	14:00	438.55	418.50	20.05

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181010	Alton, IL	8:00	417.48	414.00	3.48
20181010	Alton, IL	15:00	418.31	414.00	4.31
20181010	Grafton, IL	8:00	424.30	418.00	6.30
20181010	Grafton, IL	15:00	424.64	418.00	6.64
20181010	Lock & Dam 25 (Lower)	8:00	436.86	418.50	18.36
20181010	Lock & Dam 25 (Lower)	15:00	437.16	418.50	18.66



1. SOUNDED OCTOBER 10, 2018 & MARCH 21, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L&D 25 (LOWER), IL	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.20	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
10 OCT 2018	29.86:8:00 30.16:15:00	UNDERWATER	20.51:8:00 20.85:15:00	17.48:8:00 18.31:15:00
21 MAR 2019	31.42:8:00 31.55:14:00	UNDERWATER	24.35:8:00 24.54:14:00	23.26:8:00 23.37:14:00

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 10, 2018 & MAR. 21, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: 888STRCHART-EEPROFILEPLATES.DGN
Plot date: 888STRCHART-TITLE888

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

240 METERS 120 0 120 400 0 400 800 FEET

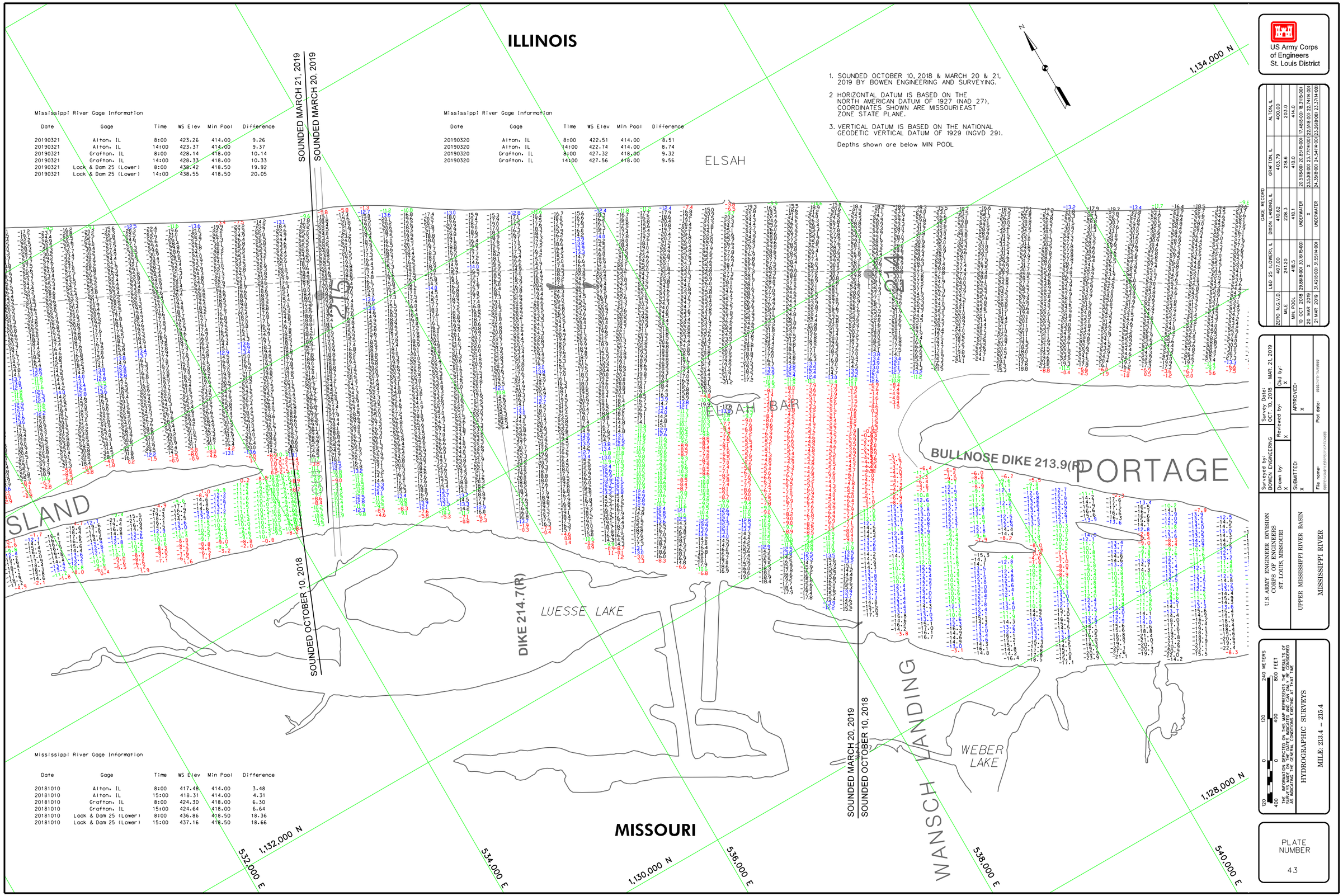
THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND ARE ACCURATE AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 215.4 – 217.5

PLATE NUMBER

42



Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190321	Alton, IL	8:00	423.26	414.00	9.26
20190321	Alton, IL	14:00	423.37	414.00	9.37
20190321	Grafton, IL	8:00	428.14	418.00	10.14
20190321	Grafton, IL	14:00	428.33	418.00	10.33
20190321	Lock & Dam 25 (Lower)	8:00	438.42	418.50	19.92
20190321	Lock & Dam 25 (Lower)	14:00	438.55	418.50	20.05

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190320	Alton, IL	8:00	422.51	414.00	8.51
20190320	Alton, IL	14:00	422.74	414.00	8.74
20190320	Grafton, IL	8:00	427.32	418.00	9.32
20190320	Grafton, IL	14:00	427.56	418.00	9.56

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181010	Alton, IL	8:00	417.48	414.00	3.48
20181010	Alton, IL	15:00	418.31	414.00	4.31
20181010	Grafton, IL	8:00	424.30	418.00	6.30
20181010	Grafton, IL	15:00	424.64	418.00	6.64
20181010	Lock & Dam 25 (Lower)	8:00	436.86	418.50	18.36
20181010	Lock & Dam 25 (Lower)	15:00	437.16	418.50	18.66

1. SOUNDED OCTOBER 10, 2018 & MARCH 20 & 21, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL

GAGE RECORD

	L&D 25 (LOWER), IL	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.20	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
10 OCT 2018	29.86/8:00	UNDERWATER	20.51/8:00	20.85/15:00	17.48/8:00	18.31/15:00
20 MAR 2019	X	UNDERWATER	23.53/8:00	23.77/14:00	22.51/8:00	22.74/14:00
21 MAR 2019	31.42/8:00	31.55/14:00	24.30/8:00	24.54/14:00	23.26/8:00	23.37/14:00

US Army Corps of Engineers
St. Louis District

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 10, 2018 - MAR. 21, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: 888BYSCHAFF-EEPROJECTS\ALTON\888
Plot date: 888BYSCHAFF-EEPROJECTS\ALTON\888

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

240 METERS 120 0 120
800 FEET 400 0 400

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE BY OTHERS. THE CORPS OF ENGINEERS DOES NOT VOUCH FOR THE ACCURACY OF THE INFORMATION AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 213.4 – 215.4

PLATE NUMBER

43

1. SOUNDED OCTOBER 10, 2018 & MARCH 20, 2019 BY BOWEN ENGINEERING AND SURVEYING.

2 HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.

3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

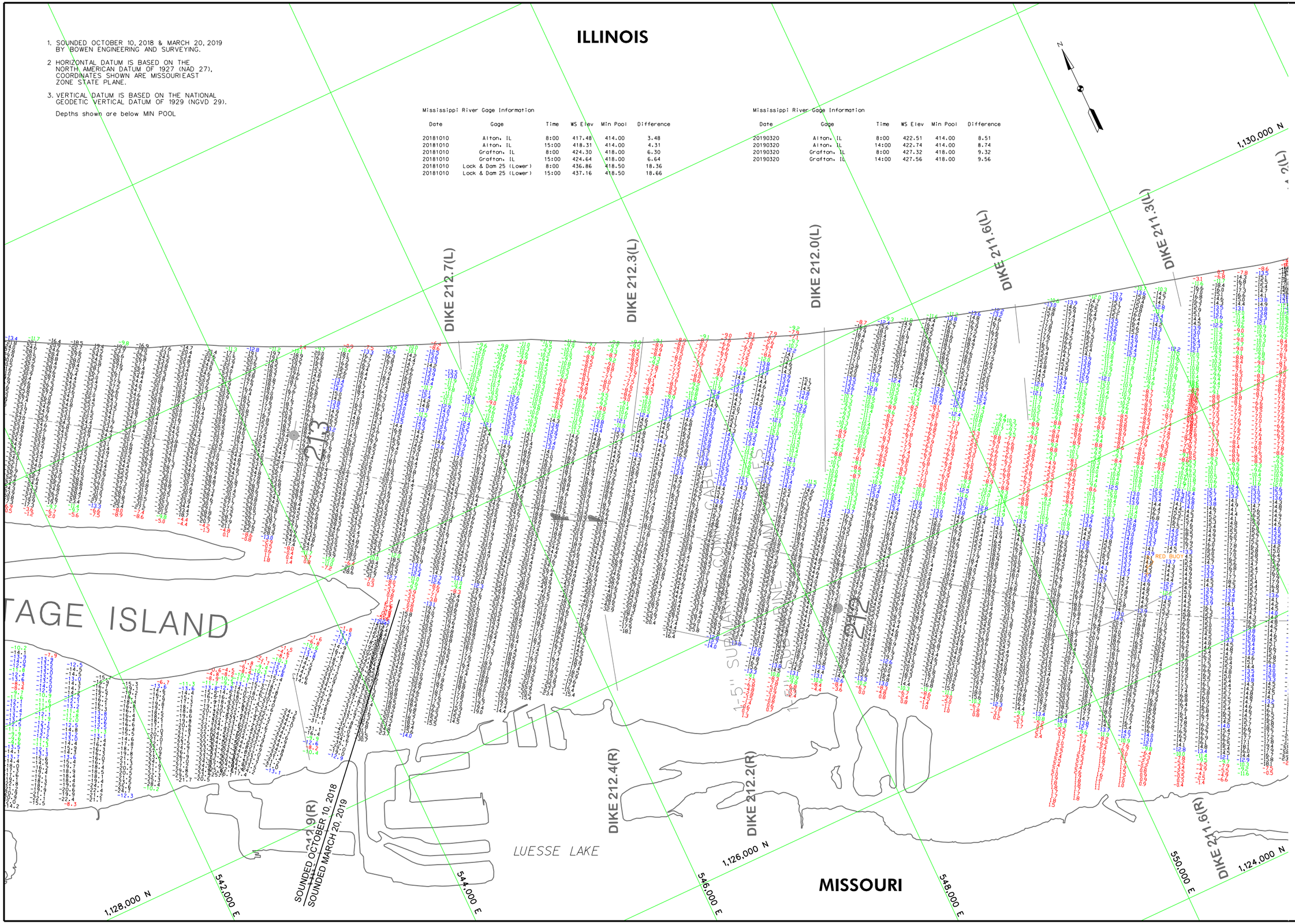
Depths shown are below MIN POOL

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181010	Alton, IL	8:00	417.48	414.00	3.48
20181010	Alton, IL	15:00	418.31	414.00	4.31
20181010	Grafton, IL	8:00	424.30	418.00	6.30
20181010	Grafton, IL	15:00	424.64	418.00	6.64
20181010	Lock & Dam 25 (Lower)	8:00	436.86	418.50	18.36
20181010	Lock & Dam 25 (Lower)	15:00	437.16	418.50	18.66

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190320	Alton, IL	8:00	422.51	414.00	8.51
20190320	Alton, IL	14:00	422.74	414.00	8.74
20190320	Grafton, IL	8:00	427.32	418.00	9.32
20190320	Grafton, IL	14:00	427.56	418.00	9.56



US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L & D 25 (LOWER)	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL
ZERO N.G.V.D.	407.00	410.62	403.79	400.00
MILE	241.2	228.3	218.6	203.0
MIN. POOL	418.5	418.1	418.0	414.0
10 OCT 2018	29.86:8:00) 30.9(15:00)	UNDERWATER	20.51(8:00) 20.85(15:00)	17.48(8:00) 18.31(15:00)
20 MAR 2019	X	X	23.53(8:00) 23.77(14:00)	22.51(8:00) 22.74(14:00)

Surveyed by: BOWEN ENGINEERING
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
Survey Date: OCT. 10, 2018 & MAR. 20, 2019
File name: 8888\HYDROGRAPHICS\PLATES\8888
Plot date: 8888\HYDROGRAPHICS\PLATES\8888

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

0 120 240 METERS
0 400 800 FEET

THE INFORMATION REPORTED IN THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE AT THE TIME INDICATED AND MAY NOT BE CORRECT AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 211.4 – 213.4

PLATE NUMBER

44

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181015	Mel Price Upper	10:00	423.01	412.50	10.51
20181015	Mel Price Upper	16:00	423.05	412.50	10.55
20181015	Alton, IL	10:00	423.55	414.00	9.55
20181015	Alton, IL	16:00	423.61	414.00	9.61
20181015	Grafton, IL	10:00	428.70	418.00	10.70
20181015	Grafton, IL	16:00	428.74	418.00	10.74

Mississippi River Gage Information

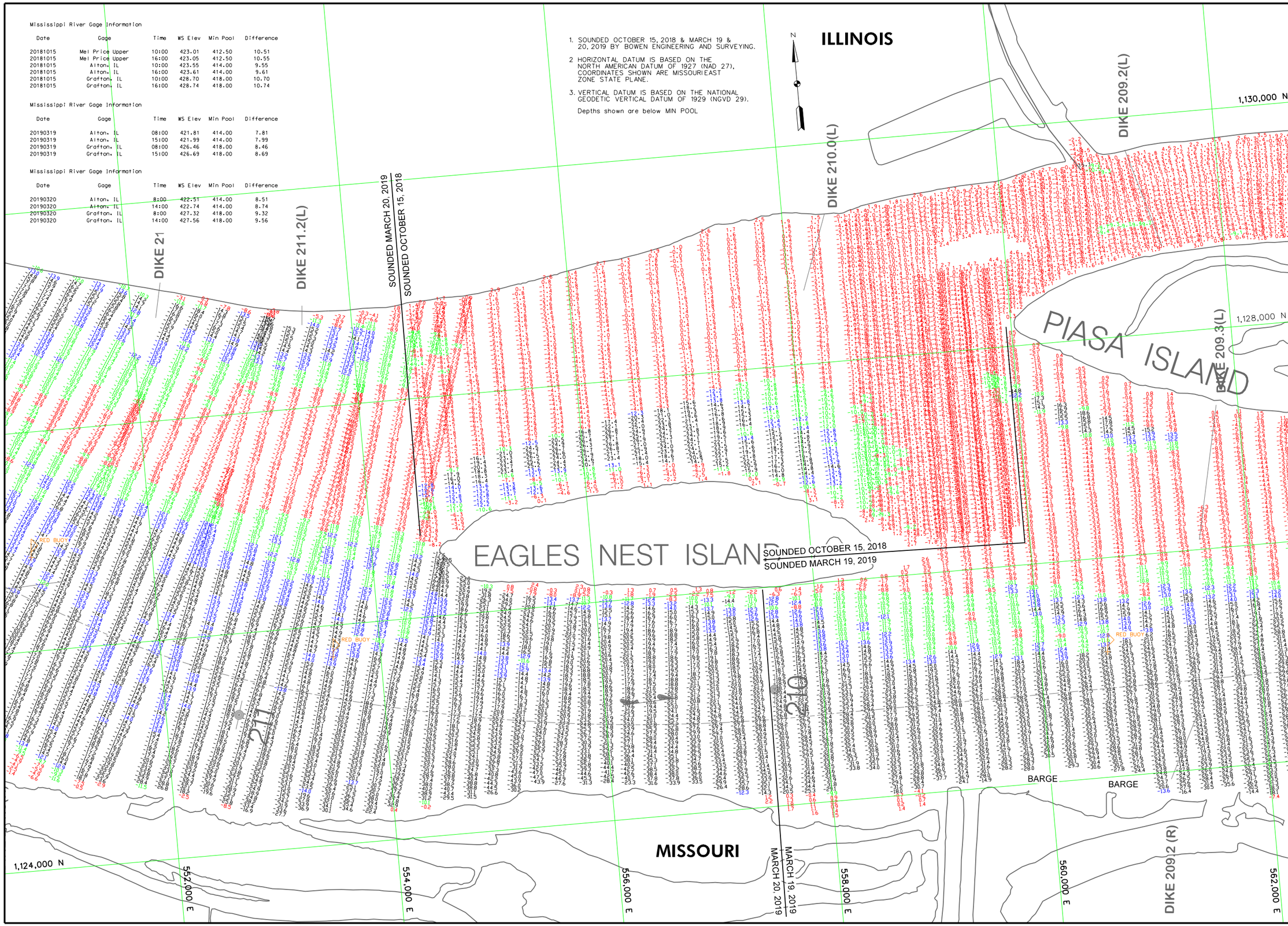
Date	Gage	Time	WS Elev	Min Pool	Difference
20190319	Alton, IL	08:00	421.81	414.00	7.81
20190319	Alton, IL	15:00	421.99	414.00	7.99
20190319	Grafton, IL	08:00	426.46	418.00	8.46
20190319	Grafton, IL	15:00	426.69	418.00	8.69

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190320	Alton, IL	8:00	422.51	414.00	8.51
20190320	Alton, IL	14:00	422.74	414.00	8.74
20190320	Grafton, IL	8:00	427.32	418.00	9.32
20190320	Grafton, IL	14:00	427.56	418.00	9.56

1. SOUNDED OCTOBER 15, 2018 & MARCH 19 & 20, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL



US Army Corps of Engineers
St. Louis District

GAGE RECORD

	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL	MEL PRICE (UPPER)
ZERO N.G.V.D.	410.62	403.79	400.00	395.48
MILE	228.3	218.6	203.0	201.1
MIN. POOL	418.1	418.0	414.0	412.5
15 OCT 2018	x	24.39/10:00	24.95/16:00	23.55/10:00	23.61/16:00	27.53/10:00	27.57/16:00
19 MAR 2019	x	x	22.67/8:00	22.90/15:00	23.81/8:00	21.99/15:00	x
20 MAR 2019	x	x	23.53/8:00	23.77/14:00	22.51/8:00	22.74/14:00	x

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 15, 2018 - MAR. 20, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: ##########
Plot date: ##########

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

120 0 120 240 METERS
400 0 400 800 FEET
THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYING CONDUCTED AT THE TIME INDICATED AND MAY NOT BE AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 209.2 – 211.4

PLATE NUMBER

45

Mississippi River Gage Information

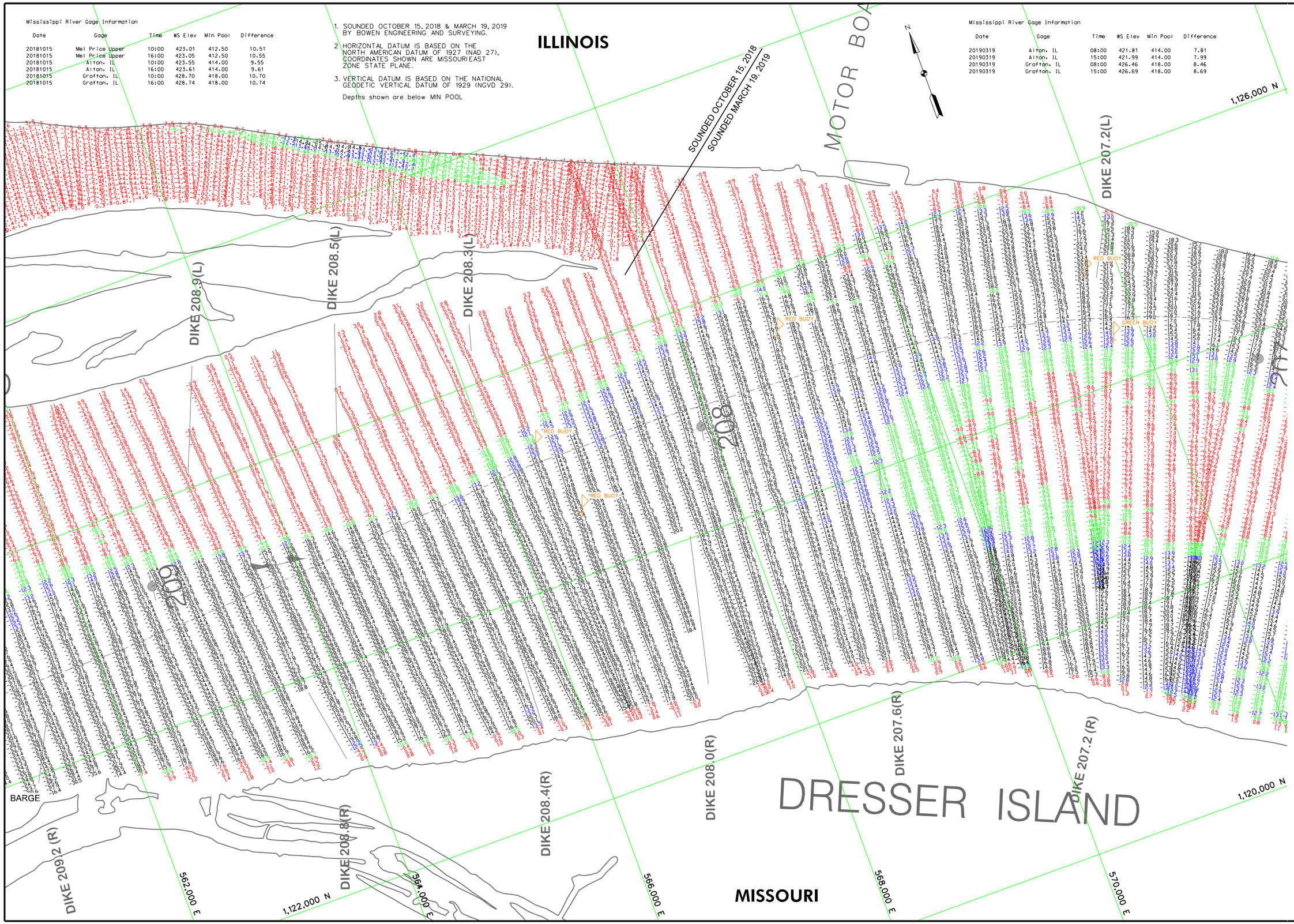
Date	Gage	Time	WS Elev	Min Pool	Difference
20181015	Mel Price Upper	10:00	423.01	412.50	10.51
20181015	Mel Price Upper	16:00	423.05	412.50	10.55
20181015	Alton, IL	10:00	423.55	414.00	9.55
20181015	Alton, IL	16:00	423.61	414.00	9.61
20181015	Grafton, IL	10:00	428.70	418.00	10.70
20181015	Grafton, IL	16:00	428.74	418.00	10.74

1. SOUNDED OCTOBER 15, 2018 & MARCH 19, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURIEAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190319	Alton, IL	08:00	421.81	414.00	7.81
20190319	Alton, IL	15:00	421.99	414.00	7.99
20190319	Grafton, IL	08:00	426.46	418.00	8.46
20190319	Grafton, IL	15:00	426.69	418.00	8.69



US Army Corps of Engineers
St. Louis District

GAGE RECORD

	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL	MEL PRICE (UPPER)
ZERO N.G.V.D.	410.62	403.79	400.00	395.48
MILE	228.3	218.6	203.0	201.1
MIN. POOL	418.1	418.0	414.0	412.5
15 OCT 2018	x	24.39'@00:24.95'@06:00	23.55'@00:23.61'@06:00	27.53'@00:27.57'@06:00
19 MAR 2019	x	22.67'@00:22.90'@15:00	21.81'@00:21.99'@15:00	x

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 15, 2018 & MAR. 19, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: MISSISSIPPI RIVER
Plot date: ##/##/YY HH:MM:SS AM

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

240 METERS 120 0 120 400
800 FEET 400 0 400 800

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE AT THE TIME INDICATED AND MAY NOT BE CONSTRUED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 207.1 – 209.2

PLATE NUMBER

46

Mississippi River Gage Information

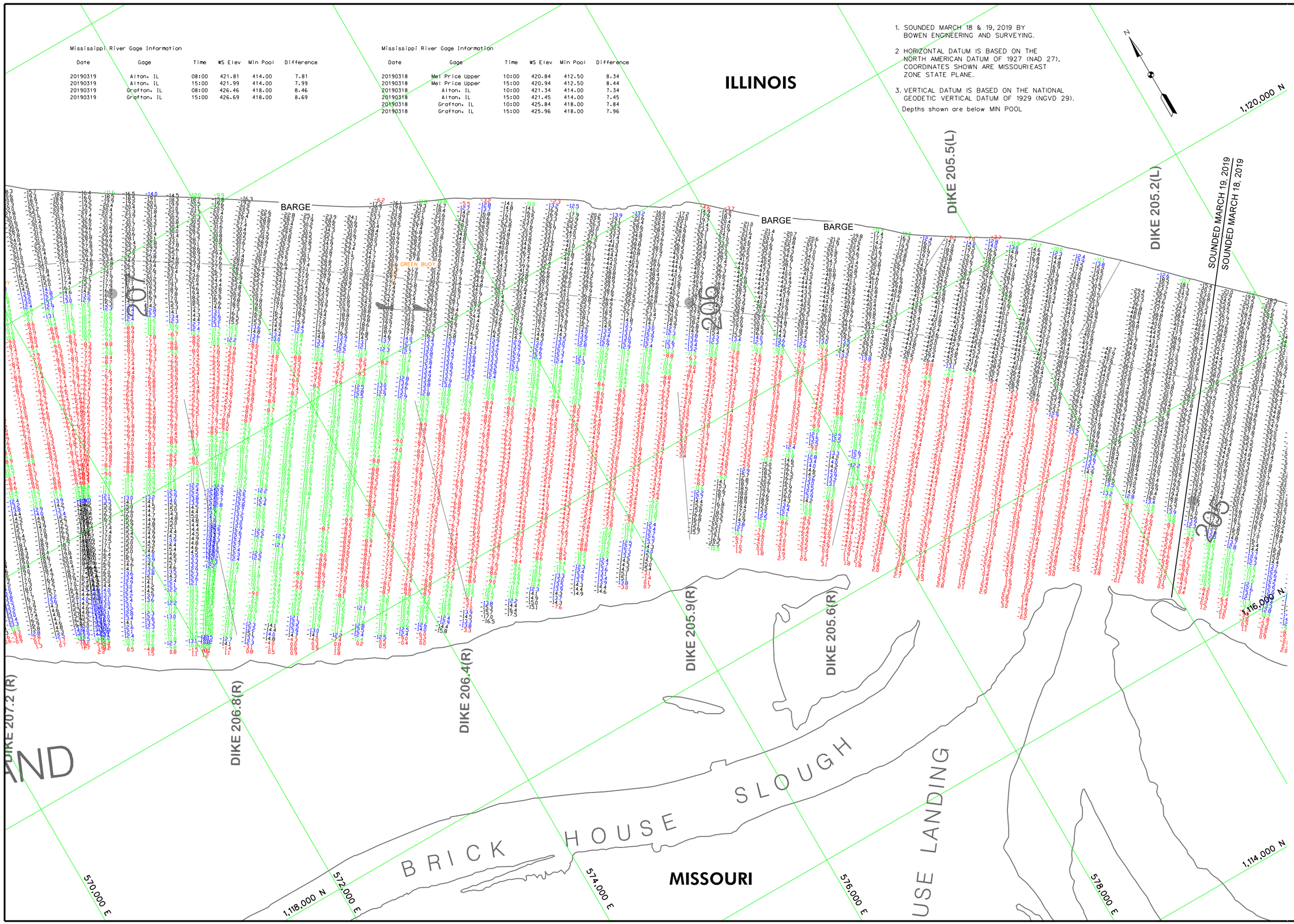
Date	Gage	Time	WS Elev	Min Pool	Difference
20190319	Alton, IL	08:00	421.81	414.00	7.81
20190319	Alton, IL	15:00	421.99	414.00	7.99
20190319	Grafton, IL	08:00	426.46	418.00	8.46
20190319	Grafton, IL	15:00	426.69	418.00	8.69

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190318	Mel Price Upper	10:00	420.84	412.50	8.34
20190318	Mel Price Upper	15:00	420.94	412.50	8.44
20190318	Alton, IL	10:00	421.34	414.00	7.34
20190318	Alton, IL	15:00	421.45	414.00	7.45
20190318	Grafton, IL	10:00	425.84	418.00	7.84
20190318	Grafton, IL	15:00	425.96	418.00	7.96

1. SOUNDED MARCH 18 & 19, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL



US Army Corps of Engineers
St. Louis District

GAGE RECORD

	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL	MEL PRICE (UPPER)
ZERO N.G.V.D.	410.62	403.79	400.00	395.48
MILE	228.3	218.6	203.0	201.1
MIN. POOL	418.1	418.0	414.0	412.5
18 MAR 2019	x	22.05/10:00	22.17/15:00	21.34/10:00	21.45/15:00	25.36/10:00	25.46/15:00
19 MAR 2019	x	22.67/08:00	22.90/15:00	21.81/08:00	21.99/15:00	x

Surveyed by: BOWEN ENGINEERING
Survey Date: MARCH 18 & 19, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: 89890cover.dgn
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U.S. ARMY ENGINEER DIVISION
CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

120 0 120 240 METERS
400 0 400 800 FEET

THE INFORMATION REPORTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATE(S) SHOWN AND IS BELIEVED TO BE AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 205.0 – 207.1

PLATE NUMBER

47

Mississippi River Gage Information

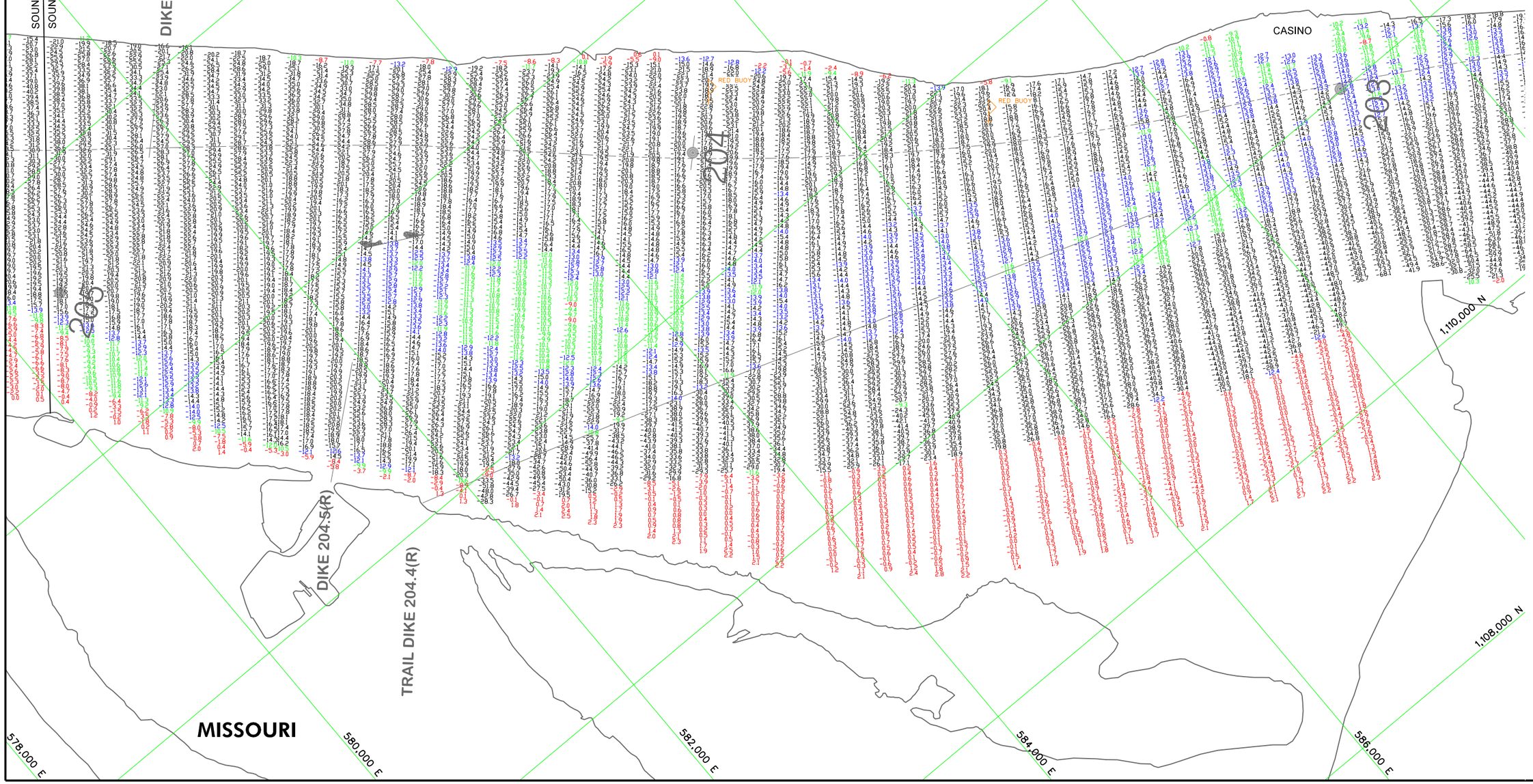
Date	Gage	Time	WS Elev	Min Pool	Difference
20190319	Alton, IL	08:00	421.81	414.00	7.81
20190319	Alton, IL	15:00	421.99	414.00	7.99
20190319	Grafton, IL	08:00	426.46	418.00	8.46
20190319	Grafton, IL	15:00	426.69	418.00	8.69

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190318	Mel Price Upper	10:00	420.84	412.50	8.34
20190318	Mel Price Upper	15:00	420.94	412.50	8.44
20190318	Alton, IL	10:00	421.34	414.00	7.34
20190318	Alton, IL	15:00	421.45	414.00	7.45
20190318	Grafton, IL	10:00	425.84	418.00	7.84
20190318	Grafton, IL	15:00	425.96	418.00	7.96

1. SOUNDED MARCH 18 & 19, 2019 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL



US Army Corps of Engineers
St. Louis District

GAGE RECORD

	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL	MEL PRICE (UPPER)
ZERO N.G.V.D.	410.62	403.79	400.00	395.48
MILE	228.3	218.6	203.0	201.1
MIN. POOL	418.1	418.0	414.0	412.5
18 MAR 2019	x	22.05/10:00/ 22.17/15:00/	21.34/10:00/ 21.45/15:00/	25.36/10:00/ 25.46/15:00/
19 MAR 2019	x	22.67/08:00/ 22.90/15:00/	21.81/08:00/ 21.99/15:00/	x

Surveyed by: BOWEN ENGINEERING
Survey Date: MARCH 18 & 19, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: 88888TRSCNAP1EEPROFILEPLATENO48
Plot date: 88888TRUE TYMEE88888

U.S. ARMY ENGINEER DIVISION
NORTH CENTRAL BRANCH
ST. LOUIS, MISSOURI

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

240 METERS 120 0 800 FEET 400 0

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE AT THE TIME INDICATED AND MAY NOT BE ACCURATE AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE: 202.8 – 205.0

PLATE NUMBER

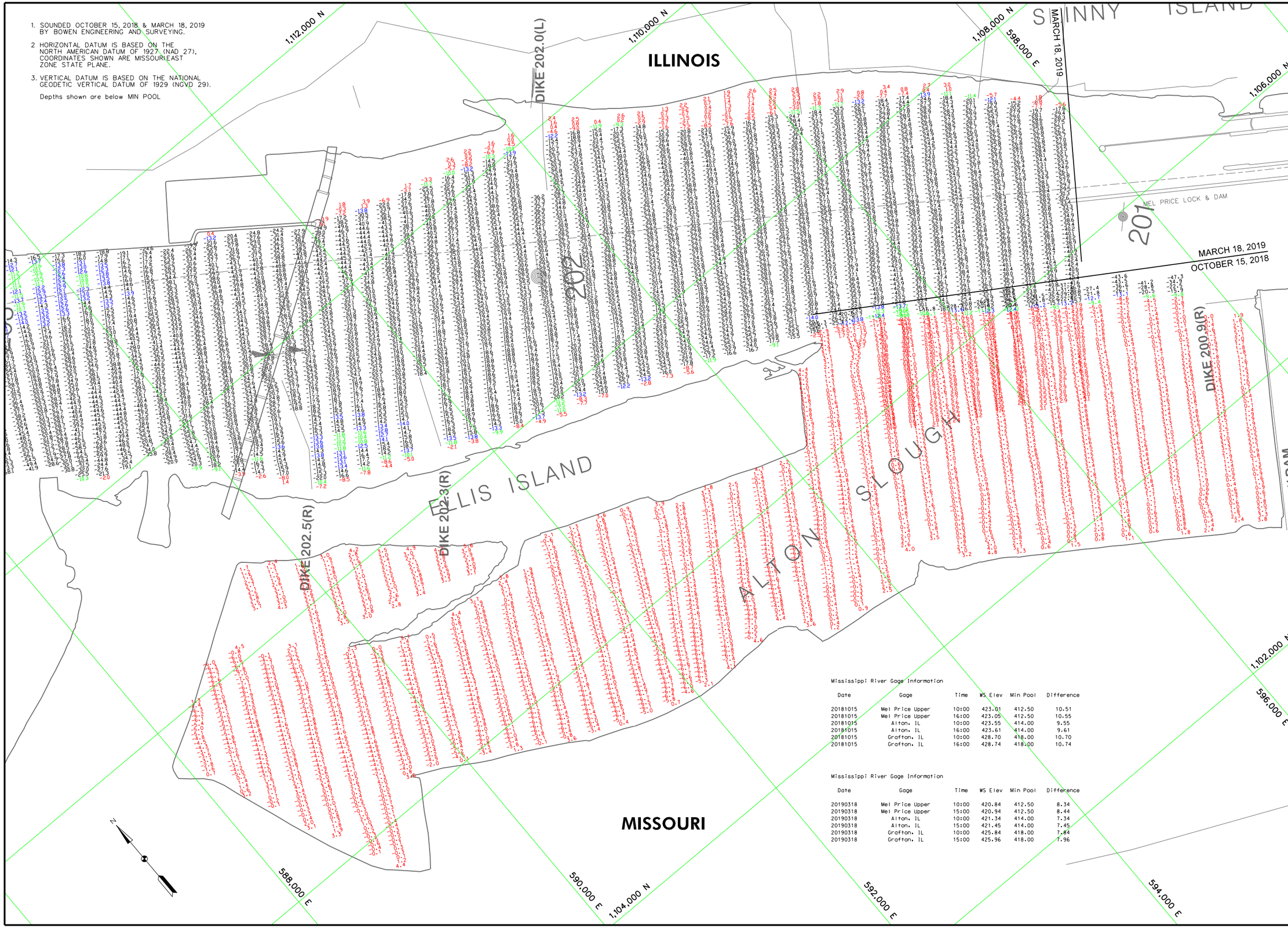
48

1. SOUNDED OCTOBER 15, 2018 & MARCH 18, 2019 BY BOWEN ENGINEERING AND SURVEYING.

2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.

3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Depths shown are below MIN POOL



Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20181015	Mel Price Upper	10:00	423.01	412.50	10.51
20181015	Mel Price Upper	16:00	423.05	412.50	10.55
20181015	Alton, IL	10:00	423.55	414.00	9.55
20181015	Alton, IL	16:00	423.61	414.00	9.61
20181015	Grafton, IL	10:00	428.70	418.00	10.70
20181015	Grafton, IL	16:00	428.74	418.00	10.74

Mississippi River Gage Information

Date	Gage	Time	WS Elev	Min Pool	Difference
20190318	Mel Price Upper	10:00	420.84	412.50	8.34
20190318	Mel Price Upper	15:00	420.94	412.50	8.44
20190318	Alton, IL	10:00	421.34	414.00	7.34
20190318	Alton, IL	15:00	421.45	414.00	7.45
20190318	Grafton, IL	10:00	425.84	418.00	7.84
20190318	Grafton, IL	15:00	425.96	418.00	7.96

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	DIXON LANDING, IL	GRAFTON, IL	ALTON, IL	MEL PRICE (UPPER)
ZERO N.G.V.D.	410.62	403.79	400.00	395.48
MILE	228.3	218.6	203.0	201.1
MIN. POOL	418.1	418.0	414.0	412.5
15 OCT 2018	x	24.39/10:00	24.95/16:00	23.55/10:00	23.61/16:00	27.53/10:00	27.57/16:00
18 MAR 2019	x	22.05/10:00	22.17/15:00	21.34/10:00	21.45/15:00	25.36/10:00	25.46/15:00

Surveyed by: BOWEN ENGINEERING
Survey Date: OCT. 15, 2018 & MAR. 18, 2019
Drawn by: X
Reviewed by: X
Ckd by: X
SUBMITTED: X
APPROVED: X
File name: ##########
Plot date: ##########

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

UPPER MISSISSIPPI RIVER BASIN

MISSISSIPPI RIVER

240 METERS
800 FEET
120 0 120 400 0 400

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND IS INTENDED ONLY AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

HYDROGRAPHIC SURVEYS

MILE 200.9 – 202.8

PLATE NUMBER

49