SURVEY NOTES:

1) HORIZONTAL DATUM:
NAD83 ILLINOIS WEST 1202, US SURVEY FOOT

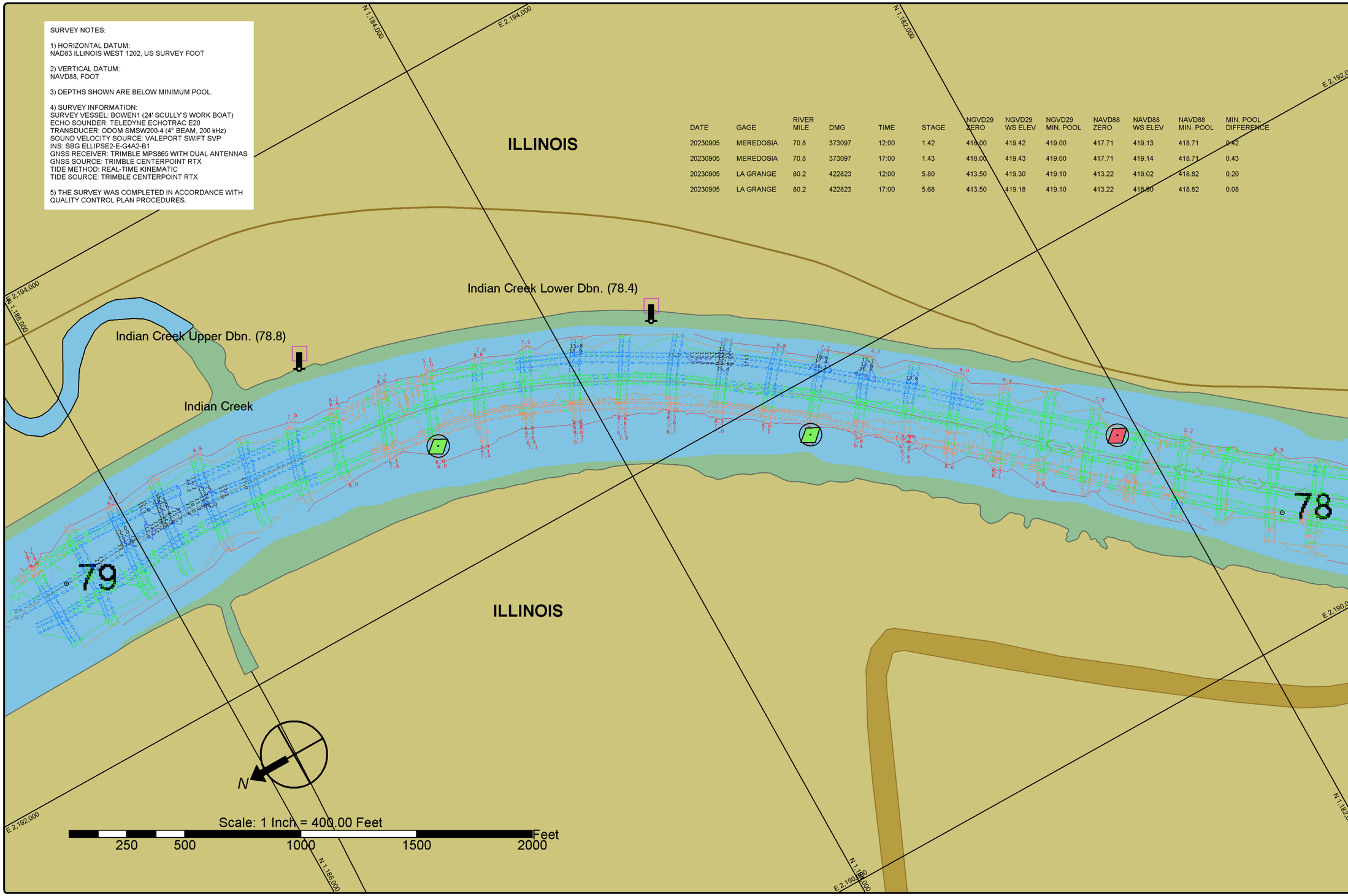
2) VERTICAL DATUM:
NAVD88, FOOT

3) DEPTHS SHOWN ARE BELOW MINIMUM POOL.

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.

DATE	GAGE	RIVER MILE	DMG	TIME	STAGE	NGVD29 ZERO	NGVD29 WS ELEV	NGVD29 MIN. POOL	NAVD88 ZERO	NAVD88 WS ELEV	NAVD88 MIN. POOL	MIN. POOL DIFFERENCE
20230905	MEREDOSIA	70.8	373097	12:00	1.42	418.00	419.42	419.00	417.71	419.13	418.71	0.42
20230905	MEREDOSIA	70.8	373097	17:00	1.43	418.00	419.43	419.00	417.71	419.14	418.71	0.43
20230905	LA GRANGE	80.2	422823	12:00	5.80	413.50	419.30	419.10	413.22	419.02	418.82	0.20
20230905	LA GRANGE	80.2	422823	17:00	5.68	413.50	419.18	419.10	413.22	418.90	418.82	0.08



St. Louis District

DATES OF SURVEY:
SEPTEMBER 5, 2023

FILE NO.: 079_0730523
REQUEST NO.: W912P923F0113

SCALE:
1" = 400' (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.
2721 MEGAN DRIVE
CAPE GIRARDEAU, MO 63701

UPPER MISSISSIPPI RIVER BASIN
ILLINOIS RIVER

PRE DREDGE SURVEY
RIVER MILES 79.0 - 73.0

SHEET NO.

1 OF 6

SURVEY NOTES:

1) HORIZONTAL DATUM:
NAD83 ILLINOIS WEST 1202, US SURVEY FOOT

2) VERTICAL DATUM:
NAVD88, FOOT

3) DEPTHS SHOWN ARE BELOW MINIMUM POOL.

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.

DATE	GAGE	RIVER MILE	DMG	TIME	STAGE	NGVD29 ZERO	NGVD29 WS ELEV	NGVD29 MIN. POOL	NAVD88 ZERO	NAVD88 WS ELEV	NAVD88 MIN. POOL	MIN. POOL DIFFERENCE
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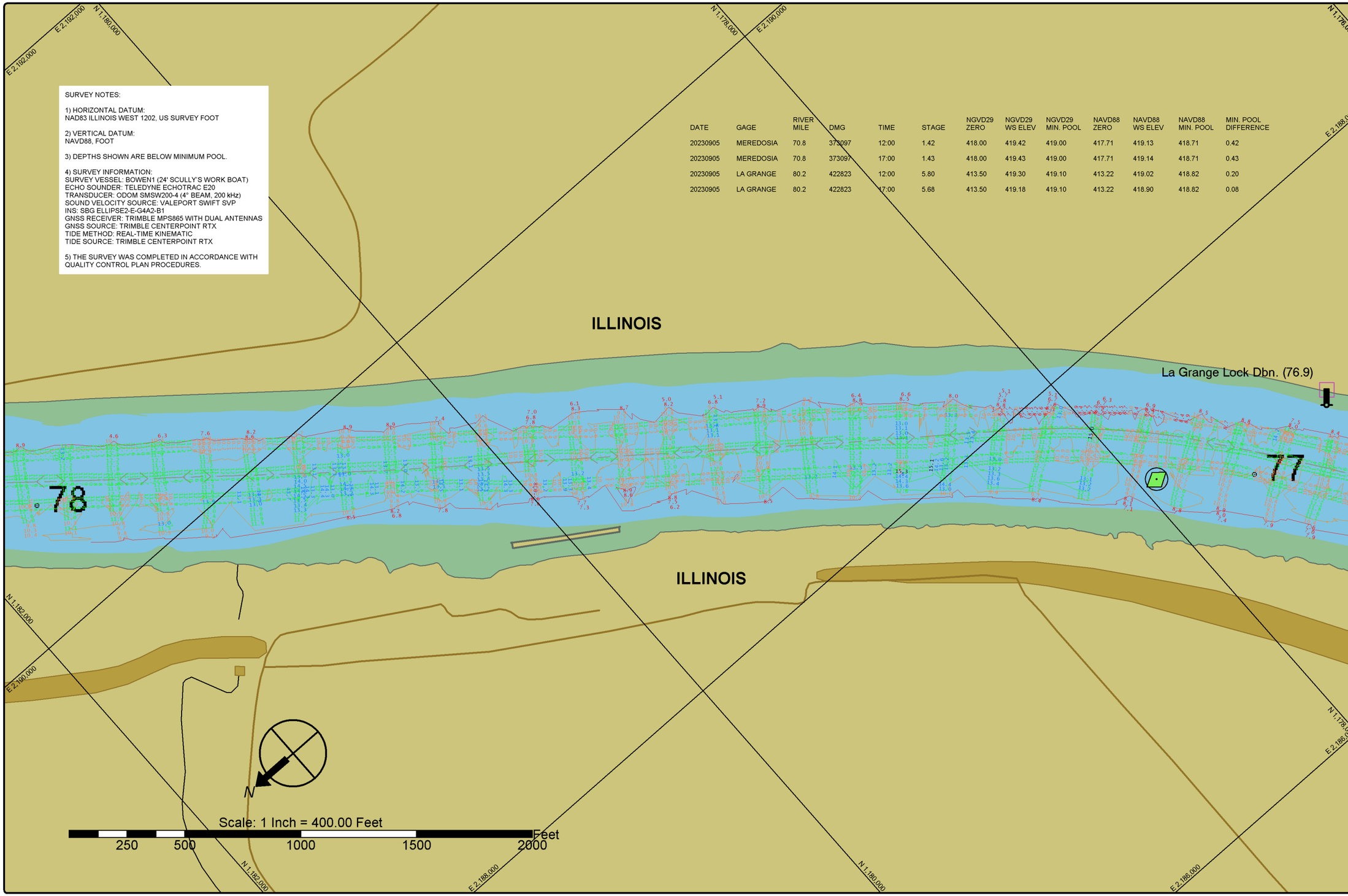
20230905	LA GRANGE	80.2	422823	12:00	5.80	413.50	419.30	419.10	413.22	419.02	418.82	0.20
20230905	LA GRANGE	80.2	422823	17:00	5.68	413.50	419.18	419.10	413.22	418.90	418.82	0.08



St. Louis District

DATES OF SURVEY:
SEPTEMBER 5, 2023

FILE NO.: 079_0730523
REQUEST NO.: W912P923F0113

SCALE:
1" = 400' (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
1222 SPRUCE STREET
ST. LOUIS, MISSOURI

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

UPPER MISSISSIPPI RIVER BASIN
ILLINOIS RIVER

PRE DREDGE SURVEY
RIVER MILES 79.0 - 73.0

SHEET NO.
2 OF 6

SURVEY NOTES:

1) HORIZONTAL DATUM:
NAD83 ILLINOIS WEST 1202, US SURVEY FOOT

2) VERTICAL DATUM:
NAVD88, FOOT

3) DEPTHS SHOWN ARE BELOW MINIMUM POOL.

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.

DATE	GAGE	RIVER MILE	DMG	TIME	STAGE	NGVD29 ZERO	NGVD29 WS ELEV	NGVD29 MIN. POOL	NAVD88 ZERO	NAVD88 WS ELEV	NAVD88 MIN. POOL	MIN. POOL DIFFERENCE
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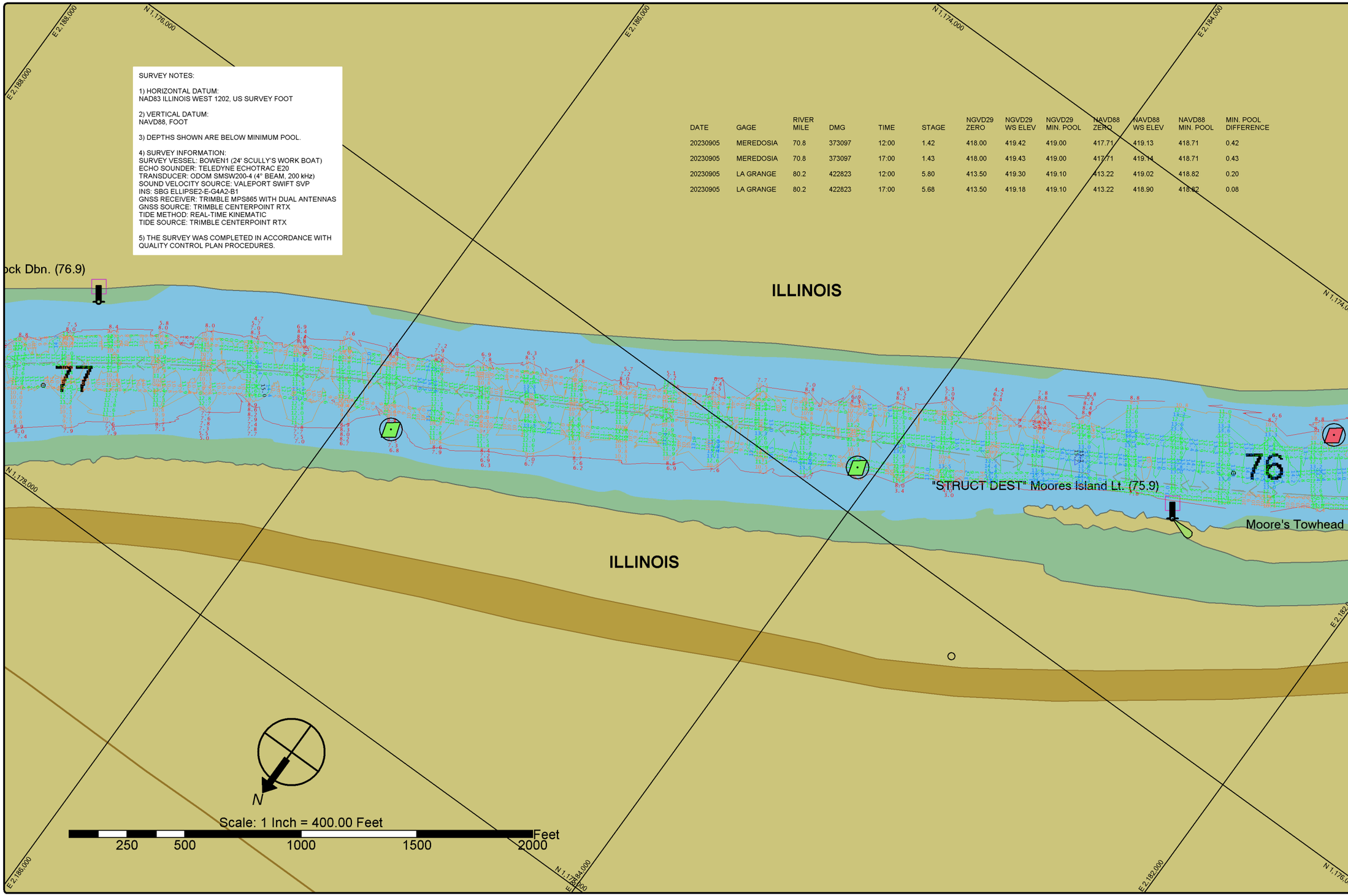

St. Louis District

DATES OF SURVEY:
SEPTEMBER 5, 2023

FILE NO.: 079_0730523
REQUEST NO.: W912P923F0113

SCALE:
1" = 400' (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.
2721 MEGAN DRIVE
CAPE GIRARDEAU, MO 63701

UPPER MISSISSIPPI RIVER
BASIN
ILLINOIS RIVER

PRE DREDGE SURVEY
RIVER MILES 79.0 - 73.0

SHEET NO.
3 OF 6

SURVEY NOTES:

1) HORIZONTAL DATUM:
NAD83 ILLINOIS WEST 1202, US SURVEY FOOT

2) VERTICAL DATUM:
NAVD88, FOOT

3) DEPTHS SHOWN ARE BELOW MINIMUM POOL.

4) SURVEY INFORMATION:
SURVEY VESSEL: BOWEN1 (24' SCULLY'S WORK BOAT)
ECHO SOUNDER: TELEDYNE ECHOTRAC E20
TRANSDUCER: ODOM SMSW200-4 (4° BEAM, 200 kHz)
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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.

DATE	GAGE	RIVER MILE	DMG	TIME	STAGE	NGVD29 ZERO	NGVD29 WS ELEV	NGVD29 MIN. POOL	NAVD88 ZERO	NAVD88 WS ELEV	NAVD88 MIN. POOL	MIN. POOL DIFFERENCE
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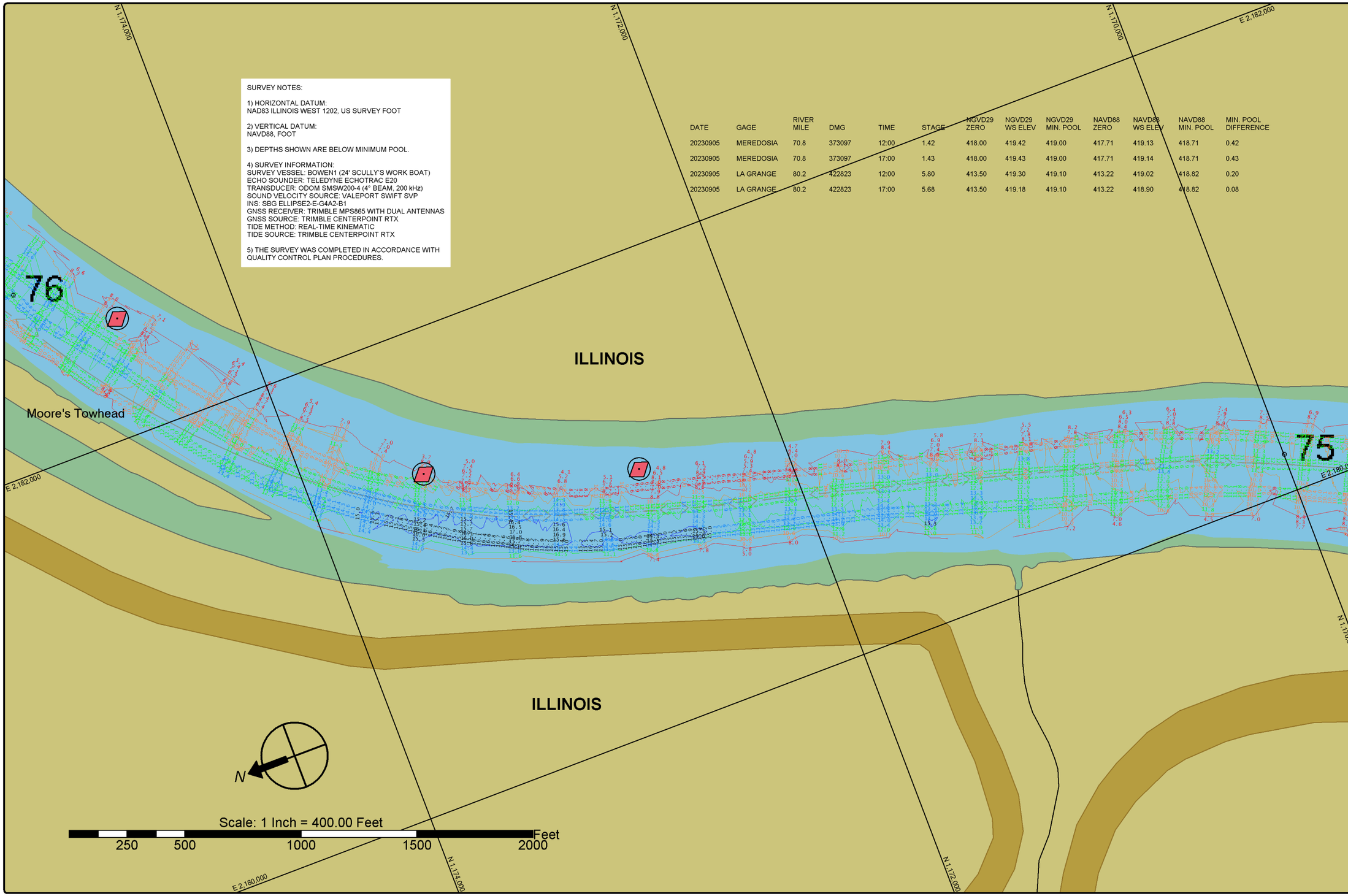

St. Louis District

DATES OF SURVEY:
SEPTEMBER 5, 2023

FILE NO.: 079_0730523
REQUEST NO.: W912P923F0113

SCALE:
1" = 400' (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.
2721 MEGAN DRIVE
CAPE GIRARDEAU, MO 63701

UPPER MISSISSIPPI RIVER BASIN
ILLINOIS RIVER

PRE DREDGE SURVEY
RIVER MILES 79.0 - 73.0

SHEET NO.

4 OF 6

SURVEY NOTES:

1) HORIZONTAL DATUM:
NAD83 ILLINOIS WEST 1202, US SURVEY FOOT

2) VERTICAL DATUM:
NAVD88, FOOT

3) DEPTHS SHOWN ARE BELOW MINIMUM POOL.

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GNSS SOURCE: TRIMBLE CENTERPOINT RTX
TIDE METHOD: REAL-TIME KINEMATIC
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DATE	GAGE	RIVER MILE	DMG	TIME	STAGE	NGVD29 ZERO	NGVD29 WS ELEV	NGVD29 MIN. POOL	NAVD88 ZERO	NAVD88 WS ELEV	NAVD88 MIN. POOL	MIN. POOL DIFFERENCE
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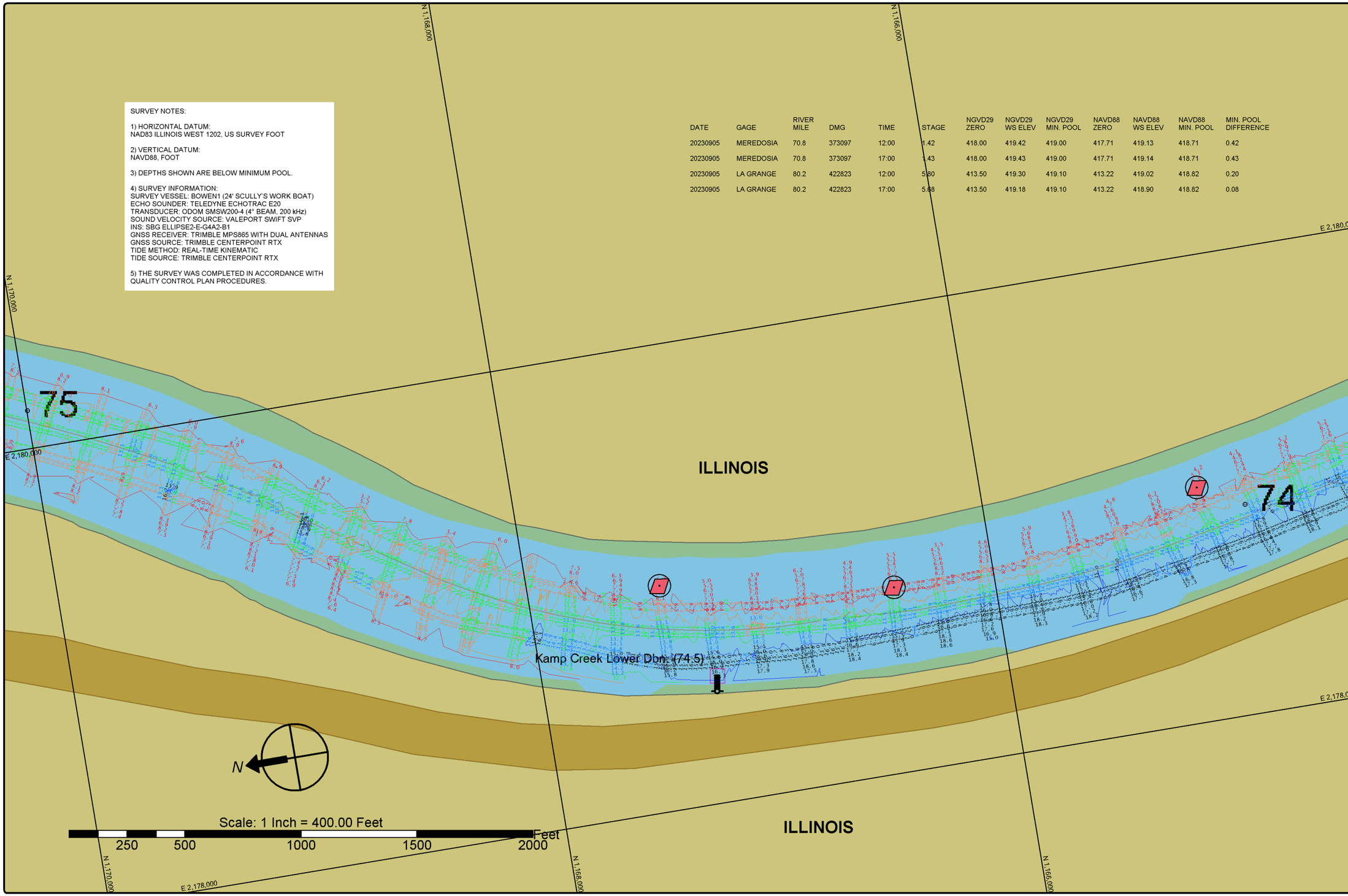

St. Louis District

DATES OF SURVEY:
SEPTEMBER 5, 2023

FILE NO.: 079_07310523
REQUEST NO.: W912P923F0113

SCALE:
1" = 400' (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.
2721 MEGAN DRIVE
CAPE GIRARDEAU, MO 63701

UPPER MISSISSIPPI RIVER BASIN
ILLINOIS RIVER

PRE DREDGE SURVEY
RIVER MILES 79.0 - 73.0

SHEET NO.
5 OF 6

SURVEY NOTES:

1) HORIZONTAL DATUM:
NAD83 ILLINOIS WEST 1202, US SURVEY FOOT

2) VERTICAL DATUM:
NAVD88, FOOT

3) DEPTHS SHOWN ARE BELOW MINIMUM POOL.

4) SURVEY INFORMATION:
SURVEY VESSEL: BOWEN1 (24' SCULLY'S WORK BOAT)
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TRANSDUCER: ODOM SMSW200-4 (4° BEAM, 200 kHz)
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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.

DATE	GAGE	RIVER MILE	DMG	TIME	STAGE	NGVD29 ZERO	NGVD29 WS ELEV	NGVD29 MIN. POOL	NAVD88 ZERO	NAVD88 WS ELEV	NAVD88 MIN. POOL	MIN. POOL DIFFERENCE
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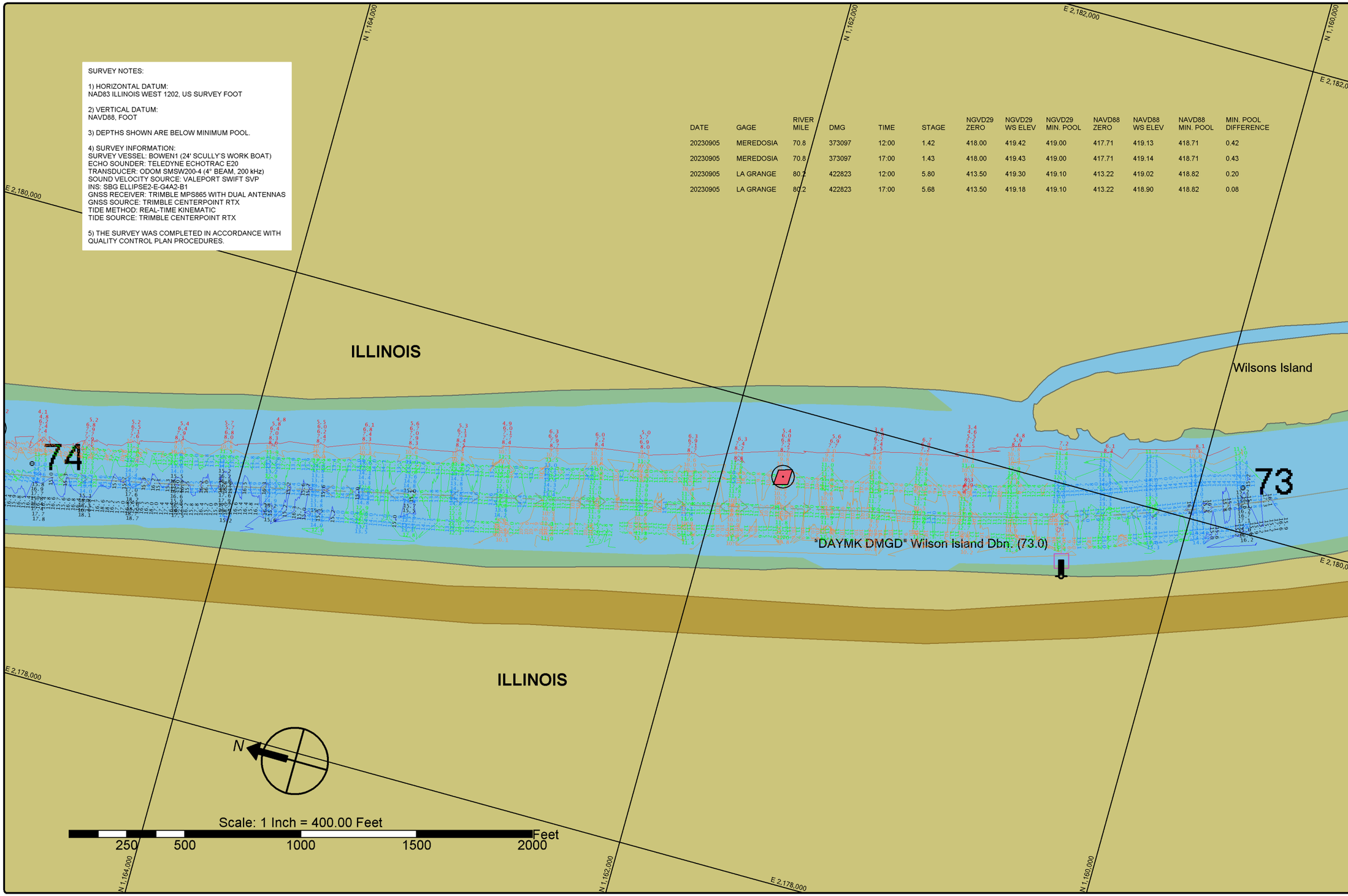

St. Louis District

DATES OF SURVEY:
SEPTEMBER 5, 2023

FILE NO.: 079_07310523
REQUEST NO.: W912P923F0113

SCALE:
1" = 400' (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
ILLINOIS RIVER

PRE DREDGE SURVEY
RIVER MILES 79.0 - 73.0

SHEET NO.
6 OF 6