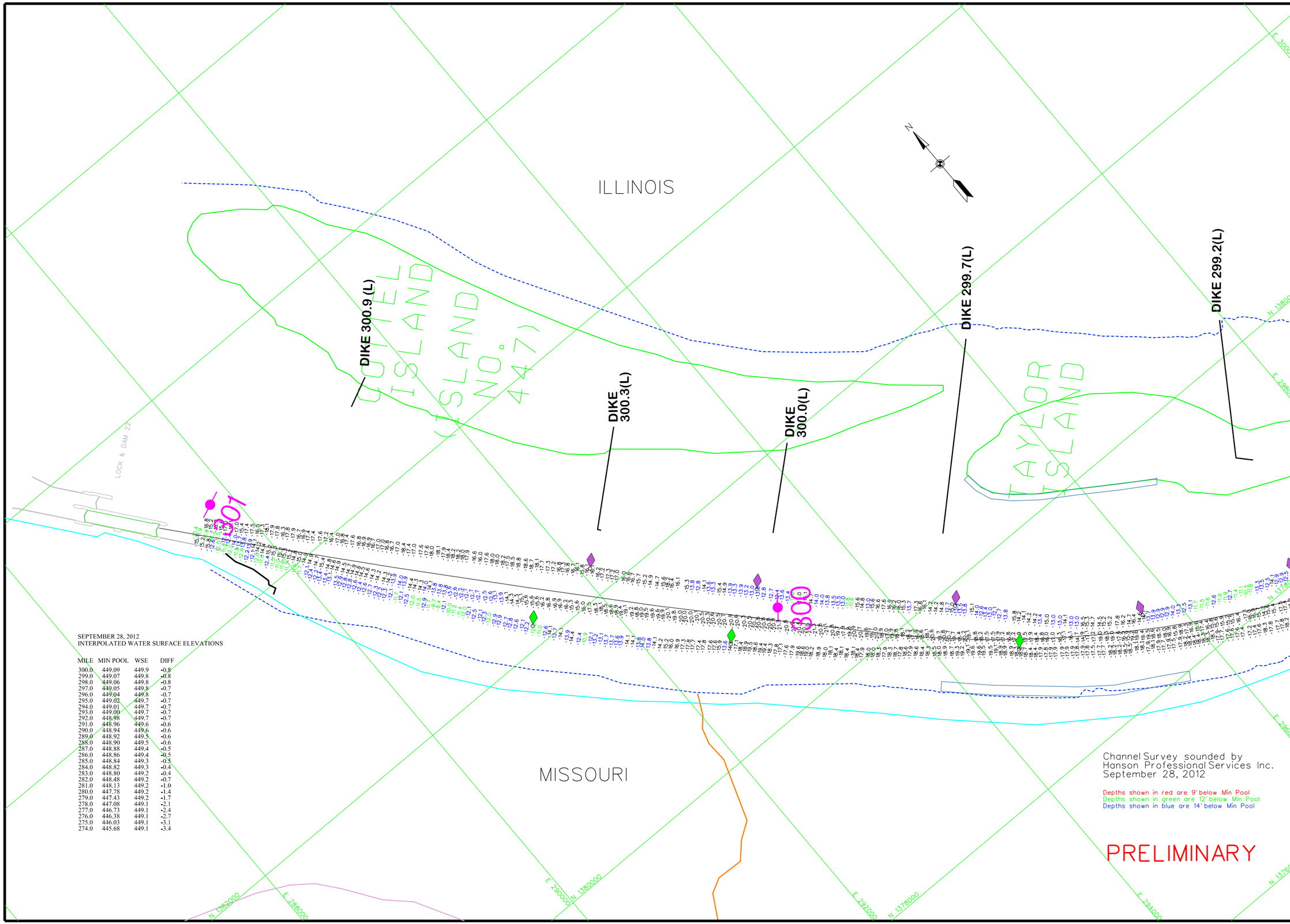


SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	MIN POOL	WSE	DIFF
300.0	449.09	449.9	-0.8
299.0	449.07	449.8	-0.8
298.0	449.06	449.8	-0.8
297.0	449.05	449.8	-0.7
296.0	449.04	449.8	-0.7
295.0	449.02	449.7	-0.7
294.0	449.01	449.7	-0.7
293.0	449.00	449.7	-0.7
292.0	448.98	449.7	-0.7
291.0	448.96	449.6	-0.6
290.0	448.94	449.6	-0.6
289.0	448.92	449.5	-0.6
288.0	448.90	449.5	-0.6
287.0	448.88	449.4	-0.5
286.0	448.86	449.4	-0.5
285.0	448.84	449.3	-0.5
284.0	448.82	449.3	-0.4
283.0	448.80	449.2	-0.4
282.0	448.48	449.2	-0.7
281.0	448.13	449.2	-1.0
280.0	447.78	449.2	-1.4
279.0	447.43	449.2	-1.7
278.0	447.08	449.1	-2.1
277.0	446.73	449.1	-2.4
276.0	446.38	449.1	-2.7
275.0	446.03	449.1	-3.1
274.0	445.68	449.1	-3.4

Channel Survey sounded by
Hanson Professional Services Inc.
September 28, 2012

Depths shown in red are 9' below Min Pool
Depths shown in green are 12' below Min Pool
Depths shown in blue are 14' below Min Pool

PRELIMINARY

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	WATER SURFACE	MUNDY'S LANDING	L & D 22 (LOWER)	ST. LOUIS
ZERO N.G.V.D.		441.9	446.1	379.94
MILE		293.0	301.2	179.6
MIN POOL		449.0	449.1	376.4
	28 SEP 2012	449.7 (10:00)	449.9 (10:00)	
		449.7 (13:30)	449.9 (13:30)	

ELEVATIONS ARE REFERRED TO N.G.V.D. - CONTOURS ARE BELOW 1994-97 LOW WATER REFERENCE PLANE (L.W.R.P.) 154,000 C.F.S.

Survey Date: September 28, 2012
SUBMITTED:
Chief, Engr. Data Mngt. Sect.
File name: 301_273\2812.dgn
Plot date: October 1, 2012
Plot scale: 1"=400'

Surveyed by: HANSON
Drawn by: RCA
Ckd by: RCA
Reviewed by:
APPROVED:
Chief, Geospatial Branch

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

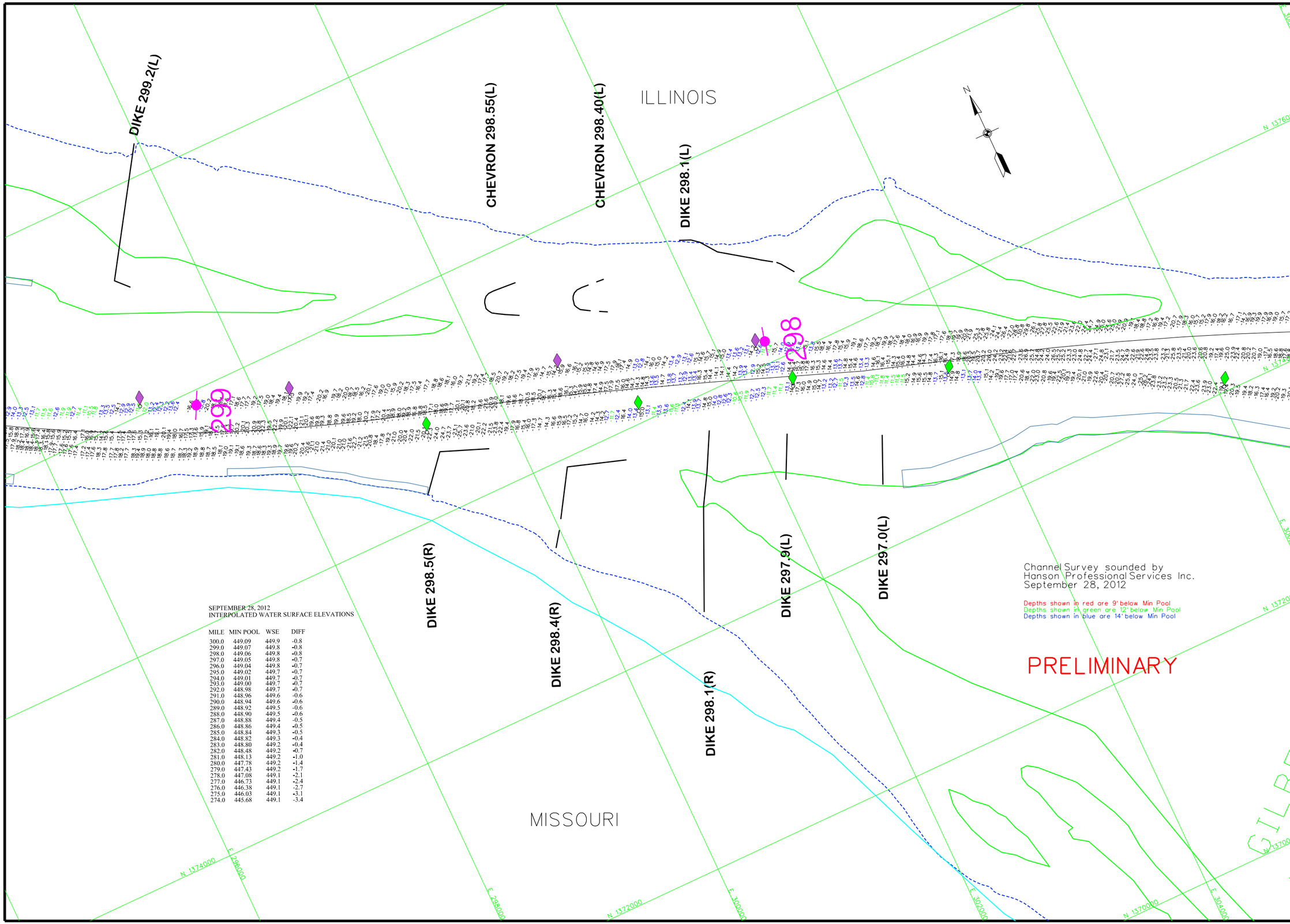
UPPER MISSISSIPPI RIVER BASIN
MISSISSIPPI RIVER

120 400 0 0 120 240 METERS
400 800 FEET

THE INFORMATION REPORTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYING OPERATIONS PERFORMED ON THE DATE(S) SHOWN AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

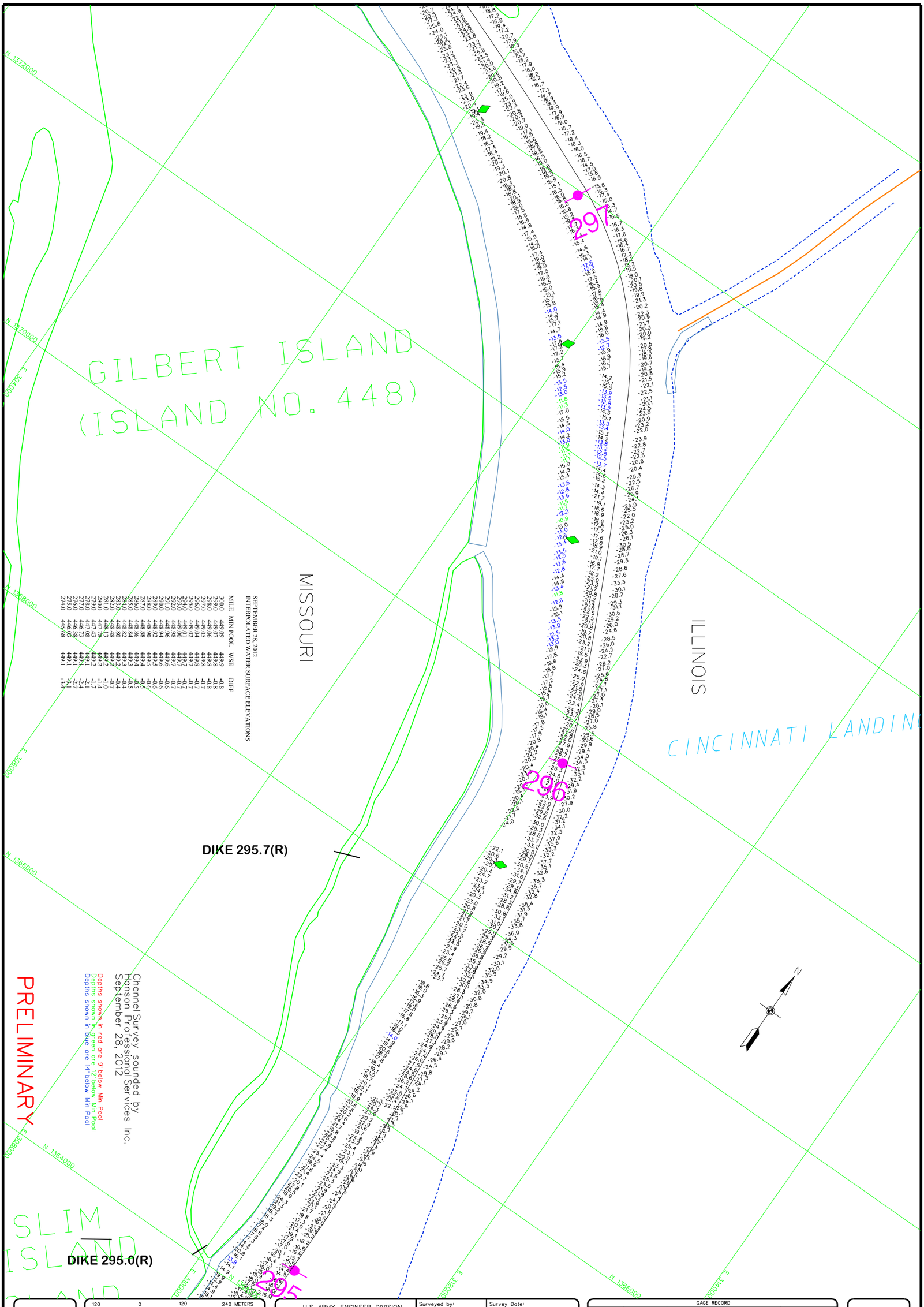
CHANNEL SURVEY
MILE: 301.2-273.5

PLATE NUMBER



SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	MIN POOL	WSE	DIFF
300.0	449.09	449.9	-0.8
299.0	449.07	449.8	-0.8
298.0	449.06	449.8	-0.8
297.0	449.05	449.8	-0.7
296.0	449.04	449.8	-0.7
295.0	449.02	449.7	-0.7
294.0	449.01	449.7	-0.7
293.0	449.00	449.7	-0.7
292.0	448.98	449.7	-0.7
291.0	448.96	449.6	-0.6
290.0	448.94	449.6	-0.6
289.0	448.92	449.5	-0.6
288.0	448.90	449.5	-0.6
287.0	448.88	449.4	-0.5
286.0	448.86	449.4	-0.5
285.0	448.84	449.3	-0.5
284.0	448.82	449.3	-0.4
283.0	448.80	449.2	-0.4
282.0	448.48	449.2	-0.7
281.0	448.13	449.2	-1.0
280.0	447.78	449.2	-1.4
279.0	447.43	449.2	-1.7
278.0	447.08	449.1	-2.1
277.0	446.73	449.1	-2.4
276.0	446.38	449.1	-2.7
275.0	446.03	449.1	-3.1
274.0	445.68	449.1	-3.4



SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	MIN POOL	WSE	DIFF
300.0	449.09	449.9	-0.8
299.0	449.07	449.8	-0.8
298.0	449.06	449.9	-0.8
297.0	449.05	449.8	-0.7
296.0	449.04	449.8	-0.7
295.0	449.02	449.7	-0.7
294.0	449.01	449.7	-0.7
293.0	449.00	449.7	-0.7
292.0	448.98	449.7	-0.7
291.0	448.96	449.6	-0.6
290.0	448.94	449.6	-0.6
289.0	448.92	449.5	-0.6
288.0	448.90	449.5	-0.6
287.0	448.88	449.4	-0.5
286.0	448.86	449.4	-0.5
285.0	448.84	449.3	-0.4
284.0	448.82	449.3	-0.4
283.0	448.80	449.2	-0.4
282.0	448.48	449.2	-0.4
281.0	448.13	449.2	-1.0
280.0	447.78	449.2	-1.4
279.0	447.43	449.2	-1.7
278.0	447.08	449.1	-2.1
277.0	446.73	449.1	-2.4
276.0	446.38	449.1	-2.7
275.0	446.03	449.1	-3.1
274.0	445.68	449.1	-3.4

PLATE NUMBER

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 CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

CHANNEL SURVEY
MILE: 301.2-273.5

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

UPPER MISSISSIPPI RIVER BASIN
MISSISSIPPI RIVER

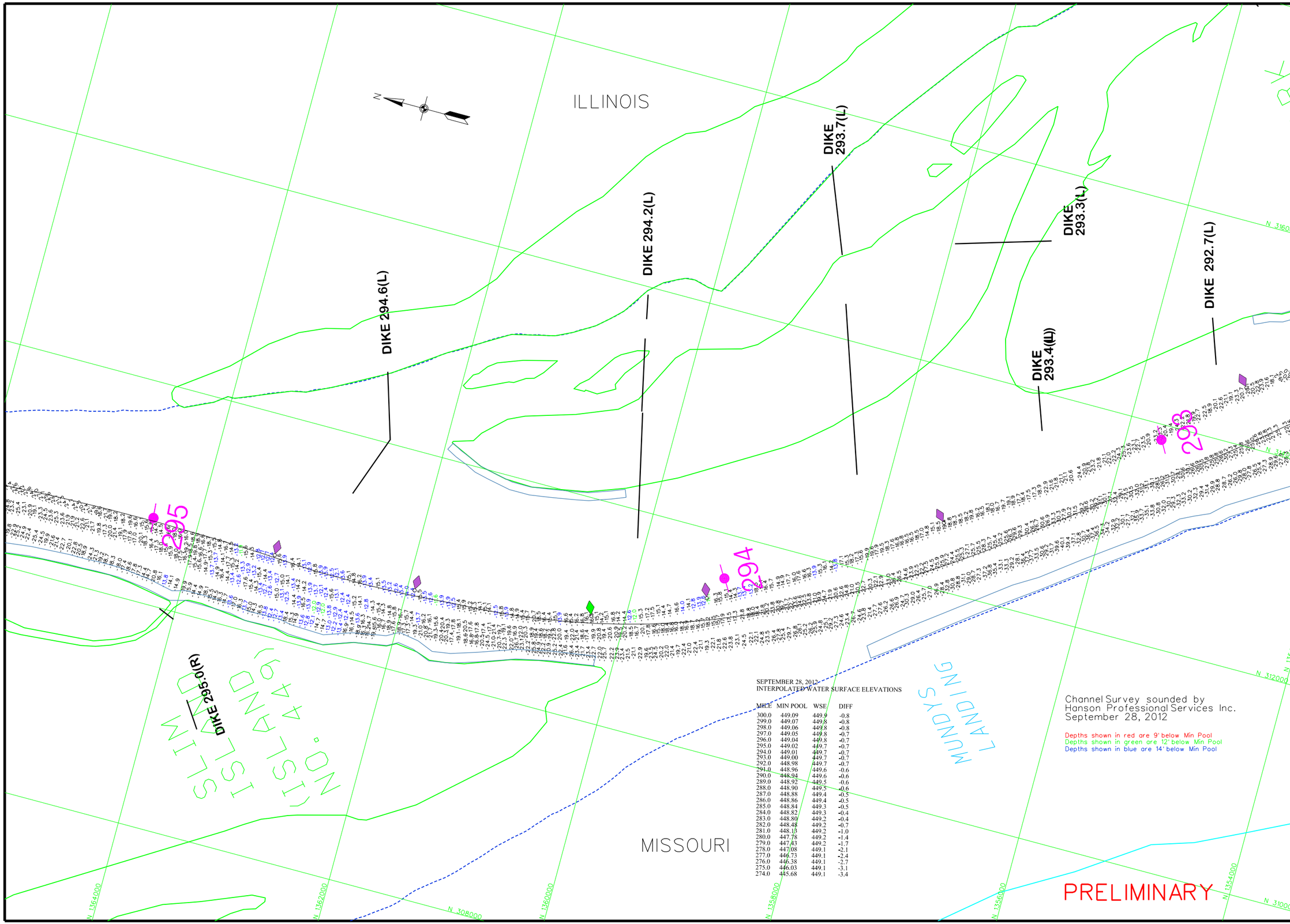
Surveyed by: HANSON	Survey Date: September 28, 2012
Drawn by: RCA / Ckd by: RCA	SUBMITTED: Chief, Engr. Data Mngt. Sect.
Reviewed by:	File name: 301_273i2812.dgn
APPROVED: Chief, Geospatial Branch	Plot date: October 2, 2012 Plot scale: 1"=400'

GAGE RECORD

	WATER SURFACE	MUNDYS LANDING	L & D 22 (LOWER)	ST. LOUIS
ZERO N.G.V.D.		441.9	446.1	379.94
MILE		293.0	301.2	179.6
MIN POOL		449.0	449.1	376.4
	28 SEP 2012	449.7 (09:00)	449.9 (09:00)	
		449.7 (13:30)	449.9 (13:30)	

ELEVATIONS ARE REFERRED TO N.G.V.D. - CONTOURS ARE BELOW 1956-57 LOW WATER REFERENCE PLANE (L.W.R.P.) (54,000 C.F.S.)

US Army Corps of Engineers
St. Louis District



SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	MIN POOL	WSE	DIFF
300.0	449.09	449.9	-0.8
299.0	449.07	449.8	-0.8
298.0	449.06	449.8	-0.8
297.0	449.05	449.8	-0.7
296.0	449.04	449.8	-0.7
295.0	449.02	449.7	-0.7
294.0	449.01	449.7	-0.7
293.0	449.00	449.7	-0.7
292.0	448.98	449.7	-0.7
291.0	448.96	449.6	-0.6
290.0	448.94	449.6	-0.6
289.0	448.92	449.5	-0.6
288.0	448.90	449.5	-0.6
287.0	448.88	449.4	-0.5
286.0	448.86	449.4	-0.5
285.0	448.84	449.3	-0.5
284.0	448.82	449.3	-0.4
283.0	448.80	449.2	-0.4
282.0	448.48	449.2	-0.7
281.0	448.13	449.2	-1.0
280.0	447.78	449.2	-1.4
279.0	447.43	449.2	-1.7
278.0	447.08	449.1	-2.1
277.0	446.73	449.1	-2.4
276.0	446.38	449.1	-2.7
275.0	446.03	449.1	-3.1
274.0	445.68	449.1	-3.4

Channel Survey sounded by
Hanson Professional Services Inc.
September 28, 2012

Depths shown in red are 9' below Min Pool
Depths shown in green are 12' below Min Pool
Depths shown in blue are 14' below Min Pool

PRELIMINARY

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	WATER SURFACE	MUNDYS LANDING	L & D 22 (LOWER)	ST. LOUIS
ZERO N.G.V.D.		441.9	446.1	379.94
MILE		293.0	301.2	179.6
MIN POOL		449.0	449.1	376.4
	28 SEP 2012	449.7 (09:00)	449.9 (09:00)	
		449.7 (13:30)	449.9 (13:30)	

ELEVATIONS ARE REFERRED TO N.G.V.D. - CONTOURS ARE BELOW 1956-57 LOW WATER REFERENCE PLANE (L.W.R.P.) 154,000 C.F.S.

Survey Date: September 28, 2012
SUBMITTED:
Chief, Engr. Data Mngt. Sect.
File name: 301_273i2812.dgn
Plot date: October 2, 2012
Plot scale: 1"=400'

Surveyed by: HANSON
Drawn by: RCA
Ckd by: RCA
Reviewed by:
APPROVED:
Chief, Geospatial Branch

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

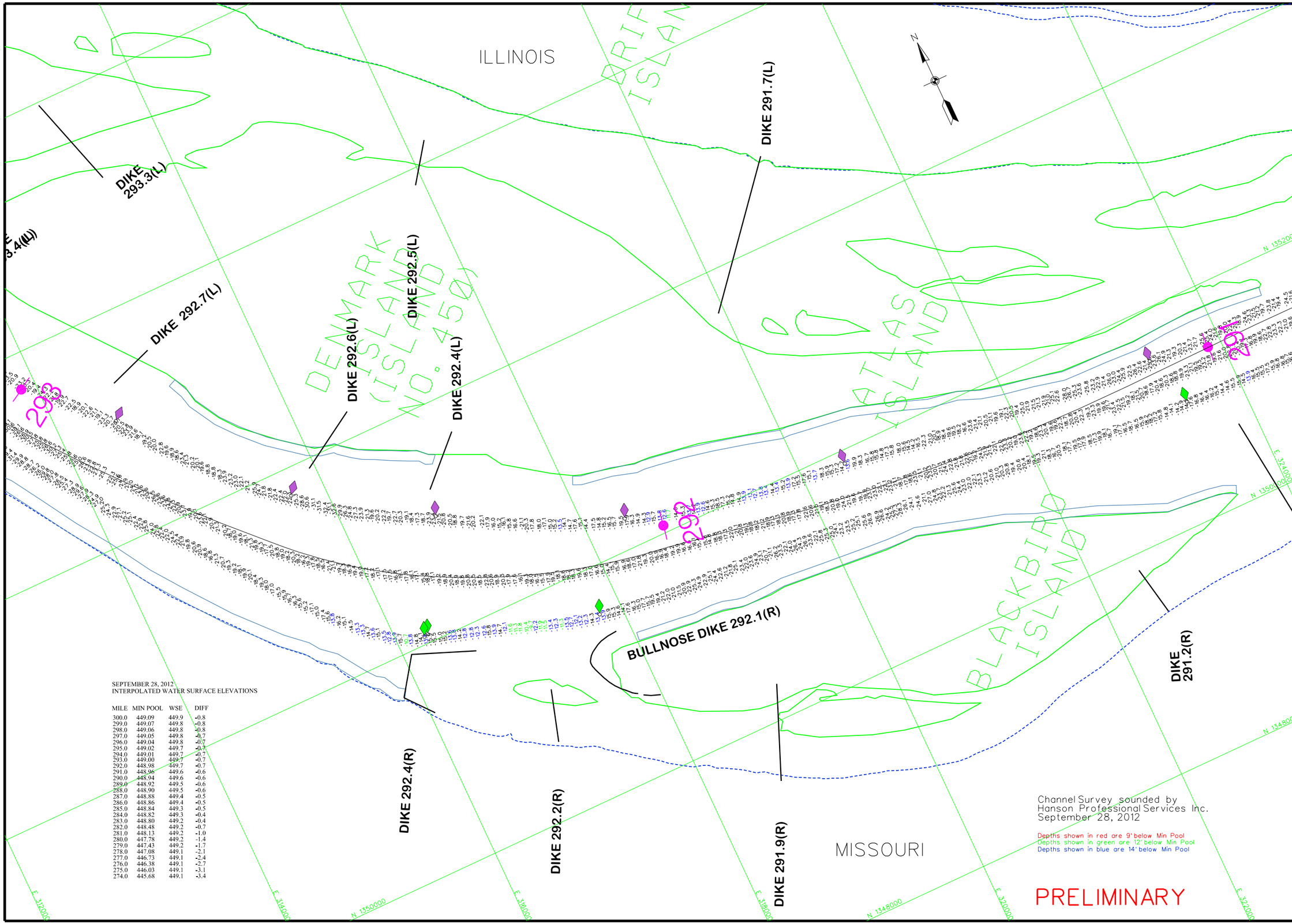
UPPER MISSISSIPPI RIVER BASIN
MISSISSIPPI RIVER

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 CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

CHANNEL SURVEY
MILE: 301.2-273.5

PLATE NUMBER



SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	MIN POOL	WSE	DIFF
300.0	449.09	449.9	-0.8
299.0	449.07	449.8	-0.8
298.0	449.06	449.8	-0.8
297.0	449.05	449.8	-0.7
296.0	449.04	449.8	-0.7
295.0	449.02	449.7	-0.7
294.0	449.01	449.7	-0.7
293.0	449.00	449.7	-0.7
292.0	448.98	449.7	-0.7
291.0	448.96	449.6	-0.6
290.0	448.94	449.6	-0.6
289.0	448.92	449.5	-0.6
288.0	448.90	449.5	-0.6
287.0	448.88	449.4	-0.5
286.0	448.86	449.4	-0.5
285.0	448.84	449.3	-0.5
284.0	448.82	449.3	-0.4
283.0	448.80	449.2	-0.4
282.0	448.48	449.2	-0.7
281.0	448.13	449.2	-1.0
280.0	447.78	449.2	-1.4
279.0	447.43	449.2	-1.7
278.0	447.08	449.1	-2.1
277.0	446.73	449.1	-2.4
276.0	446.38	449.1	-2.7
275.0	446.03	449.1	-3.1
274.0	445.68	449.1	-3.4

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	WATER SURFACE	LOUISIANA, MO	MUNDY'S LANDING	ST. LOUIS
ZERO N.G.V.D.		437.3	441.9	379.94
MILE		282.9	293.0	179.6
MIN POOL		448.8	449.0	376.4
	28 SEP 2012	449.2 (09:00)	449.7 (09:00)	
		449.2 (13:30)	449.7 (13:30)	

ELEVATIONS ARE REFERRED TO N.G.V.D. - CONTOURS ARE BELOW 1956-57 LOW WATER REFERENCE PLANE (L.W.R.P.) 154.000 C.F.S.

Survey Date: September 28, 2012
Surveyed by: HANSON
SUBMITTED:
Drawn by: RCA
Ckd by: RCA
Chief, Engr. Data Mngt. Sect.
Reviewed by:
File name: 301_273282.dgn
Plot date: October 2, 2012
Plot scale: 1"=400'
APPROVED:
Chief, Geospatial Branch

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

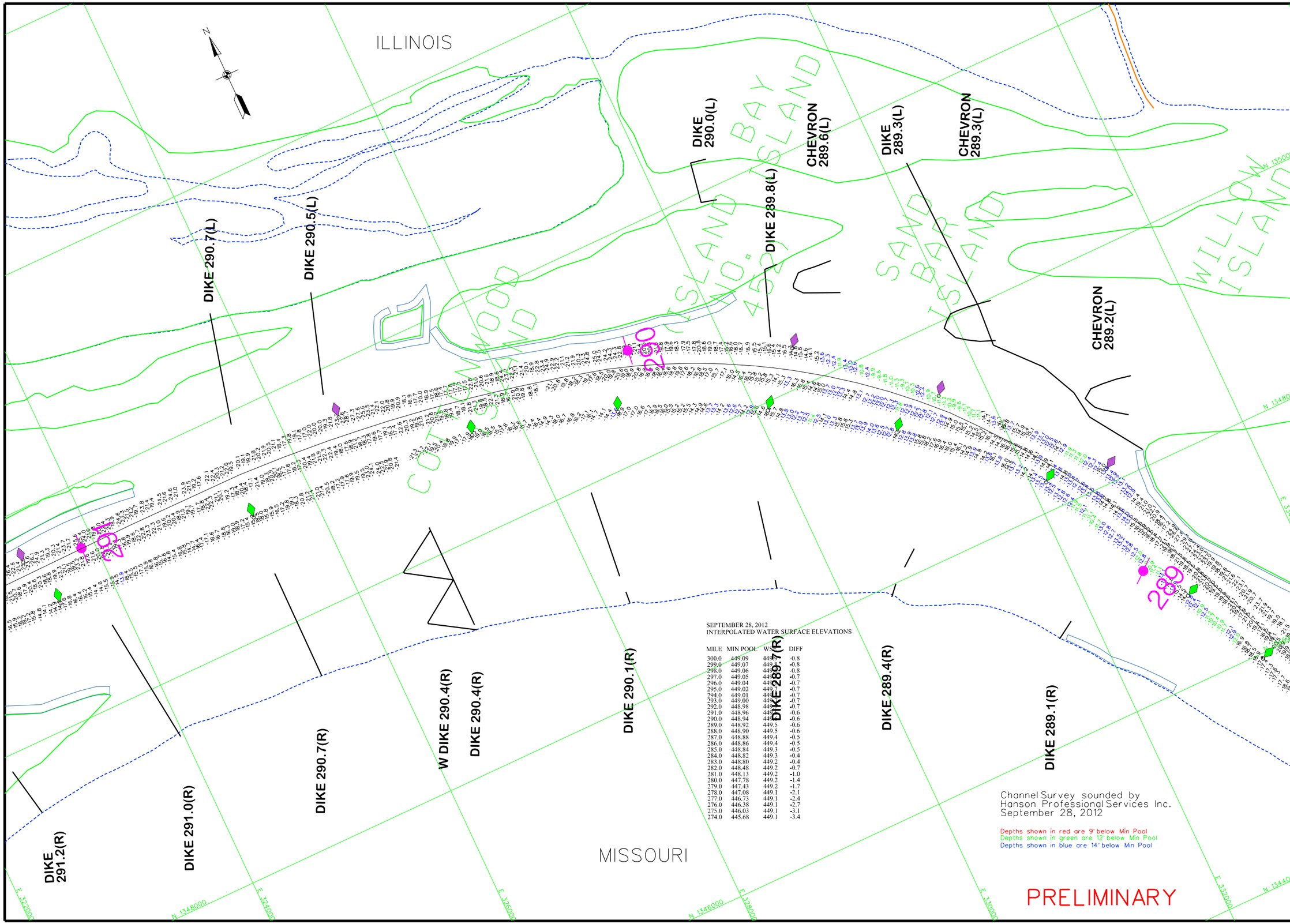
UPPER MISSISSIPPI RIVER BASIN
MISSISSIPPI RIVER

120 400 0 0 120 400 249 METERS 800 FEET

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

CHANNEL SURVEY
MILE: 301.2-273.5

PLATE NUMBER



SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	MIN POOL	WS	DIFF
300.0	449.09	449.9	-0.8
299.0	449.07	449.9	-0.8
298.0	449.06	449.9	-0.8
297.0	449.05	449.8	-0.7
296.0	449.04	449.8	-0.7
295.0	449.02	449.7	-0.7
294.0	449.01	449.6	-0.7
293.0	449.00	449.6	-0.7
292.0	448.98	449.6	-0.7
291.0	448.96	449.5	-0.6
290.0	448.94	449.5	-0.6
289.0	448.92	449.5	-0.6
288.0	448.90	449.5	-0.6
287.0	448.88	449.4	-0.5
286.0	448.86	449.4	-0.5
285.0	448.84	449.3	-0.5
284.0	448.82	449.3	-0.4
283.0	448.80	449.2	-0.4
282.0	448.48	449.2	-0.7
281.0	448.13	449.2	-1.0
280.0	447.78	449.2	-1.4
279.0	447.43	449.2	-1.7
278.0	447.08	449.1	-2.1
277.0	446.73	449.1	-2.4
276.0	446.38	449.1	-2.7
275.0	446.03	449.1	-3.1
274.0	445.68	449.1	-3.4

Channel Survey sounded by
Hanson Professional Services Inc.
September 28, 2012

Depths shown in red are 9' below Min Pool
Depths shown in green are 12' below Min Pool
Depths shown in blue are 14' below Min Pool

PRELIMINARY

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	WATER SURFACE	LOUISIANA, MO	MUNDY'S LANDING	ST. LOUIS
ZERO N.G.V.D.		437.3	441.9	379.94
MILE		282.9	293.0	179.6
MIN POOL		448.8	449.0	376.4
	28 SEP 2012	449.2 (09:00)	449.7 (09:00)	
		449.2 (13:30)	449.7 (13:30)	

ELEVATIONS ARE REFERRED TO N.G.V.D. - CONTOURS ARE BELOW 1956-57 LOW WATER REFERENCE PLANE (L.W.R.P.) 154,000 C.F.S.

Survey Date: September 28, 2012
SUBMITTED:
Chief, Engr. Data Mngt. Sect.
File name: 301_273i2812.dgn
Plot date: October 2, 2012
Plot scale: 1"=400'

Surveyed by: HANSON
Drawn by: RCA
Ckd by: RCA
Reviewed by:
APPROVED:
Chief, Geospatial Branch

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

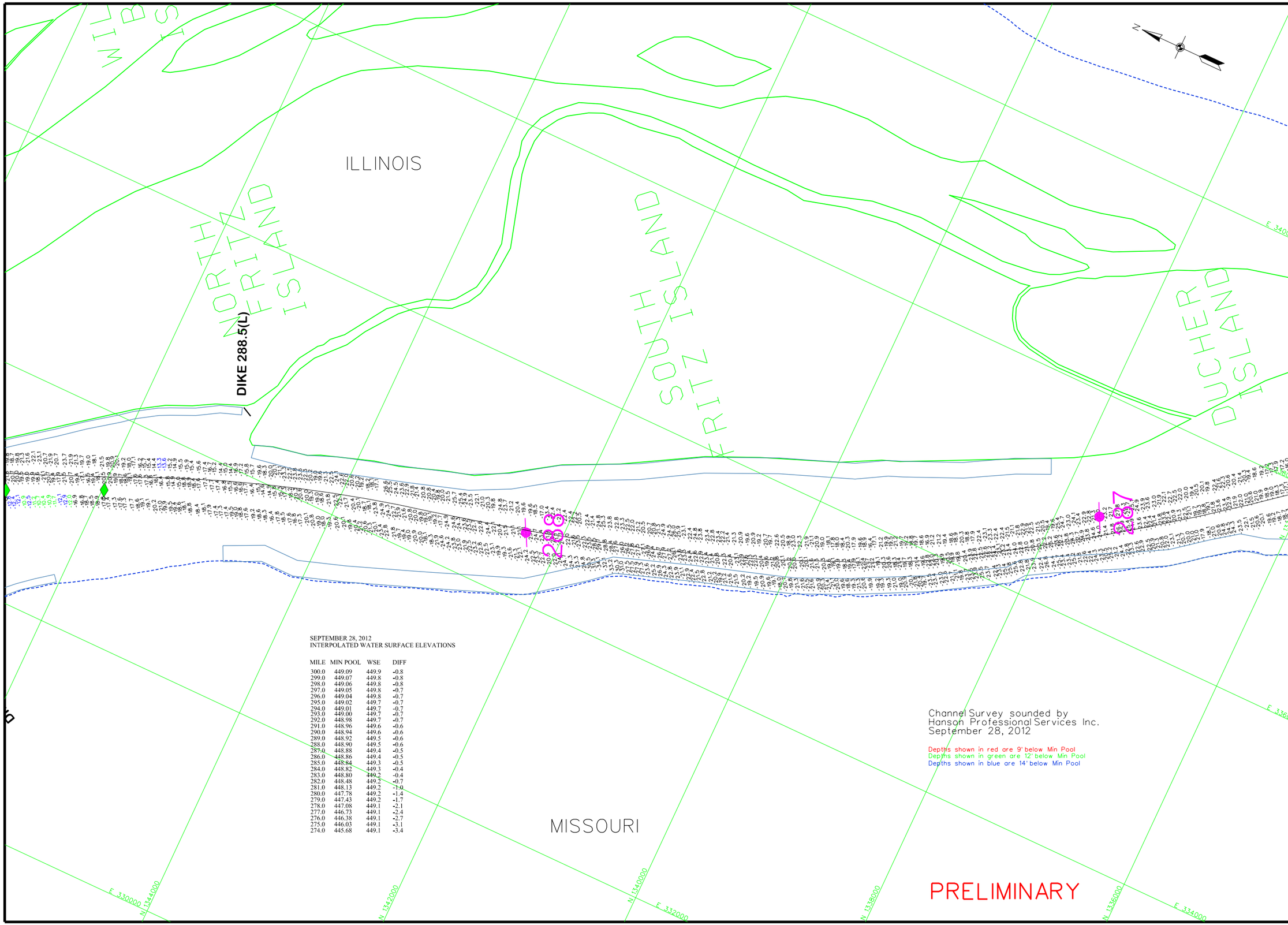
UPPER MISSISSIPPI RIVER BASIN
MISSISSIPPI RIVER

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 CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

CHANNEL SURVEY
MILE: 301.2-273.5

PLATE NUMBER



SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	MIN POOL	WSE	DIFF
300.0	449.09	449.9	-0.8
299.0	449.07	449.8	-0.8
298.0	449.06	449.8	-0.8
297.0	449.05	449.8	-0.7
296.0	449.04	449.8	-0.7
295.0	449.02	449.7	-0.7
294.0	449.01	449.7	-0.7
293.0	449.00	449.7	-0.7
292.0	448.98	449.7	-0.7
291.0	448.96	449.6	-0.6
290.0	448.94	449.6	-0.6
289.0	448.92	449.5	-0.6
288.0	448.90	449.5	-0.6
287.0	448.88	449.4	-0.5
286.0	448.86	449.4	-0.5
285.0	448.84	449.3	-0.5
284.0	448.82	449.3	-0.4
283.0	448.80	449.2	-0.4
282.0	448.48	449.2	-0.7
281.0	448.13	449.2	-1.0
280.0	447.78	449.2	-1.4
279.0	447.43	449.2	-1.7
278.0	447.08	449.1	-2.1
277.0	446.73	449.1	-2.4
276.0	446.38	449.1	-2.7
275.0	446.03	449.1	-3.1
274.0	445.68	449.1	-3.4

Channel Survey sounded by
Hanson Professional Services Inc.
September 28, 2012

Depths shown in red are 9' below Min Pool
Depths shown in green are 12' below Min Pool
Depths shown in blue are 14' below Min Pool

PRELIMINARY

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	WATER SURFACE	LOUISIANA, MO	MUNDYS LANDING	ST. LOUIS
ZERO N.G.V.D.		437.3	441.9	379.94
MILE		282.9	293.0	179.6
MIN POOL		448.8	449.0	376.4
	28 SEP 2012	449.2 (09:00)	449.7 (09:00)	
		449.2 (13:30)	449.7 (13:30)	

ELEVATIONS ARE REFERRED TO N.G.V.D. - CONTOURS ARE BELOW 1994-97 LOW WATER REFERENCE PLANE (L.W.R.P.) 154.000 C.F.S.

Survey Date: September 28, 2012
SUBMITTED:
Chief, Engr. Data Mngt. Sect.
File name: 301_273C812.dgn
Plot date: October 2, 2012
Plot scale: 1"=400'

Surveyed by: HANSON
Drawn by: RCA
Ckd by: RCA
Reviewed by:
APPROVED: Chief, Geospatial Branch

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

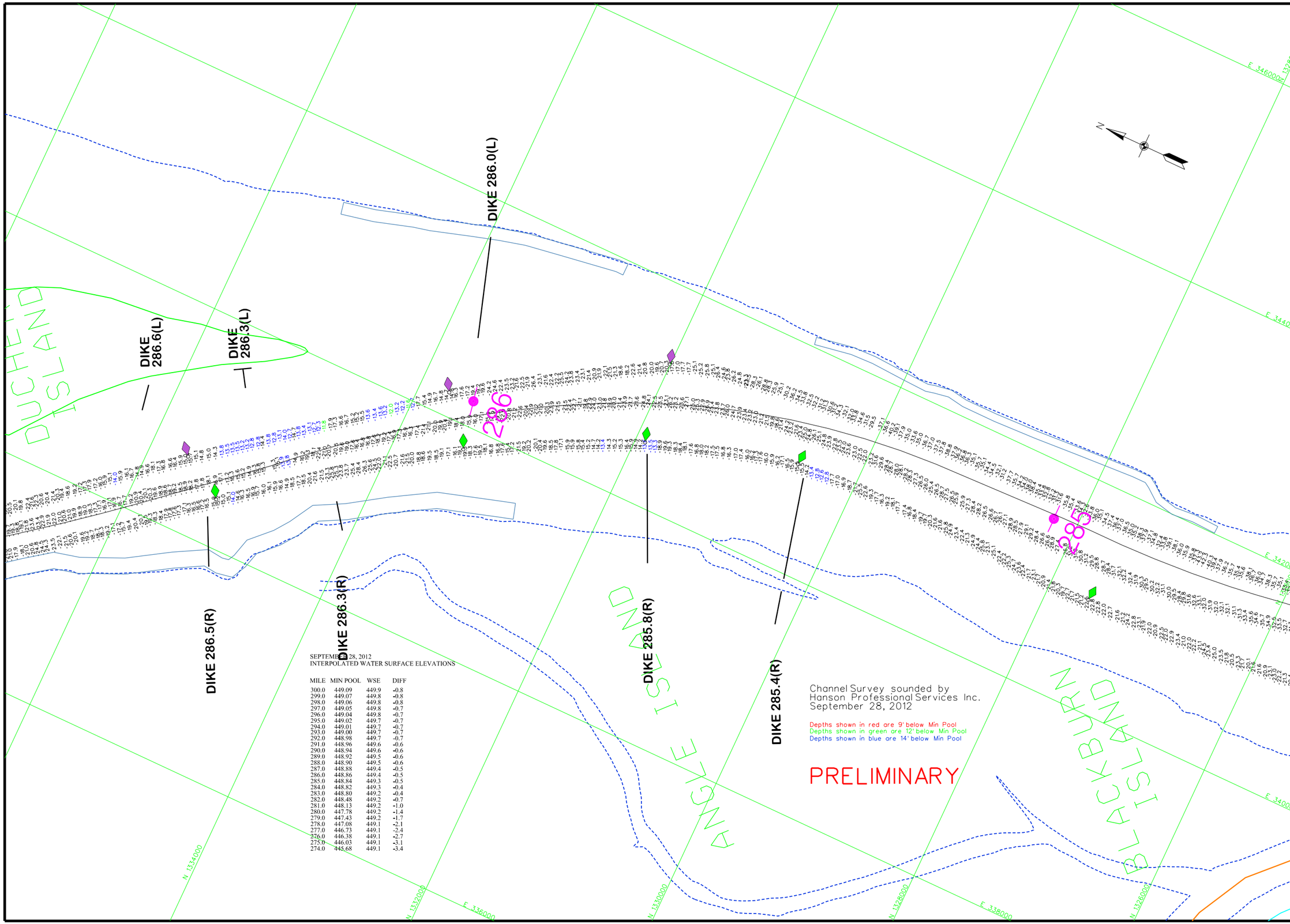
UPPER MISSISSIPPI RIVER BASIN
MISSISSIPPI RIVER

120 400 0 0 120 240 METERS
400 800 FEET

THE INFORMATION REPORTED ON MAPS AND APPURTENANCES, THE GENERAL LOCATIONS OF WHICH ARE SHOWN, WAS COMPILED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

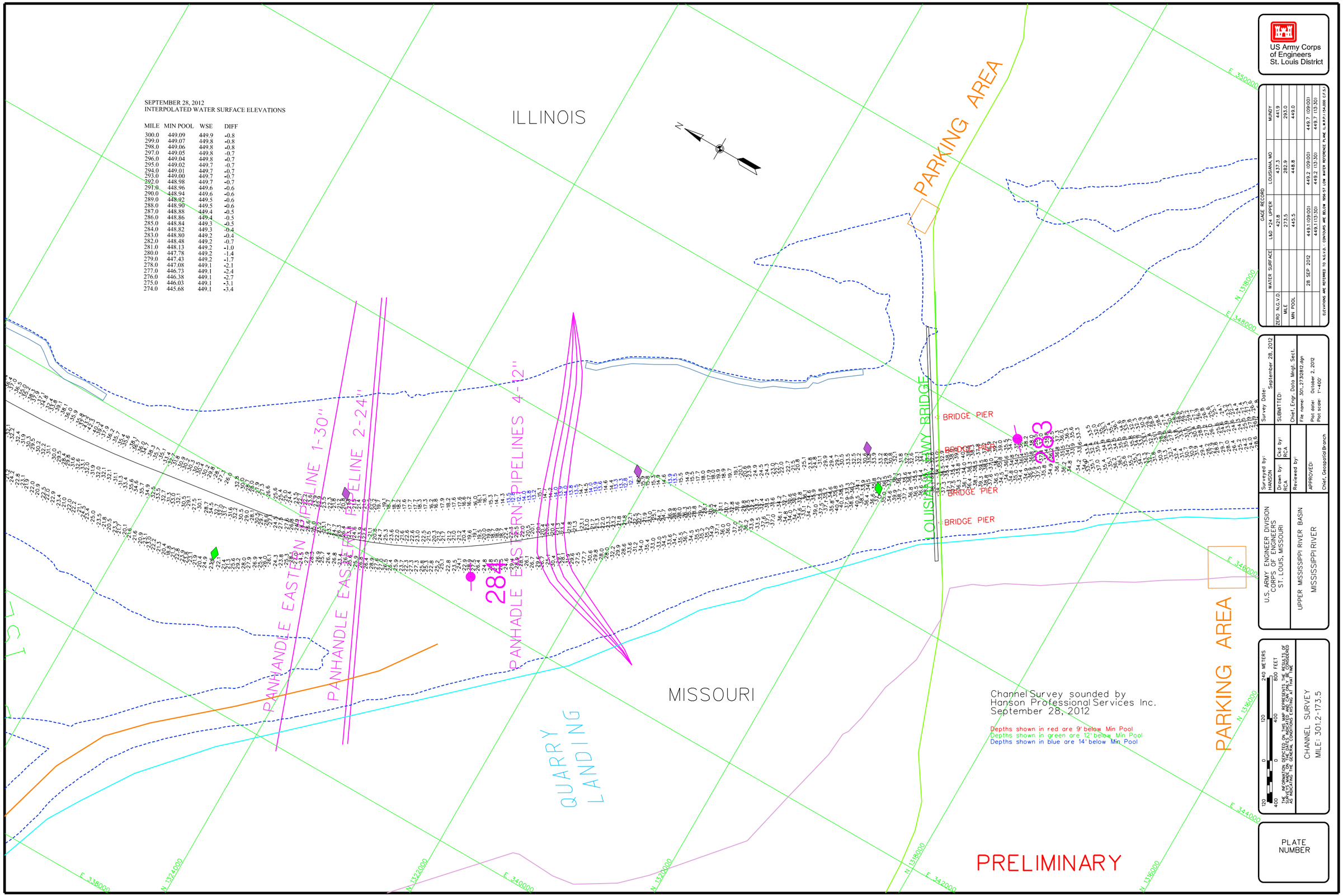
CHANNEL SURVEY
MILE: 301.2-273.5

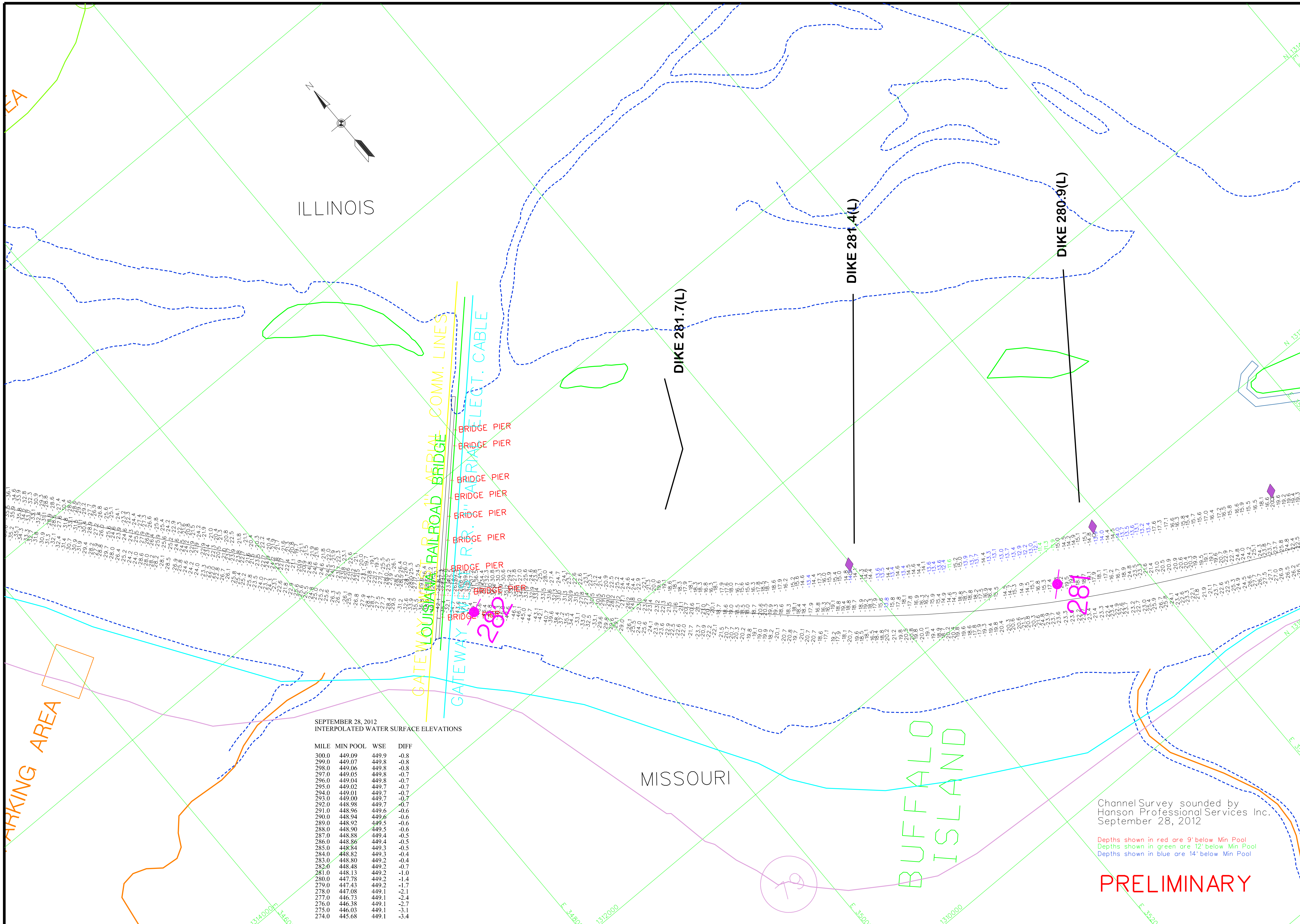
PLATE NUMBER


DIKE 286.6(L)
DIKE 286.3(L)
DIKE 286.0(L)
DIKE 286.5(R)
DIKE 286.3(R)
DIKE 285.8(R)
DIKE 285.4(R)
DUCHENE ISLAND
BLACKBURN ISLAND
ANGLE ISLAND
286
285
N 1334000
N 1332000
N 1330000
N 1328000
N 1326000
E 336000
E 338000
E 340000
E 342000
E 344000
E 346000
E 1328000
N
Channel Survey sounded by
Hanson Professional Services Inc.
September 28, 2012
Depths shown in red are 9' below Min Pool
Depths shown in green are 12' below Min Pool
Depths shown in blue are 14' below Min Pool
PRELIMINARY
SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS
MILE MIN POOL WSE DIFF
300.0 449.09 449.9 -0.8
299.0 449.07 449.8 -0.8
298.0 449.06 449.8 -0.8
297.0 449.05 449.8 -0.7
296.0 449.04 449.8 -0.7
295.0 449.02 449.7 -0.7
294.0 449.01 449.7 -0.7
293.0 449.00 449.7 -0.7
292.0 448.98 449.7 -0.7
291.0 448.96 449.6 -0.6
290.0 448.94 449.6 -0.6
289.0 448.92 449.5 -0.6
288.0 448.90 449.5 -0.6
287.0 448.88 449.4 -0.5
286.0 448.86 449.4 -0.5
285.0 448.84 449.3 -0.5
284.0 448.82 449.3 -0.4
283.0 448.80 449.2 -0.4
282.0 448.48 449.2 -0.7
281.0 448.13 449.2 -1.0
280.0 447.78 449.2 -1.4
279.0 447.43 449.2 -1.7
278.0 447.08 449.1 -2.1
277.0 446.73 449.1 -2.4
276.0 446.38 449.1 -2.7
275.0 446.03 449.1 -3.1
274.0 445.68 449.1 -3.4
US Army Corps of Engineers
St. Louis District
GAGE RECORD
WATER SURFACE
LOUISIANA, MO
MUNDY'S LANDING
ST. LOUIS
ZERO N.G.V.D.
MILE
MIN POOL
437.3
282.9
448.8
441.9
293.0
449.0
379.94
179.6
376.4
28 SEP 2012
449.2 (09-00)
449.2 (13-30)
449.7 (09-00)
449.7 (13-30)
ELEVATIONS ARE REFERRED TO N.G.V.D. - CONTOURS ARE BELOW 1956-57 LOW WATER REFERENCE PLANE (L.W.R.P.) 154.000 C.F.S.
Survey Date: September 28, 2012
SUBMITTED:
Chief, Engr. Data Mngt. Sect.
File name: 301-273C812.dgn
Plot date: October 2, 2012
Plot scale: 1"=400'
Surveyed by: HANSON
Drawn by: RCA
Ckd by: RCA
Reviewed by:
APPROVED:
Chief, Geospatial Branch
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
SURVEY INFORMATION REPRESENTS ON THIS MAP, ALTHOUGH IT IS THE BEST AVAILABLE, MAY NOT BE ACCURATE OR COMPLETE AS INDICATED BY THE SURVEYED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME
CHANNEL SURVEY
MILE: 301.2-273.5
PLATE NUMBER

SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	MIN POOL	WSE	DIFF
300.0	449.09	449.9	-0.8
299.0	449.07	449.8	-0.8
298.0	449.06	449.8	-0.8
297.0	449.05	449.8	-0.7
296.0	449.04	449.8	-0.7
295.0	449.02	449.7	-0.7
294.0	449.01	449.7	-0.7
293.0	449.00	449.7	-0.7
292.0	448.98	449.7	-0.7
291.0	448.96	449.6	-0.6
290.0	448.94	449.6	-0.6
289.0	448.92	449.5	-0.6
288.0	448.90	449.5	-0.6
287.0	448.88	449.4	-0.5
286.0	448.86	449.4	-0.5
285.0	448.84	449.3	-0.5
284.0	448.82	449.3	-0.4
283.0	448.80	449.2	-0.4
282.0	448.48	449.2	-0.7
281.0	448.13	449.2	-1.0
280.0	447.78	449.2	-1.4
279.0	447.43	449.2	-1.7
278.0	447.08	449.1	-2.1
277.0	446.73	449.1	-2.4
276.0	446.38	449.1	-2.7
275.0	446.03	449.1	-3.1
274.0	445.68	449.1	-3.4





SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	MIN POOL	WSE	DIFF
300.0	449.09	449.9	-0.8
299.0	449.07	449.8	-0.8
298.0	449.06	449.8	-0.8
297.0	449.05	449.8	-0.7
296.0	449.04	449.8	-0.7
295.0	449.02	449.7	-0.7
294.0	449.01	449.7	-0.7
293.0	449.00	449.7	-0.7
292.0	448.98	449.7	-0.7
291.0	448.96	449.6	-0.6
290.0	448.94	449.6	-0.6
289.0	448.92	449.5	-0.6
288.0	448.90	449.5	-0.6
287.0	448.88	449.4	-0.5
286.0	448.86	449.4	-0.5
285.0	448.84	449.3	-0.5
284.0	448.82	449.3	-0.4
283.0	448.80	449.2	-0.4
282.0	448.48	449.2	-0.7
281.0	448.13	449.2	-1.0
280.0	447.78	449.2	-1.4
279.0	447.43	449.2	-1.7
278.0	447.08	449.1	-2.1
277.0	446.73	449.1	-2.4
276.0	446.38	449.1	-2.7
275.0	446.03	449.1	-3.1
274.0	445.68	449.1	-3.4

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	L & D 24 UPPER	LOUISIANA, MO	ST. LOUIS
ZERO N.G.V.D.	421.8	437.3	379.94
MILE	273.5	282.9	179.6
MIN POOL	445.5	448.8	376.4
WATER SURFACE 28 SEP 2012	449.1 (09:00)	449.2 (09:00)	
	449.1 (13:30)	449.2 (13:30)	

ELEVATIONS ARE REFERRED TO N.G.V.D. - CONTOURS ARE BELOW 1956-57 LOW WATER REFERENCE PLANE (L.W.R.P.) (54,000 C.F.S.)

Survey Date: September 28, 2012
SUBMITTED:
Chief, Engr. Data Mngt. Sect.
File name: 301_273l2812.dgn
Plot date: October 2, 2012
Plot scale: 1"=400'

Surveyed by: HANSON
Drawn by: RCA
Ckd by: RCA
Reviewed by:
APPROVED:
Chief, Geospatial Branch

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

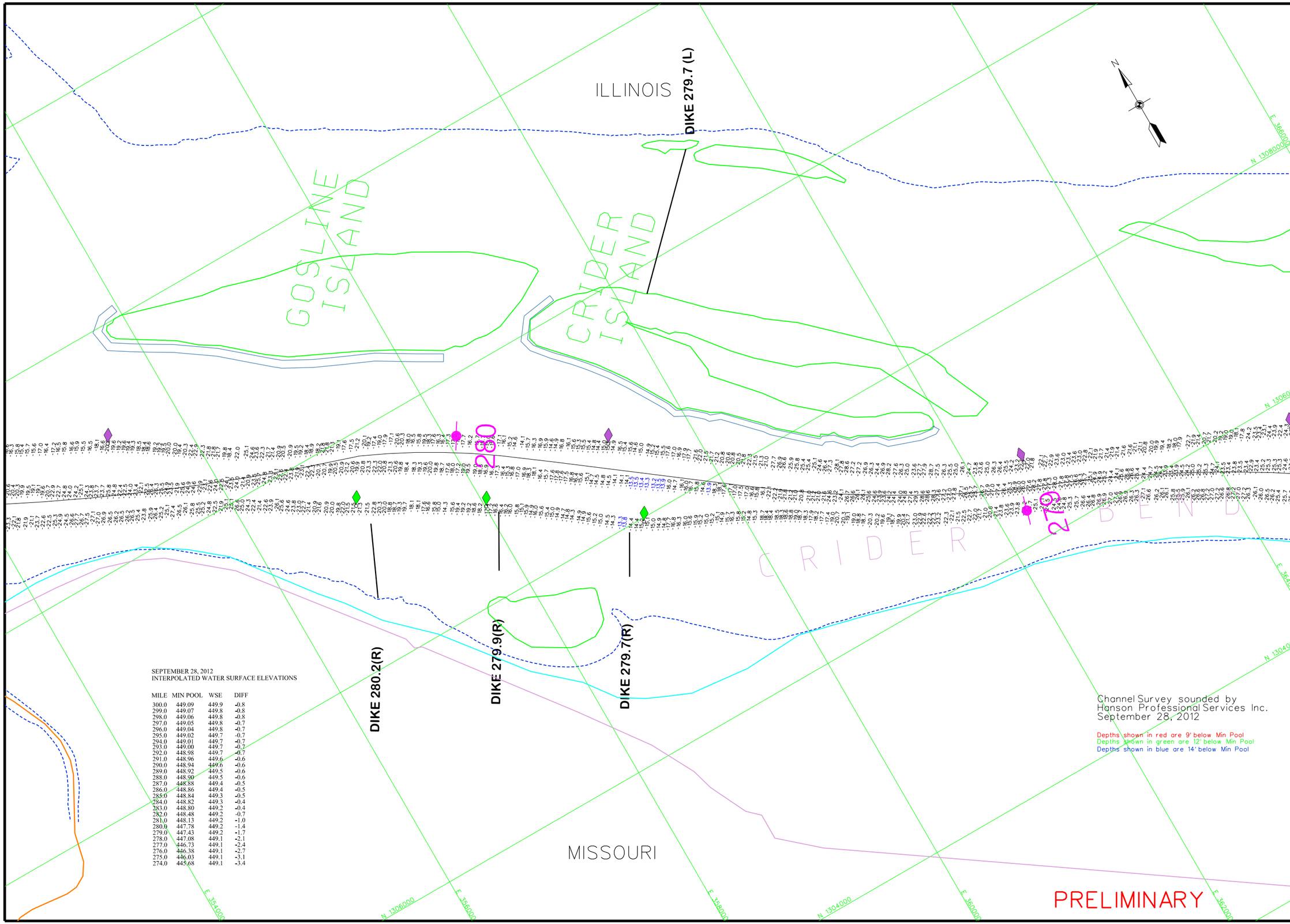
UPPER MISSISSIPPI RIVER BASIN
MISSISSIPPI RIVER

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 CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

CHANNEL SURVEY
MILE: 301.2-273.5

PLATE NUMBER



SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	MIN POOL	WSE	DIFF
300.0	449.09	449.9	-0.8
299.0	449.07	449.8	-0.8
298.0	449.06	449.8	-0.8
297.0	449.05	449.8	-0.7
296.0	449.04	449.8	-0.7
295.0	449.02	449.7	-0.7
294.0	449.01	449.7	-0.7
293.0	449.00	449.7	-0.7
292.0	448.98	449.7	-0.7
291.0	448.96	449.6	-0.6
290.0	448.94	449.6	-0.6
289.0	448.92	449.5	-0.6
288.0	448.90	449.5	-0.6
287.0	448.88	449.4	-0.5
286.0	448.86	449.4	-0.5
285.0	448.84	449.3	-0.5
284.0	448.82	449.3	-0.4
283.0	448.80	449.2	-0.4
282.0	448.48	449.2	-0.7
281.0	448.13	449.2	-1.0
280.0	447.78	449.2	-1.4
279.0	447.43	449.2	-1.7
278.0	447.08	449.1	-2.1
277.0	446.73	449.1	-2.4
276.0	446.38	449.1	-2.7
275.0	446.03	449.1	-3.1
274.0	445.68	449.1	-3.4

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	WATER SURFACE	L & D 24 UPPER	LOUISIANA, MO	ST. LOUIS
ZERO N.G.V.D.		421.8	437.3	379.94
MILE		273.5	282.9	179.6
MIN POOL		445.5	448.8	376.4
	28 SEP 2012	449.1(09:00)	449.2 (09:00)	
		449.1(13:30)	449.2 (13:30)	

ELEVATIONS ARE REFERENCED TO N.G.V.D. - CONTOURS ARE BELOW 1996-97 LOW WATER REFERENCE PLANE (L.W.R.P.) 154,000 C.F.S.

Survey Date: September 28, 2012

SUBMITTED:

Chief, Engr. Data Mngt. Sect.

File name: 301_273\2812.dgn

Plot date: October 2, 2012

Plot scale: 1"=400'

Surveyed by: HANSON

Drawn by: RCA

Ckd by:

Reviewed by:

APPROVED:

Chief, Geospatial Branch

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

UPPER MISSISSIPPI RIVER BASIN

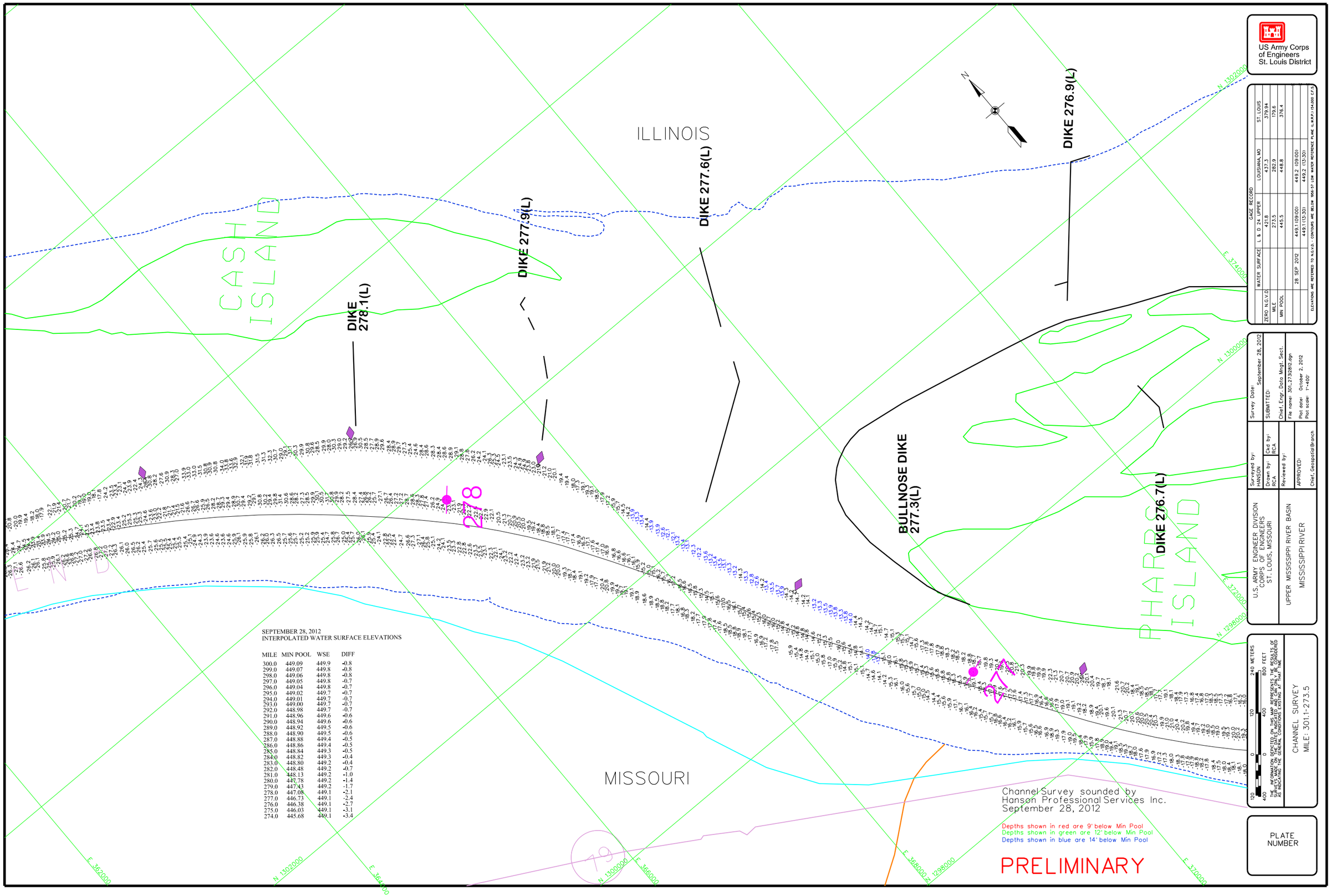
MISSISSIPPI RIVER

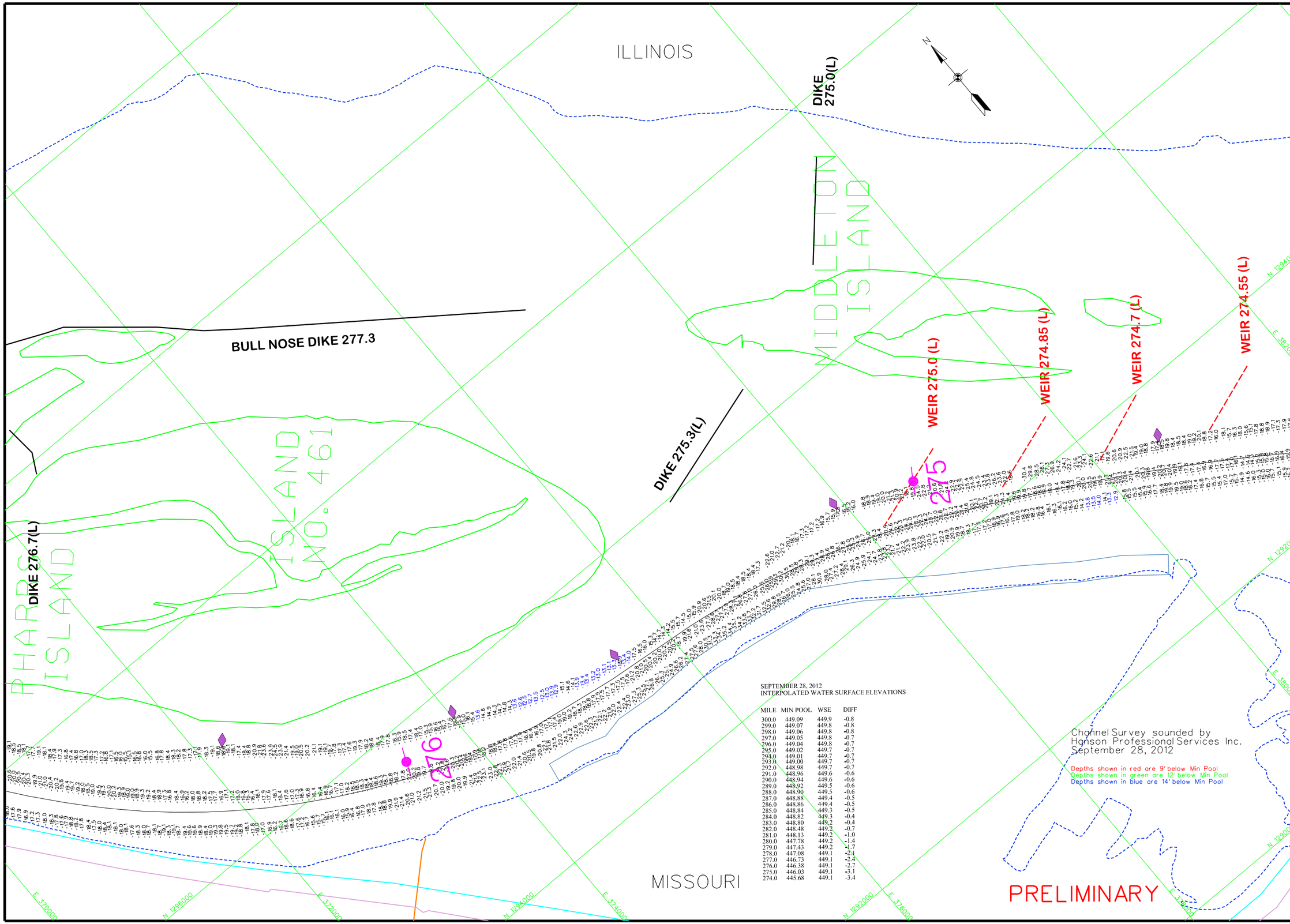
120 0 120 240 METERS
400 0 400 800 FEET

SURVEY INFORMATION REPORTED ON THIS MAP REPRESENTS THE POSSIBLE CHANGES IN THE RIVER BOTTOM AS MEASURED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

CHANNEL SURVEY
MILE: 301.1-273.5

PLATE NUMBER


ILLINOIS
MISSOURI
CASH ISLAND
PHARRS ISLAND
DIKE 278.1(L)
DIKE 277.9(L)
DIKE 277.6(L)
DIKE 276.9(L)
DIKE 276.7(L)
BULLNOSE DIKE 277.3(L)
N
N 1302000
N 1300000
N 1298000
E 374000
E 372000
E 370000
E 368000
E 366000
E 364000
E 362000
SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS
MILE MIN POOL WSE DIFF
300.0 449.09 449.9 -0.8
299.0 449.07 449.8 -0.8
298.0 449.06 449.8 -0.8
297.0 449.05 449.8 -0.7
296.0 449.04 449.8 -0.7
295.0 449.02 449.7 -0.7
294.0 449.01 449.7 -0.7
293.0 449.00 449.7 -0.7
292.0 448.98 449.7 -0.7
291.0 448.96 449.6 -0.6
290.0 448.94 449.6 -0.6
289.0 448.92 449.5 -0.6
288.0 448.90 449.5 -0.6
287.0 448.88 449.4 -0.5
286.0 448.86 449.4 -0.5
285.0 448.84 449.3 -0.5
284.0 448.82 449.3 -0.4
283.0 448.80 449.2 -0.4
282.0 448.48 449.2 -0.7
281.0 448.13 449.2 -1.0
280.0 447.78 449.2 -1.4
279.0 447.43 449.2 -1.7
278.0 447.08 449.1 -2.1
277.0 446.73 449.1 -2.4
276.0 446.38 449.1 -2.7
275.0 446.03 449.1 -3.1
274.0 445.68 449.1 -3.4
Channel Survey sounded by
Hanson Professional Services Inc.
September 28, 2012
Depths shown in red are 9' below Min Pool
Depths shown in green are 12' below Min Pool
Depths shown in blue are 14' below Min Pool
PRELIMINARY
US Army Corps of Engineers
St. Louis District
GAGE RECORD
WATER SURFACE
ZERO N.G.V.D.
MILE
MIN POOL
L & D 24 UPPER
LOUISIANA, MO
ST. LOUIS
421.8
437.3
379.94
273.5
282.9
179.6
445.5
448.8
376.4
28 SEP 2012
449.1 (09:00)
449.2 (09:00)
449.1 (13:30)
449.2 (13:30)
ELEVATIONS ARE REFERRED TO N.G.V.D. - CONTOURS ARE BELOW 1956-57 LOW WATER REFERENCE PLANE (L.W.R.P.) 154.000 C.F.S.
Survey Date: September 28, 2012
SUBMITTED:
Chief, Engr. Data Mngt. Sect.
File name: 301_273C812.dgn
Plot date: October 2, 2012
Plot scale: 1"=400'
Chief, Geospatial Branch
Surveyed by: HANSON
Drawn by: RCA
Ckd by: RCA
Reviewed by:
APPROVED:
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 RESOURCES AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME
CHANNEL SURVEY
MILE: 301.1-273.5
PLATE NUMBER



SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	MIN POOL	WSE	DIFF
300.0	449.09	449.9	-0.8
299.0	449.07	449.8	-0.8
298.0	449.06	449.8	-0.8
297.0	449.05	449.8	-0.7
296.0	449.04	449.8	-0.7
295.0	449.02	449.7	-0.7
294.0	449.01	449.7	-0.7
293.0	449.00	449.7	-0.7
292.0	448.98	449.7	-0.7
291.0	448.96	449.6	-0.6
290.0	448.94	449.6	-0.6
289.0	448.92	449.5	-0.6
288.0	448.90	449.5	-0.6
287.0	448.88	449.4	-0.5
286.0	448.86	449.4	-0.5
285.0	448.84	449.3	-0.5
284.0	448.82	449.3	-0.4
283.0	448.80	449.2	-0.4
282.0	448.48	449.2	-0.7
281.0	448.13	449.2	-1.0
280.0	447.78	449.2	-1.4
279.0	447.43	449.2	-1.7
278.0	447.08	449.1	-2.1
277.0	446.73	449.1	-2.4
276.0	446.38	449.1	-2.7
275.0	446.03	449.1	-3.1
274.0	445.68	449.1	-3.4

Channel Survey sounded by
Hanson Professional Services Inc.
September 28, 2012

Depths shown in red are 9' below Min Pool
Depths shown in green are 12' below Min Pool
Depths shown in blue are 14' below Min Pool

US Army Corps of Engineers
St. Louis District

GAGE RECORD

	WATER SURFACE	L & D 24 UPPER	LOUISIANA, MO	ST. LOUIS
ZERO N.G.V.D.		421.8	437.3	379.94
MILE		273.5	282.9	179.6
MIN POOL		445.5	448.8	376.4
	28 OCT 2012	449.1 (09:00)	449.2 (09:00)	
		449.1 (13:30)	449.2 (13:30)	

ELEVATIONS ARE REFERED TO N.G.V.D. - CONTOURS ARE BELOW 1956-57 LOW WATER REFERENCE PLANE (L.W.R.P.) 154.000 C.F.S.

Survey Date: September 28, 2012
SUBMITTED:
Chief, Engr. Data Mngt. Sect.
File name: 301_273C812.dgn
Plot date: October 2, 2012
Plot scale: 1"=400'

Surveyed by: HANSON
Drawn by: RCA
Ckd by: RCA
Reviewed by:
APPROVED:
Chief, Geospatial Branch

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

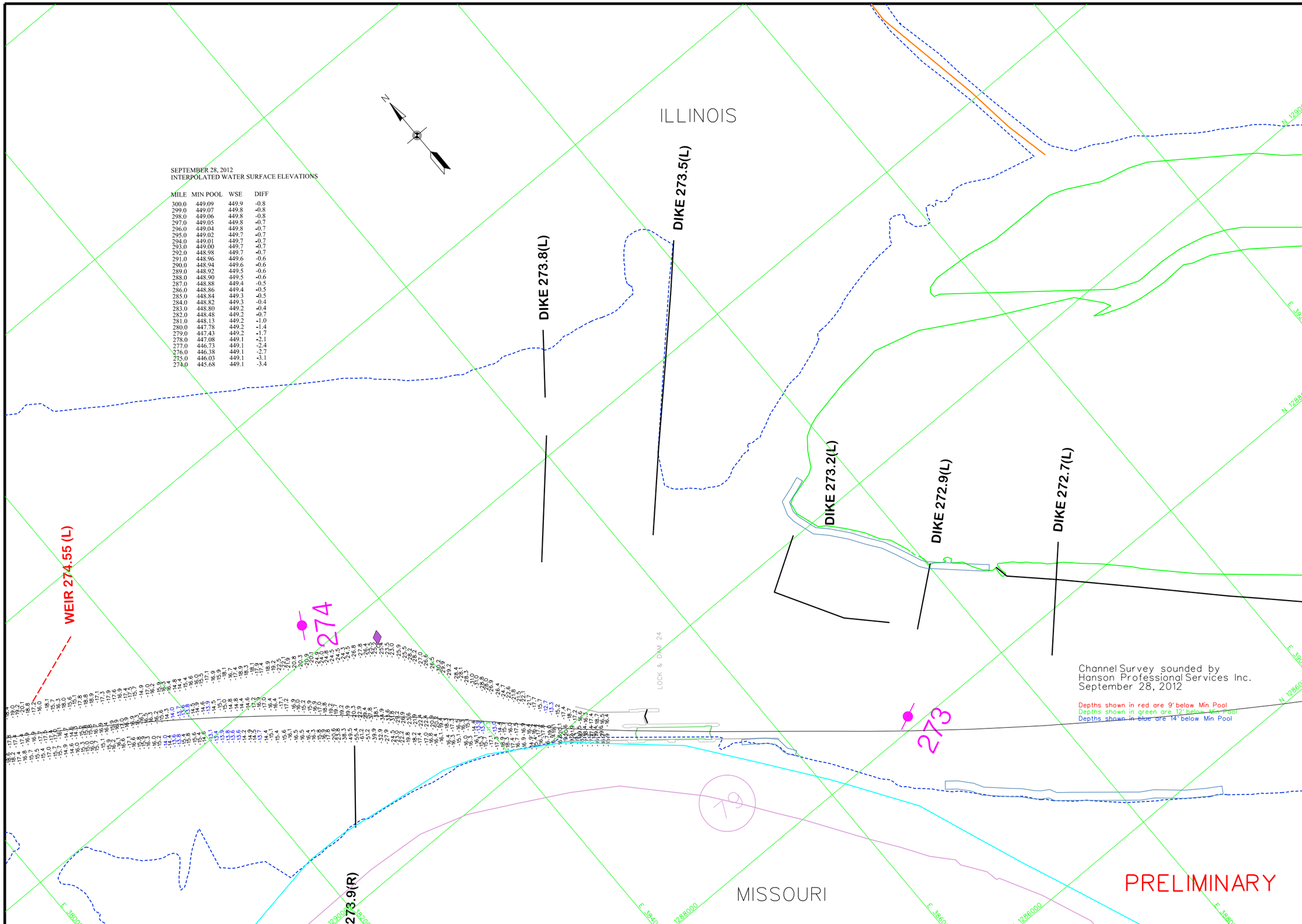
UPPER MISSISSIPPI RIVER BASIN
MISSISSIPPI RIVER

120 0 120 240 METERS
400 0 400 800 FEET

THE INFORMATION REPRESENTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON THE DATE SHOWN AND IS ACCURATE AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME

CHANNEL SURVEY
MILE: 301.2-273.5

PLATE NUMBER



SEPTEMBER 28, 2012
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	MIN POOL	WSE	DIFF
300.0	449.09	449.9	-0.8
299.0	449.07	449.8	-0.8
298.0	449.06	449.8	-0.8
297.0	449.05	449.8	-0.7
296.0	449.04	449.8	-0.7
295.0	449.02	449.7	-0.7
294.0	449.01	449.7	-0.7
293.0	449.00	449.7	-0.7
292.0	448.98	449.7	-0.7
291.0	448.96	449.6	-0.6
290.0	448.94	449.6	-0.6
289.0	448.92	449.5	-0.6
288.0	448.90	449.5	-0.6
287.0	448.88	449.4	-0.5
286.0	448.86	449.4	-0.5
285.0	448.84	449.3	-0.5
284.0	448.82	449.3	-0.4
283.0	448.80	449.2	-0.4
282.0	448.48	449.2	-0.7
281.0	448.13	449.2	-1.0
280.0	447.78	449.2	-1.4
279.0	447.43	449.2	-1.7
278.0	447.08	449.1	-2.1
277.0	446.73	449.1	-2.4
276.0	446.38	449.1	-2.7
275.0	446.03	449.1	-3.1
274.0	445.68	449.1	-3.4

US Army Corps of Engineers
St. Louis District

GAGE RECORD

ZERO N.G.V.D.	WATER SURFACE	RIPRAP	L & D 24 (L)	LOUISIANA, MO
MILE		426.0	421.8	437.3
		265.0	273.2	282.9
MIN POOL		434.0	434.1	448.8
	28 SEP 2012		449.1 (09-00)	449.2 (09-00)
			449.1 (13-30)	449.2 (13-30)

ELEVATIONS ARE REFERRED TO N.G.V.D. - CONTOURS ARE BELOW 1956-57 LOW WATER REFERENCE PLANE (L.W.R.P.) (34,000 C.F.S.)

Survey Date: September 28, 2012
SUBMITTED:
Chief, Engr. Data Mngt. Sect.
File name: 301_273092812.dgn
Plot date: October 2, 2012
Plot scale: 1"=400'

Surveyed by: HANSON
Drawn by: RCA
Ckd by: RCA
Reviewed by:
APPROVED:
Chief, Geospatial Branch

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

UPPER MISSISSIPPI RIVER BASIN
MISSISSIPPI RIVER

120 400 0 0 240 800 METERS FEET

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

CHANNEL SURVEY
MILE: 301.2-273.5

PLATE NUMBER