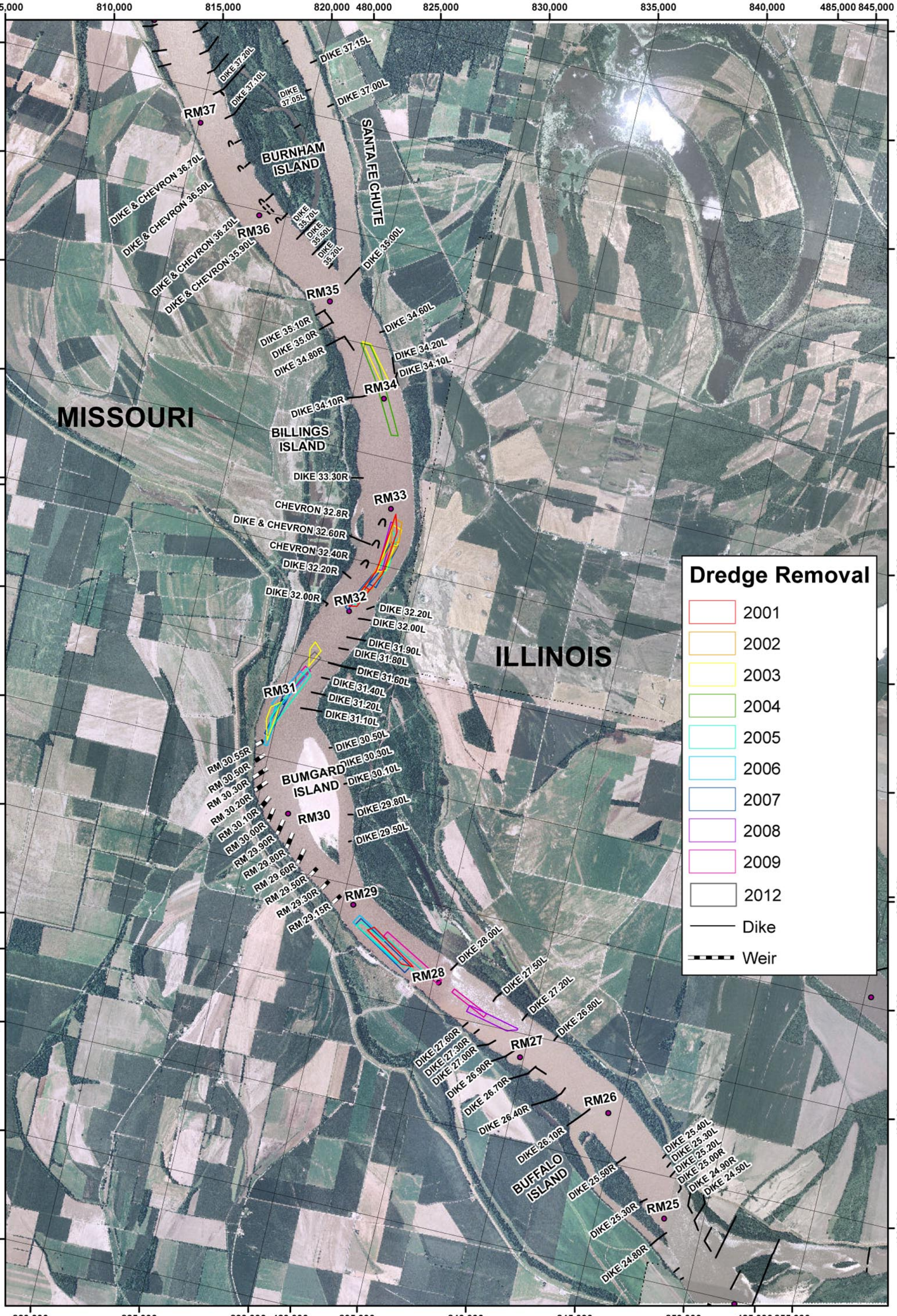

PLATE NUMBER 1

0 1,600 3,200 6,400
Feet

DREDGE REMOVAL
2001 - 2012

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey		
DRAWN BY: K. Clancey	REVIEWED BY: E Brauer, P.E.	CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey	APPROVED: Rob Davinroy, P.E.	
FILE NAME: Z:\Bumgard Island HSR study\Plates		

N W E S

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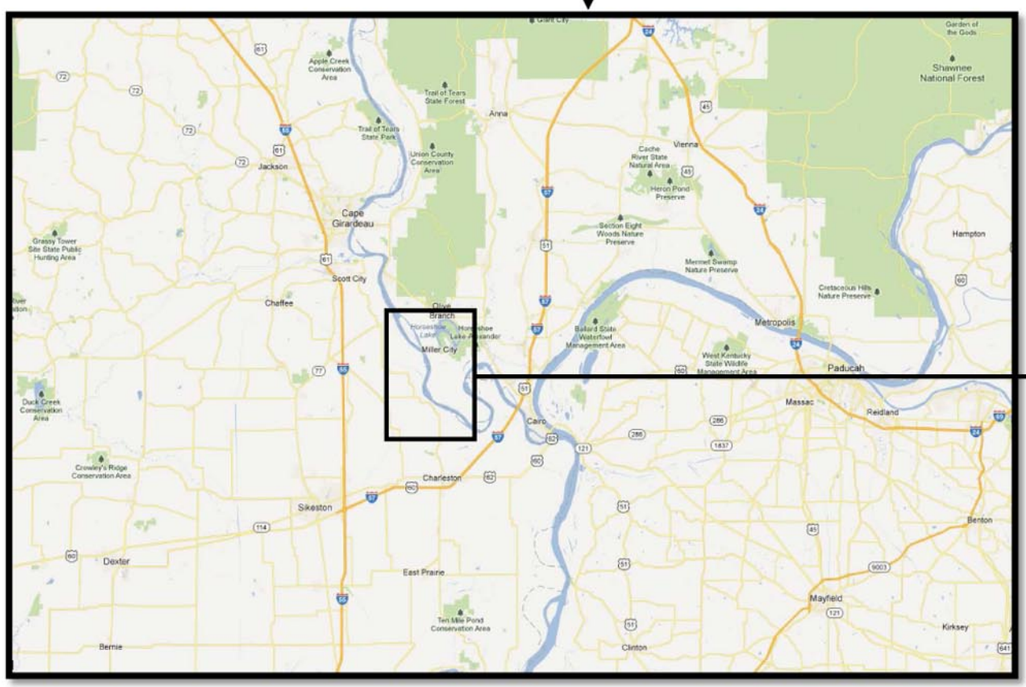

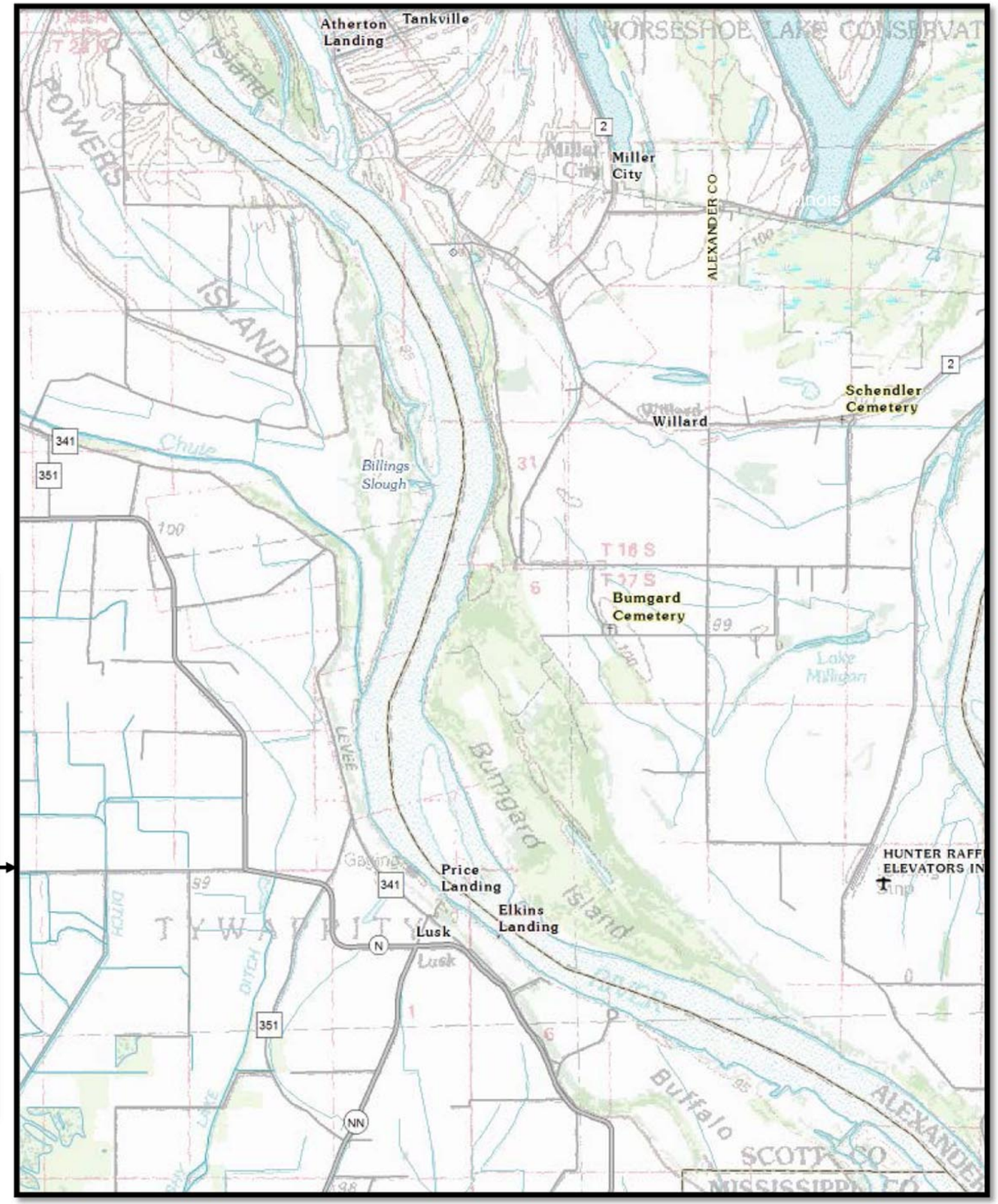

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REVIEWED BY: J.BROWN, P.E.	
CHECKED BY: E.BRAUER, P.E.	
APPROVED BY: R.DAVINROY, P.E.	
DRAWN BY: K. CLANCEY	
SUBMITTED BY: K. CLANCEY	
PLOT DATE: JUNE 2012	
FILE NAME: Z:\Bumgard Island HSR study\Plates\LocationMapVicinity-Plate#1	
U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST.LOUIS, MISSOURI	APPLIED RIVER ENGINEERING CENTER ST.LOUIS DISTRICT

Bumgard Island
Location & Vicinity Map

PLATE NUMBER 2

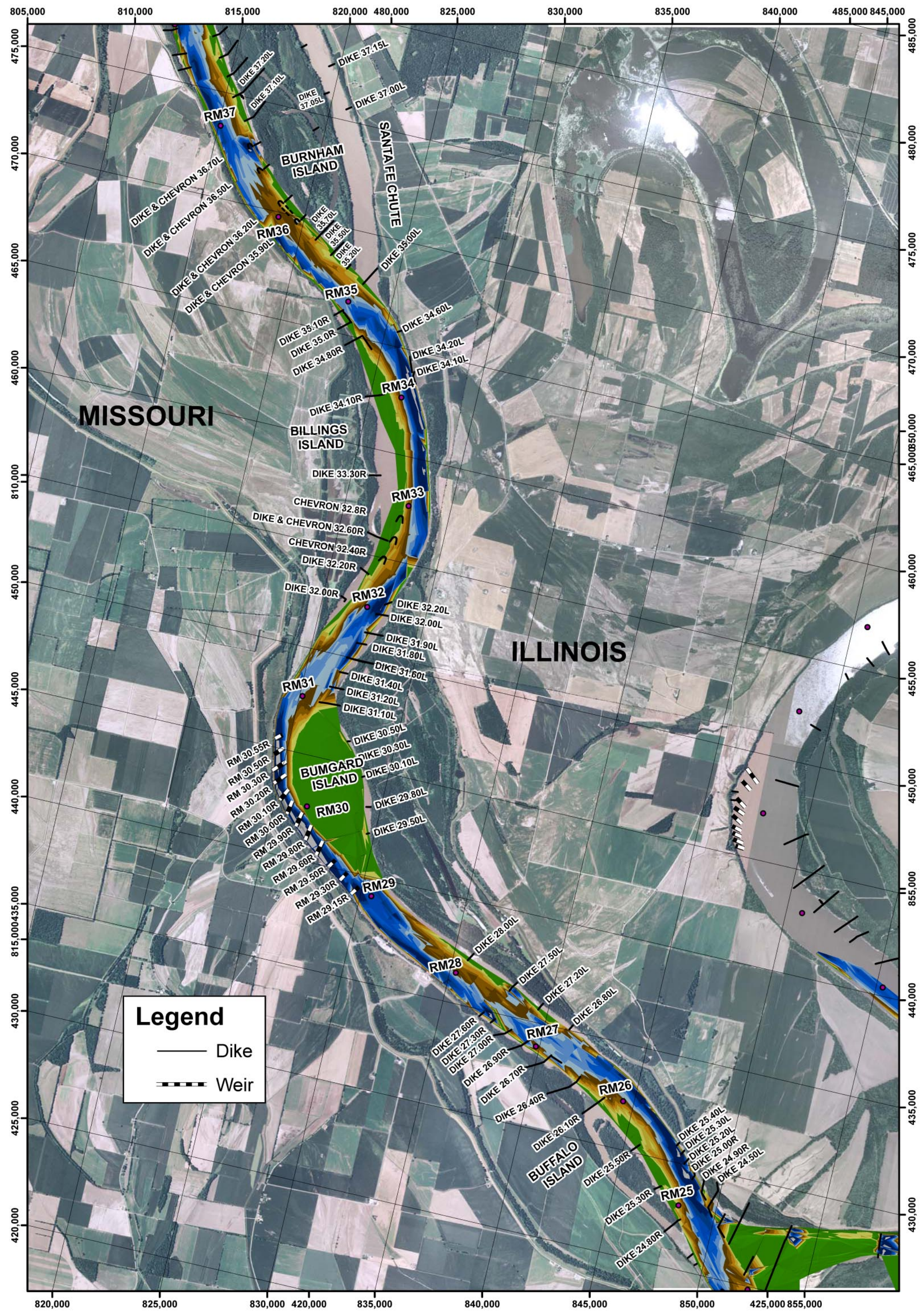

PLATE NUMBER 3

0 1,600 3,200 6,400
Feet

2007 AERIAL PHOTOGRAPH

U.S. ARMY ENGINEER DIVISION
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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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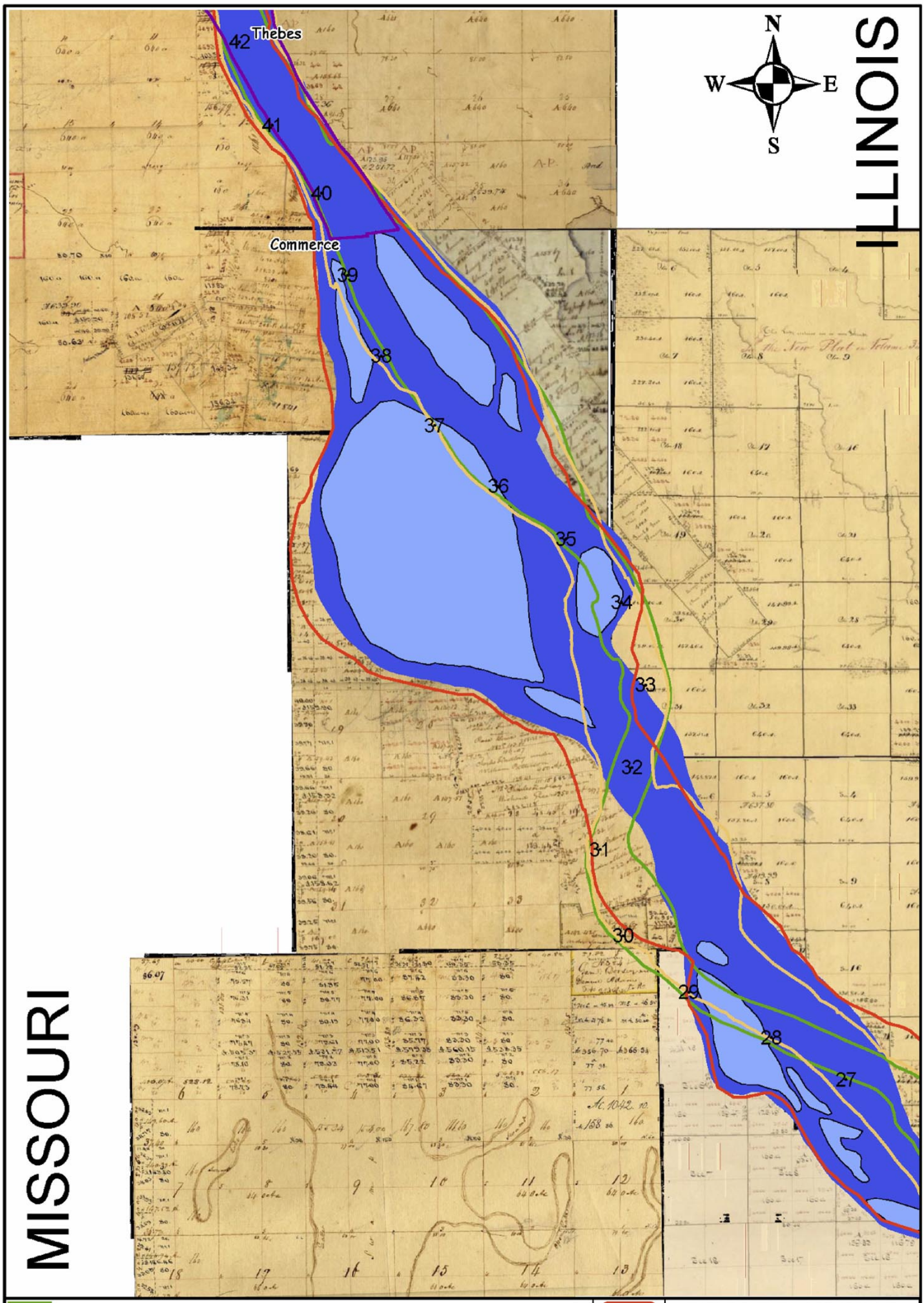

U.S. ARMY ENGINEER DISTRICT, ST. LOUIS
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ST. LOUIS, MISSOURI

GEOMORPHOLOGY OF THE MIDDLE MISSISSIPPI RIVER FROM ST. LOUIS, MO TO CAIRO, IL

1817 Planform

APPLIED RIVER ENGINEERING CENTER

RIVER MILES 42-26

PLATE NO. 56

PLATE NUMBER 4

Bumgard Island Geomorphology
1817 Planform

U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI	DESIGNED BY: K. Clancey		
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Mississippi River Basin St. Louis District Bumgard Island HSR Model RM 36.0 - 25.0	SUBMITTED: K.Clancey	APPROVED: Rob Davinroy, P.E.	
	FILE NAME: Z:\Bumgard Island HSR study\Plates		

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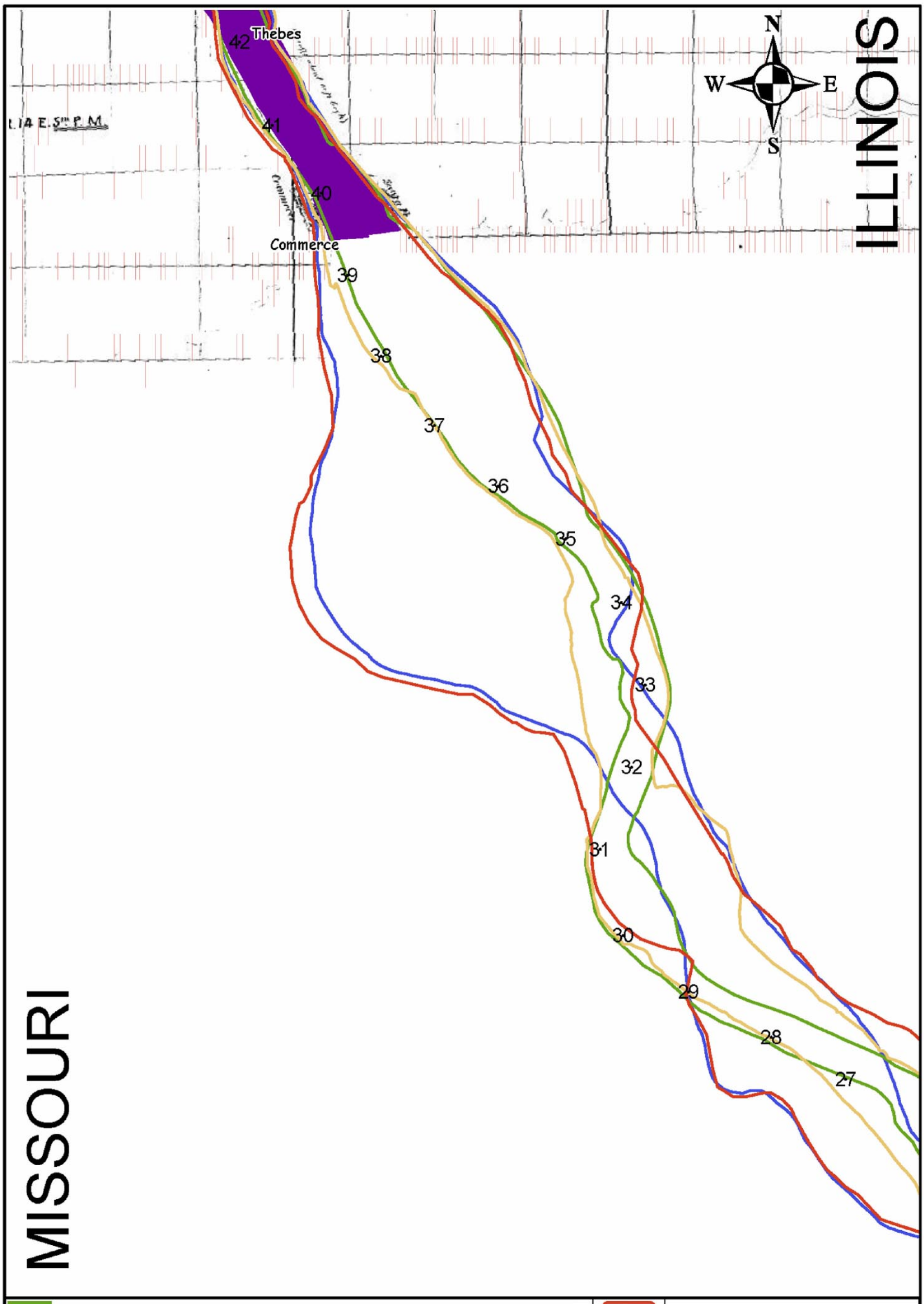
US Army Corps of Engineers
St. Louis District



U.S. ARMY ENGINEER DISTRICT, ST. LOUIS
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ST. LOUIS, MISSOURI

GEOMORPHOLOGY OF THE MIDDLE MISSISSIPPI RIVER FROM ST. LOUIS, MO TO CAIRO, IL

1866 Planform

RIVER MILES 42-26

PLATE NO. 57

APPLIED RIVER ENGINEERING CENTER

PLATE NUMBER 5

Bumgard Island Geomorphology
1866 Planform

U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI	DESIGNED BY: K. Clancey		
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Mississippi River Basin St. Louis District Bumgard Island HSR Model RM 36.0 - 25.0	SUBMITTED: K.Clancey	APPROVED: Rob Davinroy, P.E.	
	FILE NAME: Z:\Bumgard Island HSR study\Plates		

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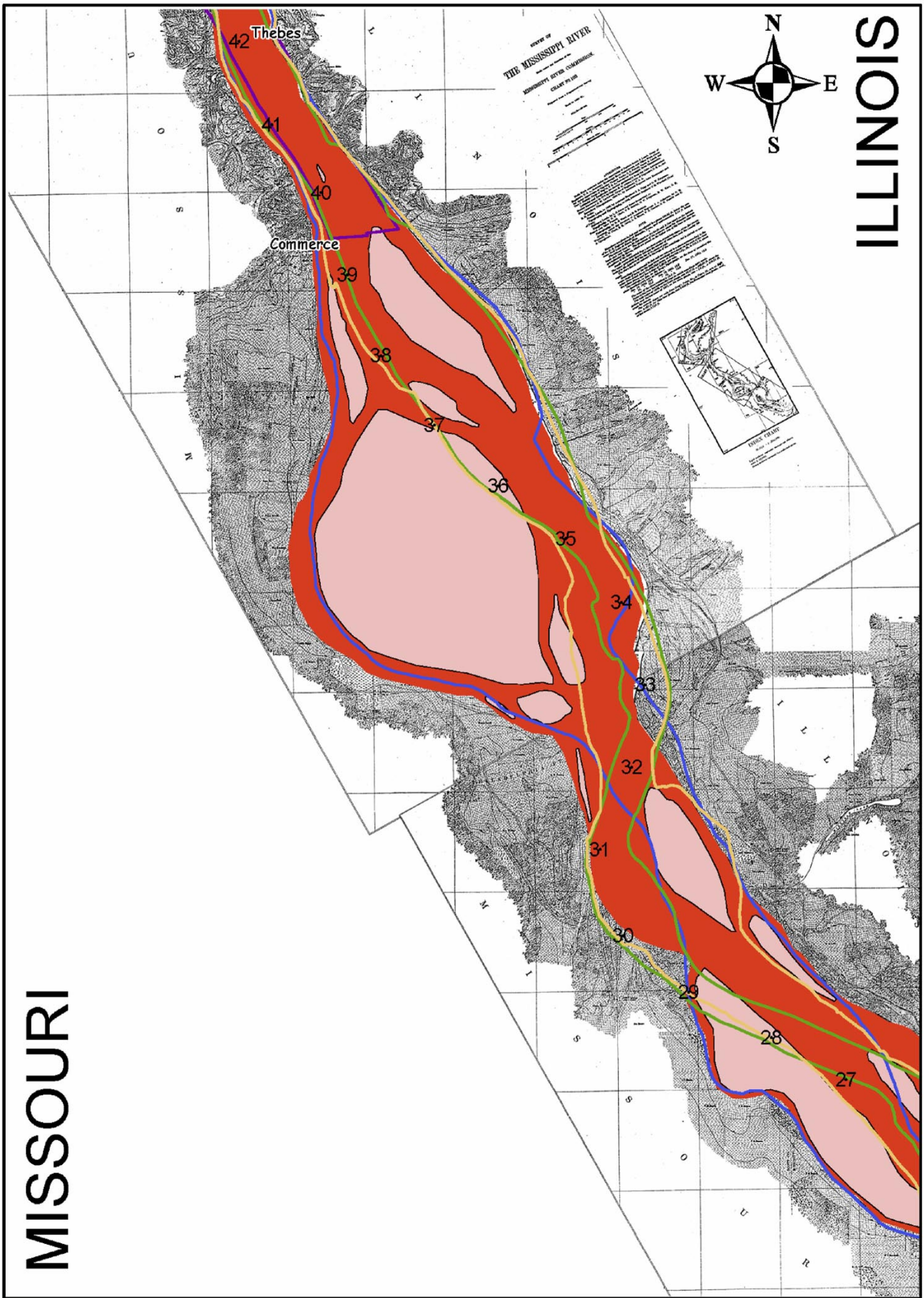

2003
1928
1881
1866
1817

0 5,280 10,560 21,120 Feet

SOURCE: Mississippi River Commission, 1880-1882, 1884, 1888, 1889, 1891-1899

U.S. ARMY ENGINEER DISTRICT, ST. LOUIS
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GEOMORPHOLOGY OF THE MIDDLE MISSISSIPPI RIVER FROM ST. LOUIS, MO TO CAIRO, IL

1881 Planform

RIVER MILES 42-26

PLATE NO. 58

PLATE NUMBER 6

Bumgard Island Geomorphology
1881 Planform

U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI	DESIGNED BY: K. Clancey		
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	FILE NAME: Z:\Bumgard Island HSR study\Plates		

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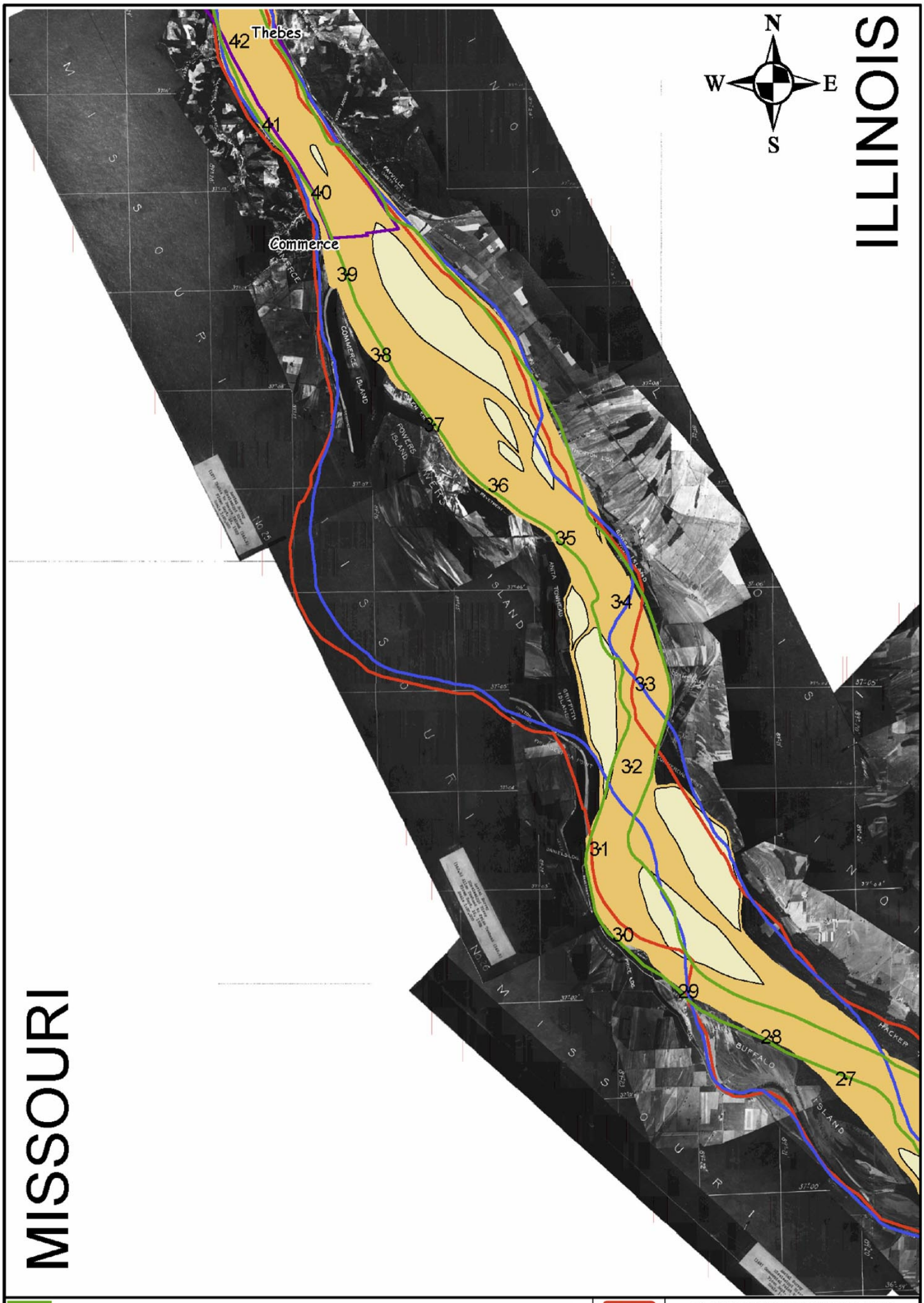

PLATE NUMBER 7

Bumgard Island Geomorphology
1928 Planform

U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI	DESIGNED BY: K. Clancey		
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Mississippi River Basin St. Louis District Bumgard Island HSR Model RM 36.0 - 25.0	SUBMITTED: K.Clancey	APPROVED: Rob Davinroy, P.E.	
	FILE NAME: Z:\Bumgard Island HSR study\Plates		

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US Army Corps of Engineers
St. Louis District

2003
1928
1881
1866
1817

0 5,280 10,560 21,120 Feet

SOURCE: Aerial Photographs

U.S. ARMY ENGINEER DISTRICT, ST. LOUIS
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ST. LOUIS, MISSOURI

GEOMORPHOLOGY OF THE MIDDLE MISSISSIPPI RIVER FROM ST. LOUIS, MO TO CAIRO, IL

2003 Planform

APPLIED RIVER ENGINEERING CENTER

RIVER MILES 42-26

PLATE NO.: 60

PLATE NUMBER 8

Bumgard Island Geomorphology
2003 Planform

U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI	DESIGNED BY: K. Clancey		
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Mississippi River Basin St. Louis District Bumgard Island HSR Model RM 36.0 - 25.0	SUBMITTED: K.Clancey	APPROVED: Rob Davinroy, P.E.	
	FILE NAME: Z:\Bumgard Island HSR study\Plates		

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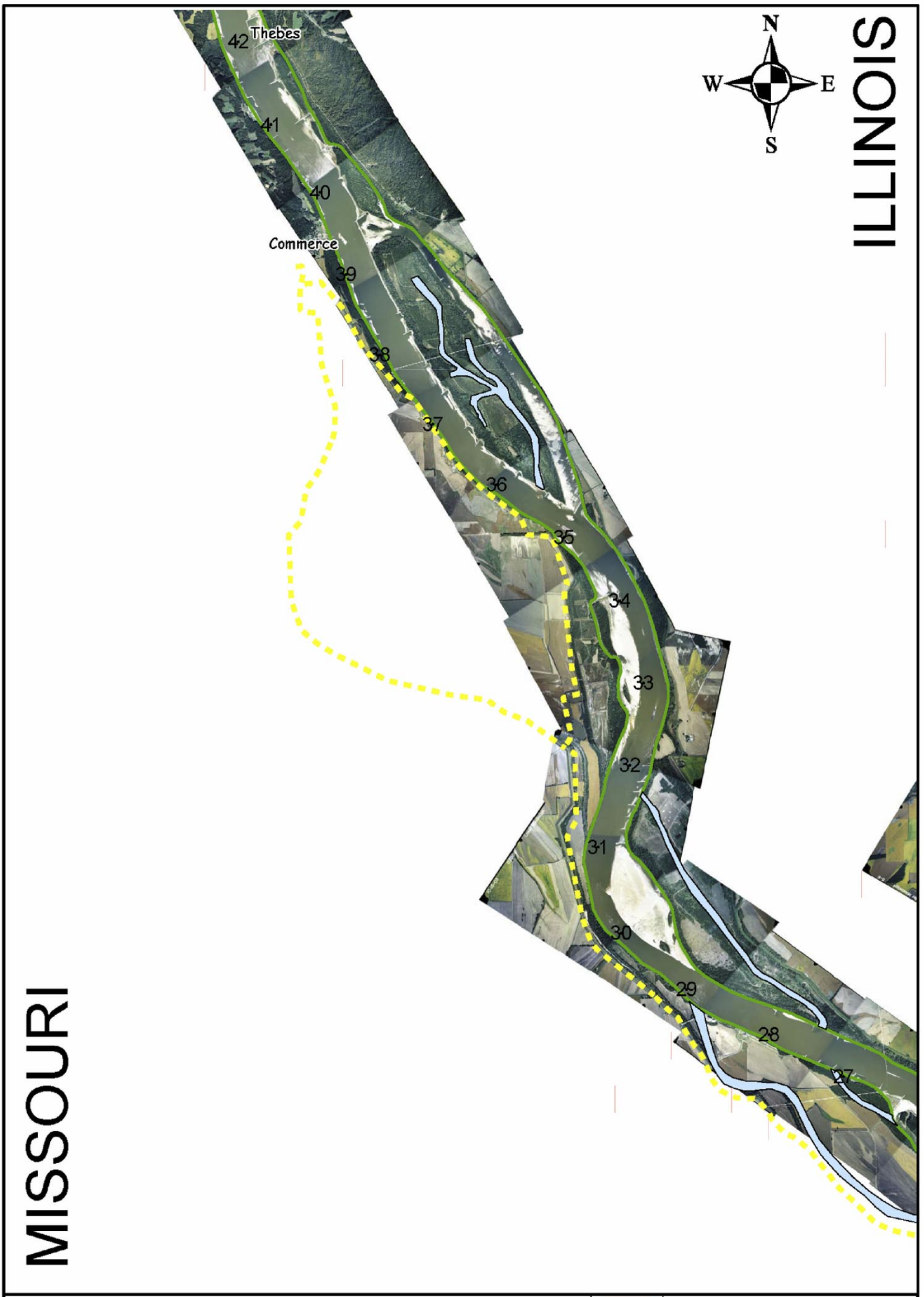

LEGEND

- Levee
- 2003 Planform
- Isolated, Deep Oxbow
- Side Channel, Sloughs or Backwater

0 — 5,280 — 10,560 — 21,120 Feet

U.S. ARMY ENGINEER DISTRICT, ST. LOUIS
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ST. LOUIS, MISSOURI

GEOMORPHOLOGY OF THE MIDDLE MISSISSIPPI RIVER FROM ST. LOUIS, MO TO CAIRO, IL

BLUEPRINT FOR RESTORATION

APPLIED RIVER ENGINEERING CENTER

RIVER MILES 42-26

PLATE NO. 61

PLATE NUMBER 9

Bumgard Island Geomorphology
Blueprint for Restoration

U.S. ARMY ENGINEER DIVISION
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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K.Clancey
APPROVED: Rob Davinroy, P.E.
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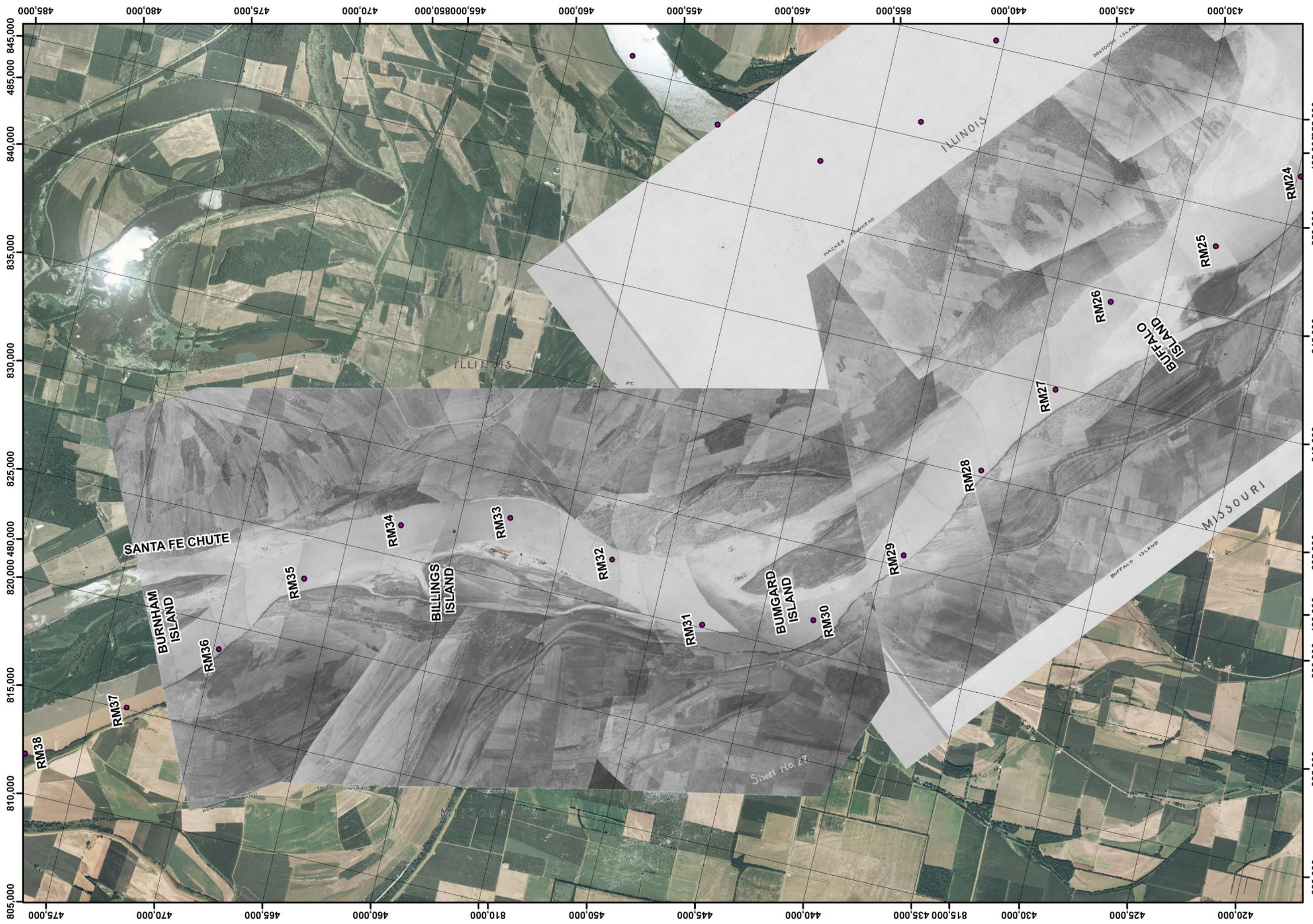

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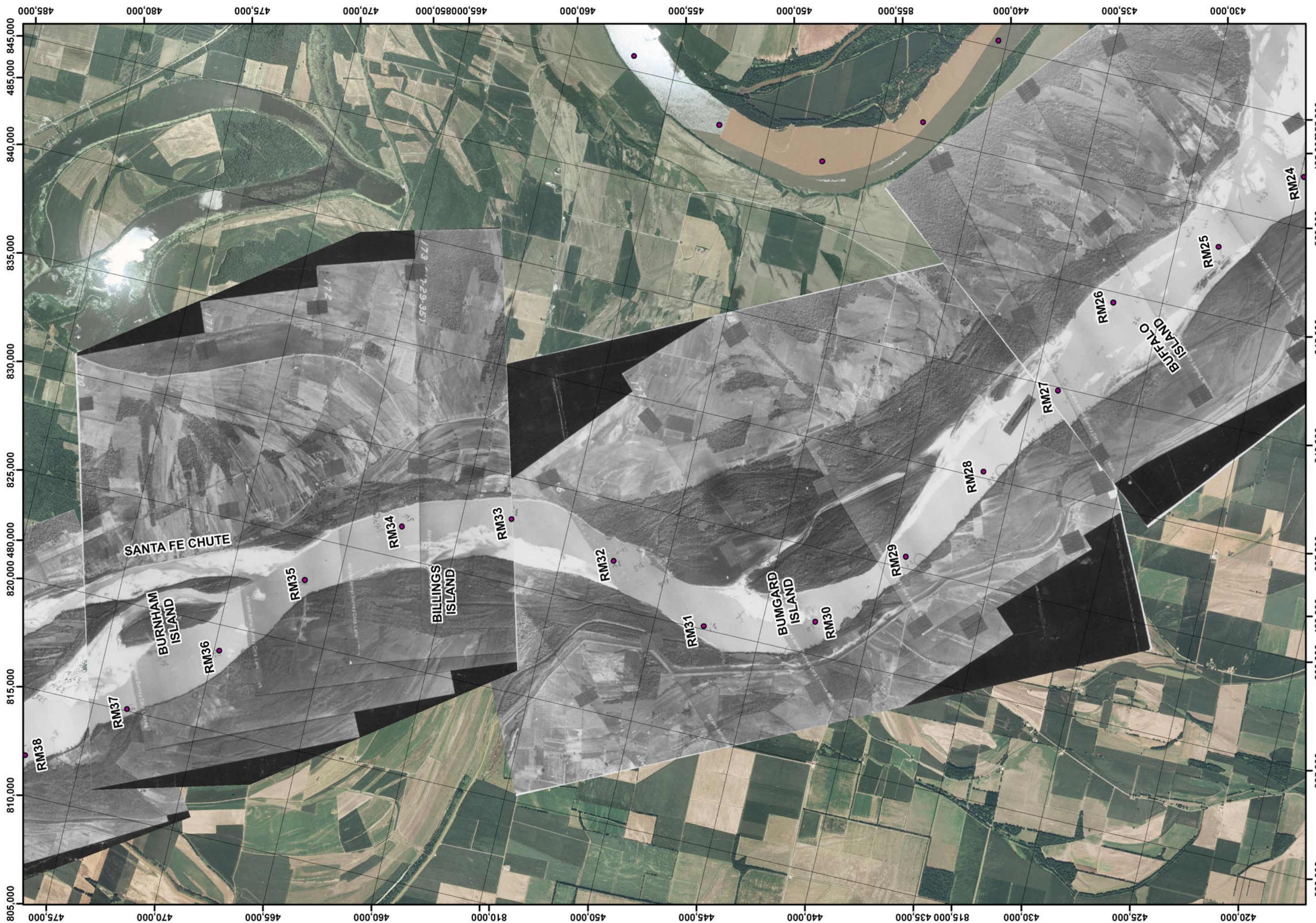
CHECKED BY J Brown, P.E.
SUBMITTED K. Clancey
APPROVED Rob Davinroy, P.E.
FILE NAME Z:\Bumgard Island HSR study\Plates

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

1925 AERIAL PHOTOGRAPH
OVERLAY
2007 AERIAL PHOTOGRAPH

PLATE NUMBER
10



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Mississippi River Basin St. Louis District Bumgard Island Hydraulic Study RM 36.0 - 25.0	SUBMITTED K. Clancey	APPROVED Rob Davinroy, P.E.	
	FILE NAME Z:\Bumgard Island HSS study\Plates		

0 1,625 3,250 6,500 Feet

1935 AERIAL PHOTOGRAPH OVERLAY
2007 AERIAL PHOTOGRAPH

PLATE NUMBER
11

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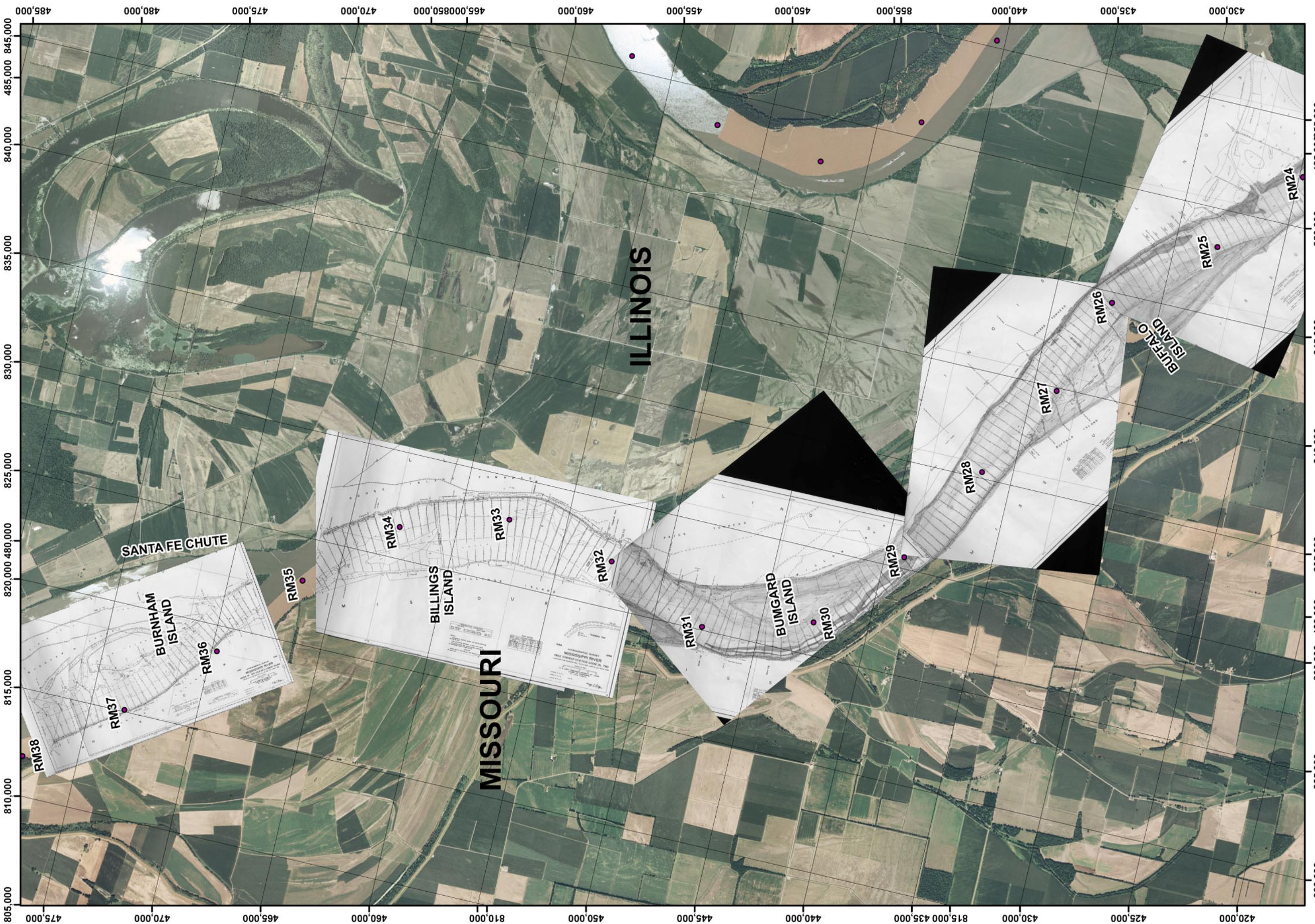
Mississippi River Basin
St. Louis District
Bumgard Island
FY 36.0 - 25.0
RM 36.0 - 25.0

0 1,625 3,250 6,500
Feet

1942 PLANFORM MAP
OVERLAY
2007 AERIAL PHOTOGRAPH

PLATE NUMBER
12



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Mississippi River Basin St. Louis District Bumgard Island HSI Study RM 36.0 - 25.0	SUBMITTED K. Clancey	APPROVED Rob Davinroy, P.E.	
	FILE NAME Z:\ Bumgard Island HSI\ study \Plates		

0 1,625 3,250 6,500 Feet

1956 PLANFORM MAP OVERLAY
2007 AERIAL PHOTOGRAPH

PLATE NUMBER
13

PLATE NUMBER 14

0 1,600 3,200 6,400
Feet

1968 AERIAL PHOTOGRAPH OVERLAY

2007 AERIAL PHOTOGRAPH

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Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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PLATE NUMBER 15

0 1,600 3,200 6,400
Feet

1977 AERIAL PHOTOGRAPH OVERLAY

2007 AERIAL PHOTOGRAPH

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St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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Mississippi River Basin St. Louis District Bumgard Island HSR Model RM 36.0 - 25.0	0 1,600 3,200 6,400 Feet
1987 AERIAL PHOTOGRAPH OVERLAY 2007 AERIAL PHOTOGRAPH	

PLATE NUMBER
16

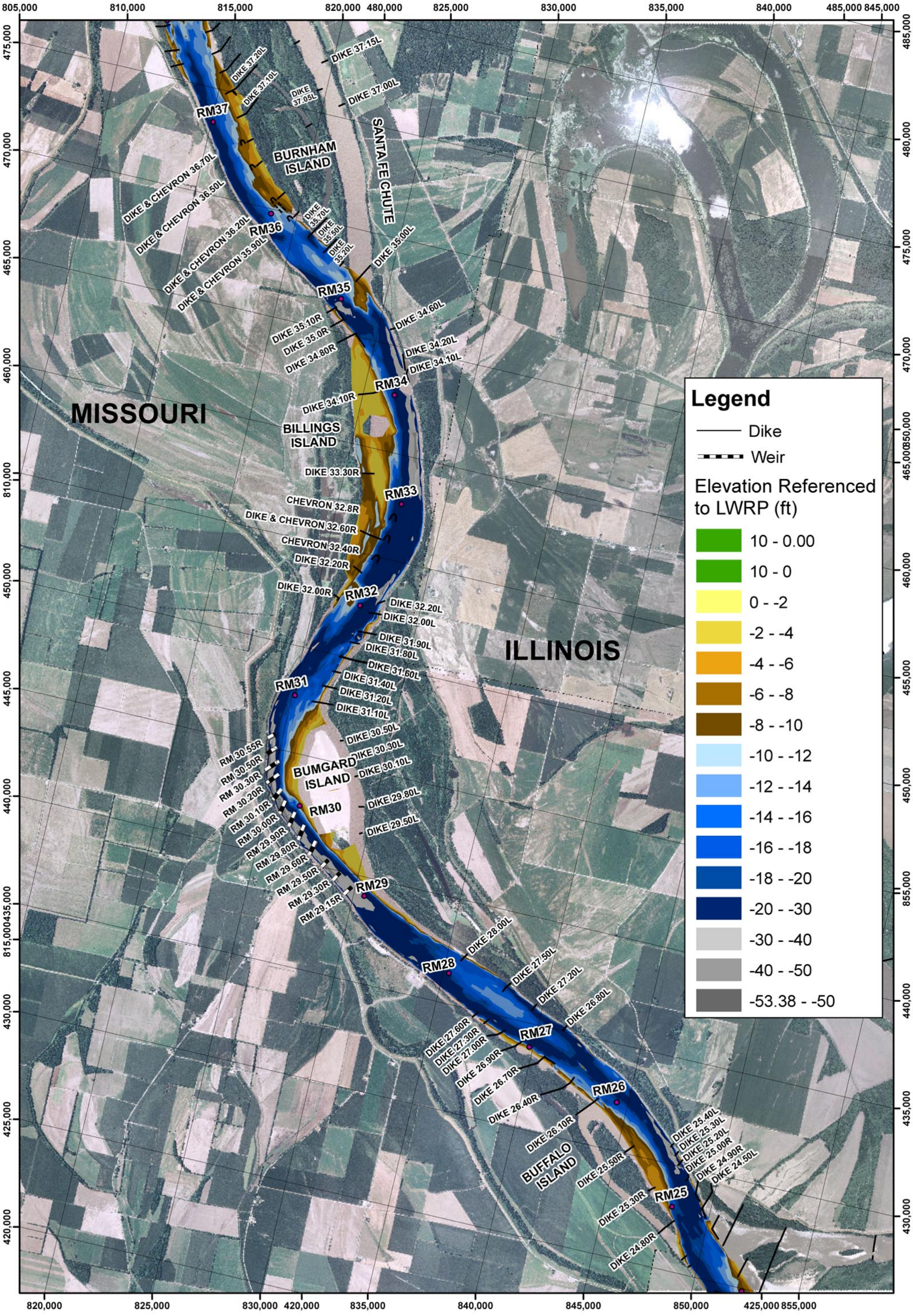

PLATE NUMBER 17

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
DECEMBER 13, 1957 - JULY 9, 1958
STAGE (FT): 4.9 - 14.9
2007 AERIAL PHOTOGRAPH

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Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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DRAWN BY: K. Clancey	REVIEWED BY: E Brauer, P.E.	CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey	APPROVED: Rob Davinroy, P.E.	
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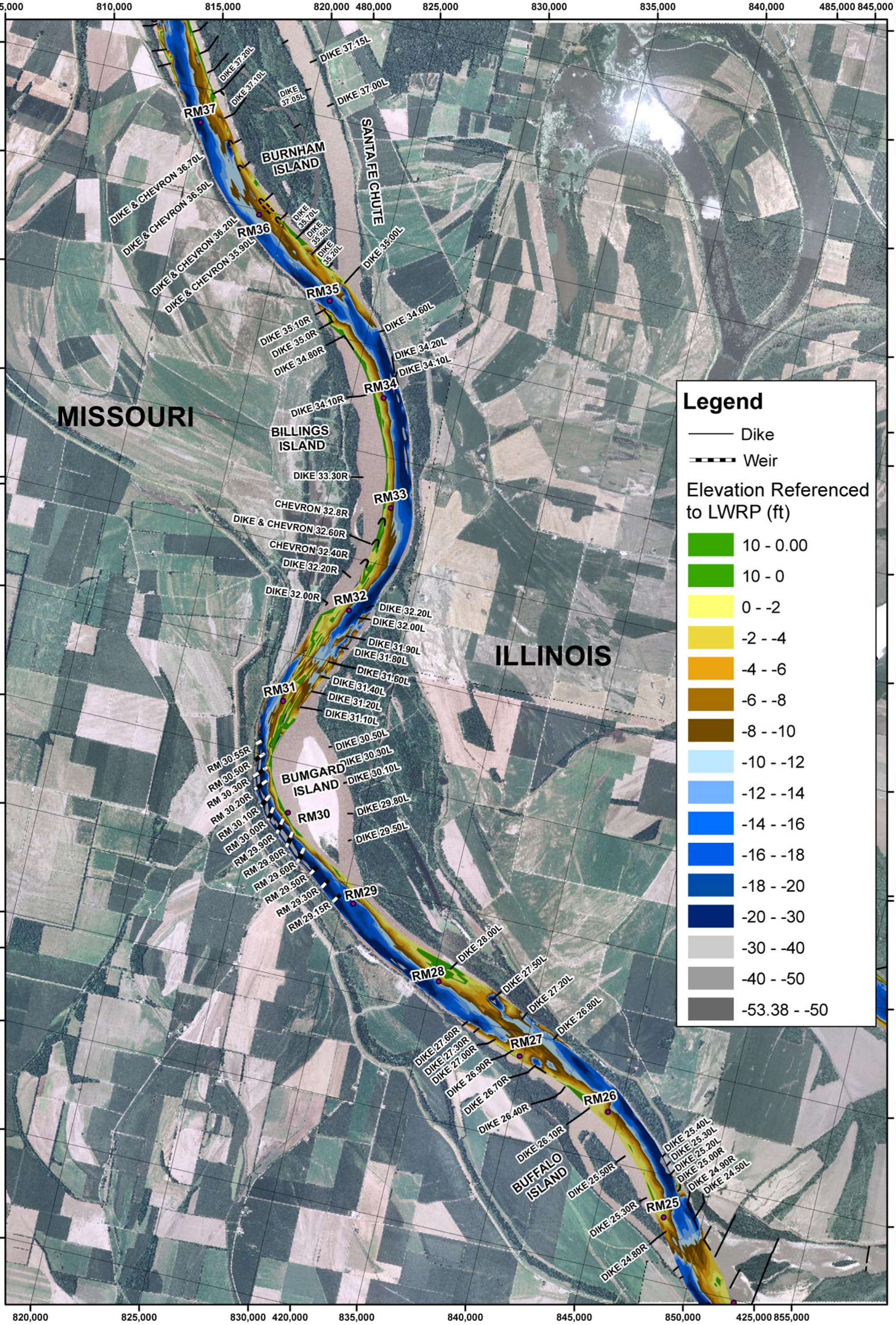

PLATE NUMBER 18

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
SEPTEMBER 6, 1970
STAGE (FT): -0.2
2007 AERIAL PHOTOGRAPH

U.S. ARMY ENGINEER DIVISION
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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY:		
K. Clancey		
DRAWN BY: K. Clancey	REVIEWED BY: E Brauer, P.E.	CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey	APPROVED: Rob Davinroy, P.E.	
FILE NAME: Z:\Bumgard Island HSR study\Plates		

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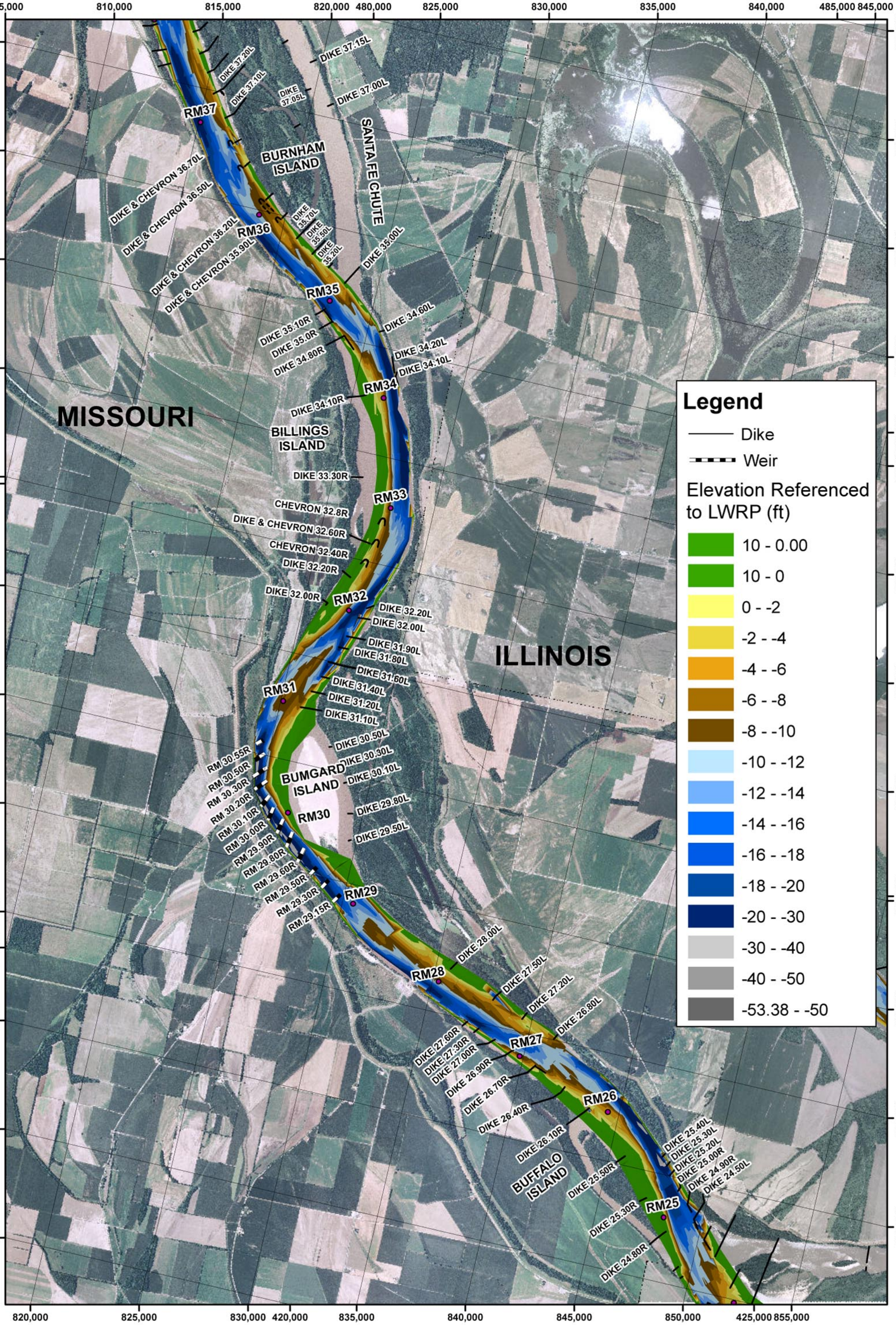

PLATE NUMBER 19

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
MARCH 19, 1977
STAGE (FT): 10.6
2007 AERIAL PHOTOGRAPH

U.S. ARMY ENGINEER DIVISION
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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
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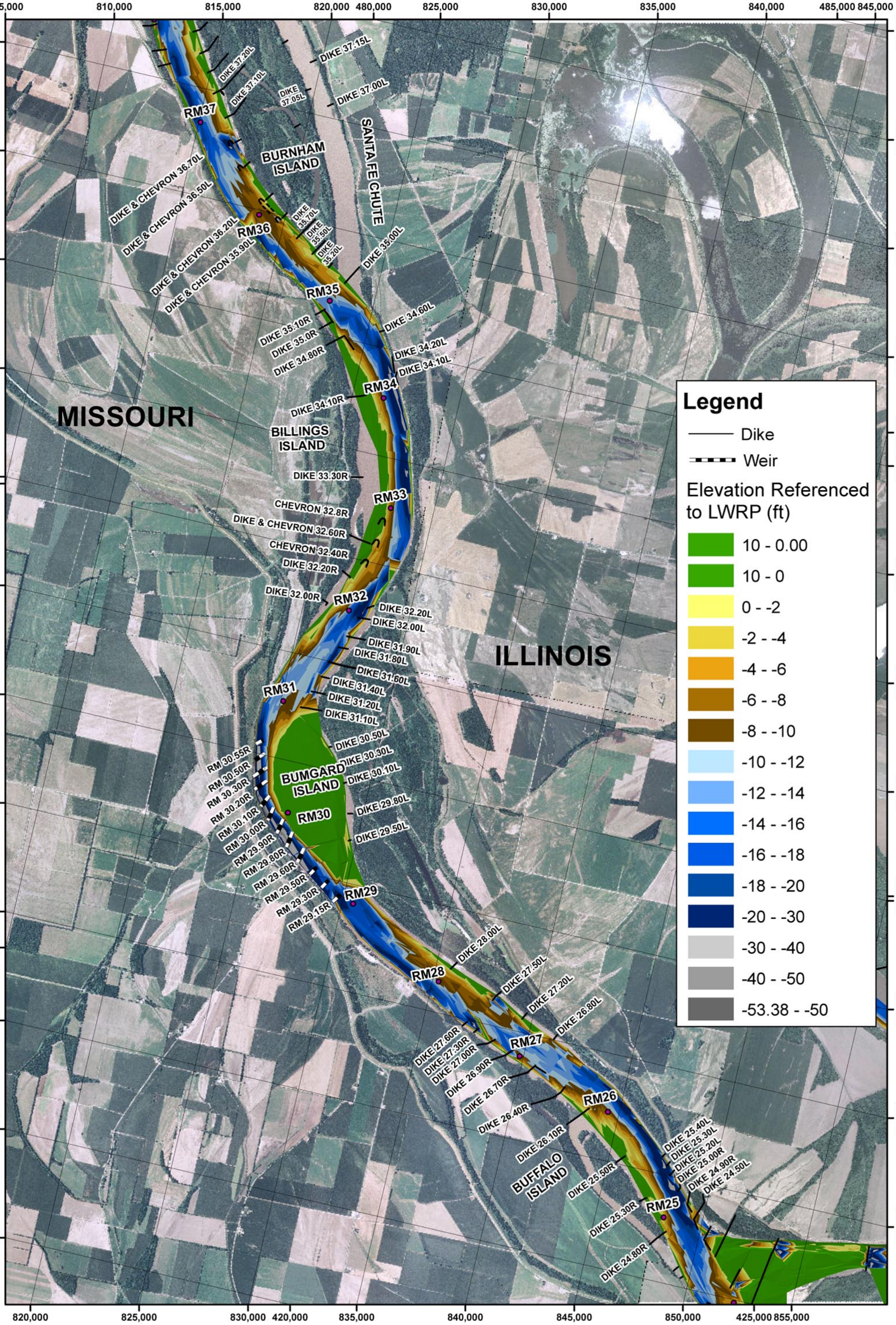

PLATE NUMBER 20

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
AUGUST 6, 1986 - JUNE 22, 1987
STAGE (FT): 14.30 - 9.10
2007 AERIAL PHOTOGRAPH

U.S. ARMY ENGINEER DIVISION
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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY:		
K. Clancey		
DRAWN BY: K. Clancey	REVIEWED BY: E Brauer, P.E.	CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey	APPROVED: Rob Davinroy, P.E.	
FILE NAME: Z:\Bumgard Island HSR study\Plates		

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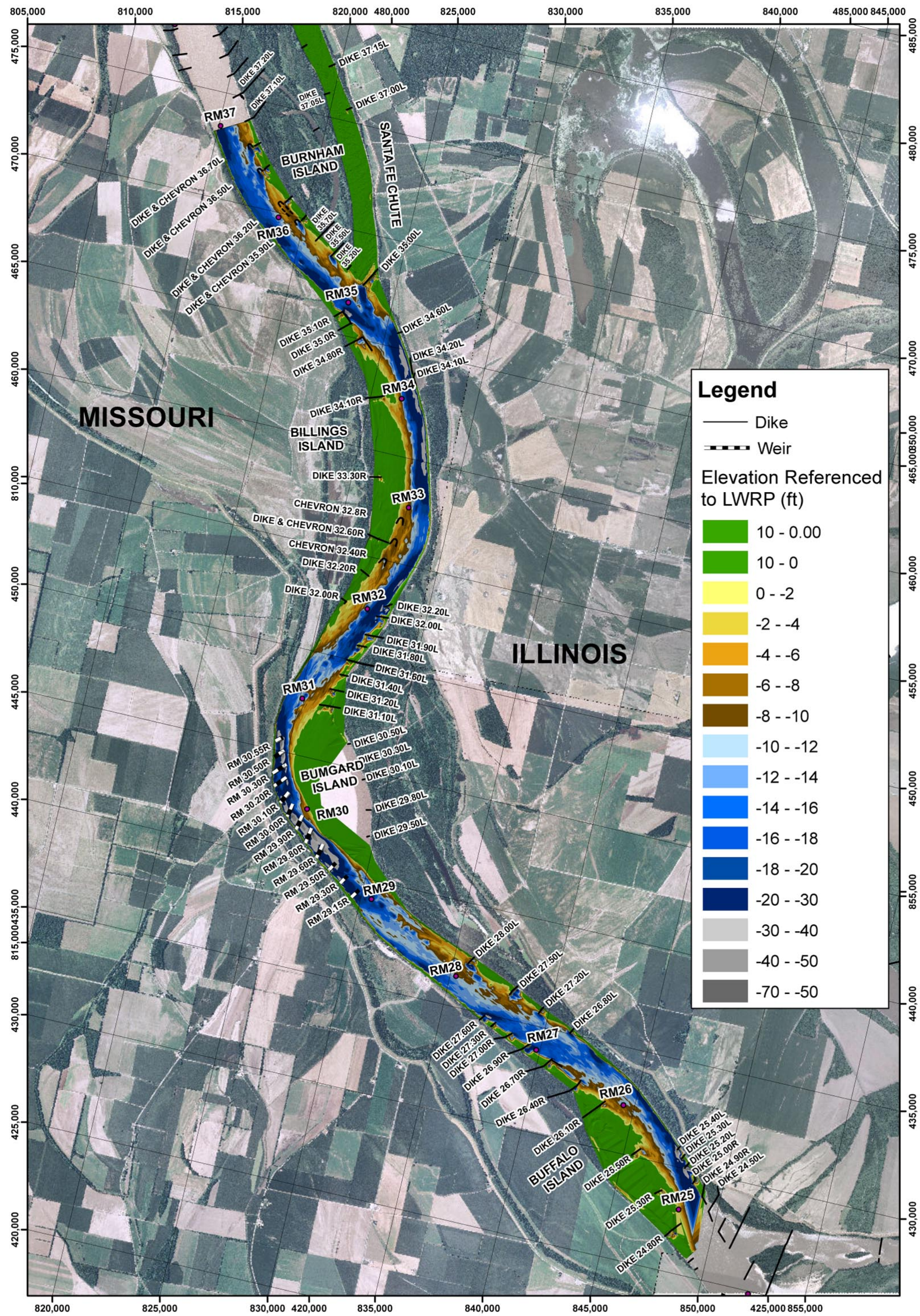

PLATE NUMBER 21

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
MAY 11, 2001
STAGE (FT): 26.37
2007 AERIAL PHOTOGRAPH

U.S. ARMY ENGINEER DIVISION
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St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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SUBMITTED: K. Clancey	APPROVED: Rob Davinroy, P.E.	
FILE NAME: Z:\Bumgard Island HSR study\Plates		

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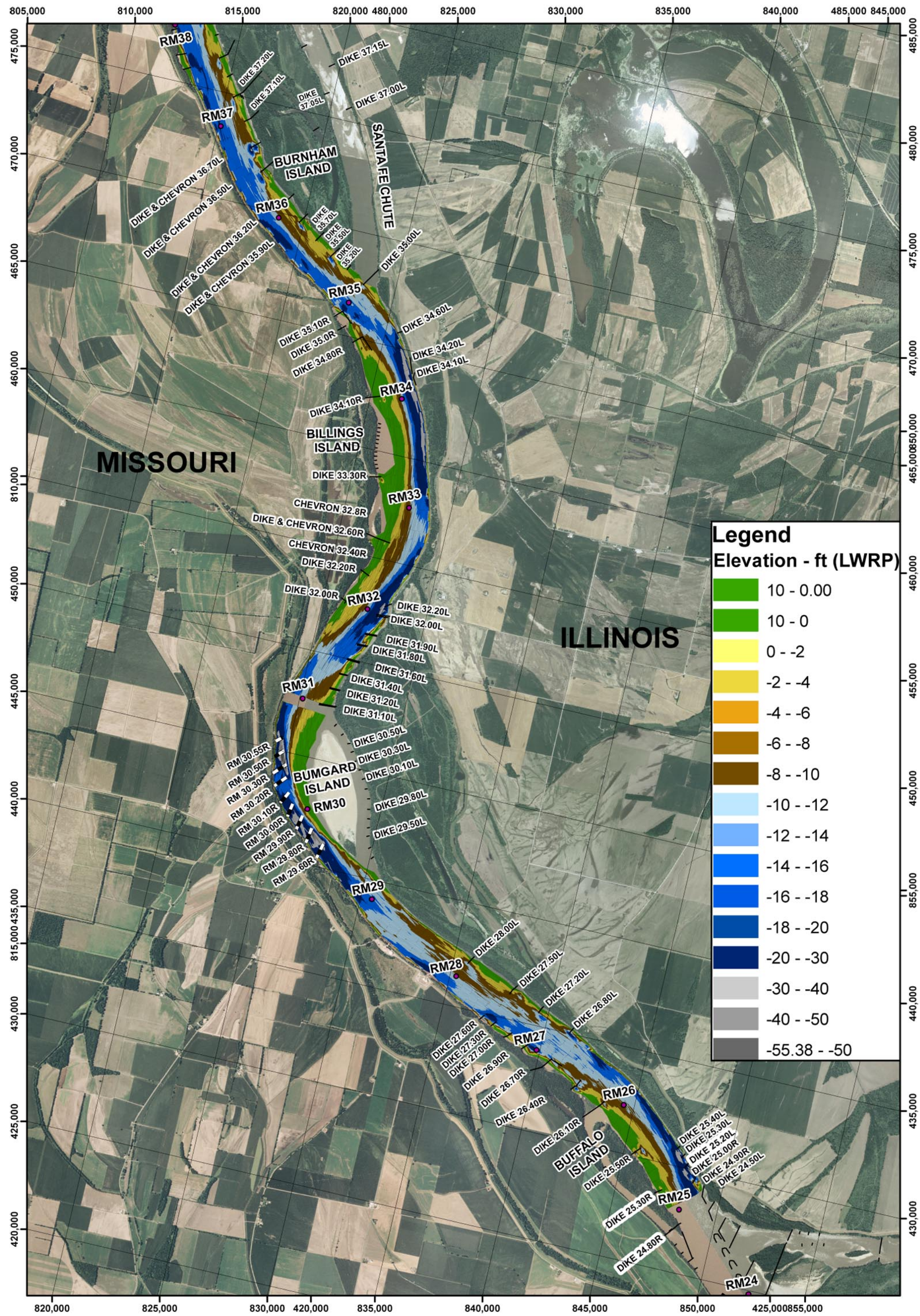

PLATE NUMBER 22

0 1,625 3,250 6,500
Feet

FEBRUARY 2005 HYDROGRAPHIC SURVEY

2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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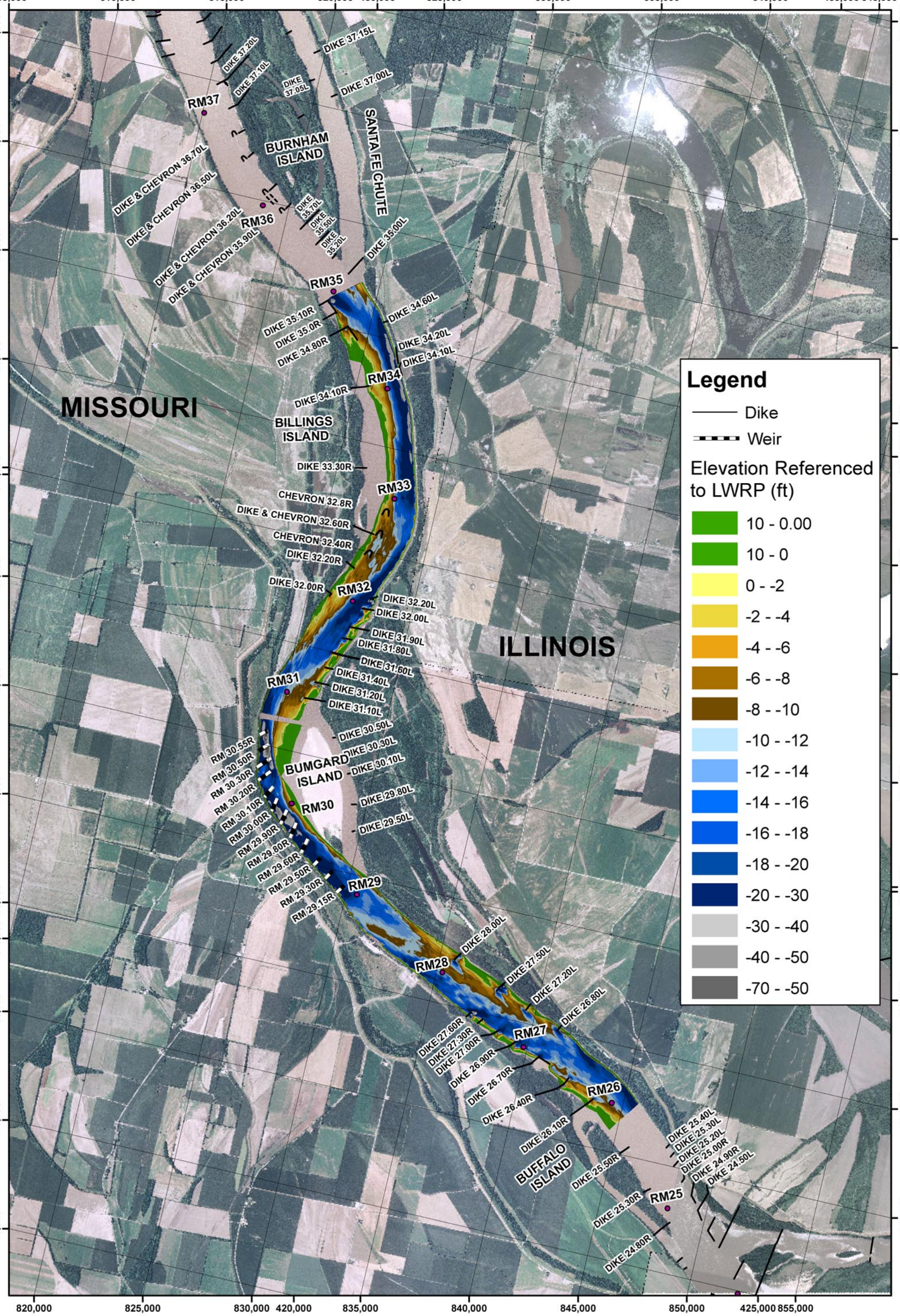

PLATE NUMBER 23

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
SEPTEMBER 19, 2007
STAGE (FT): 10.4
2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey		
DRAWN BY: K. Clancey	REVIEWED BY: E Brauer, P.E.	CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey	APPROVED: Rob Davinroy, P.E.	
FILE NAME: Z:\Bumgard Island HSR study\Plates		

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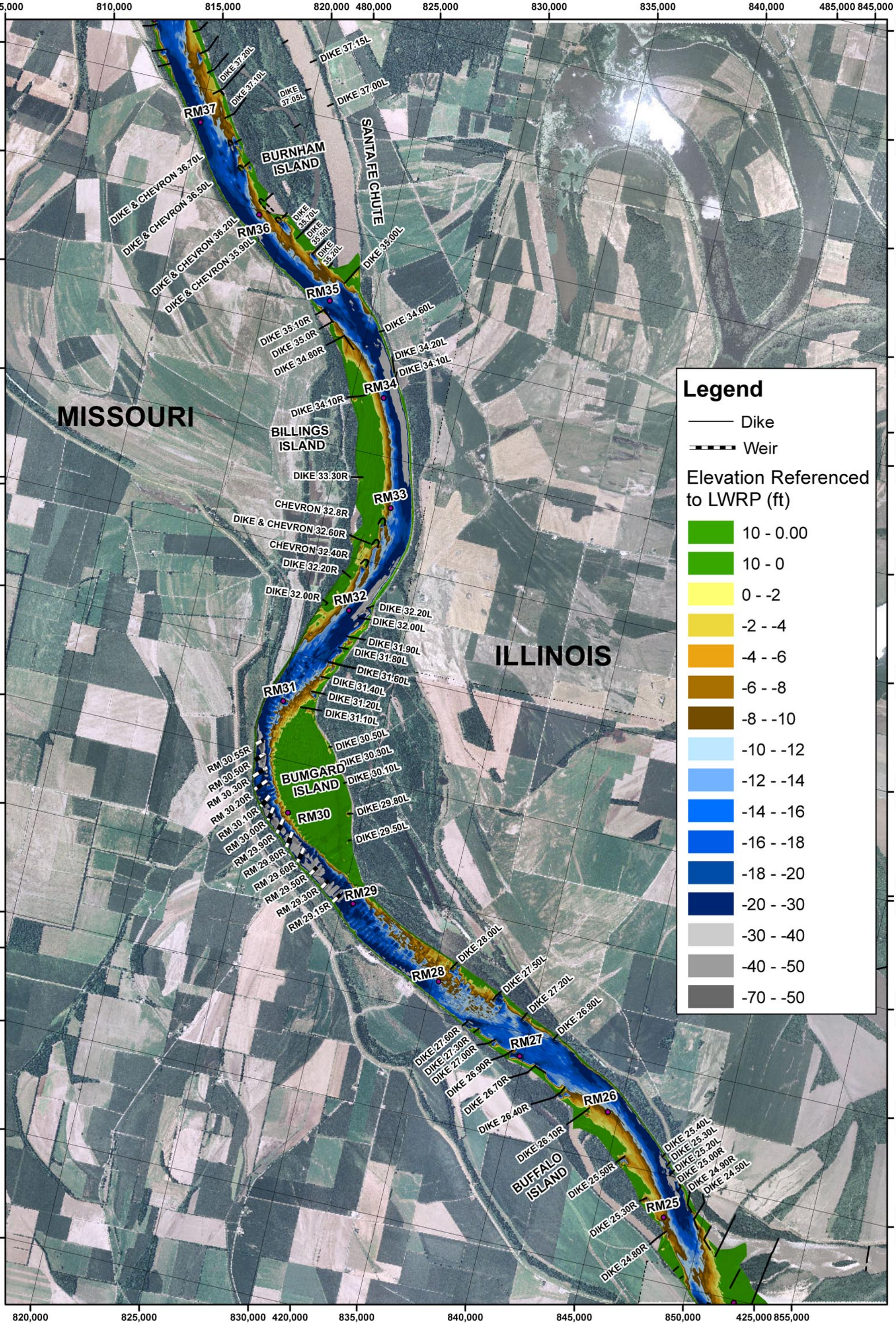

PLATE NUMBER 24

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
AUGUST 2, 2010
STAGE (FT): 29.5
2007 AERIAL PHOTOGRAPH

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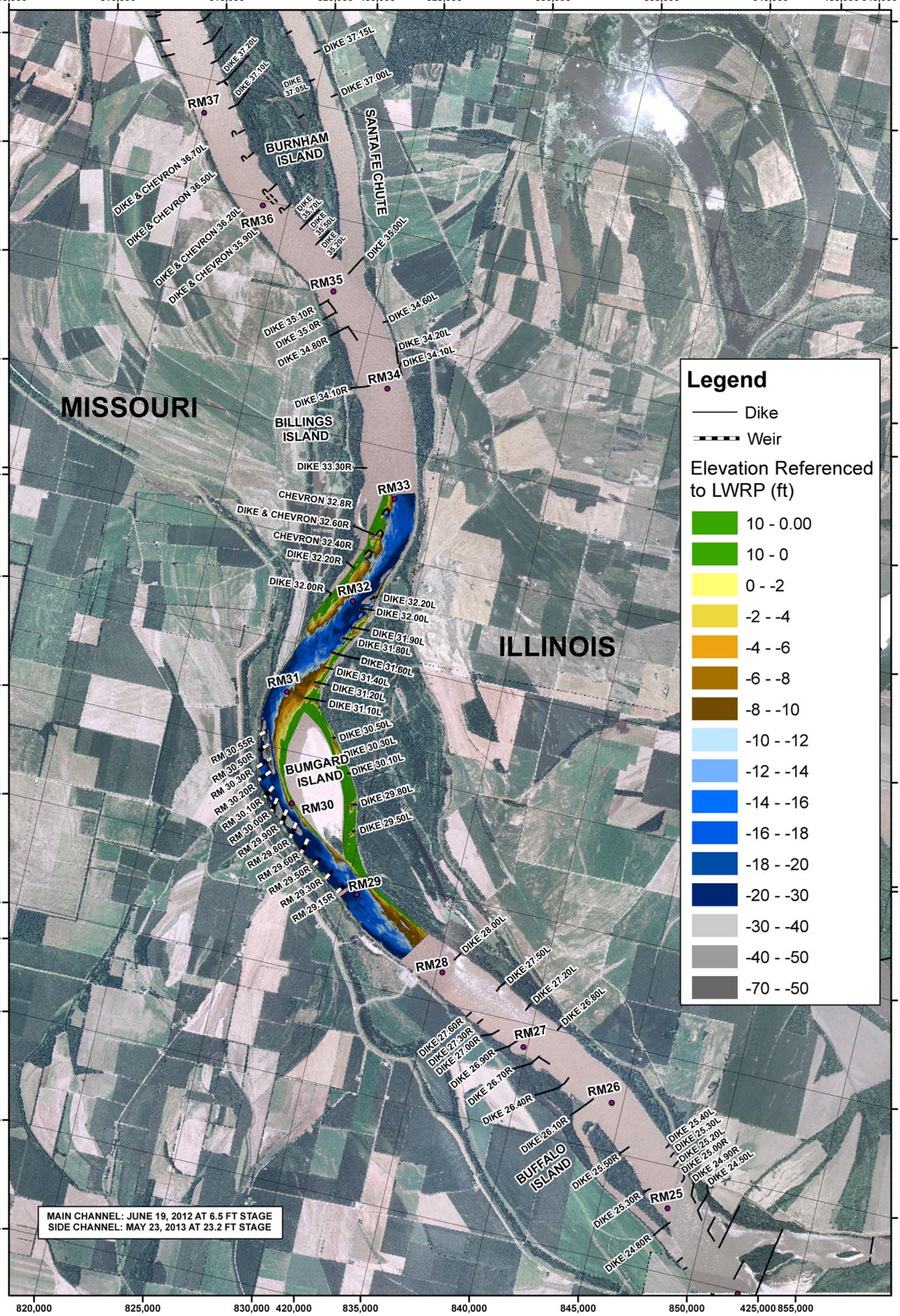

PLATE NUMBER 25

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
2007 AERIAL PHOTOGRAPH

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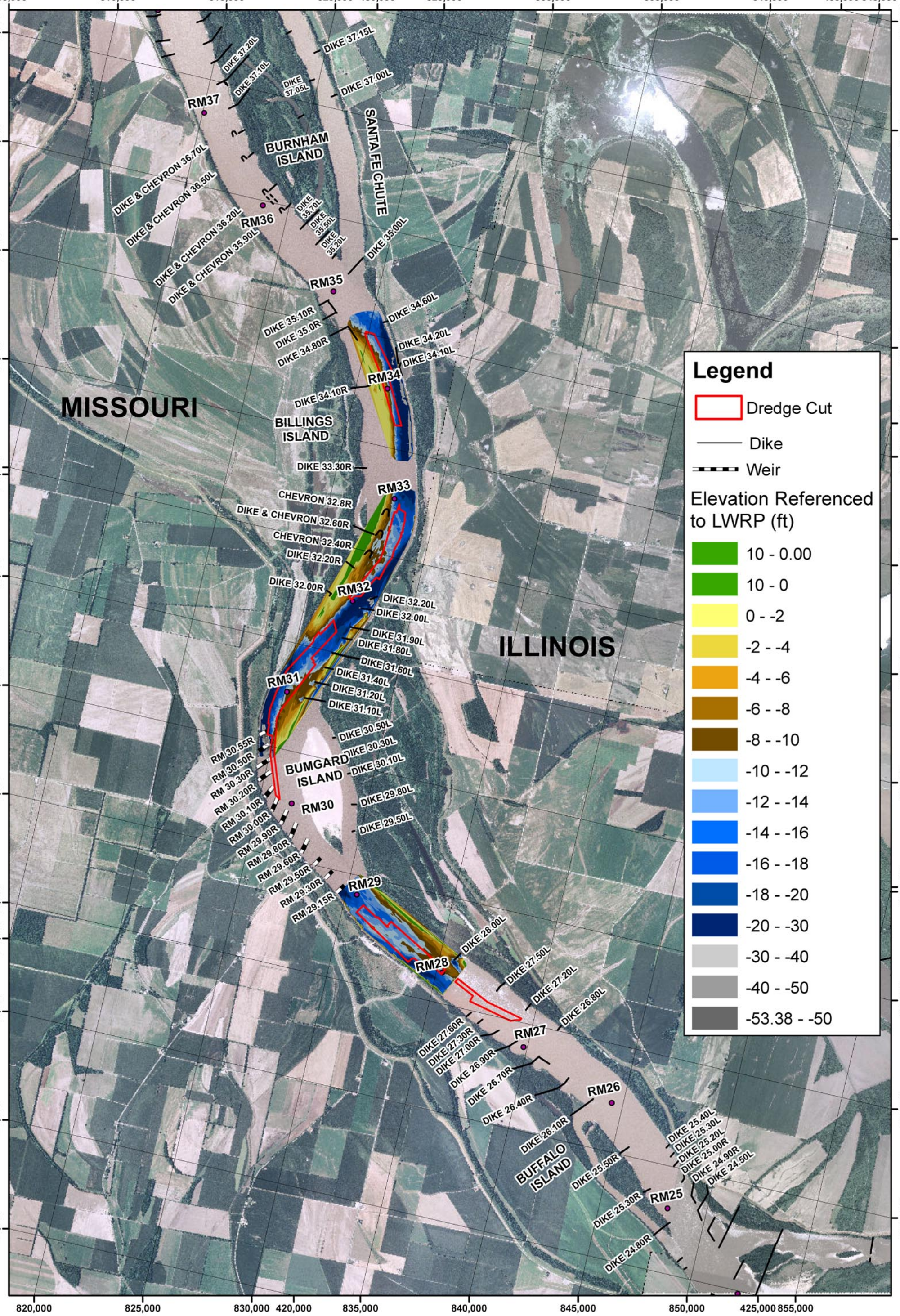

PLATE NUMBER 26

0 1,600 3,200 6,400
Feet

SEPTEMBER 22, 2005
STAGE (FT): 4.5
2007 AERIAL PHOTOGRAPH

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FILE NAME: Z:\Bumgard Island HSR study\Plates		

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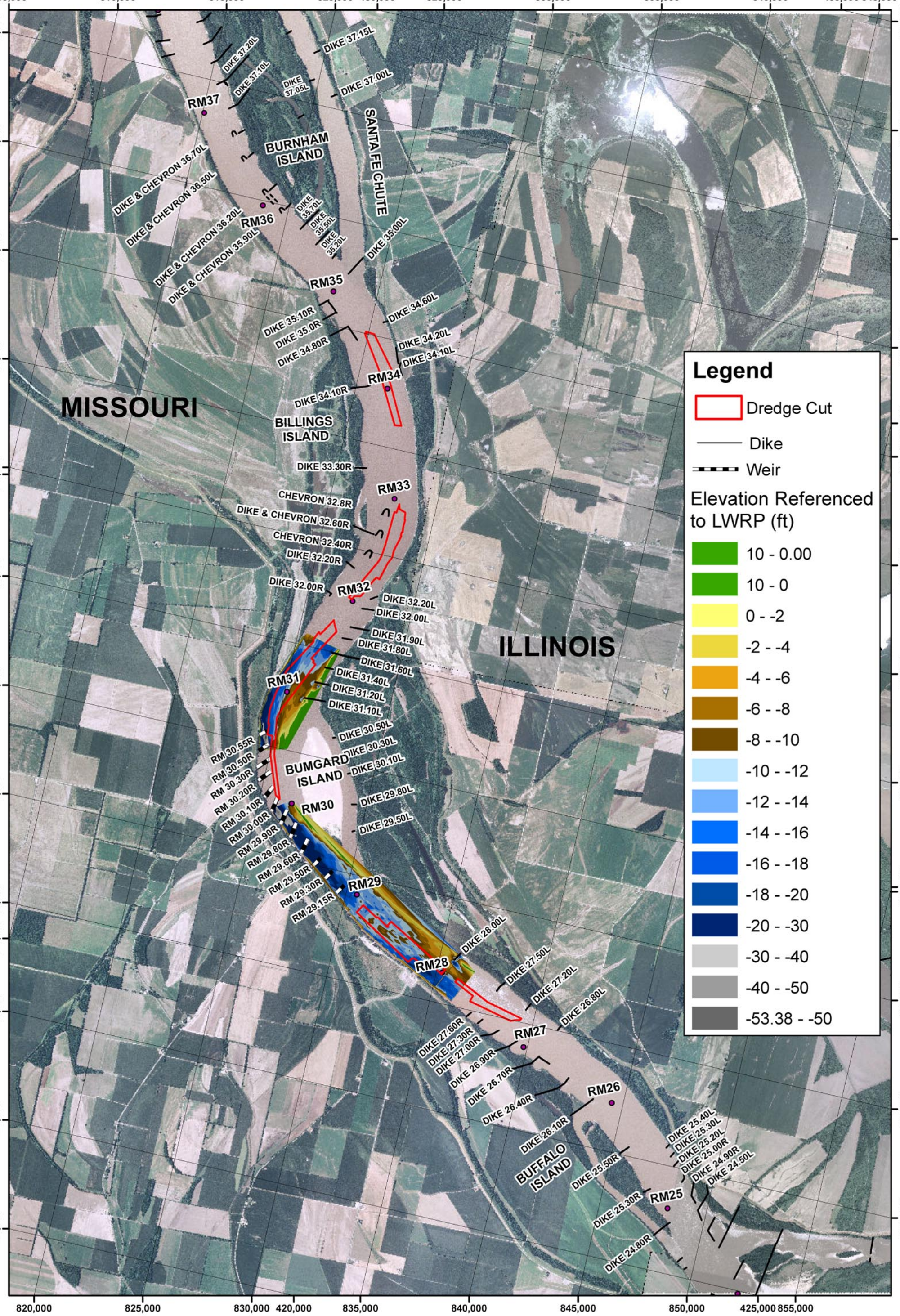

PLATE NUMBER 27

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
AUGUST 29, 2006 - NOVEMBER 22, 2006
STAGE (FT): -1.4 - 3.1
2007 AERIAL PHOTOGRAPH

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FILE NAME: Z:\Bumgard Island HSR study\Plates		

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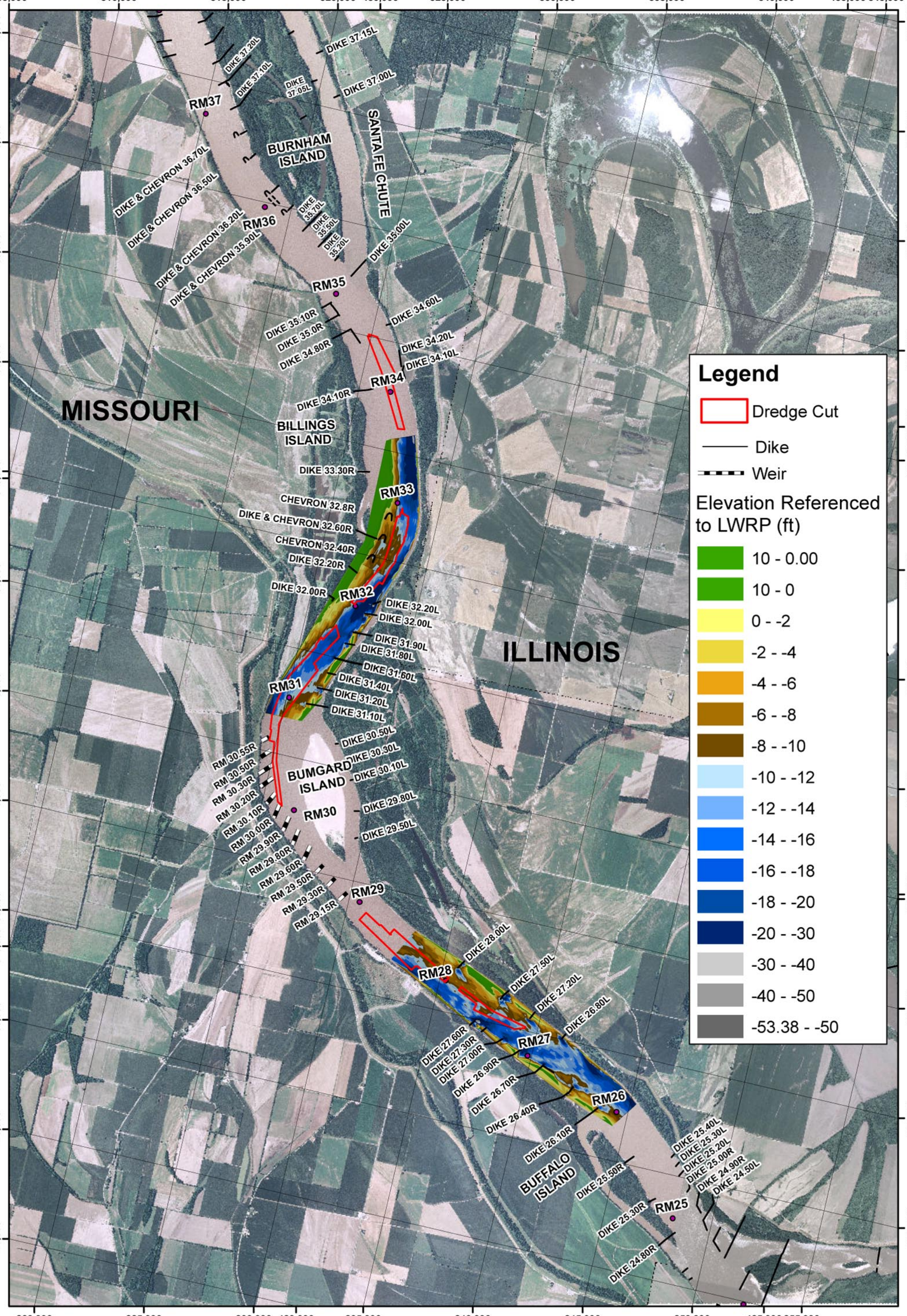

PLATE NUMBER 28

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
AUGUST 18, 2007 - NOVEMBER 26, 2007
STAGE (FT): 4.9 - 0.6
2007 AERIAL PHOTOGRAPH

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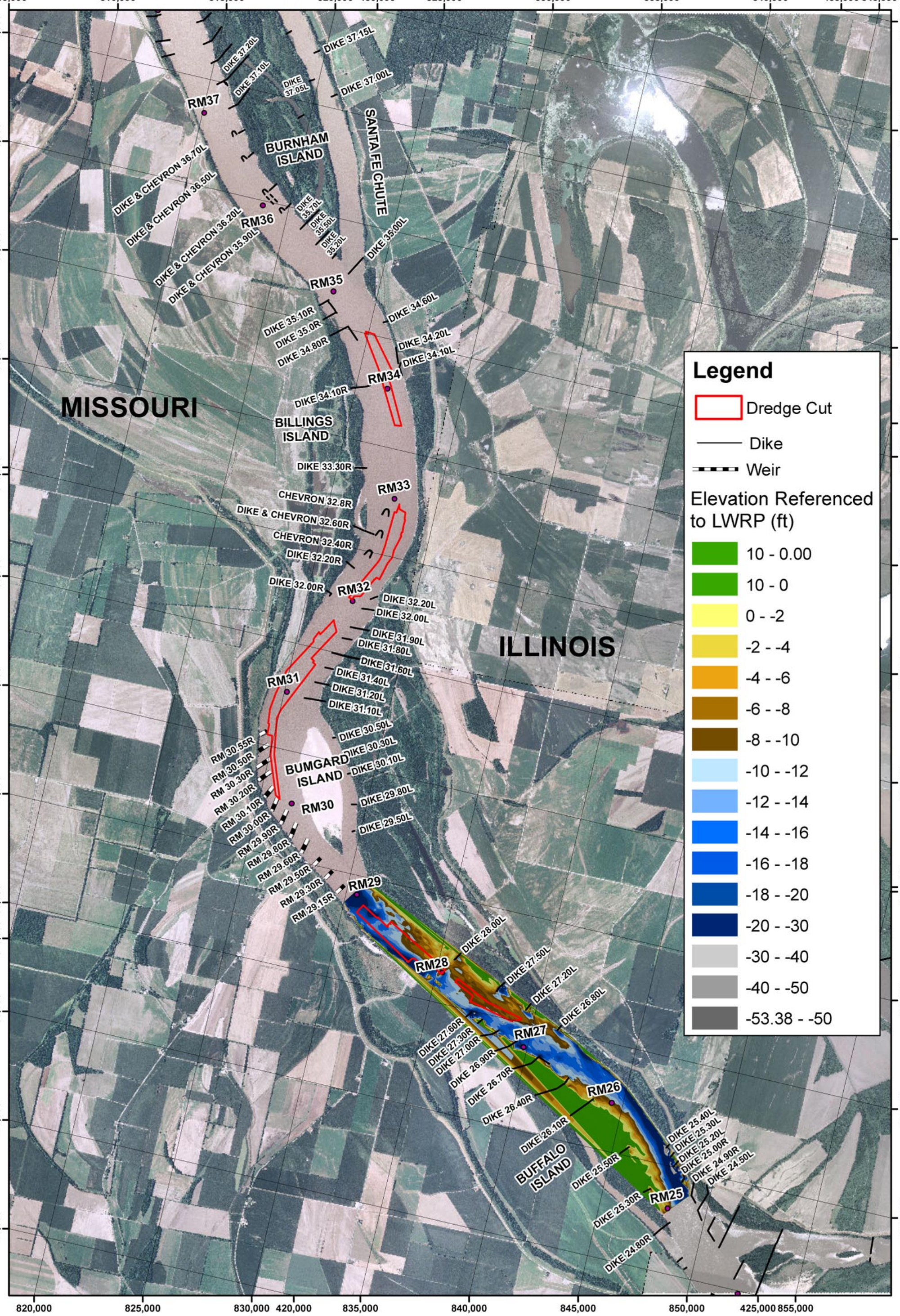

PLATE NUMBER 29

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
AUGUST 21, 2008
STAGE (FT): 5.6
2007 AERIAL PHOTOGRAPH

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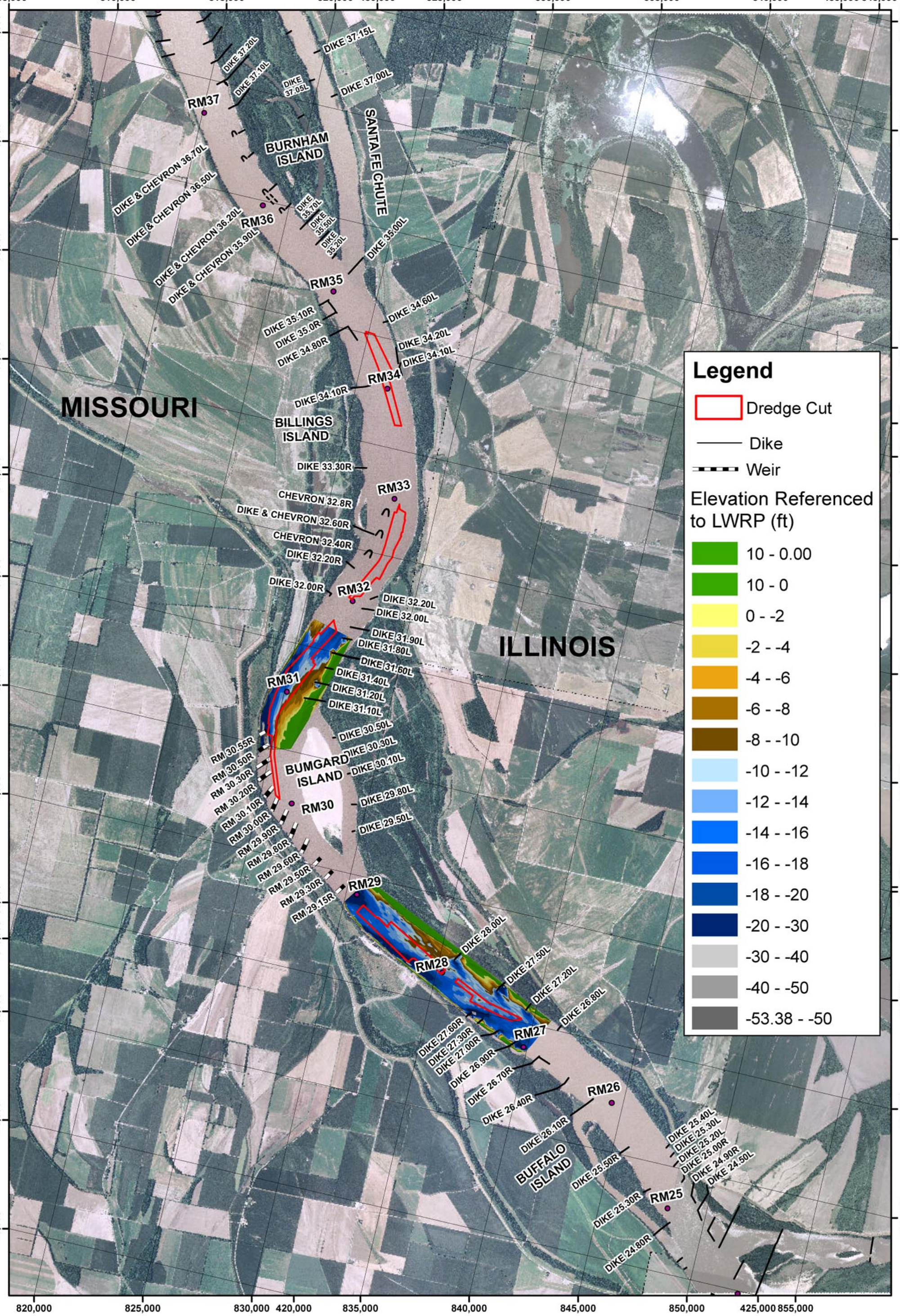

PLATE NUMBER 30

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
SEPTEMBER 6, 2009
STAGE (FT): 10.2
2007 AERIAL PHOTOGRAPH

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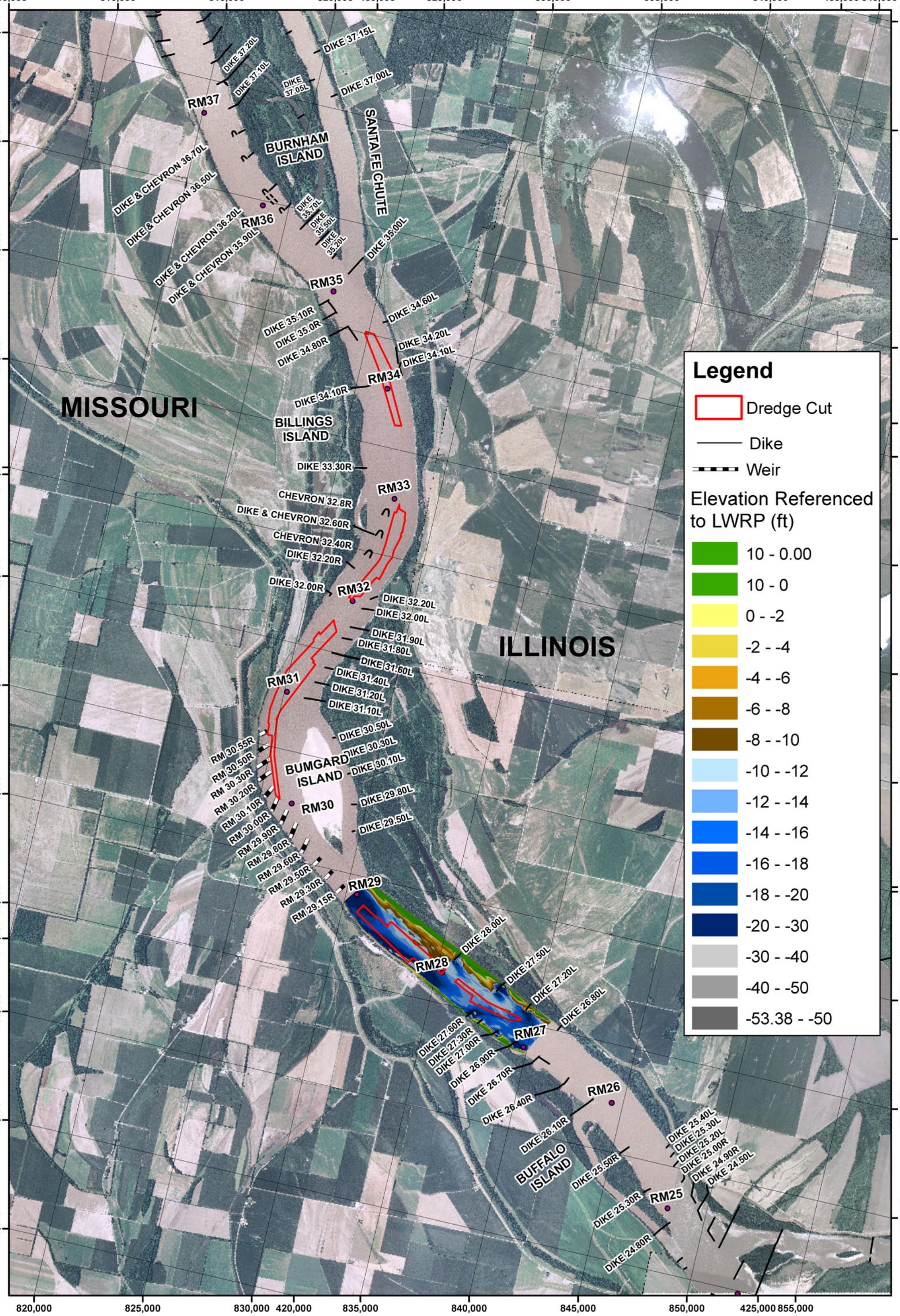

PLATE NUMBER 31

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
SEPTEMBER 22, 2011
STAGE (FT): 7.0
2007 AERIAL PHOTOGRAPH

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Mississippi River Basin
St. Louis District
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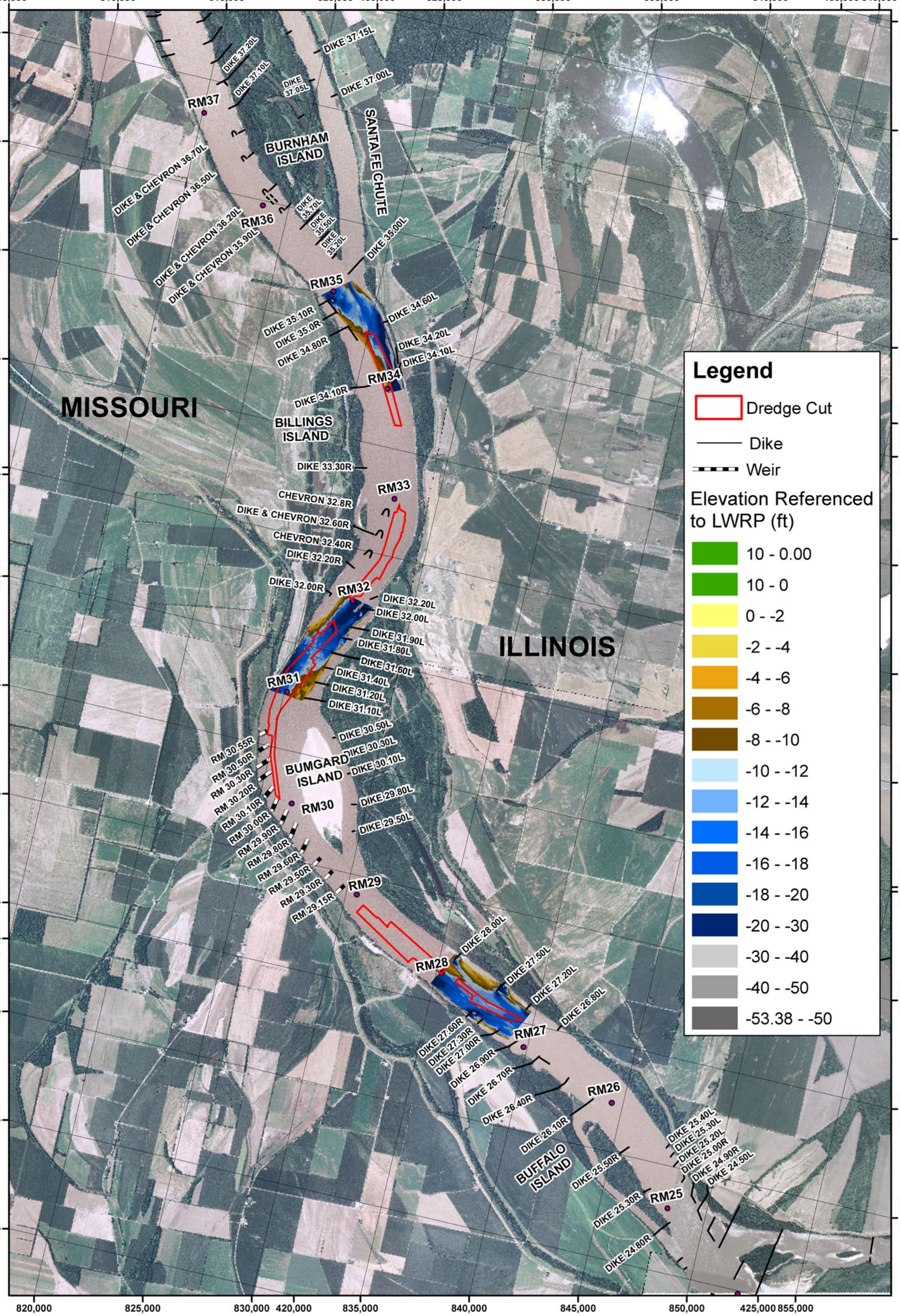

PLATE NUMBER 32

0 1,600 3,200 6,400
Feet

HYDROGRAPHIC SURVEY
SEPTEMBER 19, 2012 - DECEMBER 6, 2012
STAGE (FT): -5.1 - -4.7
2007 AERIAL PHOTOGRAPH

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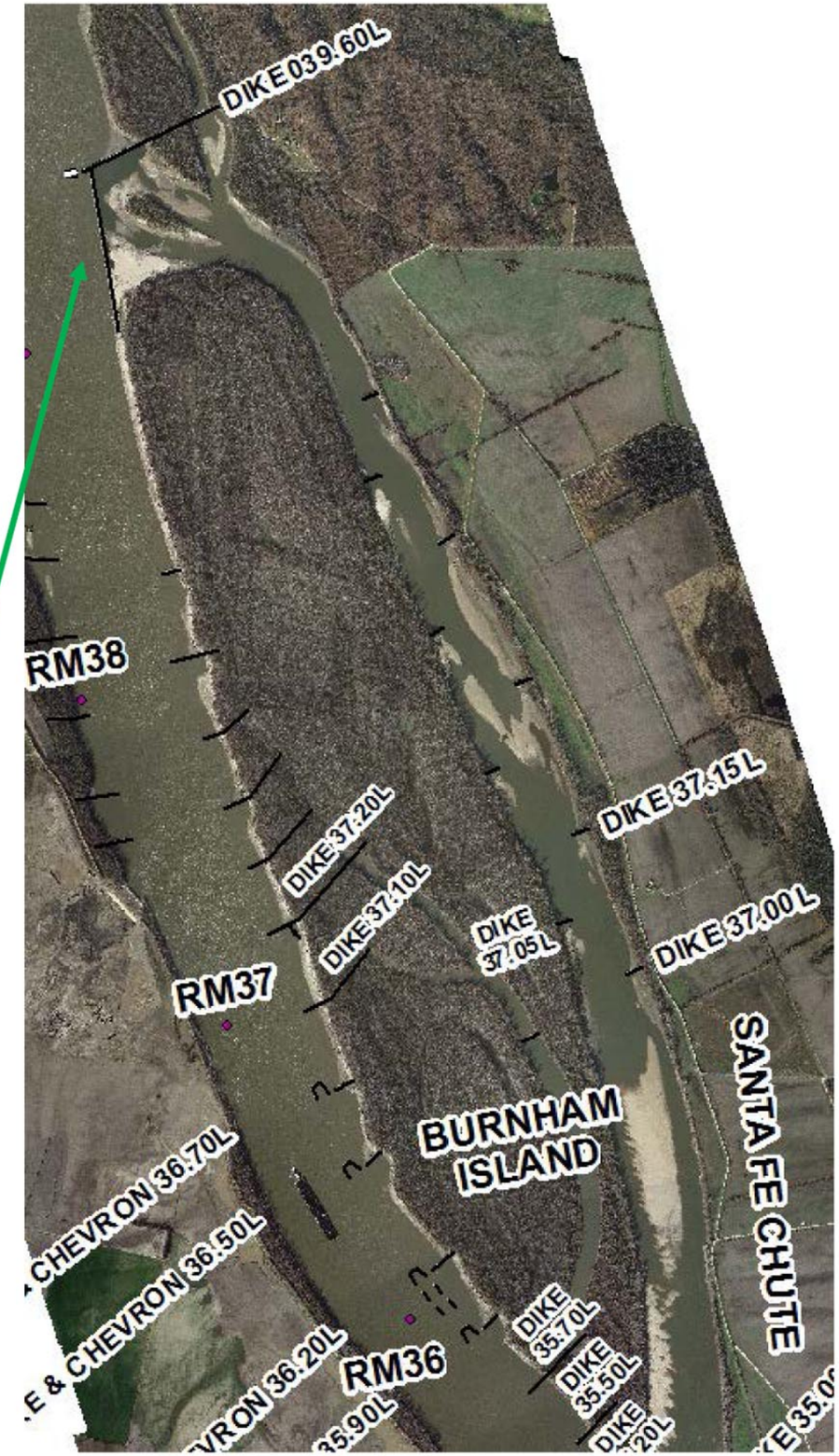
Looking downstream at Dike 39.60L – This dike is located at the entrance of Santa Fe Chute and keeps most flows from entering the side channel unless there is higher water. The dike has a low spot at which water at low stages can get through. The photo above was taken on April 18 while the photo below was taken May 24, both showing the dike at its low spot. The side channel is mostly very shallow as seen on the 2011 aerial photograph (photo to the right).



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U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST.LOUIS, MISSOURI	DRAWN BY: K. CLANCEY	SUBMITTED BY: K. CLANCEY	REVIEWED BY: J.BROWN, P.E.
APPLIED RIVER ENGINEERING CENTER ST.LOUIS DISTRICT	PLOT DATE: JUNE 2012	APPROVED BY: R.DAVINROY, P.E.	CHECKED BY: E.BRAUER, P.E.
	FILE NAME: Z:\Burngard Island HSR study\Plates		

Bumgard Island
Field Photographs
April 18 and May 24, 2012
Stage (ft): 20.5 & 17.8

PLATE NUMBER 33

Looking upstream at Chevron 32.60 R (left photo) & Chevron 32.80R (right photo) — There is a difference in height between the right and left leg of the chevron, the left leg is lower on both. Chevron 32.40R was in good conditions.

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SUBMITTED BY: K. CLANCEY	CHECKED BY: E.BRAUER, P.E.
PLOT DATE: JUNE 2012	APPROVED BY: R.DAVINROY, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates	

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Bumgard Island
Field Photographs
April 18, 2012
Stage (ft): 20.5

PLATE
NUMBER
34

Looking downstream at Dike 32. 20 L - Most dikes and banklines appeared to be in fairly good conditions.

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DRAWN BY: K.CLANCEY
SUBMITTED BY: K.CLANCEY
PLOT DATE: JUNE 2012
FILE NAME: Z:\Bumgard Island HSR study\Plates
REVIEWED BY: J.BROWN, P.E.
CHECKED BY: E.BRAUER, P.E.
APPROVED BY: R.DAVINROY, P.E.

Bumgard Island
Field Photographs
April 18, 2012
Stage (ft): 20.5

PLATE
NUMBER
35

Looking upstream – RM 30.50 - Barge passing through weir field located on the RDB, next to Bumgard Island

Looking downstream at Bumgard Island – RM 30.50 - the upper part of the island is a flat sand bar without any vegetation.

Looking at the soil along Bumgard Island – RM 29.90 - Water rises and cuts a steep slope along the island.

Looking upstream at Bumgard Island – RM 29.50 – the lower part of the island has some vegetation.

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CHECKED BY: E.BRAUER, P.E.	
APPROVED BY: R.DAVINROY, P.E.	
DRAWN BY: K. CLANCEY	
SUBMITTED BY: K.CLANCEY	
PLOT DATE: JUNE 2012	
FILE NAME: Z:\Bumgard Island HSR study\Plates	
U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST.LOUIS, MISSOURI	APPLIED RIVER ENGINEERING CENTER ST.LOUIS DISTRICT

Bumgard Island
Field Photographs
April 18 and May 24, 2012
Stage (ft): 20.5 & 17.8

PLATE NUMBER 36

Entrance is on the left of the picture; water flows to the right of the picture to the exit drain.

PLATE NUMBER 37

0 1,625 3,250 6,500
Feet

Bumgard Island
HSR Model Photograph

U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI	DESIGNED BY: K. Clancey		
	DRAWN BY: K. Clancey	REVIEWED BY: E Brauer, P.E.	CHECKED BY: J Brown, P.E.
Mississippi River Basin St. Louis District Bumgard Island HSR Model RM 36.0 - 25.0	SUBMITTED: K. Clancey	APPROVED: Rob Davinroy, P.E.	
	FILE NAME: Z:\Bumgard Island HSR study\Plates		

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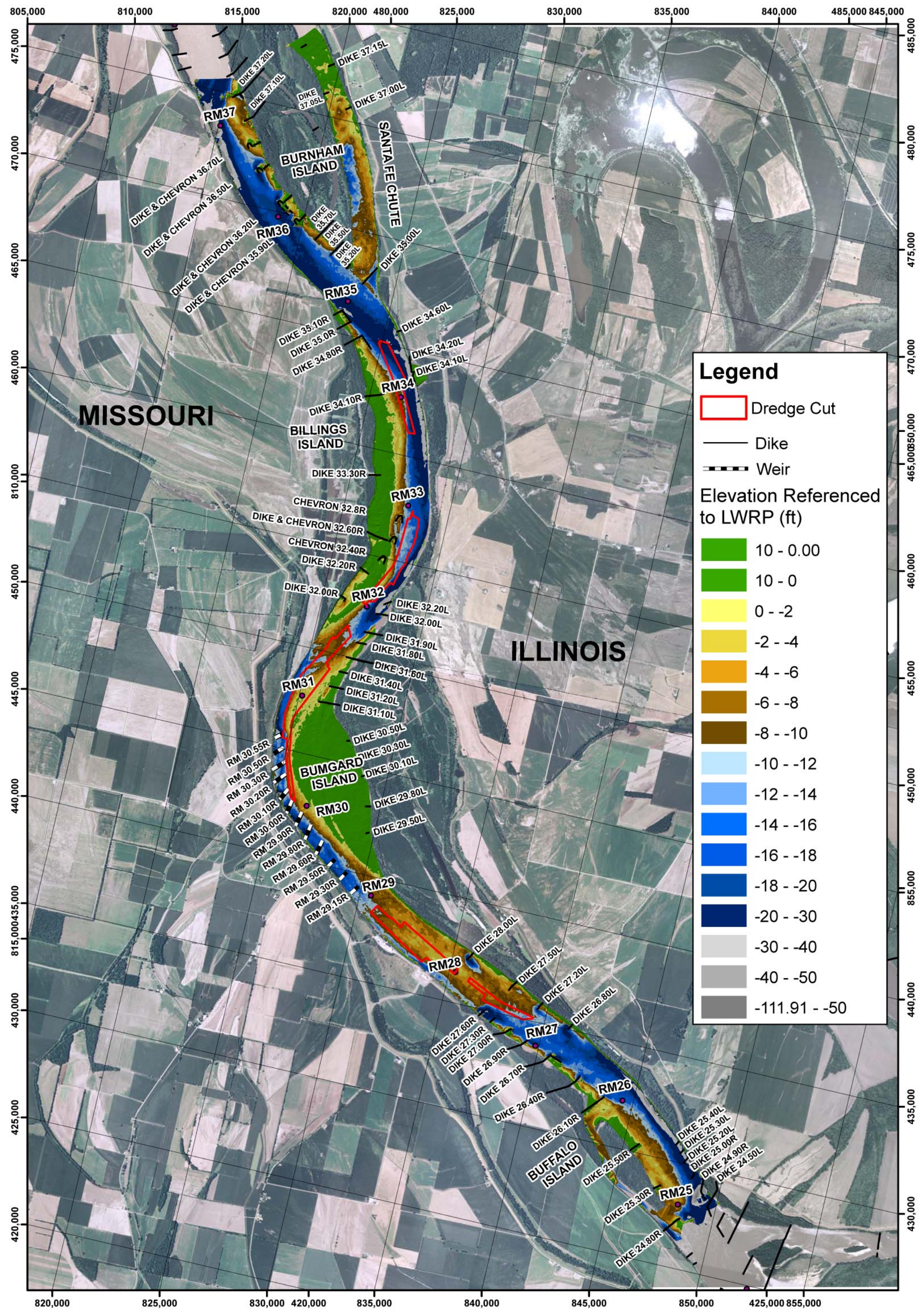

PLATE NUMBER 38

0 1,600 3,200 6,400
Feet

Replication Test:
Bathymetry Results
2007 AERIAL PHOTOGRAPH

U.S. ARMY ENGINEER DIVISION
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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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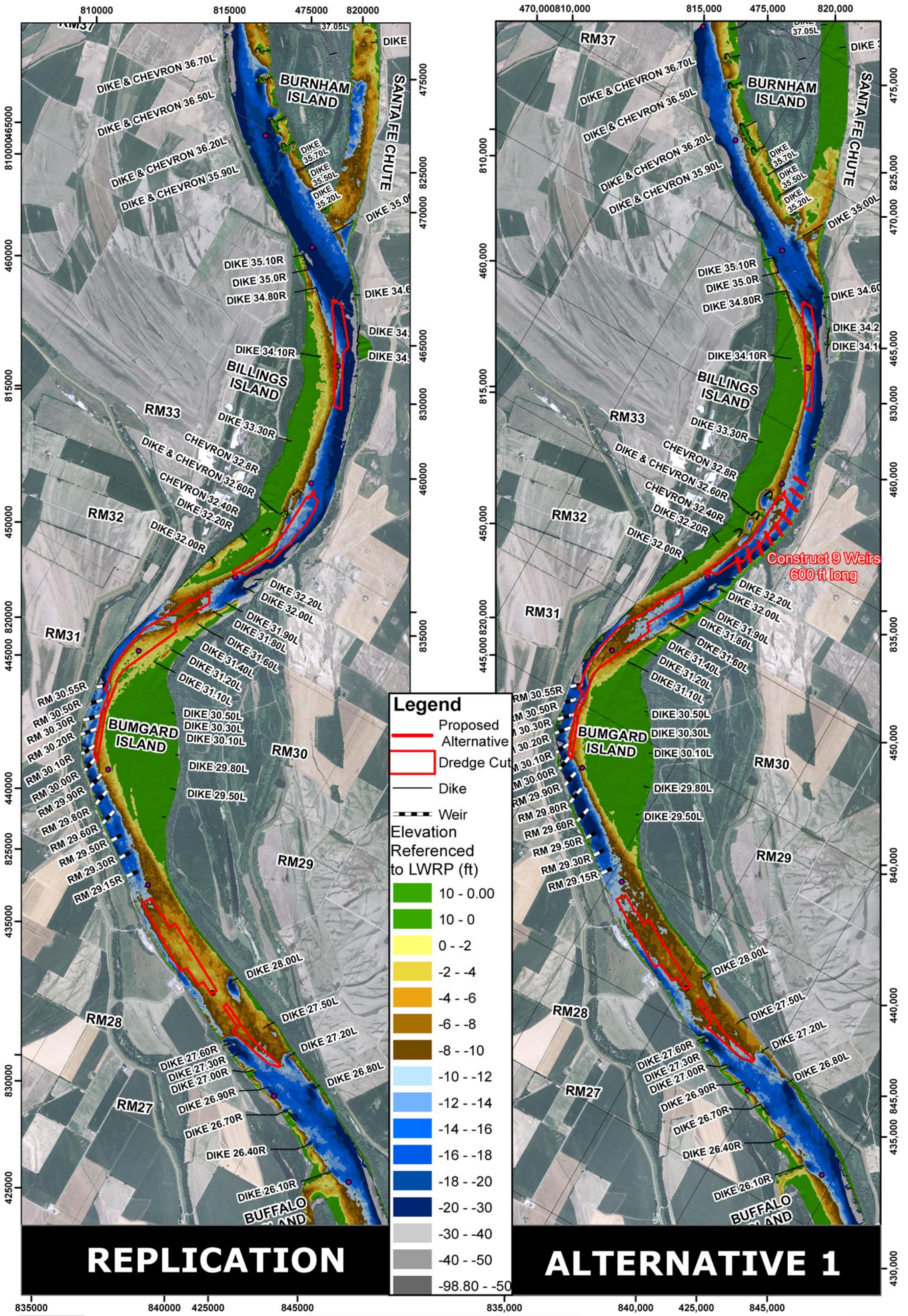

PLATE NUMBER 39

0 1,625 3,250 6,500
Feet

Replication Scan vs. Alternative 1
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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CHECKED BY: J Brown, P.E.
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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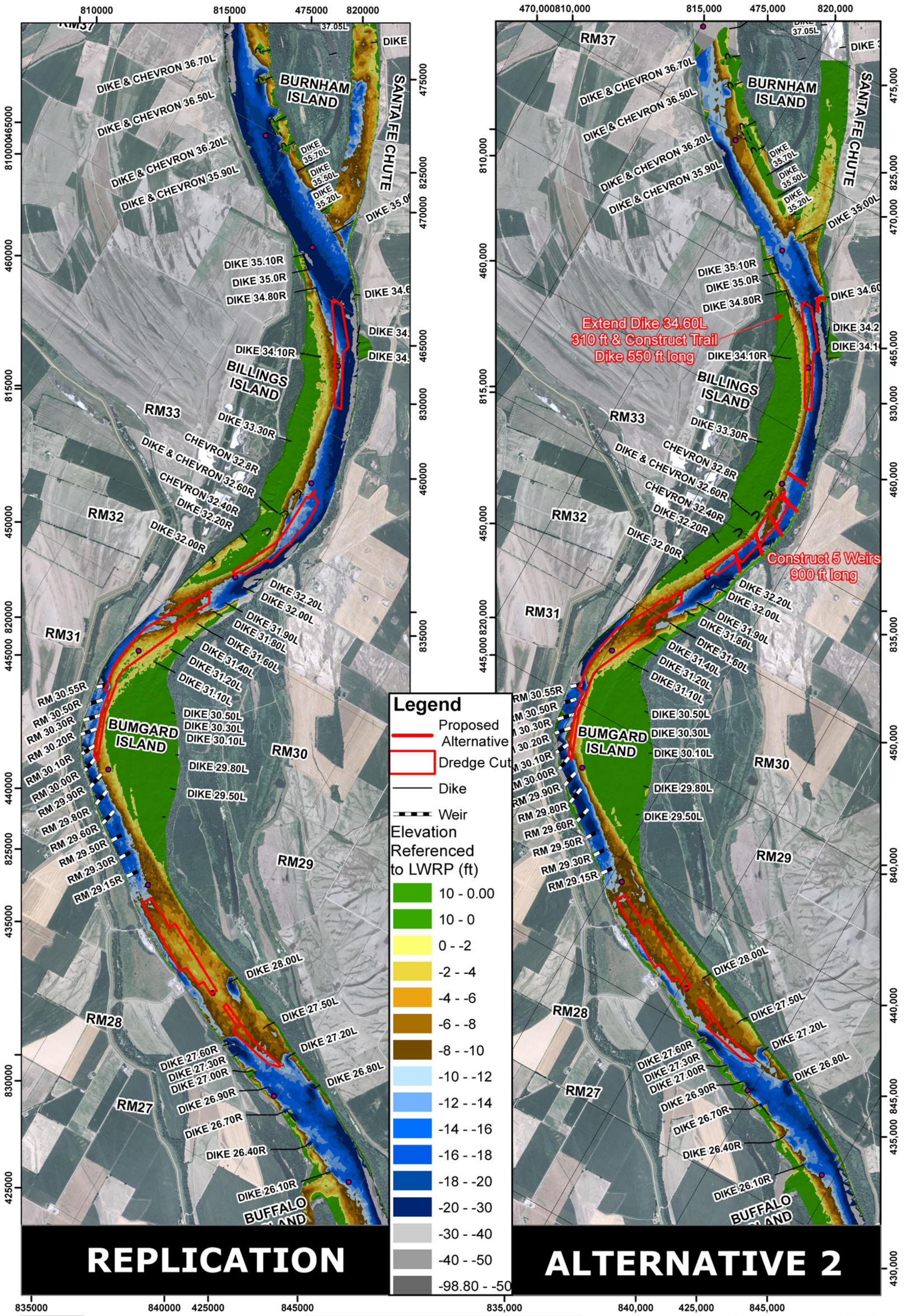

PLATE NUMBER 40

0 1,625 3,250 6,500
Feet

Replication Scan vs. Alternative 2
Bathymetry Results
2007 AERIAL PHOTOGRAPH

U.S. ARMY ENGINEER DIVISION
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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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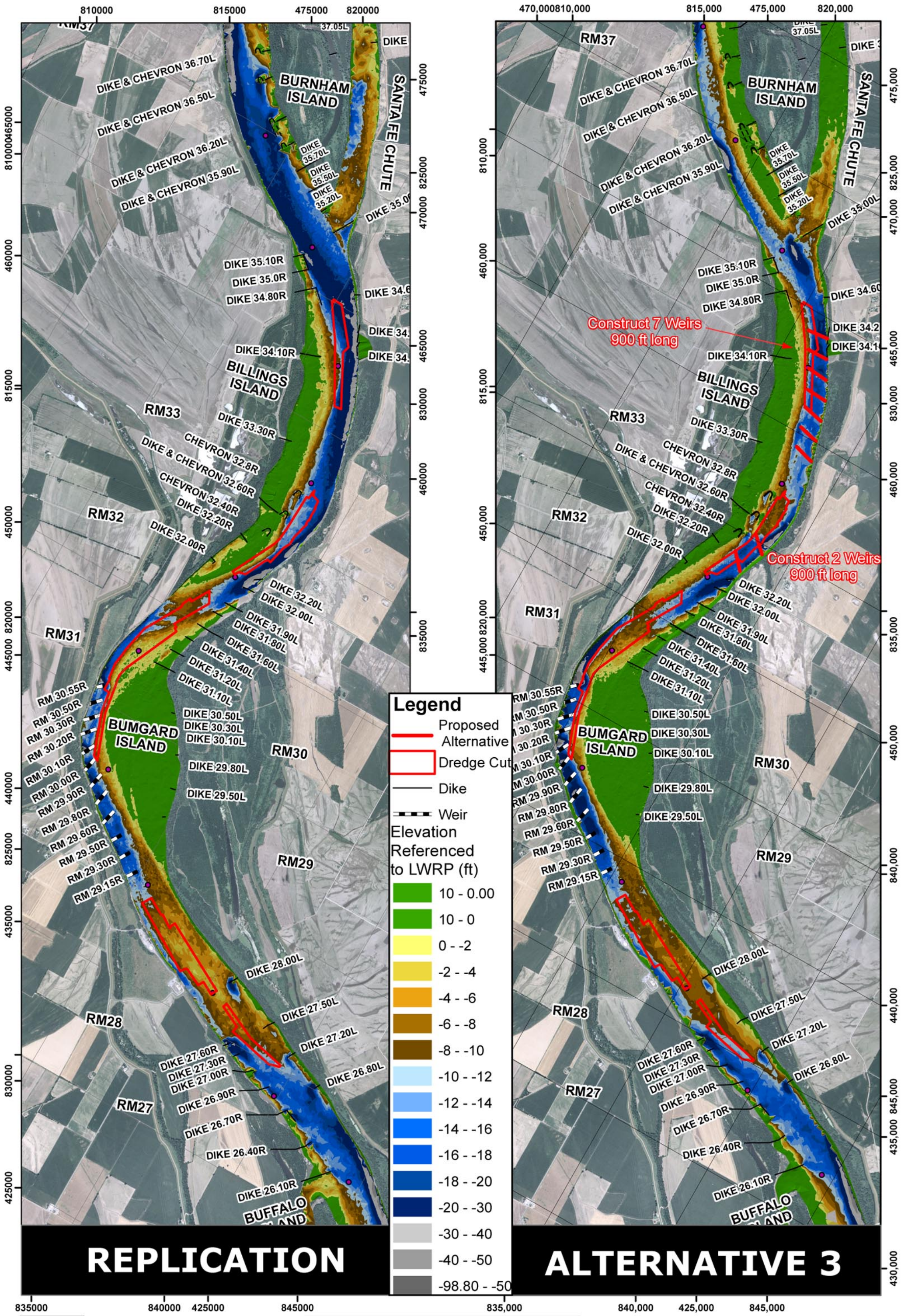

PLATE NUMBER 41

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 3 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
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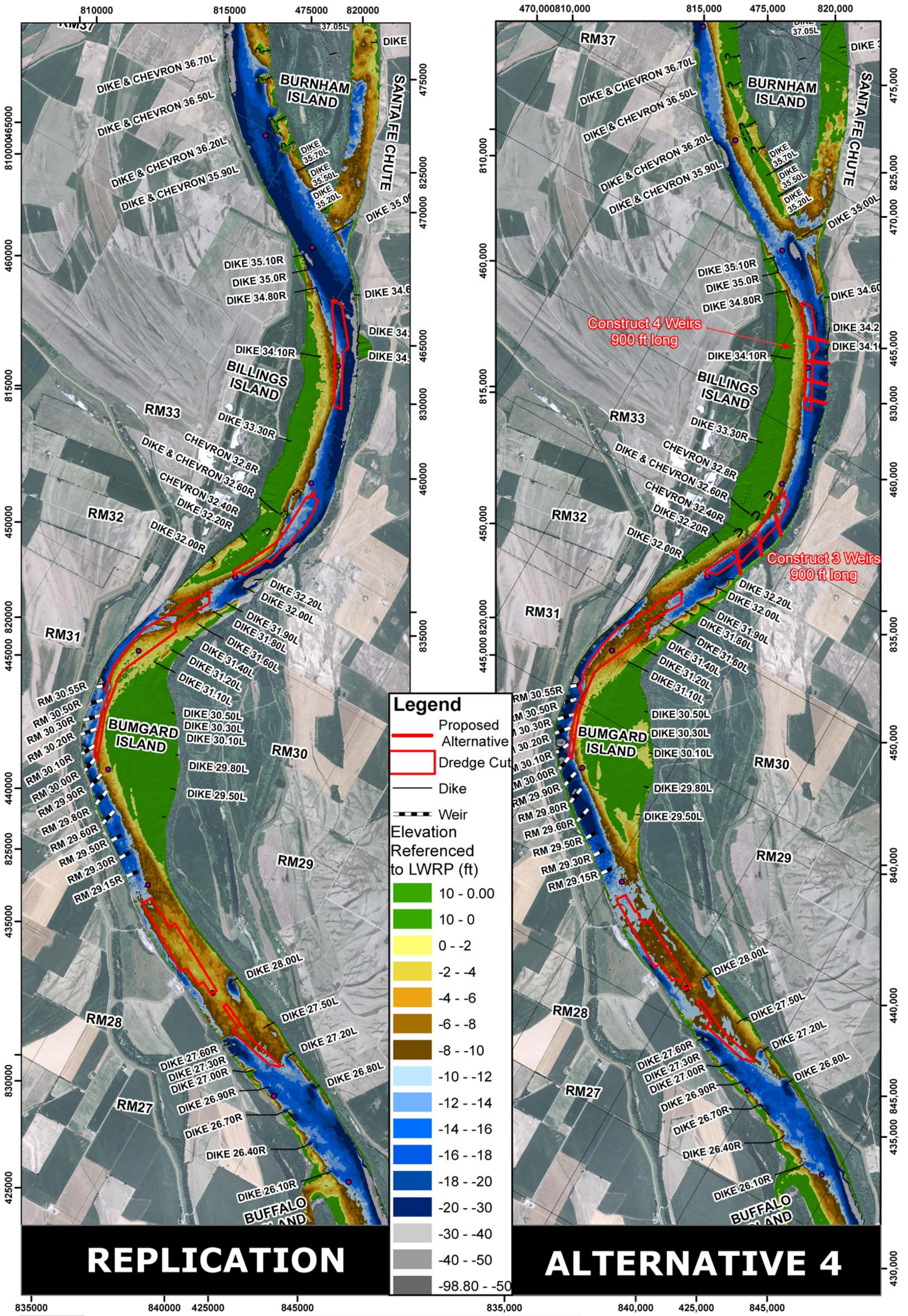

PLATE NUMBER 42

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 4 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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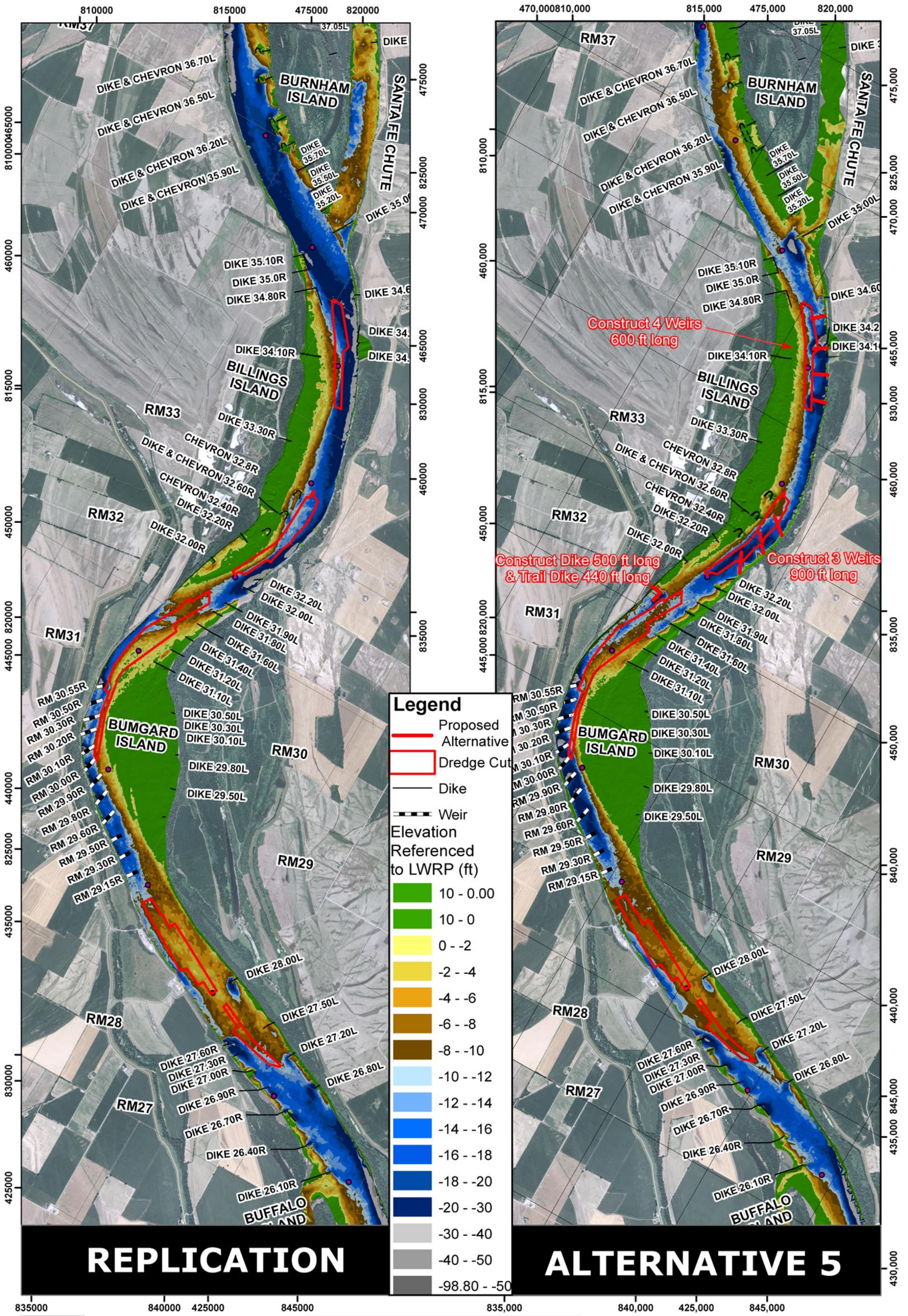

PLATE NUMBER 43

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 5 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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St. Louis District
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DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
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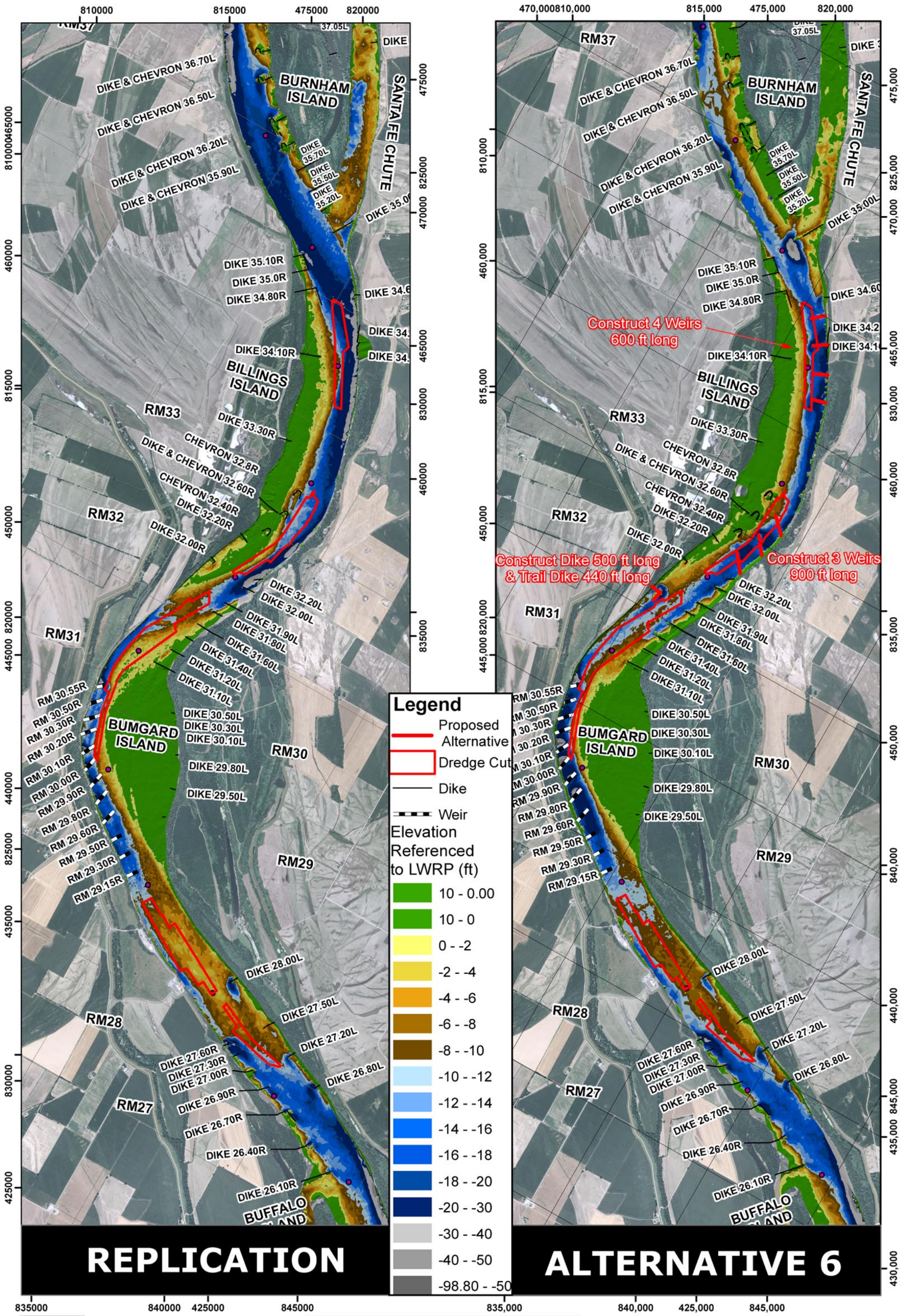

PLATE NUMBER 44

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 6 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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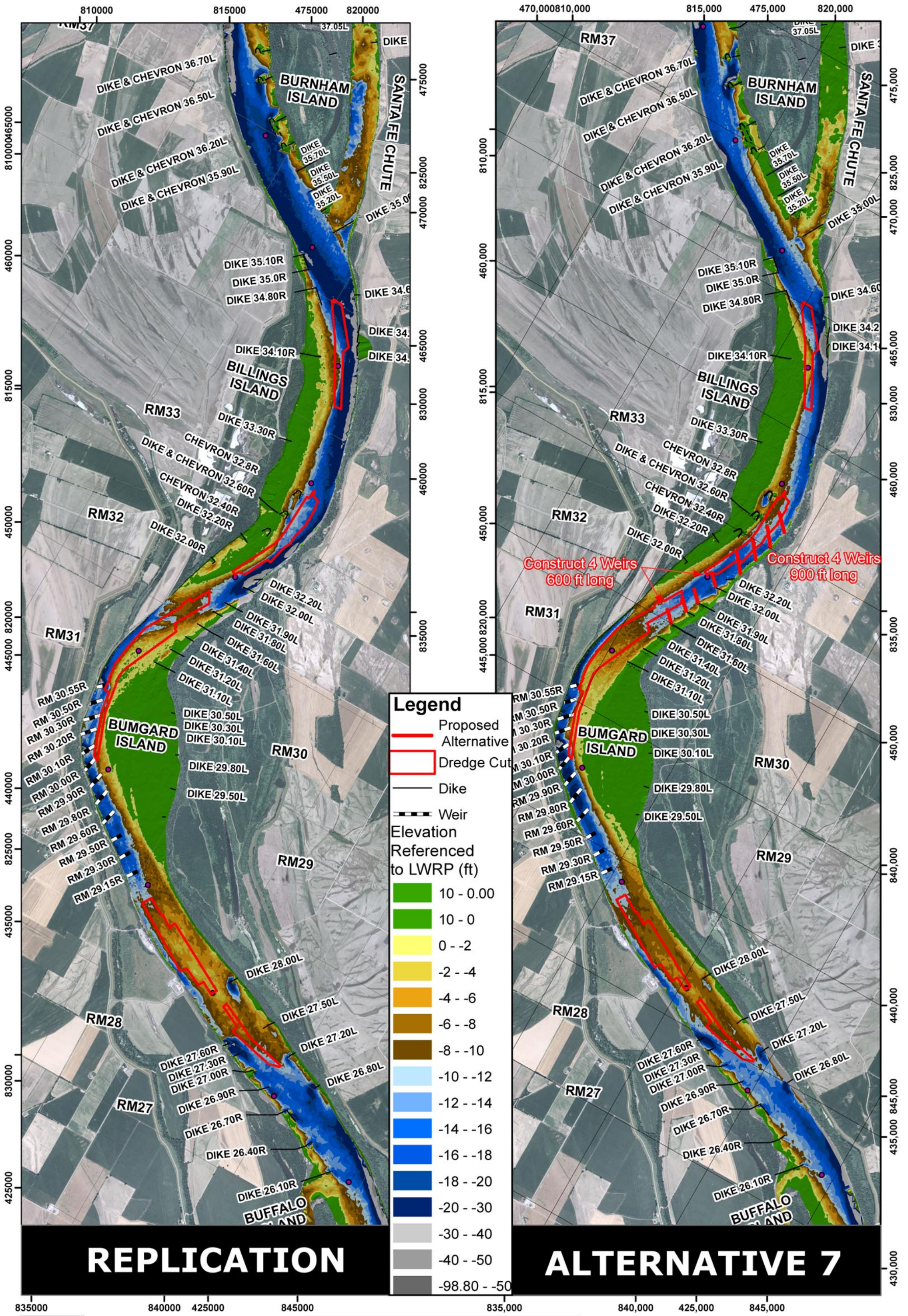

PLATE NUMBER 45

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 7 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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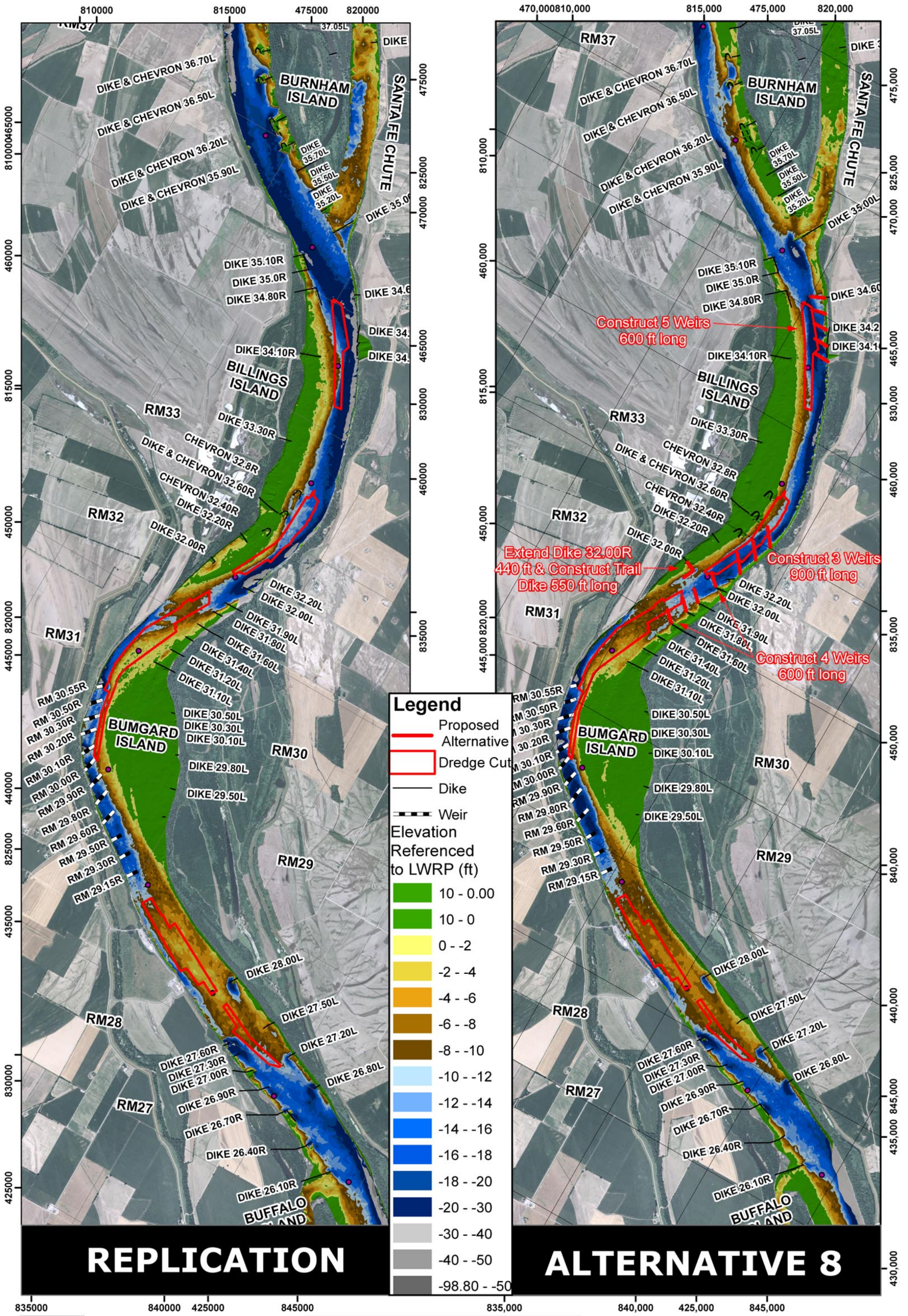

PLATE NUMBER 46

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 8 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

APPLIED RIVER ENGINEERING CENTER

US Army Corps of Engineers
St. Louis District

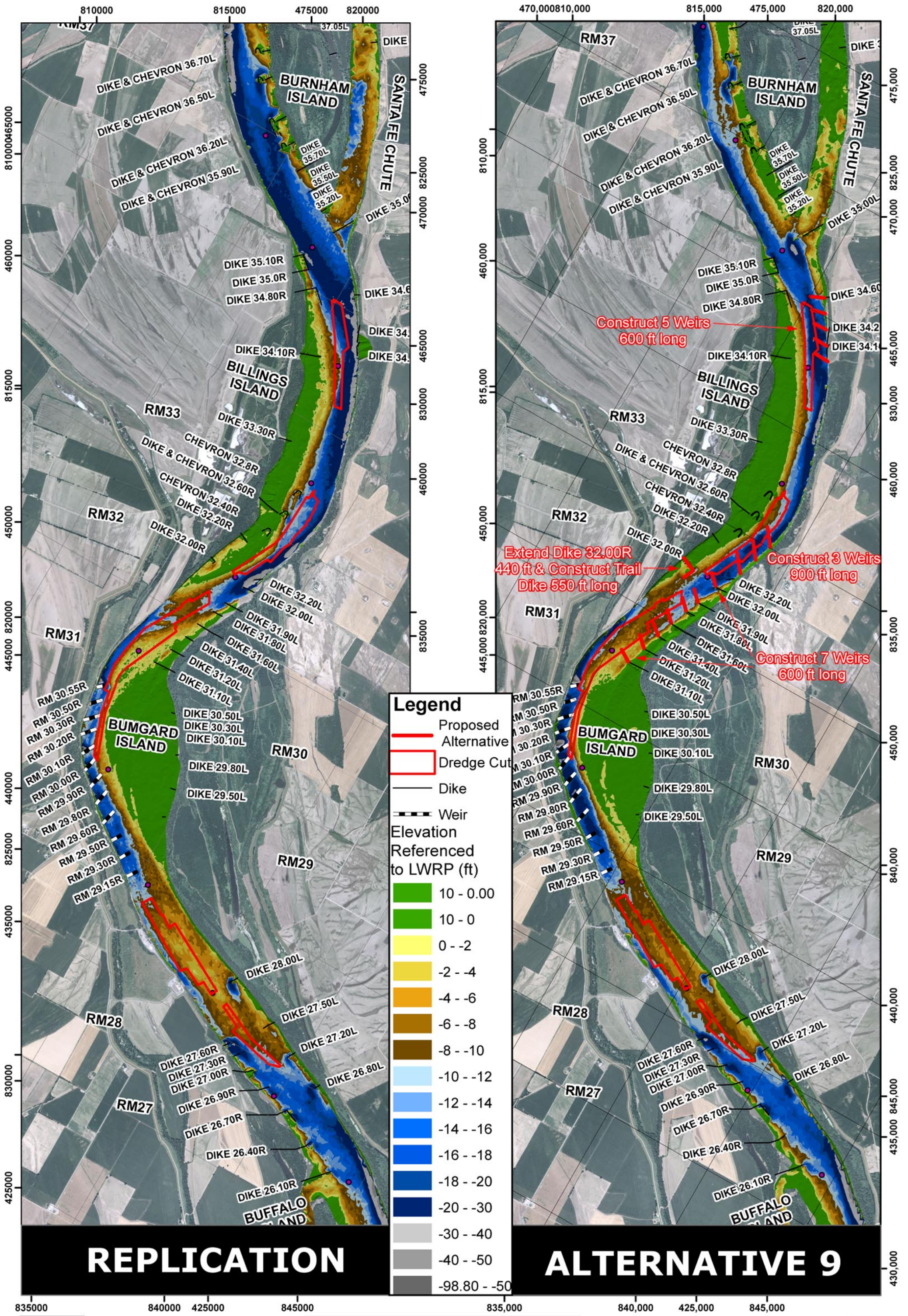

PLATE NUMBER 47

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 9 Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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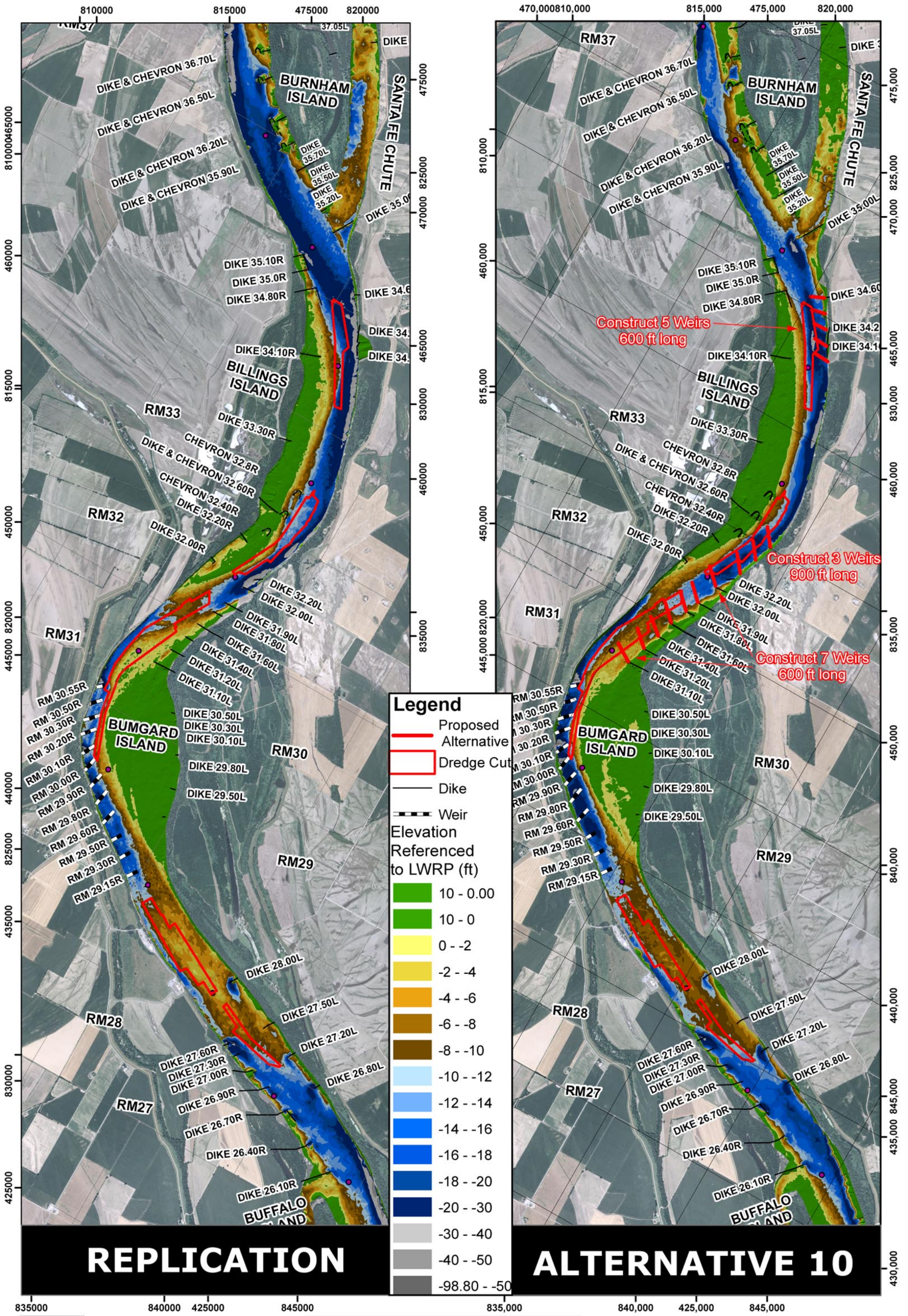

PLATE NUMBER 48

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 10 Bathymetry Results

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FILE NAME: Z:\Bumgard Island HSR study\Plates

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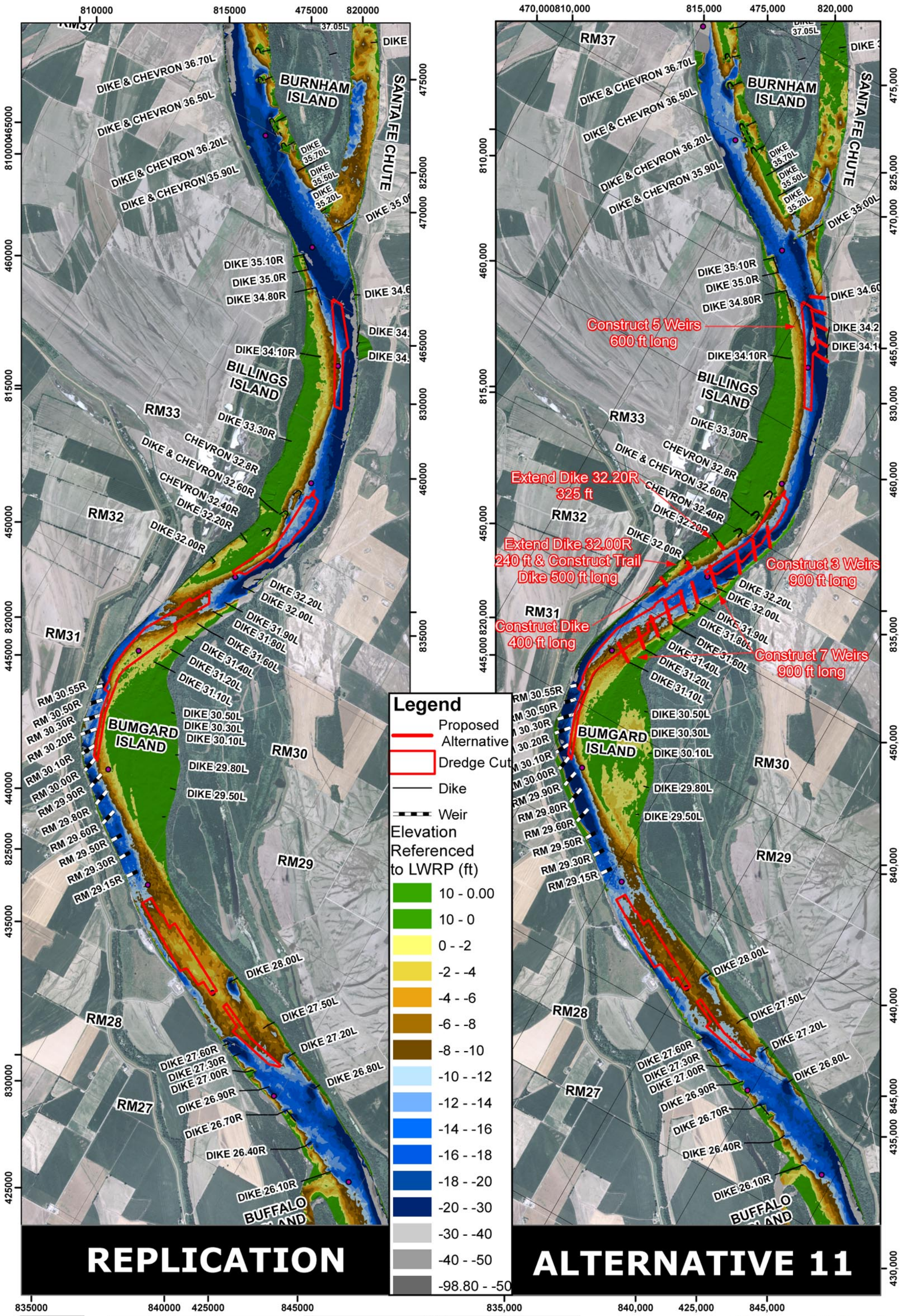

PLATE NUMBER 49

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 11 Bathymetry Results

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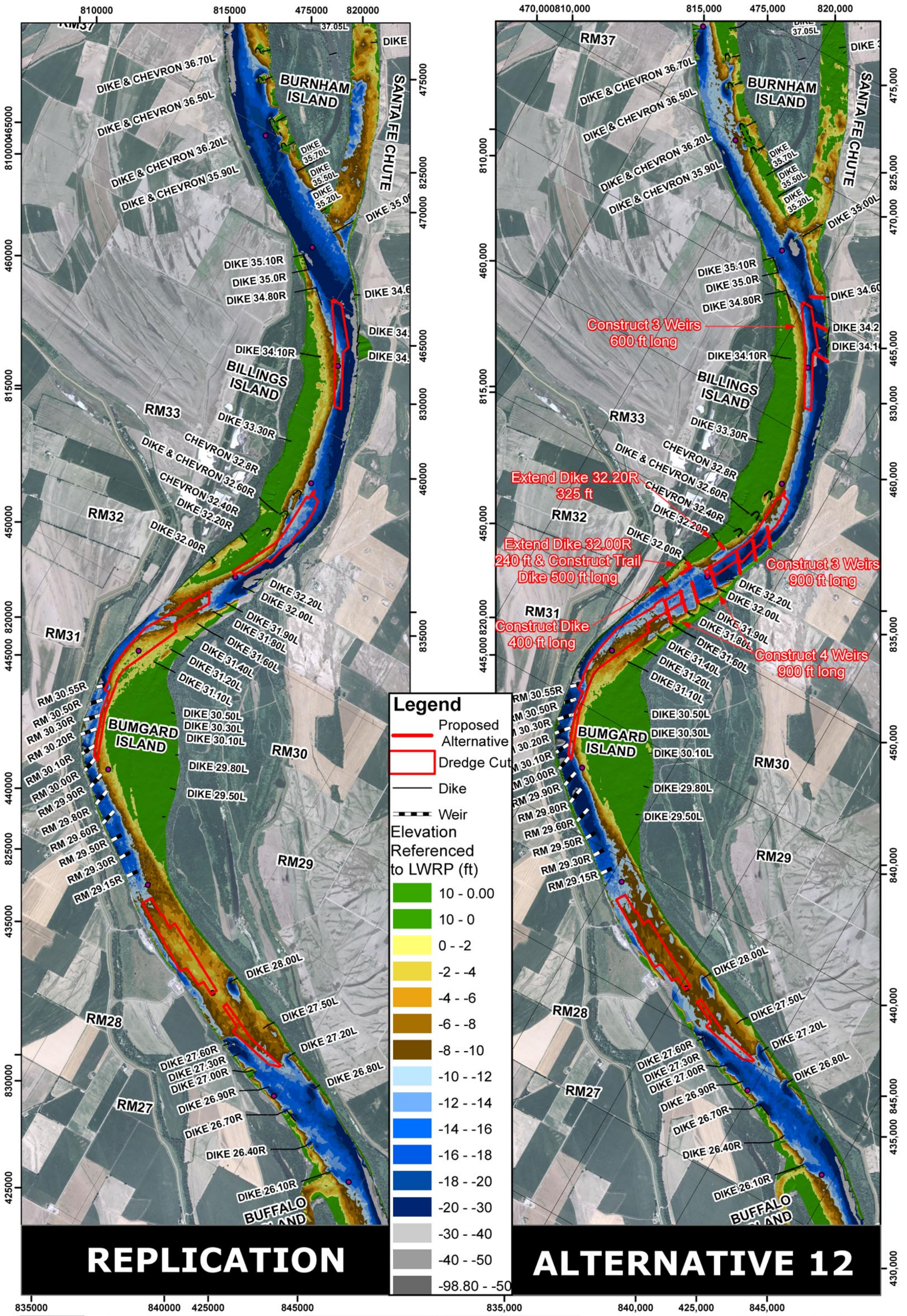

PLATE NUMBER 50

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 12 Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
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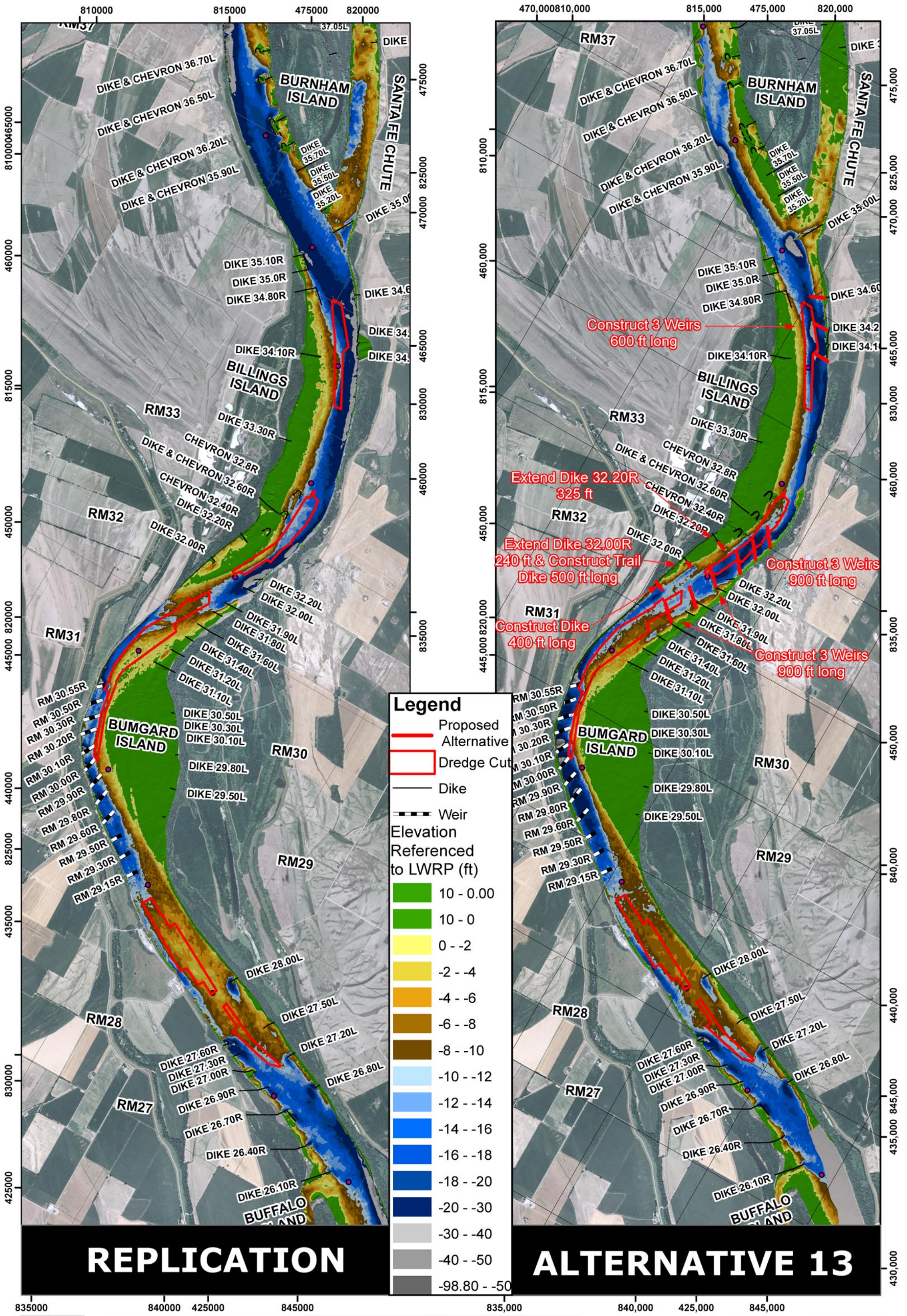

PLATE NUMBER 51

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 13 Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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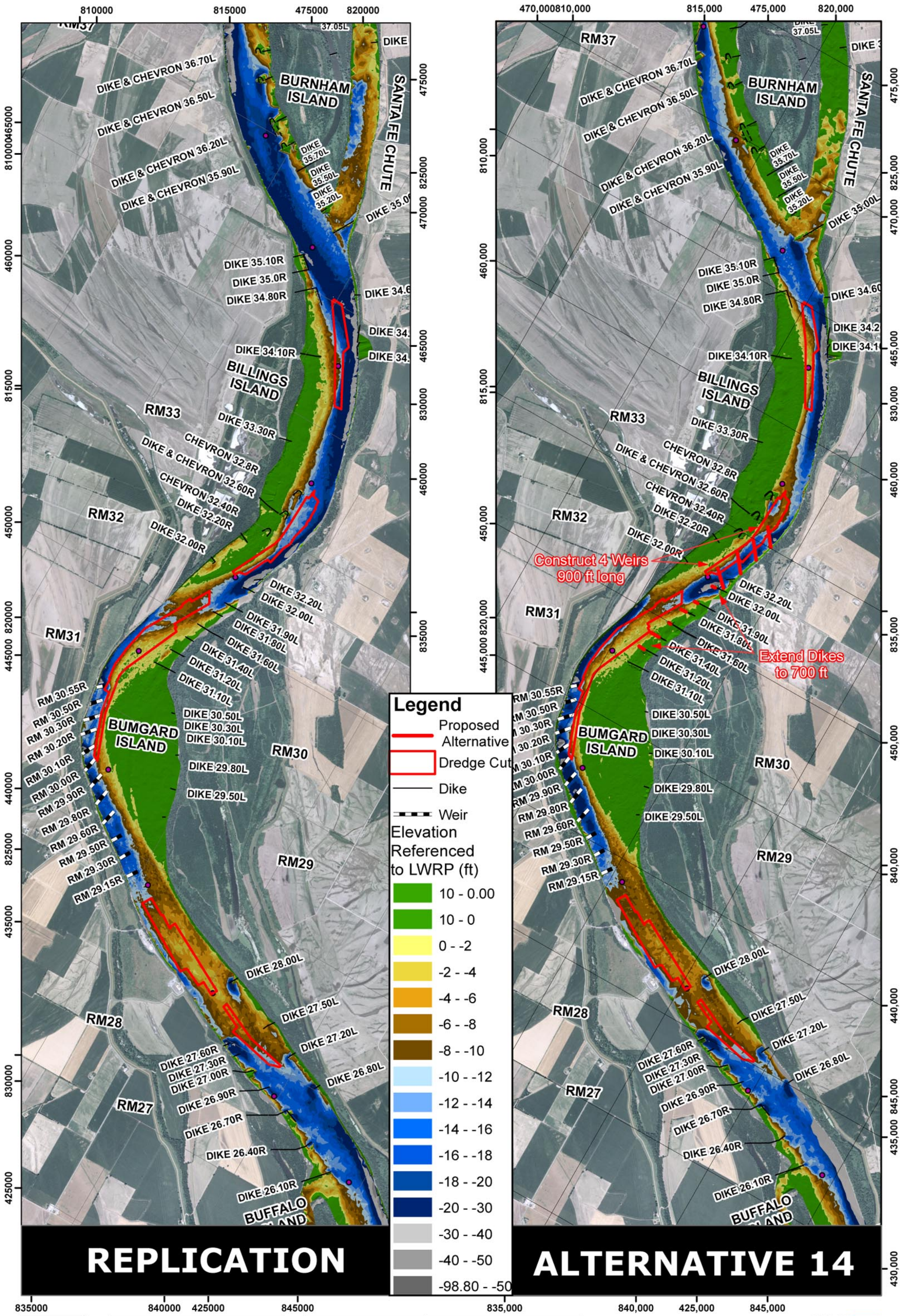

PLATE NUMBER 52

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 14 Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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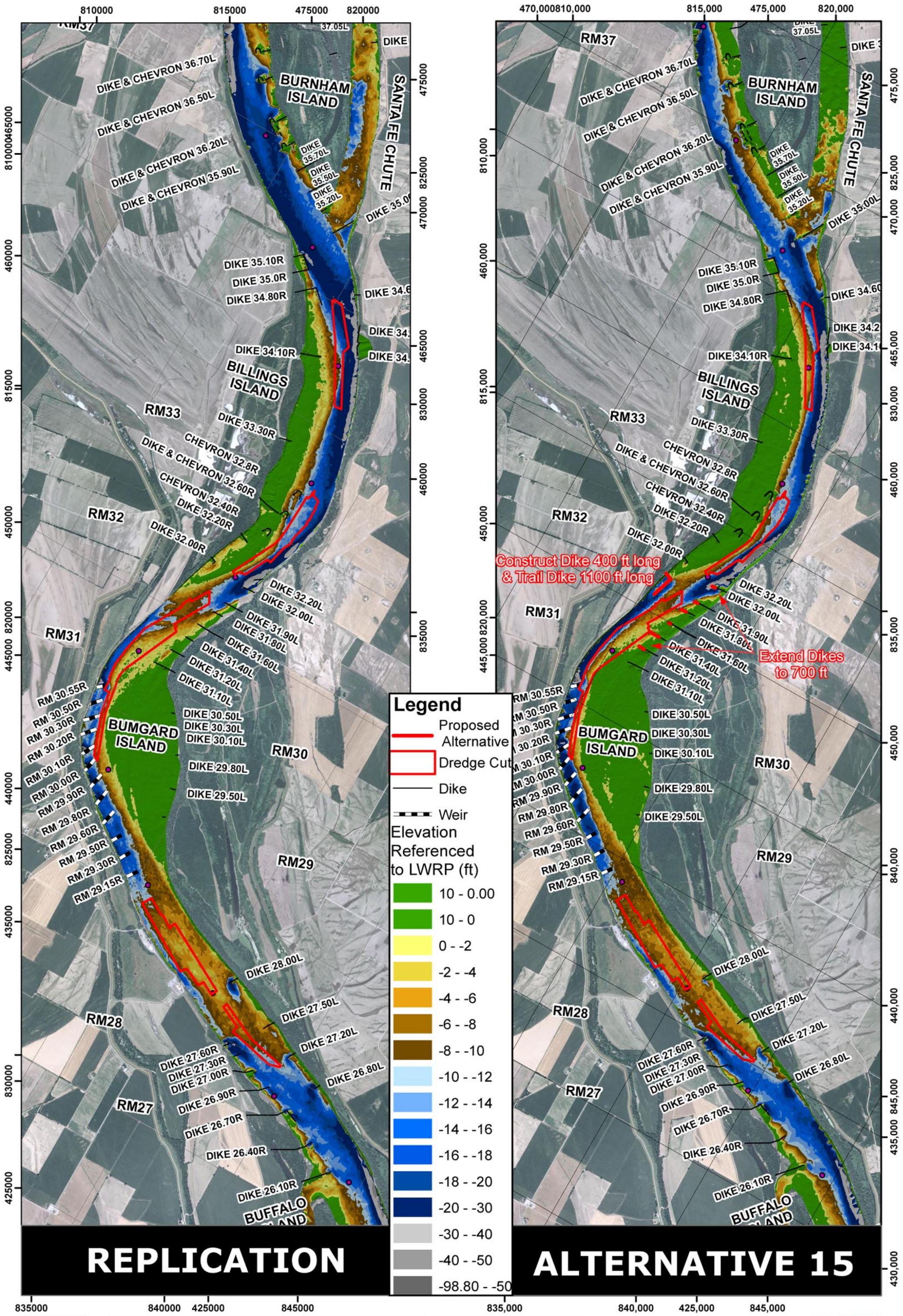

PLATE NUMBER 53

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 15 Bathymetry Results

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

Mississippi River Basin
St. Louis District
Bumgard Island
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RM 36.0 - 25.0

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FILE NAME: Z:\Bumgard Island HSR study\Plates

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US Army Corps of Engineers St. Louis District

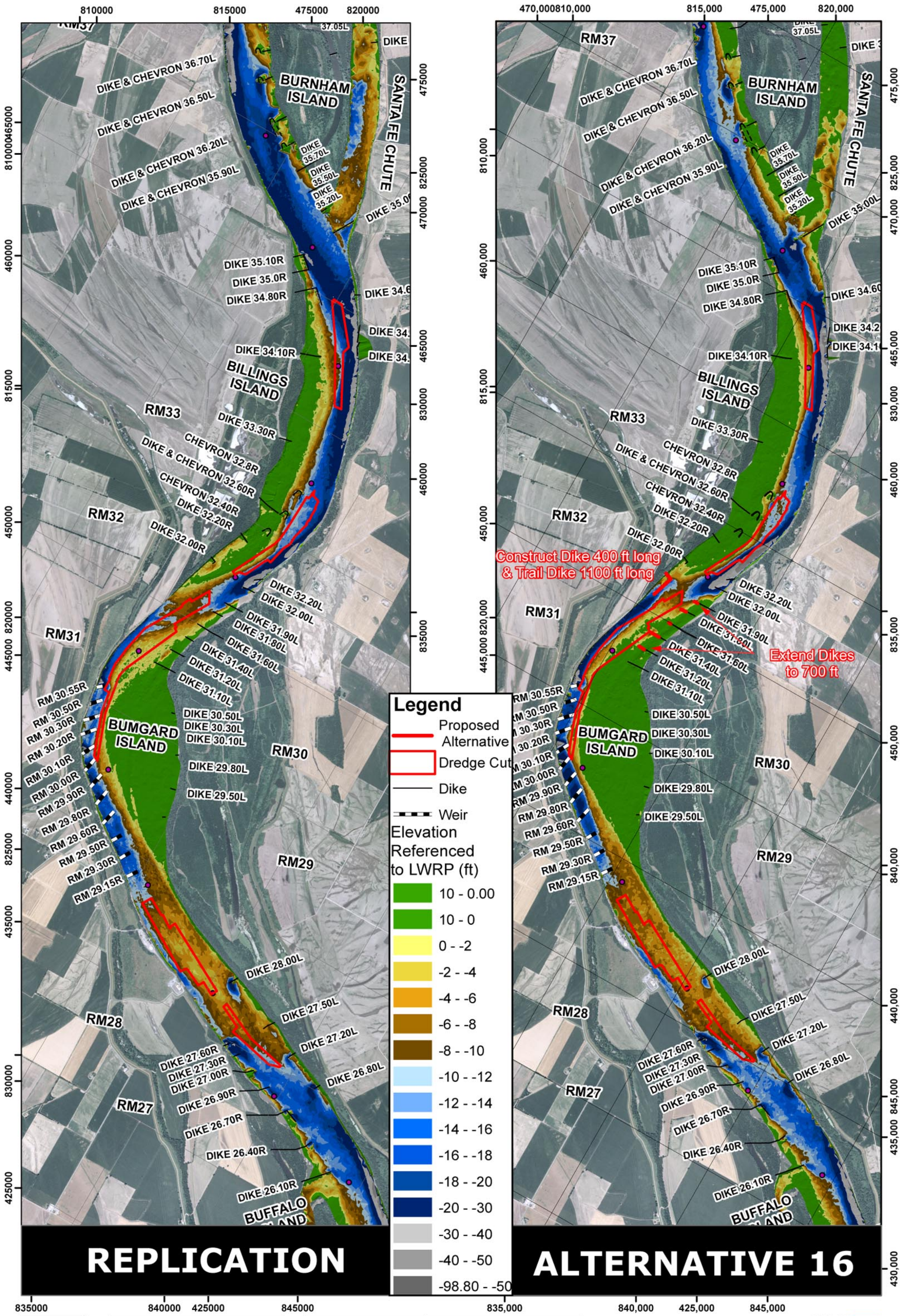

PLATE NUMBER 54

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 16 Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District
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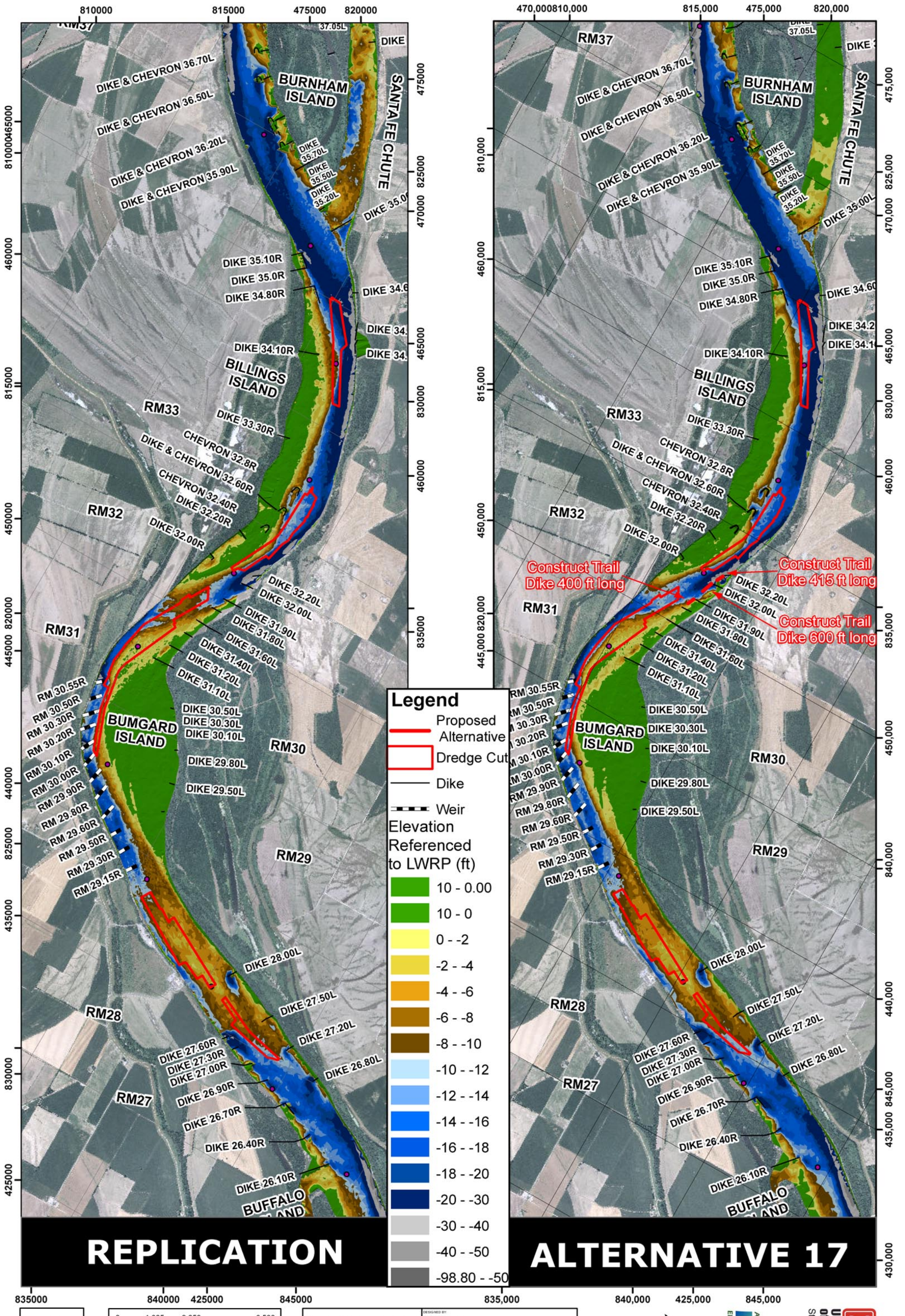

PLATE NUMBER 55

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 17 Bathymetry Results

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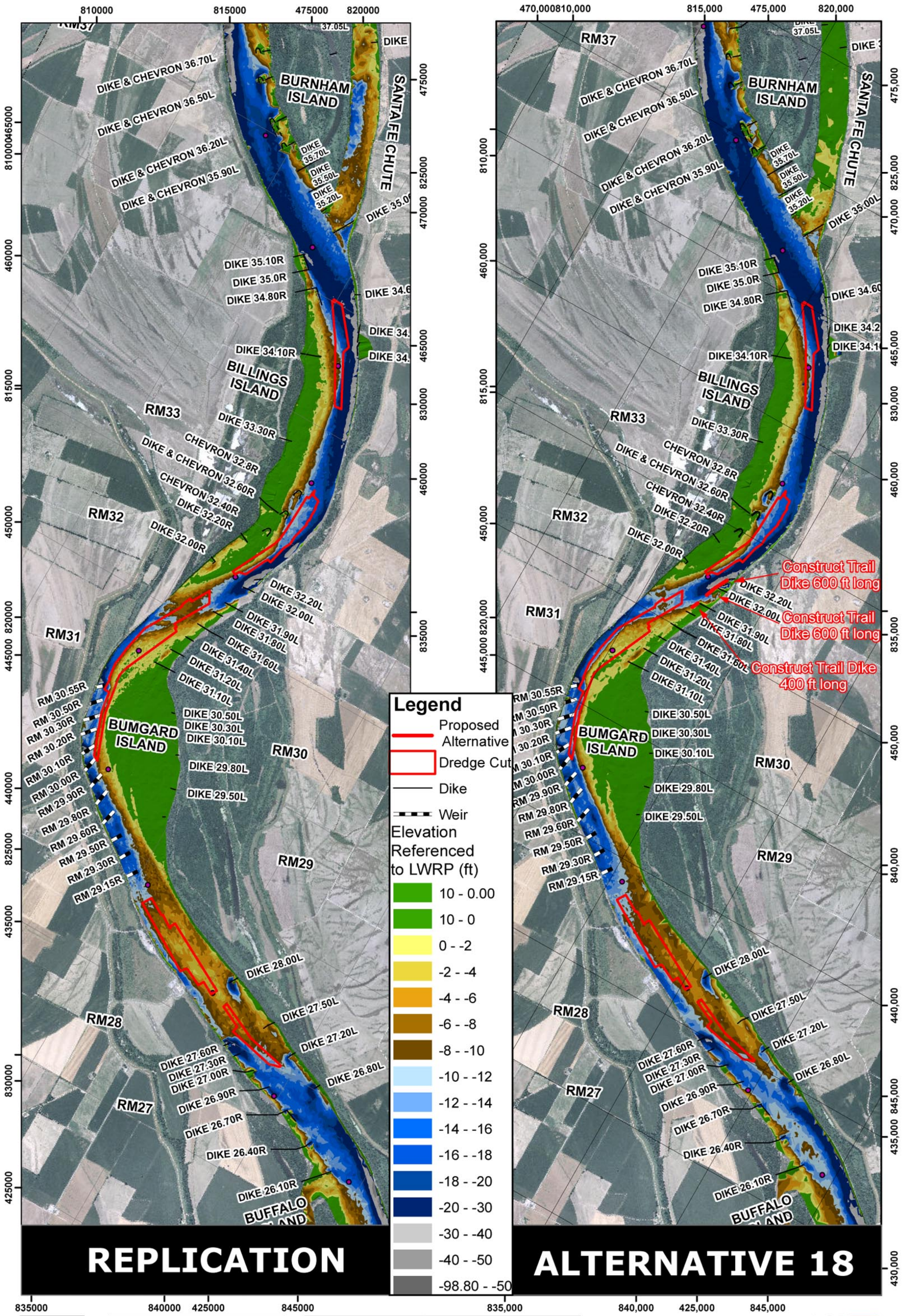

PLATE NUMBER 56

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 18 Bathymetry Results

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St. Louis District
Bumgard Island
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District

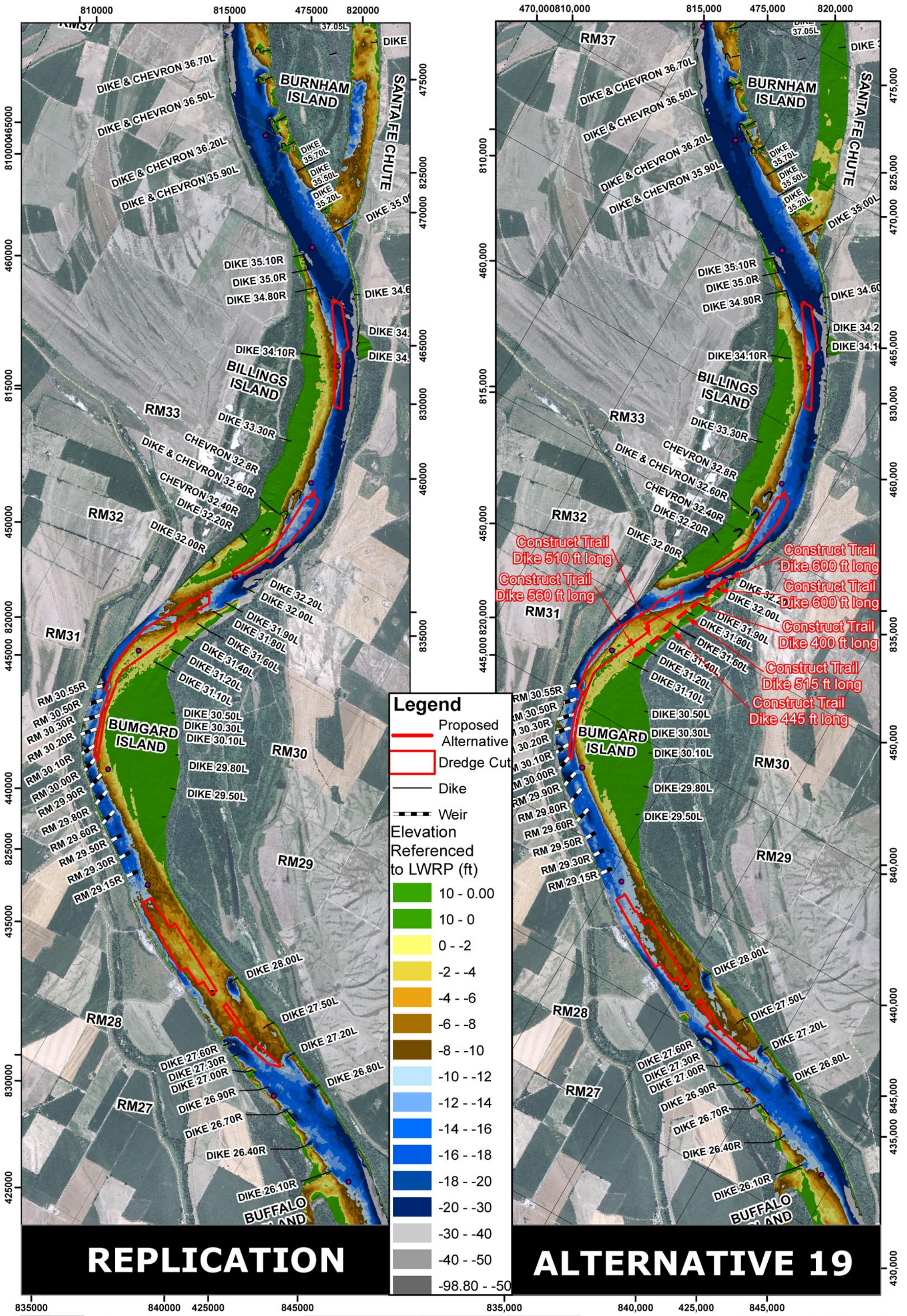

PLATE NUMBER 57

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 19 Bathymetry Results

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Mississippi River Basin
St. Louis District
Bumgard Island
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SUBMITTED: K. Clancey
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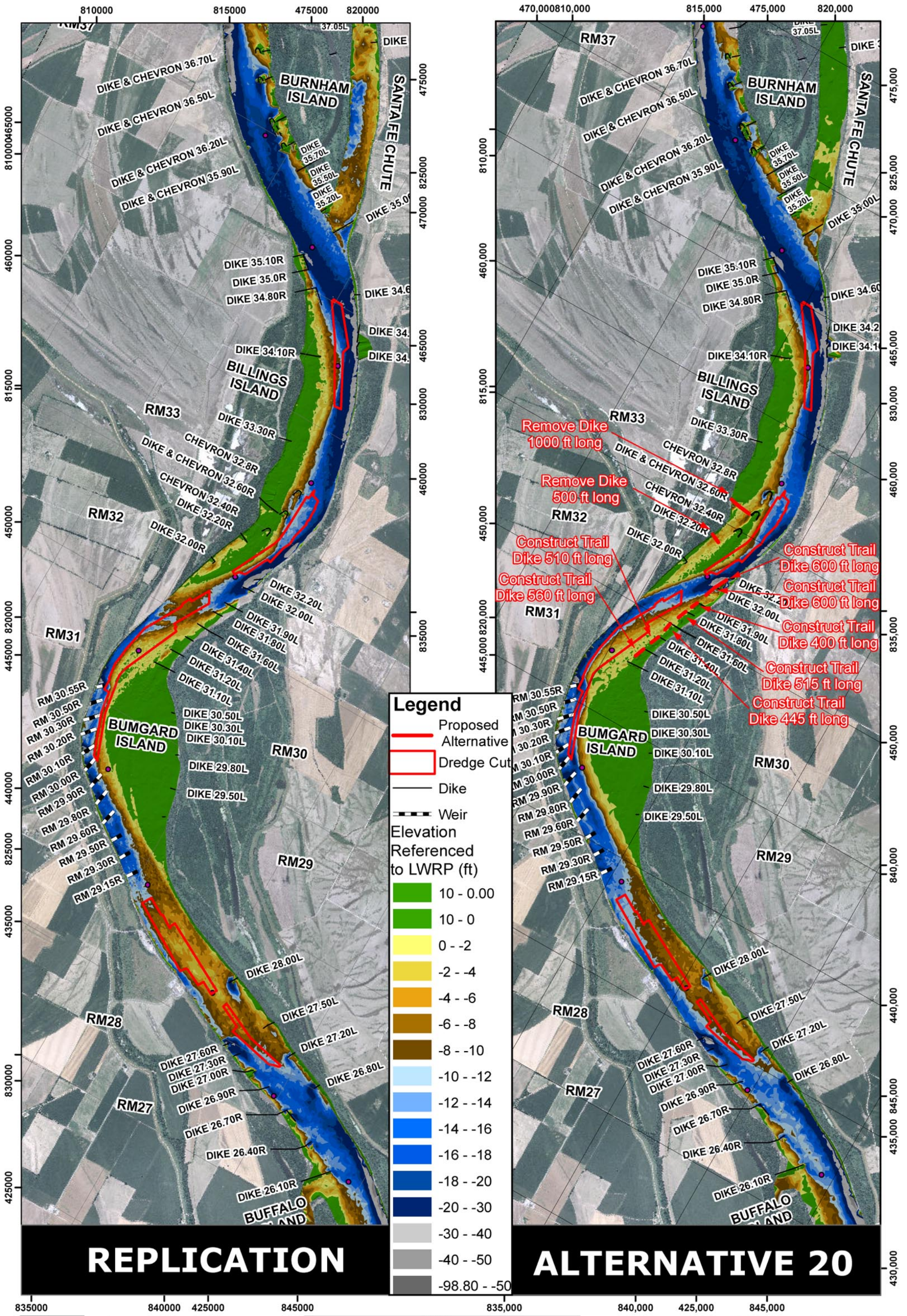

PLATE NUMBER 58

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 20 Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District

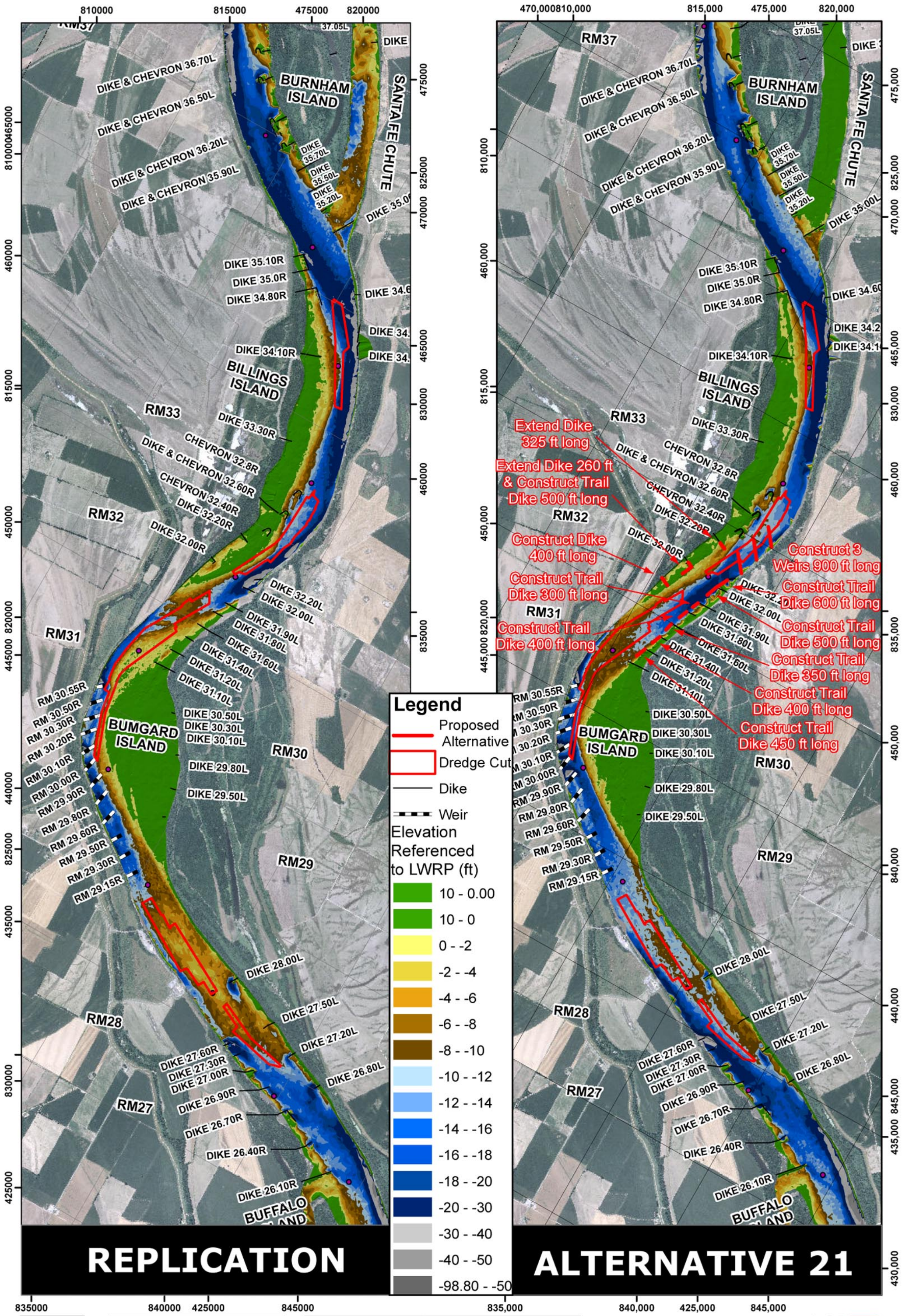

PLATE NUMBER 59

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 21 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District

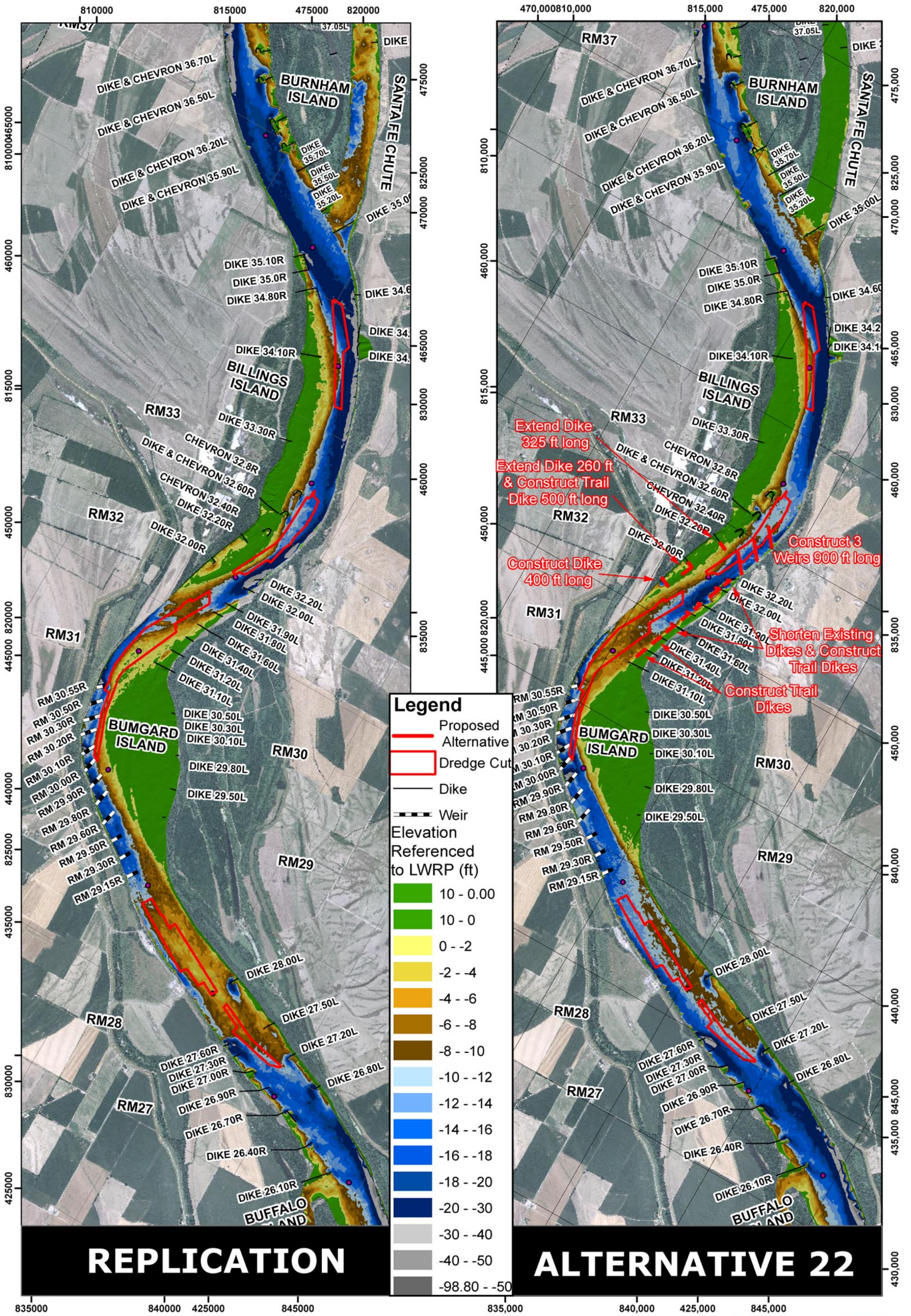

PLATE NUMBER 60

0 1,625 3,250 6,500
Feet

Replication Scan vs. Alternative 22
Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
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CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District

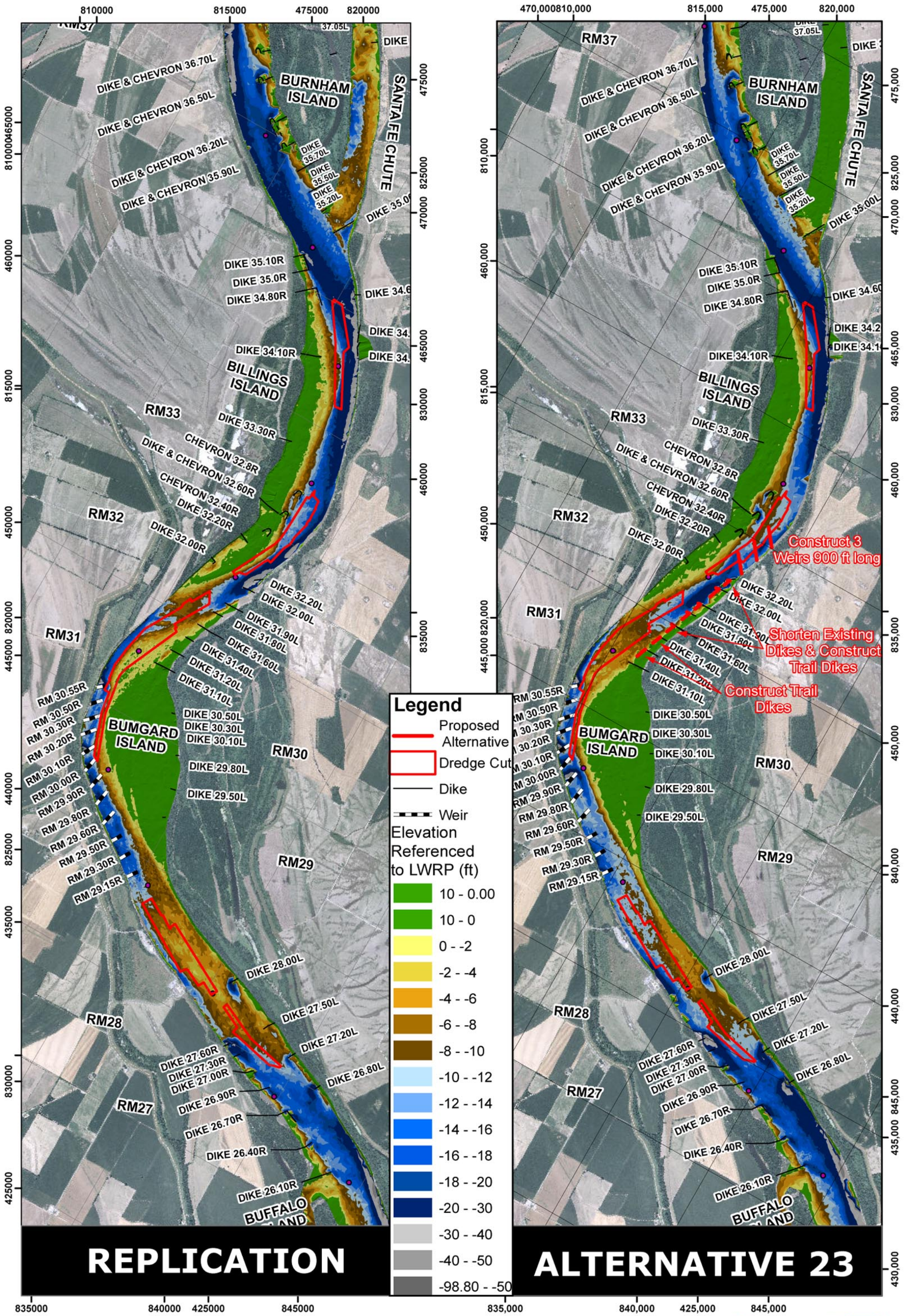

PLATE NUMBER 61

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 23 Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
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RM 36.0 - 25.0

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St. Louis District

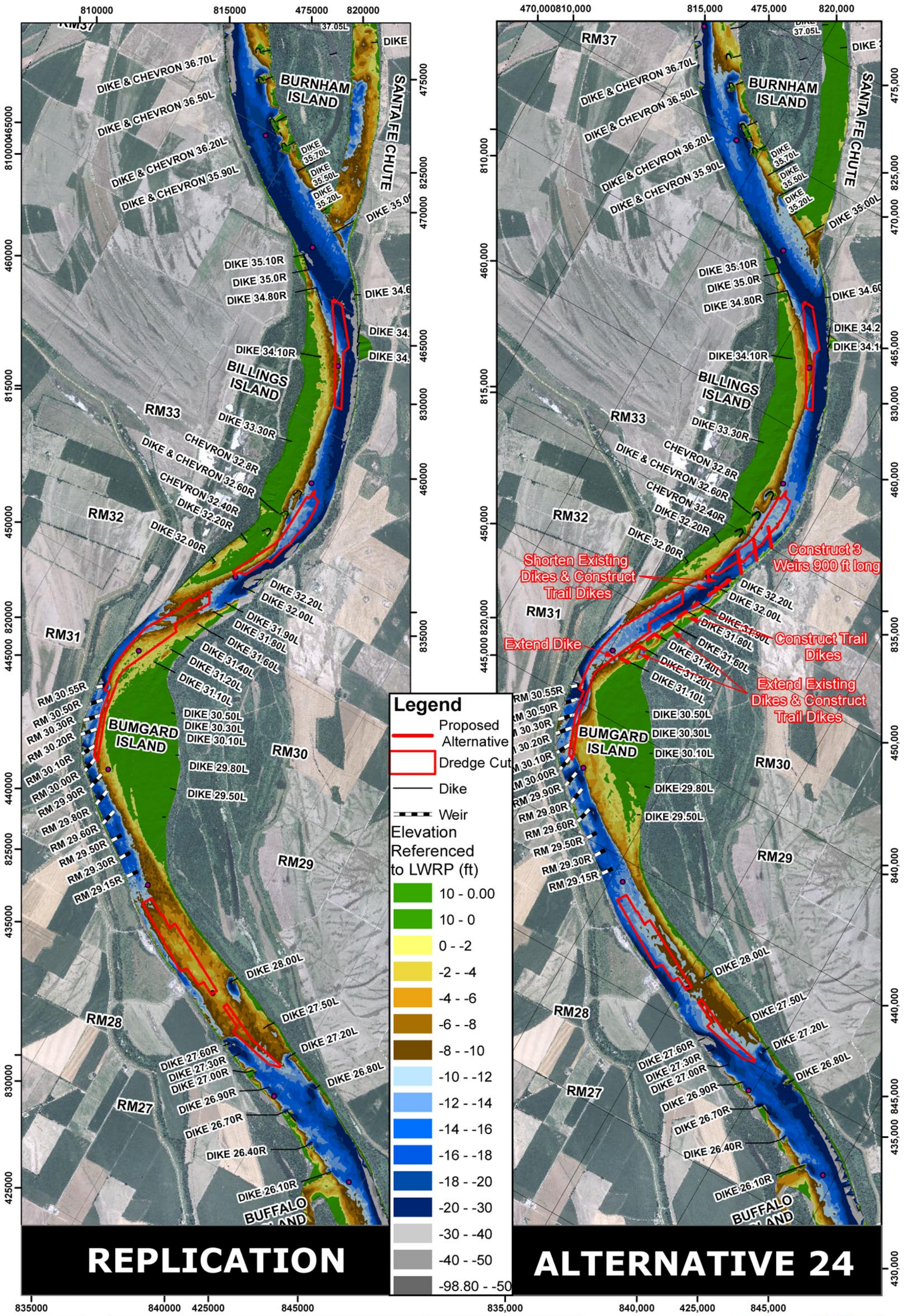

PLATE NUMBER 62

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 24 Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
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CHECKED BY: J Brown, P.E.
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District

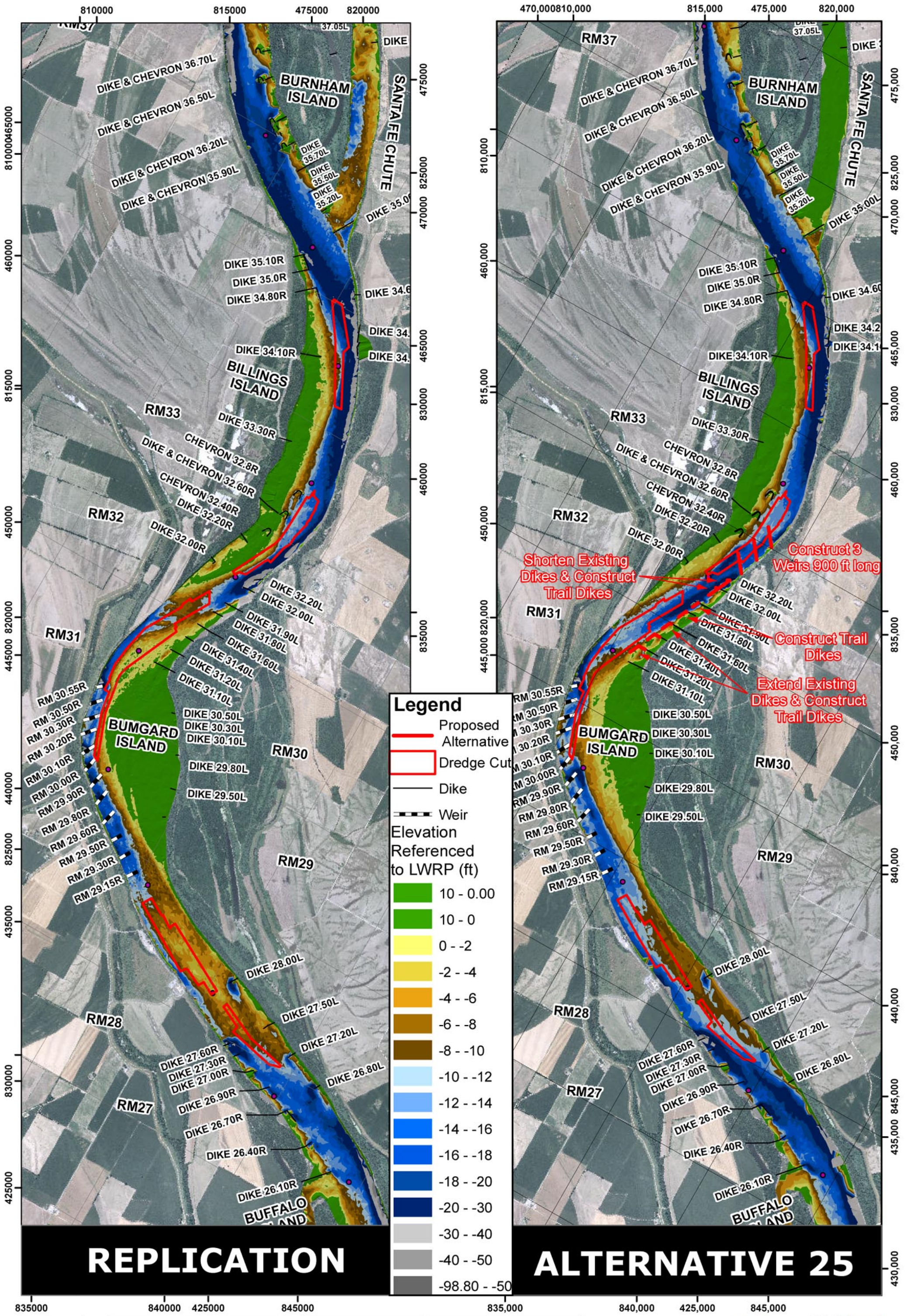

PLATE NUMBER 63

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 25 Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
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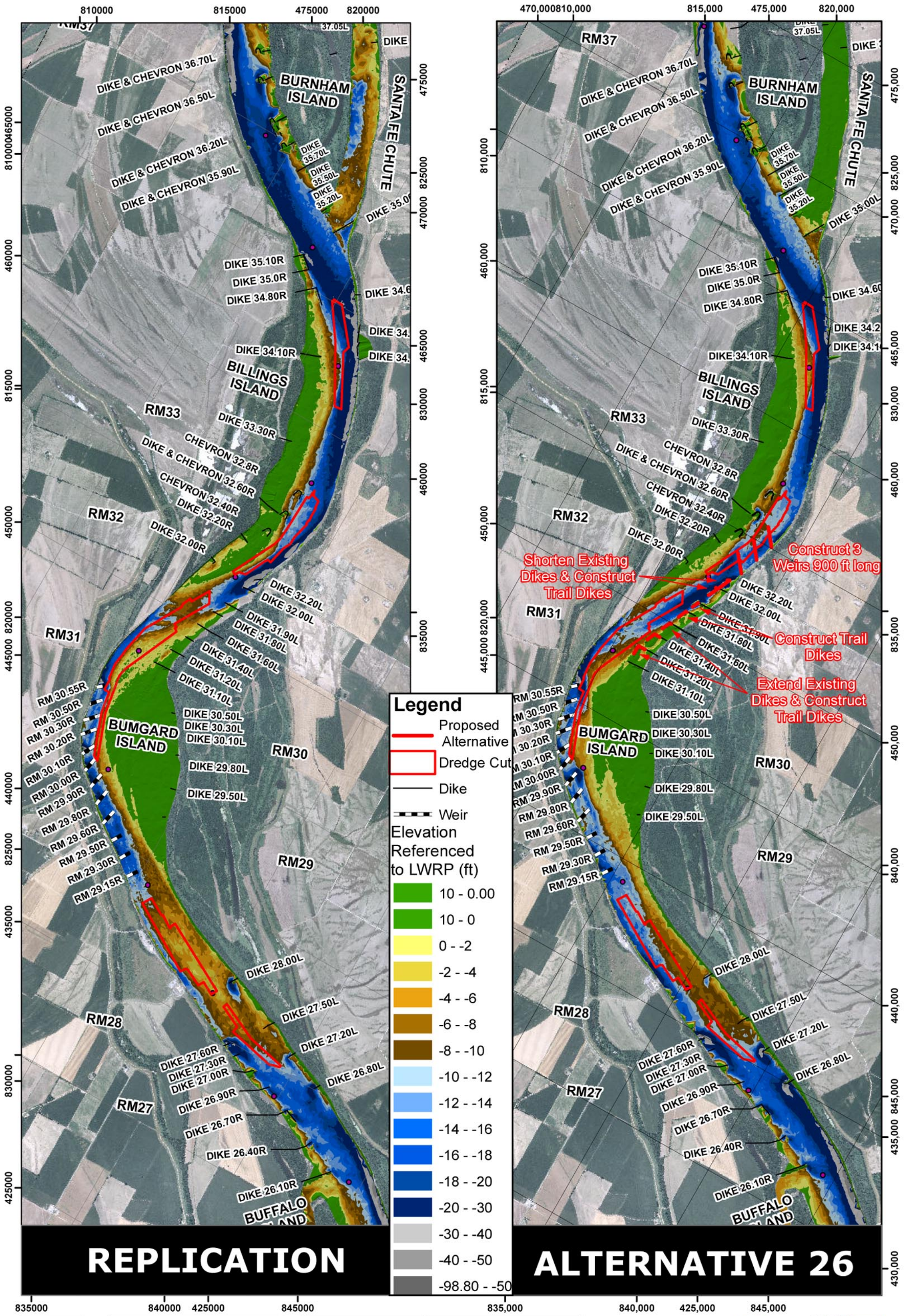

PLATE NUMBER 64

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 26 Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
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RM 36.0 - 25.0

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CHECKED BY: J Brown, P.E.
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APPROVED: Rob Davinroy, P.E.
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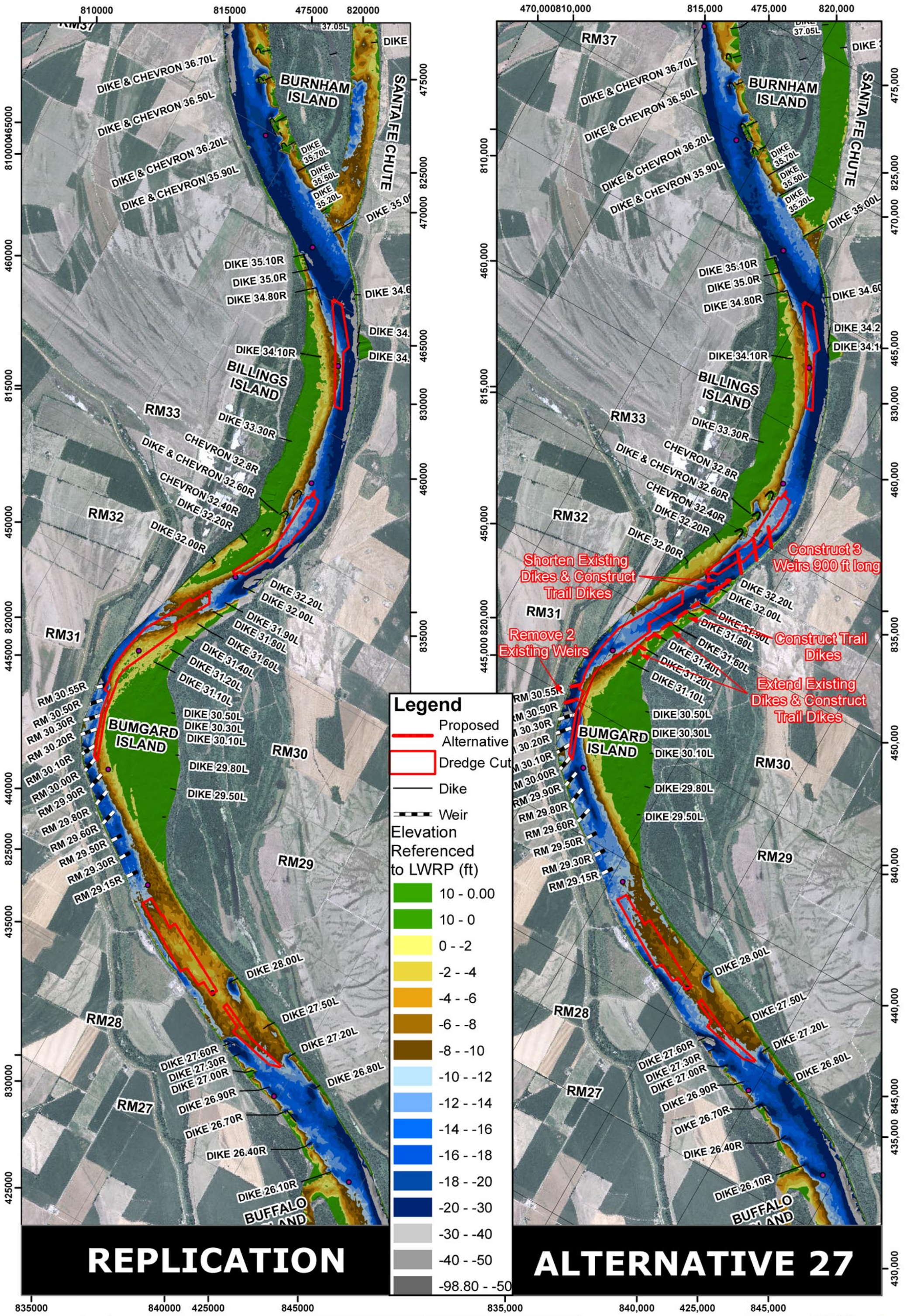

PLATE NUMBER 65

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 27 Bathymetry Results

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

Mississippi River Basin
St. Louis District
Bumgard Island
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CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

US Army Corps of Engineers
St. Louis District
APPLIED RIVER ENGINEERING CENTER

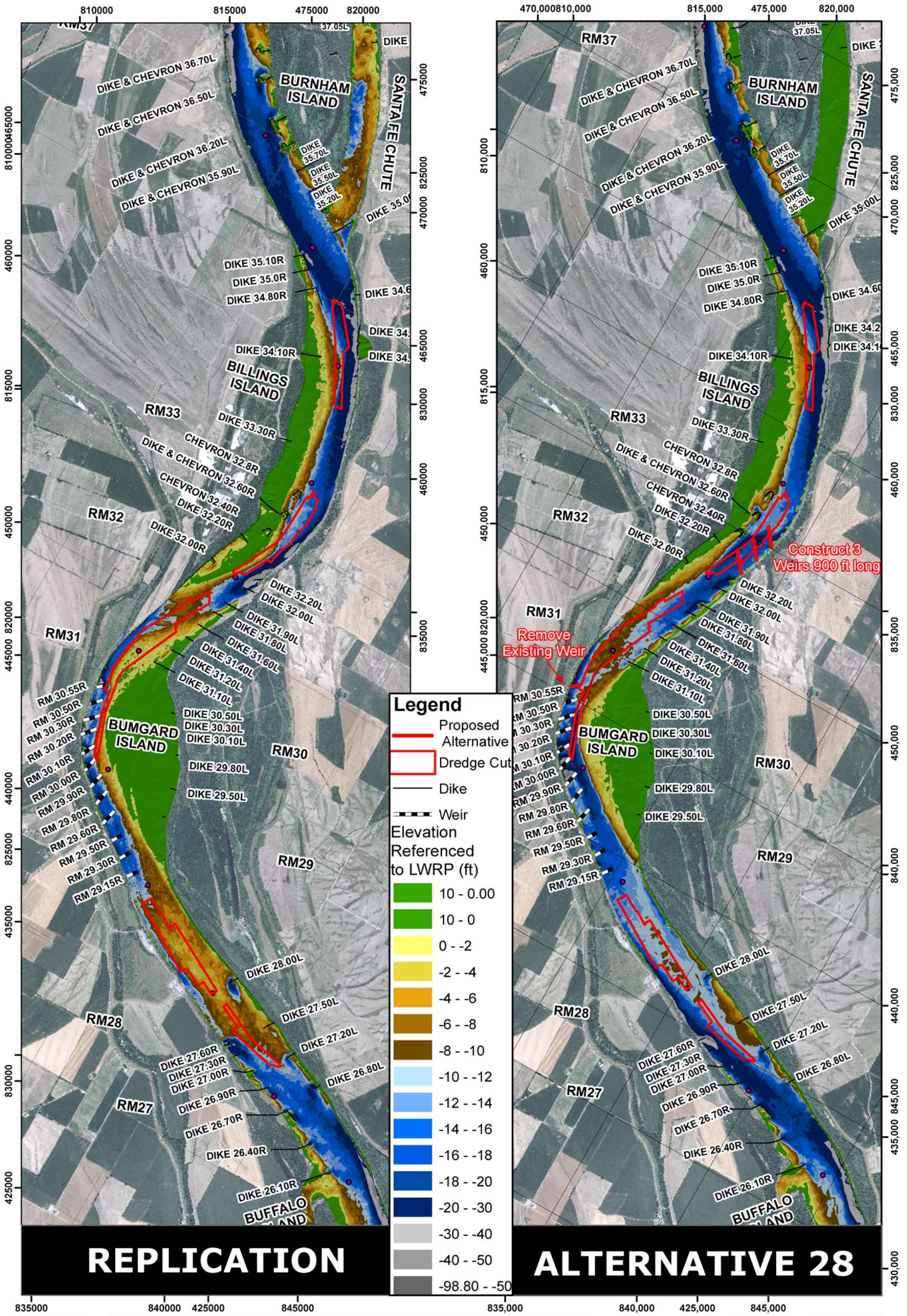

PLATE NUMBER 66

Replication Scan vs. Alternative 28 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

US Army Corps of Engineers
St. Louis District
Applied River Engineering Center

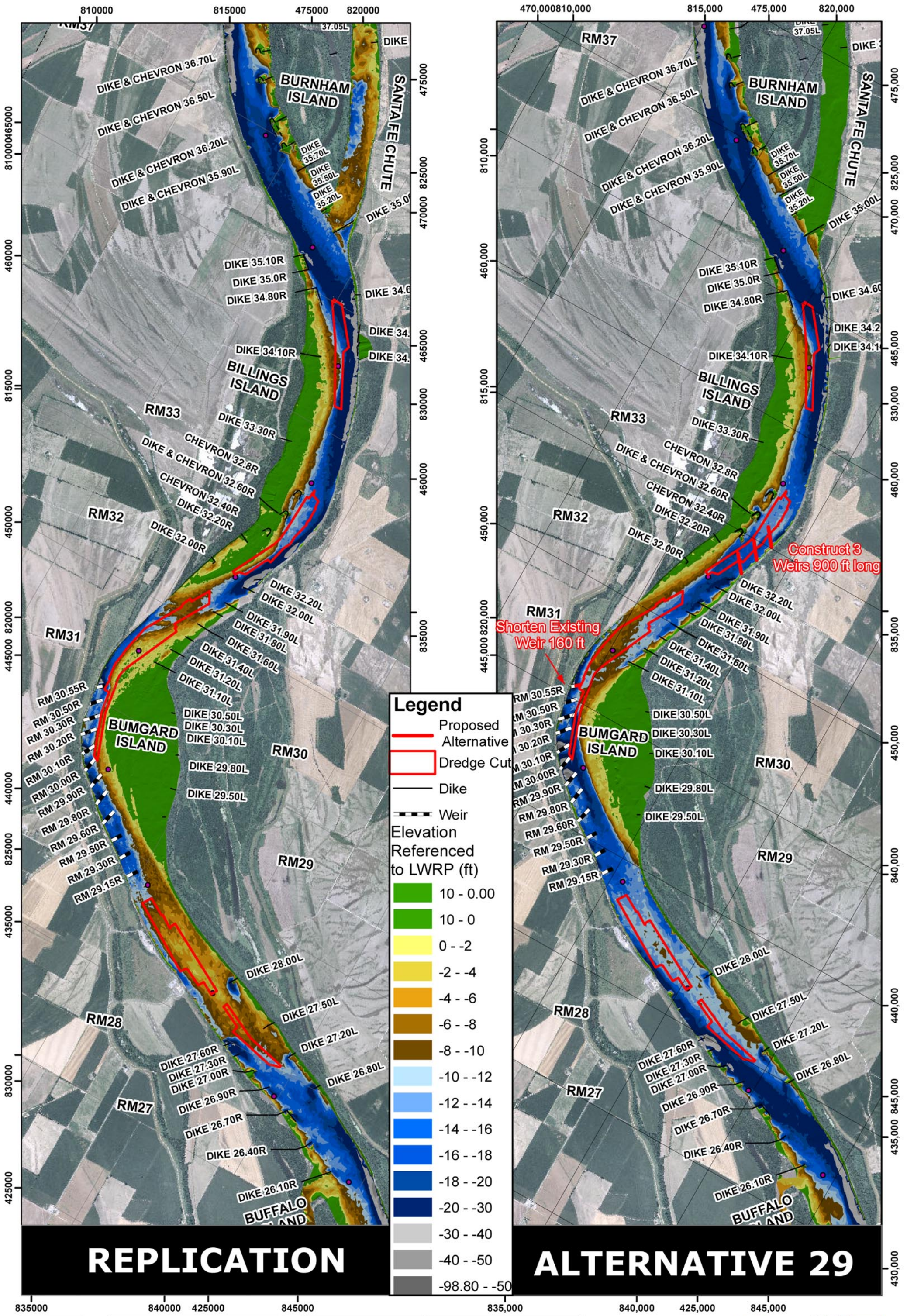

PLATE NUMBER 67

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 29 Bathymetry Results

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

Mississippi River Basin
St. Louis District
Bumgard Island
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District
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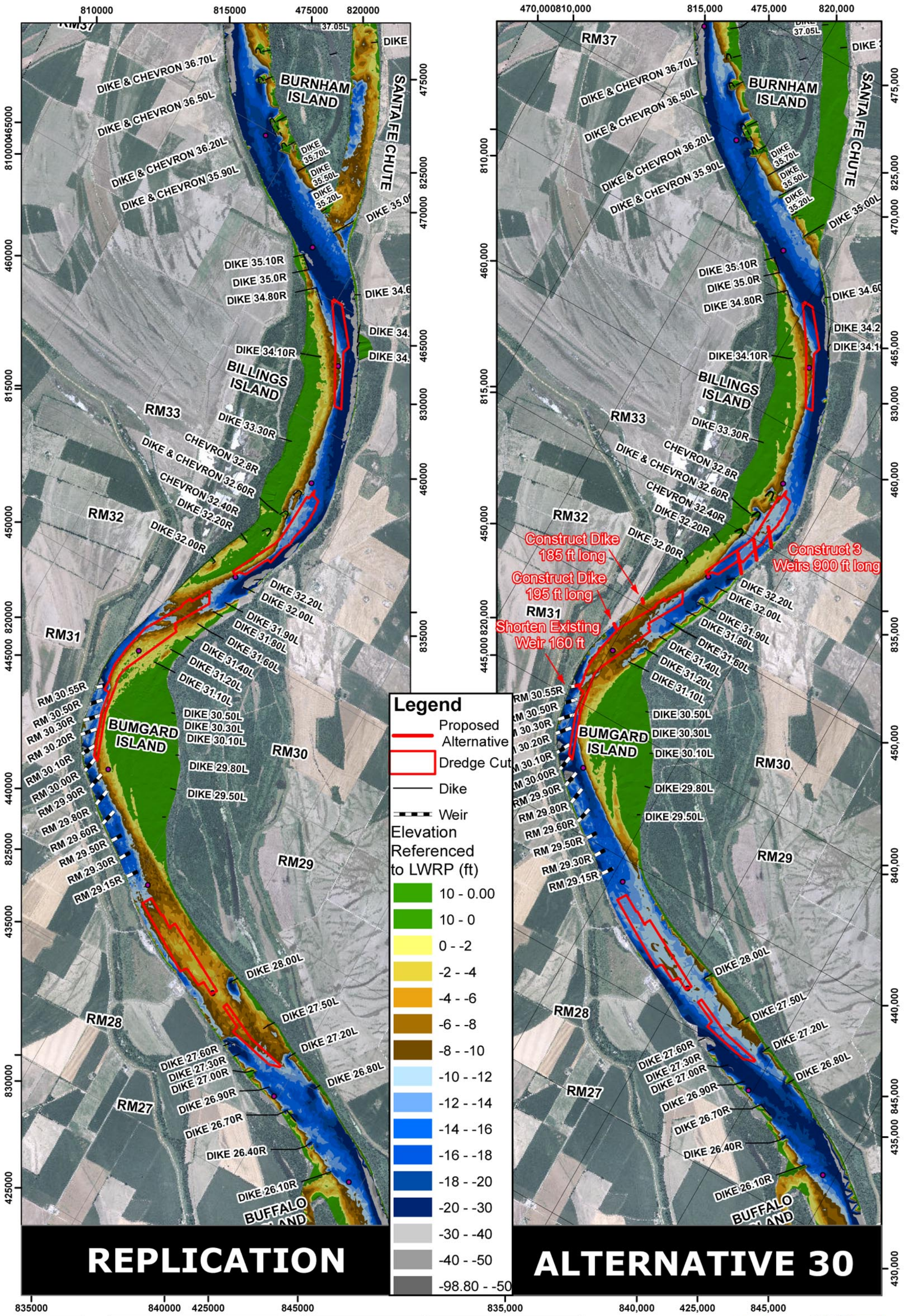

PLATE NUMBER 68

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 30 Bathymetry Results

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ST. LOUIS, MISSOURI

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Bumgard Island
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DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

APPLIED RIVER ENGINEERING CENTER

US Army Corps of Engineers
St. Louis District

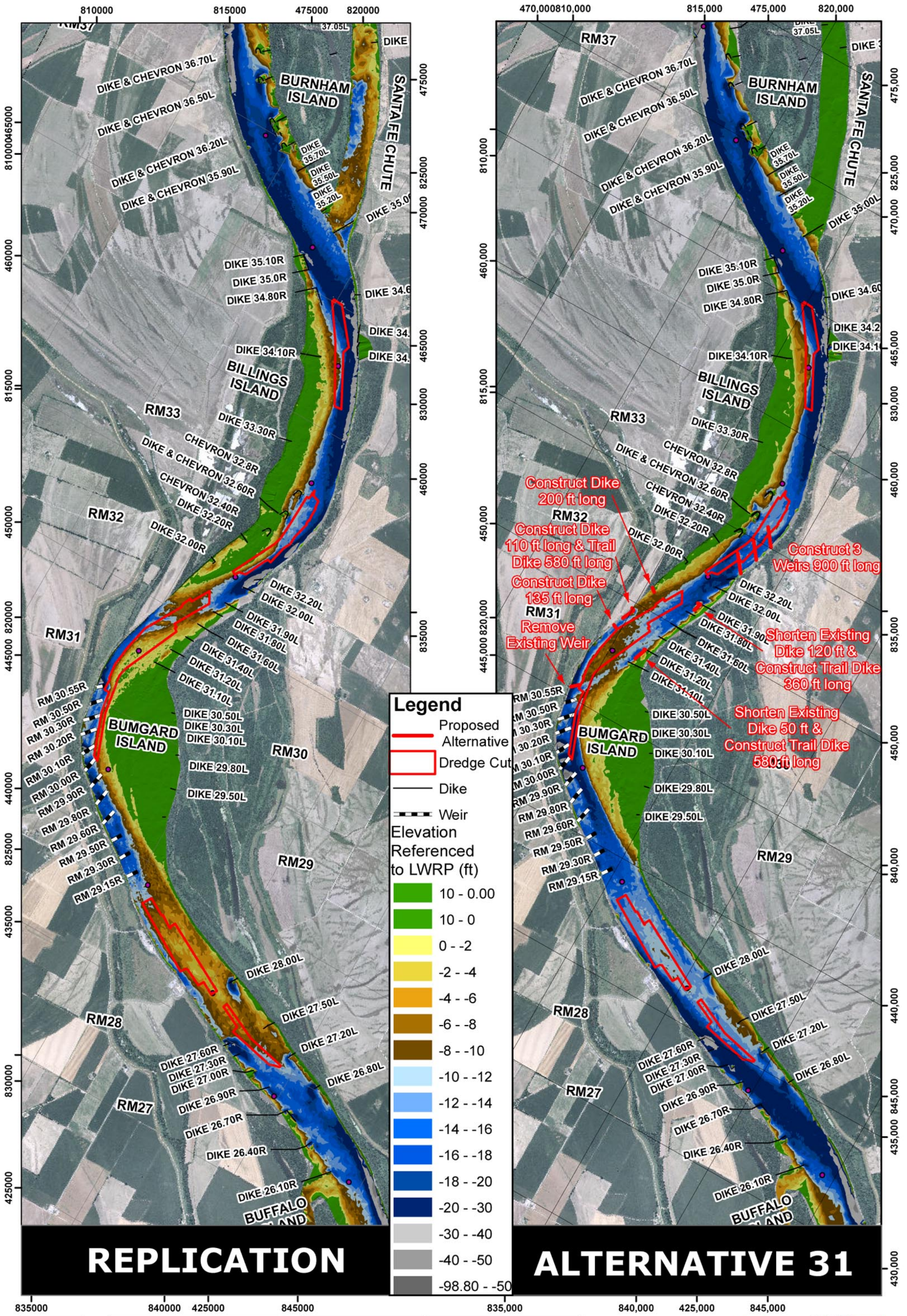

PLATE NUMBER 69

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 31 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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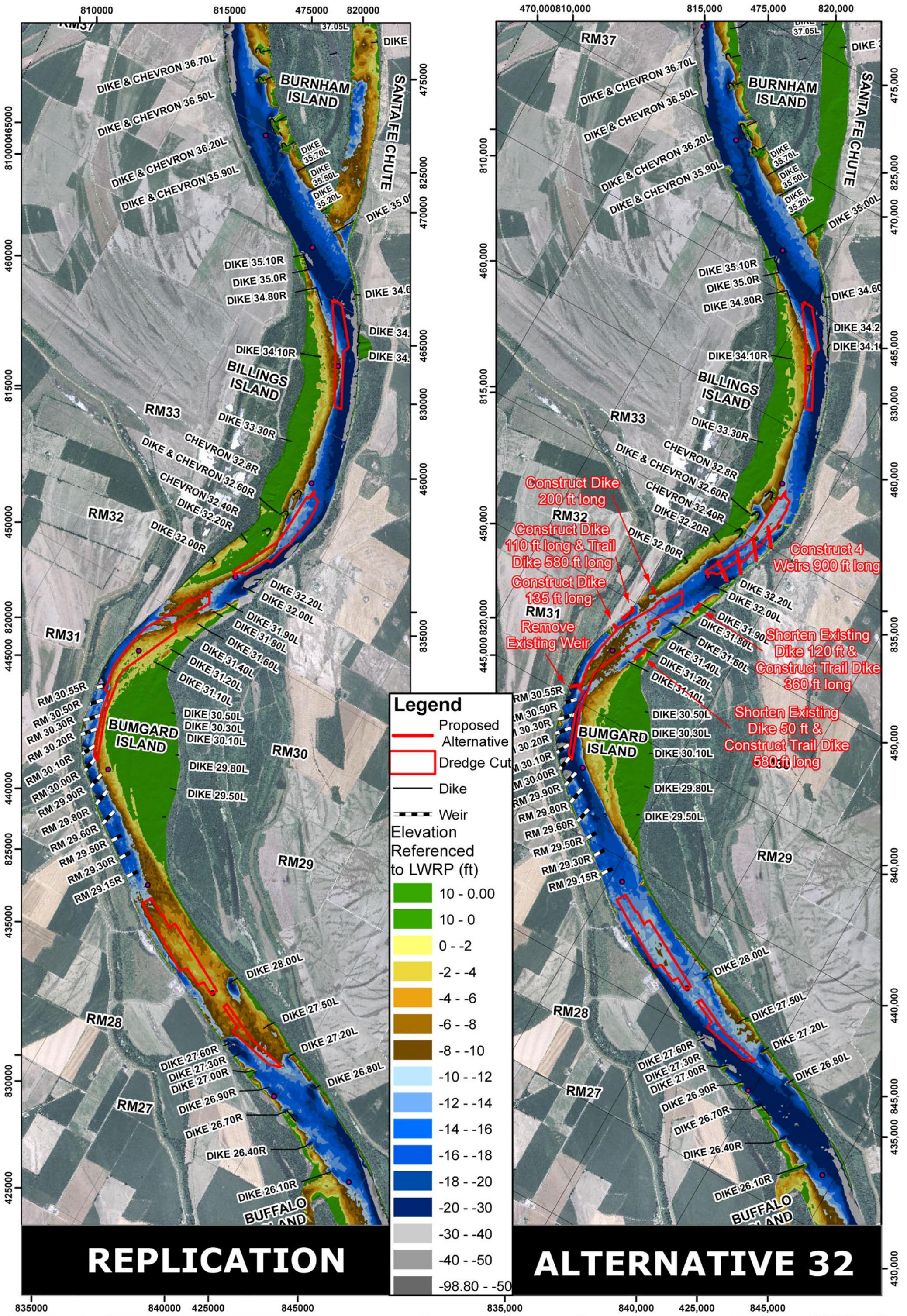

PLATE NUMBER 70

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 32 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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SUBMITTED: K. Clancey
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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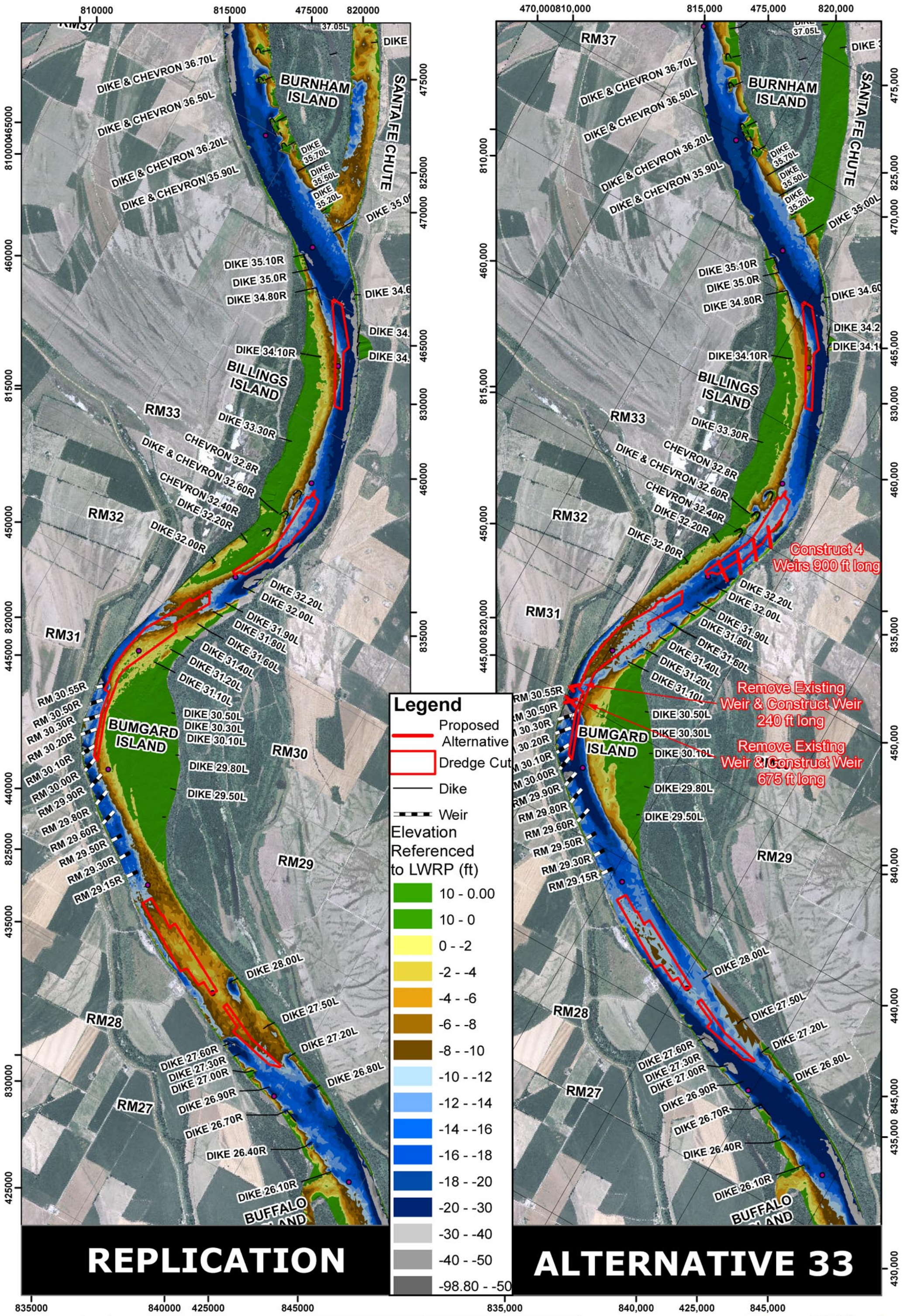

PLATE NUMBER 71

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 33 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District
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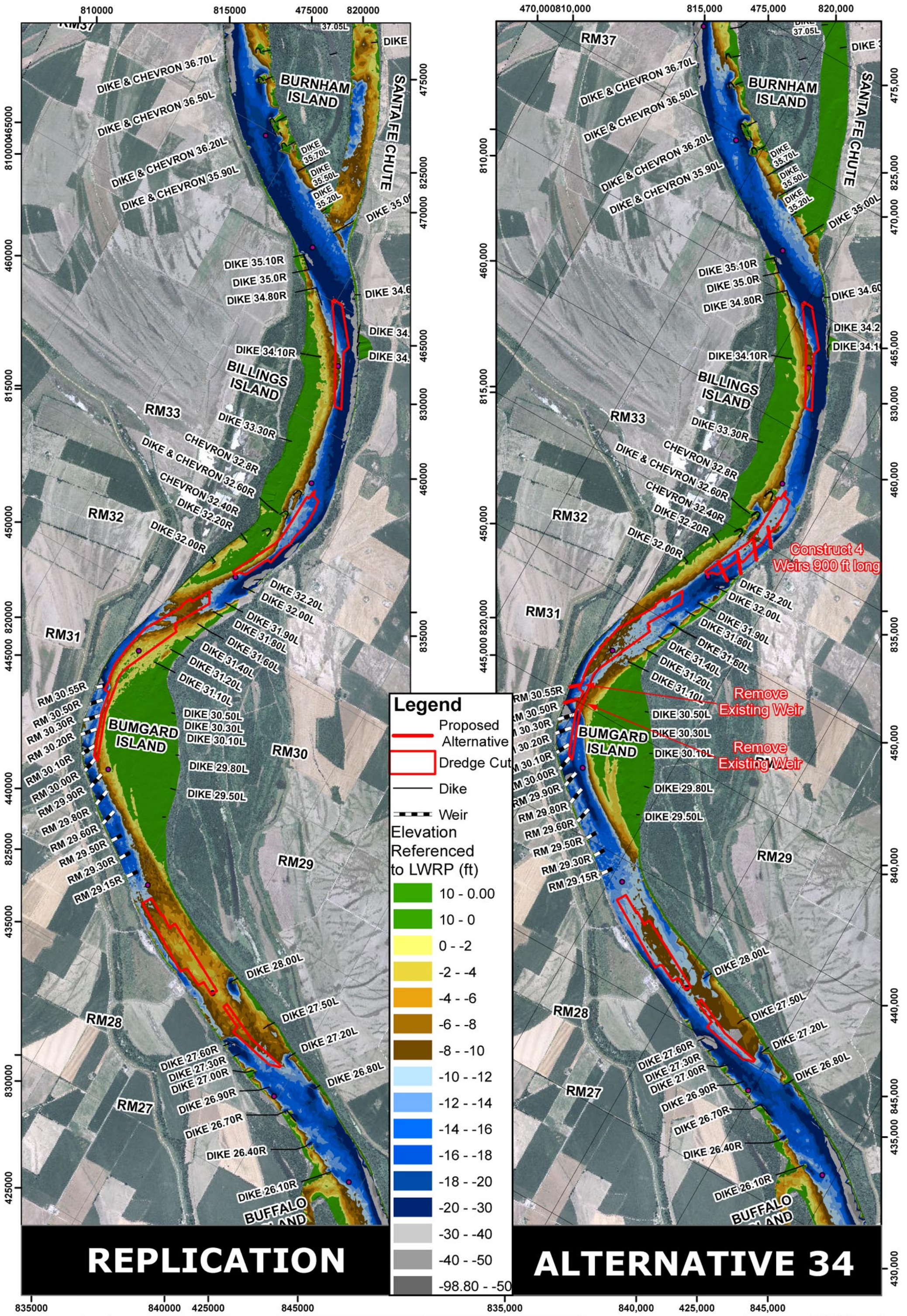

PLATE NUMBER 72

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 34 Bathymetry Results

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CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District
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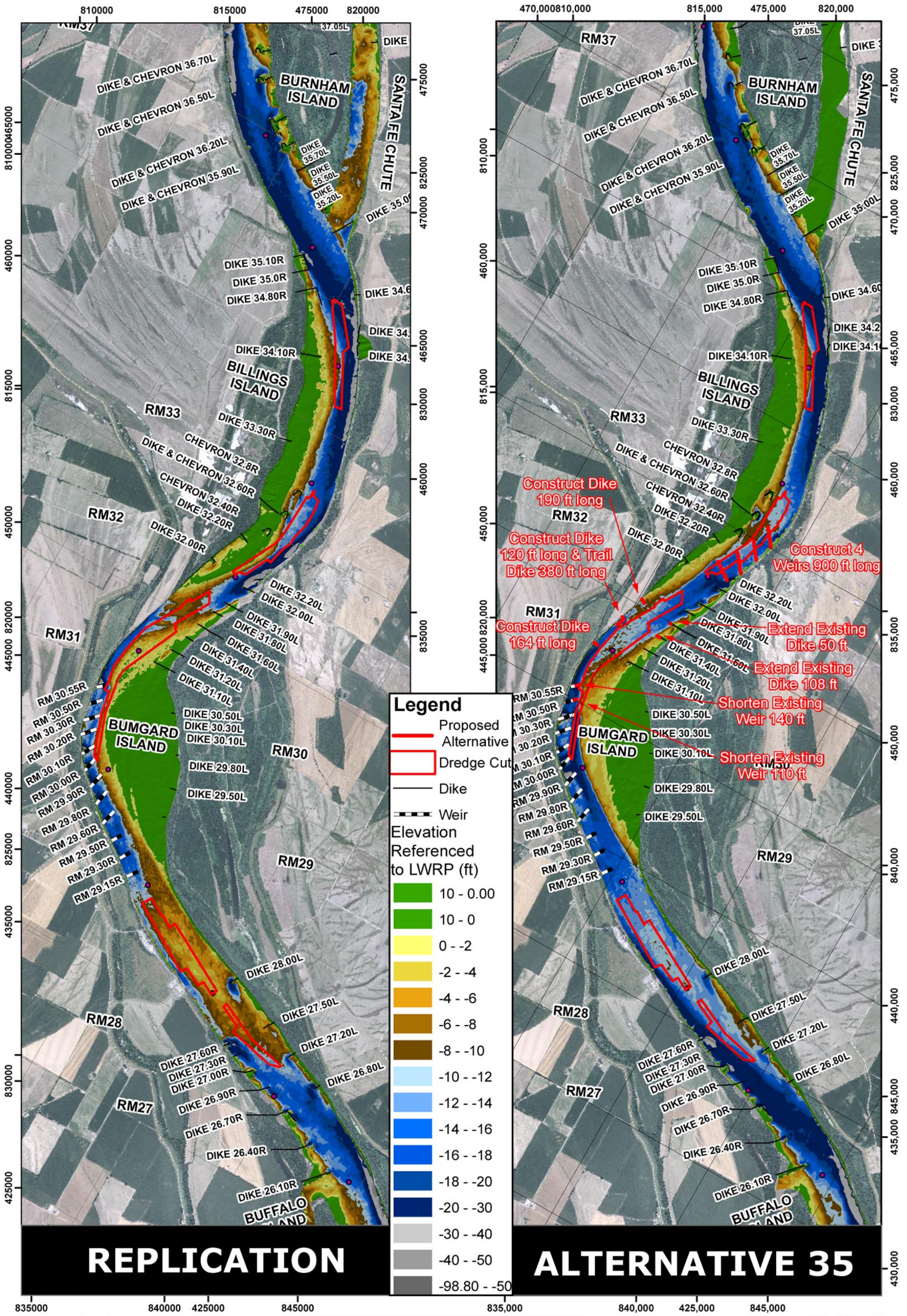

PLATE NUMBER 73

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 35 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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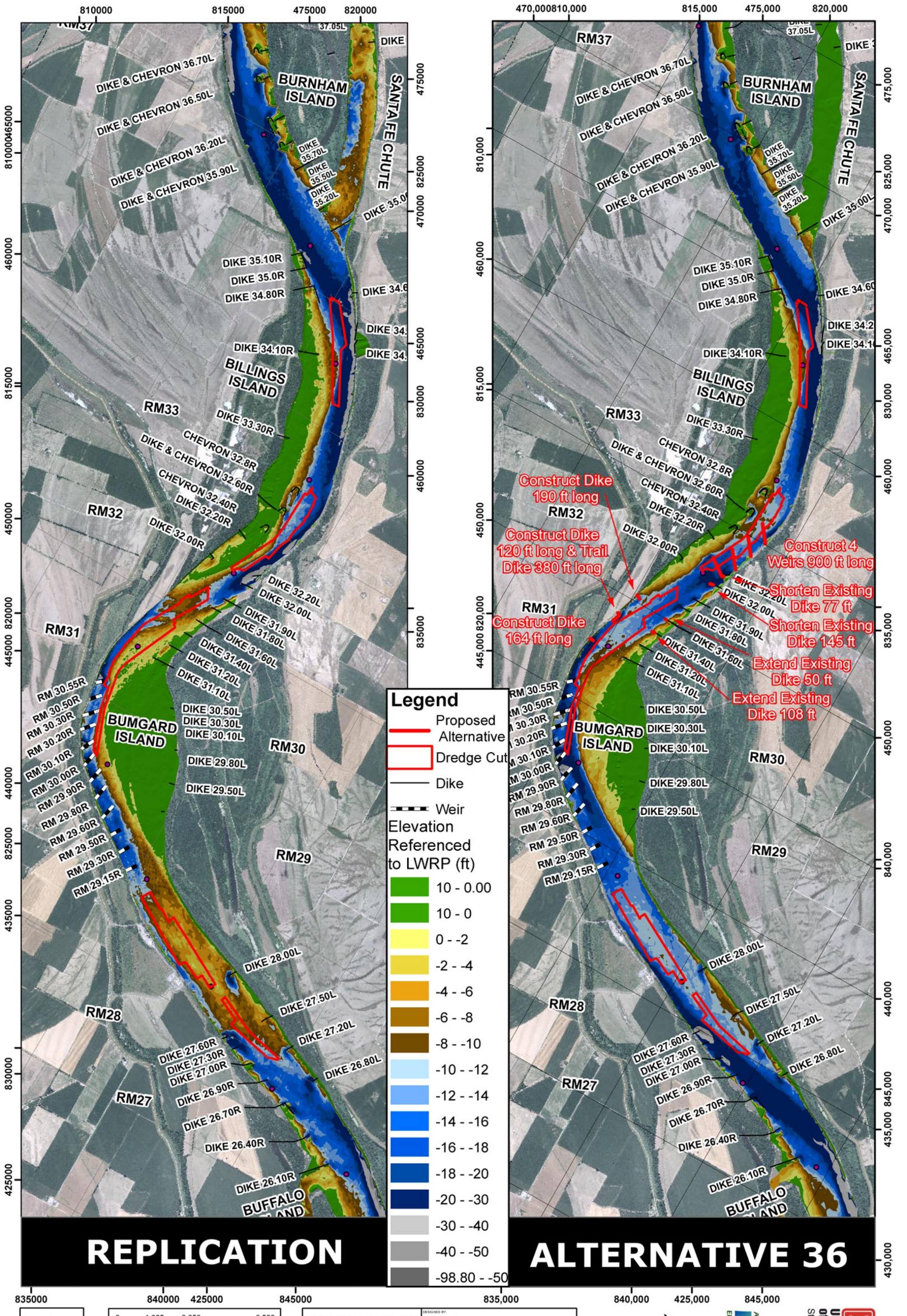

PLATE NUMBER 74

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 36 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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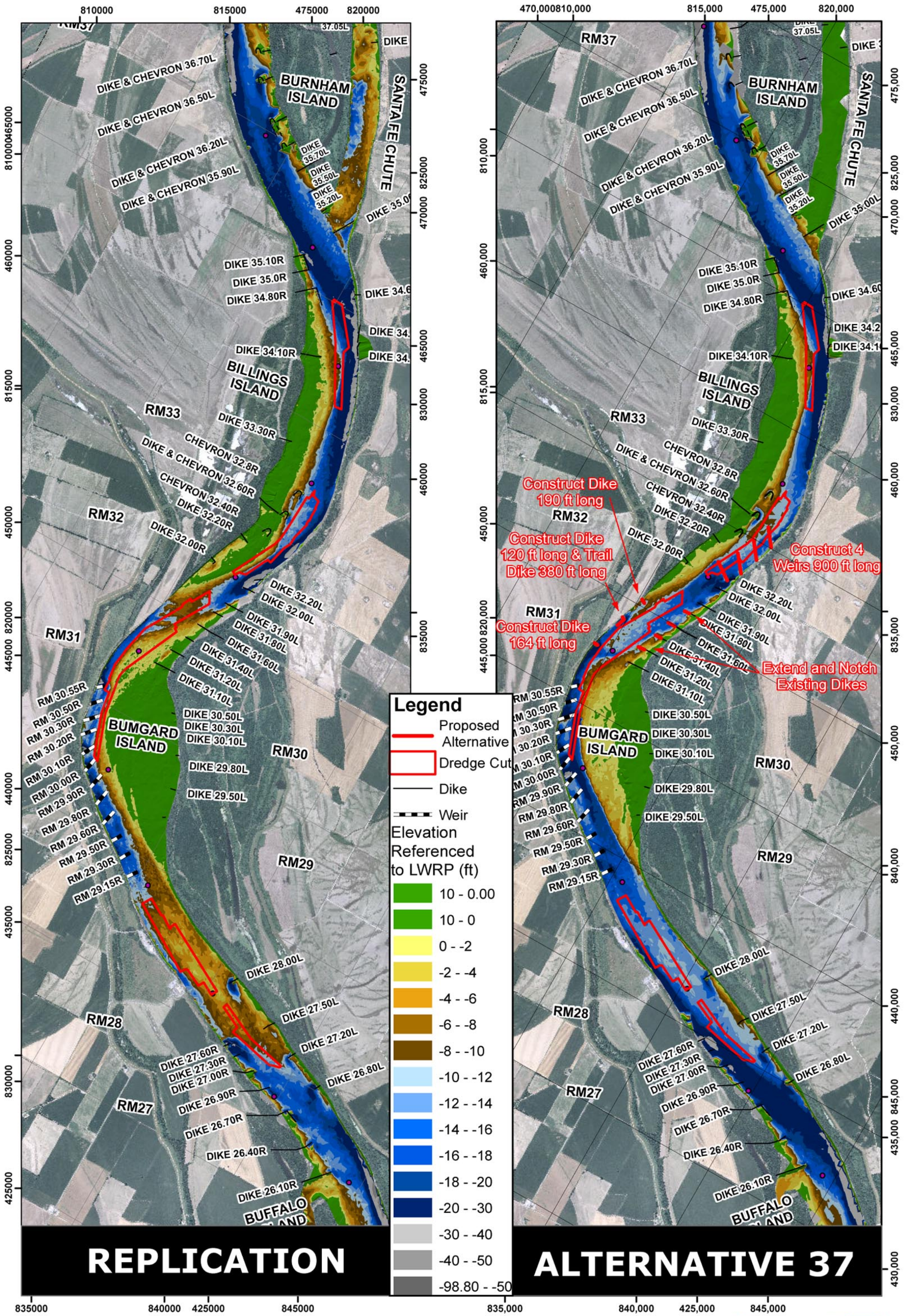

PLATE NUMBER 75

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 37 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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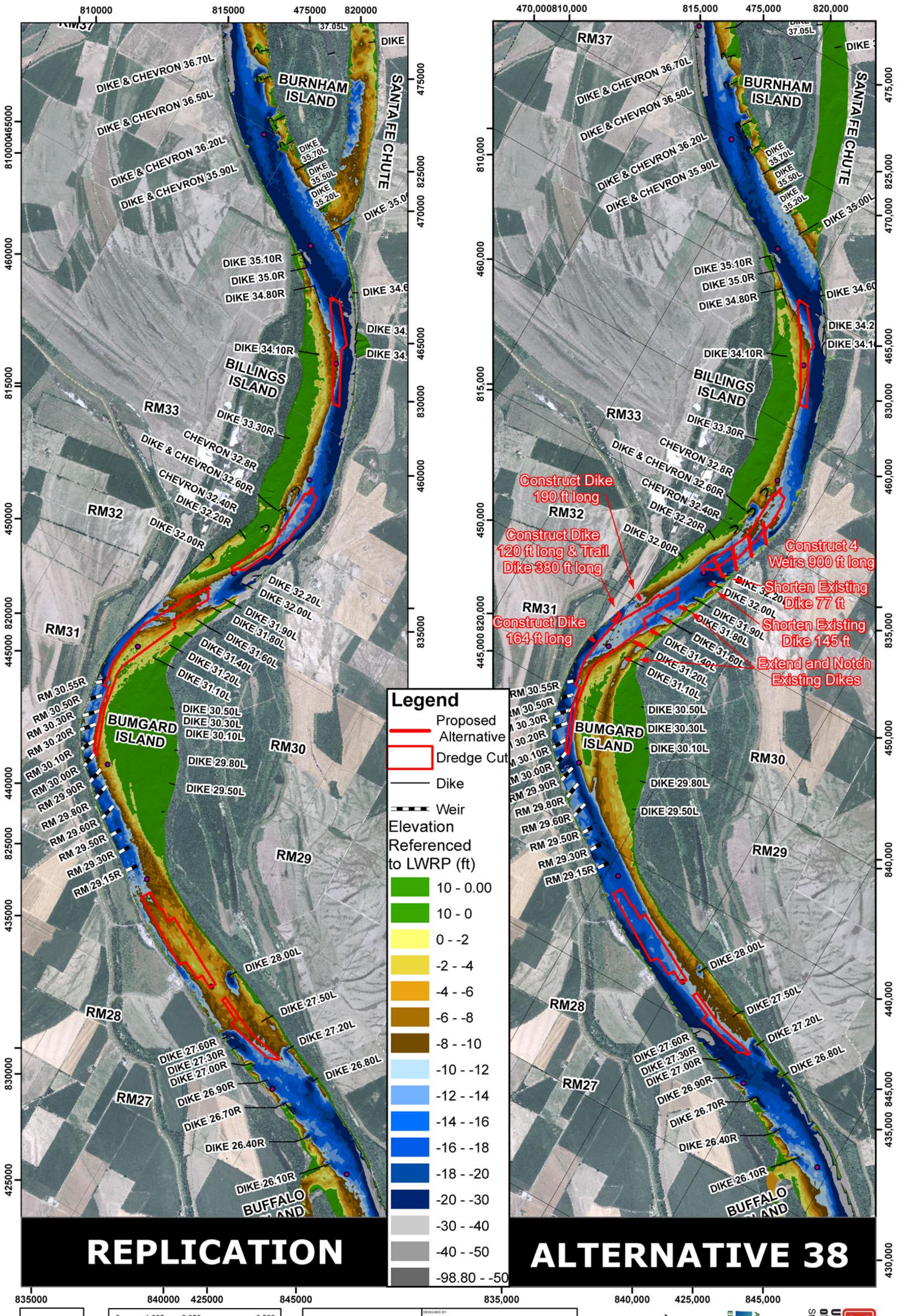

PLATE NUMBER 76

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 38 Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
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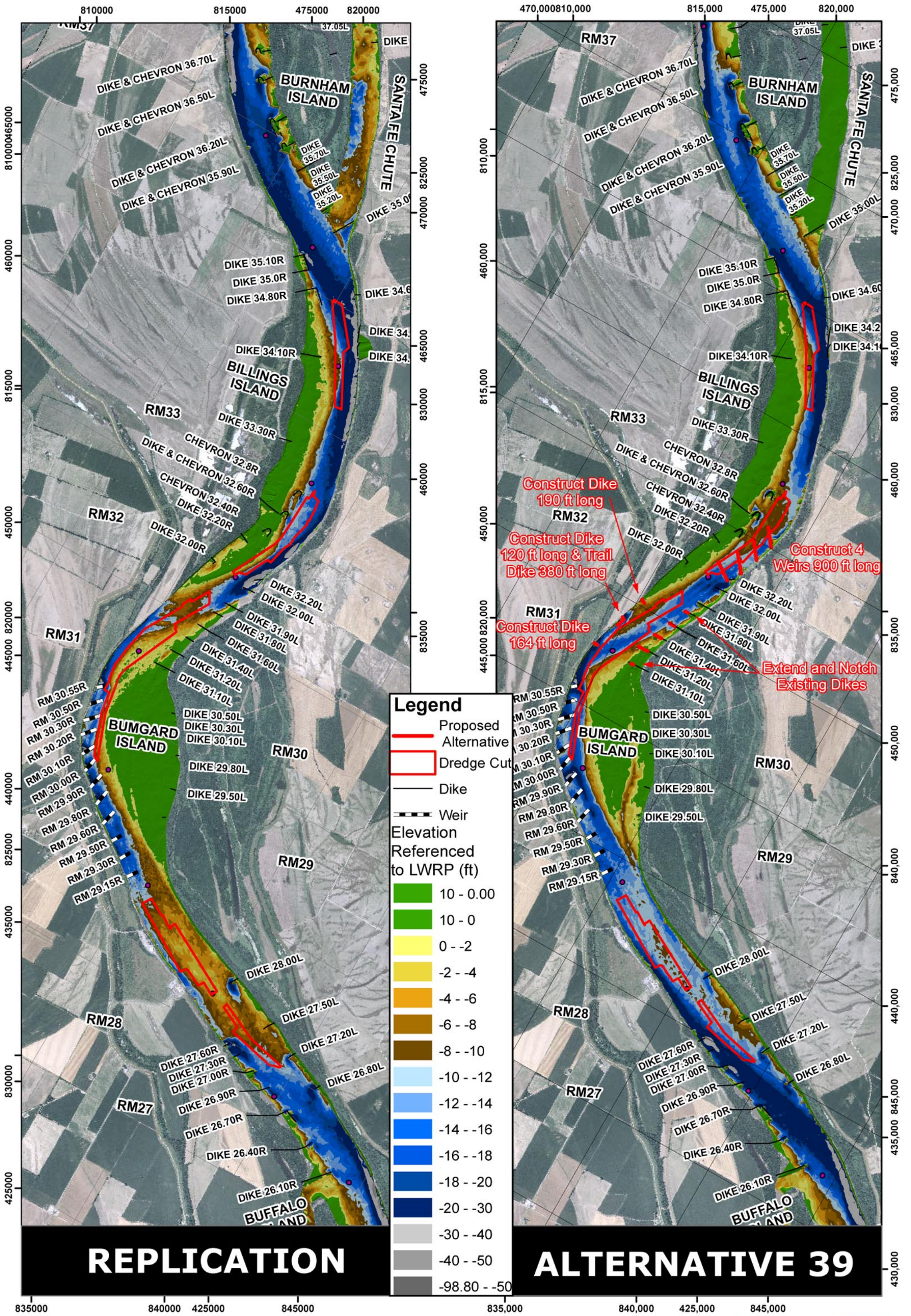

PLATE NUMBER 77

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 39 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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CHECKED BY: J Brown, P.E.
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APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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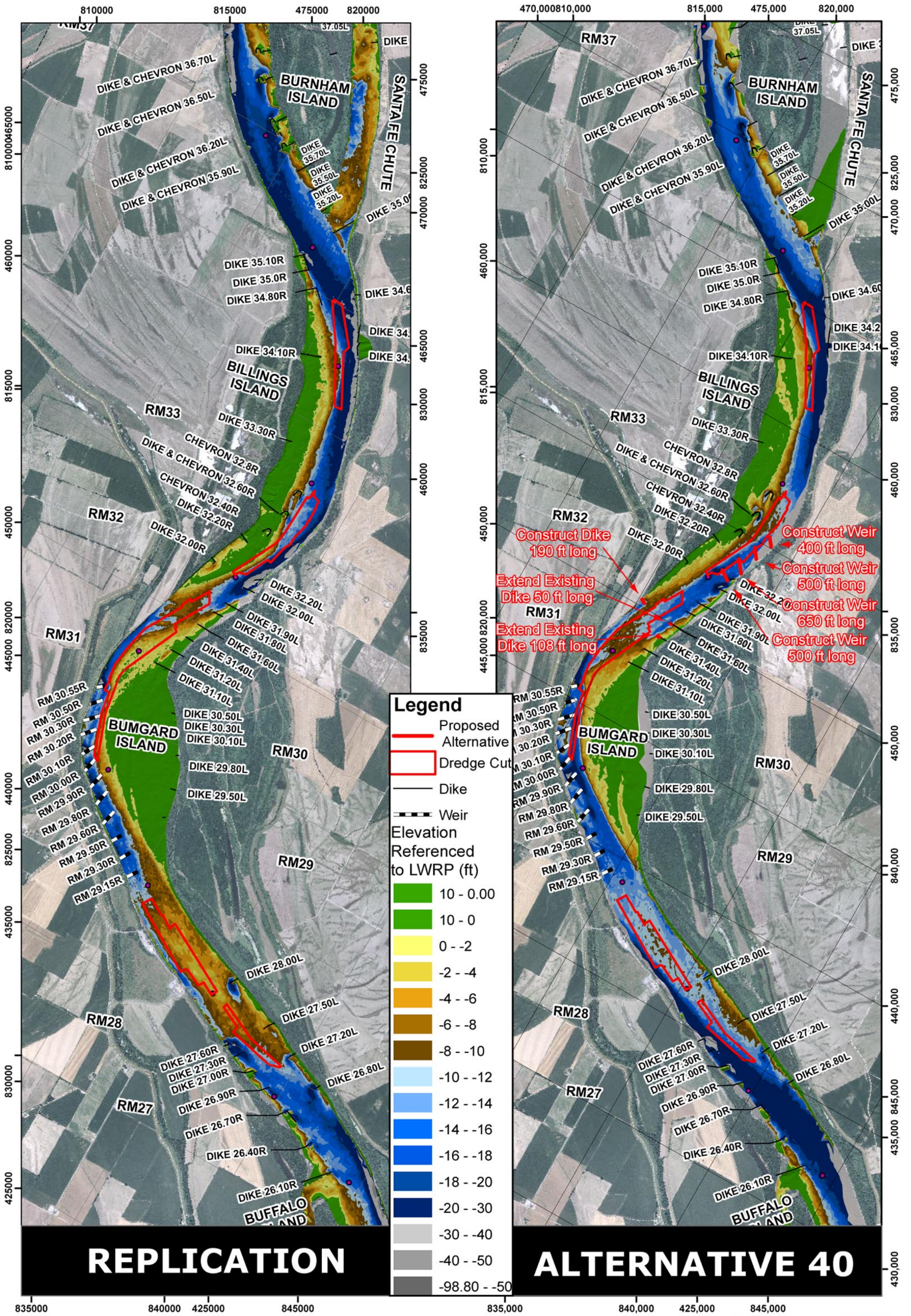

PLATE NUMBER 78

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 40 Bathymetry Results

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CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District

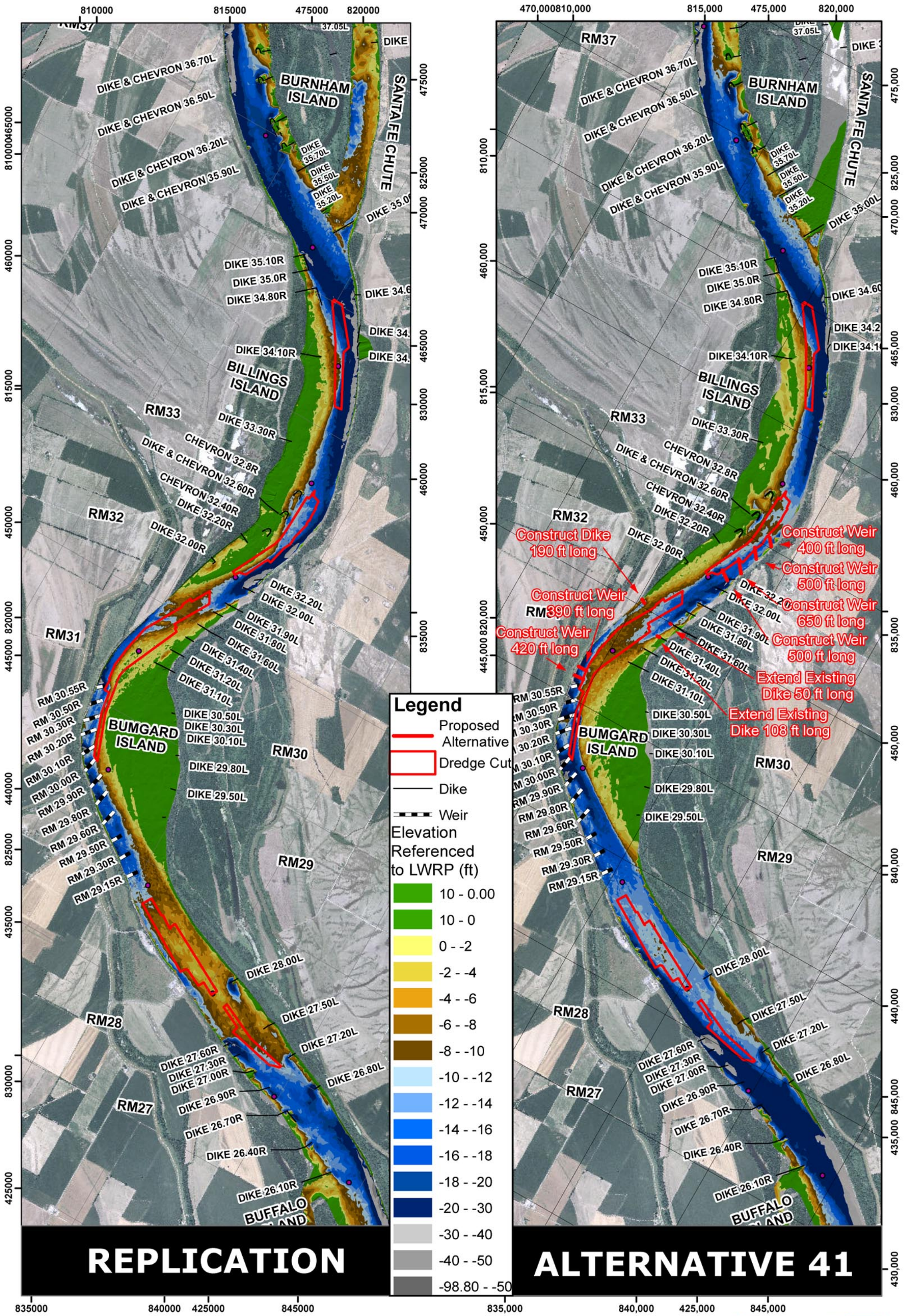

PLATE NUMBER 79

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 41 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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US Army Corps of Engineers
St. Louis District

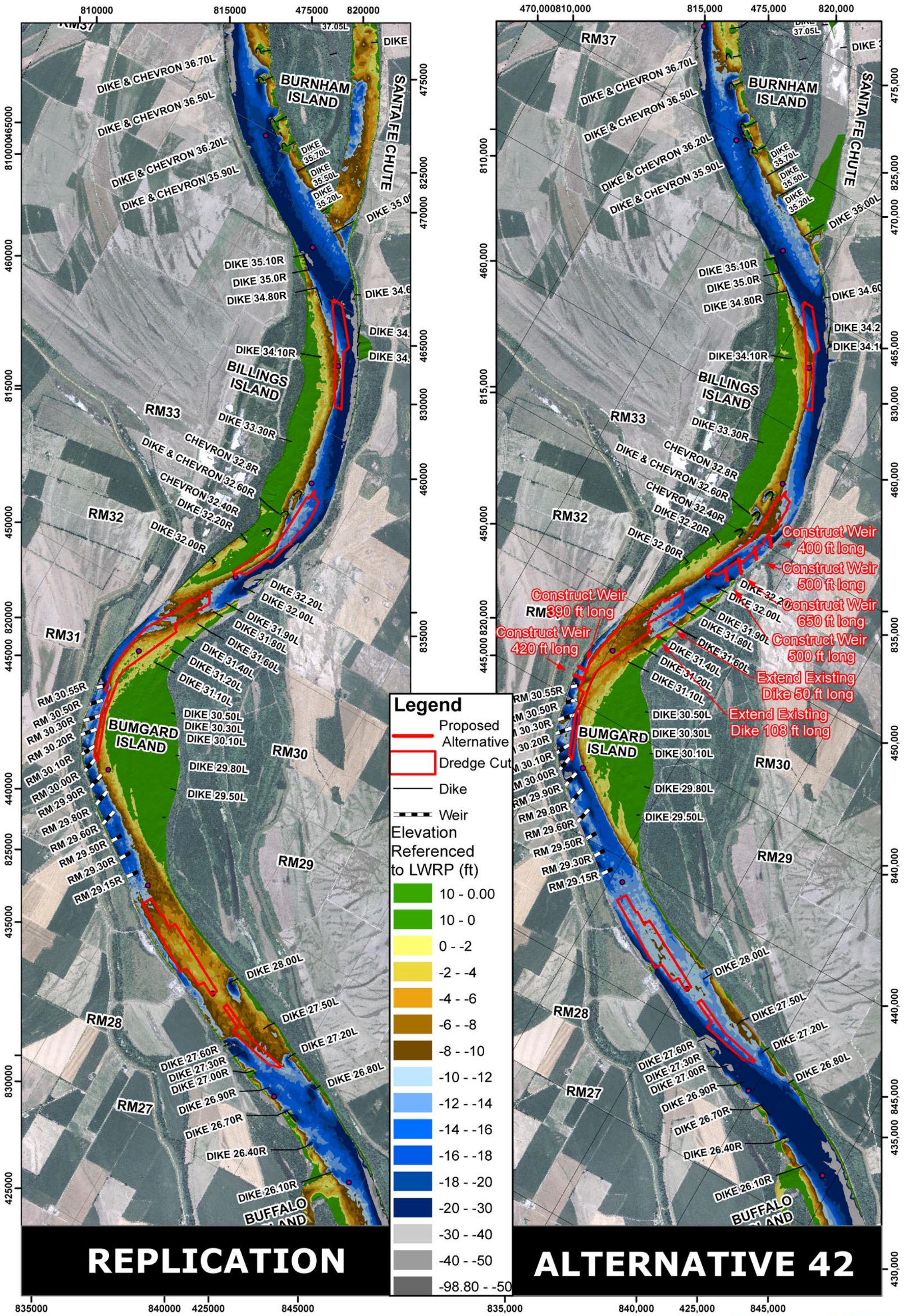

PLATE NUMBER 80

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 42 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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US Army Corps of Engineers
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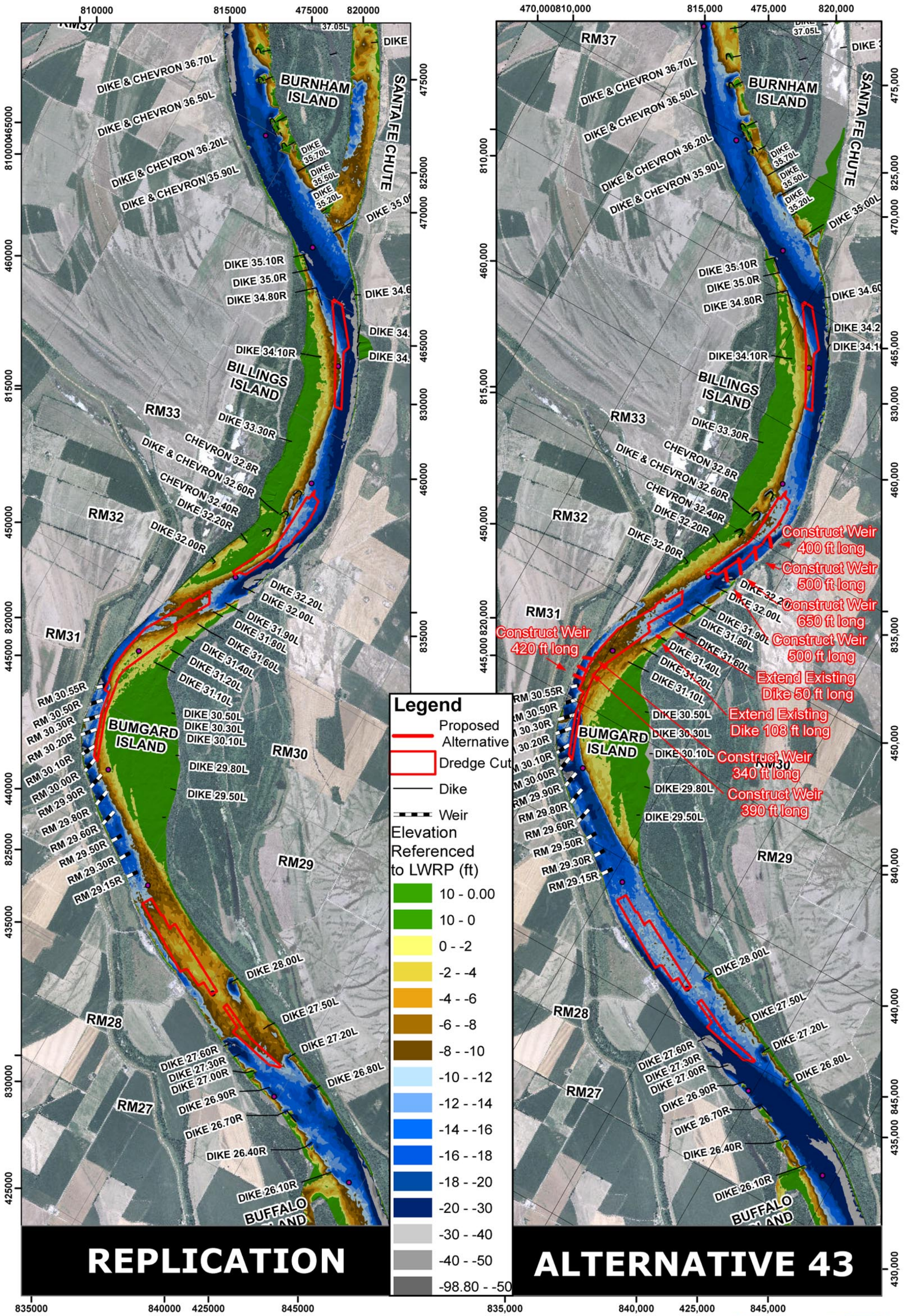

PLATE NUMBER 81

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 43 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District

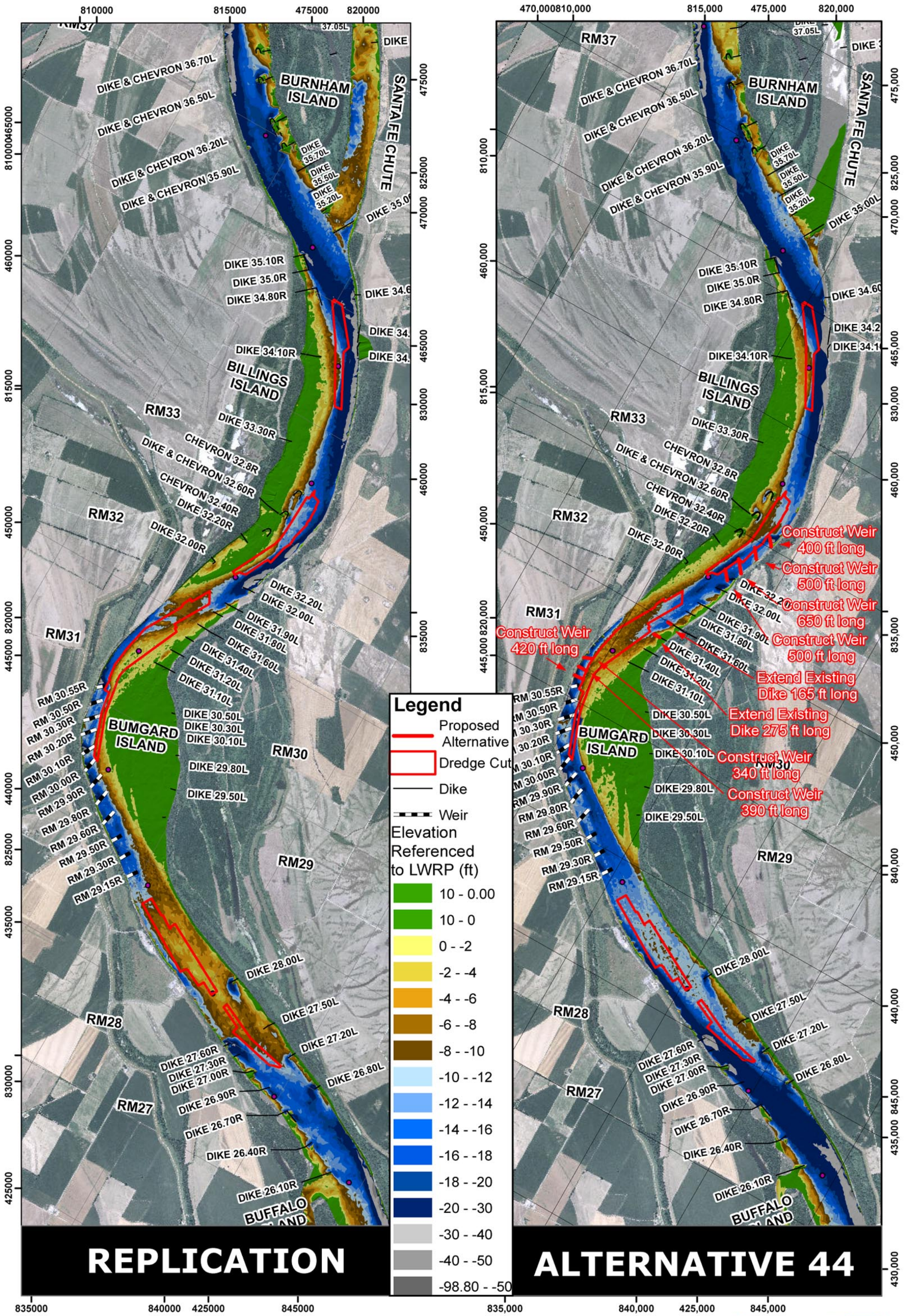

PLATE NUMBER 82

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 44 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District

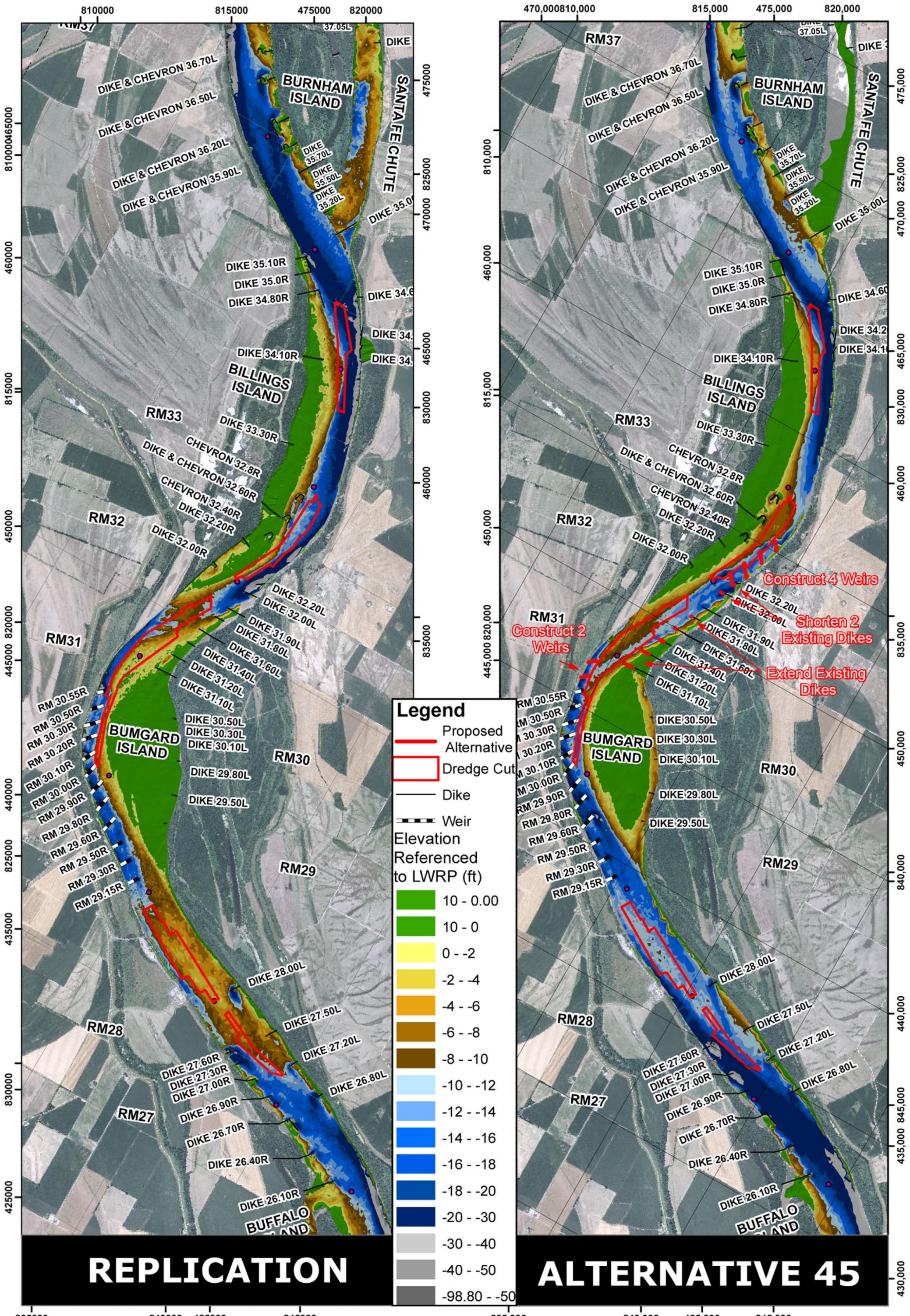

PLATE NUMBER 83

0 1,625 3,250 6,500
Feet

Replication Scan vs. Alternative 45
Bathymetry Results

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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CHECKED BY: J Brown, P.E.
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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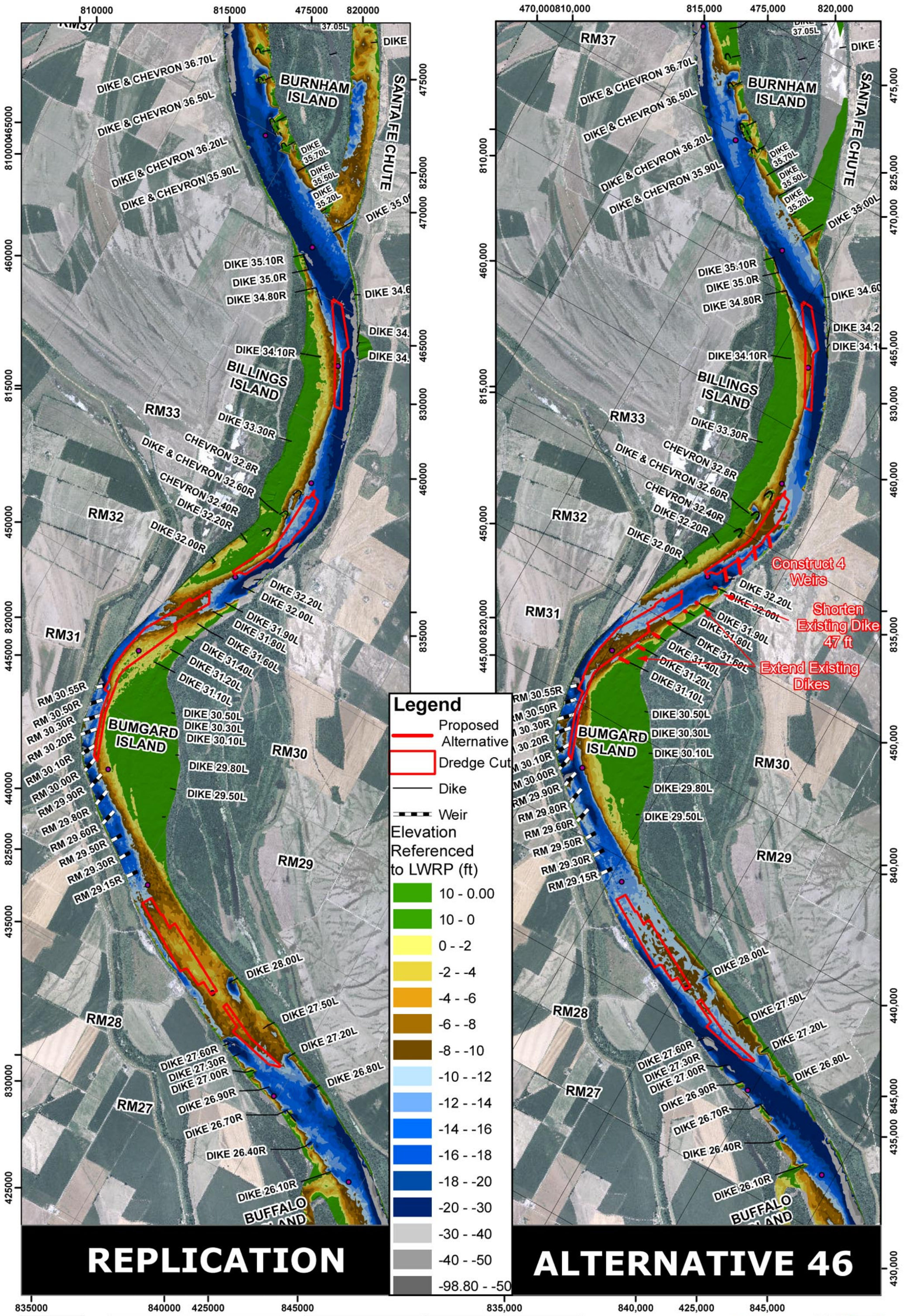

PLATE NUMBER 84

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 46 Bathymetry Results

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CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
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REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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US Army Corps of Engineers
St. Louis District

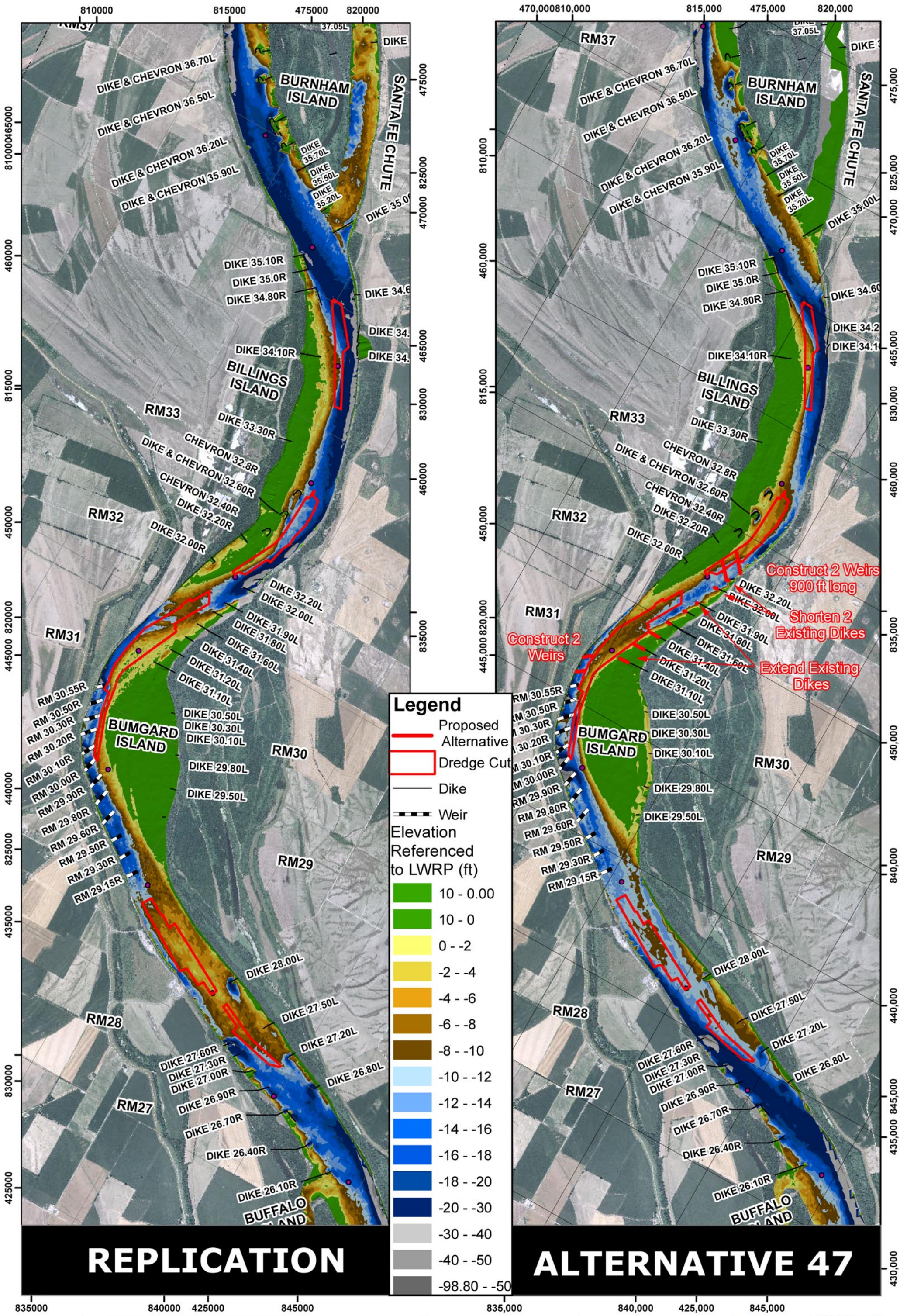

PLATE NUMBER 85

0 1,625 3,250 6,500
Feet

Replication Scan vs. Alternative 47
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District
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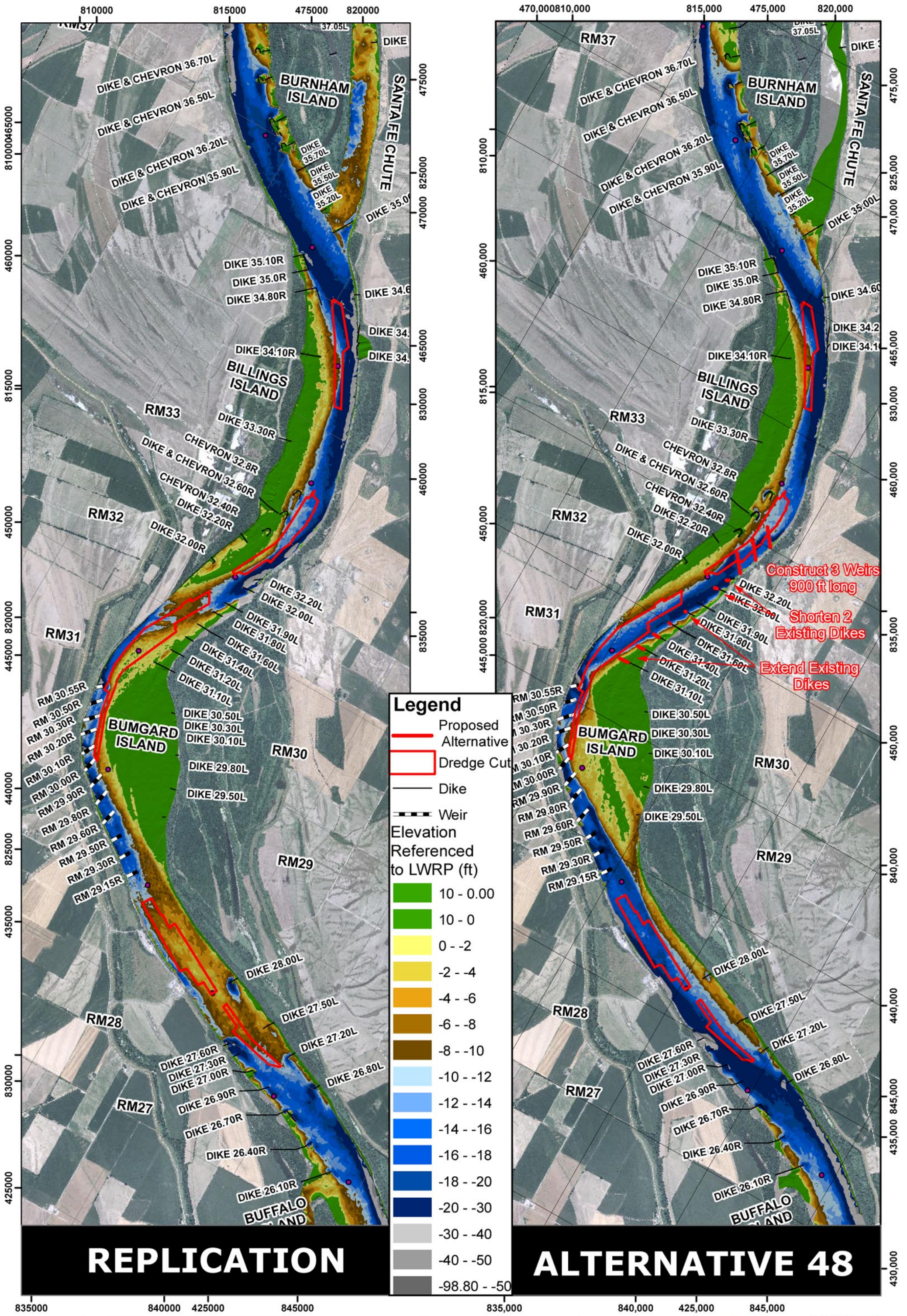

PLATE NUMBER 86

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 48 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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US Army Corps of Engineers
St. Louis District

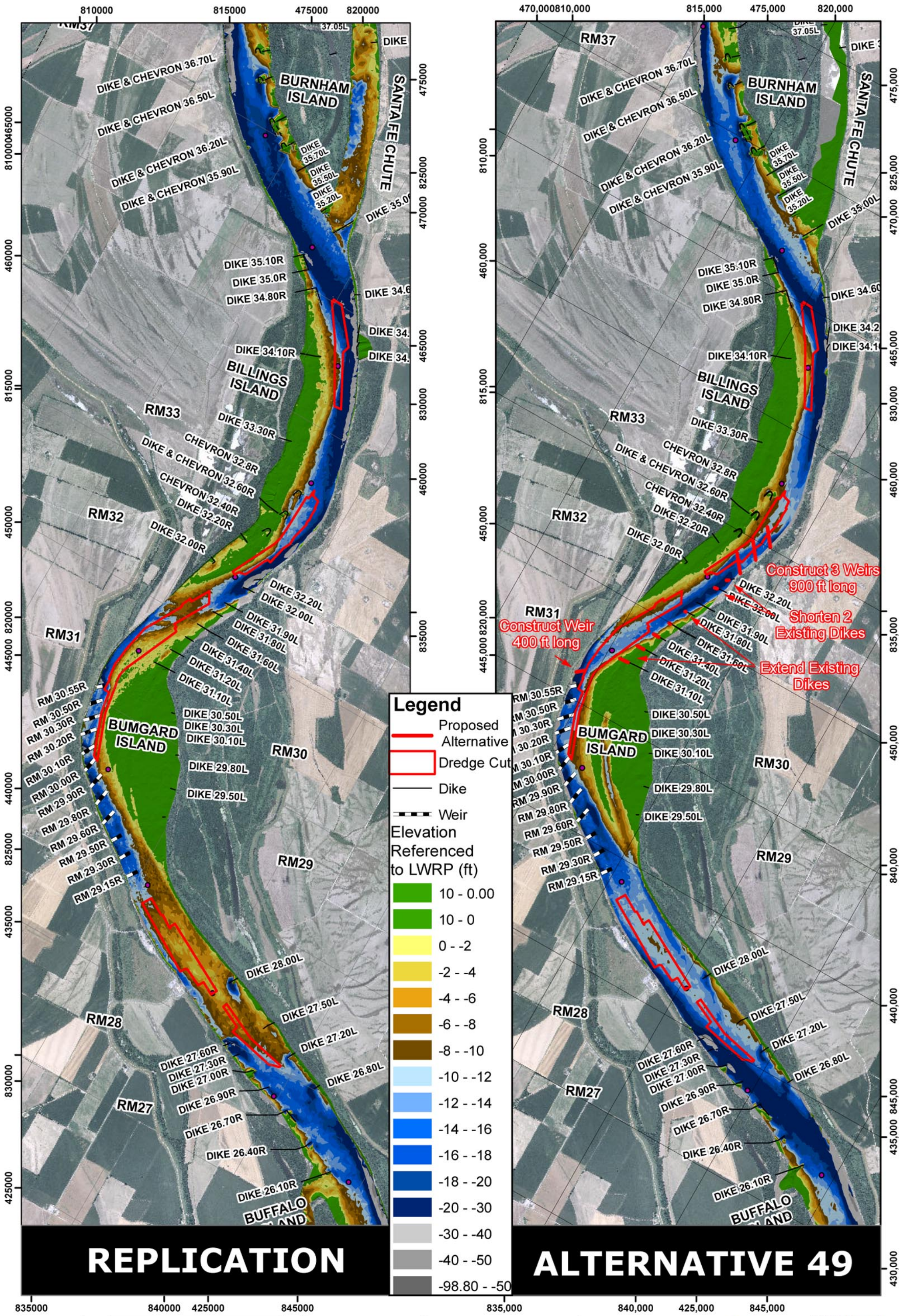

PLATE NUMBER 87

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 49 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
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CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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St. Louis District

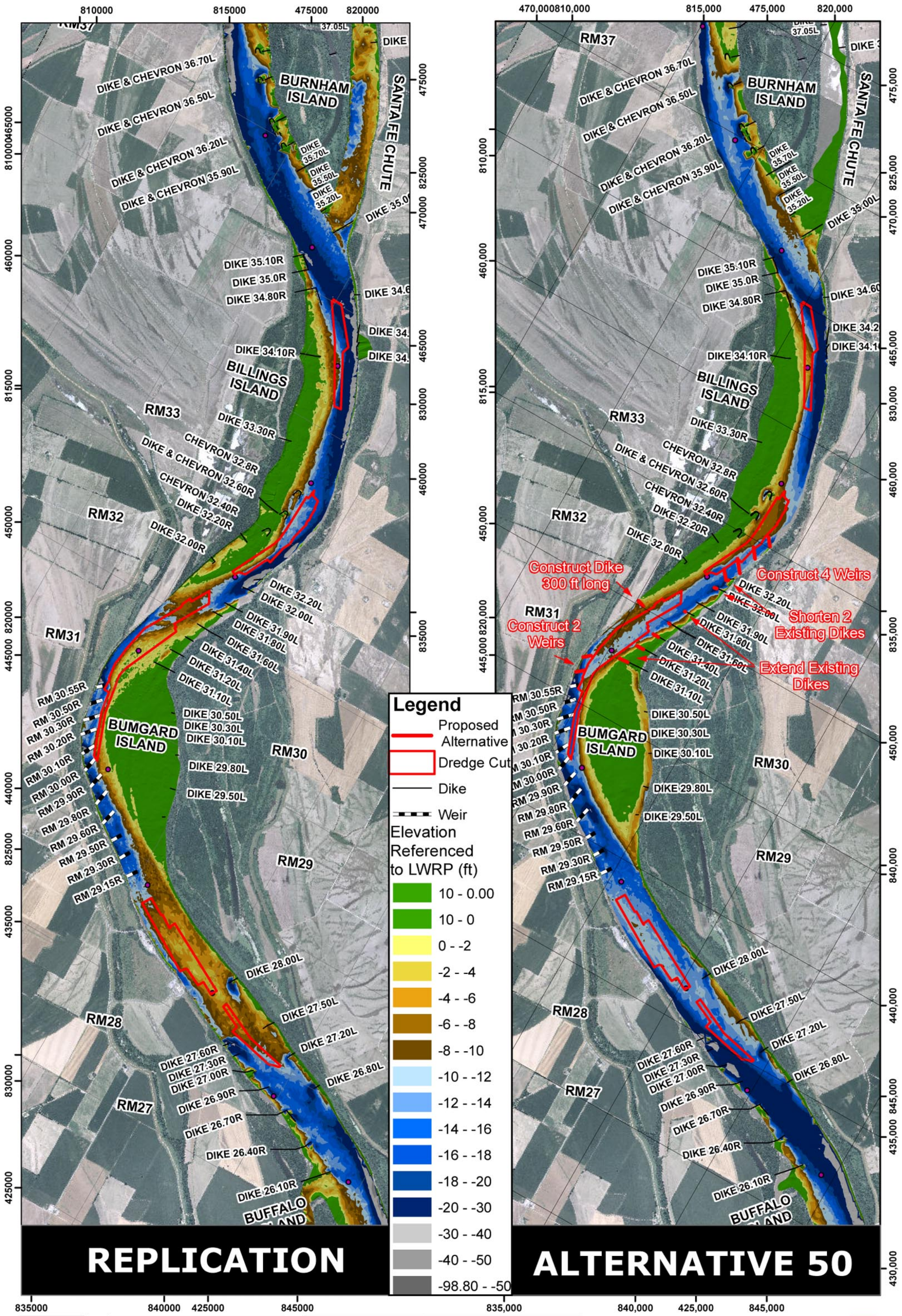

PLATE NUMBER 88

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 50 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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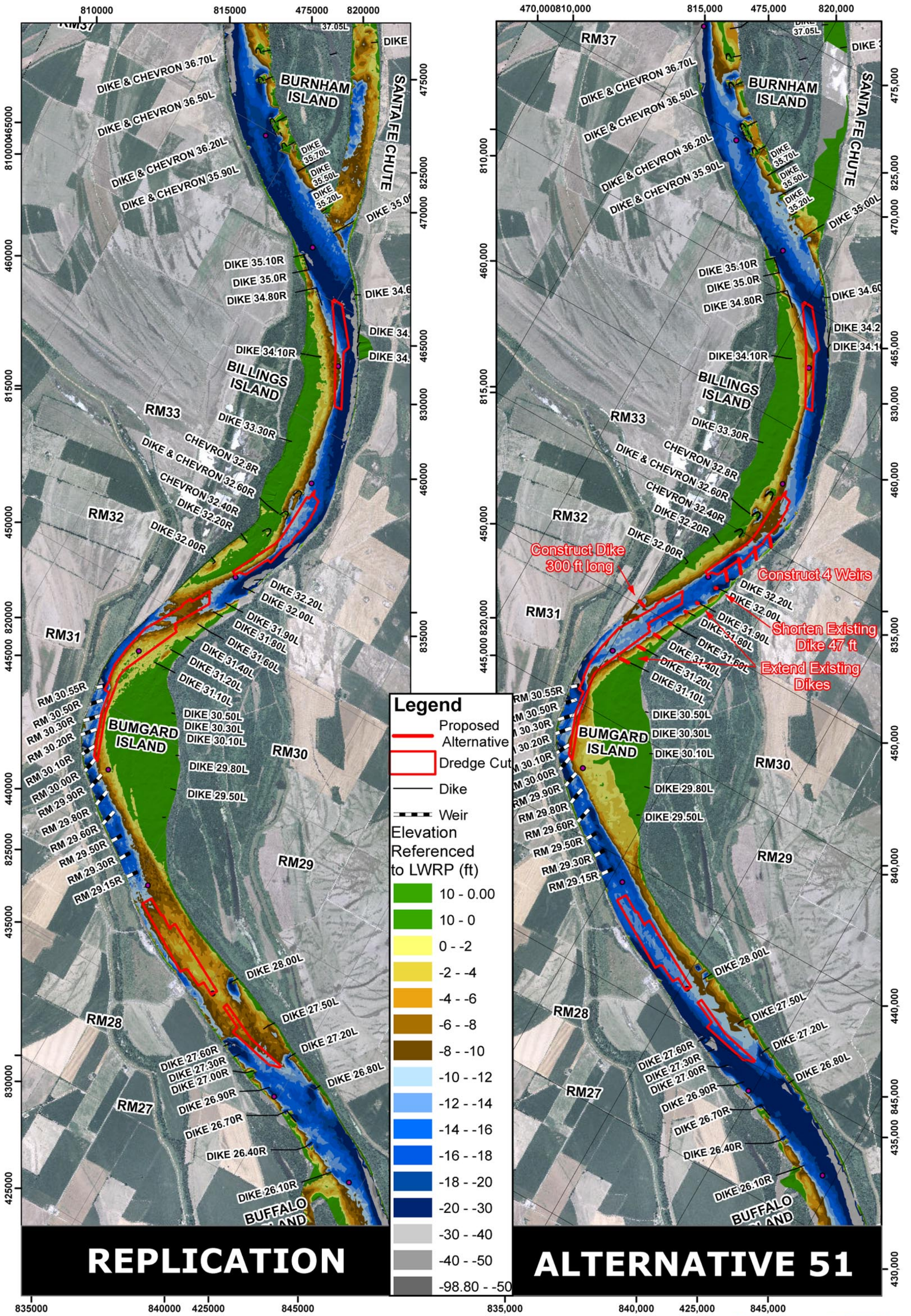

PLATE NUMBER 89

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 51 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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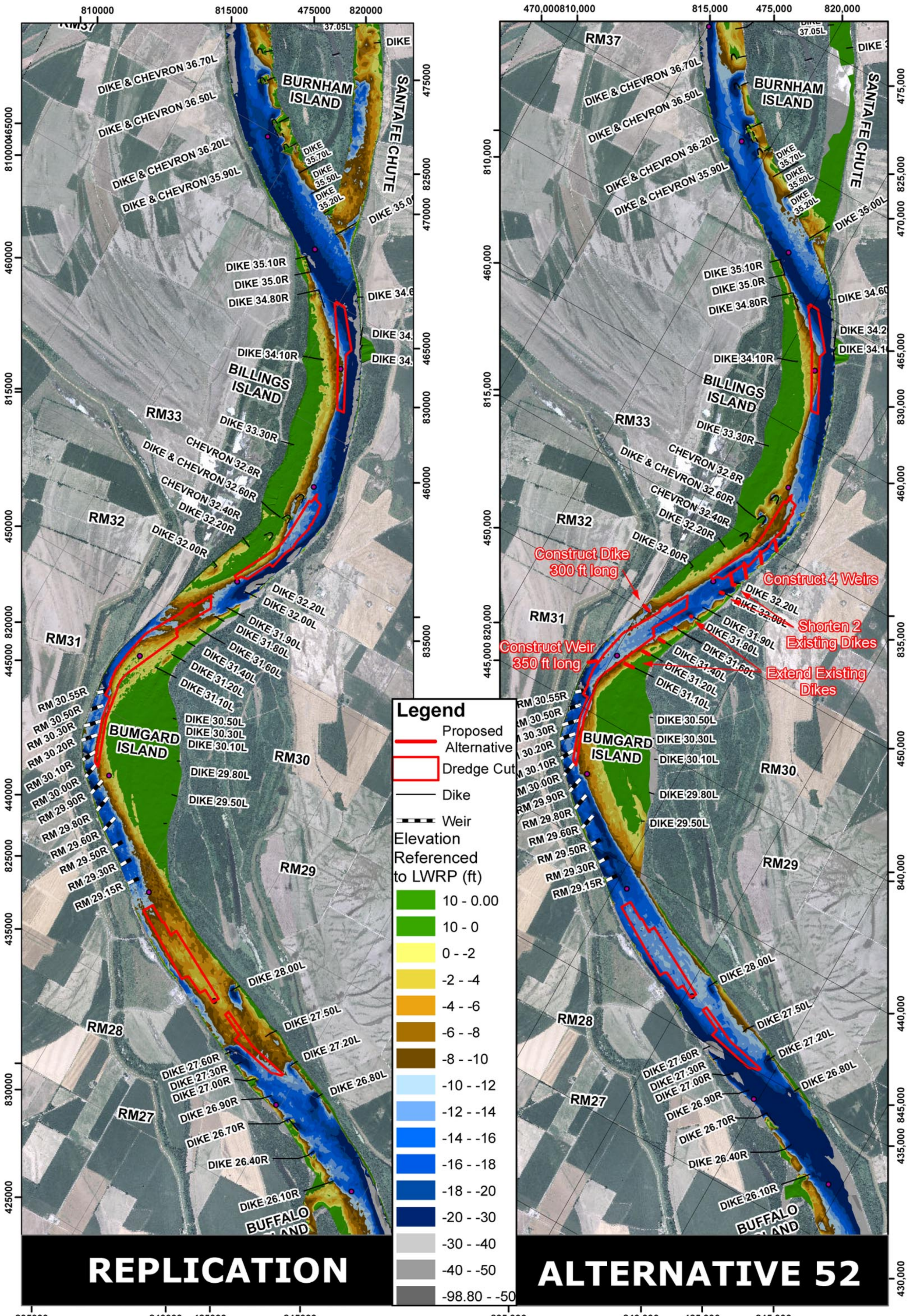

PLATE NUMBER 90

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 52 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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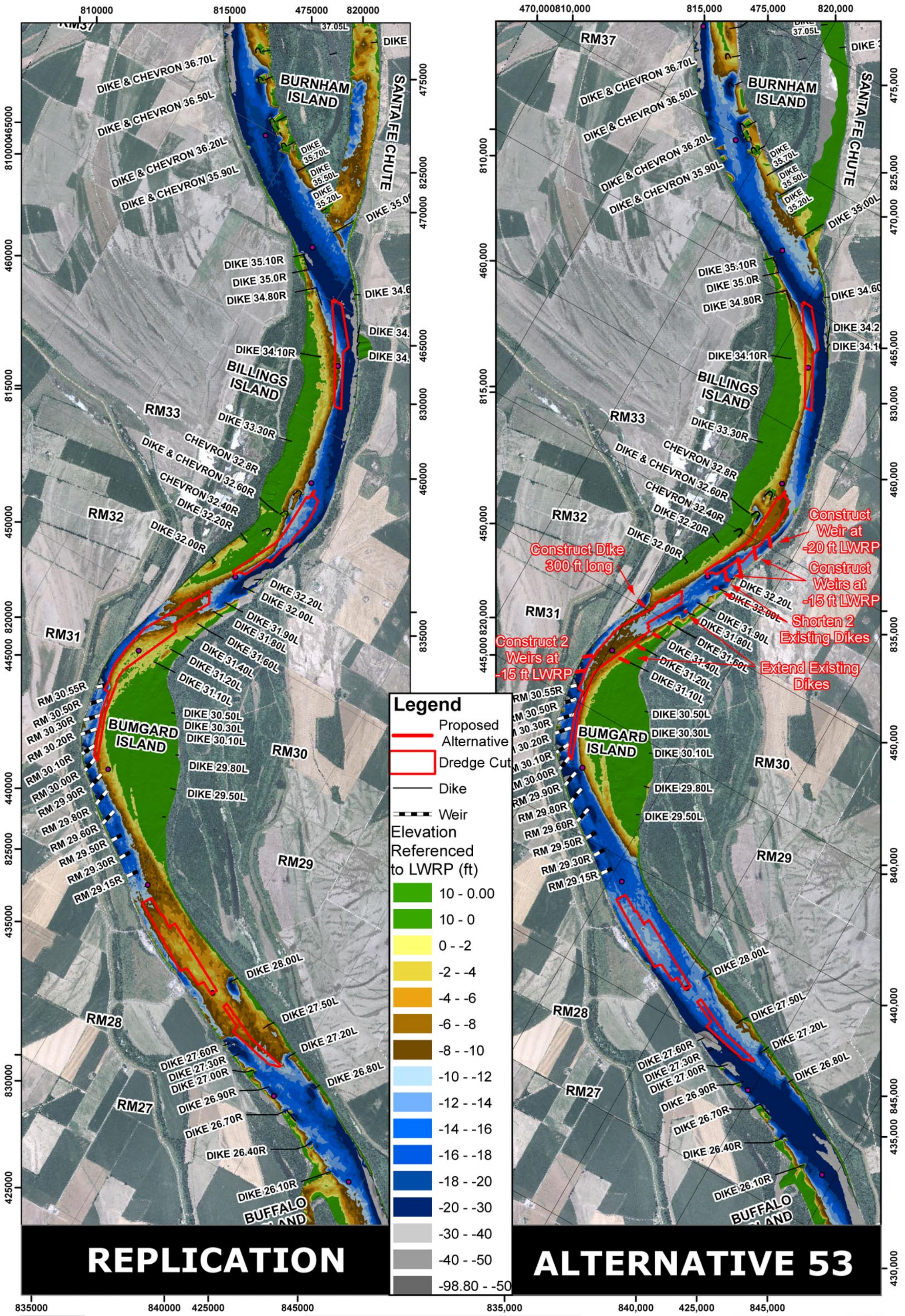

PLATE NUMBER 91

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 53 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

N W E S

APPLIED RIVER ENGINEERING CENTER

US Army Corps of Engineers
St. Louis District®

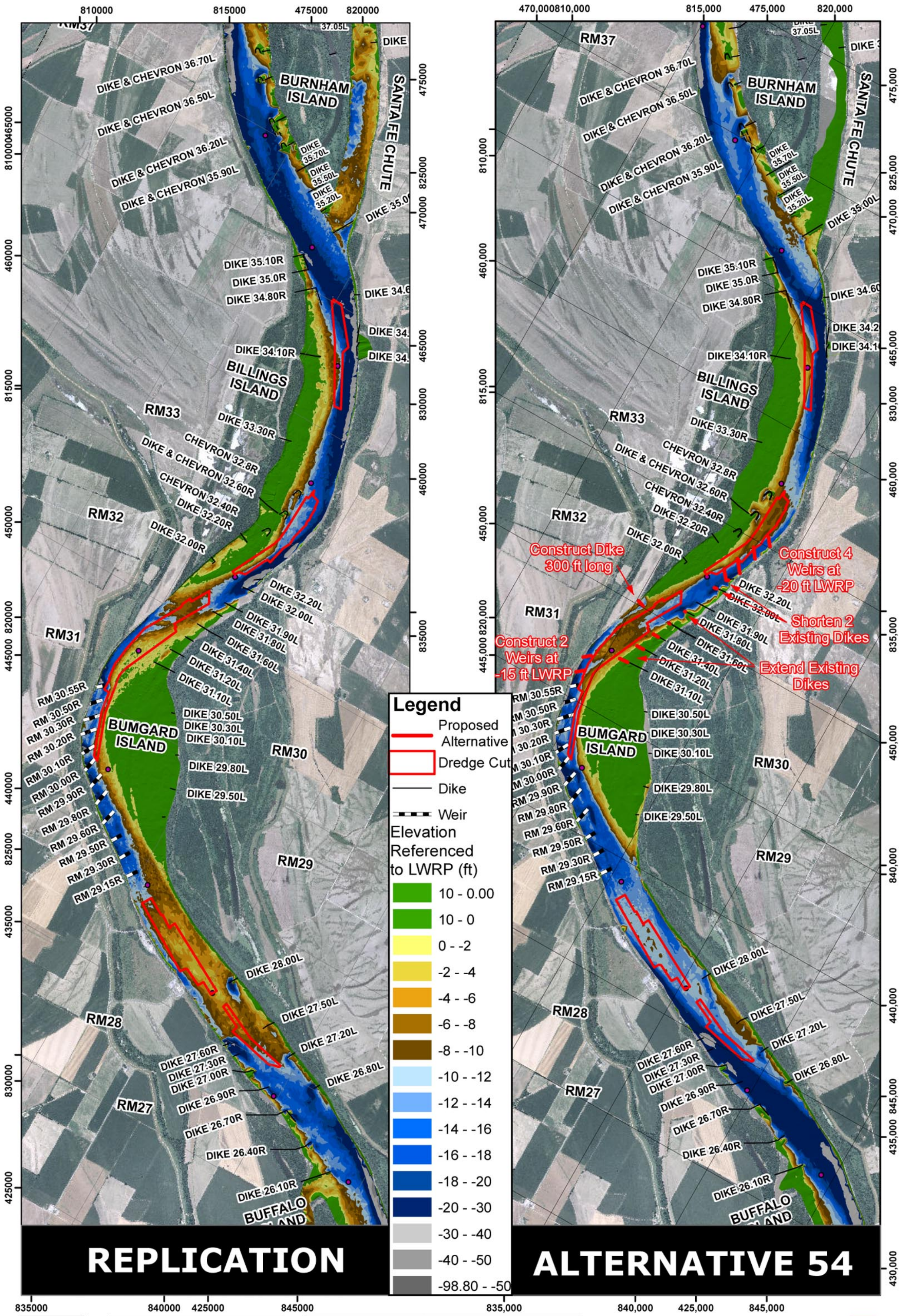

PLATE NUMBER 92

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 54 Bathymetry Results

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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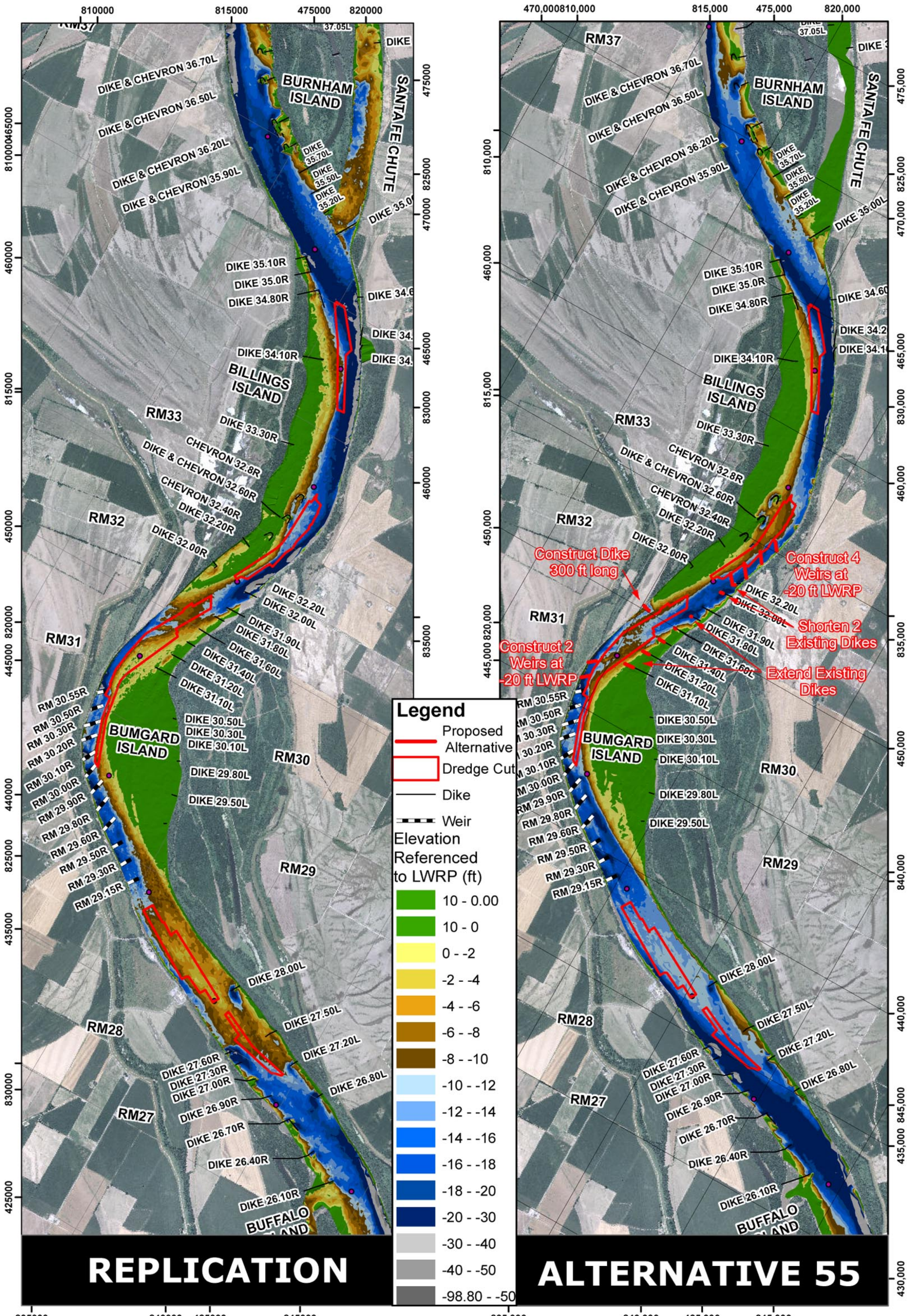

PLATE NUMBER 93

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 55 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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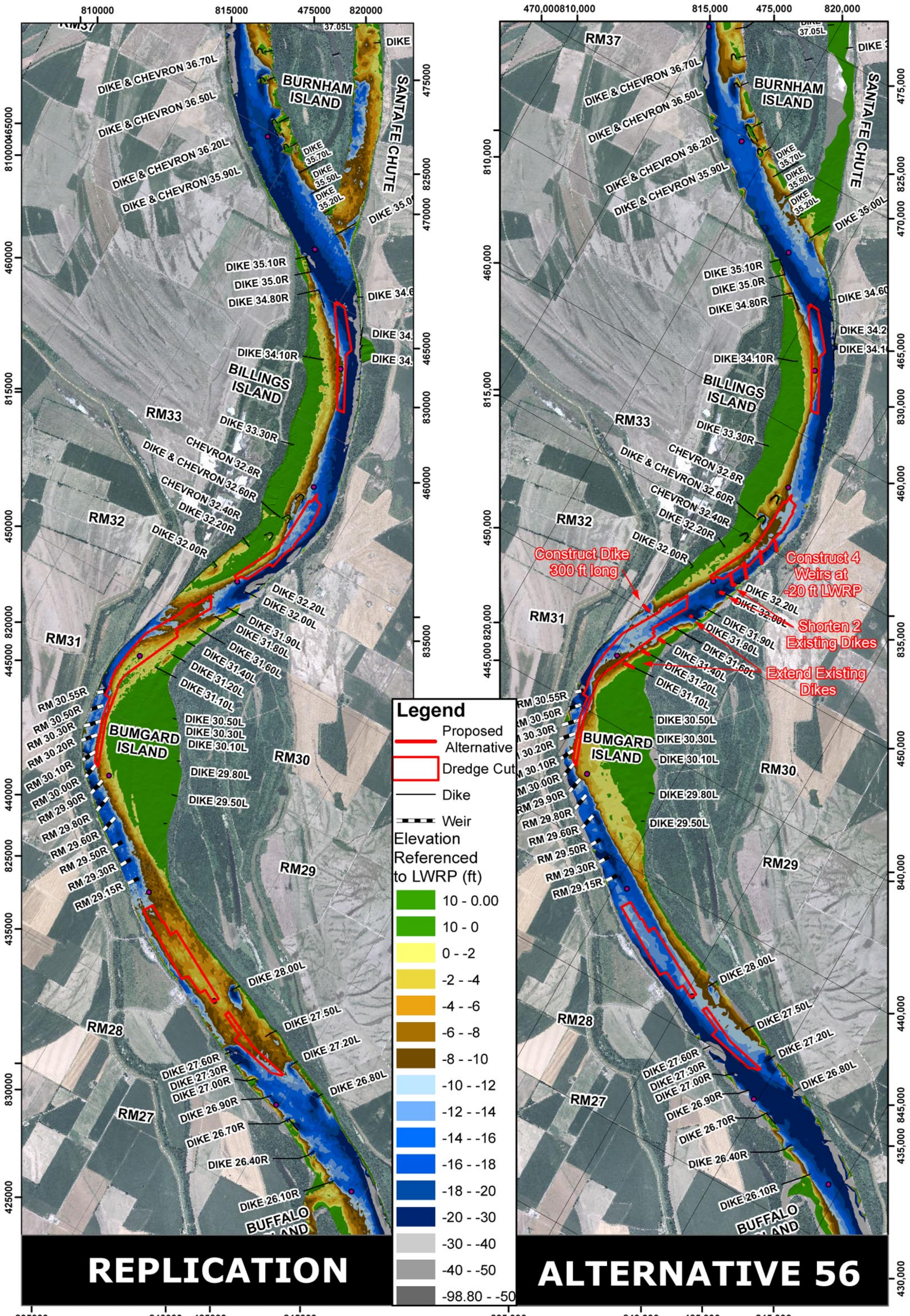

PLATE NUMBER 94

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 56 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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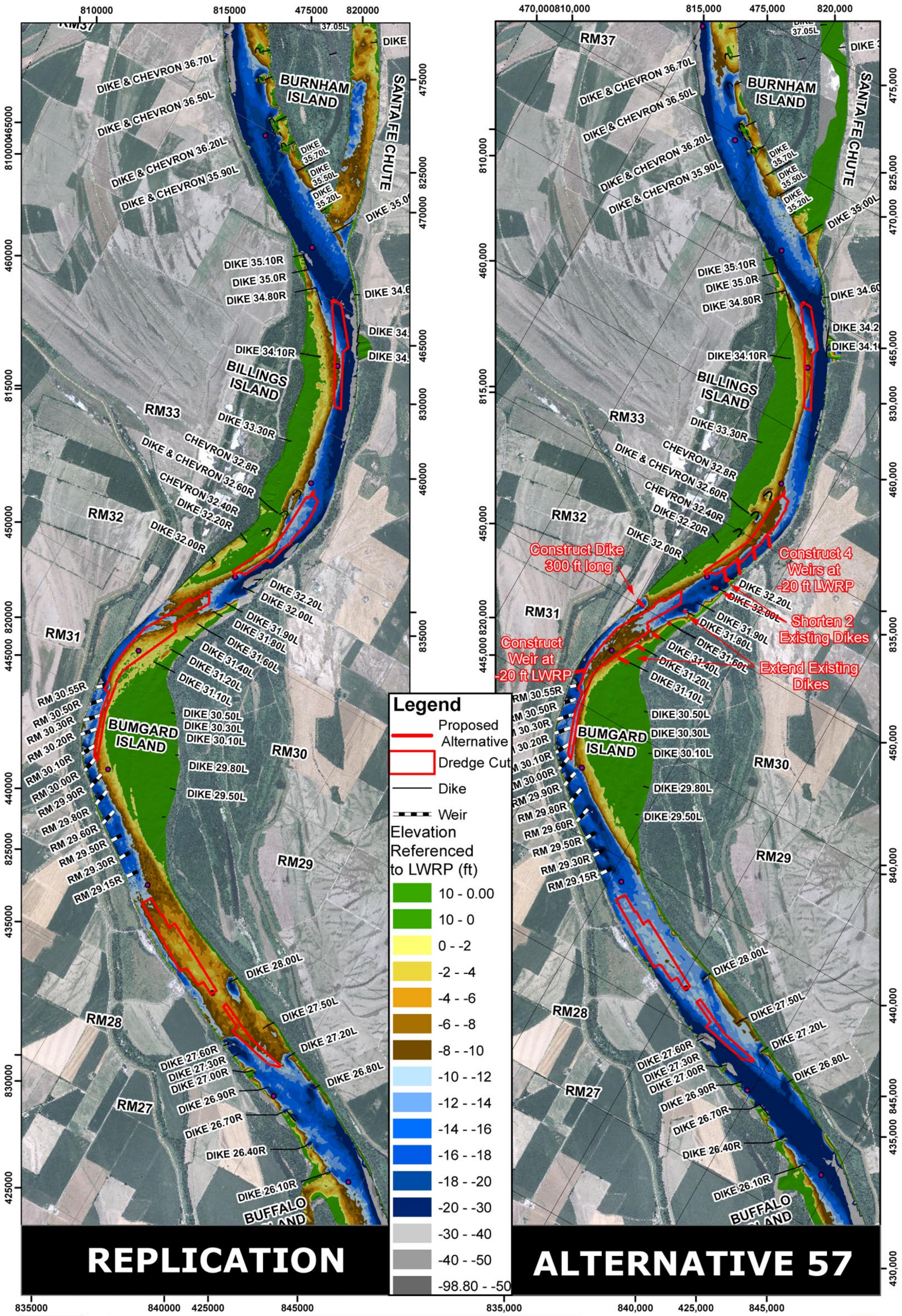

PLATE NUMBER 95

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 57 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
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RM 36.0 - 25.0

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FILE NAME: Z:\Bumgard Island HSR study\Plates

US Army Corps of Engineers St. Louis District
APPLIED RIVER ENGINEERING CENTER

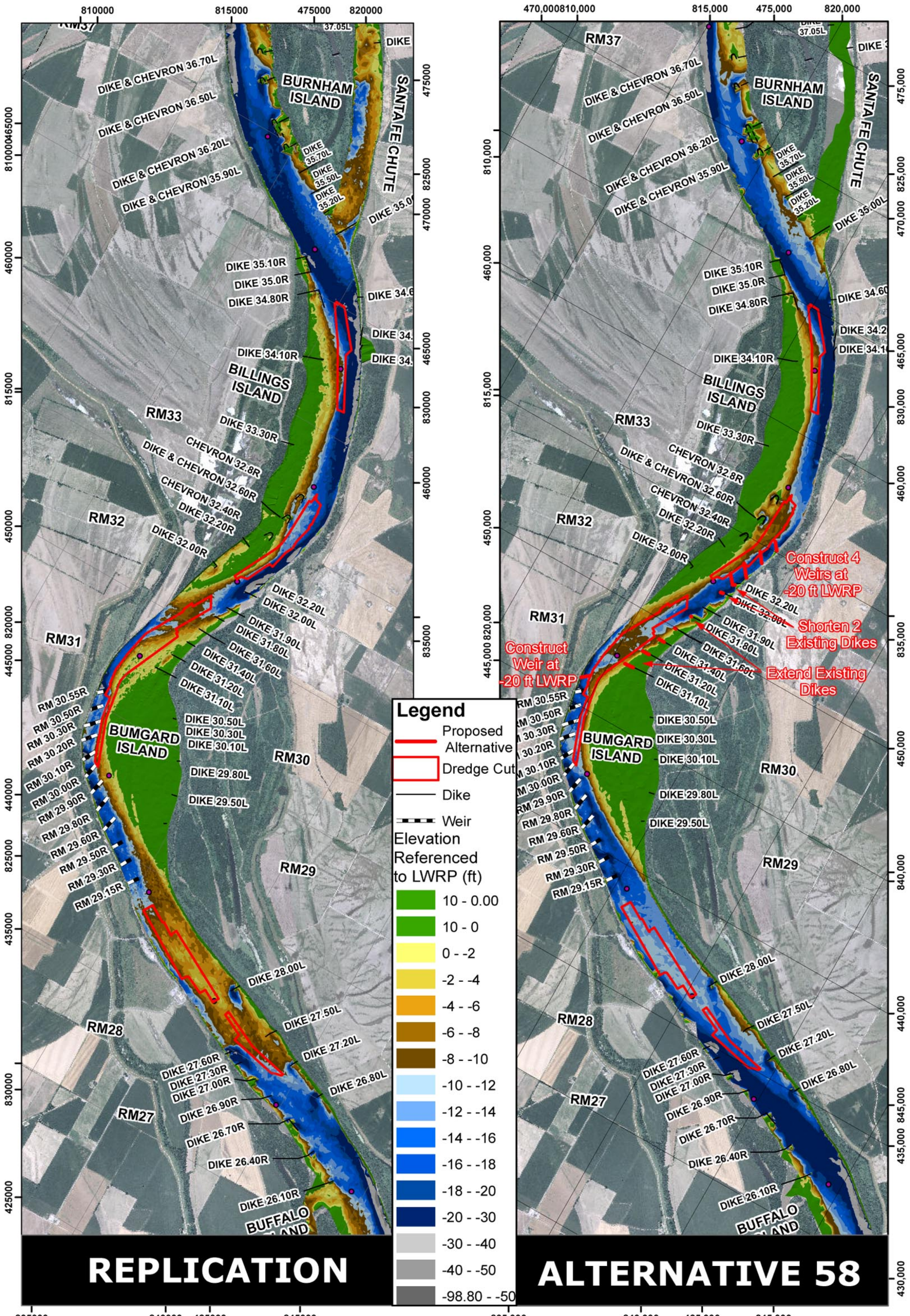

PLATE NUMBER 96

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 58 Bathymetry Results

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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FILE NAME: Z:\Bumgard Island HSR study\Plates

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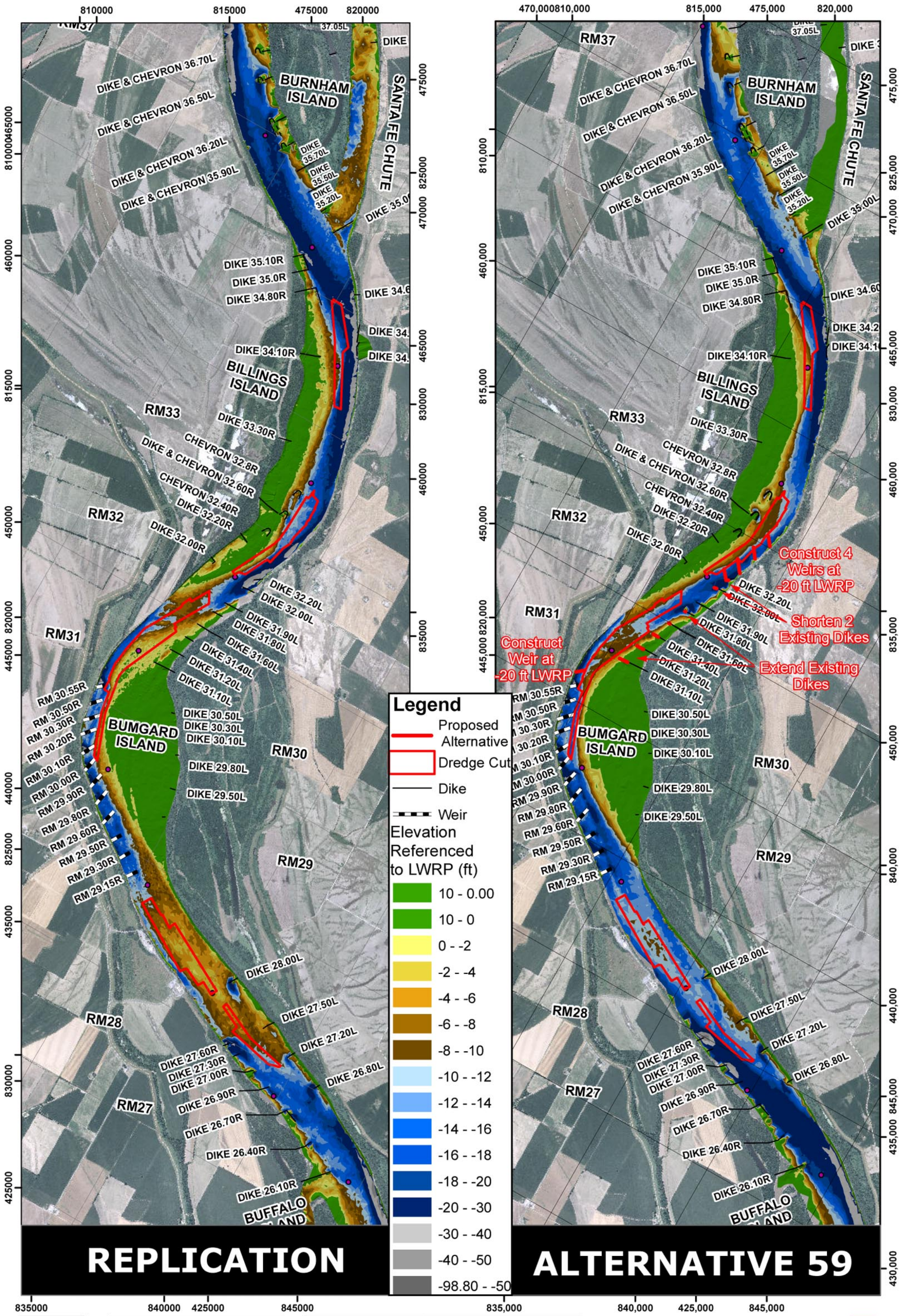

PLATE NUMBER 97

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 59 Bathymetry Results

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

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St. Louis District
Bumgard Island
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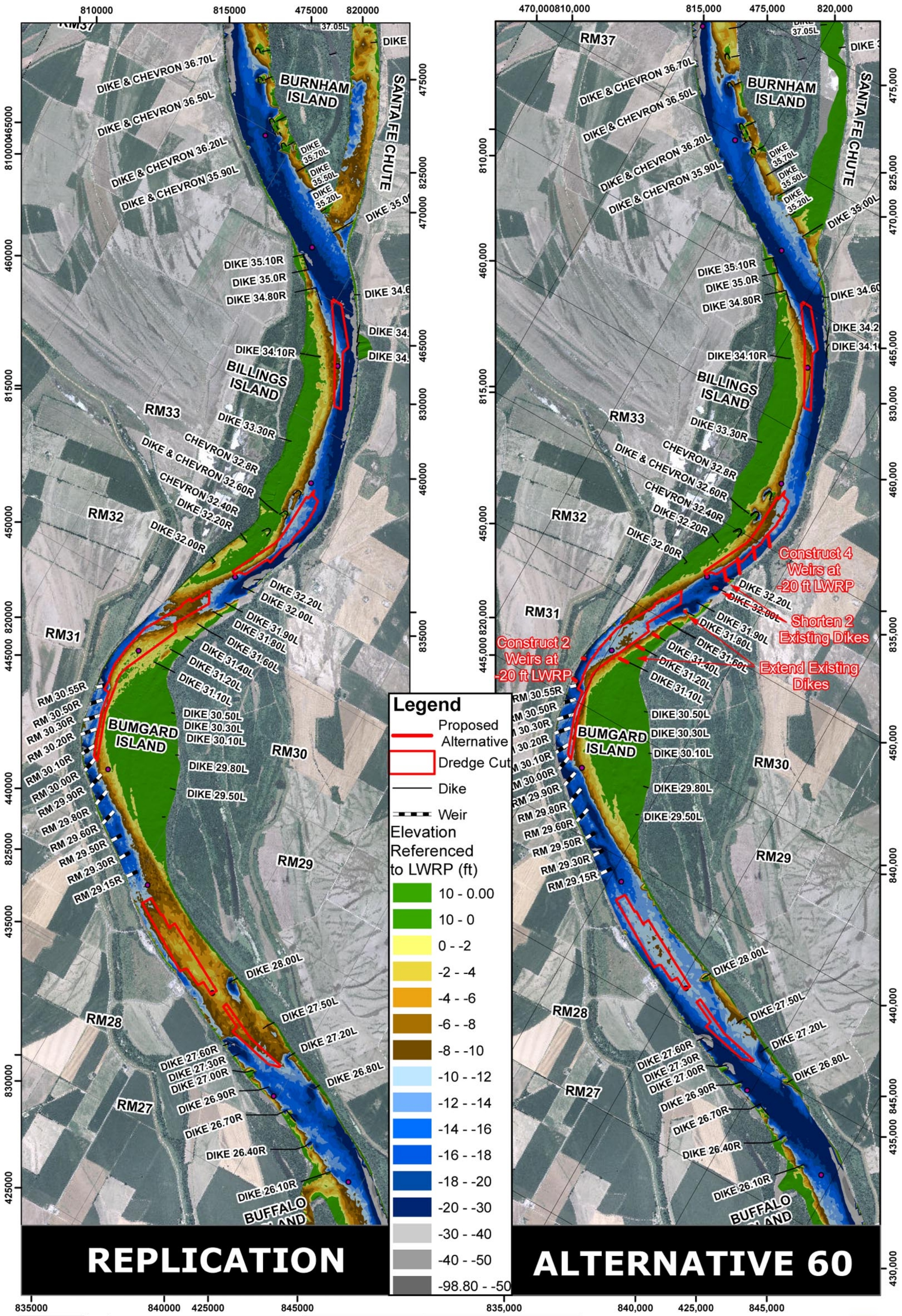

PLATE NUMBER 98

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 60 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

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St. Louis District
Bumgard Island
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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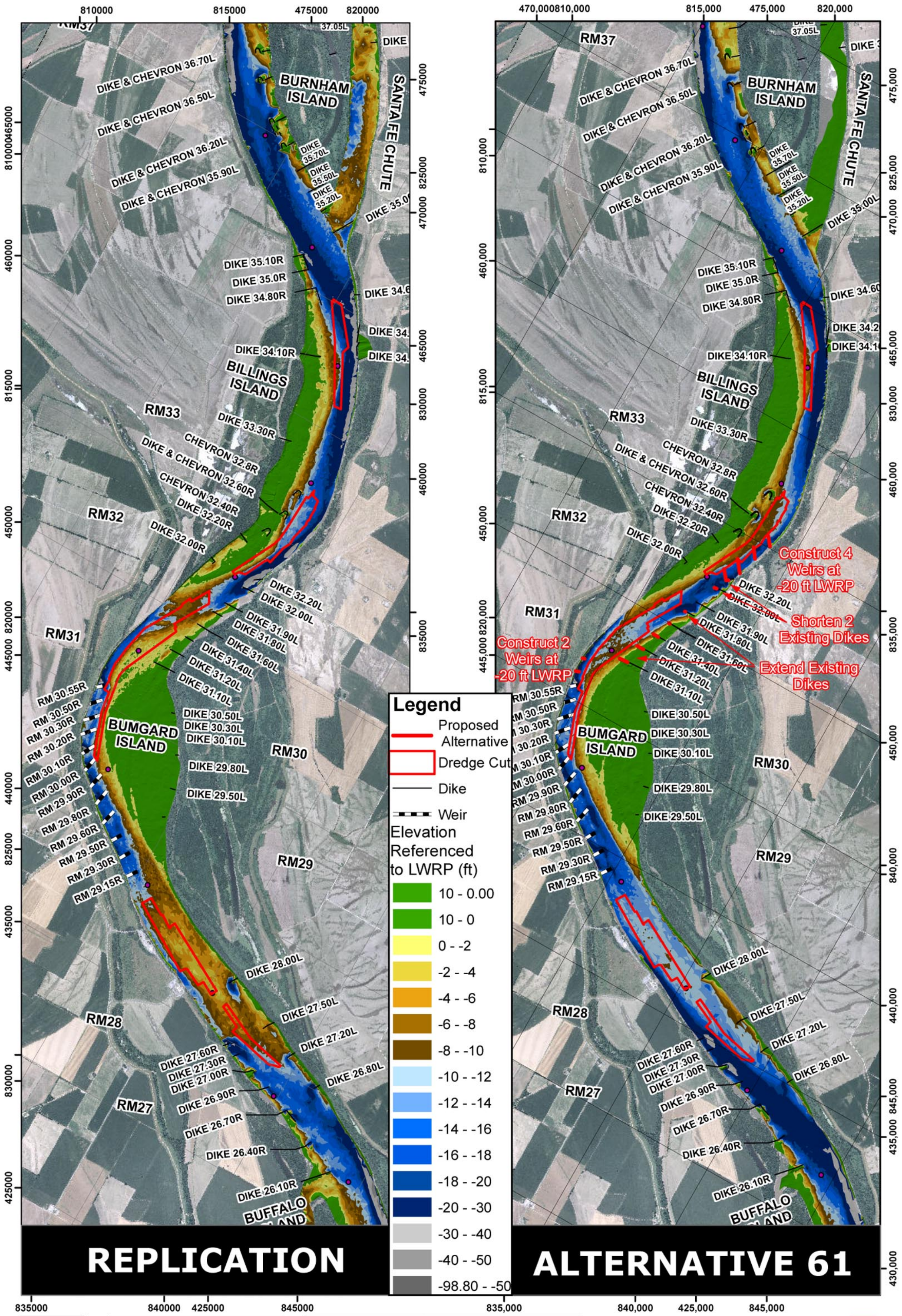

PLATE NUMBER 99

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 61 Bathymetry Results

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

Mississippi River Basin
St. Louis District
Bumgard Island
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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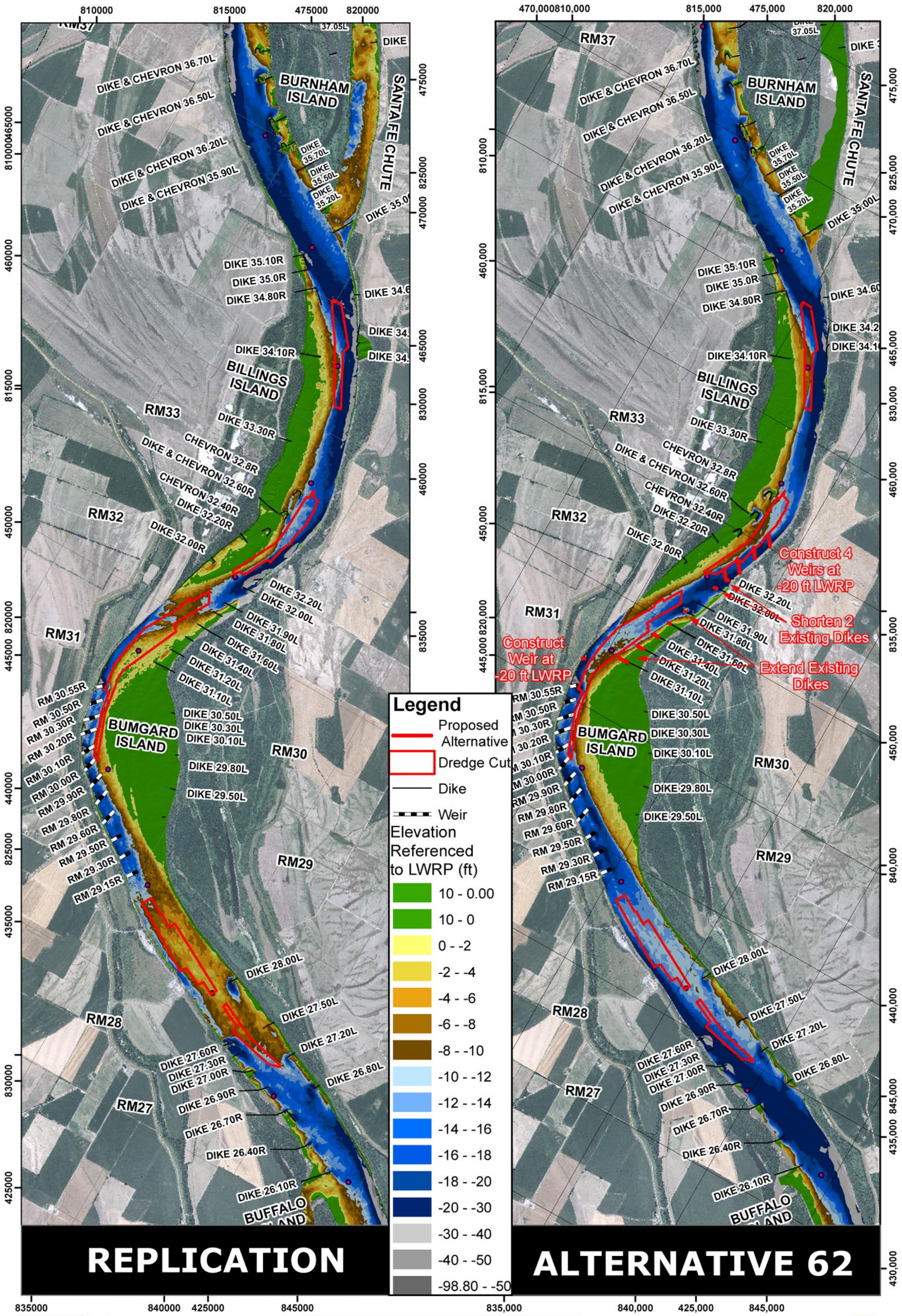

PLATE NUMBER 100

0 1,625 3,250 6,500
Feet

Replication Scan vs. Alternative 62
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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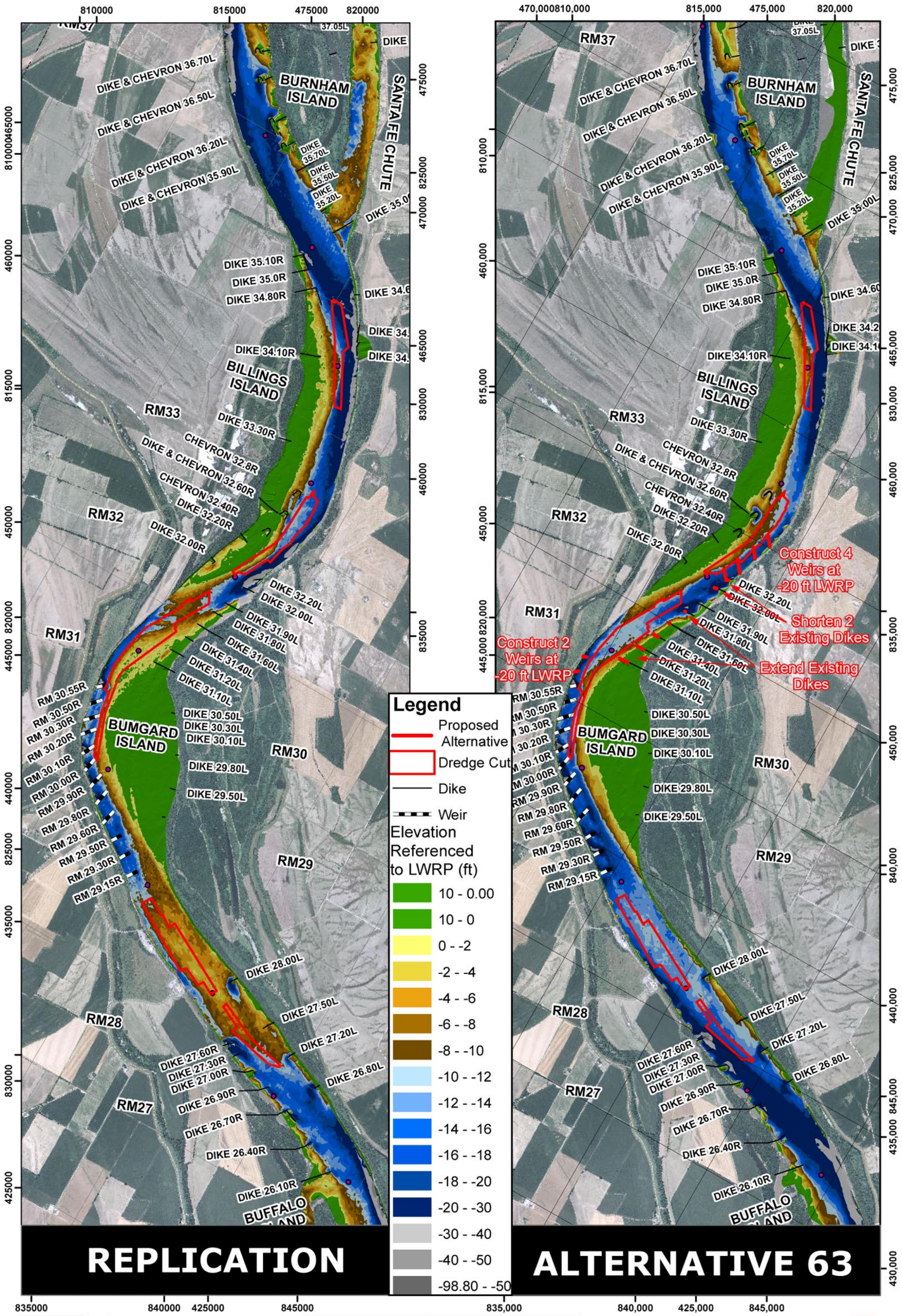

PLATE NUMBER 101

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 63 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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FILE NAME: Z:\Bumgard Island HSR study\Plates

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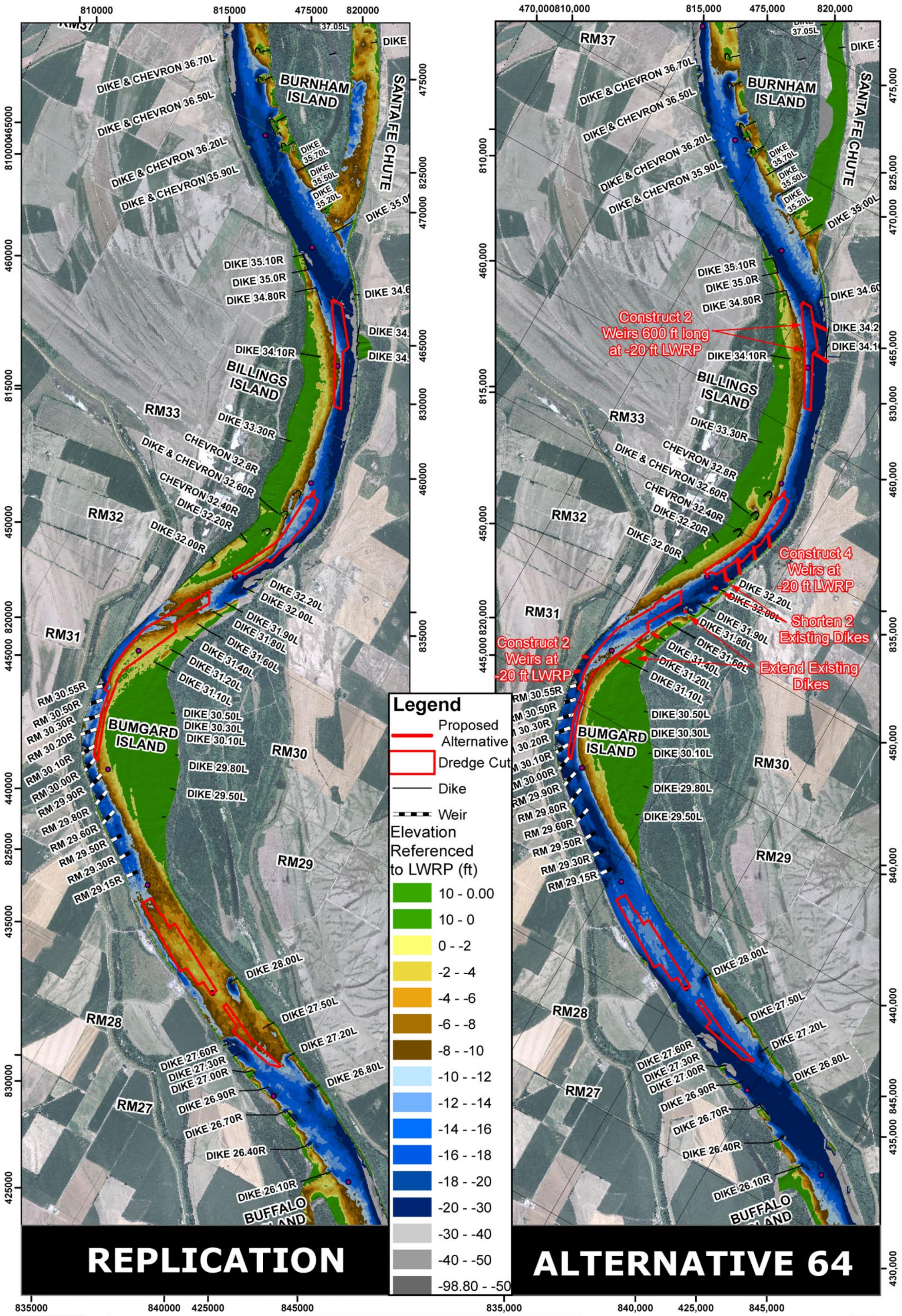

PLATE NUMBER 102

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 64 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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FILE NAME: Z:\Bumgard Island HSR study\Plates

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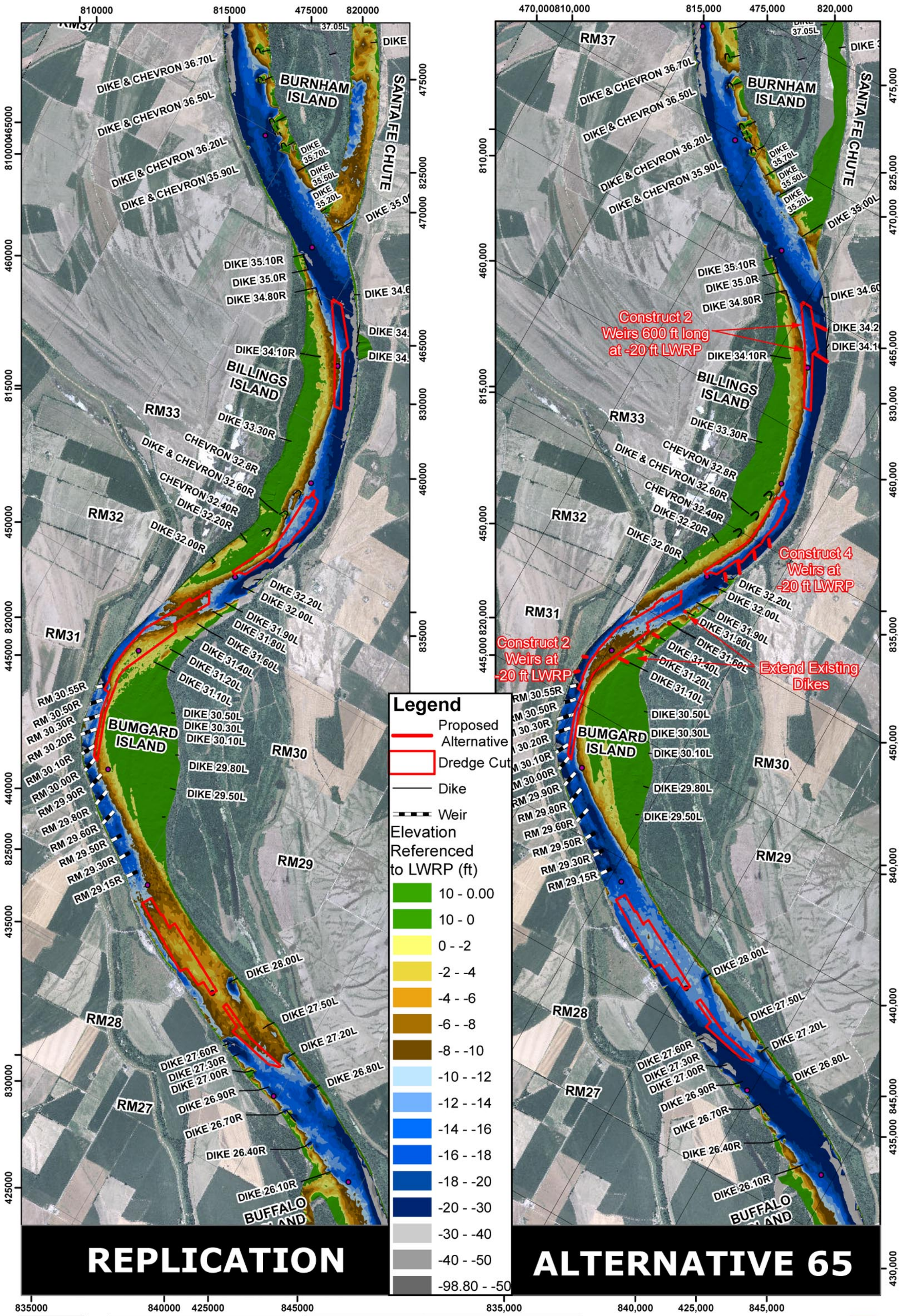

PLATE NUMBER 103

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 65 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

US Army Corps of Engineers St. Louis District
APPLIED RIVER ENGINEERING CENTER

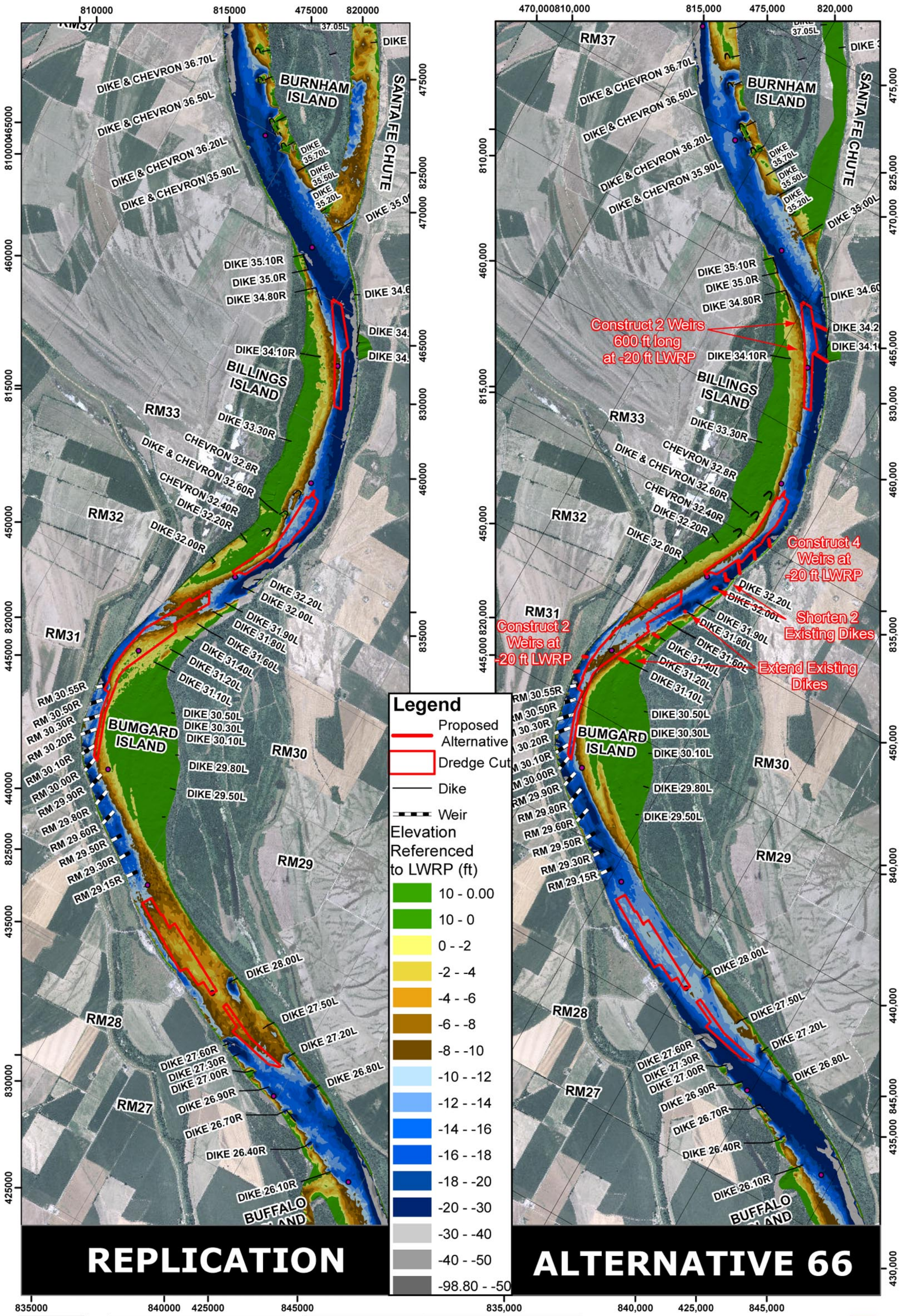

PLATE NUMBER 104

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 66 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
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REVIEWED BY: E Brauer, P.E.
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SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

US Army Corps of Engineers St. Louis District

APPLIED RIVER ENGINEERING CENTER

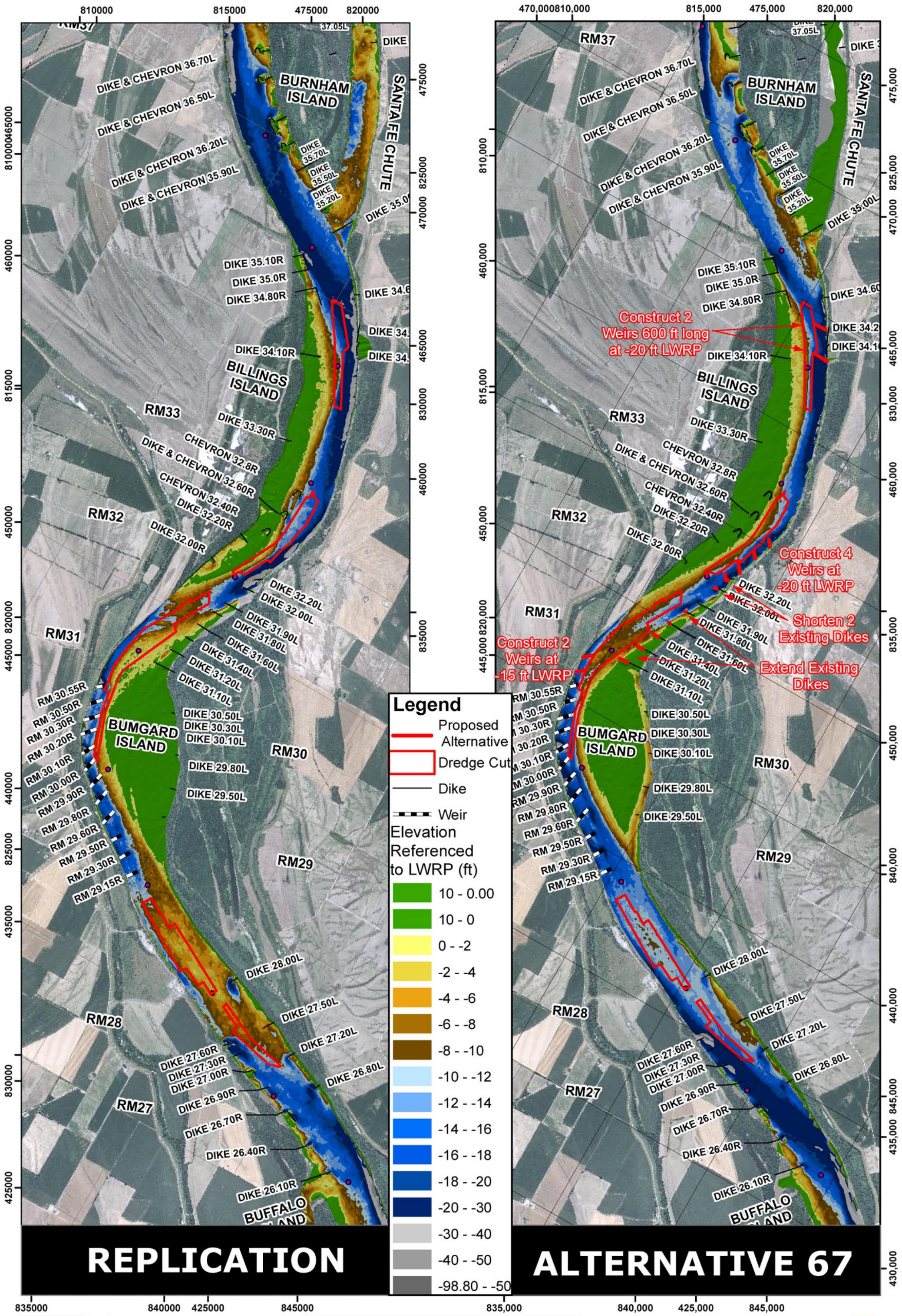

PLATE NUMBER 105

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 67 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

US Army Corps of Engineers St. Louis District
APPLIED RIVER ENGINEERING CENTER

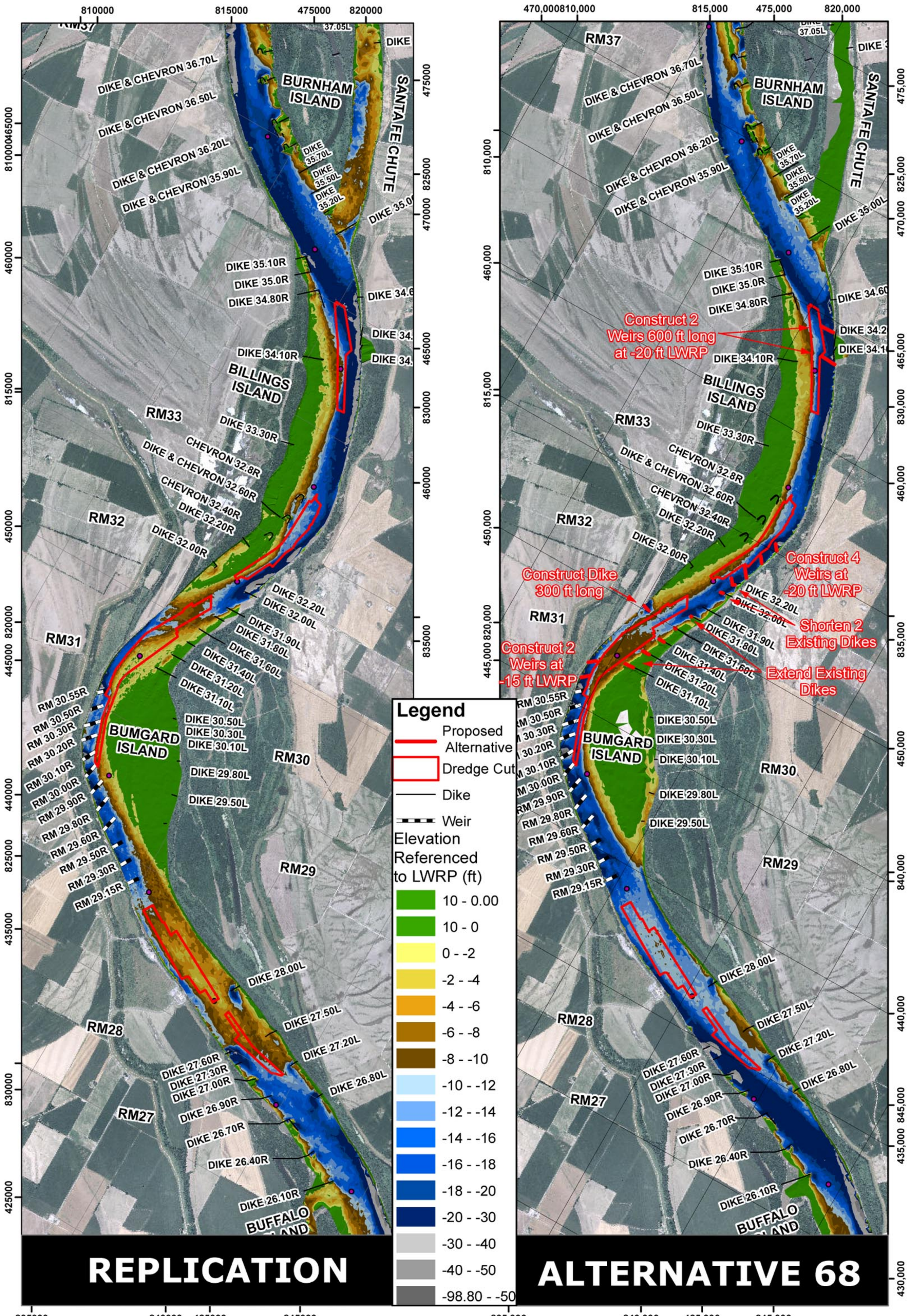

PLATE NUMBER 106

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 68 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
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FILE NAME: Z:\Bumgard Island HSR study\Plates

US Army Corps of Engineers St. Louis District
APPLIED RIVER ENGINEERING CENTER

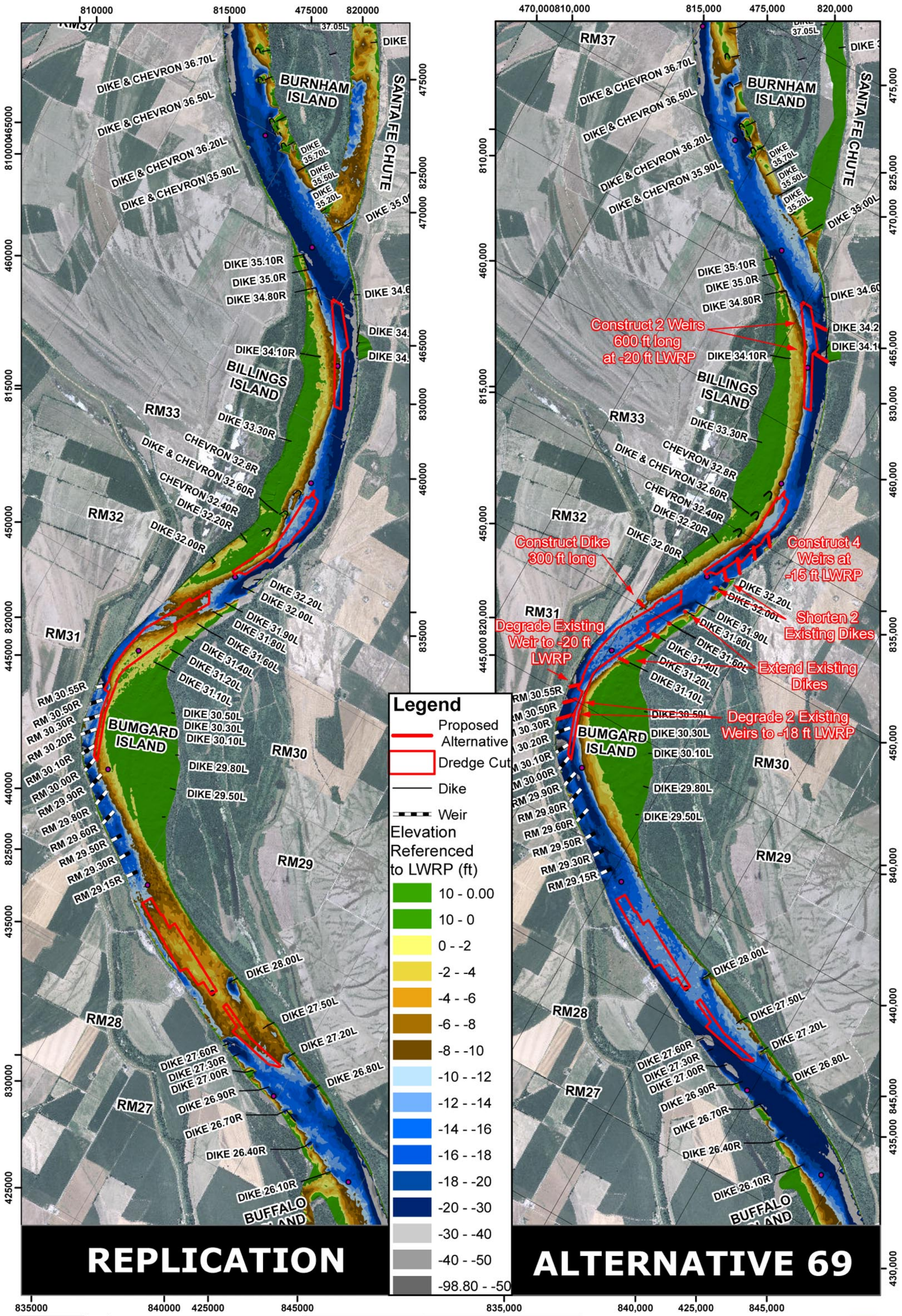

PLATE NUMBER 107

0 1,625 3,250 6,500 Feet

Replication Scan vs. Alternative 69 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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FILE NAME: Z:\Bumgard Island HSR study\Plates

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US Army Corps of Engineers St. Louis District

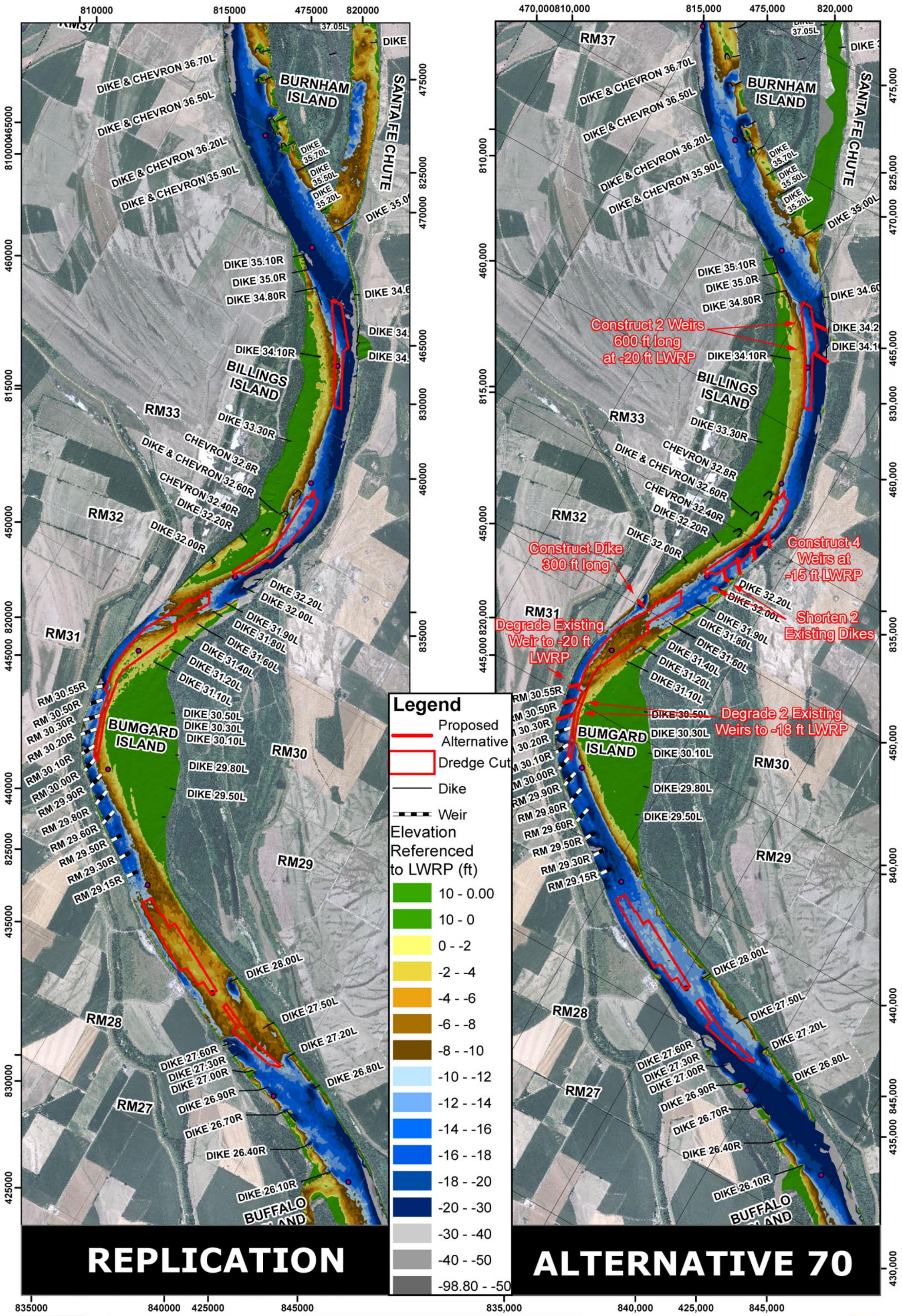

PLATE NUMBER 108

0 1,625 3,250 6,500
Feet

Replication Scan vs. Alternative 70
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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SUBMITTED: K. Clancey
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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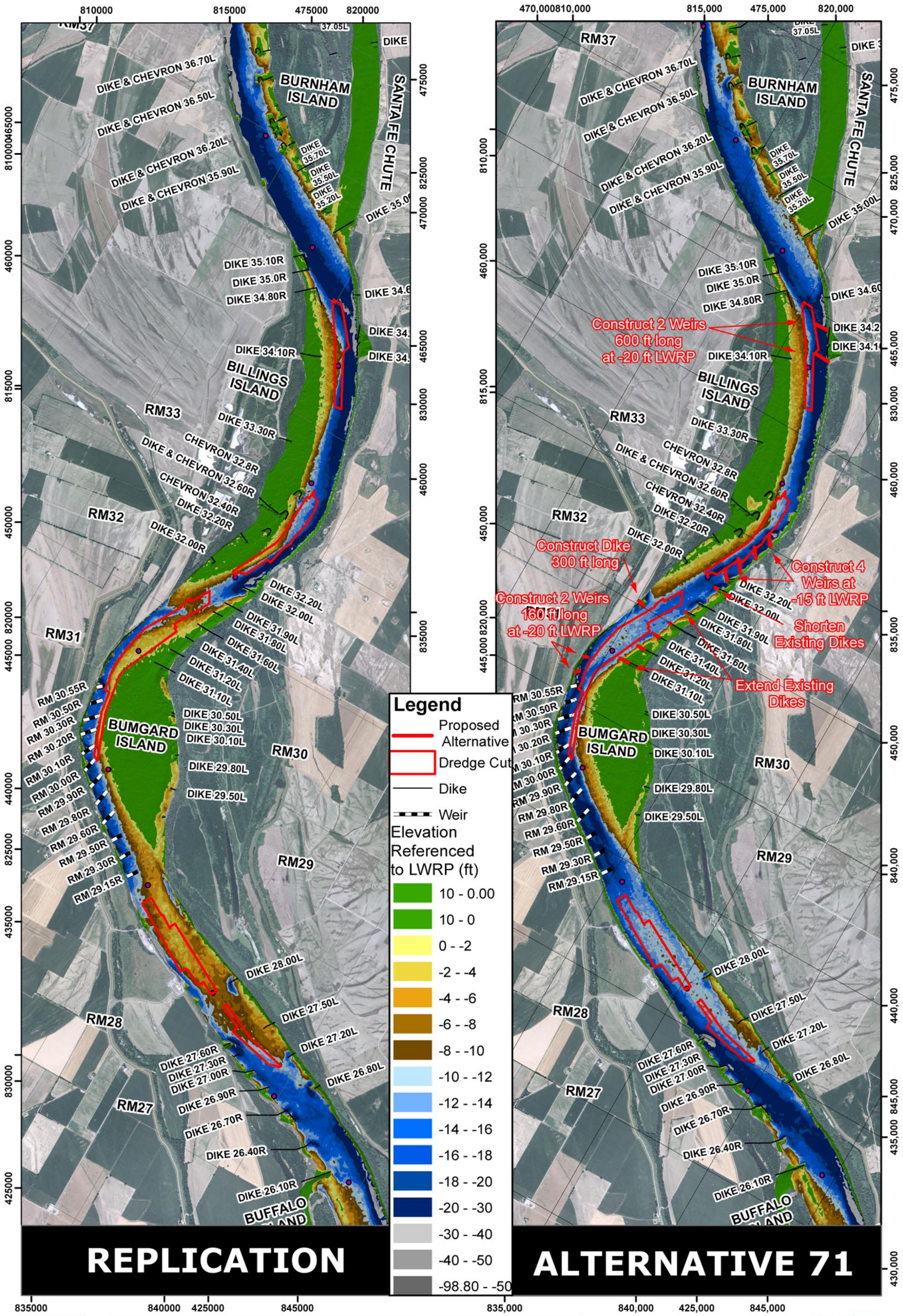

PLATE NUMBER 109

0 1,600 3,200 6,400
Feet

Replication Scan vs. Alternative 71
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
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SUBMITTED: K. Clancey
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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US Army Corps of Engineers
St. Louis District

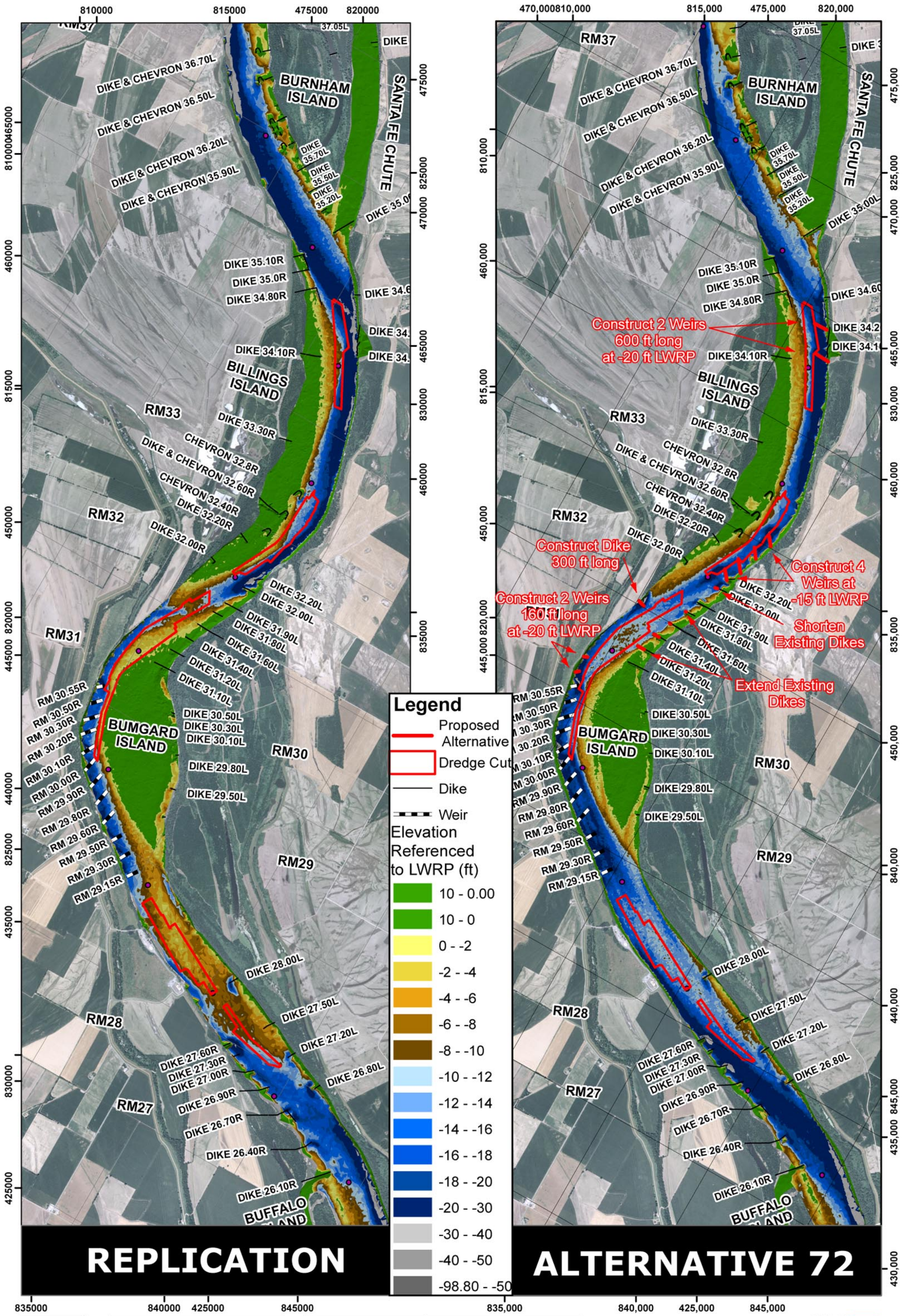

PLATE NUMBER 110

0 1,600 3,200 6,400
Feet

Replication Scan vs. Alternative 72
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
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SUBMITTED: K. Clancey
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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US Army Corps of Engineers
St. Louis District

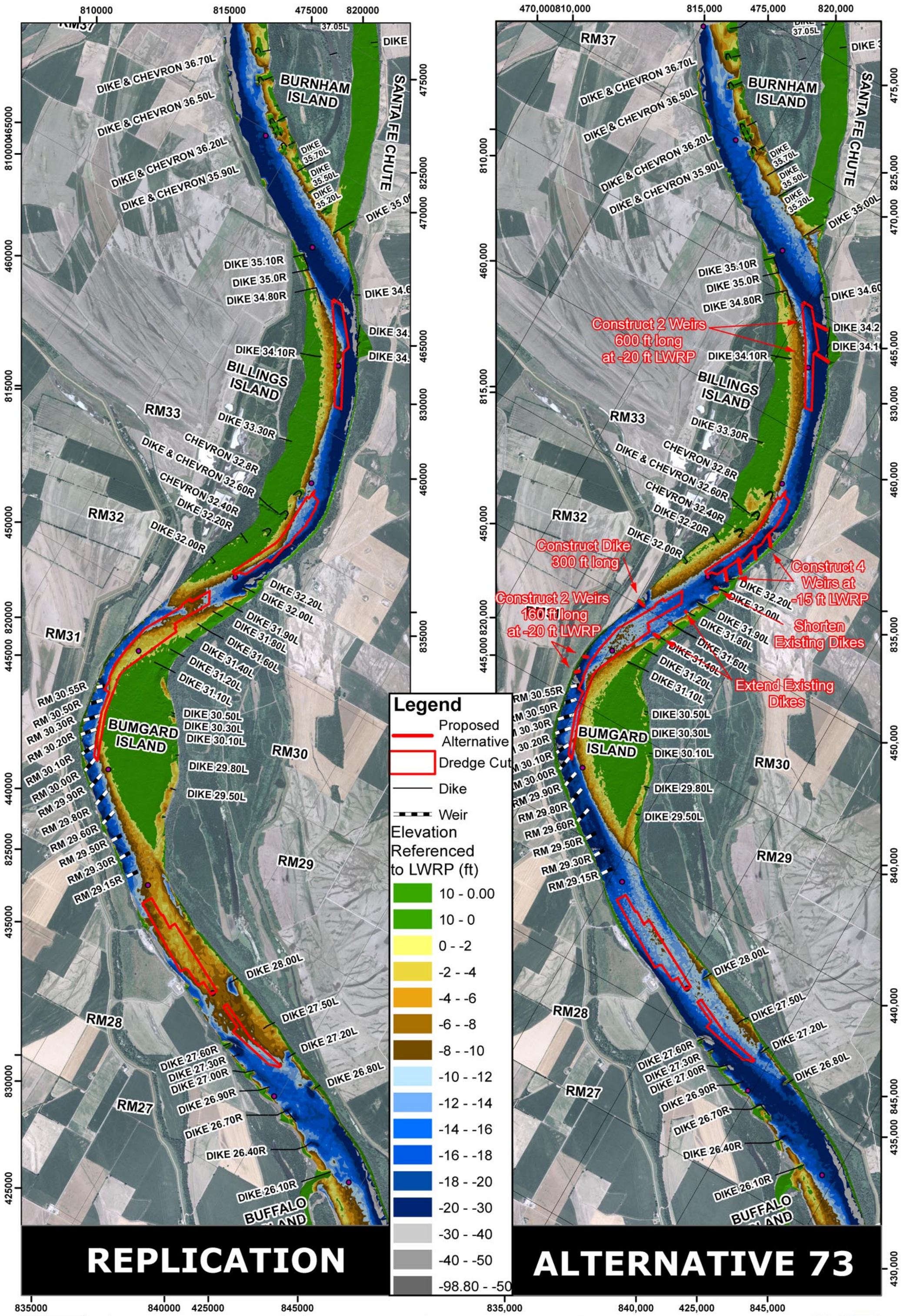

PLATE NUMBER 111

0 1,600 3,200 6,400
Feet

Replication Scan vs. Alternative 73
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
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SUBMITTED: K. Clancey
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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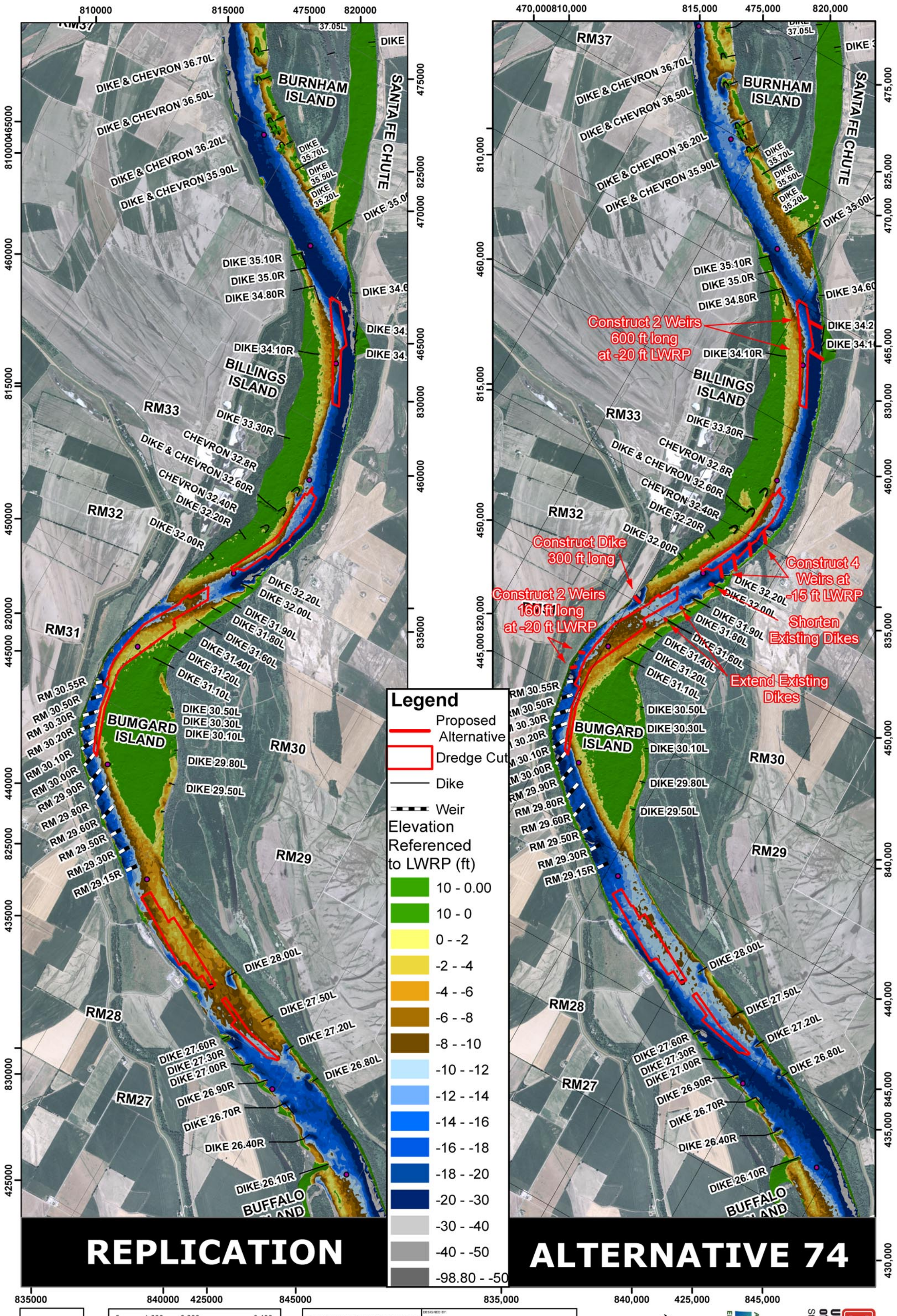

PLATE NUMBER 112

0 1,600 3,200 6,400
Feet

Replication Scan vs. Alternative 74
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
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CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
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FILE NAME: Z:\Bumgard Island HSR study\Plates

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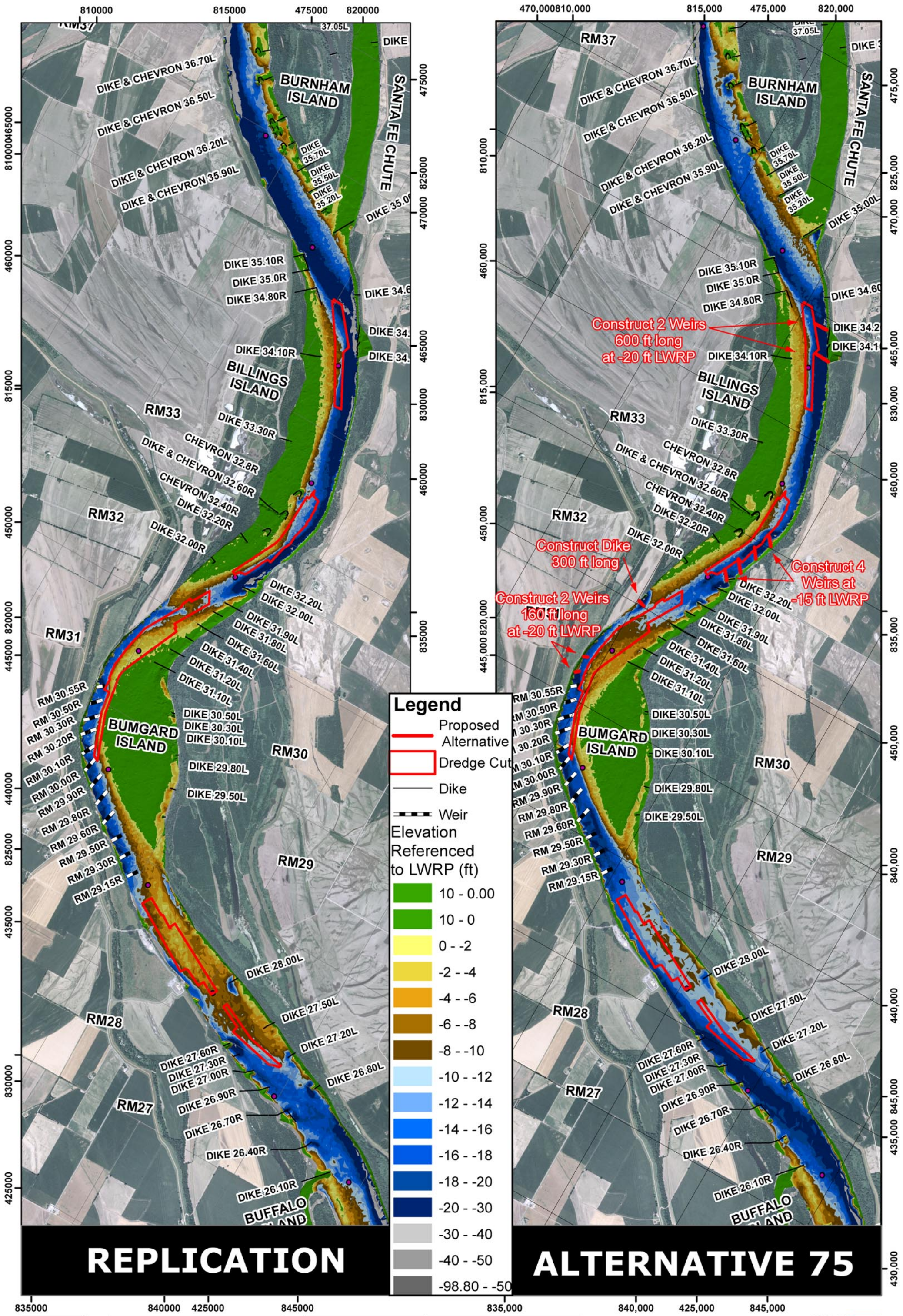

PLATE NUMBER 113

0 1,600 3,200 6,400
Feet

Replication Scan vs. Alternative 75
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
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US Army Corps of Engineers
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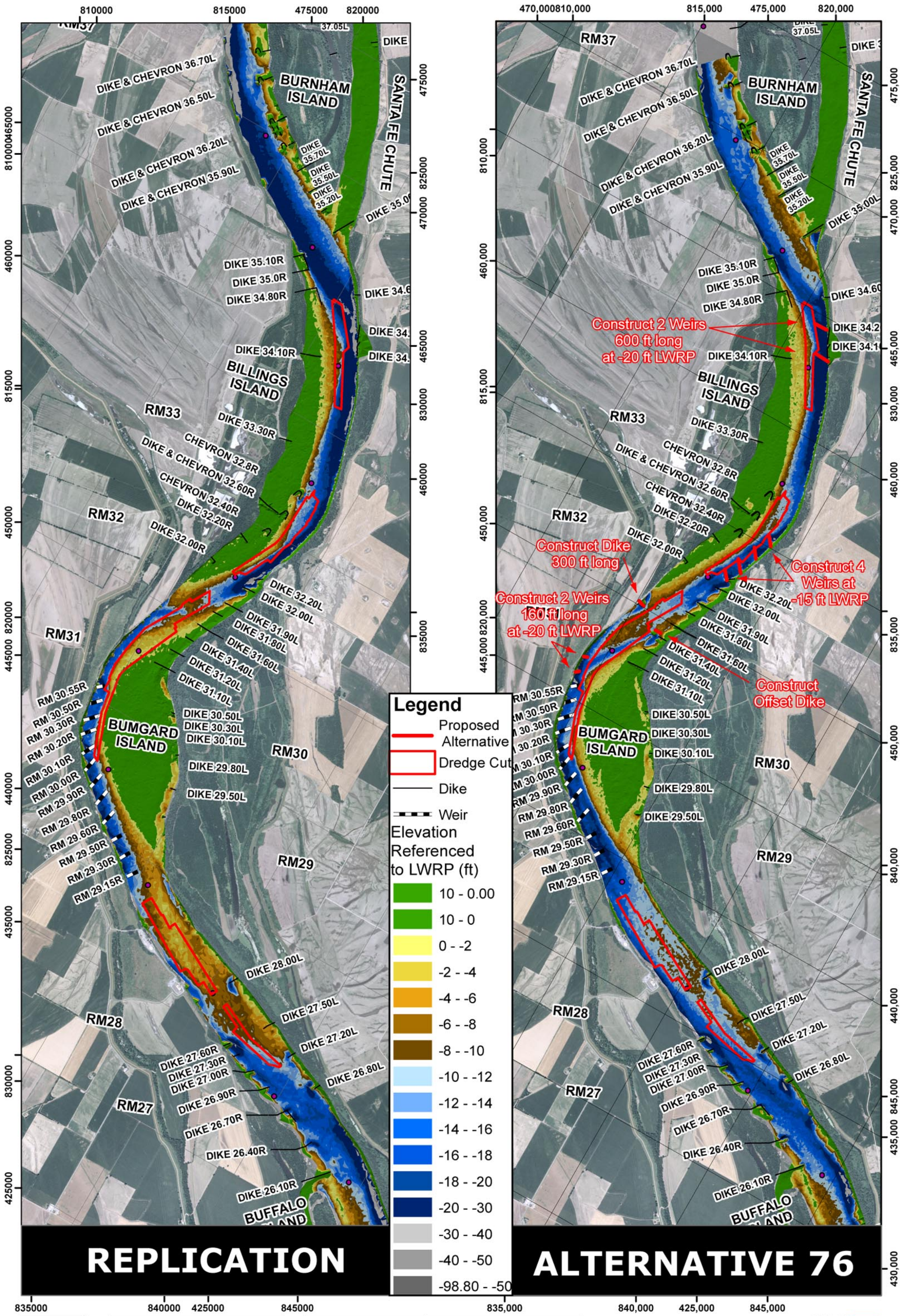

PLATE NUMBER 114

0 1,600 3,200 6,400
Feet

Replication Scan vs. Alternative 76
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

DESIGNED BY: K. Clancey
DRAWN BY: K. Clancey
REVIEWED BY: E Brauer, P.E.
CHECKED BY: J Brown, P.E.
SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

APPLIED RIVER ENGINEERING CENTER

US Army Corps of Engineers
St. Louis District

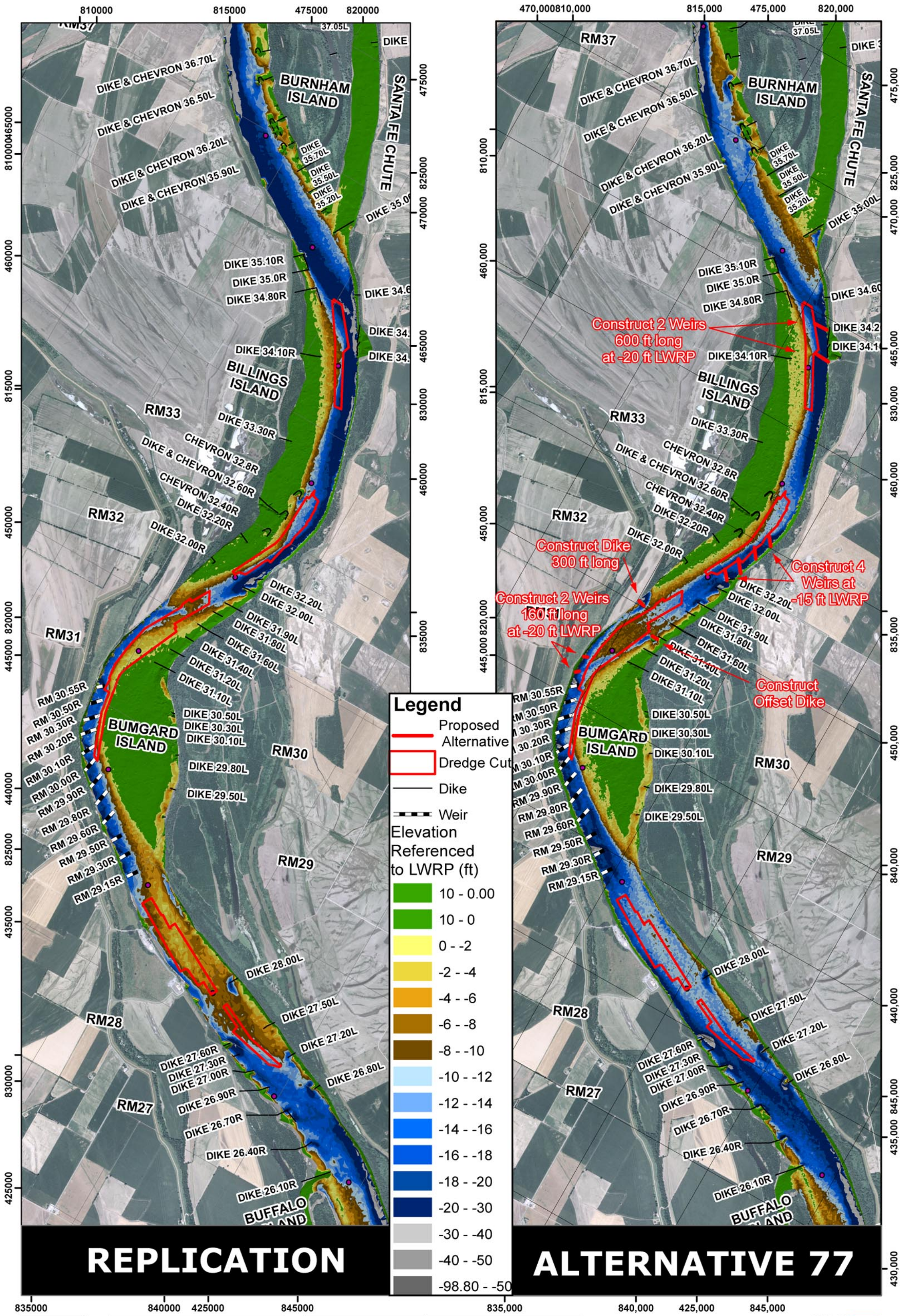

PLATE NUMBER 115

0 1,600 3,200 6,400 Feet

Replication Scan vs. Alternative 77 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
Bumgard Island
HSR Model
RM 36.0 - 25.0

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REVIEWED BY: E Brauer, P.E.
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SUBMITTED: K. Clancey
APPROVED: Rob Davinroy, P.E.
FILE NAME: Z:\Bumgard Island HSR study\Plates

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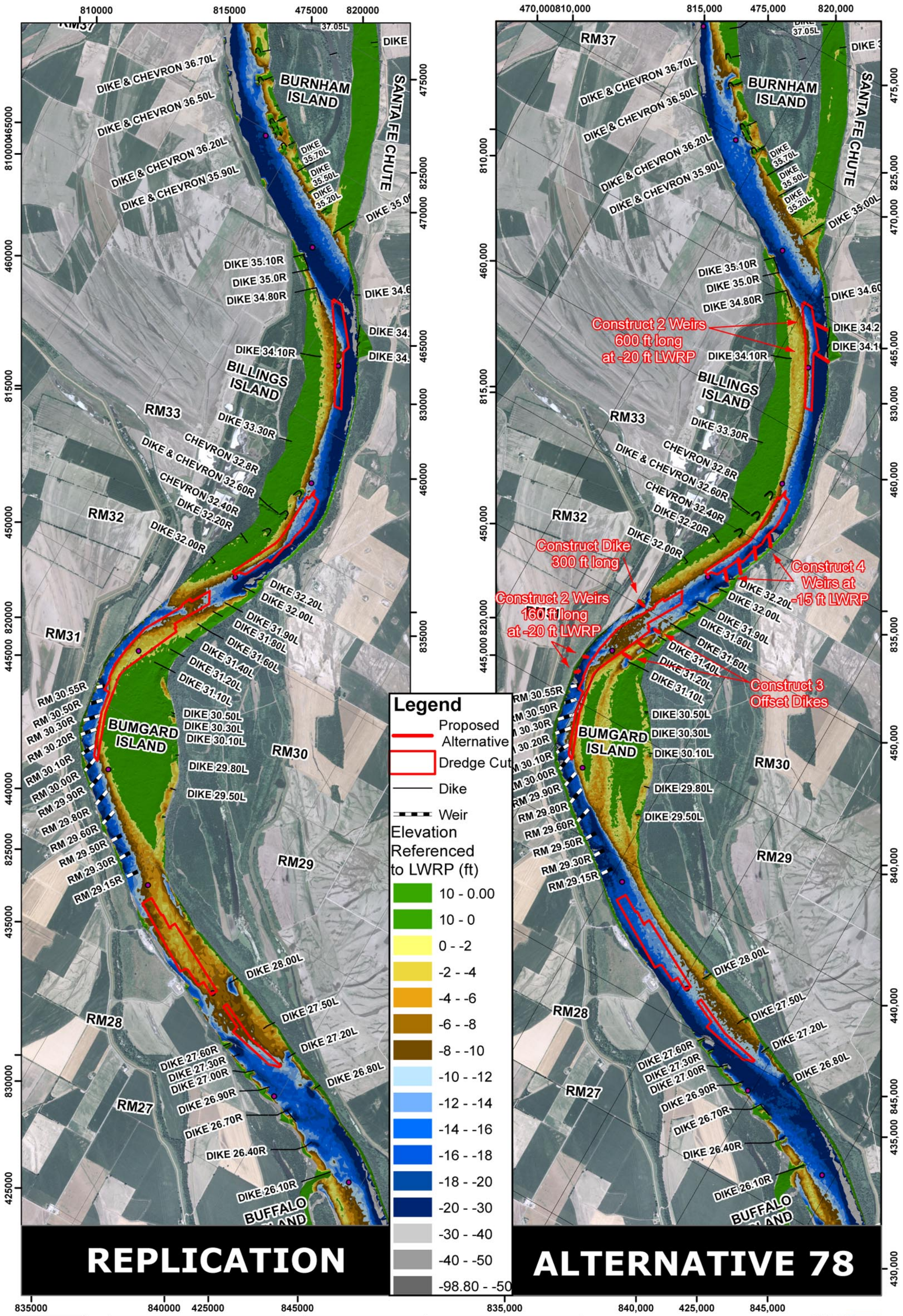

PLATE NUMBER 116

0 1,600 3,200 6,400 Feet

Replication Scan vs. Alternative 78 Bathymetry Results

2007 AERIAL PHOTOGRAPH

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

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St. Louis District
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US Army Corps of Engineers St. Louis District
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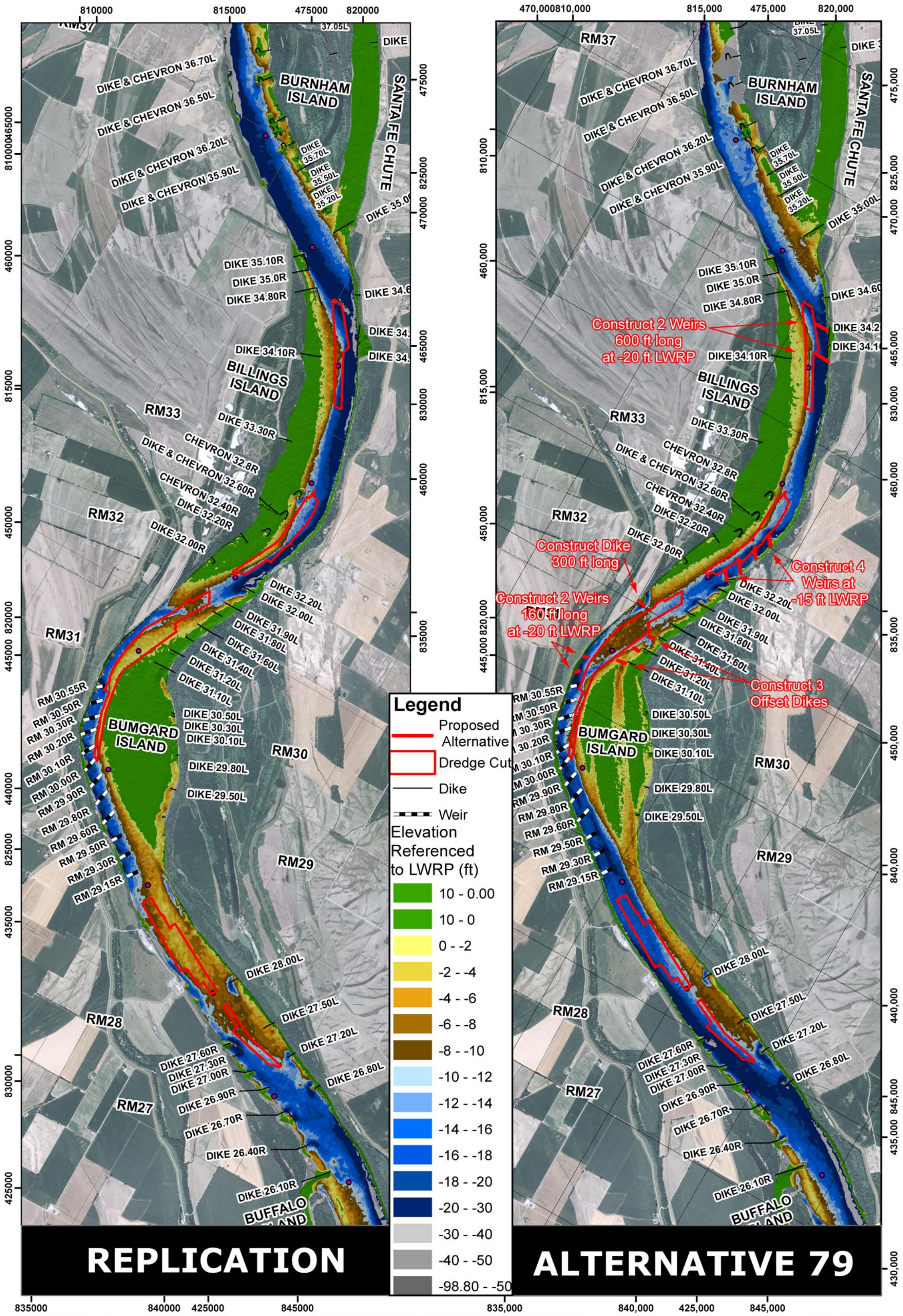

PLATE NUMBER 117

0 1,600 3,200 6,400
Feet

Replication Scan vs. Alternative 79
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

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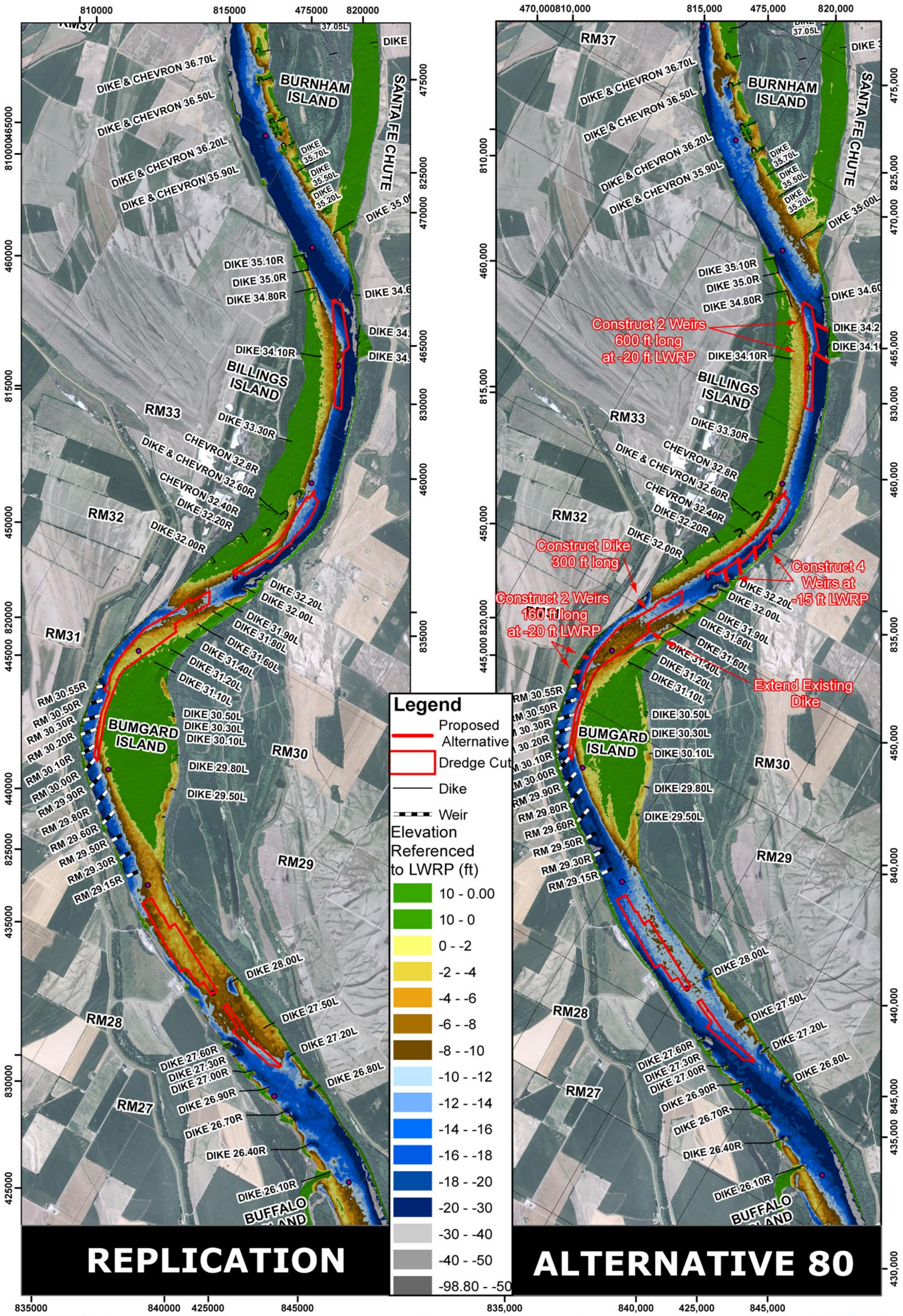

PLATE NUMBER 118

0 1,600 3,200 6,400
Feet

Replication Scan vs. Alternative 80
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
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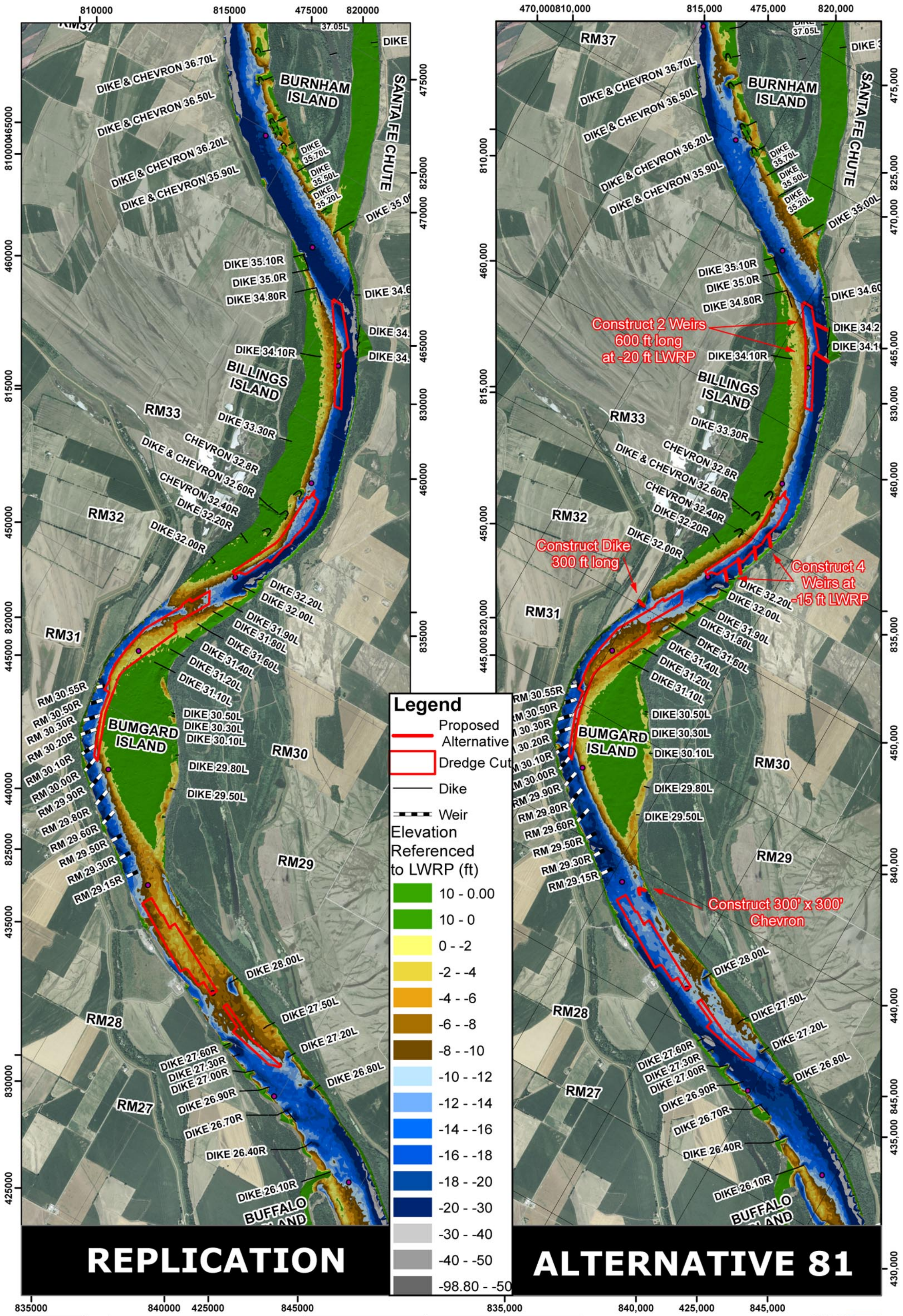

PLATE NUMBER 119

0 1,600 3,200 6,400
Feet

Replication Scan vs. Alternative 81
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

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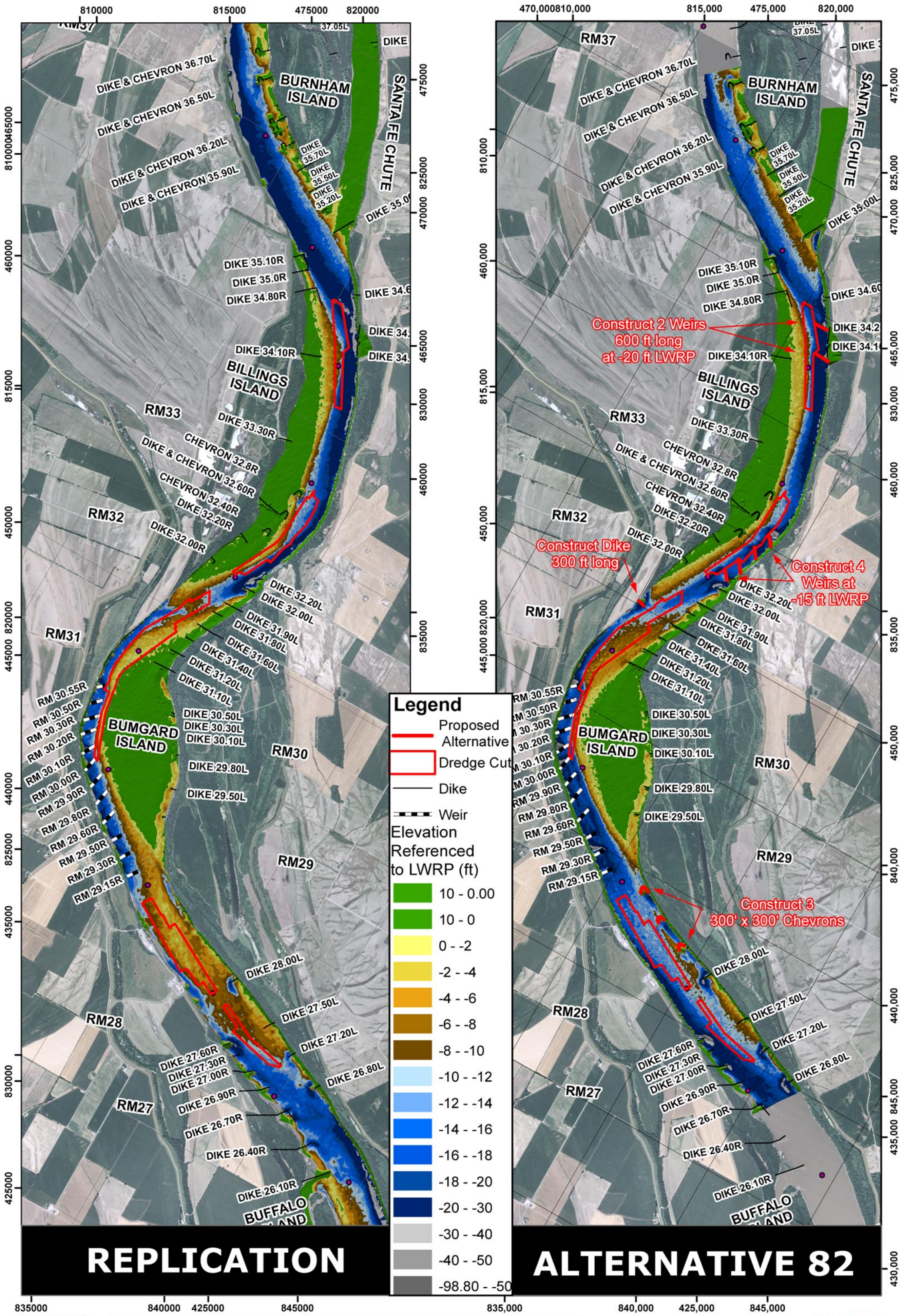

PLATE NUMBER 120

0 1,600 3,200 6,400 Feet

Replication Scan vs. Alternative 82 Bathymetry Results

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ST. LOUIS, MISSOURI

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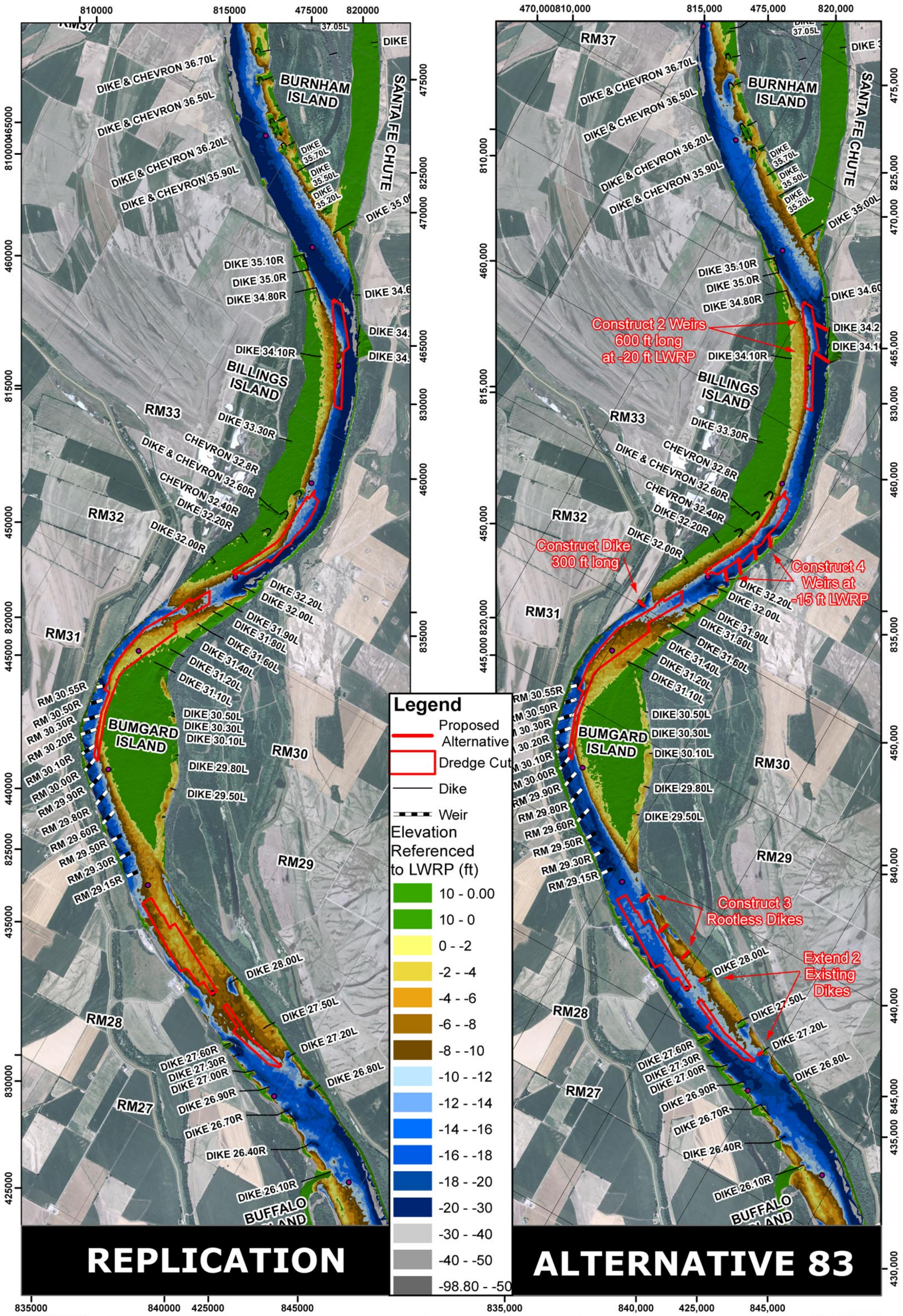

PLATE NUMBER 121

0 1,600 3,200 6,400 Feet

Replication Scan vs. Alternative 83 Bathymetry Results

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CORPS OF ENGINEERS
ST. LOUIS, MISSOURI

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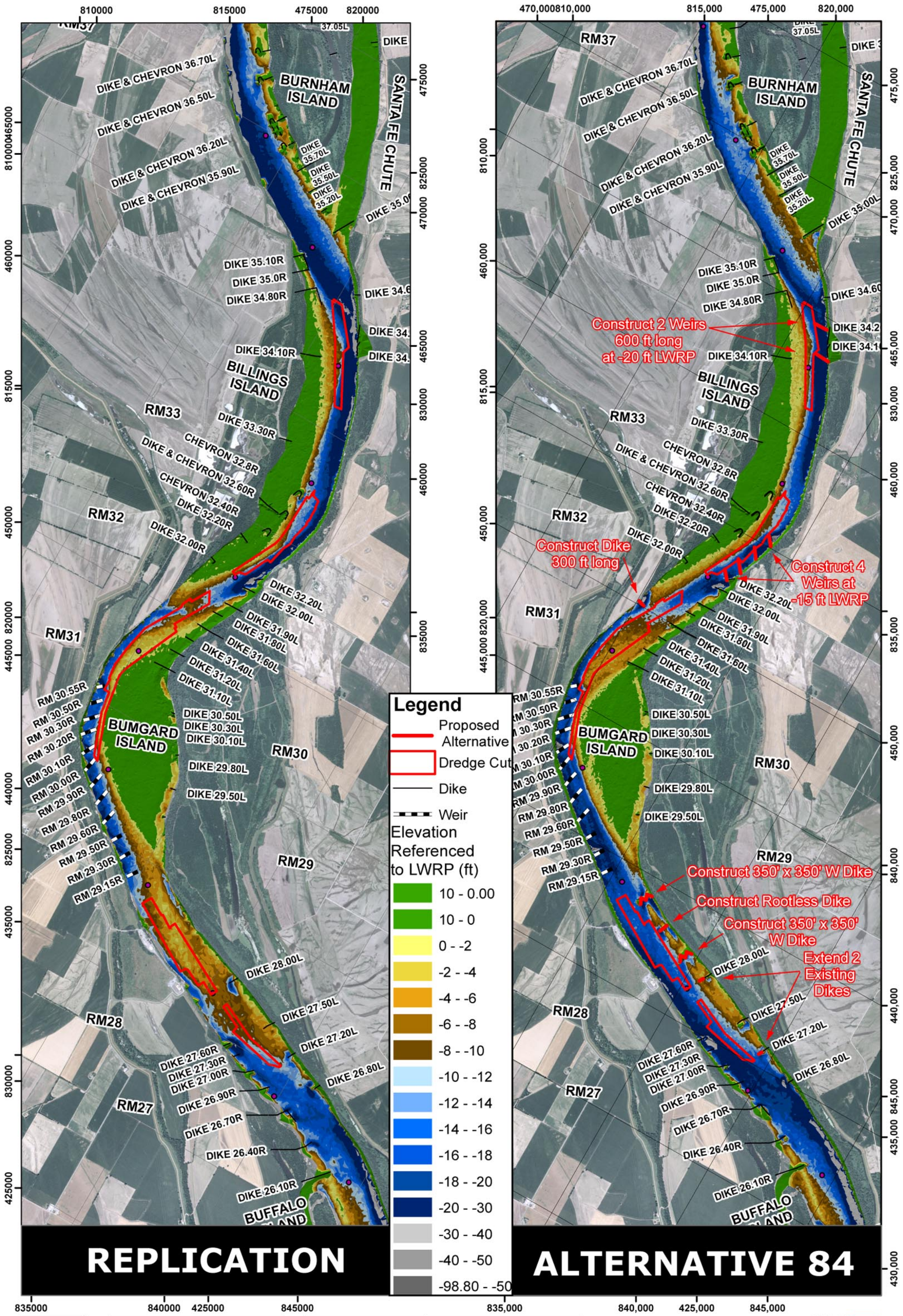

PLATE NUMBER 122

0 1,600 3,200 6,400
Feet

Replication Scan vs. Alternative 84
Bathymetry Results
2007 AERIAL PHOTOGRAPH

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ST. LOUIS, MISSOURI

Mississippi River Basin
St. Louis District
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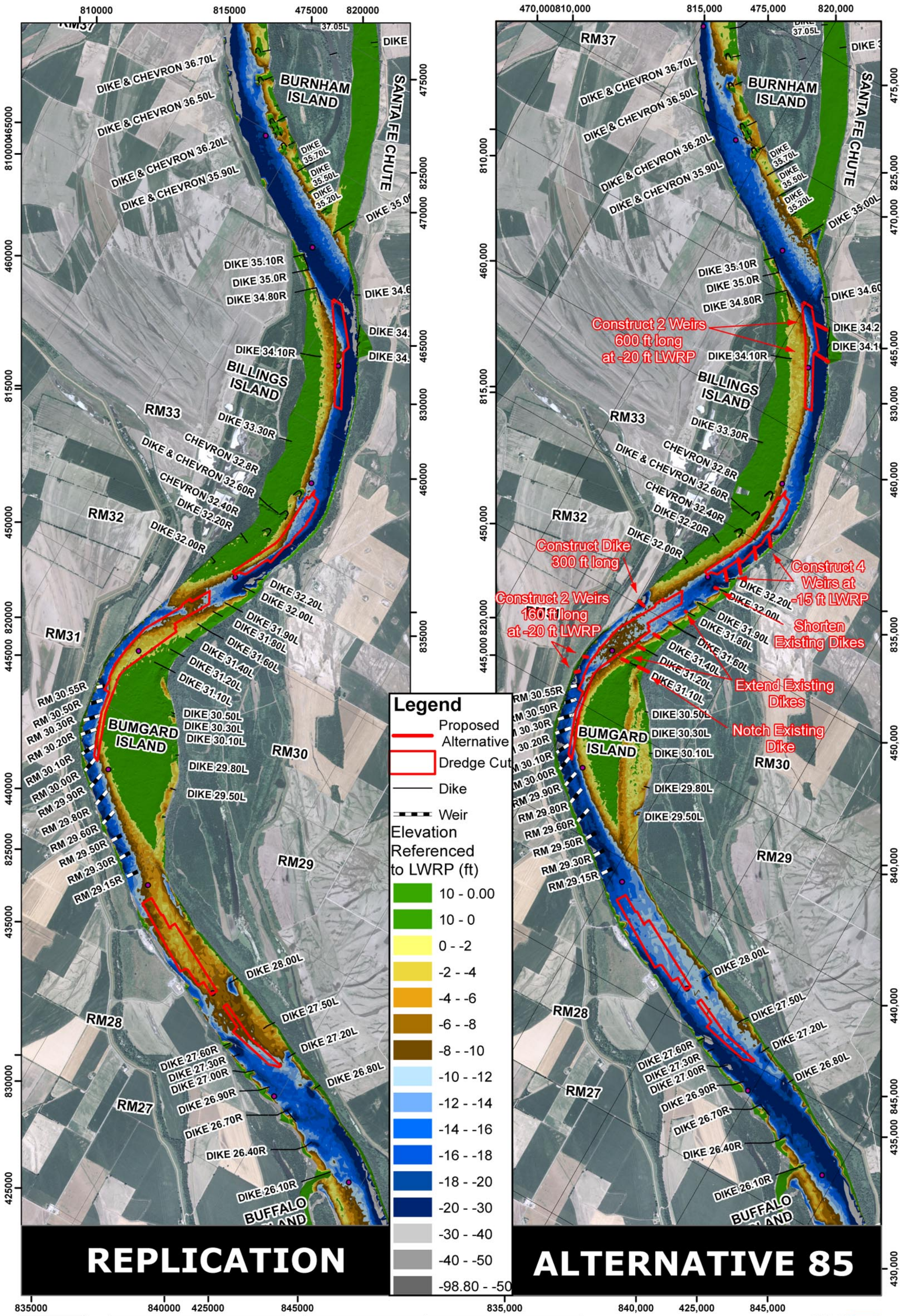

PLATE NUMBER 123

0 1,600 3,200 6,400
Feet

Replication Scan vs. Alternative 85
Bathymetry Results
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ST. LOUIS, MISSOURI

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