

DRAFT

19 Feb 2021

Post 2019 Flood Area of Concern (AOC)
Repairs CONCEPT DESIGN MAPS for
3 Phase Approach

21 AOC Sites

+

4 Additional MRRP Sites

Priority 1 (Green Lines █) = Top Priority work identified to be completed with FY21 funding

Priority 2 (Yellow Lines █) = Priority work to be considered as additional funding is received

Priority 3 (Orange Lines █) = Additional work to be considered as needed and as funding allows

DRAFT Rock Quantity (tons) Summary by Site

2020 AOC Sites							
AOC Sites			PHASE 1			Phase 2	Phase 3
Industry Priority Rank	Name	RM	Completed Phase 1	Remaining Phase 1	Total Phase 1		
	Cora Island Chute	3	0	68950	68950	86000	77500
	Pelican/Littles	10	0	15200	15200	2400	68600
6	Bryan Island/ St Charles Bend	25	13291	76800	90091	28500	2500
7	Daniel Boone Hwy Bridge	44	5800	12230	18030	41927	6075
9	Augusta Bend	56	0	37500	37500	46500	0
2	Lunch Island/ Bates Island Bend	92	30401	18000	48401	40250	53500
3	Gasconade	104	3750	52180	55930	19063	0
	Auxvasse Bend	122	0	25300	25300	10700	0
4	Smoky Waters Chute	133	14028	34000	48028	102800	33700
11	Providence/ Sandy Hook	167	0	13068	13068	9569	6750
5	Tadpole/Searcy Chute and IRC	179	52778	107460	160238	14600	73000
8	Overton North Chute	187	0	44150	44150	30700	30000
	Franklin Bend	194	0	5140	5140	14400	0
	Jameson Chute	213	25000	84700	109700	130500	85000
	Lisbon Chute	217	40000	5000	45000	88500	29000
	Upper Miami Bend	262	0	6800	6800	17300	11000
12	Prunty	269	0	3400	3400	13800	6100
1	Cranberry Chute	282	38100	139000	177100	18000	105000
	Bakers	286	0	2000	2000	9700	19000
	Weston Bend	400	0	0	0	14900	0
10	Wolf Creek	480	14300	3125	17425	53000	45000

Additional MRRP Sites							
Additional MRRP Sites			PHASE 1			Phase 2	Phase 3
	Name	RM	Completed Phase 1	Remaining Phase 1	Total Phase 1		
NA	Moberly Bend	299	0	16850	16850	15440	0
NA	Dalbey Chute	417	0	13000	13000	18000	50000
NA	Benedictine Chute	427	0	12000	12000	90000	91000
NA	Worthwine Chute	459	0	41200	41200	31900	25600

- Note**
- Structure_Phase1_Completed
 - Structure_Phase1_New
 - Structure_Phase1_Repair
 - Structure_Phase2
 - Structure_Phase3
 - River Mile
 - Existing Notch
 - Abatis/Retard
 - Buried/Inaccessible
 - xxxxxx Standard Revetment
 - Pile
 - Stone Fill
 - Pile with Stone Fill
 - Rectified Channel Line

Phase 1 (Blue & Green)
18,000 tons estimated (5,800 tons completed)

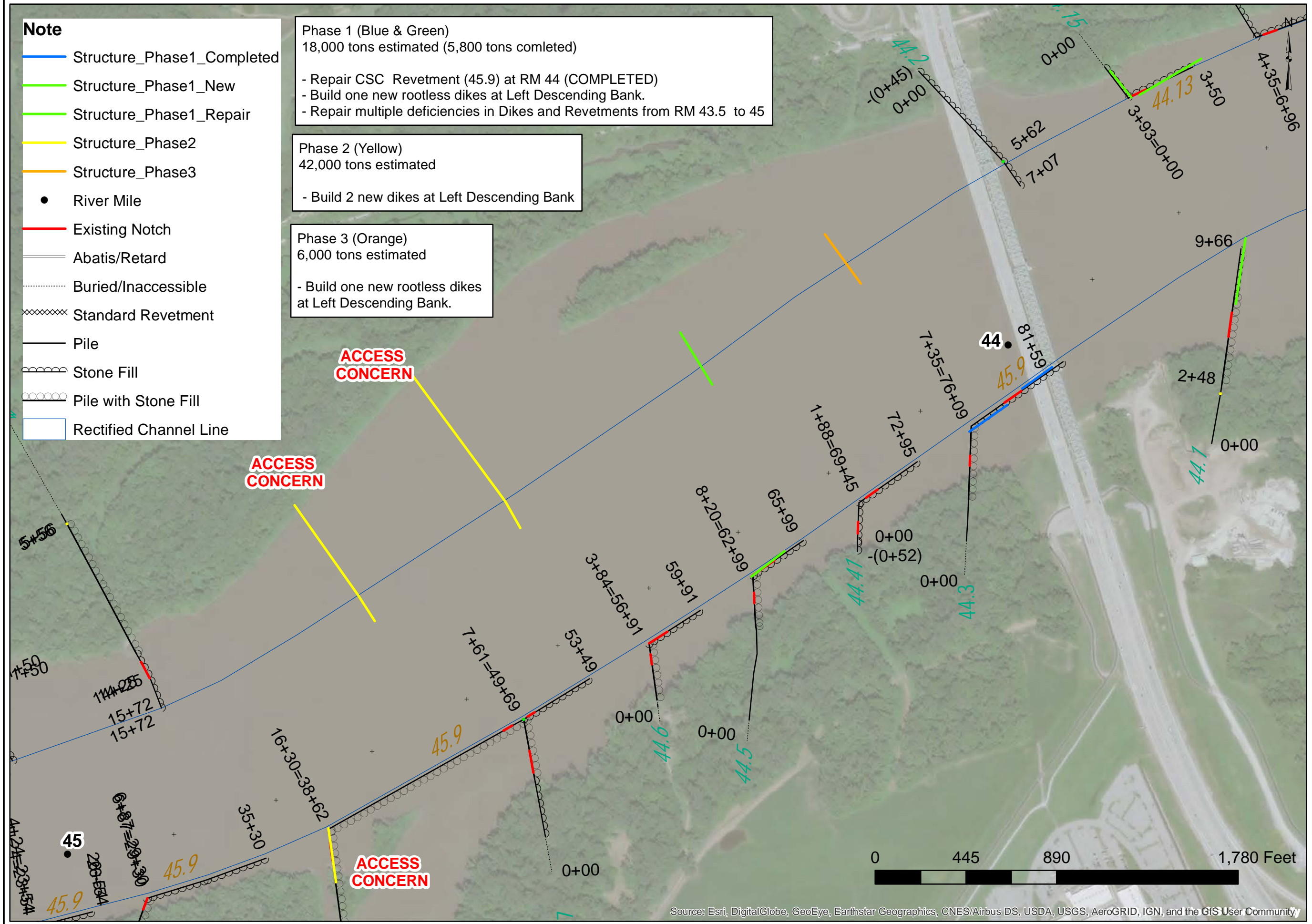
- Repair CSC Revetment (45.9) at RM 44 (COMPLETED)
- Build one new rootless dikes at Left Descending Bank.
- Repair multiple deficiencies in Dikes and Revetments from RM 43.5 to 45

Phase 2 (Yellow)
42,000 tons estimated

- Build 2 new dikes at Left Descending Bank

Phase 3 (Orange)
6,000 tons estimated

- Build one new rootless dikes at Left Descending Bank.



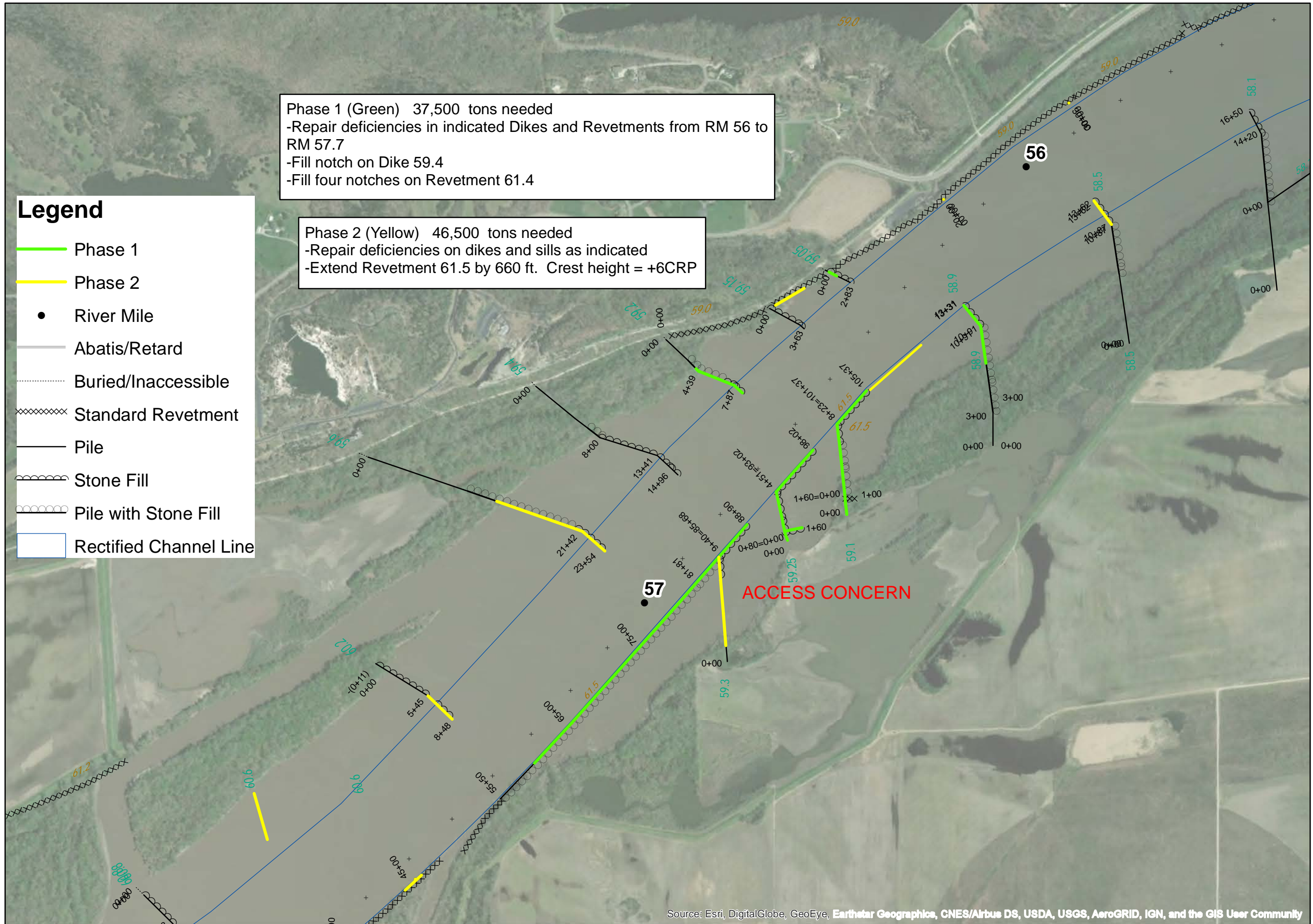
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Designed by: D. SCHRADER	Date: AUGUST 2020
Drawn by: T. BROHN	
D. MORRIS	
Submitted by: M. CHAPMAN	

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
KANSAS CITY, MISSOURI

Sheet Reference Number:
C-100



Date: FEBRUARY 2021

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 Drawn by: J. SHELLEY
 XXXXX
 Submitted by: M. CHAPMAN

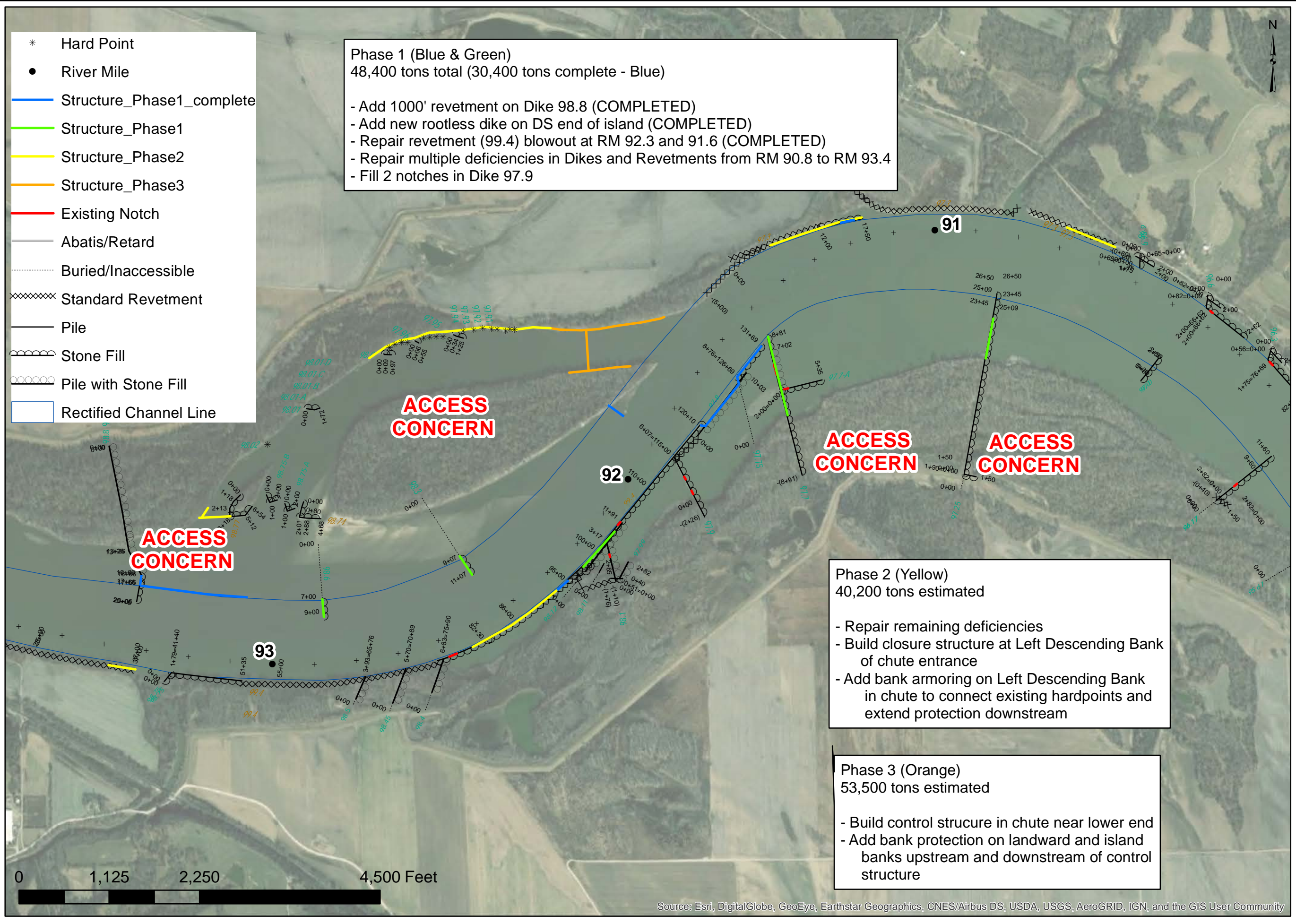
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 CORPS OF ENGINEERS
 KANSAS CITY, MISSOURI

MISSOURI RIVER BASIN

POST FLOOD AOC REPAIR
 RM 57- AUGUSTA BEND

Sheet Reference Number:

C-100



- * Hard Point
- River Mile
- Structure_Phase1_complete
- Structure_Phase1
- Structure_Phase2
- Structure_Phase3
- Existing Notch
- Abatis/Retard
- ... Buried/Inaccessible
- XXXX Standard Revetment
- Pile
- Stone Fill
- Pile with Stone Fill
- Rectified Channel Line

Phase 1 (Blue & Green)
 48,400 tons total (30,400 tons complete - Blue)

- Add 1000' revetment on Dike 98.8 (COMPLETED)
- Add new rootless dike on DS end of island (COMPLETED)
- Repair revetment (99.4) blowout at RM 92.3 and 91.6 (COMPLETED)
- Repair multiple deficiencies in Dikes and Revetments from RM 90.8 to RM 93.4
- Fill 2 notches in Dike 97.9

Phase 2 (Yellow)
 40,200 tons estimated

- Repair remaining deficiencies
- Build closure structure at Left Descending Bank of chute entrance
- Add bank armoring on Left Descending Bank in chute to connect existing hardpoints and extend protection downstream

Phase 3 (Orange)
 53,500 tons estimated

- Build control structure in chute near lower end
- Add bank protection on landward and island banks upstream and downstream of control structure



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DRAWN BY: T. BROTHN	
CHECKED BY: D. MORRIS	
SUBMITTED BY: M. CHAPMAN	

MISSOURI RIVER BASIN
 FLOOD DAMAGE REPAIR
 AREAS OF CONCERN (AOC)
POST FLOOD AOC REPAIR
RM92 - LUNCH ISLAND

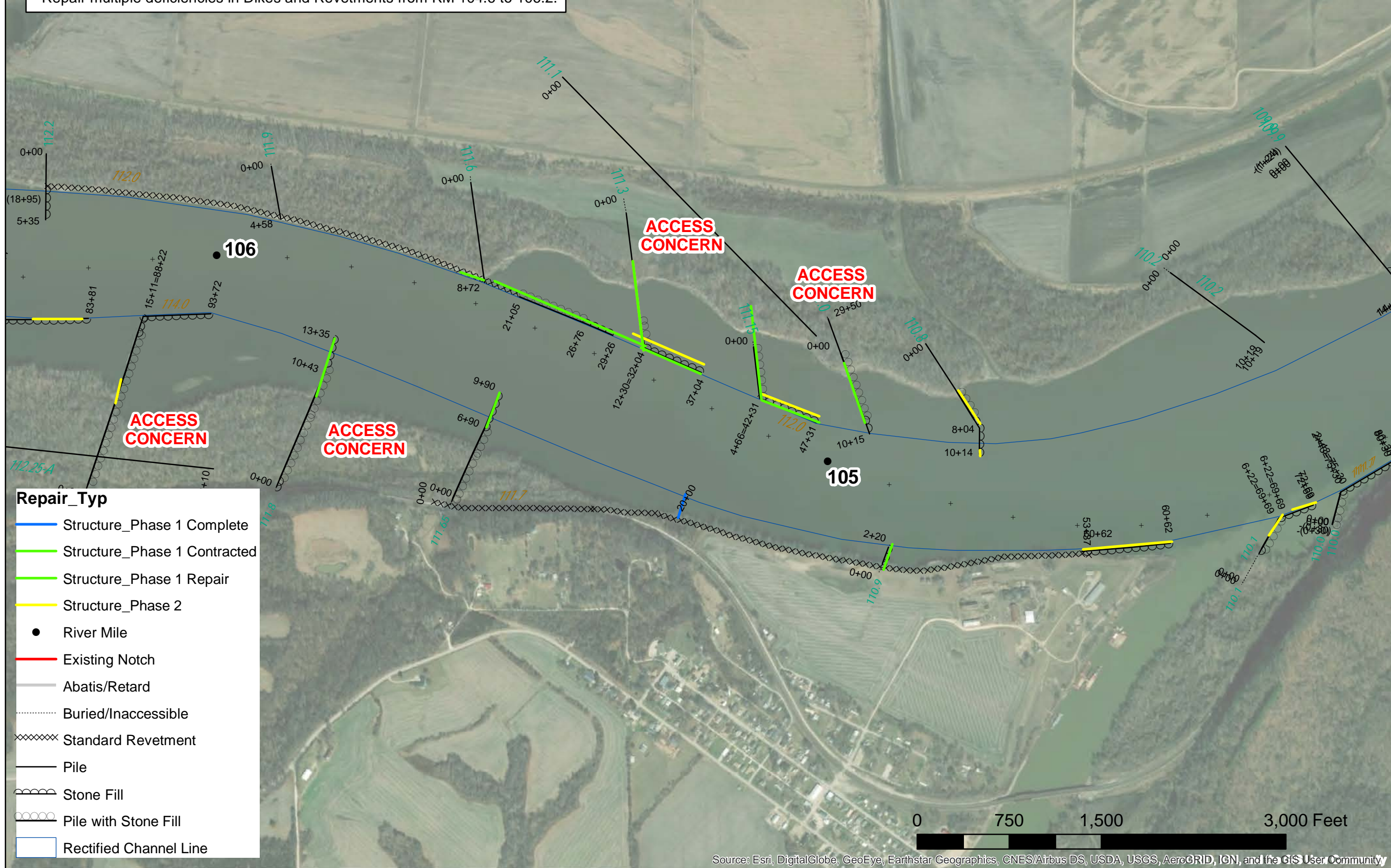
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Phase 1 (Blue & Green)
 52,500 tons estimated (23,500 tons completed and contracted)

- Construct new dike 111.25 (COMPLETED)
- Repair flanked dike (111.15, 111.3 and 111.0) (CONTRACTED)
- Repair multiple deficiencies in Dikes and Revetments from RM 104.6 to 106.2.

Phase 2 (Yellow)
 19,000 tons estimated

- Raise revetment 112.0 at Right Descending Bank
- Repair multiple deficiencies in Dikes and Revetments from RM 104.6 to 106.2.



Repair_Typ

	Structure_Phase 1 Complete
	Structure_Phase 1 Contracted
	Structure_Phase 1 Repair
	Structure_Phase 2
	River Mile
	Existing Notch
	Abatis/Retard
	Buried/Inaccessible
	Standard Revetment
	Pile
	Stone Fill
	Pile with Stone Fill
	Rectified Channel Line

0 750 1,500 3,000 Feet

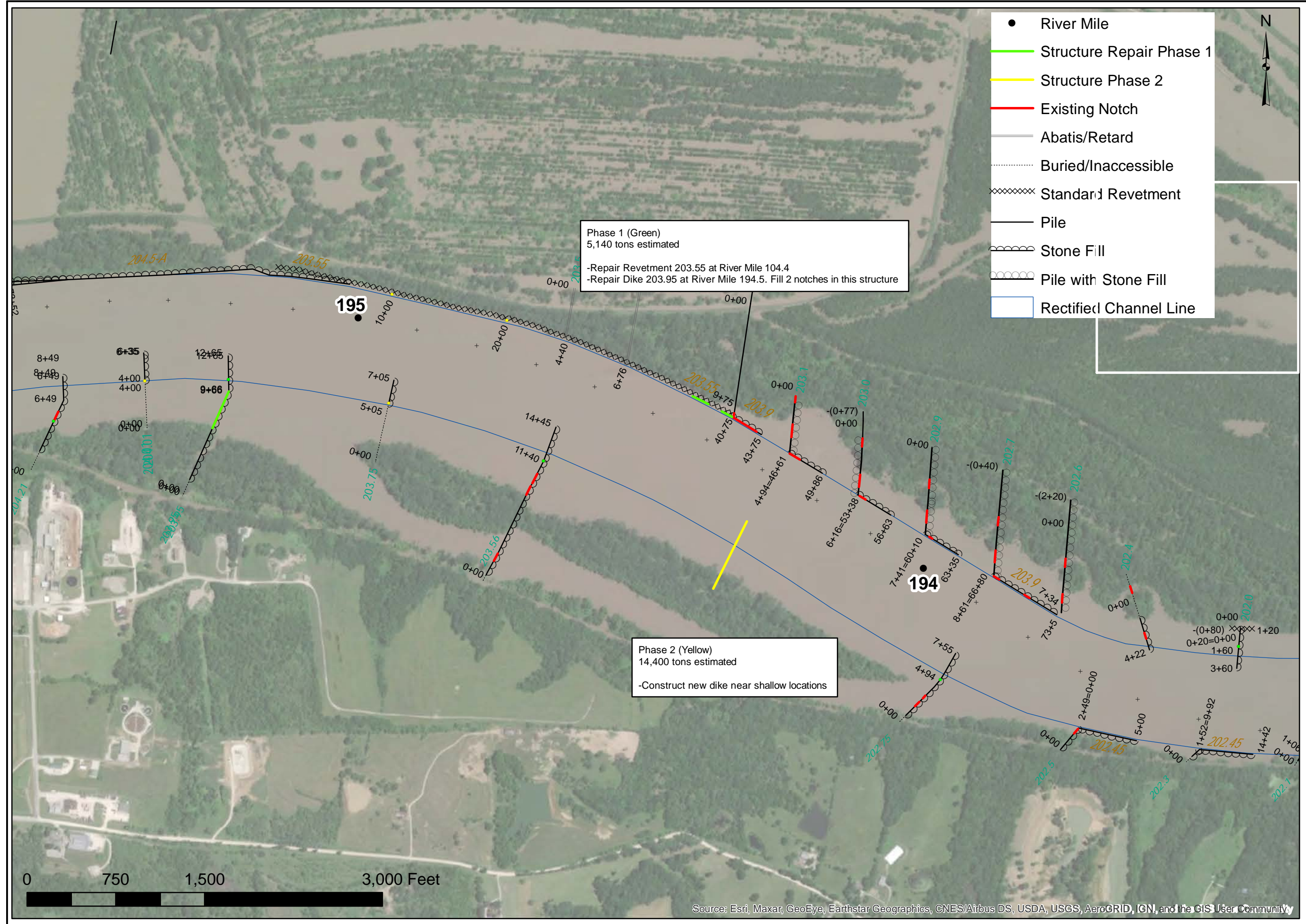
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Date	AUGUST 2020
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Checked by	D. MORRIS
Submitted by	M. CHAPMAN

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
KANSAS CITY, MISSOURI

MISSOURI RIVER BASIN
 ST. CHARLES COUNTY, MISSOURI
 FLOOD DAMAGE REPAIR
 CORA ISLAND CHUTE PROJECT
POST FLOOD AOC REPAIR
RM104 - GASCONADE

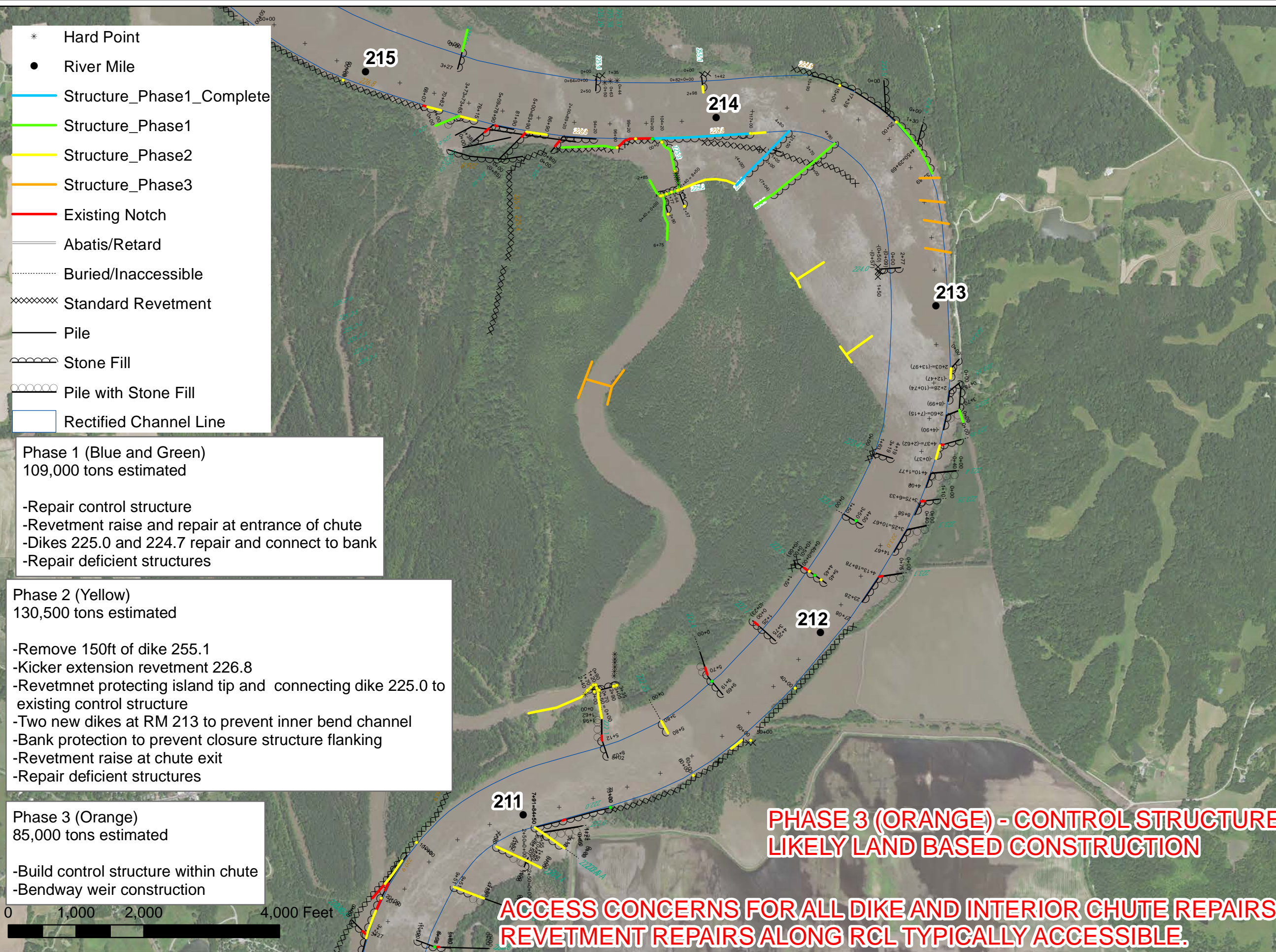
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<p>Designed by: D. SCHRADER</p> <p>Drawn by: T. BRODIN</p> <p>D. MORRIS</p> <p>Submitted by: M. CHAPMAN</p>	<p>Date: AUGUST 2020</p>
<p>U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS KANSAS CITY, MISSOURI</p>	

**FRANKLIN ISLAND-RM 194
SITE PLAN**

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



- * Hard Point
- River Mile
- Structure_Phase1_Complete
- Structure_Phase1
- Structure_Phase2
- Structure_Phase3
- Existing Notch
- Abatis/Retard
- Buried/Inaccessible
- Standard Revetment
- Pile
- Stone Fill
- Pile with Stone Fill
- Rectified Channel Line

Phase 1 (Blue and Green)
 109,000 tons estimated

- Repair control structure
- Revetment raise and repair at entrance of chute
- Dikes 225.0 and 224.7 repair and connect to bank
- Repair deficient structures

Phase 2 (Yellow)
 130,500 tons estimated

- Remove 150ft of dike 255.1
- Kicker extension revetment 226.8
- Revetment protecting island tip and connecting dike 225.0 to existing control structure
- Two new dikes at RM 213 to prevent inner bend channel
- Bank protection to prevent closure structure flanking
- Revetment raise at chute exit
- Repair deficient structures

Phase 3 (Orange)
 85,000 tons estimated

- Build control structure within chute
- Bendway weir construction

PHASE 3 (ORANGE) - CONTROL STRUCTURE LIKELY LAND BASED CONSTRUCTION

ACCESS CONCERNS FOR ALL DIKE AND INTERIOR CHUTE REPAIRS. REVETMENT REPAIRS ALONG RCL TYPICALLY ACCESSIBLE.



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Submitted by: M. CHAPMAN	
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POST FLOOD AOC REPAIR
 RM213 - JAMESON ISLAND

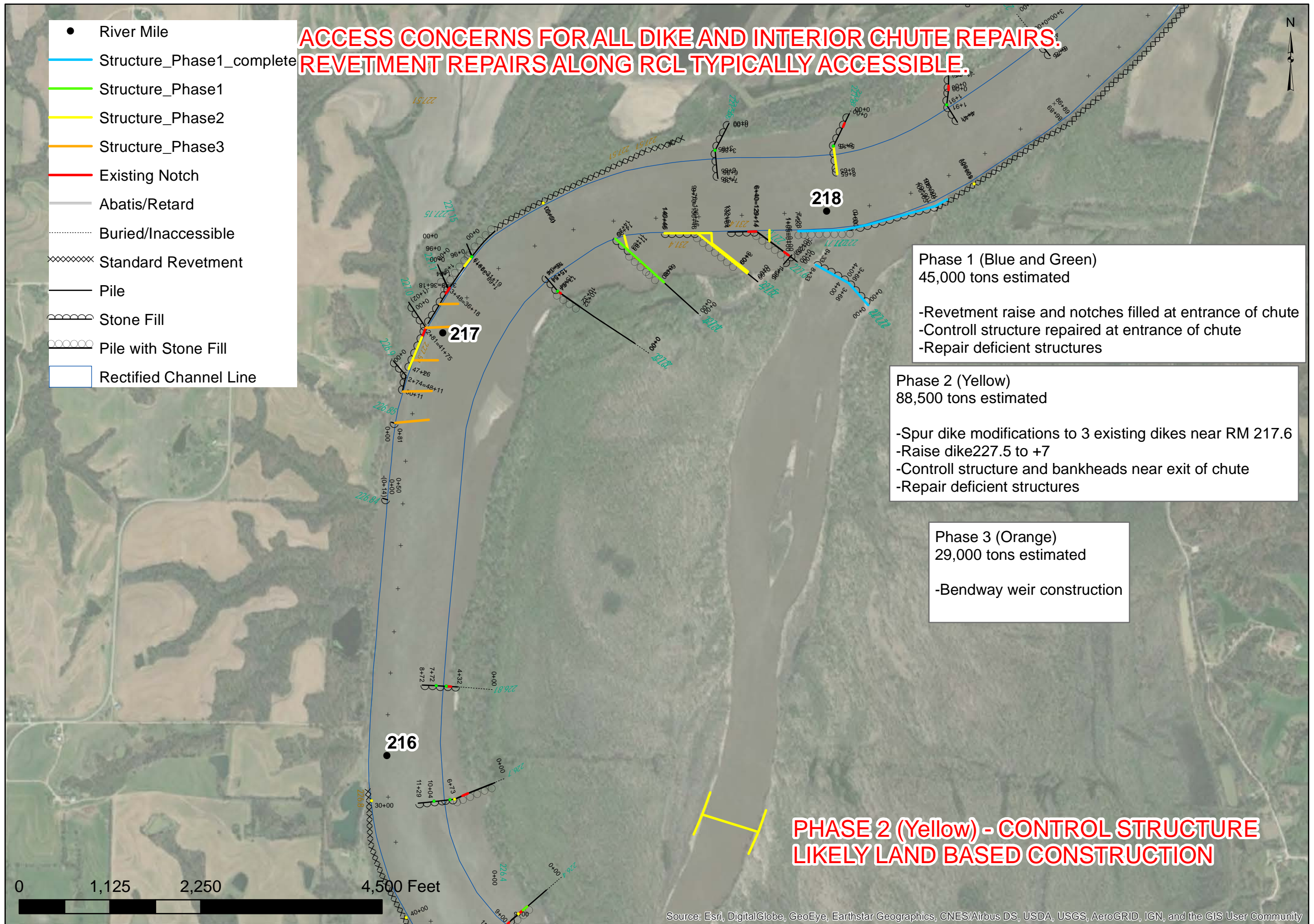
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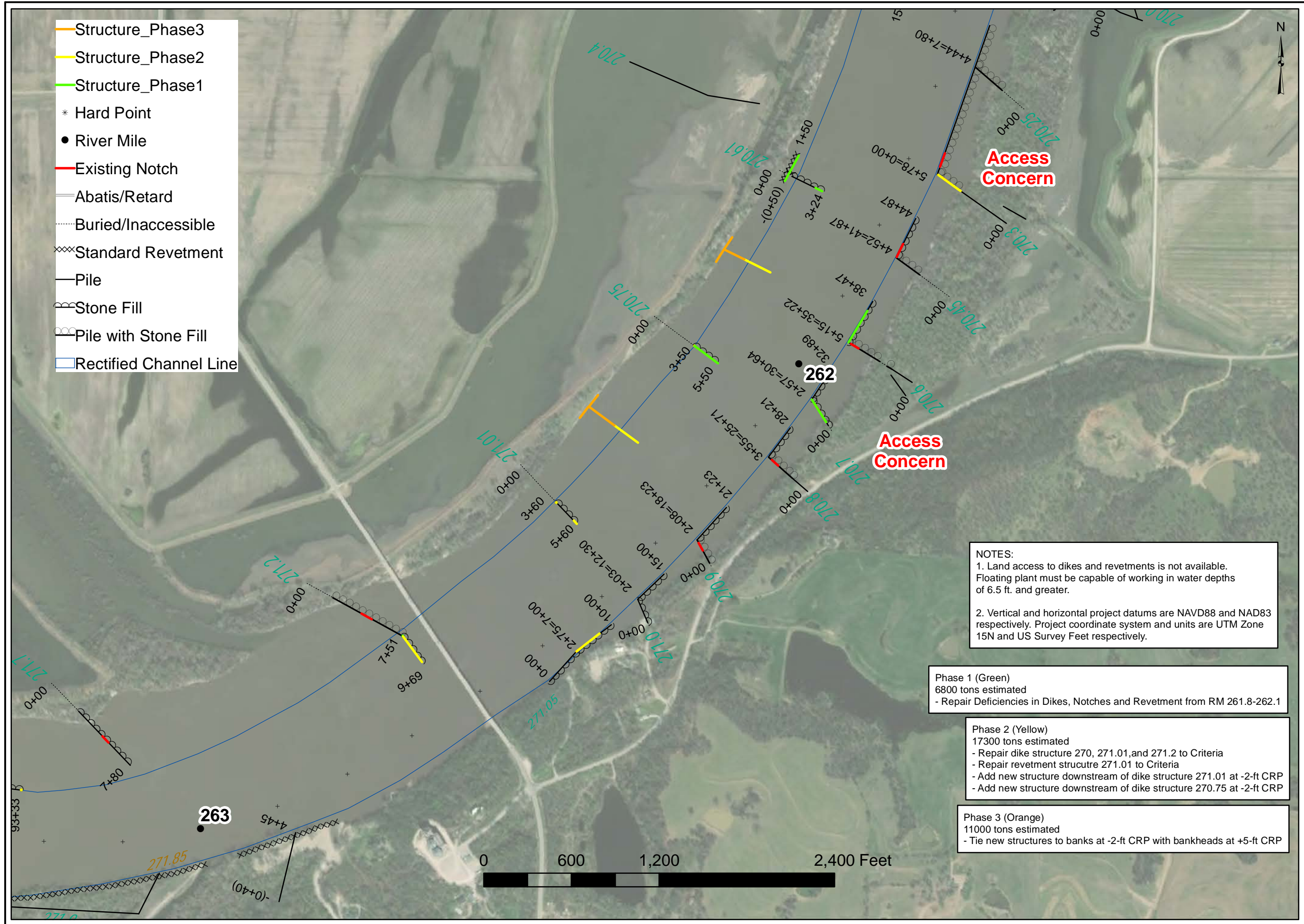
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	Drawn by: D. MORRIS	Submitted by: M. CHAPMAN

POST FLOOD AOC REPAIR
RM217 - LISBON

Sheet Reference Number:
C-100





- Structure_Phase3
- Structure_Phase2
- Structure_Phase1
- * Hard Point
- River Mile
- Existing Notch
- Abatis/Retard
- Buried/Inaccessible
- ⊗ Standard Revetment
- Pile
- ⊕ Stone Fill
- ⊕ Pile with Stone Fill
- Rectified Channel Line



Designed by: G. FIGUEROA TORO	Date: JANUARY 2021
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U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
KANSAS CITY, MISSOURI

MISSOURI RIVER BASIN
SALINE COUNTY, MISSOURI
POST FLOOD DAMAGE REPAIR
UPPER MIAMI PROJECT

POST FLOOD AOC REPAIRS RM 262 UPPER MIAMI

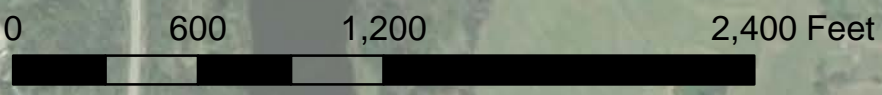
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NOTES:
1. Land access to dikes and revetments is not available. Floating plant must be capable of working in water depths of 6.5 ft. and greater.
2. Vertical and horizontal project datums are NAVD88 and NAD83 respectively. Project coordinate system and units are UTM Zone 15N and US Survey Feet respectively.

Phase 1 (Green)
6800 tons estimated
- Repair Deficiencies in Dikes, Notches and Revetment from RM 261.8-262.1

Phase 2 (Yellow)
17300 tons estimated
- Repair dike structure 270, 271.01, and 271.2 to Criteria
- Repair revetment structure 271.01 to Criteria
- Add new structure downstream of dike structure 271.01 at -2-ft CRP
- Add new structure downstream of dike structure 270.75 at -2-ft CRP

Phase 3 (Orange)
11000 tons estimated
- Tie new structures to banks at -2-ft CRP with bankheads at +5-ft CRP



ADDITIONAL MRRP SITES

