# Appendix G – Cost Engineering

### **1** BASIS OF ESTIMATE

The feasibility study cost was a federal cost for the initial \$100,000; the amount after the initial \$100,000 was cost shared at 50%. The General Navigation Feature (GNF) costs are 90% federal and 10% non-federal and the Local Service Facility (LSF) costs are 100% non-federal, per CAP 107 cost share guidance for GNF dredging depth of <20 ft. GNF costs include the costs for dredge disposal areas and environmental mitigation.

### 1.1 SOUTH OXBOW ALTERNATIVES

Cost estimates for the south oxbow alternatives were developed using equipment and labor rates from a recent nearby dredging IDIQ contract. After research and much discussion, hydraulic dredging was assumed to be the most cost-effective methodology in the south oxbow. Riprap and bedding material quote were received from Columbia Quarry in Waterloo, IL. Dredge disposal areas identified in the main report would require sitework necessary to build up the berm to receive the slurry material. Costs include Mobilization/Demobilization from dredging IDIQ contract, hydraulic dredging, fleeting area revetment, mooring structures, and dredge disposal area site prep, 32% Contingency based on Abbreviated Risk Analysis (ARA), Planning Engineering and Design (18% of overall construction costs including contingency), Construction Management (10% of overall construction costs including contingency), environmental mitigation, and Real Estate. LSF costs are related to fleeting areas including mooring structures. Per ER 1110-2-1302, LSFs are Associated Costs which are excluded from the Total Project First Cost. The breakdown of the costs can be seen in **Table G-1**, **Table G-2**, and **Table G-3**.

**Table G-1**. South Oxbow Alternative 1a & 1b – Maximum – Two Way and One Way Traffic (FY24 Price Level)

	Alternative	1	la	1	lb
			Non-Federal		Non-Federal
		Federal Cost	Cost	Federal Cost	Cost
,st	Construction w/ Contingency	\$6,913,000	\$1,022,000	\$6,362,000	\$961,000
بة ( <del>.</del>	PED	\$1,244,000	\$184,000	\$1,145,000	\$173,000
jec (GN	S&A	\$691,000	\$102,000	\$636,000	\$96,000
al Project F Cost (GNF)	Environmental Mitigation:	\$463,000	\$51,000	\$463,000	\$51,000
Total Project First Cost (GNF)	Real Estate Costs:	\$0	\$225,000	\$0	\$225,000
ĭ	Total Project First Cost	\$9,311,000	\$1,584,000	\$8,606,000	\$1,506,000
		\$10,8	95,000	\$10,1	12,000
S.	Construction w/ Contingency		\$1,806,000		\$2,220,000
Costs	PED		\$325,000		\$400,000
iated (LSF)	S&A		\$180,000		\$222,000
Associated (LSF)	Environmental Mitigation:		\$21,000		\$36,000
sso	Real Estate Costs:		\$14,000		\$22,000
٩	Associated Cost Total		\$2,346,000		\$2,900,000
	Project First Cost with				
	Associated Costs:	\$13,2	41,000	\$13,0	12,000
	Feasibility Study Costs:	\$520,000	\$420,000	\$520,000	\$420,000
	Total Fed/Non-Fed Costs:	\$9,831,000	\$4,350,000	\$9,126,000	\$4,826,000
	Estimated Duration (Months)	1	.6	1	16

**Table G-2**. South Oxbow Alternative 2a & 2b – Turning Basin – Two Way and One Way Traffic (FY24 Price Level)

	Alternative		2a		2b
		Federal Cost	Non-Federal Cost	Federal Cost	Non-Federal Cost
t s	Construction w/ Contingency	\$7,399,000	\$822,000	\$6,848,000	\$760,000
ᄩ	PED	\$1,332,000	\$148,000	\$1,233,000	\$137,000
ject	S&A	\$740,000	\$82,000	\$685,000	\$76,000
al Project F Cost (GNF)	Environmental Mitigation:	\$463,000	\$51,000	\$463,000	\$51,000
Total Project First Cost (GNF)	Real Estate Costs:	\$0	\$225,000	\$0	\$225,000
Ľ	Total Project First Cost	\$9,934,000	\$1,328,000	\$9,229,000	\$1,249,000
		\$11,2	\$11,262,000 \$10,478,000		178,000
S.	Construction w/ Contingency				
Cos	PED				
iated (LSF)	S&A				
ciat (C	Environmental Mitigation:				
Associated Costs (LSF)	Real Estate Costs:				
٩	Associated Cost Total				
	Project First Cost with				
	Associated Costs:	\$11,2	62,000	\$10,4	178,000
	Feasibility Study Costs:	\$520,000	\$420,000	\$520,000	\$420,000
	Total Fed/Non-Fed Costs:	\$10,454,000	\$1,748,000	\$9,749,000	\$1,669,000
	Estimated Duration (Months)		13		12

**Table G-3**. South Oxbow Alternative 3a & 3b – Minimum – Two Way and One Way Traffic (FY24 Price Level)

	Alternative	3	a	3b	1
			Non-Federal		Non-Federal
		Federal Cost	Cost	Federal Cost	Cost
st	Construction w/ Contingency	\$2,665,000	\$296,000	\$2,115,000	\$235,000
<u>F</u> C	PED	\$480,000	\$53,000	\$381,000	\$42,000
) jecj GN	S&A	\$267,000	\$30,000	\$212,000	\$24,000
Total Project First Cost (GNF)	Environmental Mitigation:	\$463,000	\$51,000	\$463,000	\$51,000
) ta	Real Estate Costs:	\$0	\$85,000	\$0	\$85,000
ĭ	Total Project First Cost	\$3,875,000	\$515,000	\$3,171,000	\$437,000
		\$4,39	0,000	\$3,608	,000
s,	Construction w/ Contingency				
Costs	PED				
iated (LSF)	S&A				
Associated (LSF)	Environmental Mitigation:				
SSO	Real Estate Costs:				
٩	Associated Cost Total				
	Project First Cost with				
	Associated Costs:	\$4,39	0,000	\$3,608	,000
	Feasibility Study Costs:	\$520,000	\$420,000	\$520,000	\$420,000
	Total Fed/Non-Fed Costs:	\$4,395,000	\$935,000	\$3,691,000	\$857,000
	Estimated Duration (Months)	4	+	3	

#### 1.2 NORTH OXBOW ALTERNATIVES

Cost estimates for the north oxbow alternatives were developed using equipment and labor rates from a recent nearby dredging IDIQ contract. Because the north oxbow has never been dredged before, it was anticipated that hydraulic dredging would not be capable of removing the material, so mechanical dredging was assumed to be the most cost-effective method. Riprap and bedding material quote were received from Columbia Quarry in Waterloo, IL. Dredge disposal areas identified in the main report would require sitework necessary to build up the berm to receive the dredged material. Costs include Mobilization/Demobilization from dredging IDIQ contract, mechanical dredging, fleeting area revetment, mooring structures, and dredge disposal area site prep, 36% Contingency based on Abbreviated Risk Analysis (ARA), Planning Engineering and Design (18% of overall construction costs including contingency), Construction Management (10% of overall construction costs including contingency), environmental mitigation, and Real Estate. The GNF costs are 90% federal and 10% non-federal and the LSF costs are 100% non-federal. LSF costs are related to fleeting areas including mooring structures, and a new dock at the north oxbow. Per ER 1110-2-1302, LSFs are Associated Costs which are excluded from the Total Project First Cost. The breakdown of the

# costs can be seen in **Table G-4**,

	Alternative	4a	1	4b	
			Non-Federal		Non-Federal
		Federal Cost	Cost	Federal Cost	Cost
st s	Construction w/ Contingency	\$12,890,000	\$1,434,000	\$11,125,000	\$1,236,000
<u> </u>	PED	\$2,320,000	\$258,000	\$2,003,000	\$222,000
jec (GN	S&A	\$1,289,000	\$143,000	\$1,113,000	\$124,000
al Project F Cost (GNF)	Environmental Mitigation:	\$656,000	\$73,000	\$656,000	\$73,000
Total Project First Cost (GNF)	Real Estate Costs:	\$0	\$161,000	\$0	\$161,000
ĭ	Total	\$17,155,000	\$2,069,000	\$14,897,000	\$1,816,000
		\$19,224,000		\$16,713	3,000
ž.	Construction w/ Contingency		\$14,663,000		\$14,820,000
Associated Costs (LSF)	PED		\$2,639,000		\$2,668,000
iated (LSF)	S&A		\$1,466,000		\$1,482,000
ciat (L)	Environmental Mitigation:		\$79,000		\$101,000
ossı	Real Estate Costs:		\$25,000		\$32,000
٩	Associated Cost Total		\$18,872,000		\$19,103,000
	Project First Cost with				
	Associated Costs:	\$38,09	6,000	\$35,816	5,000
	Feasibility Study Costs:	\$520,000	\$420,000	\$520,000	\$420,000
	Total Fed/Non-Fed Costs:	\$17,675,000	\$21,361,000	\$15,417,000	\$21,339,000
	Estimated Duration (Months)	29	)	27	

Table G-5, Table G-6, and Table G-7.

**Table G-4**. North Oxbow Alternative 4a & 4b – Maximum – Two Way and One Way Traffic (FY24 Price Level)

	Alternative	4a	1	4b	
			Non-Federal		Non-Federal
		Federal Cost	Cost	Federal Cost	Cost
z z	Construction w/ Contingency	\$12,890,000	\$1,434,000	\$11,125,000	\$1,236,000
<u> </u>	PED	\$2,320,000	\$258,000	\$2,003,000	\$222,000
jec (GN	S&A	\$1,289,000	\$143,000	\$1,113,000	\$124,000
Total Project First Cost (GNF)	Environmental Mitigation:	\$656,000	\$73,000	\$656,000	\$73,000
otal C	Real Estate Costs:	\$0	\$161,000	\$0	\$161,000
ĭ	Total	\$17,155,000	\$2,069,000	\$14,897,000	\$1,816,000
		\$19,224,000		\$16,713	3,000
t t	Construction w/ Contingency		\$14,663,000		\$14,820,000
Associated Costs (LSF)	PED		\$2,639,000		\$2,668,000
iated (LSF)	S&A		\$1,466,000		\$1,482,000
ciat (L)	Environmental Mitigation:		\$79,000		\$101,000
ossı	Real Estate Costs:		\$25,000		\$32,000
٩	Associated Cost Total		\$18,872,000		\$19,103,000
	Project First Cost with				
	Associated Costs:	\$38,09	6,000	\$35,816	5,000
	Feasibility Study Costs:	\$520,000	\$420,000	\$520,000	\$420,000
	Total Fed/Non-Fed Costs:	\$17,675,000	\$21,361,000	\$15,417,000	\$21,339,000
	Estimated Duration (Months)	29	)	27	

**Table G-5**. North Oxbow Alternative 5a & 5b – Fleeting Two Way and One Way Traffic (FY24 Price Level)

	Alternative	5a		5b	1
			Non-Federal		Non-Federal
		Federal Cost	Cost	Federal Cost	Cost
t i	Construction w/ Contingency	\$11,952,000	\$1,328,000	\$9,991,000	\$1,111,000
<u> </u>	PED	\$2,151,000	\$239,000	\$1,798,000	\$200,000
GN	S&A	\$1,195,000	\$133,000	\$999,000	\$111,000
Total Project First Cost (GNF)	Environmental Mitigation:	\$579,000	\$64,000	\$579,000	\$64,000
L Stal	Real Estate Costs:	\$0	\$154,000	\$0	\$154,000
ĭ	Total	\$15,877,000	\$1,918,000	\$13,367,000	\$1,640,000
		\$17,795	\$17,795,000 \$15,007,000		7,000
S.	Construction w/ Contingency		\$14,663,000		\$14,820,000
So	PED		\$2,639,000		\$2,668,000
Associated Costs (LSF)	S&A		\$1,466,000		\$1,482,000
ciat (L)	Environmental Mitigation:		\$79,000		\$101,000
oss	Real Estate Costs:		\$25,000		\$32,000
٩	Associated Cost Total		\$18,872,000		\$19,103,000
	Project First Cost with				
	Associated Costs:	\$36,667	,000	\$34,110	0,000
	Feasibility Study Costs:	\$520,000	\$420,000	\$520,000	\$420,000
	Total Fed/Non-Fed Costs:	\$16,397,000	\$21,210,000	\$13,887,000	\$21,163,000
	Estimated Duration (Months)	28		26	i

**Table G-6**. North Oxbow Alternative 6a & 6b – Mouth Widening Two Way and One Way Traffic (FY24 Price Level)

	Alternative	6a		6b		
			Non-Federal		Non-Federal	
		Federal Cost	Cost	Federal Cost	Cost	
st	Construction w/ Contingency	\$12,206,000	\$1,356,000	\$10,529,000	\$1,170,000	
<u> </u>	PED	\$2,197,000	\$244,000	\$1,895,000	\$211,000	
jec GN	S&A	\$1,221,000	\$136,000	\$1,053,000	\$117,000	
Total Project First Cost (GNF)	Environmental Mitigation:	\$656,000	\$73,000	\$656,000	\$73,000	
) tal	Real Estate Costs:	\$0	\$161,000	\$0	\$161,000	
Total		\$16,280,000	\$1,970,000	\$14,133,000	\$1,732,000	
		\$18,250,000		\$15,8	55,000	
ន	Construction w/ Contingency		\$14,280,000		\$14,280,000	
Costs	PED		\$2,570,000		\$2,570,000	
iated (LSF)	S&A		\$1,428,000		\$1,428,000	
Associated (LSF)	Environmental Mitigation:		\$29,000		\$29,000	
ossi	Real Estate Costs:		\$12,000		\$12,000	
٩	Associated Cost Total		\$18,319,000		\$18,319,000	
	Project First Cost with					
	Associated Costs:	\$36,569	,000	\$34,1	84,000	
	Feasibility Study Costs:	\$520,000	\$420,000	\$520,000	\$420,000	
	Total Fed/Non-Fed Costs:	\$16,800,000	\$20,709,000	\$14,653,000	\$20,471,000	
	Estimated Duration (Months)	27		25		

**Table G-7**. North Oxbow Alternative 7a & 7b – Minimum Two Way and One Way Traffic (FY24 Price Level)

·	Alternative	7:	a	7	b
			Non-Federal		Non-Federal
		Federal Cost	Cost	Federal Cost	Cost
ş	Construction w/ Contingency	\$11,269,000	\$1,253,000	\$7,685,000	\$854,000
<u> </u>	PED	\$2,028,000	\$226,000	\$1,383,000	\$154,000
jec (GN	S&A	\$1,127,000	\$125,000	\$769,000	\$85,000
Total Project First Cost (GNF)	Environmental Mitigation:	\$579,000	\$64,000	\$579,000	\$64,000
C tal	Real Estate Costs:	\$0	\$154,000	\$0	\$154,000
ĭ	Total	\$15,003,000	\$1,822,000	\$10,416,000	\$1,311,000
		\$16,82	25,000	\$11,727,000	
£ 2	Construction w/ Contingency		\$14,280,000		\$14,280,000
Associated Costs (LSF)	PED		\$2,570,000		\$2,570,000
iated (LSF)	S&A		\$1,428,000		\$1,428,000
ciat (L)	Environmental Mitigation:		\$29,000		\$29,000
SSO	Real Estate Costs:		\$12,000		\$12,000
٥	Associated Cost Total		\$18,319,000		\$18,319,000
	Project First Cost with				
	Associated Costs:	\$35,14	4,000	\$30,04	16,000
	Feasibility Study Costs:	\$520,000	\$420,000	\$520,000	\$420,000
	Total Fed/Non-Fed Costs:	\$15,523,000	\$20,561,000	\$10,936,000	\$20,050,000
	Estimated Duration (Months)	2	6	1	9

The following pages show a more detailed cost breakdown of each alternative.

	Alternative	:	La		1b		2a		2b		3a	3	3b
		Federal Cost	Non-Federal Cost										
rst	Construction w/ Contingency	\$6,913,000	\$1,022,000	\$6,362,000	\$961,000	\$7,399,000	\$822,000	\$6,848,000	\$760,000	\$2,665,000	\$296,000	\$2,115,000	\$235,000
<u> </u>	PED	\$1,244,000	\$184,000	\$1,145,000	\$173,000	\$1,332,000	\$148,000	\$1,233,000	\$137,000	\$480,000	\$53,000	\$381,000	\$42,000
je g	S&A	\$691,000	\$102,000	\$636,000	\$96,000	\$740,000	\$82,000	\$685,000	\$76,000	\$267,000	\$30,000	\$212,000	\$24,000
Project Fi	Environmental Mitigation:	\$463,000	\$51,000	\$463,000	\$51,000	\$463,000	\$51,000	\$463,000	\$51,000	\$463,000	\$51,000	\$463,000	\$51,000
E S	Real Estate Costs:	\$0	\$225,000	\$0	\$225,000	\$0	\$225,000	\$0	\$225,000	\$0	\$85,000	\$0	\$85,000
P	Total Project First Cost	\$9,311,000	\$1,584,000	\$8,606,000	\$1,506,000	\$9,934,000	\$1,328,000	\$9,229,000	\$1,249,000	\$3,875,000	\$515,000	\$3,171,000	\$437,000
		\$10,8	95,000	\$10,1	12,000	\$11,2	62,000	\$10,4	78,000	\$4,3	90,000	\$3,60	8,000
ts	Construction w/ Contingency		\$1,806,000		\$2,220,000								
ا ق ا	PED		\$325,000		\$400,000								
B €	S&A		\$180,000		\$222,000								
ciated (LSF)	Environmental Mitigation:		\$21,000		\$36,000								
Soci	Real Estate Costs:		\$14,000		\$22,000								
As	Associated Cost Total		\$2,346,000		\$2,900,000								
	Economic Cost	\$13,2	41,000	\$13,0	12,000	\$11,2	62,000	\$10,4	78,000	\$4,3	90,000	\$3,60	08,000
	Feasibility Study Costs:	\$520,000	\$420,000	\$520,000	\$420,000	\$520,000	\$420,000	\$520,000	\$420,000	\$520,000	\$420,000	\$520,000	\$420,000
	Total Fed/Non Fed Costs:	\$9,831,000	\$4,350,000	\$9,126,000	\$4,826,000	\$10,454,000	\$1,748,000	\$9,749,000	\$1,669,000	\$4,395,000	\$935,000	\$3,691,000	\$857,000
	Estimated Duration (Months)	:	L6		16		13		12		4		3

Alternative 1a - Maximum (two-way traffic)

5/31/2022 1/4/2024

<sup>\*\*</sup>Assume Hydraulic Dredging with Disposal at DD-2 & 4

ITEM	FCTI	NAATED ARADUS	MT	
HEIM	ESII	MATED AMOUN Non-Federal	N I	
	Federal cost	cost	Total	
Mobilization and Demobilization	\$172,980	\$211,420	\$384,400	1
Dredging				1
Channel, Turning Basin	\$2,787,885	\$309,765	\$3,097,650	1
Fleeting Area 1		\$1,071,150	\$1,071,150	1
Fleeting Area Revetment				1
R-90 Stone		\$101,898	\$101,898	1
Bedding Stone		\$24,390	\$24,390	1
Excavation for Toe		\$9,625	\$9,625	
Excavation for Key-In		\$9,025	\$9,025	
Mooring Structures (FL-1)				
Excavation		\$1,784	\$1,784	1
Metal Pipe		\$47,923	\$47,923	
Mooring		\$20,592	\$20,592	
Concrete		\$81,900	\$81,900	
Site Prep (DD-2a)				1
Earthwork	\$480,600	\$53,400	\$534,000	
Clear and Grub	\$307,800	\$34,200	\$342,000	
Geotextile	\$148,725	\$16,525	\$165,250	
Seeding	\$81,000	\$9,000	\$90,000	
Site Prep (DD-4)				
Earthwork	\$1,020,015	\$113,335	\$1,133,350	
Clear and Grub	\$188,100	\$20,900	\$209,000	
Seeding	\$49,500	\$5,500	\$55,000	
SUBTOTAL:	\$5,237,000	\$2,142,000	\$7,379,000	
Contingency:	\$1,676,000	\$685,000	\$2,361,000	
Construction Subtotal:	\$6,913,000	\$2,827,000	\$9,740,000	
E&D :	\$1,244,000	\$509,000	\$1,753,000	1
S & A :	\$691,000	\$283,000	\$974,000	10
Environmental Mitigation:	\$463,000	\$72,000	\$535,000	
Real Estate Cost:	\$0	\$239,000	\$239,000	
	\$9,311,000	\$3,930,000		
TOTAL COST:	\$13.24	41.000		

TOTAL COST: \$13,241,000

<sup>\*\*</sup>Assume 12' Depth for Dredging

Alternative 1b - Maximum (one-way traffic)

5/31/2022 1/4/2024

<sup>\*\*</sup>Assume Hydraulic Dredging with Disposal at DD-2 & 4

ITEM				
ITEM	EST	IMATED AMOU	NT	
	Federal cost	Non-Federal	Total	
Mobilization and Demobilization	\$172,980	cost \$211,420	\$384,400	
Dredging Dernobilization	\$172,560	\$211,420	\$304,400	
Channel, Turning Basin	\$2,371,005	\$263,445	\$2,634,450	
Fleeting Area 1 & 2	ψ <u>2</u> ,3. <u>1</u> ,003	\$1,244,850	\$1,244,850	
Fleeting Area Revetment		<del>+ 1/2 : 1,62 c</del>	<del>+ 1) 1 1 1   10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 </del>	
R-90 Stone		\$165,240	\$165,240	
Bedding Stone		\$39,353	\$39,353	
Excavation for Toe		\$15,550	\$15,550	
Excavation for Key-In		\$14,575	\$14,575	
Mooring Structures (FL-1 & FL-2)		,		
Excavation		\$2,378	\$2,378	
Metal Pipe		\$63,898	\$63,898	
Mooring		\$27,456	\$27,456	
Concrete		\$109,200	\$109,200	
Site Prep (DD-2a)				
Earthwork	\$480,600	\$53,400	\$534,000	
Clear and Grub	\$307,800	\$34,200	\$342,000	
Geotextile	\$148,725	\$16,525	\$165,250	
Seeding	\$81,000	\$9,000	\$90,000	
Site Prep (DD-4)				
Earthwork	\$1,020,015	\$113,335	\$1,133,350	
Clear and Grub	\$188,100	\$20,900	\$209,000	
Seeding	\$49,500	\$5,500	\$55,000	
SUBTOTAL:	\$4,820,000	\$2,410,000	\$7,230,000	
Contingency:	\$1,542,000	\$771,000	\$2,313,000	32
Construction Subtotal:	\$6,362,000	\$3,181,000	\$9,543,000	
E & D :	\$1,145,000	\$573,000	\$1,718,000	1
S & A :	\$636,000	\$318,000	\$954,000	1
Environmental Mitigation:	\$463,000	\$87,000	\$550,000	
Real Estate Cost:	\$0	\$247,000	\$247,000	
	\$8,606,000	\$4,406,000		
TOTAL COST:	\$13,0	12,000	-	

TOTAL COST: \$13,012,000

<sup>\*\*</sup>Assume 12' Depth for Dredging

# Kaskaskia Port CAP 107

Alternative 2a - Intermediate (two-way traffic)

5/31/2022 1/4/2024

<sup>\*\*</sup>Assume Hydraulic Dredging with Disposal at DD-2 & 4

ITEM	FST	IMATED AMOUN	т	
172.0	Federal cost	Non-Federal cost	Total	
Mobilization and Demobilization	\$172,980	\$19,220	\$192,200	
Dredging	\$2,787,885	\$309,765	\$3,097,650	
Site Prep (DD-2a)				
Earthwork	\$480,600	\$53,400	\$534,000	
Clear and Grub	\$307,800	\$34,200	\$342,000	
Geotextile	\$148,725	\$16,525	\$165,250	
Seeding	\$81,000	\$9,000	\$90,000	
Site Prep (DD-4)				
Earthwork	\$1,020,015	\$113,335	\$1,133,350	
Clear and Grub	\$188,100	\$20,900	\$209,000	
Seeding	\$49,500	\$5,500	\$55,000	
SUBTOTAL:	\$5,605,000	\$623,000	\$6,228,000	
Contingency:	\$1,794,000	\$199,000	\$1,993,000	3
Construction Subtotal:	\$7,399,000	\$822,000	\$8,221,000	
E & D :	\$1,332,000	\$148,000	\$1,480,000	1
S&A:	\$740,000	\$82,000	\$822,000	1
Environmental Mitigation:	\$463,000	\$51,000	\$514,000	
Real Estate Cost:	\$0	\$225,000	\$225,000	
	\$9,934,000	\$1,328,000		
	644.0	50.000	•	

TOTAL COST:

\$11,262,000

<sup>\*\*</sup>Assume 12' Depth for Dredging

# Kaskaskia Port CAP 107

Alternative 2b - Intermediate (one-way traffic)

5/31/2022 1/4/2024

<sup>\*\*</sup>Assume Hydraulic Dredging with Disposal at DD-2 & 4

ITEM	EST	MATED AMOUN	T	
	Federal cost	Non-Federal cost	Total	
Mobilization and Demobilization	\$172,980	\$19,220	\$192,200	
Dredging	\$2,371,005	\$263,445	\$2,634,450	
Site Prep (DD-2a)				
Earthwork	\$480,600	\$53,400	\$534,000	
Clear and Grub	\$307,800	\$34,200	\$342,000	
Geotextile	\$148,725	\$16,525	\$165,250	
Seeding	\$81,000	\$9,000	\$90,000	
Site Prep (DD-4)				
Earthwork	\$1,020,015	\$113,335	\$1,133,350	
Clear and Grub	\$188,100	\$20,900	\$209,000	
Seeding	\$49,500	\$5,500	\$55,000	
SUBTOTAL:	\$5,188,000	\$576,000	\$5,764,000	
Contingency:	\$1,660,000	\$184,000	\$1,844,000	32
Construction Subtotal:	\$6,848,000	\$760,000	\$7,608,000	
E&D:	\$1,233,000	\$137,000	\$1,370,000	18
S&A:	\$685,000	\$76,000	\$761,000	10
Environmental Mitigation:	\$463,000	\$51,000	\$514,000	
Real Estate Cost:	\$0	\$225,000	\$225,000	
	\$9,229,000	\$1,249,000		
TOTAL COST.	¢10.4	79 000		

TOTAL COST: \$10,478,000

<sup>\*\*</sup>Assume 12' Depth for Dredging

# Kaskaskia Port CAP 107

Alternative 3a - Minimum (two-way traffic)

5/31/2022 1/4/2024

<sup>\*\*</sup>Assume Hydraulic Dredging with Disposal at DD-2

ITEM	FST	IMATED AMOUN	т	
	Federal cost	Non-Federal cost	Total	
Mobilization and Demobilization	\$172,980	\$19,220	\$192,200	
Dredging	\$1,172,475	\$130,275	\$1,302,750	
Site Prep (DD-2b)			\$0	
Earthwork	\$157,725	\$17,525	\$175,250	
Clear and Grub	\$307,800	\$34,200	\$342,000	
Geotextile	\$127,035	\$14,115	\$141,150	
Seeding	\$81,000	\$9,000	\$90,000	
SUBTOTAL:	\$2,019,000	\$224,000	\$2,243,000	•
Contingency:	\$646,000	\$72,000	\$718,000	32%
Construction Subtotal:	\$2,665,000	\$296,000	\$2,961,000	
E&D:	\$480,000	\$53,000	\$533,000	18%
S&A:	\$267,000	\$30,000	\$297,000	10%
Environmental Mitigation:	\$463,000	\$51,000	\$514,000	
Real Estate Cost:	\$0	\$85,000	\$85,000	
	\$3,875,000	\$515,000		
TOTAL COST:	\$4,39	90,000		

<sup>\*\*</sup>Assume 12' Depth for Dredging

# Kaskaskia Port CAP 107

Alternative 3b - Minimum (one-way traffic)

5/31/2022 1/4/2024

<sup>\*\*</sup>Assume Hydraulic Dredging with Disposal at DD-2

ITEM	EST	IMATED AMOUN	IT	
	Federal cost	Non-Federal cost	Total	
Mobilization and Demobilization	\$172,980	\$19,220	\$192,200	
Dredging	\$755 <i>,</i> 595	\$83,955	\$839,550	
Site Prep (DD-2b)			\$0	
Earthwork	\$157,725	\$17,525	\$175,250	
Clear and Grub	\$307,800	\$34,200	\$342,000	
Geotextile	\$127,035	\$14,115	\$141,150	
Seeding	\$81,000	\$9,000	\$90,000	
SUBTOTAL:	\$1,602,000	\$178,000	\$1,780,000	
Contingency:	\$513,000	\$57,000	\$570,000	32
Construction Subtotal:	\$2,115,000	\$235,000	\$2,350,000	
E&D:	\$381,000	\$42,000	\$423,000	18
S & A :	\$212,000	\$24,000	\$236,000	109
Environmental Mitigation:	\$463,000	\$51,000	\$514,000	
Real Estate Cost:	\$0	\$85,000	\$85,000	
	\$3,171,000	\$437,000		
TOTAL COST:	¢2.60	9 000	•	

TOTAL COST: \$3,608,000

<sup>\*\*</sup>Assume 12' Depth for Dredging

	Alternative	4	a	4	b	5	a	5	ib	6	ia	€	ib .	7	'a	7	'b
		Federal Cost	Non-Federal Cost														
-	Construction w/ Contingency	\$12,890,000	\$1,434,000	\$11,125,000	\$1,236,000	\$11,952,000	\$1,328,000	\$9,991,000	\$1,111,000	\$12,206,000	\$1,356,000	\$10,529,000	\$1,170,000	\$11,269,000	\$1,253,000	\$7,685,000	\$854,000
oject (GNF	PED	\$2,320,000	\$258,000	\$2,003,000	\$222,000	\$2,151,000	\$239,000	\$1,798,000	\$200,000	\$2,197,000	\$244,000	\$1,895,000	\$211,000	\$2,028,000	\$226,000	\$1,383,000	\$154,000
[ E E	S&A	\$1,289,000	\$143,000	\$1,113,000	\$124,000	\$1,195,000	\$133,000	\$999,000	\$111,000	\$1,221,000	\$136,000	\$1,053,000	\$117,000	\$1,127,000	\$125,000	\$769,000	\$85,000
اقاءا	Environmental Mitigation:	\$656,000	\$73,000	\$656,000	\$73,000	\$579,000	\$64,000	\$579,000	\$64,000	\$656,000	\$73,000	\$656,000	\$73,000	\$579,000	\$64,000	\$579,000	\$64,000
호호	Real Estate Costs:	\$0	\$161,000	\$0	\$161,000	\$0	\$154,000	\$0	\$154,000		\$161,000	\$0	\$161,000	\$0	\$154,000	\$0	\$154,000
. E	Total	\$17,155,000	\$2,069,000	\$14,897,000	\$1,816,000	\$15,877,000	\$1,918,000	\$13,367,000	\$1,640,000	\$16,280,000	\$1,970,000	\$14,133,000	\$1,732,000	\$15,003,000	\$1,822,000	\$10,416,000	\$1,311,000
		\$19,22	24,000	\$16,71	13,000	\$17,79	5,000	\$15,00	07,000	\$18,25	50,000	\$15,86	65,000	\$16,82	25,000	\$11,7	27,000
ts.	Construction w/ Contingency		\$14,663,000		\$14,820,000		\$14,663,000		\$14,820,000		\$14,280,000		\$14,280,000		\$14,280,000		\$14,280,000
👸	PED		\$2,639,000		\$2,668,000		\$2,639,000		\$2,668,000		\$2,570,000		\$2,570,000		\$2,570,000		\$2,570,000
ated (LSF)	S&A		\$1,466,000		\$1,482,000		\$1,466,000		\$1,482,000		\$1,428,000		\$1,428,000		\$1,428,000		\$1,428,000
LS iii	Environmental Mitigation:		\$79,000		\$101,000		\$79,000		\$101,000		\$29,000		\$29,000		\$29,000		\$29,000
%	Real Estate Costs:		\$25,000		\$32,000		\$25,000		\$32,000		\$12,000		\$12,000		\$12,000		\$12,000
¥	Associated Cost Total		\$18,872,000		\$19,103,000		\$18,872,000		\$19,103,000		\$18,319,000		\$18,319,000		\$18,319,000		\$18,319,000
Proj	ect First Cost with Associated Costs:	\$38,09	96,000	\$35,81	16,000	\$36,66	7,000	\$34,11	10,000	\$36,56	9,000	\$34,18	84,000	\$35,14	14,000	\$30,04	16,000
	Feasibility Study Costs:	\$520,000	\$420,000	\$520,000	\$420,000	\$520,000	\$420,000	\$520,000	\$420,000	\$520,000	\$420,000	\$520,000	\$420,000	\$520,000	\$420,000	\$520,000	\$420,000
	Total Fed/Non Fed Costs:	\$17,675,000	\$21,361,000	\$15,417,000	\$21,339,000	\$16,397,000	\$21,210,000	\$13,887,000	\$21,163,000	\$16,800,000	\$20,709,000	\$14,653,000	\$20,471,000	\$15,523,000	\$20,561,000	\$10,936,000	\$20,050,000
	Estimated Duration (Months)	2	9	2	.7	2	8	2	26	2	:7	2	25	2	!6	1	9

Alternative - 4a - North Oxbow Maximum (Two-Way Traffic)

1/8/2024

<sup>\*\*</sup>Assume Mechanical Dredging with Disposal at DD-3

ITEM	ES	TIMATED AMOU	JNT	l
	Federal cost	Non-Federal cost	Total	1
Mobilization and Demobilization	\$129,780	\$14,420	\$144,200	1
New Dock (KRPD)		\$10,500,000	\$10,500,000	1
Site Prep at DD-3				l
Earthwork	\$1,020,375	\$113,375	\$1,133,750	1
Seeding	\$45,000	\$5,000	\$50,000	1
Clear and Grub	\$171,000	\$19,000	\$190,000	1
Excavation for Outflow Ditch	\$46,125	\$5,125	\$51,250	1
R-50 Stone	\$89,910	\$9,990	\$99,900	l
Bedding Stone	\$37,665	\$4,185	\$41,850	1
Erosion Control Blanket	\$33,300	\$3,700	\$37,000	1
24" Dia RCP Culverts	\$6,480	\$720	\$7,200	1
Site Prep (DD-4)				1
Earthwork	\$1,020,015	\$113,335	\$1,133,350	1
Clear and Grub	\$188,100	\$20,900	\$209,000	1
Seeding	\$49,500	\$5,500	\$55,000	1
Dredging	\$6,574,689	\$730,521	\$7,305,210	1
Mouth Cut Area Revetment				1
R-90 Stone	\$46,413	\$5,157	\$51,570	1
Bedding Stone	\$10,935	\$1,215	\$12,150	1
Excavation for Toe	\$4,388	\$488	\$4,875	1
Excavation for Key-In	\$4,163	\$463	\$4,625	1
Fleeting Area Revetment				1
R-90 Stone		\$125,766	\$125,766	1
Bedding Stone		\$30,015	\$30,015	1
Excavation for Toe		\$11,850	\$11,850	1
Excavation for Key-In		\$11,100	\$11,100	1
Mooring Structures (FL-5)				1
Excavation		\$1,241	\$1,241	1
Metal Pipe		\$31,949	\$31,949	1
Mooring		\$13,728	\$13,728	1
Concrete		\$56,160	\$56,160	
SUBTOT	TAL: \$9,478,000	\$11,835,000	\$21,313,000	•
Continger	ncy: \$3,412,000	\$4,261,000	\$7,673,000	36
Construction Subto	otal: \$12,890,000	\$16,096,000	\$28,986,000	
E &	D: \$2,320,000	\$2,897,000	\$5,217,000	18
S &	A : \$1,289,000	\$1,610,000	\$2,899,000	10
Environmental Mitigati	ion: \$656,000	\$152,000	\$808,000	
Real Estate C	ost: \$0	\$186,000	\$186,000	
	\$17,155,000	\$20,941,000	1	
TOTAL CO	ST: \$38.0	96,000	•	

<sup>\*\*</sup>Assume 12' Depth for Dredging

Alternative - 4b - North Oxbow Maximum (One-Way Traffic)

1/8/2024

<sup>\*\*</sup>Assume Mechanical Dredging with Disposal at DD-3

ITEM		ES	TIMATED AMOU	JNT	
		Non-Federal			
		Federal cost	cost	Total	
Mobilization and Demobilization		\$129,780	\$14,420	\$144,200	
New Dock (KRPD)			\$10,500,000	\$10,500,000	
Site Prep at DD-3					
Earthwork		\$1,020,375	\$113,375	\$1,133,750	
Seeding		\$45,000	\$5,000	\$50,000	
Clear and Grub		\$171,000	\$19,000	\$190,000	
Excavation for Outflow Ditch		\$46,125	\$5,125	\$51,250	
R-50 Stone		\$89,910	\$9,990	\$99,900	
Bedding Stone		\$37,665	\$4,185	\$41,850	
Erosion Control Blanket		\$33,300	\$3,700	\$37,000	
24" Dia RCP Culverts		\$6,480	\$720	\$7,200	
Site Prep (DD-4)					
Earthwork		\$1,020,015	\$113,335	\$1,133,350	
Clear and Grub		\$188,100	\$20 <i>,</i> 900	\$209,000	
Seeding		\$49,500	\$5,500	\$55,000	
Dredging		\$5,276,502	\$586,278	\$5,862,780	
Mouth Cut Area Revetment		\$0	\$0		
R-90 Stone		\$46,413	\$5,157	\$51,570	
Bedding Stone		\$10,935	\$1,215	\$12,150	
Excavation for Toe		\$4,388	\$488	\$4,875	
Excavation for Key-In		\$4,163	\$463	\$4,625	
Fleeting Area Revetment					
R-90 Stone			\$189,108	\$189,108	
Bedding Stone			\$45,000	\$45,000	
Excavation for Toe			\$17,775	\$17,775	
Excavation for Key-In			\$16,675	\$16,675	
Mooring Structures (FL-4 & 5)					
Excavation			\$1,551	\$1,551	
Metal Pipe			\$39,936	\$39,936	
Mooring			\$17,160	\$17,160	
Concrete			\$70,200	\$70,200	
	SUBTOTAL:	\$8,180,000	\$11,806,000	\$19,986,000	
	Contingency:	\$2,945,000	\$4,250,000	\$7,195,000	3
	Construction Subtotal:	\$11,125,000	\$16,056,000	\$27,181,000	
	E & D :	\$2,003,000	\$2,890,000	\$4,893,000	1
	S&A:	\$1,113,000	\$1,606,000	\$2,719,000	1
	Environmental Mitigation:	\$656,000	\$174,000	\$830,000	
	Real Estate Cost:	\$0	\$193,000	\$193,000	
		\$14,897,000	\$20,919,000		
	TOTAL COST:	\$35.8	16,000		

<sup>\*\*</sup>Assume 12' Depth for Dredging

Alternative - 5a - North Oxbow Fleeting (Two-Way Traffic)

1/8/2024

<sup>\*\*</sup>Assume Mechanical Dredging with Disposal at DD-3

ITEM	ES	TIMATED AMOL	<sub>JNT</sub>	
		Non-Federal		
	Federal cost	cost	Total	
Mobilization and Demobilization	\$129,780	\$14,420	\$144,200	
New Dock (KRPD)		\$10,500,000	\$10,500,000	
Site Prep at DD-3				
Earthwork	\$1,020,375	\$113,375	\$1,133,750	
Seeding	\$45,000	\$5,000	\$50,000	
Clear and Grub	\$171,000	\$19,000	\$190,000	
Excavation for Outflow Ditch	\$46,125	\$5,125	\$51,250	
R-50 Stone	\$89,910	\$9,990	\$99,900	
Bedding Stone	\$37,665	\$4,185	\$41,850	
Erosion Control Blanket	\$33,300	\$3,700	\$37,000	
24" Dia RCP Culverts	\$6,480	\$720	\$7,200	
Site Prep (DD-4)				
Earthwork	\$1,020,015	\$113,335	\$1,133,350	
Clear and Grub	\$188,100	\$20,900	\$209,000	
Seeding	\$49,500	\$5,500	\$55,000	
Dredging	\$5,951,187	\$661,243	\$6,612,430	
Fleeting Area Revetment				
R-90 Stone		\$125,766	\$125,766	
Bedding Stone		\$30,015	\$30,015	
Excavation for Toe		\$11,850	\$11,850	
Excavation for Key-In		\$11,100	\$11,100	
Mooring Structures (FL-5)				
Excavation		\$1,241	\$1,241	
Metal Pipe		\$31,949	\$31,949	
Mooring		\$13,728	\$13,728	
Concrete		\$56,160	\$56,160	
SUBTOTAL	\$8,788,000	\$11,758,000	\$20,546,000	
Contingency	\$3,164,000	\$4,233,000	\$7,397,000	369
Construction Subtotal		\$15,991,000	\$27,943,000	
E & D	\$2,151,000	\$2,878,000	\$5,029,000	189
S & A		\$1,599,000	\$2,794,000	
Environmental Mitigation		\$143,000	\$722,000	
Real Estate Cost		\$179,000	\$179,000	
	\$15,877,000	\$20,790,000		
TOTAL COST.		67,000		

<sup>\*\*</sup>Assume 12' Depth for Dredging

Alternative - 5b - North Oxbow Fleeting (One-Way Traffic)

1/8/2024

<sup>\*\*</sup>Assume Mechanical Dredging with Disposal at DD-3

ITEM	EST	TIMATED AMOU	JNT	
	Federal cost	Non-Federal cost	Total	
Mobilization and Demobilization	\$129,780	\$14,420	\$144,200	
New Dock (KRPD)		\$10,500,000	\$10,500,000	
Site Prep at DD-3				
Earthwork	\$1,020,375	\$113,375	\$1,133,750	
Seeding	\$45,000	\$5,000		
Clear and Grub	\$171,000	\$19,000	\$190,000	
Excavation for Outflow Ditch	\$46,125	\$5,125	\$51,250	
R-50 Stone	\$89,910	\$9,990	\$99,900	
Bedding Stone	\$37,665	\$4,185	\$41,850	
Erosion Control Blanket	\$33,300	\$3,700	\$37,000	
24" Dia RCP Culverts	\$6,480	\$720		
Site Prep (DD-4)				
Earthwork	\$1,020,015	\$113,335	\$1,133,350	
Clear and Grub	\$188,100	\$20,900	\$209,000	
Seeding	\$49,500	\$5,500	\$55,000	
Dredging	\$4,508,757	\$500,973	\$5,009,730	
Fleeting Area Revetment				
R-90 Stone		\$189,108	\$189,108	
Bedding Stone		\$45,000	\$45,000	
Excavation for Toe		\$17,775	\$17,775	
Excavation for Key-In		\$16,675	\$16,675	
Mooring Structures (FL-4 & 5)				
Excavation		\$1,551	\$1,551	
Metal Pipe		\$39,936	\$39,936	
Mooring		\$17,160	\$17,160	
Concrete		\$70,200	\$70,200	
SUBTOTAL:		\$11,714,000	\$19,060,000	
Contingency:		\$4,217,000	\$6,862,000	36
Construction Subtotal:	, -,,	\$15,931,000	\$25,922,000	
E & D :	\$1,798,000	\$2 <i>,</i> 868,000	\$4,666,000	
S & A :	\$999,000	\$1,593,000	\$2,592,000	10
Environmental Mitigation:	\$579,000	\$165,000	\$744,000	
Real Estate Cost:	\$0	\$186,000	\$186,000	
	\$13,367,000	\$20,743,000		
TOTAL 000T	6244	10 000		

TOTAL COST: \$34,110,000

<sup>\*\*</sup>Assume 12' Depth for Dredging

Table of costs related to a proposed alternative. Contact the team for more information or 508 needs.

### Kaskaskia Port CAP 107

1/8/2024

Alternative - 6a - North Oxbow Mouth (Two-Way Traffic)

<sup>\*\*</sup>Assume Mechanical Dredging with Disposal at DD-3

ITEM	FST	TIMATED AMOU	INT	
	Federal cost	cost	Total	
Mobilization and Demobilization	\$129,780	\$14,420	\$144,200	
New Dock (KRPD)		\$10,500,000	\$10,500,000	
Site Prep at DD-3				
Earthwork	\$1,020,375	\$113,375	\$1,133,750	
Seeding	\$45,000	\$5,000	\$50,000	
Clear and Grub	\$171,000	\$19,000	\$190,000	
Excavation for Outflow Ditch	\$46,125	\$5,125	\$51,250	
R-50 Stone	\$89,910	\$9,990	\$99,900	
Bedding Stone	\$37,665	\$4,185	\$41,850	
Erosion Control Blanket	\$33,300	\$3,700	\$37,000	
24" Dia RCP Culverts	\$6,480	\$720	\$7,200	
Site Prep (DD-4)				
Earthwork	\$1,020,015	\$113,335	\$1,133,350	
Clear and Grub	\$188,100	\$20,900	\$209,000	
Seeding	\$49,500	\$5,500	\$55,000	
Dredging	\$6,072,165	\$674,685	\$6,746,850	
Mouth Cut Area Revetment				
R-90 Stone	\$46,413	\$5,157	\$51,570	
Bedding Stone	\$10,935	\$1,215	\$12,150	
Excavation for Toe	\$4,388	\$488	\$4 <i>,</i> 875	
Excavation for Key-In	\$4,163	\$463	\$4 <i>,</i> 625	
SUBTOTAL:	\$8,975,000	\$11,497,000	\$20,472,000	
Contingency:	\$3,231,000	\$4,139,000	\$7,370,000	36
Construction Subtotal:	\$12,206,000	\$15,636,000	\$27,842,000	
E & D :	\$2,197,000	\$2,814,000	\$5,011,000	18
\$ & A :	\$1,221,000	\$1,564,000	\$2,785,000	10
Environmental Mitigation:	\$656,000	\$102,000	\$758,000	
Real Estate Cost:	\$0	\$173,000	\$173,000	
	\$16,280,000	\$20,289,000		
TOTAL COST:	\$36,5	69,000	_	

<sup>\*\*</sup>Assume 12' Depth for Dredging

Alternative - 6b - North Oxbow Mouth (One-Way Traffic)

1/8/2024

<sup>\*\*</sup>Assume Mechanical Dredging with Disposal at DD-3

ITEM	EST	IMATED AMOU	NT	
	Federal cost	Non-Federal cost	Total	
Mobilization and Demobilization	\$129,780	\$14,420	\$144,200	
New Dock (KRPD)		\$10,500,000	\$10,500,000	
Site Prep at DD-3				
Earthwork	\$1,020,375	\$113,375	\$1,133,750	
Seeding	\$45,000	\$5,000	\$50,000	
Clear and Grub	\$171,000	\$19,000	\$190,000	
Excavation for Outflow Ditch	\$46,125	\$5,125	\$51,250	
R-50 Stone	\$89,910	\$9,990	\$99,900	
Bedding Stone	\$37,665	\$4,185	\$41,850	
Erosion Control Blanket	\$33,300	\$3,700	\$37,000	
24" Dia RCP Culverts	\$6,480	\$720	\$7,200	
Site Prep (DD-4)				
Earthwork	\$1,020,015	\$113,335	\$1,133,350	
Clear and Grub	\$188,100	\$20,900	\$209,000	
Seeding	\$49,500	\$5,500	\$55,000	
Dredging	\$4,839,120	\$537,680	\$5,376,800	
Mouth Cut Area Revetment				
R-90 Stone	\$46,413	\$5,157	\$51,570	
Bedding Stone	\$10,935	\$1,215	\$12,150	
Excavation for Toe	\$4,388	\$488	\$4,875	
Excavation for Key-In	\$4,163	\$463	\$4,625	
SUBTOTAL:	\$7,742,000	\$11,360,000	\$19,102,000	
Contingency:	\$2,787,000	\$4,090,000	\$6,877,000	369
Construction Subtotal:	\$10,529,000	\$15,450,000	\$25,979,000	
E&D:	\$1,895,000	\$2,781,000	\$4,676,000	189
S & A :	\$1,053,000	\$1,545,000	\$2,598,000	109
Environmental Mitigation:	\$656,000	\$102,000	\$758,000	
Real Estate Cost:	\$0	\$173,000	\$173,000	
	\$14,133,000	\$20,051,000		
TOTAL COST:	\$34,1	84,000	-	

<sup>\*\*</sup>Assume 12' Depth for Dredging

Alternative - 7a - North Oxbow Minimum (Two-Way Traffic)

1/8/2024

<sup>\*\*</sup>Assume Mechanical Dredging with Disposal at DD-3

ITEM	EC	TIMATED AMOU	INT	
II LIVI	E3	Non-Federal	INI	
	Federal cost	cost	Total	
Mobilization and Demobilization	\$129,780	\$14,420	\$144,200	
New Dock (KRPD)		\$10,500,000	\$10,500,000	
Site Prep at DD-3			\$0	
Earthwork	\$1,020,375	\$113,375	\$1,133,750	
Seeding	\$45,000	\$5,000	\$50,000	
Clear and Grub	\$171,000	\$19,000	\$190,000	
Excavation for Outflow Ditch	\$46,125	\$5,125	\$51,250	
R-50 Stone	\$89,910	\$9,990	\$99,900	
Bedding Stone	\$37,665	\$4,185	\$41,850	
Erosion Control Blanket	\$33,300	\$3,700	\$37,000	
24" Dia RCP Culverts	\$6,480	\$720	\$7,200	
Site Prep (DD-4)				
Earthwork	\$1,020,015	\$113,335	\$1,133,350	
Clear and Grub	\$188,100	\$20,900	\$209,000	
Seeding	\$49,500	\$5,500	\$55,000	
Dredging	\$5,448,663	\$605,407	\$6,054,070	
SUBTOT	AL: \$8,286,000	\$11,421,000	\$19,707,000	•
Contingen	cy: \$2,983,000	\$4,112,000	\$7,095,000	3
Construction Subto	tal: \$11,269,000	\$15,533,000	\$26,802,000	
E &	5 : \$2,028,000	\$2,796,000	\$4,824,000	1
S &	A : \$1,127,000	\$1,553,000	\$2,680,000	1
Environmental Mitigati	on: \$579,000	\$93,000	\$672,000	
Real Estate Co	st: \$0	\$166,000	\$166,000	
	\$15,003,000	\$20,141,000		
	60= 4	44.000	-	

TOTAL COST: \$35,144,000 GNF costs are 90% federal and 10% non-federal and LSF costs are 100% non-federal.

<sup>\*\*</sup>Assume 12' Depth for Dredging

Alternative - 7b - North Oxbow Minimum (One-Way Traffic)

1/8/2024

<sup>\*\*</sup>Assume Mechanical Dredging with Disposal at DD-3

ITEM	EST	IMATED AMOU	NT	
	Federal cost	Non-Federal cost	Total	
Mobilization and Demobilization	\$129,780	\$14,420	\$144,200	
New Dock (KRPD)		\$10,500,000	\$10,500,000	
Site Prep at DD-3			\$0	
Earthwork	\$1,020,375	\$113,375	\$1,133,750	
Seeding	\$45,000	\$5,000	\$50,000	
Clear and Grub	\$171,000	\$19,000	\$190,000	
Excavation for Outflow Ditch	\$46,125	\$5,125	\$51,250	
R-50 Stone	\$89,910	\$9,990	\$99,900	
Bedding Stone	\$37,665	\$4,185	\$41,850	
Erosion Control Blanket	\$33,300	\$3,700	\$37,000	
24" Dia RCP Culverts	\$6,480	\$720	\$7,200	
Dredging	\$4,071,375	\$452,375	\$4,523,750	
SUBTOTAL:	\$5,651,000	\$11,128,000	\$16,779,000	
Contingency:	\$2,034,000	\$4,006,000	\$6,040,000	3
Construction Subtotal:	\$7,685,000	\$15,134,000	\$22,819,000	
E & D :	\$1,383,000	\$2,724,000	\$4,107,000	18
S & A :	\$769,000	\$1,513,000	\$2,282,000	10
Environmental Mitigation:	\$579,000	\$93,000	\$672,000	
Real Estate Cost:	\$0	\$166,000	\$166,000	
	\$10,416,000	\$19,630,000		

TOTAL COST:

\$30,046,000

<sup>\*\*</sup>Assume 12' Depth for Dredging