# Appendix D COST ESTIMATION

## ALTERNATIVE COST ESTIMATES FOR COMPARISON 2008 DOLLARS

### CALCASIEU RIVER AND PASS, LOUISIANA DREDGED MATERIAL MANAGEMENT PLAN

Contract No. DACW27-03-D-0005 Delivery Order No. CZ03 GEC Project No. 27321CZ03

#### Prepared for:



U.S. Army Corps of Engineers

New Orleans District

New Orleans, Louisiana

#### Prepared by:



#### GAHAGAN & BRYANT ASSOCIATES, INC.

10631 SOUTH SAM HOUSTON PARKWAY WEST SUITE 190 HOUSTON, TEXAS 77071-3140 PHONE (832) 518-2112 FAX (832) 518-1496

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#### 1 INTRODUCTION

The following cost estimates are considered planning level estimates used for determining the cost of various alternatives. The estimates demonstrate the relative cost to one another. The estimates are not intended to identify final projected cost of the project. A further defined cost estimate based on the selected alternative will be developed in the future.

Cost estimates were developed for Options B, C and D that considered dredging, placement area construction, shore protection, site management, lands easements rights of ways and relocations (LERRs) engineering and design, and supervision and administration. Each option divided the channel from river mile 5 to mile 36 into 10 segments in addition to the Bar Channels for which the costs were estimated. The costs for each cycle over the 20 year term of the DMMP were adjusted for escalation per 1110-2-1304 Civil Works Construction Cost Index System. While these planning level estimates were made to primarily provide an order of magnitude cost of an option and an annual estimated funding requirement, they also provide a basis for comparison of the options. An overall 15% contingency was applied to all estimates for the first 5 years and 20% for the remaining years due to the breadth of uncertaintainties surrounding the options and the advice of the ITR process. Fuel costs were estimated at \$3.76 per gallon for off-road diesel as of May 2009. South East Labor and Benefit rates for the Local 25 southern dredging union were used to establish unit costs, production, and rates. Alternative B, the Recommended Plan, is estimated at a total of \$788 million. Approximately \$628 million is estimated for Mile 5 to 36 and \$160 million for the Bar Channel Sections. Alternative C is estimated at \$800 million. Approximately \$640 million is estimated for Mile 5 to 36 and \$160 million for the Bar Channel Sections. Alternative D is estimated at over \$1 Billion over the life of the DMMP and has been eliminated from further consideration as a viable plan.

The cost estimates and assumptions listed in this Appendix have been used to evaluate and compare the costs for each alternative.

The estimates prepared under this appendix have been used in the DMMP for the cost estimate as the separable items relating to cost sharing, and operation and maintenance are more easily separated.

Tables D-1 to D-3 provides a summary of the costs for all three options by year, river reach and site. The amounts in the tables also indicate the cost sharing values for elements per law and policy at the time the estimate was made.

Table D-1. Alternative B Cost Estimate

Section	Placement	Туре	Cost										Year											Total
Section	Sites	Туре	Share	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
		Local	25%	181									54											
	1	Federal	75%	543									163											
		O&M			1,416	31	32		471	35				1,731	38									
34 to 36		Total		724	1,416	31	32	0	471	35	0	0	217	1,731	38	0	0	0	0	0	0	0	0	4,695
		Local	25%	131			_	_	_			_	47		_		_		_					
	2	Federal	75%	392			_	_	_	_		_	140	_			_		_	_				
		O&M	-		1,416	27	28	_	_	_		_		1,731	34		_	_	562	37				
		Total		523	1,416	27	28	0	0	0	0	0	187	1,731	34	0	0	0	562	37	0	0	0	4,545
		Local	25%	233					115															
	3	Federal	75%	698					345															
		O&M			5,112	70	71	_		1,515	80				3,180	87								
30 to 34		Total		931	5,112	70	71	0	461	1,515	80	0	0	0	3,180	87	0	0	0	0	0	0	0	11,506
		Local	25%				192		_	_		_		_		_	_	48	_	_				_
	7	Federal	75%	77	70		575	_	_	_		_		_	0.400	00	_	144	_	4.047	400			_
		O&M	-	77	78	•	707	_		0			0		3,180	98	_	400		1,917	108		0	0.447
		Total	250/	77	78	0	767	0	0	0	0	0	0	0	3,180	98	0	192	0	1,917	108	0	0	6,417
		Local	25%				192											48						
	7	Federal	75%	77	70		575	2.050	0.7	00						00		144	4.045	400				
		O&M		77	78	0	707	3,659	87	88	0	0	0	0	0	98		400	4,645	106	0		0	0.700
		Total	250/	77	78	0	767	3,659	87	88	0	0	0	0	0	98	0	192	4,645	106	0	0	0	9,798
		Local Federal	25% 75%				396 1,187		_	_		99 297					_		_					_
26 to 30	8	O&M	75%				1,107	3,659	131	133		297	4,174	143			_		_					_
		Total		0	0	0	1,583	3,659	131	133	0	397	4,174	143	0	0	0	0	0	0	0	0	0	10,219
		Local	25%	U	U	U	1,565	3,039	131	133	U	398	4,174	143	U	U	U	96	U	U	U	U	U	10,219
		Federal	75%									1,194						288						
	9	O&M	7570									1,134	4,174	125	127			200	4,645	139				
		Total		0	0	0	0	0	0	0	0	1,592	4,174	125	127	0	0	385	4,645	139	0	0	0	11,187
		Local	25%			342						1,002	1,171	51	121			000	1,010	100				11,107
		Federal	75%	_		1,026				_	_		_	152		_								
	10	O&M		_		.,020	2,332	87	92	_	_		_		1,870	105			2,008	112				
		Total		0	0	1,368	2,332	87	92	0	0	0	0	203	1,870	105	0	0	2,008	112	0	0	0	8,176
		Local	25%	320		,	,			-			-	50	, -				,				-	-, -
	4.4	Federal	75%	960										151										
	11	O&M			1,502	84	86				2,612	97			1,870	105			2,008	112				
22 to 26		Total		1,280	1,502	84	86	0	0	0	2,612	97	0	201	1,870	105	0	0	2,008	112	0	0	0	9,958
22 to 26		Local	25%			407								60										
	12A	Federal	75%			1,220								180										
	IZA	O&M					2,332	103	110		2,612	116			1,870	125			2,008	134				
		Total		0	0	1,627	2,332	103	110	0	2,612	116	0	240	1,870	125	0	0	2,008	134	0	0	0	11,276
		Local	25%									951								132				
	12B	Federal	75%									2,853								396				
	120	O&M			3,006	267	272		5,040	300			5,414	322			5,814	346			6,242	371	6,458	
		Total		0	3,006	267	272	0	5,040	300	0	3,804	5,414	322	0	0	5,814	346	0	528	6,242	371	6,458	38,183

Table D-1. Alternative B Cost Estimate Continued

		- D OOST ESTIN																						
		Local	25%				1,783												140					
	15	Federal	75%				5,350												421					
	15	O&M		1,571	110	112		1,665	123			1,866	132			2,004	142			2,152	152			
21 to		Total		1,571	110	112	7,134	1,665	123	0	0	1,866	132	0	0	2,004	142	0	561	2,152	152	0	0	17,725
22		Local	25%		1,329								110											
	16N	Federal	75%		3,988								329											
	ION	O&M				1,607	105	107		1,801	117			1,934	126			2,077	135			2,228	145	
		Total		0	5,317	1,607	105	107	0	1,801	117	0	438	1,934	126	0	0	2,077	135	0	0	2,228	145	16,138
		Local	25%	492							120													
	13A	Federal	75%	1,477							360													
	1374	O&M		3,631		219	223	3,850	242			4,314	260			4,634	279			4,976	299			
Devil's		Total		5,601	0	219	223	3,850	242	0	480	4,314	260	0	0	4,634	279	0	0	4,976	299	0	0	25,377
Elbow		Local	25%	492									124											
	13B	Federal	75%	1,477									373											
	100	O&M				3,716	223	227		4,163	251			4,471	269			4,802	289			5,152	310	
		Total		1,970	0	3,716	223	227	0	4,163	251	0	497	4,471	269	0	0	4,802	289	0	0	5,152	310	26,339
		Local	25%												1,101					248				
	17	Federal	75%												3,304					744				
		O&M													1,830	3,592	261				4,215	285		
		Total		0	0	0	0	0	0	0	0	0	0	0	6,236	3,592	261	0	0	993	4,215	285	0	15,582
		Local	25%				1,567					312			218									
	19	Federal	75%				4,700					935			653									
		O&M					2,208		4,929	184				3,556	201	1,994	208							
		Total		0	0	0	8,475	0	4,929	184	0	1,247	0	3,556	1,072	1,994	208	0	0	0	0	0	0	21,665
		Local	25%				1,778					579			278									
16 to	22	Federal	75%				5,334					1,738			833									
21		O&M					217		4,929	239				3,665	262	5,585	271		5,899	286				
		Total		0	0	0	7,330	0	4,929	239		2,317	0	3,665	1,373	5,585	271	0	5,899	286	0	0	0	31,895
		Local	25%	114		116					133								153		159			
	Meracantel	Federal	75%	341		349					399								460		477			
	(BU50)	O&M		7,553		7,729					8,816								10,160		13,452			
		Total		8,008	0	8,195	0	0	0	0	9,348	0	0	0	0	0	0	0	10,773	0	14,088	0	0	50,413
		Local	25%	1,819																				
	Foreshore	Federal	75%	5,457																				
	Dike (FSD)	O&M		4,378	181	4,480	187				5,109	213		3,556	225									
		Total		11,654	181	4,480	187	0	0	0	5,109	213	0	3,556	225	0	0	0	0	0	0	0	0	25,605

Table D-1. Alternative B Cost Estimate (Continued)

D.E. Expanded (DEX)
OEX   OSM   OSM   O   O   O   O   O   O   O   O   O
CEX   Common B   Foderal   Total   Common B   Total   Common B   Foderal   Total   Common B   Total   Common B   Total   Common B   Foderal   Total   Common B   Total
Total  To
12 to   10   10   10   10   10   10   10   1
12 to   16   16   16   16   16   16   16   1
Total
Total
Sabine (BUS)
Sabine (BU5) Sabin
Sabine (BUS)
Sabine (BUS)   O&M
Total
Cameron SB (BU49)
Cameron SB (BU49)
9.5 to 12   9.5 to 12   114
9.5 to 12    Total   Cocal   C
12   Sabine (BU18)
Sabine (BU18)  Sabine (BU18)  Federal O&M  Total  Local 25% 746  O&M  Total  D&M  D&M  Total  D&M  D&M  D&M  D&M  D&M  D&M  D&M  D&
BU18    O&M   Total
Total
Total
H   Cocal   Co
H Federal O&M 75% 746 2,751 88 89 0 0 0 0 0 0 0 0 0 0 2,129 114 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
TO&M Total    O&M Total   O&M
Total 994 2,751 88 89 0 0 0 0 0 0 0 0 0 0 2,129 114 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
M Federal 75%
M Federal 75%
O&M Total O 0 0 0 2,839 2,895 266 271 0 0 0 3,362 296 0 4,965 312 7,483 329 0 3,940    N Federal 75% 1,500
O&M Total  O&M Total  O&M Total  O&M Total  O O O O O O O O O O O O O O O O O O O
Total
S to 9.5 N
5 to 9.5 N Federal 75% 1,500
O&M 2,751 137 139 3,940 Total 2,000 2,751 137 139 0 0 0 0 0 3,362 168 0 0 0 0 0 0 608 3,940
O&M         2,751         137         139         3,362         168         3,362         168         3,940           Total         2,000         2,751         137         139         0         0         0         0         0         3,362         168         0 <td< td=""></td<>
Local 25%   91   91   91   91   91   91   91   9
Cameron WR   Federal   75%
(BU19) O&M 6,780
Saw   Saw
Local 25% 83 83
Cameron WR   Federal   75%
(BU20) O&M   5,134
Total 0 0 0 331 5,134 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Total 0 0 0 331 5,134 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Total         0         0         0         331         5,134         0 <th< td=""></th<>
Local 25% 4,717 1,329 938 9,706 0 115 352 253 2,339 2,788 161 1,597 238 0 192 708 380 260 314 0
Local         25%         4,717         1,329         938         9,706         0         115         352         253         2,339         2,788         161         1,597         238         0         192         708         380         260         314         0           Total Project Mile 5-36         Federal         75%         14,151         3,988         2,813         29,118         0         345         1,057         759         7,018         8,364         483         4,791         715         0         577         2,125         1,141         781         941         0           Mile 5-36         O&M         30,699         26,096         32,291         8,918         29,645         26,076         9,350         45,996         7,038         14,153         48,653         15,998         32,569         24,696         7,651         47,276         28,169         41,201         8,291         25,815
Local         25%         4,717         1,329         938         9,706         0         115         352         253         2,339         2,788         161         1,597         238         0         192         708         380         260         314         0           Total Project         Federal         75%         14,151         3,988         2,813         29,118         0         345         1,057         759         7,018         8,364         483         4,791         715         0         577         2,125         1,141         781         941         0

#### Table D-1. Alternative B Cost Estimate (Continued)

Section	Placement	Туре	Cost										Υe	ear										Total
occion	Sites	Type	Share	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
		Local	25%																					
D	ODMB0/	Federal	75%																					
Bar Channel	ODMDS/ Agitation	O&M		6,373	6,500	6,631	6,763	7,199	7,343	7,490	7,640	7,793	7,948	8,107	8,270	8,435	8,604	8,776	8,951	9,130	9,312	9,499	9,689	160,453
	, ig.ia.io.i	LER's																						
		Total		6,373	6,500	6,631	6,763	7,199	7,343	7,490	7,640	7,793	7,948	8,107	8,270	8,435	8,604	8,776	8,951	9,130	9,312	9,499	9,689	160,453
_			_																					
		Local	25%	4,717	1,329	938	9,706	0	115	352	253	2,339	2,788	161	1,597	238	0	192	708	380	260	314	0	26,389
	Total Project Mile 5-36 and	Federal	75%	14,151	3,988	2,813	29,118	0	345	1,057	759	7,018	8,364	483	4,791	715	0	577	2,125	1,141	781	941	0	79,166
	Bar Channel	O&M		37,072	32,596	38,922	15,681	36,844	33,419	16,840	53,636	14,831	22,101	56,760	24,268	41,004	33,300	16,427	56,227	37,299	50,513	17,790	35,504	671,036
	Option B	LER's		4,726	3,630	1,859	1,203	0	0	151	25	293	0	2	360	0	0	0	0	0	0	0	0	12,249
		Total		60,666	41,543	44,532	55,708	36,844	33,880	18,400	54,673	24,481	33,253	57,407	31,016	41,957	33,300	17,196	59,060	38,820	51,555	19,045	35,504	788,840

Table D-2. Alternative C Cost Estimate

	Placement		Cost										Year											
Section	Sites	Type	Share	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
		Local	25%	181									54											
	4	CG	75%	543									163											
	1	O&M			1,416	31	32		471	35				1,731	38									
24 += 20		Total		724	1,416	31	32	0	471	35	0	0	217	1,731	38	0	0	0	0	0	0	0	0	4,695
34 to 36		Local	25%	131									47											
	2	CG	75%	392									140											
	2	O&M			1,416	27	28							1,731	34				562	37				
		Total		523	1,416	27	28	0	0	0	0	0	187	1,731	34	0	0	0	562	37	0	0	0	4,545
		Local	25%	233					115															
	3	CG	75%	698					345															
	3	O&M			5,112	70	71			1,515	80				3,180	87								
30 to 34		Total		931	5,112	70	71	0	461	1,515	80	0	0	0	3,180	87	0	0	0	0	0	0	0	11,506
30 10 34		Local	25%				192		_									48			_			_
	7	CG	75%				575											144						
		O&M		77	78										3,180	98				1,917	108			
		Total		77	78	0	767	0	0	0	0	0	0	0	3,180	98	0	192	0	1,917	108	0	0	6,417
		Local	25%				192											48						
	7	CG	75%				575											144						
	·	O&M		77	78			3,659	87	88						98			4,645	106				
		Total		77	78	0	767	3,659	87	88	0	0	0	0	0	98	0	192	4,645	106	0	0	0	9,798
		Local	25%				396					99												
26 to 30	8	CG	75%				1,187					297												_
20 10 00	•	O&M						3,659	131	133			4,174	143	_			L						_
		Total		0	0	0	1,583	3,659	131	133	0	397	4,174	143	0	0	0	0	0	0	0	0	0	10,219
		Local	25%									398						96						
	9	Federal	75%									1,194						288						
		O&M											4,174	125	127				4,645	139				
		Total		0	0	0	0	0	0	0	0	1,592	4,174	125	127	0	0	385	4,645	139	0	0	0	11,187

Table D-2. Alternative C Cost Estimate (Continued)

21 to	15	Local	25%				1,783												140					
22		Federal	75%	_			5,350												421					-
		O&M		1,571	110	112	0,000	1,665	123			1,866	132			2,004	142		121	2,152	152			
		Total	l —	1,571	110	112	7,134	1,665	123	0	0	1,866	132	0	0	2,004	142	0	561	2,152	152	0	0	17,725
	16N		25%	1,571	1,329	112	7,134	1,005	123	0	U	1,000	110	0	0	2,004	142	0	301	2,152	132	0	U	17,725
	ION	Local			-																			
		Federal	75%		3,988	4.00=	40=	407		4 004			329	4.004	400				40=					
		O&M				1,607	105	107		1,801	117			1,934	126			2,077	135			2,228	145	
		Total		0	5,317	1,607	105	107	0	1,801	117	0	438	1,934	126	0	0	2,077	135	0	0	2,228	145	16,138
Devil's	13A	Local	25%		496										124									
Elbow		Federal	75%		1,489										373									
		O&M				3,716	219	223				4,314	260			4,551	279			4,976	299			
		Total		0	1,985	3,716	219	223	0	0	0	4,314	260	0	497	4,551	279	0	0	4,976	299	0	0	21,320
	13B	Local	25%		496												133							
		Federal	75%		1,489												400							
		O&M						3,782	242	238				4,471	264			4,802	289			5,152	310	
		Total		0	1,985	0	0	3,782	242	238	0	0	0	4,471	264	0	534	4,802	289	0	0	5,152	310	22,068
	West of Black	Local	25%	114	,			-, -		131				,				,				, -		,
	Lake(BU50)	Federal	75%	341						392														
		O&M	1070	6,401					_	7,338						-								
		Total		6,856	0	0	0	0	0	7,861	0	0	0	0	0	0	0	0	0	0	0	0	0	14,717
16 to	17	Local	25%	0,030	U	0	U	0	U	7,001	U	U	U	U	0	U	0	U	U	865	U	U	U	14,717
21	''		75%																					
		Federal	75%																	2,594	0.540	405		
		O&M															0				8,546	125		
		Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,459	8,546	125	0	12,130
	W. Palermo (BU48)	Local	25%		146				164	166					182							!		
	(5040)	Federal	75%		439				499	499					546				_					
		O&M				14,374			6,849		8,506					10,162								
		Total		0	585	14,374	0	0	7,512	666	8,506	0	0	0	728	10,162	0	0	0	0	0	0	0	42,532
	West of Black	Local	25%	114					126		133													
	Lake (BU50)	Federal	75%	341					378		399													
		O&M		14,309					9,266		7,887													
		Total		14,765	0	0	0	0	9,770	0	8,419	0	0	0	0	0	0	0	0	0	0	0	0	32,954
	E. Palermo	Local	25%										138											
	(BU52)	Federal	75%										414											
		O&M												4,269								i		
		Total		0	0	0	0	0	0	0	0	0	551	4,269	0	0	0	0	0	0	0	0	0	4,821
	Palermo	Local	25%										146	1,200										1,021
	(BU4)	Federal	75%										439											
			1378										433	40.000										
		O&M	4											12,698										
	DI Ia	Total		0	0	0	0	0	0	0	0	0	586	12,698		0	0	0	0	0	0	0	0	13,284
	BU24	Local	25%												223			236			125			
		Federal	75%												670			707			374			
		O&M														9,115			19,622		7,133			
		Total		0	0	0	0	0	0	0	0	0	0	0	893	9,115	0	942	19,622	0	7,631	0	0	38,204

#### Table D-2. Alternative C Cost Estimate (Continued)

		Local	25%	1,819														1,183						
	Foreshore	Federal	75%	5,457														3,550						
	Dike (FSD)	O&M		8,574	156														11,541	214				
		Total		15,849	156	0	0	0	0	0	0	0	0	0	0	0	0	4,733	11,541	214	0	0	0	32,494
		Local	25%	- ,								-	-		-			,	,-					- , -
	Shore Protect	Federal	75%																					
	D&E Lakeside	O&M										0												
		Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Local	25%		74				80		85			44										V
12 to		Federal	75%		223				241		255			132										
16	Sabine (BU5)	O&M				13,724		_	14,837		15,653			8,219				_						_
		Total		0	297	13,724	0	0	15,159	0	15,992	0	0	8,395	0		0	0	0	0	0	0	0	53,567
		Local	25%	J	201	10,721			10,100	U	10,002	U		44		46				0	U			00,001
		Federal	75%											132		137								
	Bell (BU6)	O&M	1070											8,139		6,775								
		Total		0	0	0	0	0	0	0	0	0	0	8,314	0	6,957	0	0	0	0	0	0	0	15,271
		Local	25%	Ü		Ü	Ü	Ü	Ü			J		0,011		394	Ü	Ü	Ü	Ü	51			10,271
		Federal	75%													1,183					152			
	Bell (BU7)	O&M	7070													10,175					19,197			
		Total		0	0	0	0	0	0	0	0	0	0	0	0	11,752	0	0	0	0	19,400	0	0	31,152
		Local	25%	114						131		- U	138			145			153		10,100	162		01,102
	Sabine	Federal	75%	341						391.965			414			436			460			485		
	(BU18)	O&M	7070	011	7,695					001.000	6,816			4,976		100	9,922		100	10,468		100	11,022	
9.5 to		Total		455	7,695	0	0	0	0	523	6,816	0	551	4,976	0	582	9,922	0	614	10,468	0	647	11,022	54,271
12		Local	25%	.55	.,555		119			131	3,310	J	138	1,570		332	0,022		011	10,100	J	<u> </u>	11,022	31,271
	Cameron SB	Federal	75%				356			392			414											
	(BU49)	O&M	. 370					8,260		002	2,796			5,163										
		Total		0	0	0	474	8,260	0	523	2,796	0	551	5,163	0	0	0	0	0	0	0	0	0	17,768

Table D-2. Alternative C Cost Estimate (Continued)

		Local	25%	249																				
	Н	Federal	75%	746																				
		O&M			2,751	88	89										2,129	114						
		Total		994	2,751	88	89	0	0	0	0	0	0	0	0	0	2,129	114	0	0	0	0	0	6,165
		Local	25%				710												163					
	M	Federal	75%				2,129												490					
	IVI	O&M						2,895	266	271				3,362	296		4,965	312		7,483	329		3,940	
		Total		0	0	0	2,839	2,895	266	271	0	0	0	3,362	296	0	4,965	312	653	7,483	329	0	3,940	27,612
		Local	25%	500																		152		
54-05	N	Federal	75%	1,500																		456		
5 to 9.5	N	O&M		·	2,751	137	139							3,362	168								3,940	
		Total		2,000	2,751	137	139	0	0	0	0	0	0	3,362	168	0	0	0	0	0	0	608	3,940	13,103
		Local	25%	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, -					91				-,										,
	Cameron WR	Federal	75%							273														_
	(BU19)	O&M									6,780													
		Total		0	0	0	0	0	0	364	6,780	0	0	0	0	0	0	0	0	0	0	0	0	7,144
		Local	25%				83				3,1 2 2													,,,,,,
	Cameron WR	Federal	75%				248																	
	(BU20)	O&M	. 676					5,134																
		Total		0	0	0	331	5,134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,465
		700		<u> </u>	<u> </u>		001	0,101	<u> </u>	<u> </u>	, J	J	<u> </u>				<u> </u>	<u> </u>	, v					0,100
		Local	25%	3,773	2,542	749	3,474	0	485	649	218	1,448	770	249	530	585	133	1,611	457	997	175	314	0	19,160
		Federal	75%	11,320	7,626	2,246	10,421	0	1,464	1,948	654	4,345	2,311	747	1,589	1,756	400	4,834	1,371	2,991	526	941	0	57,490
	Total Project Mile 5-36	O&M	7070	31,009	26,072	34,237	5,703	29,573	37,513	11,718	53,860	6,394	14,153	60,644	13,022	43,399	23,251		47,463	27,851	42,007	7,876	25,815	549,212
	Option C																							
					Ĭ	İ			i i		i i			Ì	Ì	İ					İ		i	
		U&M LER's Total		2,428 48,531	6,276 42,516	1,788 39,019	1,090 20,688	29,573 166 29,739	37,513 0 39,463	11,718 135 14,451	0 54,732	253 12,440	420 17,655	301 61,941	908	0 45,741	0 23,785	7,651 0 14,096	0 49,291	27,851 0 31,839	520 43,228	7,876 0 9,131	25,815 0 25,815	14,285 640,147

#### Table D-2. Alternative C Cost Estimate (Continued)

Section	Placement Sites	Туре	Cost		Year .															Total				
Occilon	1 lacement ones	Турс	Share	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
		Local	25%																					
	ODMDS/Agitation	Federal	75%																					
Bar Channel		O&M		6,373	6,500	6,631	6,763	7,199	7,343	7,490	7,640	7,793	7,948	8,107	8,270	8,435	8,604	8,776	8,951	9,130	9,312	9,499	9,689	160,453
		LER's																						
		Total		6,373	6,500	6,631	6,763	7,199	7,343	7,490	7,640	7,793	7,948	8,107	8,270	8,435	8,604	8,776	8,951	9,130	9,312	9,499	9,689	160,453
					<b>.</b>										<b>.</b>									
		Local	25%	3,773	2,542	749	3,474	0	485	649	218	1,448	770	249	530	585	133	1,611	457	997	175	314	0	19,160
	Total Project	Federal	75%	11,320	7,626	2,246	10,421	0	1,464	1,948	654	4,345	2,311	747	1,589	1,756	400	4,834	1,371	2,991	526	941	0	57,490
	Mile 5-36 and Bar Channel	O&M		37,382	32,572	40,868	12,466	36,772	44,856	19,208	61,500	14,187	22,101	68,751	21,292	51,834	31,855	16,427	56,414	36,981	51,319	17,375	35,504	709,665
	Option C	LER's		2,428	6,276	1,788	1,090	166	0	135	0	253	420	301	908	0	0	0	0	0	520	0	0	14,285
		Total		54,904	49,016	45,650	27,451	36,938	46,806	21,941	62,372	20,233	25,603	70,048	24,318	54,176	32,389	22,872	58,242	40,969	52,540	18,630	35,504	800,600

Table D-3. Option D Cost Estimate

	Placement	_	Cost										Year											1
Section	Sites	Туре	Share	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
		Local	25%	182									57											
	1	CG	75%	547									170											
	'	O&M			1,444	32	33		485	36				1,802	39									
34 to 36		Total		730	1,444	32	33	0	485	36	0	0	226	1,802	39	0	0	0	0	0	0	0	0	4,827
		Local	25%	132			_					_	49		_						_			_
	2	CG	75%	395									146											
		O&M			1,444	28	28							1,802	36				591	39				4.000
		Total	050/	527	1,444	28	28	0	0	0	0	0	194	1,802	36	0	0	0	591	39	0	0	0	4,689
		Local	25%	235					119															
	3	CG	75%	704	F 04.4	74	7.4		356	4 505	00				0.047	04								
		O&M Total		938	5,214 5,214	71 71	74 74	0	475	1,565 1,565	82 82	0	0	0	3,317	91 91	0	0	0	0	0	0	0	11 027
30 to 34		Local	25%	930	3,214	7 1	197	U	4/3	1,363	02	0	U	U	3,317	91	0	51	U	U	U	U	0	11,827
		CG	75%				591											152						-
	7	O&M	1370	79	79		391								3,317	102		132		2,019	113			
		Total	_	79	79	0	788	0	0	0	0	0	0	0	3,317	102	0	202	0	2,019	113	0	0	6,699
		Local	25%	70	7.0		197						J		0,017	102		51		2,010	110	Ŭ		0,000
	-	CG	75%				591											152						
	7	O&M		78	79			2,822	89	91						102			3,662	111				
		Total		78	79	0	788	2,822	89	91	0	0	0	0	0	102	0	202	3,662	111	0	0	0	8,024
		Local	25%				406					103							·					
26 to 30	8	CG	75%				1,219					309												
20 10 30	0	O&M						2,822	135	138			3,252	149										
		Total		0	0	0	1,625	2,822	135	138	0	412	3,252	149	0	0	0	0	0	0	0	0	0	8,533
	9	Local	25%									413						101						
		Federal	75%									1,238						303						
		O&M		_	_	_							3,252	131	133		_		3,662	147	_		_	
		Total	0.004	0	0	0	0	0	0	0	0	1,651	3,252	131	133	0	0	404	3,662	147	0	0	0	9,380
		Local	25%			350								53										
	10	Federal	75%		_	1,051	2 205	00	05				_	159	4.050	100		-	0.444	440	_	_		
		O&M Total		0	0	1,401	2,395 2,395	90	95 95	0	0	0	0	212	1,950 1,950	109	0		2,111 2,111	118 118	0	0	0	0 401
		Local	25%	323	U	1,401	2,393	90	90	U	U	U	U	52	1,950	109	U	U	۷,۱۱۱	110	U	U	U	8,481
		Federal	75%	968										157										
	11	O&M	7370	300	2,301	86	88				2,703	100		107	1,950	109			2,111	118				
		Total		1,291	2,301	86	88	0	0	0	2,703	100	0	209	1,950	109	0	0	2,111	118	0	0	0	11,066
22 to 26		Local	25%	.,20.	2,50	417					2,. 00	100		63	1,000	100			_,,,,	110		Ů		11,000
	404	Federal	75%			1,250	·		· ——					188	· ——	·					· ———			
	12A	O&M				,	2,395	106	114		2,703	121			1,950	131			2,111	142				
		Total		0	0	1,667	2,395	106	114	0	2,703	121	0	250	1,950	131	0	0	2,111	142	0	0	0	11,690
		Local	25%									986								139				
	12B	Federal	75%									2,958								417				
	120	O&M			2,301	273	278		5,196	309			5,624	335			6,088	362			6,589	392	6,855	
		Total		0	2,301	273	278	0	5,196	309	0	3,944	5,624	335	0	0	6,088	362	0	556	6,589	392	6,855	39,102

Table D-3. Alternative D Cost Estimate Continued

Section	Placement Type		Cost										Ye	ar										Total
Section	Sites	туре	Share	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	lotai
		Local	25%	L			0			L			L	L							_	L		L
	15	Federal	75%				0								_					_			_	
		O&M	_		_		5,487		L .						_							ļ ļ	_	
		Total		0	0	0	5,487	0	0	0	0	0	0	0	0	0	0	0	0			0	0	5,487
		Local	25%		0																			
21 to 22	16N	Federal	75%		0																			
		O&M			3,819																			0.040
		Total	050/	0	3,819	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,819
		Local	25%		_				-						_		_						_	_
	ODMDS	Federal	75%	2 44 4	_	2.552		2.000	-	4.044		4.470		4 2 4 4	_	4.547		4.000		4 000	_	5.000	_	-
		O&M	-	3,414		3,552	0	3,696		4,011		4,173		4,341	0	4,517	0	4,699	0	4,889		5,086		40.070
		Total Local	25%	3,414	0	3,552	0	3,696	0	4,011	0	4,173	0	4,341	U	4,517	U	4,699	U	4,889	U	5,086	0	42,378
Devil's		Federal	75%																					
Elbow	ODMDS	O&M	7376	8,160		8,490		8,833		9,589		9,977		10,380		10,799		11,236		11,689		12,161		
		Total		8,160	0	8,490	0	8,833	0	9,589	0	9,977	0	10,380	0	10,799	0	11,236	0	11,689	0	12,161	0	101,314
		Local	25%	0,100		0,430		0,000		3,303		3,311		10,300	U	10,733		11,200	0	11,003		12,101		101,314
		Federal	75%		_																			
	ODMDS	O&M	1070	19,004	_	19,773			21,894		22,778			24,173		25,150			26,688	_	27,766			
4004		Total	i i	19,004	0	19,773	0	0	21,894	0	22,778	0	0	24,173	0	25,150	0	0	26,688	0	27,766	0	0	187,226
16 to 21		Local	25%	,,,,,		, , ,		0	0		, -			, -		2, 22			2,22		,			- , -
	17-19-22	Federal	75%					0	0															
		O&M								34,314	26,372	10,438												
		Total		0	0	0	0	0	0	34,314	26,372	10,438	0	0	0	0	0	0	0	0	0	0	0	71,124
		Local	25%																					L
12 to 16	ODMDS	Federal	75%					_			_													
12 10 10	OBINIDO	O&M	_	18,511		19,259			21,326		22,187		L	23,545	_	24,497			25,995		27,045			
		Total		18,511	0	19,259	0	0	21,326	0	22,187	0	0	23,545	0	24,497	0	0	25,995	0	27,045	0	0	182,365
		Local	25%																					
9.5 to	ODMDS	Federal	75%																					
12		O&M		_	10,220	_	_	10,846	_	_	12,011	_	_	12,746	_	_	13,526	_	_	14,354	_		15,232	
		Total	0=0/	0	10,220	0	0	10,846	0	0	12,011	0	0	12,746	0	0	13,526	0	0	14,354	0	0	15,232	88,935
		Local	25%		_						_													
5 to 9.5	ODMDS	Federal	75%		11 011			10.070			14.000			14.005			15 007			16.774			17.004	
		O&M Total		0	11,944		0	12,676 12,676	0	0	14,036 14,036		0	14,895 14,895	0	0	15,807 15,807	0	0	16,774 16,774	0	0	17,801 17,801	102 022
		าบเลา		U	11,944	U	U	12,070	U	U	14,030	U	U	14,095	U	U	15,607	U	U	10,774	U	U	17,001	103,933
		Local	25%	871	0	767	800	0	119	0	0	1,502	105	168	0	0	0	202	0	139	0	0	0	4,673
	Total Project	Federal	75%	2,614	0	2,301	2,401	0	356	0	0	4,505	315	503	0	0	0	606	0	417	0	0	0	14,019
	Mile 5-36	O&M		49,246		51,564		41,891	49,334	50,053	102,872	24,809	12,128	94,299	12,692	65,607	35,421	16,297	66,931	50,400	61,513	17,639	39,888	892,207
	Option D	LER's		367	2,933	1,904	11	0	0	340	0	304	0	0	0	0	0	0	0	0	0	0	0	5,860
		Total		52,731	38,845	54,632	13,979	41,891	49,809	50,053	102,872	30,816	12,548	94,970	12,692	65,607	35,421	17,105	66,931	50,956	61,513	17,639	39,888	916,758

#### Table D-3. Alternative D Cost Estimate (Continued)

Section	Placement Sites	Туре	Cost		Year															Total				
Section	Tiaccincii Oites		Share	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	iotai
		Local	25%																					
Dor		Federal	75%																					
Bar Channel	ODMDS/Agitation	O&M		6,373	6,500	6,631	6,763	7,199	7,343	7,490	7,640	7,793	7,948	8,107	8,270	8,435	8,604	8,776	8,951	9,130	9,312	9,499	9,689	160,453
		LER's																						
		Total		6,373	6,500	6,631	6,763	7,199	7,343	7,490	7,640	7,793	7,948	8,107	8,270	8,435	8,604	8,776	8,951	9,130	9,312	9,499	9,689	160,453
									_															
		Local	25%	871	0	767	800	0	119	0	0	1,502	105	168	0	0	0	202	0	139	0	0	0	4,673
	Total Project	Federal	75%	2,614	0	2,301	2,401	0	356	0	0	4,505	315	503	0	0	0	606	0	417	0	0	0	14,019
	Mile 5-36 and Bar Channel Option D	O&M		55,619	45,345	58,195	17,541	49,090	56,677	57,543	110,512	32,602	20,076	102,406	20,962	74,042	44,025	25,073	75,882	59,530	70,825	27,138	49,577	1,052,660
		LER's		367	2,933	1,904	11	0	0	340	0	304	0	0	0	0	0	0	0	0	0	0	0	5,860
		Total		59,472	48,279	63,167	20,753	49,090	57,152	57,883	110,512	38,913	20,496	103,077	20,962	74,042	44,025	25,881	75,882	60,086	70,825	27,138	49,577	1,077,211

COSTS SHOWN REFLECT CONDITIONS AND ESTIMATES FROM 2007. DUE TO THE EXCESSIVE COSTS OF THIS OPTION, IT WAS NOT CARRIED THROUGH COST COORDINATION.

#### 2 GENERAL BASIS OF ESTIMATE AND ASSUMPTIONS

#### 2.1 Placement Areas (CDF's)

- Costs do not have as much variability or uncertainty as the Beneficial Use sites. Costs
  are based on considerable experience with numerous projects supported by historical
  data from the Corps. There is assumed little or no environmental issues or mitigation
  requirements affecting costs or implementation.
- Site Management costs are for minimum required efforts to insure that there is sufficient
  dry material for dike raising needed to support the schedule and meet capacity
  requirements. Initial efforts are repeated over 2 years to compensate for poor existing
  site conditions and provide better stability and more available material for dike raising.
  Following subsequent dredged material fill events, a single year effort is applied.
- Rehabilitation includes perimeter and interior ditching to obtain dry material for dike raising. Second lift dike raising assumes site management has been done in the interim and sufficient dry material is available and therefore does not include any ditching.
- Typical dike sections include 3:1 slopes and a 12 ft crown width. Dikes will be constructed/raised by side-casting material from the site interior.
- The dikes on the lakeside of CDFs 17, 19, 22, and D/E will be constructed with a 25' crown and 4:1 side slopes.
- Dike raising (initial and second lift) does not include any grassing or other stabilization.

  These costs are considered to be relatively minor.
- No interior training dikes are included, only perimeter containment dikes are constructed or raised.
- Site dimensions were estimated from aerial photos.
- Weir costs are current pricing data from USACE, Mobile for 16 ft (4 each, 4 ft long bay) weirs, 8 feet tall, including outfall pipes, installed; \$35,000 each.
- Due to wet conditions, dikes are constructed in two lifts; the total width of the 20-year dike is constructed in the initial construction to provide long term settlement and consolidation.
- Dike volume calculation for the bottom half of the 20-year dike: first sequence calculates the area of the trapezoid, and then compresses the area under the crown and 1/2 of the side slope length, simulating the "iceberg" effect of a displacement dike.

- Two passes on a perimeter dewatering ditch around the exterior and one interior pass of the rotary ditcher is included in the initial rehabilitation costs. Perimeter ditches all around the site are included in the initial effort. Perimeter ditches are shortened to two dike lengths for subsequent events to new weirs.
- The second lift volumes assume the site is managed in the interim; the material is dried and available as a result of management.
- Side-cast borrow costs are based on current costs of \$3.50/cy that includes side-casting, dressing and grassing where usable materials may be present adjacent to or near the existing dike alignment.
- In areas where longer haul efforts are required and the possibility of double or triple handling materials is required to achieve the dike template, the CY unit costs increase to \$6.00 and \$8.00 per/cy. This occurs on PAs 17, 19, 22, D/E.
- Side slopes for the dike are based on slope stability analyses and qualitative reviews of shear vane tests as discussed in the Geotechnical Report Appendix.
- Costs assume dredged material placed strategically around the site to provide dike stability and width for haul roads.
- The estimated remaining capacities of the CDFs subtract 2 feet for required site freeboard and 1 foot for ponding. For example, a site with 4 foot of remaining freeboard was estimated to have 1 foot of available dredged material capacity.

Table D-4, Site Management Costs, lists the assumptions made to determine the site management costs.

**Table D-4. Site Management Costs** 

Perimete	er Ditcl	hing	g; Initial Effort
\$ 2	250.00		Hourly Cost for Marshbuggy Backhoe
	40		feet per hour production first pass
	35		feet per hour production second pass
\$	6.25		per foot first pass
\$	7.14		per foot second
·		_	pass
		r Di	tching; Initial Effort
\$	4,000		daily cost for rotary ditcher
	8000		feet per day
\$	0.50		per foot interior ditch
Ф	100		
	3		center spacing for ditches
φ.	_		lines per acre @ 200 ft long
\$ 3	300.00		per acre
			Ory and Drain Costs
	100		Acres
	2,100		
	22		lines for 100 ft spacing
4	6,200		in the second se
	8,000	-	feet per day production
	4 000		\$ per day for
	4,000		ditcher
	5.78		,
\$2	23,100		
	\$231	-	cost per acre to do internal ditching
	4200	_	perimeter ditch on two sides (ft)
	4200	-	cost per ft, one
	\$6.25	_	pass
\$2	26,250		sub-total cost perimeter ditch
	3,000		sub-total, cost to excavated sumps at weirs
	52,350	_	total DAMP cost
	36.25	-	per acre

#### **Data Sources:**

J. Simmons Group, Disposal Area Management Contractor for the Port of Houston US Army Corps of Engineers, Mobile District, Irvington Area Office

#### Assumptions:

Two passes are required for the initial perimeter ditches

One internal pass of the rotary ditcher

Perimeter ditches all around the site for the initial effort

Perimeter ditches shortened to two dike lengths for subsequent events to new weirs

#### 2.2 Beneficial Use Sites

- Costs have variability and uncertainty due to site conditions and access impediments, possible marsh dike stability issues, owner requirements and adjacent property impacts.
   Planning, engineering, permitting, access and coordination efforts could also be greater than estimated.
- Site management, planting or other habitat restoration efforts are not included; nor is removal or degrading of marsh containment dikes upon completion.
- Site dimensions were estimated from aerial photos and property maps.
- Available capacities (based on property acreage) were reduced by a third to a half to allow for open water areas and circulation in the marshes.
- Typical marsh dikes are assumed to be constructed to a height of 5-7 feet, using adjacent side cast borrow at an estimated unit price of \$55/lf.
- Typical site preparation does not include water control structures.
- Pipeline lengths were scaled from aerial photos from center of reach to center of site.
   Unit price to lay and remove shore pipeline was estimated at \$12/lf. Unit price to lay and remove marsh pipeline was estimated at \$16/lf.

Table D-5, Beneficial Use Site Parameters and Shore Protection Costs, details the assumptions made to determine the Beneficial Use Costs.

Table D-5. Beneficial Use Site Parameters and Shore Protection Costs

Site Designation	Shore Prot. Length (ft)	Event Dike Length (ft)	Laying Line Length (ft)	Misc Cost (\$1000)	Pipeline Cost (\$1000)	Event Containment Cost (\$1000)	Total Event Cost (\$)
Cameron Pr WR (19)		4,000	18,000		252	230	\$ 482,000.00
Cameron Pr WR (20)		4,000	31,000		455	230	\$ 684,666.67
Cameron SB (BU 49)		6,000	27,000		432	330	\$ 762,000.00
NWR 18 (BU 18)		6,000	23,000		322	330	\$ 652,000.00
Bell (6)		6,000	5,000	80	80	210	\$ 370,000.00
Bell (7)		13,000	24,000		384	910	\$ 1,294,000.00
NWR (5)		6,000	8,000		128	210	\$ 338,000.00
BU (48)		6,000	24,000		384	420	\$ 804,000.00
West Palermo							
E. Palermo (52)		3,000	4,000		64	330	\$ 394,000.00
W. Black Lake (50)		6,000	36,000		576	330	\$ 906,000.00
BU 24		8,000	48,000	75	768	440	\$ 1,283,000.00
Palermo (4)		6,000	8,000	20	128	330	\$ 478,000.00

#### Assumptions:

\$ 12.00 per ft to lay and pick up shore pipe per ft to lay and pick up pipe in a

\$16.00 marsh

\$ 55.00 per linear foot of 5 ft high marsh dike using adjacent borrow

\$ 35.00 per linear foot of 5 ft high dike built with an 8 cy bucket dredge

8 tons per ft rock shore protection for lake side expansions

\$ 80.00 per ton of graded rock installed on earth fill, with filter fabric

\$640 per ft shore protection

Miscellaneous costs are for drainage and water control structures on the sites that drain to adjacent properties.

#### Data Sources:

US Army Corps of Engineers, Mobile District

US Army Corps of Engineers, Galveston District

US Army Corps of Engineers, New Orleans District

# 2.3 Hydraulic Dredging Costs

Dredging cost estimates are supported by historical prices for the region and by Corps data. Costs were estimated by developing production tables for various dredge plant configurations as applicable for the various site conditions and locations. Booster pump costs and mobilization/demobilization are included in the unit prices for dredging. Dredging costs were developed for 27 and 30 inch discharge hydraulic cutterhead dredges operating alone or utilizing 1 or 2 booster pumps depending on the pipeline lengths required for placement. Production estimates were produced utilizing data and

information from the Corps and dredging contractors as well as software systems specifically designed for estimating dredging production that consider pump size and power, dredge material characteristics and other factors. Operating and ownership costs including overhead, bond and profit were developed from data and information obtained from the Corps and dredging contractors for dredges that could be reasonably be expected to bid and perform the work resulting from implementation of the DMMP. For the CDF dredging costs, pipeline costs were assumed in the mobilization and demobilization as most of the CDFs used are adjacent. For BU costs the pipline costs were added.

Table D-6, Hydraulic Cutterhead Dredge Cost and Production Analysis, details the analysis and assumptions made to determine the dredging and pipeline costs.

Table D-6. Hydraulic Cutterhead Dredge Cost and Production Analysis

			O	

27 inch dredge			
Line Length (ft)	23,500	40,300	41,500
Line Length (mi)	4	8	8
Dredge Production (cy/hr)	1,266		
with one booster (cy/hr)		947	931
with two boosters (cy/hr		1,146	1,130
30-inch dredge			
Line Length (ft)	23500	40300	41500
Line Length (mi)	4.45	7.63	7.86
Dredge Production (cy/hr)	2350		
with one booster (cy/hr)		1840	1800

#### **Ownership & Operating Cost**

	30 inch dredges	dredge	with booster
	T James or Geo D. Wms	& aux. plant	added
$\  \ $	Monthly Ownership Cost	\$232,555	\$265,315
	Monthly Operating Cost	\$2,887,750	\$3,164,132
	Total Monthly Cost	\$3,120,305	\$3,429,447
	incl. OH & Bond(s)&contingency	\$3,749,251	\$4,163,169
	incl. Profit	\$4,068,660	\$4,535,789

27 inch dredges	dredge	with booster
Mike Hooks and Dredge 32	& aux. plant	added
Monthly Ownership Cost	\$232,555	\$265,315
Monthly Operating Cost	\$1,924,344	\$2,259,730
Total Monthly Cost	\$2,156,899	\$2,525,045
incl. OH & Bond(s)&contin	\$2,624,084	\$3,071,970
incl. Profit	\$2,861,343	\$3,349,725

#### **Developed Unit Cost**

		27-inch	27-inch	27-inch	30-inch	30-inch	
			with	2			
		dredge	booster	boosters	dredge	w/ booster	
Run Hours dredg	е	18	18	18	18		
Run Hours w/ boo	oster	16.5	16.5	15	16.5		16.5
Days per							
month		30.4	30.4	30.4	30.4		30.4
					128592		
Monthly Production	on	692755.2	475015.2	515280	0		922944
Unit Price		\$4.13	\$7.05	\$7.28	\$3.16		\$4.91
M&D / 2.0 million	cys	\$0.25	\$0.38	\$0.50	\$0.28		\$0.40
	_	\$4.38	\$7.43	\$7.78	\$3.44		\$5.31
	rounded unit /cy	\$3.44	\$5.31	\$5.31	\$3.44		\$5.31

41,000

45,000

# The 30" dredge cost is the gover

#### **Data Sources:**

max pipeline length

Gahagan & Bryant Dredge Production Analysis Program
US Army Corps of Engineers, Mobile District, Irvington Area Office
US Army Corps of Engineers, New Orleans District

23,000

CUTPRO; ERDC Production

Gahagan & Bryant Cost Database Production Analysis Program Historic Data Set from USACE, Weeks Marine and Mike Hooks Inc.

#### 2.4 Shore Protection Costs

Traditional shore protection costs are based on top elevation of 8 ft, a bottom elevation of -2 ft, side slopes at 3:1, with an application of 0.27 tons/sf/lf at \$80/ton resulting in a unit cost of \$640/lf.

# 2.5 Alternatives B and C Cutterhead Dredging

- General: Total volumes include non-pay excess dredging quantities. Pay volumes in estimate are reduced by dividing by 135%. Historical volumes used were from the 1995 to 2005 dredging contracts for all reaches except Reach 30-36, the Turning Basin, and Clooney Island Loop, which did not include 2005.
- General: Costs include 10% Engineering and Design, 8% Supervision and Administration for Construction and 15% Contingency for the first five years of the plan and a 20% contingency thereafter. A contingency is applied to cover minor variations and incidental costs through the planning, design and construction phases. This is not intended to cover variations in market factors such as dredge plant supply and demand, inflation fluctuations, spikes in fuel costs, etc.
- Reach 34-36: The channels are dredged on a 10 yr cycle. The Port/Non-federal quantity of 88,000cy is dredged every 5 years.
- Reach 30-34: Costs for Site 7 are split with Reach 26-30. DAMP is applied at Site 7 in years 0 and 1 due to wet existing conditions, in preparation for Rehabilitation and dike raising in year 3.
- Reach 26-30: Costs for Site 7 are split with Reach 30-34. DAMP is applied at Site 7 in years 0 and 1 due to wet existing conditions, in preparation for Rehabilitation and dike raising in year 3.
- Reach 21-22: Shore Protection is applied along the channel side of sites 15 and 16N.
- Reach 16-21: Shore Protection and Rehabilitation of Sites 17, 19, and 22 would likely take 2 years and should be initiated in year 3 to be ready to accept material in the combined site in year 5. The DAMP at the Foreshore Dike site is applied only for 1 year initially, as opposed to the typical 2-year application, since the site is new and the initial placement will not be much above the water table. Subsequent applications following fill events are also applied for 1 year only.
- Reach 12-16: Expansion of Sites D and E would likely take 2 years and should be initiated in year 3 to be ready to accept material in the combined site in year 5. The DAMP at the Foreshore Dike site is applied only for 1 year initially, as opposed to the

typical 2-year application, since the site is mostly new and relatively dry and consolidated. Subsequent applications following fill events are also applied for 1 year only.

- Reach 9.5-12: No DAMP or Shore Protection is applied in this reach since only nonadjacent Beneficial Use sites are utilized.
- Reach 5-9.5: Utilizes a combination of CDF rehabilitation and levee raising with beneficial use.

# 2.6 Alternative D – Hopper Dredging

- Reach 34-36, Reach 30-34, Reach 26-30, and Reach 22-26 are the same as in Alternatives B and C. Offshore disposal is not cost effective above Mile 22 because of the excessive travel distance to the disposal area.
- Dredging costs are based on a typical rental contract rate of \$1,600 per hour. Hourly
  rates are based on historical prices from New Orleans and Mobile District hopper rental
  contracts and include Mobilization/Demobilization allocations.
- Rental Costs include hopper dredge, survey vessel, survey plots and silent inspector telemetry.
- The estimate is primarily based on cycle time including dredging, travel to offshore disposal area, unloading, turning and return to dredging reach.
- Total time for dredging, unloading, and turning offshore is estimated to be 45 minutes.
   Due to the curvature in the channel through the Devils Elbow reach, the dredging time was increased to 1 hour.
- The distance to the offshore area is estimated at 7 miles beyond the channel entrance (Mile 0).
- Travel time to the disposal area is based on a typical loaded speed of 10.89 mph.
- Travel time to return to the dredging reach is based on a typical unloaded speed of 11.88 mph. The return time includes travel to turn around at Devils Elbow (Mile 23).
- An allowance of 1.1 hours was added to account for wait time for LNG traffic in the channel.
- A typical hopper dredge capacity of 6,300 (Eagle, now Terrapin Island and the Glen Edwards) cubic yards is used. This includes a reduction of 100 cubic yards to account for residual material after unloading.
- A load factor of 58% was applied to convert gross capacity of the hopper to the effective volume of dredged material.

- An efficiency factor of 95% was applied to the operating time to account for traffic, fueling, maintenance and repairs.
- The quantity of material to be dredged is the same as the quantities evaluated for Options B and C for purposes of comparison and calculation of costs and comparison of options.

Tables D-7, Industry Hopper Fleet Analysis for Mobile District Hopper Dredge Rental Contract, provide the parameters used for the basis of estimates for Hopper Dredging and placement at the ODMDS.

Table D-7. Industry Hopper Fleet Analysis for Mobile District Hopper Dredge Rental Contract

	Норре	er	EAGLE		Effective Capacity = Rate =	6300 3,500	cy \$/hr	57% 95%		Factor ction Effi	ciency				
													Compa	arative A	nalysis
Rea	ach	Pass	Speed	Speed	Dump	Trav to	L&D	LNG	Turn	DE	Turn	DE	Unit	Unit	Larger
Start	Stop	to Dmp	Light	Loaded	to Cut	Dump	Time	wait	Time	& retn	Сус	Су	Price	Price	Unit
Mile	Mile	(mi)	(mph)	(mph)	(hr)	(hr)	(hr)	(hr)	(hr)	(hr)	(hr)	(hr)	to turn	to DE	Price
5	9.5	7	11.88	10.89	1.389	1.4233	0.75	1.1	0.5	2.473	5.162	7.135	5.30	7.32	\$7.32
9.5	12	7	11.88	10.89	1.599	1.6529	0.75	1.1	0.5	2.052	5.602	7.154	5.75	7.34	\$7.34
12	16	7	11.88	10.89	1.936	2.0202	0.75	1.1	0.5	1.378	6.306	7.185	6.47	7.37	\$7.37
16	21	7	11.88	10.89	2.357	2.4793	0.75	1.1	0.5	0.537	7.186	7.223	7.37	7.41	\$7.41
21	22	7	11.88	10.89	2.441	2.5712	0.75	1.1		0.368	6.862	7.231	7.04	7.42	\$7.42
22	22	7	11.88	10.89	2.441	2.5712	1	1.1		0.368	7.112	7.481	7.30	7.67	\$7.67

					Effective Capacity =	13372	cys	57%	Load F	actor					
			<b>GLENN EDWARDS</b>		Rate =	3,200	\$/hr	95%	Produ	ction Effi	ciency	·			
										То			Compa	arative A	nalysis
Rea	ach	Pass	Speed	Speed	Dump	Trav to	L&D	LNG	Turn	DE	Turn	DE	Unit	Unit	Larger
Start	Stop	to Dmp	Light	Loaded	to Cut	Dump	Time	wait	Time	& retn	Сус	Су	Price	Price	Unit
Mile	Mile	(mi)	(mph)	(mph)	(hr)	(hr)	(hr)	(hr)	(hr)	(hr)	(hr)	(hr)	to turn	to DE	Price
5	9.5	7	13.56	11.24	1.217	1.379	1	1.1	0.5	1.991	5.196	6.687	2.30	2.96	\$2.96
9.5	12	7	13.56	11.24	1.401	1.6014	1	1.1	0.5	1.622	5.603	6.725	2.48	2.97	\$2.97
12	16	7	13.56	11.24	1.696	1.9573	1	1.1	0.5	1.032	6.253	6.786	2.76	3.00	\$3.00
16	21	7	13.56	11.24	2.065	2.4021	1	1.1	0.5	0.295	7.067	6.862	3.12	3.03	\$3.12
21	22	7	13.56	11.24	2.139	2.4911	1	1.1	0.5	0.147	7.23	6.877	3.20	3.04	\$3.20
22	22	7	13.56	11.24	2.139	2.4911	1.25	1.1	0.5	0.147	7.48	7.127	3.31	3.15	\$3.31

# Notes & Assumptions

Devils Elbow is from 22 to 23

L&D is load and dump time

The dredges are 300 ft long and could turn empty in the channel with thrusters, costs are both ways, used larger cost

Used turning in the channel vs going to Devils Elbow for turning

Several places for the dredge to leave the channel for LNG if anchorages constructed.

Assumed hopper rental contract, digging on channel toes only.

Travel time from ODMDS is to the top of the cut

Rental Costs include hopper dredge, survey vessel, survey plots and silent inspector telemetered data to PM

Hourly rates are from New Orleans and Mobile District hopper rental contracts and include Mob/Demob allocation

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# 3 SITE SPECIFIC INFORMATION

3.1 Alternative B – Emphasis on Placement at Currently Available Sites
Site specific assumptions for the cost estimate are provided by reach and site in the following subsections.

#### 3.1.1 Reach 34-36

#### Site 1:

- Estimated dimensions: 50 acres surrounded by 6,300 lf of perimeter dike
- Typical dike section variance: N slope = 3.5:1, E slope = 3:1, W slope = 3:1 due to poor existing conditions/materials in these areas
- Initial dike raising/construction variance: short haul materials for N dike = 800 lf, E dike =
   800 lf due to poor existing materials in these areas negating the option of side-casting
- Existing capacity: 97,000 cy based on an estimated remaining freeboard of 3 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 5 ft
- Total Capacity with vertical expansion = 887,700 cy
- Vertical Capacity/Ft = 80,700 cy
- Number of weirs, locations: 2, N and W
- Estimated dike foundation displacement/compaction: N = 2 ft, E = 0.5 ft, S = 0.5 ft, W = 0.5 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

#### Site 2:

- Estimated dimensions: 44 acres surrounded by 5,400 lf of perimeter dike
- Typical dike section variance: N slope = 3:1, S slope = 3:1, W slope = 3.5:1 due to poor existing conditions/materials in these areas
- Initial dike raising/construction variance: short haul materials for N dike = 500 lf, S dike = 200 lf and long haul materials for W dike = 1,000 lf due to poor existing materials in these areas negating the option of side-casting
- Existing capacity: 97,000 cy based on an estimated remaining freeboard of 3 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 5 ft
- Total Capacity with vertical expansion = 807,000 cy
- Number of weirs, locations: 1, S

- Estimated dike foundation displacement/compaction: N = 0.7 ft, E = 0.5 ft, S = 0.7 ft, W = 1.5 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# 3.1.2 Reach 30-34, Clooney Island and Turning Basin

# Site 3:

- Estimated dimensions: 113 acres surrounded by 11,100 If perimeter dike
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: 364,600 cy based on an estimated remaining freeboard of 3 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 5 ft
- Total Capacity with vertical expansion = 2,187,600 cy
- Number of weirs, locations: 2, E and W
- Estimated dike foundation displacement/displacement/compaction: N = 1 ft, E = 1 ft, S = 1 ft, W = 1 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump).

# Site 7 (shared with Reach 26-30):

- Estimated dimensions: 257 acres surrounded by 13,000 lf of perimeter dike
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: 414,600 cy based on an estimated remaining freeboard of 3 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 3 ft
- Total Capacity with vertical expansion = 3,731,400 cy
- Vertical Capacity = 414,600 cy/ft
- Number of weirs, location: 3, N and E and W
- Estimated dike foundation displacement/displacement/compaction: N = 1 ft, E = 1.3 ft,
   S = 1.5 ft, W = 1 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump).

# 3.1.3 Reach 26-30

# Site 7 (shared with Reach 30-34):

- Estimated dimensions: 257 acres surrounded by 13,000 lf of perimeter dike
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a

- Existing capacity: 414,600 cy based on an estimated remaining freeboard of 4 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 3 ft.
- Total Capacity with vertical expansion = 3,731,400 cy
- Number of weirs, location: 3, N and E and W
- Estimated dike foundation displacement/displacement/compaction: N = 1 ft, E = 1.3 ft,
   S = 1.5 ft, W = 1 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# Site 8:

- Estimated dimensions: 192 acres surrounded by 14,400 If perimeter dike
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: 0 cy based on an estimated remaining freeboard of 2 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 3 ft
- Total Capacity with vertical expansion = 2,478,400 cy
- Vertical Capacity: 309,800 cy/ft
- Number of weirs, locations: 3, E(2) and W
- Estimated dike foundation displacement/displacement/compaction: N = 1.4 ft, E = 1.7 ft,
   S = 1.8 ft, W = 1 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# Site 9:

- Estimated dimensions: 170 acres surrounded by 12,500 lf perimeter dike
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: 0 cy based on an estimated remaining freeboard of 2 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 3 ft
- Total Capacity with vertical expansion = 2,194,400 cy
- Vertical Capacity: 274,00 cy/ft
- Number of weirs, locations: 3, NE and SE and SW
- Estimated dike foundation displacement/displacement/compaction: N = 1.1 ft, E = 1.5 ft,
   S = 1.5 ft, W = 1 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# 3.1.4 Reach 22-26

# Site 10:

- Estimated dimensions: 135 acres surrounded by 10,100 lf of perimeter dike
- Typical dike section variance: all slopes = 3.5:1 due to poor existing conditions/materials
- Initial dike raising/construction variance: n/a
- Existing capacity: 0 cy based on an estimated remaining freeboard of 2 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 3 ft
- Total Capacity with vertical expansion = 1,742,400 cy
- Vertical Capacity = 217,800 cy/ft
- Number of weirs, location: 3, N and E and W
- Estimated dike foundation displacement/displacement/compaction: N = 1.3 ft, E = 1.8 ft,
   S = 1.3 ft, W = 1 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# Site 11:

- Estimated dimensions: 135 acres surrounded by 10,000 If perimeter dike
- Typical dike section variance: all slopes = 3.5:1 due to poor existing conditions/materials
- Initial dike raising/construction variance: n/a
- Existing capacity: 217,800 cy based on an estimated remaining freeboard of 4 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 3 ft
- Total Capacity with vertical expansion = 1,960,200 cy
- Vertical Capacity = 217,800 cy/ft
- Number of weirs, locations: 3, E(2) and S
- Estimated dike foundation displacement/displacement/compaction: N = 1.2 ft, E = 0.9 ft,
   S = 1.2 ft, W = 1.8 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# **Site 12A:**

- Estimated dimensions: 160 acres surrounded by 12,000 If perimeter dike
- Typical dike section variance: all slopes = 3.5:1 due to poor existing conditions/materials
- Initial dike raising/construction variance: n/a
- Existing capacity: 0 cy based on an estimated remaining freeboard of 2 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 3 ft

- Total Capacity with vertical expansion = 2,064,800 cy
- Vertical Capacity = 258,100 cy/ft
- Number of weirs, locations: 3, N and E and W
- Estimated dike foundation displacement/displacement/compaction: N = 1 ft, E = 1.5 ft,
   S = 1 ft, W = 0.5 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# Site 12B:

- Estimated dimensions: 433 acres surrounded by 23,600 lf perimeter dike
- Typical dike section variance: all slopes = 3.5:1 due to poor existing conditions/materials
- Initial dike raising/construction variance: n/a
- Existing capacity: 2,095,800 cy based on an estimated remaining freeboard of 5 ft
- Vertical Capacity = 698,600 cy/ft
- Dike raising required: Initial lift = 5 ft, Final height = 8 ft
- Total Capacity with vertical expansion = 7,684,600 cy
- Vertical Capacity = 698,600 cy/ft
- Number of weirs, locations: 6, E(3) and S(2) and W
- Estimated dike foundation displacement/displacement/compaction: N = 1 ft, E = 1.5 ft,
   S = 1.2 ft, W = 0.7 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

#### 3.1.5 Reach 21-22

#### Site 15:

- Estimated dimensions: 181 acres surrounded by 12,800 lf of perimeter dike
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: 584,000 cy based on an estimated remaining freeboard of 4 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 5 ft
- Total Capacity with vertical expansion = 3,504,000cy
- Vertical Capacity = 292,000 cy/ft
- Number of weirs, location: 2, E and S
- Estimated dike foundation displacement/displacement/compaction: N = 1 ft, E = 0.8 ft,
   S = 1 ft, W = 1.4 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# **Site 16N:**

- Estimated dimensions: 168 acres surrounded by 11,100 If perimeter dike
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: 0 cy based on an estimated remaining freeboard of 2 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 5 ft
- Total Capacity with vertical expansion = 2,710,000 cy
- Vertical Capacity = 271,000 cy/ft
- Number of weirs, locations: 2, N and E
- Estimated dike foundation displacement/compaction: N = 1.2 ft, E = 0.7 ft, S = 1.2 ft, W = 1.7 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# 3.1.6 Reach Devil's Elbow

#### Site 13:

- Estimated dimensions: 710 acres surrounded by 23,000 lf of perimeter dike
- Typical dike section variance: all slopes = 3.5:1 due to poor existing conditions/materials
- Initial dike raising/construction variance: site divided into 2 cells (13A & 13B)
- Existing capacity: 0 cy based on an estimated remaining freeboard of 2-3 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 5 ft
- Total Capacity with vertical expansion = 11,455,000 cy
- Vertical Capacity = 1.145,500 cy/ft
- Number of weirs, location: 6, N(add'l pipe costs) and E(add'l pipe costs) and S(2) and W(2)
- Estimated dike foundation displacement/compaction: N = 1.2 ft, E = 1.5 ft, S = 1.2 ft, W = 0.7 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

#### 3.1.7 Reach 16-21

## Site BU50:

- Estimated dimensions: Approximately 6,000 LF of dike will be constructed each event.
- Dikes needed to contain the dredged materials are constructed using in-situ material in the same year of the dredging cycle to meet the capacity requirement of the dredging cycle.

- Assumes dikes are existing on two sides
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity is estimated at 6,598,386 cy with a fill height of 6 ft assuming freeboard of
   7 ft from top of dike to average bottom surface of site interior
- Number of weirs, location: n/a
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 36,000 ft (1 booster pump) for a 30" dredge.

# Site FSD (shared with Reach 12-16):

- Estimated dimensions: 260 acres surrounded by 24,000 If perimeter dike
- Typical dike section variance: all slopes = n/a
- Initial dike raising/construction variance: rock dike protection
- Site specific surveys for elevation of the adjacent dike/land on CDFs D and E were not available for this analysis. Existing LIDAR Data was used to estimate the adjacent dike heights. It is assumed that the existing adjacent dike heights are at +20 or greater.
- In order to contain materials in the new FSD for this site in a manner that allows for vertical expansion and contains the dredged materials from flowing through the rock dike, an earthen dike will be constructed by a combination of side cast materials and dried and hauled materials from within the land portions of the adjacent CDF.
- Dike construction assumes that a bucket dredge will be used to construct the first dike lift. It is assumed that the bucket dredge will enter through the currently existing breach and that the breach will be closed upon completion of the first dike construction.
- The second dike lift will be hauled and side cast.
- Dike raising required: Initial lift = 10 ft, Final height = 20 ft
- Approximately 4,549,000 CY of the 8,390,000 capacity will be utilized for this reach and the remaining capacity of approximately 3,841,000 will be utilized in the mile 12-16 reach.
- Number of weirs, locations: \$70,000 included for drainage / water control structures
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# Site 17:

- Estimated dimensions: 160 acres surrounded by 13,070 lf perimeter dike
- Typical dike section variance: slopes on the north, south and west = 3.5:1 due to poor existing conditions/materials
- Total Acres: 160
- Existing capacity: 309,700 cy
- Dike raising required: Initial lift = 5 ft
- Total Capacity with vertical expansion = 1,657,000 cy
- Number of weirs, locations: 2, E(2)
- Estimated dike foundation displacement/compaction: 17 N = 3 ft, E = 3.0 ft, S = 1.2 ft,
   W = 0.8 ft.
- Dikes on the upland portion of the site will be constructed in one five foot lift.
- Dikes in poor foundation and subject to significant erosion on the lakeside of the CDF will be constructed with a 25 foot crown and 4:1 side slopes (approximately 3,000 LF).
- The remaining dikes on the northeast, south, and west will be constructed with a standard 12 foot crown and 1:3.5 side slopes.
- In order to contain materials in the new FSD for this site in a manner that allows for vertical expansion and contains the dredged materials from flowing through the rock dike, an earthen dike will be constructed by a combination of side cast materials and dried and hauled materials from within the land portions of the CDF.
- Site specific surveys for elevation of the adjacent dike/land on in the vicinity of CDF 17
  were not available for this analysis. Existing LIDAR Data was used to estimate the
  adjacent dike heights. It is assumed that the existing dike/land heights range from +15
  to +20.
- It is assumed that the height of the FSD earthen dikes will be raised to +20 in two lifts.
- CDF 19 is utilized before 17 in order to raise it's elevation closer to the existing
  elevations of CDF 17 so that the sites can be combined and utilized as one large site in
  the future.
- Approximately 2,100 LF of dike separates CDFs 17 and 19 and will be degraded in the future.
- Approximately 2,700 LF of the existing dikes will be degraded in front of the new CDF 17 FSD to allow the FSD and the upland site to be utilized as one area.
- Dredge pipeline length: less than 23,000 ft (no booster pump)

#### Site 19:

• Estimated dimensions: 149 acres surrounded by 15,954 If perimeter dike

- Existing capacity: n/a
- Dike raising required: Initial lift = 5 ft, Second lift = 5 ft.
- Total Capacity with vertical expansion = 2,507,000 cy
- Number of weirs, locations: 2, E(2)
- Estimated dike foundation displacement/compaction: N = 1.23 ft, E = 3.0 ft, S = 0 ft,
   W = 3.0 ft.
- Approximately 6,300 LF of existing land and old eroded dikes will be degraded in front of the new FSD to allow the FSD and the upland site to be utilized as one area.
- Dikes on the upland portion of the site will be constructed in two five foot lifts.
- Dikes in poor foundation and subject to significant erosion on the lakeside of the CDF will be constructed with a 25 foot crown and 4:1 side slopes (approximately 6,700 LF).
- The remaining dikes on the north, south, and west will be constructed with a standard 12 foot crown and 1:3.5 side slopes.
- In order to contain materials in the new FSD for this site in a manner that allows for vertical expansion and contains the dredged materials from flowing through the rock dike, an earthen dike will be constructed by a combination of side cast materials and dried and hauled materials from within the land portions of the CDF.
- Site specific surveys for elevation of the adjacent dike/land on in the vicinity of CDF 19 were not available for this analysis. Existing LIDAR Data was used to estimate the adjacent dike heights. It is assumed that the existing dike/land heights range from +4 to +8. The vertical expansion of the site will raise the dikes approximately 10 feet.
- It is assumed that the height of the FSD earthen dikes will be raised to +12 in two lifts.
- CDF 19 is utilized before 17 in order to raise it's elevation closer to the existing
  elevations of CDF 17 so that the sites can be combined and utilized as one large site in
  the future.
- Approximately 2,900 LF of shore protection will be placed on the remaining unprotected ship channel side of the CDF to reduce further erosion. Shore protection will be placed to an elevation of +6.
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# Site 22:

- Estimated dimensions: 236 acres surrounded by 14,670 If perimeter dike
- Typical dike section variance: all slopes = 3.5:1 due to poor existing conditions/materials
- Initial dike raising/construction variance: 4:1 on the eastern slope due to poor existing conditions/materials and erosion
- Existing capacity: 214,500 cy based on an estimated remaining freeboard of 3 ft

- Dike raising required: Initial lift = 5 ft, Second lift = 5 ft.
- Total Capacity with vertical expansion = 4,575,000 cy
- Number of weirs, locations: 2
- Estimated dike foundation displacement/compaction: N = 1.2 ft, E = 3.0 ft, S = 0.9 ft,
   W = 0.0 ft.
- Approximately 6,100 LF of existing land and existing dikes will be degraded in front of the new CDF 22 FSD to allow the FSD and the upland site to be utilized as one area.
- Dikes on the upland portion of the site will be constructed in two five foot lifts.
- Dikes in poor foundation and subject to significant erosion on the lakeside of the CDF will be constructed with a 25 foot crown and 4:1 side slopes (approximately 5,300 LF).
- The remaining dikes on the northeast, and west will be constructed with a standard 12 foot crown and 1:3.5 side slopes.
- In order to contain materials in the new FSD for this site in a manner that allows for vertical expansion and contains the dredged materials from flowing through the rock dike, an earthen dike will be constructed by a combination of side cast materials and dried and hauled materials from within the land portions of the CDF.
- Site specific surveys for elevation of the adjacent dike/land in the vicinity of CDF 22 were not available for this analysis. Existing LIDAR Data was used to estimate the adjacent dike heights. It is assumed that the existing dike/land heights range from +16 to +20.
- It is assumed that the height of the FSD earthen dikes will be raised to +20 in two lifts.
- Dredge pipeline length: less than 23,000 ft (no booster pump)

#### 3.1.8 Reach 12-16

#### Site BU5:

- Estimated dimensions: 2,200 acres w/ 6,000 lf of marsh dikes constructed for each event
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity with vertical expansion = 8,873,000 cy with a fill height of 5 ft assuming freeboard of 6 ft from top of dike to average bottom surface of site interior
- Number of weirs, location: n/a
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 8,000 ft of pipeline used in conjunction with the CWWPRA pipeline.

# Site D/E:

- Estimated dimensions: 402 acres (D = 247 ac, E = 155 ac) surrounded by 41,300 lf (D = 25,000 lf, E = 16,300 lf) perimeter dike
- Typical dike section variance: all slopes = 3.5:1 due to poor existing conditions/materials,
   4:1 on the east dike due to poor foundation and high erosion.
- Initial dike raising/construction variance: combined use of sites *D* and *E* with initial vertical expansion of both
- Existing capacity: 398,500 cy
- Dike raising required: two 5 foot lifts
- Total Capacity with vertical expansion = 6,884,500 cy
- Number of weirs, locations: 6, E(2) and W at both sites
- Estimated dike foundation displacement/compaction: N = 0.7 ft, E = 3.0 ft, S = .5 ft, W = 0.0 ft.
- Dikes in poor foundation and subject to significant erosion on the lakeside of the CDF will be constructed with a 25 foot crown and 4:1 side slopes (approximately 18,500 LF).
- The remaining dikes on the north, south, and west will be constructed with a standard 12 foot crown and 1:3.5 side slopes.
- The dike between D&E will be degraded so that the site can be utilized as one site.
- It is assumed that once the FSD is filled to +20 that D&E will be combined with the FSD to be utilized as one facility in the future.
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# Site FSD (shared with Reach 16-21):

- Estimated dimensions: 260 acres surrounded by 24,000 lf perimeter dike
- Typical dike section variance: all slopes = n/a
- Initial dike raising/construction variance: rock dike protection
- Site specific surveys for elevation of the adjacent dike/land on CDFs D and E were not available for this analysis. Existing LIDAR Data was used to estimate the adjacent dike heights. It is assumed that the existing dike heights are at +20 or greater.
- In order to contain materials in the new FSD for this site in a manner that allows for vertical expansion and contains the dredged materials from flowing through the rock dike, an earthen dike will be constructed by a combination of side cast materials and dried and hauled materials from within the land portions of the CDF.
- Dike construction assumes that a bucket dredge will be used to construct the first dike lift. It is assumed that the bucket dredge will enter through the currently existing breach and that the breach will be closed upon completion of the first dike construction.
- The second dike lift will be hauled and side cast.

- Dike raising required: Initial lift = 10 ft, Final height = 20 ft
- Approximately 3,841,000 CY of the 8,390,000 CY capacity will be utilized for this reach and the remaining capacity of approximately 4,549,014 CY will be utilized in the mile 16-21 Reach.
- Number of weirs, locations: \$70,000 included for drainage / water control structures
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: less than 23,000 ft (no booster pump)

#### 3.1.9 Reach 9.5-12

# Site BU18:

- Estimated dimensions: Available 2,300 acres with adjacent properties protected by a total of 30,000 lf of perimeter dike (2 sides), site divided into 1 cell for 6 placement events w/ 6,000 lf of marsh dikes constructed for each event
- Typical dike section variance: all slopes = n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity with vertical expansion = 6,946,800 cy with a fill height of 5 ft assuming freeboard of 6 ft from top of dike to average bottom surface of site interior
- Number of weirs, location: n/a
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 23,000 ft (1 booster pump)

# Site BU49:

- Estimated dimensions: 600 acres with adjacent properties protected by a total of 18,000
   If of perimeter dike (2 sides), site divided into 3 200 acre cells for 3 placement events
   w/ 6,000 If of marsh dikes constructed for each event
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity with vertical expansion = 2,315,000 cy with a fill height of 5 ft assuming freeboard of 6 ft from top of dike to average bottom surface of site interior
- Number of weirs, locations: n/a

- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 27,000 ft (1 booster pump)

#### 3.1.10 Reach 5-9.5

#### Site H:

- Estimated dimensions: 142 acres surrounded by 13,000 lf of perimeter dike
- Typical dike section variance: all slopes = 3.5:1 due to poor existing conditions/materials
- Initial dike raising/construction variance: no dike raising/construction on W side
- Existing capacity: 458,000 cy based on an estimated remaining freeboard of 4 ft
- Dike raising required: Initial lift = 4 ft, no 2<sup>nd</sup> lift
- Total Capacity with vertical expansion = 1,374,400 cy
- Vertical Capacity = 229,100 cy/ft
- Number of weirs, location: 3, NW and SW(2)
- Estimated dike foundation displacement/compaction: N = 1.2 ft, E = 0.8 ft, S = 1.2 ft,
   W = 0.5 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# Site M:

- Estimated dimensions: 392 acres surrounded by 18,600 lf perimeter dike
- Typical dike section variance: all slopes = 3.5:1 due to poor existing conditions/materials
- Initial dike raising/construction variance: n/a
- Existing capacity: 0 cy based on an estimated remaining freeboard of 2 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 3 ft
- Total Capacity with vertical expansion = 5,059,200 cy
- Vertical Capacity = 632,400 cy/ft
- Number of weirs, locations: 4, N and E and S and W
- Estimated dike foundation displacement/compaction: N = 1.2 ft, E = 1.8 ft, S = 1.3 ft, W = 0.7 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

#### Site N:

- Estimated dimensions: 219 acres surrounded by 16,400 If perimeter dike
- Typical dike section variance: all slopes = 3.5:1 due to poor existing conditions/materials
- Initial dike raising/construction variance: n/a
- Existing capacity: 0 cy based on an estimated remaining freeboard of 2 ft

- Dike raising required: Initial lift = 5 ft, Second lift = 3 ft
- Total Capacity with vertical expansion = 2,826,400cy
- Vertical Capacity = 219,300 cy/ft
- Number of weirs, locations: 3, N and S and W
- Estimated dike foundation displacement/compaction: N = 1.3 ft, E = 0.8 ft, S = 1 ft,
   W = 1.5 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

# Site BU19/20:

- Estimated dimensions: 600 acres with adjacent properties protected by a total of 8,000 lf of perimeter dike (2 sides), site divided into 2 300 acre cells for 2 placement events w/ 4,000 lf of marsh dikes constructed for each event
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity = 1,551,000 cy for BU 19 and 775,000 for BU 20 with a fill height of 6 ft assuming freeboard of 7 ft from top of dike to average bottom surface of site interior
- Number of weirs, locations: n/a
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 18,000 ft (no booster pump)

# 3.2 Alternative C – Emphasis on Placement at Beneficial Use Sites

#### 3.2.1 Miles 36 to 22

Same as Alternative B

# 3.2.2 Reach Devil's Elbow

# Site 13:

- Estimated dimensions: 710 acres surrounded by 23,000 lf of perimeter dike
- Typical dike section variance: all slopes = 3.5:1 due to poor existing conditions/materials
- Initial dike raising/construction variance: site divided into 2 cells (13A & 13B)
- Existing capacity: 0 cy based on an estimated remaining freeboard of 2-3 ft
- Dike raising required: Initial lift = 5 ft, Second lift = 5 ft
- Total Capacity with vertical expansion = 11,455,000 cy

- Vertical Capacity = 1.145,500 cy/ft
- Number of weirs, location: 6, N (add'l pipe costs) and E (add'l pipe costs) and S(2) and W(2)
- Estimated dike foundation displacement/compaction: N = 1.2 ft, E = 1.5 ft, S = 1.2 ft,
   W = 0.7 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)

#### Site BU50:

- Estimated dimensions: Approximately 6,000 LF of dike will be constructed each event.
- Dikes needed to contain the dredged materials are constructed using in-situ material in the same year of the dredging cycle to meet the capacity requirement of the dredging cycle.
- Dikes will only be constructed to meet the dredging need at the time. No additional capacity will be created.
- Assumes dikes are existing on two sides
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity is estimated at 7,158,000 cy with a fill height of 6 ft assuming freeboard of
   7 ft from top of dike to average bottom surface of site interior.
- Approximately 2,062,000 cy will be used in this reach and the remainder in 16-21.
- Number of weirs, location: n/a
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 36,000 ft (1 booster pump) for a 30" dredge.

#### 3.2.3 Reach 16-21

# Site BU4:

- Estimated dimensions: 400 acres with adjacent properties protected by a total of 7,500 If of perimeter dike (2 sides), 1 placement event
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft

- Total Capacity with vertical expansion = 1,864,000 cy with a fill height of 6 ft assuming freeboard of 7 ft from top of dike to average bottom surface of site interior
- Number of weirs, location: \$20,000 included for drainage / water control structure
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 8,000 ft (no booster pump)

# Site BU24:

- Estimated dimensions: 450 acres with adjacent properties protected by a total of 18,000 lf of perimeter dike (2 sides), site divided into 3 150 acre cells for 3 placement events w/ 6,000 lf of marsh dikes constructed for each event
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity with vertical expansion = 4,350,000 cy with a fill height of 6 ft assuming freeboard of 7 ft from top of dike to average bottom surface of site interior
- Number of weirs, location: \$75,000 included for drainage / water control structure
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 48,000 ft (2 booster pumps)

#### Site BU48:

- Estimated dimensions: 650 acres with adjacent properties protected by a total of 14,000
   If of perimeter dike (2 sides), site divided into 2 325 acre cells for 2 placement events
   w/ 7,500 If of marsh dikes constructed for each event
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity with vertical expansion = 6,214,000 cy with a fill height of 6 ft assuming freeboard of 7 ft from top of dike to average bottom surface of site interior
- Number of weirs, location: n/a
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 24,000 ft (1 booster pump)

# Site BU50:

- Estimated dimensions: Approximately 6,000 LF of dike will be constructed each event.
- Dikes needed to contain the dredged materials are constructed using in-situ material in the same year of the dredging cycle to meet the capacity requirement of the dredging cycle.
- Dikes will only be constructed to meet the dredging need at the time. No additional capacity will be created.
- Assumes dikes are existing on two sides
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity is estimated at 7,158,000 cy with a fill height of 6 ft assuming freeboard of
   7 ft from top of dike to average bottom surface of site interior.
- Approximately 5,096,000 cy will be used in this reach and the remainder in Devil's Elbow.
- Number of weirs, location: n/a
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 36,000 ft (1 booster pump) for a 30" dredge.

# Site BU52:

- Estimated dimensions: 150 acres with adjacent properties protected by a total of 8,000 If of perimeter dike (2 sides), 1 placement event
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity with vertical expansion = 621,000 cy with a fill height of 3 ft
- Number of weirs, location: n/a
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 4,000 ft (no booster pump)

#### Site 17

- Estimated dimensions: 147 acres surrounded by 17,600 If perimeter dike
- Typical dike section variance: all slopes = 3.5:1 due to poor existing conditions/materials
- Existing capacity: 309,700 cy based on an estimated remaining freeboard of 3-4 ft,

- Dike raising required: Initial lift = 6 ft, no 2<sup>nd</sup> lift
- Total Capacity with vertical expansion = 2,336,100 cy
- Number of weirs, locations: 2, E(1) and W(1)
- Estimated dike foundation displacement/compaction: 17 N = 1.2 ft, E = 2.0 ft, S = 1.2 ft,
   W = 0.8 ft
- Dredge pipeline length: less than 23,000 ft (no booster pump)
- This alternative only uses all available land for CDF17 and does not consider any horizontal expansion as in Alternative B.

#### 3.2.4 Reach 12-16

## Site BU5:

- Estimated dimensions: 2,200 acres w/ 6,000 lf of marsh dikes constructed for each event
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity with vertical expansion = 8,873,000 cy with a fill height of 5 ft assuming freeboard of 6 ft from top of dike to average bottom surface of site interior
- Number of weirs, location: n/a
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 8,000 ft of pipeline used in conjunction with the CWWPRA pipeline.

# Site BU6:

- Estimated dimensions: 12,000 If of perimeter dike (2 sides), w/ 6,000 If of marsh dikes constructed for each event
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity with vertical expansion = 2,191,000 cy with a fill height of 2 ft
- Number of weirs, location: \$48,000 included for drainage / water control structure
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 8,000 ft in conjunction with the CWWPRA Pipeline (1 booster pump)

# Site BU7:

- Estimated dimensions: 13,000 If of marsh dikes constructed for each event
- Typical dike section variance: n/a
- Initial dike raising/construction variance: n/a
- Existing capacity: n/a
- Dike required: Final height = 5 ft
- Total Capacity with vertical expansion = 3,895,000 cy with a fill height of 2 ft
- Number of weirs, location: n/a
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: 24,000 ft (1 booster pump)

# Site FSD:

- Estimated dimensions: 260 acres surrounded by 24,000 lf perimeter dike
- Typical dike section variance: all slopes = n/a
- Initial dike raising/construction variance: rock dike protection
- Existing capacity: n/a
- Dike raising required: Initial lift = 10 ft, Final height = 20 ft
- Total Capacity with vertical expansion = 8,390,000 cy
- Number of weirs, locations: \$70,000 included for drainage / water control structures
- Estimated dike foundation displacement/compaction: n/a
- Dredge pipeline length: less than 23,000 ft (no booster pump)

#### 3.2.5 Reach 9.5-12

Same as Alternative B

#### 3.2.6 Reach 5 - 9.5

Same as Alternative B

# 3.3 Alternative D – Placement of Material in the Ocean Disposal Management Site (ODMDS)

#### 3.3.1 Miles 26 to 22

Same as Alternative B

#### 3.3.2 Reach 21-22

- Material to the ODMDS
- Shore Protection is applied along the channel side of sites 15 and 16N to minimize erosion and subsequent channel shoaling.

#### 3.3.3 Reach Devil's Elbow

Material to the ODMDS.

#### 3.3.4 Reach 16 - 21

- Material to the ODMDS.
- Shore Protection is applied along the channel side of sites 17 and 19 to minimize erosion and subsequent channel shoaling.

#### 3.3.5 Reach 12 - 16

Material to the ODMDS.

#### 3.3.6 Reach 9.5 to 12

- Material to the ODMDS.
- Shore Protection is applied along the channel side of site H to minimize erosion and subsequent channel shoaling.

# 4 BAR CHANNEL

The Bar Channel ranges from Mile 0 to approximate Mile -30 where it meets the natural deep contour of the Gulf. Approximately 7 to 8 million cubic yards are dredged and agitated semi-annually on an as needed basis, typically through a rental contract. An average of 6.7 million cubic yards per year has been agitated in the channel and an average of 700,000 cubic yards per year have been placed in the ODMDS annually. To determine the preliminary costs for maintaining the Bar Channel, the average yearly cost over the last 5 years was determined at \$4.6 million. The costs were adjusted using a 10% Engineering and Design, 8% Supervision and Administration and 15% Contingency for the first 5 years and 20% for the remaining years. The costs for each cycle over the 20 year term of the DMMP were adjusted for escalation per 1110-2-1304 Civil Works Construction Cost Index System.

River Mile 34 - 36
Disposal Site - 1
Total Capacity In CY - 887,700

Event						
Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
0	Construction	LS	1	\$	524,000	\$524,000
	Pipeline Installation	LS	1	\$	200.000	\$0
	Dredging (Gross yardage)	CY		\$		\$0
	Dredging (Pay yardage)	CY		\$		\$0
	Damp	LS	1		ŚO	ŚO
	LERR	LS	1	\$	4,000	\$4,000
	E & D @10%	LS	1	*	\$52,400	\$52,400
	S & A @ 8%	LS	1		\$41,920	\$41,920
	Contingency @15%	LS	1		\$91,438	\$91,438
	contingency & 1570					
Event				Eve	ent Total	\$713,758
Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
1	Construction	LS	1	\$		\$0
•	Pipeline	LS	1	Ś		ŚO
	Dredging (Gross yardage)	LS	399,200	2	\$0.00	\$0
		CY	295,704		\$3.44	\$1,017,222
	Dredging (Pay yardage) LERR	CY			\$3.44	\$1,017,222
			1			
	E & D @10%	LS	_		\$101,722.2	\$101,722
	S & A @ 8%	LS	1		\$81,377.7	\$81,378
	Contingency @15%	LS	1		\$180,048.3	\$180,048
- word				Eve	ent Total	\$1,380,370
Event Year		0	11-14	11	nit Price	Extended Price
2	Item Description	Quantity	Unit		III FIICE	\$0
2	Construction	LS	1	\$		
	Pipeline Installation	1,35	1	>	40.00	\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$22,000	\$22,000
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$2,200.0	\$2,200
	S & A @ 8%	LS	1		\$1,760.0	\$1,760
	Contingency @15%	LS	1		\$3,894.0	\$3,894
				Eve	ent Total	\$29,854
Event						
Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
3	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$22,000	\$22,000
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$2,200.0	\$2,200
	S & A @ 8%	LS	1		\$1,760.0	\$1,760
	Contingency @15%	LS	1		\$3,894.0	\$3,894
				E	ent Total	\$29,854
				EVE	ant rotal	323,654

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French						
Event Year	Item Description	Quantity	Unit	1)	nit Price	Extended Price
5	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	118,800		\$0.00	\$0
	Dredging (Pay yardage)	CY	88,000		\$3.44	\$302,720
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$30,272	\$30,272
	S & A @ 8%	LS	1		\$24,218	\$24,218
	Contingency @20%	LS	1		\$71,442	\$71,442
				Ev	ent Total	\$428,652
Event						
Year	Item Description	Quantity	Unit	ti	nit Price	Extended Price
9	Construction	LS	1	\$	130,000	\$130,000
3	Pipeline Installation	LS	1	\$	150,000	\$0
	Dredging (Gross yardage)	CY	•		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	ŚO
	Damp	LS	1		\$22,000	\$22,000
	LERR	LS	1		\$22,000	\$22,000
	E & D @10%	LS	1		\$15,200	\$15,200
	S & A @ 8%	LS	1		\$12,160	\$12,160
	Contingency @20%	LS	1		\$35,872	\$35,872
				Ev	ent Total	\$215,232
Event						
Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
10	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	399,200	14.7	\$0.00	\$0
	Dredging (Pay yardage)	CY	295,704		\$3.44	\$1,017,222
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$101,722	\$101,722
	S & A @ 8%	LS	1		\$81,378	\$81,378
	Contingency @20%	LS	1		\$240,064	\$240,064
				Ev	ent Total	\$1,440,386
Event	Item Description	Quantity	Unit	- 10	nit Price	Extended Price
11	Construction	LS	1	\$	int rrice	\$0
11	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	-	4	\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
		LS	1			
	Damp LERR		1		\$22,000	\$22,000
	E & D @10%	LS	1		\$2,200	\$2,200
	S & A @ 8%	LS	1		\$1,760	\$1,760
	Contingency @20%	LS	1		\$5,192	\$5,192
				Ev	ent Total	\$31,152
			Dispo	sal Sit	e Total	\$4,269,257

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#### River Mile 34 - 36 Disposal Site - Site 2 Total Capacity In CY - 807,000

Event	20020-005	20,000				ale district
Year 0	Item Description	Quantity	Unit	s	Init Price	Extended Price
U	Construction Pipeline Installation	LS	1	5	378,000	\$378,000 \$0
	Dredging (Gross yardage)	CY	0	5	\$0.00	50
	Dredging (Pay yardage)	CY	0		\$0.00	SO SO
	LERR	LS	1		\$8,000	\$8,000
	E & D @10%	LS	1		\$37,800	
	5 & A @ 8%	LS	1		\$30,240	
	Contingency @15%	LS	1		\$66,906	
				Ev	ent Total	\$520,946
Event						
Year	Item Description	Quantity	Unit		Init Price	Extended Price
1	Construction	LS	1	\$		\$0
	Pipeline	LS	1	5	-	\$0
	Dredging (Gross yardage)	LS. CY	399,200		\$0.00	\$0
	Dredging (Pay yardage) LERR	CY	295,704		\$3.44 \$0	\$1,017,222 \$0
	E & D @10%	LS	1		\$101,722	\$101,722
	5 & A @ 8%	LS	1		\$81,378	
	Contingency @15%	LS	1		\$180,048	
				Ev	ent Total	\$1,380,370
Event						
Year	Item Description	Quantity	Unit		Init Price	Extended Price
2	Construction	LS	1	\$		S0
	Pipeline Installation	LS	1	\$	40.00	\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY			\$0.00	\$0
	Damp LERR	LS	1		\$19,000 \$0	\$19,000
	E & D @10%	LS	1		\$1,900	\$0 \$1,900
	5 & A @ 8%	LS	1		\$1,520	
	Contingency @15%	LS	1		\$3,363	\$3,363
				Ev	ent Total	\$25,783
Event						
Year	Item Description	Quantity	Unit		Init Price	Extended Price
3	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	5	-	S0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY LS	0		\$0.00	\$0
	Damp LERR	LS	1		\$19,000	\$19,000 \$0
	E& D@10%	LS	1		\$1,900	\$1,900
	S & A @ 8%	LS	1		\$1,520	\$1,520
	Contingency @15%	LS	1		\$3,363	\$3,363
				Ev	ent Total	\$25,783
Event						
Year	Item Description	Quantity	Unit	t	Init Price	Extended Price
9	Construction	LS	1	\$	112,000	\$112,000
3.5	Pipeline Installation	LS	1	5		\$112,000
	Dredging (Gross yardage)	CY	0	*	\$0.00	50
	Dredging (Pay yardage)	CY	0		\$0.00	
	LERR	LS	1		50	50
	E & D @10%	LS	1		\$11,200	\$11,200
	S & A @ 8%	LS	1		\$8,960	\$8,960
	Contingency @20%	LS	1		\$27,552	\$27,552
				Ev	ent Total	\$159,712

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Event						
Year	Item Description	Quantity	Unit		nit Price	Extended Price
10	Construction	LS	1	S		SC
	Pipeline Installation	LS	1	\$	U.X	\$0
	Dredging (Gross yardage)	CY	399,200		\$0.00	\$0
	Dredging (Pay yardage)	CY	295,704		\$3.44	
	Damp	LS	1		50	
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$101,722	
	5 & A @ 8%	LS	1		\$81,378	\$81,378
	Contingency @20%	LS	1		\$240,064	\$240,064
				Eve	ent Total	\$1,440,386
Event						
Year	Item Description	Quantity	Unit	U	rit Price	Extended Price
11	Construction	LS	1	S		SO
	Pipeline Installation	LS	1	\$		SO
	Dredging (Gross yardage)	CY			\$0.00	\$6
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$19,000	
	LERR	LS	1		50	
	E & D @ 10%	LS	1		\$1,900	
	S & A @ 8%	LS	1		\$1,520	200
	Contingency @20%	LS	1		\$4,484	
				Eve	ent Total	\$26,904
Event						
Year	Item Description	Quantity	Unit	U	rit Price	<b>Extended Price</b>
15	Construction	LS	1	5		\$0
	Pipeline Installation	LS	1	\$	1.7	SC
	Dredging (Gross yardage)	CY	118,800		\$0.00	\$0
	Dredging (Pay yardage)	CY	88,000		\$3.44	\$302,720
	Damp	LS	1		\$0	\$0
	LERR	LS	1		SO	SC
	E & D @10%	LS	1		\$30,272	\$30,272
	5 & A @ 8%	LS	1		\$24,218	\$24,218
	Contingency @20%	LS	1		\$71,442	\$71,442
2000				Eve	ent Total	\$428,652
Event Year	Item Description	Quantity	Unit	Ui	nit Price	Extended Price
16	Construction	LS	1	5	-	SO
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	
	Damp	LS	1		\$19,000	
	LERR	LS	1		\$0	2000
	E & D @10%	LS	1		\$1,900	
	5 & A @ 8%	LS	1		\$1,520	
	Contingency @20%	LS	1		\$4,484	
				Eve	ent Total	\$26,904
			Dispos	sal Sit	e Total	\$4,035,439
				200	Dischar.	3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3

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River Mile 30 - 34 Disposal Site - 3

Total Capacity In CY - 2,187,600

Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
0	Construction	LS	1	\$	674,000	\$674,000
· ·	Pipeline Installation	LS	1	\$	074,000	\$0
	Dredging (Gross yardage)	CY		\$		\$0
	Dredging (Pay yardage)	CY		S	141	\$0
	LERR	LS	1	\$	138,000	\$138,000
	E & D @10%	15	1		\$67,400.0	\$67,400
	S & A @ 8%	LS	1		\$53,920.0	\$53,920
	Contingency @15%	15	1		\$119,298.0	\$119,298
					Event Total	\$1,052,618
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
1	Construction	15	1	\$		\$0
	Pipeline	15	1	\$		\$0
	Dredging (Gross yardage)	15	1,440,450		\$0.00	\$0
	Dredging (Pay yardage)	CY	1,067,000		\$3.44	\$3,670,480
	LERR	CY	1		\$0	\$0
	E & D @ 10%	LS	1		\$367,048	\$367,048
	S & A @ 8%	LS	1		\$293,638	\$293,638
	Contingency @15%	LS	1		\$649,675	\$649,675
					Event Total	\$4,980,841
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
2	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$49,000	\$49,000
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$4,900	\$4,900
	S & A @ 8%	LS	1		\$3,920	\$3,920
	Contingency @15%	LS	1		\$8,673	\$8,673
					Event Total	\$66,493
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
3	Construction	LS	1	\$	2	\$0
	Pipeline Installation	15	1	S		\$0
	Dredging (Gross yardage)	CY			\$0.00	so
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$49,000	\$49,000
	LERR	LS	1		\$0	\$0
	E & D @10%	15	1		\$4,900	\$4,900
	5 & A @ 8%	1.5	1		\$3,920	\$3,920
	Contingency @15%	LS	1		\$8,673	\$8,673
					Event Total	\$66,493
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
5	Construction	LS	1	s	295,000	\$295,000
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	0	*	\$0.00	50
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$29,500	\$29,500
	S & A @ 8%	LS	1		\$23,600	\$23,600
	Contingency @20%	LS	1		\$72,865	\$72,865
					Event Total	\$420,965

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Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
6	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	375,300		\$0.00	\$0
	Dredging (Pay yardage)	CY	278,000		\$3.44	\$956,320
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$95,632	\$95,632
	S & A @ 8%	LS	1		\$76,506	\$76,506
	Contingency @20%	LS	1		\$225,692	\$225,692
					Event Total	\$1,354,149
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
7	Construction	LS	1	5	Unit Price	SO SO
,	Pipeline Installation	LS	1	\$		\$0
	Contract to the second	CY	1	5	\$0.00	50
	Dredging (Gross yardage)				4,000	
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$49,000	\$49,000
	LERR	LS	1		\$0	\$0
	E & D @ 10%	1.5	1		\$4,900	\$4,900
	S & A @ 8%	LS	1		\$3,920	\$3,920
	Contingency @20%	LS	1		\$11,564	\$11,564
					<b>Event Total</b>	\$69,384
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
11	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	5		\$0
	Dredging (Gross yardage)	CY	720,225		\$0.00	\$0
	Dredging (Pay yardage)	CY	533,500		\$3.44	\$1,835,240
	Damp	LS	1		S0	\$0
	LERR	LS	1		SO	SO
	E & D @10%	LS	1		\$183,524	\$183,524
	S & A @ 8%	LS	1		\$146,819	\$146,819
	Contingency @20%	LS	1		\$433,117	\$433,117
					Event Total	\$2,598,700
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
12	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$49,000	\$49,000
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$4,900	\$4,900
	5 & A @ 8%	LS	1		\$3,920	\$3,920
	Contingency @20%	LS	1		\$11,564	\$11,564
					Event Total	\$69,384
			Dispo	sal S	Site Total	\$10,679,027
			-			A Sec. a. Second

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# River Mile 30 - 34 Disposal Site - Site 7

Total Capacity In CY - 3,316,800

Event Year	Item Description	Quantity	Unit	L	Init Price	Extended Price
0	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$56,000	\$56,000
	LERR	LS	1		\$206,000	\$206,000
	E & D @10%	LS	1		\$5,600	\$5,600
	S & A @ 8%	LS	1		\$4,480	\$4,480
	Contingency @15%	LS	1		\$9,912	\$9,912
				E	ent Total	\$281,992
Event Year	Item Description	Quantity	Unit	L	Init Price	Extended Price
1	Construction	LS	1	\$	( ±	\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$56,000	\$56,000
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$5,600	\$5,600
	S & A @ 8%	LS	1		\$4,480	\$4,480
	Contingency @15%	LS	1		\$9,912	\$9,912
				Ev	ent Total	\$75,992
Event Year	Item Description	Quantity	Unit	L	Init Price	Extended Price
3	Construction	LS	1	\$	533,000	\$533,000
	Pipeline Installation	LS	1	\$	752,41541	\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		50	50
	LERR	LS	1		SO	\$0
	E & D @10%	LS	1		\$53,300	\$53,300
	S & A @ 8%	LS	1		\$42,640	\$42,640
	Contingency @15%	LS	1		\$94,341	\$94,341
				E	ent Total	\$723,281

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LERR	\$0 \$0 \$0 \$1,835,240 \$0 \$183,524 \$146,819 \$433,117 \$2,598,700 anded Price \$0 \$0 \$0 \$0
Pipeline Installation	\$0 \$1,835,240 \$0 \$183,524 \$146,819 \$433,117 <b>\$2,598,700</b> anded Price \$0 \$0 \$0
Dredging (Gross yardage)	\$0 \$1,835,240 \$0 \$183,524 \$146,819 \$433,117 <b>\$2,598,700</b> anded Price \$0 \$0 \$0
Dredging (Pay yardage)	\$0 \$183,524 \$146,819 \$433,117 <b>\$2,598,700</b> nded Price \$0 \$0 \$0
LERR	\$0 \$183,524 \$146,819 \$433,117 <b>\$2,598,700</b> nded Price \$0 \$0 \$0
E & D @10%	\$183,524 \$146,819 \$433,117 <b>\$2,598,700</b> anded Price \$0 \$0 \$0 \$0
S & A @ 8%	\$146,819 \$433,117 <b>\$2,598,700</b> anded Price \$0 \$0 \$0 \$0
Event Year	\$433,117 \$2,598,700 nded Price \$0 \$0 \$0
Event Year	nded Price \$0 \$0 \$0
12	\$0 \$0 \$0
12	\$0 \$0 \$0
Pipeline Installation	\$0 \$0
Dredging (Gross yardage)	\$0
Dredging (Pay yardage)   CY   0   \$0.00     Damp	
Damp	SO
LERR	
Event Year Item Description Quantity Unit Unit Price Extended 14 Construction LS 1 \$ 105,000 Pipeline Installation LS 1 \$ 105,000	\$56,000
S & A @ 8%	\$0
Event Year Item Description Quantity Unit Unit Price Extended 14 Construction LS 1 \$ 105,000 Pipeline Installation LS 1 \$ -	\$5,600
Event Year Item Description Quantity Unit Unit Price Extended 14 Construction LS 1 \$ 105,000 Pipeline Installation LS 1 \$ -	\$4,480
Event Year Item Description Quantity Unit Unit Price Extended 14 Construction LS 1 \$ 105,000 Pipeline Installation LS 1 \$ -	\$13,216
14 Construction LS 1 \$ 105,000 Pipeline Installation LS 1 \$ -	\$79,296
14 Construction LS 1 \$ 105,000 Pipeline Installation LS 1 \$ -	nded Price
Pipeline Installation LS 1 \$ -	\$105,000
	\$0
Dredging (Gross yardage) CY \$0.00	\$0
Dredging (Pay yardage) CY 0 \$0.00	\$0
Damp LS 1 \$0	\$0
LERR LS 1 \$0	\$0
E & D @10% LS 1 \$10,500	\$10,500
S & A @ 8% LS 1 \$8,400	\$8,400
Contingency @20% LS 1 \$24,780	\$24,780
Event Total	\$148,680
Event Year Item Description Quantity Unit Unit Price Extende	nded Price
16 Construction LS 1 \$ -	\$0
Pipeline Installation LS 1 \$ -	\$0
Dredging (Gross yardage) CY 0 \$0.00	\$0
Dredging (Pay yardage) CY 0 \$3.44	\$0
Damp LS 1 \$56,000	\$56,000
LERR LS 1 \$0	\$0
E & D @10% LS 1 \$5,600	\$5,600
S & A @ 8% LS 1 \$4,480	\$4,480
Contingency @20% LS 1 \$13,216	\$13,216
Event Total	\$79,296

Mile 30-34, CDF 7, Page8

Event Year	Item Description	Quantity	Unit		Jnit Price	Extended Price
16	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	375,300		\$0.00	\$0
	Dredging (Pay yardage)	CY	278,000		\$3.44	\$956,320
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$95,632	\$95,632
	S & A @ 8%	LS	1		\$76,506	\$76,506
	Contingency @20%	LS	1		\$225,692	\$225,692
				E	vent Total	\$1,354,149
Event Year	Item Description	Quantity	Unit		Jnit Price	Extended Price
17	Construction	LS	1	\$	9	\$0
	Pipeline Installation	LS	1	\$	+	\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$56,000	\$56,000
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$5,600	\$5,600
	S & A @ 8%	LS	1		\$4,480	\$4,480
	Contingency @20%	LS	1		\$13,216	\$13,216
				E	vent Total	\$79,296
			Dispos	al Sit	e Total A	\$5,420,682
		Divor Mile	26 20			

River Mile 26 - 30 Disposal Site - Site 7

Disposal Site Total B \$8,262,648

Total \$13,683,330

Cost/cy/capacity of site \$4.13

River Mile 26 - 30 Disposal Site - 7

Total Capacity In CY - 3,316,800

Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
0	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$56,000	\$56,000
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$5,600	\$5,600
	S & A @ 8%	LS	1		\$4,480	\$4,480
	Contingency @15%	LS	1		\$9,912	\$9,912
				Ev	ent Total	\$75,992
Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
1	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	
	Damp	LS	1		\$56,000	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$5,600	\$5,600
	5 & A @ 8%	LS	1		\$4,480	
	Contingency @15%	LS	1		\$9,912	\$9,912
				Ev	ent Total	\$75,992
Event Year	Item Description	Quantity	Unit	u	nit Price	Extended Price
3	Construction	LS	1	\$	533,000	\$533,000
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	-	*	\$0.00	
	Dredging (Pay yardage)	CY	0		\$0.00	
	Damp	LS	1		\$0	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$53,300	0
	S & A @ 8%	LS	1		\$42,640	
	Contingency @15%	LS	1		\$94,341	
				Ev	ent Total	\$723,281

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Event Year	Item Description	Quantity	Unit	Unit	Price	Extended Price
4	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	979,551		\$0.00	
	Dredging (Pay yardage)	CY	725,593		\$3.44	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		249,604	\$249,604
	5 & A @ 8%	LS	1		199,683	20000000
	Contingency @20%	LS	1		441,799	
				Ever	t Total	\$3,387,126
Event Year	Item Description	Quantity	Unit	Unit	Price	Extended Price
5	Construction	LS	1	\$	rrice	\$0
3	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0	3	\$0.00	
	Dredging (Pay yardage)	CY	0		\$3.44	
	Damp	LS	1		\$56,000	\$56,000
	LERR	LS	1		\$0,000	mark the state of
	E & D @10%	LS	1		\$5,600	
	S & A @ 8%	LS	1		\$4,480	
	Contingency @20%	LS	1		\$13,216	
				Ever	t Total	\$79,296
Event Year	Item Description	Quantity	Unit		Price	Extended Price
6	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY			\$0.00	
	Dredging (Pay yardage)	CY	0		\$0.00	
	Damp	LS	1		\$56,000	40.7
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$5,600	\$5,600
	5 & A @ 8%	LS	1		\$4,480	
	Contingency @20%	LS	1		\$13,216	\$13,216
				Ever	t Total	\$79,296
Event Year	Item Description	Quantity	Unit	Unit	t Price	Extended Price
12	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	
	Damp	LS	1		\$56,000	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$5,600	
	S & A @ 8%	LS	1		\$4,480	
	Contingency @20%	LS	1		\$13,216	
				Ever	t Total	\$79,296

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Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price	
14	Construction	LS	1	\$	105,000	\$105,000	
	Pipeline Installation	LS	1	\$		\$0	
	Dredging (Gross yardage)	CY			\$0.00	\$0	
	Dredging (Pay yardage)	CY	0		\$0.00	\$0	
	Damp	LS	1		\$0	\$0	
	LERR	LS	1		\$0	\$0	
	E & D @10%	LS	1		\$10,500	\$10,500	
	S & A @ 8%	LS	1		\$8,400	\$8,400	
	Contingency @20%	LS	1		\$24,780	\$24,780	
				Ev	ent Total	\$148,680	
Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price	
15	Construction	LS	1	\$		\$0	
	Pipeline Installation	LS	1	\$		\$0	
	Dredging (Gross yardage)	CY	979,551		\$0.00	\$0	
	Dredging (Pay yardage)	CY	725,593		\$3.44	\$2,496,040	
	LERR	LS	1		\$0	\$0	
	E & D @10%	LS	1		\$249,604	\$249,604	
	S & A @ 8%	LS	1		\$199,683	\$199,683	
	Contingency @20%	LS	1		\$589,065	\$589,065	
				Ev	ent Total	\$3,534,393	
Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price	
16	Construction	LS	1	\$		\$0	
	Pipeline Installation	LS	1	\$		\$0	
	Dredging (Gross yardage)	CY	0		\$0.00	\$0	
	Dredging (Pay yardage)	CY	0		\$3.44	\$0	
	Damp	LS	1		\$56,000	\$56,000	
	LERR	LS	1		\$0	\$0	
	E & D @10%	LS	1		\$5,600	\$5,600	
	S & A @ 8%	LS	1		\$4,480	\$4,480	
	Contingency @20%	LS	1		\$13,216	\$13,216	
				Ev	ent Total	\$79,296	
			Dispos	al Sit	e Total	\$8,262,648	
				Disp	osal Site To	otal A	\$5,420,682
			River Mile	26 - 3	30		
			Disposal S	ite - S	Site 7		
					1-6		

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Disposal Site Total B

Cost/cy/capacity of site

Total

\$8,262,648

\$13,683,330

\$4.13

#### River Mile River Mile 26 - 30 Disposal Site - Site 8

Total Capacity In CY - 2,478,400

Event						
Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
3	Construction	LS	1	\$	1,099,000	\$1,099,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$10,000	\$10,000
	E & D @ 10%	LS	1		\$109,900	\$109,900
	S & A @ 8%	LS	1		\$87,920	\$87,920
	Contingency @15%	LS	1		\$194,523	\$194,523
				Ev	ent Total	\$1,501,343
Event						
Year	Item Description	Quantity	Unit		nit Price	Extended Price
4	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	979,551		\$0.00	\$0
	Dredging (Pay yardage)	CY	725,593		\$3.44	\$2,496,040
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$249,604	\$249,604
	S & A @ 8%	LS	1		\$199,683	\$199,683
	Contingency @15%	LS	1		\$441,799	\$441,799
				Ev	ent Total	\$3,387,126
Event						
Year	Item Description	Quantity	Unit	-	nit Price	<b>Extended Price</b>
5	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$84,000	\$84,000
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$8,400	\$8,400
	S & A @ 8%	LS	1		\$6,720	\$6,720
	Contingency @20%	LS	1		\$20,664	\$20,664
				Ev	ent Total	\$119,784

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Vear	Event						
6		Item Description	Quantity	Unit	ı	Init Price	Extended Price
Pipeline Installation						-	\$0
Dredging (Gross yardage)	100					1	\$0
Dredging (Pay yardage)						\$0.00	
Damp   LS   1		and the second s	100				
LERR						The second second	T-625
E & D @ 10%   LS							
S & A @ 8%							
Event   Year   Item Description   Quantity   Unit   Unit Price   Extended   Standard	The second of th		7.7				
Event   Year   Item Description   Quantity   Unit   Unit Price   Extended							
Event   Year   Item Description   Quantity   Unit   Unit Price   Extended					E	ent Total	\$119,784
8	Event						2000
Pipeline Installation	Year	Item Description	Quantity	Unit	U	Init Price	Extended Price
Dredging (Gross yardage)	8	Construction	LS	1	\$	242,000	\$242,000
Dredging (Pay yardage)		Pipeline Installation	LS	1	\$		\$0
Dredging (Pay yardage)		Dredging (Gross yardage)	CY			\$0.00	\$0
Damp			CY	0			
LERR		The state of the s					
E & D @ 10%							
S & A @ 8%				-			
Event   Year   Item Description   Quantity   Unit   Unit Price   Extended		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				San Section	
Event Year   Item Description   Quantity   Unit   Unit Price   Extended							
Event Year   Item Description   Quantity   Unit   Unit Price   Extended		contingency @ 20%				<b>437,112</b>	<b>437,112</b>
Sear					E	ent Total	\$342,672
9							
Pipeline Installation		Item Description				Init Price	Extended Price
Dredging (Gross yardage)	9	Construction	LS				\$0
Dredging (Pay yardage)		Pipeline Installation	LS	1	\$		\$0
Damp		Dredging (Gross yardage)	CY	979,551		\$0.00	\$0
LERR		Dredging (Pay yardage)	CY	725,593		\$3.44	\$2,496,040
E & D @ 10%		Damp	LS	1		\$0	\$0
S & A @ 8% LS 1 \$199,683 \$15  Contingency @ 20% LS 1 \$589,065 \$58  Event Total \$3,55  Event Year Item Description Quantity Unit Unit Price Extended 10 Construction LS 1 \$ - Pipeline Installation LS 1 \$ - Dredging (Gross yardage) CY 0 \$0.00 Dredging (Pay yardage) CY 0 \$3.44 Damp LS 1 \$84,000 \$8 LERR LS 1 \$0 E & D @ 10% LS 1 \$8,400 \$5 S & A @ 8% LS 1 \$6,720 \$5 Contingency @ 20% LS 1 \$19,824 \$55		LERR	LS	1		\$0	\$0
Event Total   \$3,53		E & D @ 10%	LS	1		\$249,604	\$249,604
Event Total \$3,53  Event Year Item Description Quantity Unit Unit Price Extended 10 Construction LS 1 \$ - Pipeline Installation LS 1 \$ - Dredging (Gross yardage) CY 0 \$0.00  Dredging (Pay yardage) CY 0 \$3.44  Damp LS 1 \$84,000 \$8  LERR LS 1 \$0  E & D @ 10% LS 1 \$8,400 \$5  S & A @ 8% LS 1 \$6,720 \$5  Contingency @ 20% LS 1 \$19,824 \$5		S & A @ 8%	LS	1		\$199,683	\$199,683
Event         Year         Item Description         Quantity         Unit         Unit Price         Extended           10         Construction         LS         1         \$ -         Pipeline Installation         LS         1         \$ 0.00         Pipeline Installation         CY         0         \$ 0.00         \$ 0.00         Pipeline Installation         CY         0         \$ 0.00         \$ 0.00         Pipeline Installation         CY         0         \$ 0.00         \$ 0.00         \$ 0.00         Pipeline Installation         LS         1         \$ 0.00		Contingency @20%	LS	1		\$589,065	\$589,065
Year         Item Description         Quantity         Unit         Unit Price         Extended           10         Construction         LS         1         \$ -           Pipeline Installation         LS         1         \$ -           Dredging (Gross yardage)         CY         0         \$0.00           Dredging (Pay yardage)         CY         0         \$3.44           Damp         LS         1         \$84,000         \$8           LERR         LS         1         \$8,400         \$8           E & D @ 10%         LS         1         \$6,720         \$9           Contingency @ 20%         LS         1         \$19,824         \$3					Ev	ent Total	\$3,534,393
10 Construction LS 1 \$ - Pipeline Installation LS 1 \$ - Dredging (Gross yardage) CY 0 \$0.00 Dredging (Pay yardage) CY 0 \$3.44 Damp LS 1 \$84,000 \$8 LERR LS 1 \$0 E & D @ 10% LS 1 \$8,400 \$ S & A @ 8% LS 1 \$6,720 \$ Contingency @ 20% LS 1 \$19,824 \$3							
Pipeline Installation         LS         1         \$ -           Dredging (Gross yardage)         CY         0         \$0.00           Dredging (Pay yardage)         CY         0         \$3.44           Damp         LS         1         \$84,000         \$8           LERR         LS         1         \$0         \$8           E & D @ 10%         LS         1         \$8,400         \$           S & A @ 8%         LS         1         \$6,720         \$           Contingency @ 20%         LS         1         \$19,824         \$						Init Price	Extended Price
Dredging (Gross yardage)         CY         0         \$0.00           Dredging (Pay yardage)         CY         0         \$3.44           Damp         LS         1         \$84,000         \$8           LERR         LS         1         \$0         \$8           E & D @ 10%         LS         1         \$8,400         \$           S & A @ 8%         LS         1         \$6,720         \$           Contingency @ 20%         LS         1         \$19,824         \$	10	Construction	LS	1		7	\$0
Dredging (Pay yardage)         CY         0         \$3.44           Damp         LS         1         \$84,000         \$8           LERR         LS         1         \$0         \$8           E & D @ 10%         LS         1         \$8,400         \$           S & A @ 8%         LS         1         \$6,720         \$           Contingency @ 20%         LS         1         \$19,824         \$		Pipeline Installation	LS	1	\$		\$0
Damp LS 1 \$84,000 \$8  LERR LS 1 \$0  E & D @ 10% LS 1 \$8,400 \$  S & A @ 8% LS 1 \$6,720 \$  Contingency @ 20% LS 1 \$19,824 \$3  Event Total \$13		Dredging (Gross yardage)	CY	0		\$0.00	\$0
LERR LS 1 \$0 E & D @ 10% LS 1 \$8,400 \$ S & A @ 8% LS 1 \$6,720 \$ Contingency @ 20% LS 1 \$19,824 \$2  Event Total \$11		Dredging (Pay yardage)	CY	0		\$3.44	\$0
LERR LS 1 \$0 E & D @ 10% LS 1 \$8,400 \$ S & A @ 8% LS 1 \$6,720 \$ Contingency @ 20% LS 1 \$19,824 \$2  Event Total \$11		Damp	LS	1		\$84,000	\$84,000
E & D @ 10% LS 1 \$8,400 \$ S & A @ 8% LS 1 \$6,720 \$ Contingency @ 20% LS 1 \$19,824 \$3  Event Total \$13							\$0
S & A @ 8% LS 1 \$6,720 \$ Contingency @ 20% LS 1 \$19,824 \$3 Event Total \$13							
Contingency @ 20% LS 1 \$19,824 \$:							
							\$19,824
Dienotal Sita Total CO 12					Ev	ent Total	\$118,944
Disposal Site Total \$9,12				Dispos	al Si	te Total	\$9,124,046
Cost/CY/capacity \$3.6				Cost/	CY/c	apacity	\$3.68

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River Mile 26 - 30 Disposal Site - Site 9

Tota	I Capacity	In CY -	2,194,000

Event Year	Item Description	Quantity	Unit	Ur	it Price	Extended Price
8	Construction	LS	1	\$	969,000	\$969,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$253,000	\$253,000
	E & D @10%	LS	1		\$96,900	\$96,900
	S & A @ 8%	LS	1		\$77,520	\$77,520
	Contingency @20%	LS	1		\$229,169	\$229,169
				Eve	ent Total	\$1,625,589
Event Year	Item Description	Quantity	Unit	Ur	it Price	Extended Price
9	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	979,551		\$0.00	\$0
	Dredging (Pay yardage)	CY	725,593		\$3.44	\$2,496,040
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$249,604	\$249,604
	S & A @ 8%	LS	1		\$199,683	\$199,683
	Contingency @20%	LS	1		\$589,065	\$589,065
				Eve	ent Total	\$3,534,393
Event Year	Item Description	Quantity	Unit	Hr	it Price	Extended Price
10	Construction	LS	1	\$		\$0
20	Pipeline Installation	LS	1	5		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$74,000	\$74,000
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$7,400	\$7,400
	5 & A @ 8%	LS	1		\$5,920	\$5,920
	Contingency @20%	LS	1		\$17,464	\$17,464
				Eve	ent Total	\$104,784
Event Year	Item Description	Quantity	Unit	Ur	it Price	Extended Price
11	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$74,000	\$74,000
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$7,400	\$7,400
	S & A @ 8%	LS	1		\$5,920	\$5,920
	Contingency @20%	LS	1		\$17,464	\$17,464

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Event Year	Item Description	Quantity	Unit		nit Price	Extended Price
14	Construction	LS	1	\$	210,000	\$210,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$21,000	\$21,000
	S & A @ 8%	LS	1		\$16,800	\$16,800
	Contingency @20%	LS	1		\$49,560	\$49,560
				Eve	ent Total	\$297,360
Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
15	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	979.551	*	\$0.00	\$0
	Dredging (Pay yardage)	CY	725,593		\$3.44	\$2,496,040
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$249,604	\$249,604
	S & A @ 8%	LS	1		\$199,683	\$199,683
	Contingency @20%	LS	1		\$589,065	\$589,065
				Eve	ent Total	\$3,534,393
Event Year	Item Description	Quantity	Unit	116	nit Price	Extended Price
16	Construction	LS	1	\$	int Frice	\$0
10	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	1	4	\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0 \$0
	Damp	LS	1		\$74,000	\$74,000
	LERR	LS	1		\$0	\$74,000
	E & D @10%	LS	1		\$7,400	\$7,400
	S & A @ 8%	LS	1		\$5,920	\$5,920
	Contingency @20%	LS	1		\$17,464.00	\$17,464
				Eve	ent Total	\$104,784
			Dispos	al Site	e Total	\$9,306,086
			Cost/cy/ca	pacity	of site	\$4.24

		iver Mile 22 -			
		sposal Site		and the same	
	Tota	al Capacity In	CY -	1,742,400	
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
2	Construction	LS	1	\$ 967,000	\$967,000
	Pipeline Installation	LS	1	5 -	50
	Dredging (Gross yardage)	CY		\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$0.00	\$0
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$147,000	\$147,000
	E & D @10% S & A @ 8%	LS LS	1	\$96,700	\$96,700
	Contingency @15%	LS	1	\$77,360 \$175,027	\$77,360 \$175,027
	Contingency (2137)				
				Event Total	\$1,463,087
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
3	Construction	LS	1	\$ -	SO
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	635,301	\$0.00	\$0
	Dredging (Pay yardage) Damp	LS	470,593 1	\$3.44 \$0	\$1,618,840 \$0
	LERR	LS	1	50	50
	E & D @ 10%	LS	1	\$161,884	\$161,884
	S & A @ 8%	LS	1	\$129,507	\$129,507
	Contingency @15%	15	1	\$286,535	\$286,535
				Event Total	\$2,196,766
Event					
Year	Item Description	Quantity		Unit Price	Extended Price
4	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	5 -	50
	Dredging (Gross yardage) Dredging (Pay yardage)	CY	0	\$0.00 \$3.44	\$0 \$0
	Damp	IS	1	\$59,000	\$59,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$5,900	\$5,900
	5 & A @ 8%	LS	1	\$4,720	\$4,720
	Contingency @15%	LS	1	\$10,443	\$10,443
2007				Event Total	\$80,063
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
5	Construction	LS	1	\$ -	S0
	Pipeline Installation	LS	1	\$ -	SO
	Dredging (Gross yardage)	CY		\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$0.00	\$0
	Damp	LS	1	\$59,000	\$59,000
	LERR	LS	1	\$0	\$0
	E & D @ 10%	LS	1	\$5,900	\$5,900
	S & A @ 8% Contingency @20%	LS	1	\$4,720 \$13,924	\$4,720 \$13,924
				Event Total	\$83,544
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
10	Construction	LS	1		\$119,000
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY		\$0.00	SO
	Dredging (Pay yardage)	CY	0	\$0.00	\$0
	Damp	LS	1	\$0	\$0
	LERR E & D @ 10%	LS	1	\$0	\$0 \$11,900
	5 & A @ 8%	LS	1	\$11,900 \$9,520	\$9,520
	Contingency @20%	LS	1	\$28,084	\$28,084

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Event Total \$168,504

Event					
Year	Item Description	Quantity		Unit Price	Extended Price
11	Construction	LS	1	5	- 50
	Pipeline Installation	LS	1	\$ -	- \$0
	Dredging (Gross yardage)	CY	423,533	\$0.00	50
	Dredging (Pay yardage)	CY	313,728	\$3.44	\$1,079,224
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$107,922	\$107,922
	S & A @ 8%	LS	1	\$86,338	\$86,338
	Contingency @20%	LS	1	\$254,697	\$254,697
				Event Total	\$1,528,182
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
12	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	5 -	\$0
	Dredging (Gross yardage)	CY		\$0.00	50
	Dredging (Pay yardage)	CY	0	\$0.00	50
	Damp	LS	1	\$59,000	\$59,000
	LERR	LS	1	50	50
	E & D @ 10%	LS	1	\$5,900	\$5,900
	S&A@8%	LS	1	\$4,720	\$4,720
	Contingency @20%	LS	1	\$13,924	\$13,924
				Event Total	\$83,544
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
15	Construction	LS	1	5 -	- 50
	Pipeline Installation	LS	1	5 -	- S0
	Dredging (Gross yardage)	CY	423,533	\$0.00	SO
	Dredging (Pay yardage)	CY	313,728	\$3.44	\$1,079,224
	Damp	LS	1	SO	\$0
	LERR	LS	1	50	50
	E & D @ 10%	LS	1	\$107,922	\$107,922
	S&A@8%	LS	1	\$86,338	\$86,338
	Contingency @20%	LS	1	\$254,697	\$254,697
				Event Total	\$1,528,182
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
16	Construction	LS	1	5 -	- 50
	Pipeline Installation	LS	1	5 -	- 50
	Dredging (Gross yardage)	CY		50.00	\$0
	Dredging (Pay yardage)	CY	0	50.00	\$0
	Damp	LS	1	\$59,000	\$59,000
	LERR	LS	1	\$0	50
	E & D @10%	LS	1	\$5,900	\$5,900
	5 & A @ 8%	LS	1	\$4,720	\$4,720
	Contingency @20%	LS	1	\$13,924	\$13,924
				Event Total	\$83,544
			Disposal	Site Total	\$7,215,415
		Cost/cy/c	apacity o	f site	\$4.14
				-	

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River Mile 22 - 26 Disposal Site - 11

Total Capacity In CY - 1,960,200

Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
0	Construction	LS	1	\$	926,000	\$926,000
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$2,000	\$2,000
	E & D @ 10%	LS	1		\$92,600	\$92,600
	S & A @ 8%	LS	1		\$74,080	\$74,080
	Contingency @15%	LS	1		\$167,606	\$167,606
					Event Total	\$1,262,286
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
1	Construction	LS	1	\$	-	ŚO
-	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	423,533	-	\$0.00	\$0
	Dredging (Pay yardage)	CY	313,728		\$3.44	\$1,079,224
	Damp	LS	1		\$0	\$0
	LERR	LS	1		ŚO	\$0
	E & D @ 10%	LS	1		\$107,922	\$107,922
	S & A @ 8%	LS	1		\$86,338	\$86,338
	Contingency @15%	LS	1		\$191,023	\$191,023
					Event Total	\$1,464,507
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
2	Construction	LS	1	\$	O I I I I I I I I I I I I I I I I I I I	\$0
-	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY		*	\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$59,000	\$59,000
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$5,900	\$5,900
	S & A @ 8%	LS	1		\$4,720	\$4,720
	Contingency @15%	LS	1		\$10,443	\$10,443
					Event Total	\$80,063
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
3	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$59,000	\$59,000
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$5,900	\$5,900
		16	1		\$4,720	\$4,720
	S & A @ 8%	LS	7		34,720	34,720
	S & A @ 8% Contingency @15%	LS LS	1		\$10,443	\$10,443

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Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
7	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	635,301		\$0.00	\$0
	Dredging (Pay yardage)	CY	470,593		\$3.44	\$1,618,840
	LERR	LS	1		ŚO	\$0
	E & D @ 10%	LS	1		\$161,884	\$161,884
	S & A @ 8%	LS	1		\$129,507	\$129,507
	Contingency @20%	LS	1		\$382,046	\$382,046
					Event Total	\$2,292,277
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
8	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$59,000	\$59,000
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$5,900	\$5,900
	S & A @ 8%	LS	1		\$4,720	\$4,720
	Contingency @20%	LS	1		\$13,924	\$13,924
					Event Total	\$83,544
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
10	Construction	LS	1	\$	118,000	\$118,000
	Pipeline Installation	LS	1	\$	220,000	\$0
	Dredging (Gross yardage)	CY	-	Ψ.	\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$11,800	\$11,800
	5 & A @ 8%	LS	1		\$9,440	\$9,440
	Contingency @20%	LS	1		\$27,848	\$27,848
					Event Total	\$167,088
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
11	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$		\$0
		CY	423,533		\$0.00	\$0
	Dredging (Gross vardage)				183.111	
	Dredging (Gross yardage) Dredging (Pay yardage)	CY	313,728		\$3.44	\$1,079,224
	Dredging (Gross yardage) Dredging (Pay yardage) Damp	CY LS	313,728		\$3.44 \$0	\$1,079,224 \$0
	Dredging (Pay yardage)				\$0	\$0
	Dredging (Pay yardage) Damp	LS	1			\$0 \$0
	Dredging (Pay yardage) Damp LERR	LS LS	1		\$0 \$0	\$0
	Dredging (Pay yardage) Damp LERR E & D @ 10%	LS LS	1 1 1		\$0 \$0 \$107,922	\$0 \$0 \$107,922

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Event Year	them Description	Quantity	Unit		Unit Price	Extended Price
12	Item Description Construction	Quantity	1	\$	Office	\$0
12	Pipeline Installation	LS	1	\$	- 1	\$0
		CY	1	5	\$0.00	\$0
	Dredging (Gross yardage)		•			
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$59,000 \$0	\$59,000
	LERR	LS	1			\$0
	E & D @ 10%	LS	1		\$5,900	\$5,900
	S & A @ 8%	LS	1		\$4,720	\$4,720
	Contingency @20%	LS	1		\$13,924	\$13,924
					Event Total	\$83,544
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
15	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	423,533		\$0.00	\$0
	Dredging (Pay yardage)	CY	313,728		\$3.44	\$1,079,224
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$107,922	\$107,922
	S & A @ 8%	LS	1		\$86,338	\$86,338
	Contingency @20%	LS	1		\$254,697	\$254,697
					Event Total	\$1,528,182
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
16	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$59,000	\$59,000
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$5,900	\$5,900
	5 & A @ 8%	LS	1		\$4,720	\$4,720
	Contingency @20%	LS	1		\$13,924	\$13,924
					Event Total	\$83,544
			Dispo	osal	Site Total	\$8,653,280
			Cost/cy/c	apa	city of site	\$4.41

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## River Mile 22 - 26 Disposal Site - 12 A Total Capacity In CY - 2,064,800

Total Capacity In CY for A & B - 9,749,400

Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
2	Construction	LS	1	\$	1,150,000	\$1,150,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1	1	\$1,636,000	\$1,636,000
	E & D @ 10%	LS	1		\$115,000	\$115,000
	S & A @ 8%	LS	1		\$92,000	\$92,000
	Contingency @15%	LS	1		\$211,600	\$211,600
				Eve	ent Total	\$3,204,600
Event Year	Item Description	Quantity	Unit	11	nit Price	Extended Price
3	Construction	LS	1	\$	IIIL FIICE	\$0
3		LS	1	\$	-	\$0
	Pipeline Installation	CY		>	\$0.00	\$0
	Dredging (Gross yardage)		635,299			
	Dredging (Pay yardage)	CY	470,592		\$3.44	\$1,618,836
	Damp	LS	1		\$0	***
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$161,884	\$161,884
	S & A @ 8%	LS	1		\$129,507	\$129,507
	Contingency @15%	LS	1		\$286,534	\$286,534
				Eve	ent Total	\$2,196,761
Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
4	Construction	LS	1	\$		ŚO
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	-	*	\$0.00	50
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$70,000	\$70,000
	LERR	LS	1		\$0	
	E & D @ 10%	LS	1		\$7,000	\$7,000
	S & A @ 8%	LS	1		\$5,600	\$5,600
	Contingency @15%	LS	1		\$12,390	\$12,390
	Contingency @ 15%	LJ				
				Eve	ent Total	\$94,990
Event Year	Item Description	Quantity	Unit		nit Price	Extended Price
5	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$70,000	\$70,000
	LERR	LS	1		\$0	
	E & D @ 10%	LS	1		\$7,000	\$7,000
	S & A @ 8%	LS	1		\$5,600	\$5,600
	Contingency @20%	LS	1		\$16,520	\$16,520
				Eve	ent Total	\$99,120

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Pipeline Installation	Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
Dredging (Gross yardage)	7	Construction	LS	1	\$	- \$0
Dredging (Pay yardage)		Pipeline Installation	LS	1	\$	- \$0
Damp		Dredging (Gross yardage)	CY	635,299	\$0	.00 \$0
Damp		Dredging (Pay yardage)	CY	470,592	\$3	.44 \$1,618,836
E & D @ 10%			LS	1		\$0 \$0
S & A @ 8%		LERR	LS	1		\$0 \$0
Event Year   Item Description   Quantity   Unit   Unit Price   Extended Price   Event Total   \$2,292,2		E & D @ 10%	LS	1	\$161,8	\$161,884
Event Year   Item Description		S & A @ 8%	LS	1	\$129,	507 \$129,507
Event Year		Contingency @20%	LS	1	\$382,0	045 \$382,045
8					Event Tota	al \$2,292,272
Pipeline Installation	Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
Dredging (Gross yardage)	8	Construction	LS	1	\$	- \$0
Dredging (Pay yardage)		Pipeline Installation	LS	1	\$	- \$0
Dredging (Pay yardage)		Dredging (Gross yardage)	CY	0	\$0	.00 \$0
Damp   LS			CY	0	\$3	.44 \$0
LERR			LS	1		
E & D @10% S & A @ 8% LS 1 \$5,600 \$5,6 Contingency @20% LS 1 \$5,600 \$5,6 Contingency @20% LS 1 \$16,520 \$16,5 \$16,5 \$16,5 \$20 \$16,5 \$16,5 \$20 \$16,5 \$16,5 \$20 \$16,5 \$16,5 \$20 \$16,5 \$16,5 \$20 \$16,5 \$16,5 \$20 \$16,5 \$16,5 \$20 \$16,5 \$10,5 \$20,5 \$16,5 \$10,5 \$20,5 \$16,5 \$10,5 \$20,5 \$16,5 \$10,5 \$				1	1000	
S & A @ 8%		E & D @ 10%	LS	1	\$7.0	
Event Year   Item Description   Cyantity   Unit   Unit Price   Extended Price   Standard Price   Construction   LS   1   \$   142,000   \$   \$   \$   \$   \$   \$   \$   \$   \$		S & A @ 8%	LS	1		
Event Year			LS	1		
10					Event Tota	\$99,120
10	-	2000	2	1100		
Pipeline Installation		11-11-11-11-11-11-11-11-11-11-11-11-11-				
Dredging (Gross yardage)	10					
Dredging (Pay yardage)         CY         0         \$0.00           Damp         LS         1         \$0           LERR         LS         1         \$14,200         \$14,2           S & A @ 8%         LS         1         \$11,360         \$11,3           Contingency @ 20%         LS         1         \$33,512         \$33,51           Event Total         \$201,0           Event Year         Item Description         Quantity         Unit         Unit Price         Extended Price           11         Construction         LS         1         \$         -           Pipeline Installation         LS         1         \$         -           Predging (Gross yardage)         CY         423,533         \$0.00           Dredging (Pay yardage)         CY         313,728         \$3.44         \$1,079,2           Damp         LS         1         \$0         LERR         LS         1         \$0           LERR         LS         1         \$107,922         \$107,9         \$0         \$6,338         \$86,33         \$86,33         \$0.00           S & A @ 8%         LS         1         \$66,338         \$86,3         \$0				1		- \$0
Damp				- 2		
LERR         LS         1         \$0           E & D @ 10%         LS         1         \$14,200         \$14,2           S & A @ 8%         LS         1         \$11,360         \$11,3           Contingency @ 20%         LS         1         \$33,512         \$33,51           Event Total         \$201,0           Extended Price           Extended		The second second second second second		- 5	\$0	
Event Year Item Description Quantity Unit Unit Price Extended Price 11 Construction LS 1 \$  Dredging (Gross yardage) CY 423,533 \$  Damp LERR LS 1 \$  LERR LS 1 \$  Event Year S& A @ 8% LS 1 \$  Description LS 1 \$  Dredging (Pay yardage) CY 423,533 \$  Damp LERR LS 1 \$  Extended Price 2  Damp LS 1 \$  Description LS 1 \$  Dredging (Pay yardage) CY 423,533 \$  Damp LS 1 \$  E & D @ 10% LS 1 \$  Extended Price 2.						
S & A @ 8% LS 1 \$11,360 \$11,3 Contingency @20% LS 1 \$33,512 \$33,5 Event Year Item Description Quantity Unit Unit Price Extended Price 11 Construction LS 1 \$ - Pipeline Installation LS 1 \$ - Dredging (Gross yardage) CY 423,533 \$0.00 Dredging (Pay yardage) CY 313,728 \$3.44 \$1,079,2 Damp LS 1 \$0 LERR LS 1 \$0 LERR LS 1 \$0 LERR LS 1 \$0 LERR LS 1 \$107,922 \$107,9 \$3.44 @8% LS 1 \$86,338 \$86,3 Contingency @20% LS 1 \$254,697 \$254,697				_	(Access	
Event Year   Item Description   Quantity   Unit   Unit Price   Extended Prior						
Event Year Item Description Quantity Unit Unit Price Extended Price 11 Construction LS 1 \$ - Pipeline Installation LS 1 \$ - Dredging (Gross yardage) CY 423,533 \$0.00 Dredging (Pay yardage) CY 313,728 \$3.44 \$1,079,2 Damp LS 1 \$0 LERR LS 1 \$0 E & D @ 10% LS 1 \$107,922 \$107,9 S & A @ 8% LS 1 \$86,338 \$86,3 Contingency @ 20% LS 1 \$254,697 \$254,6						
Event Year Item Description Quantity Unit Unit Price Extended Price  11 Construction LS 1 \$ - Pipeline Installation LS 1 \$ - Dredging (Gross yardage) CY 423,533 \$0.00  Dredging (Pay yardage) CY 313,728 \$3.44 \$1,079,2  Damp LS 1 \$0  LERR LS 1 \$0  E & D @ 10% LS 1 \$107,922 \$107,9  S & A @ 8% LS 1 \$86,338 \$86,3  Contingency @ 20% LS 1 \$254,697 \$254,6		Contingency @20%	LS	1	\$33,	512 \$33,512
11 Construction LS 1 \$ - Pipeline Installation LS 1 \$ - Dredging (Gross yardage) CY 423,533 \$0.00 Dredging (Pay yardage) CY 313,728 \$3.44 \$1,079,2 Damp LS 1 \$0 LERR LS 1 \$0 E & D @ 10% LS 1 \$107,922 \$107,9 S & A @ 8% LS 1 \$86,338 \$86,3 Contingency @ 20% LS 1 \$254,697 \$254,6					Event Tota	\$201,072
11 Construction LS 1 \$ - Pipeline Installation LS 1 \$ - Dredging (Gross yardage) CY 423,533 \$0.00 Dredging (Pay yardage) CY 313,728 \$3.44 \$1,079,2 Damp LS 1 \$0 LERR LS 1 \$0 E & D @ 10% LS 1 \$107,922 \$107,9 S & A @ 8% LS 1 \$86,338 \$86,3 Contingency @ 20% LS 1 \$254,697 \$254,6	Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
Pipeline Installation         LS         1         \$         -           Dredging (Gross yardage)         CY         423,533         \$0.00           Dredging (Pay yardage)         CY         313,728         \$3.44         \$1,079,2           Damp         LS         1         \$0         LERR         LS         1         \$0           E & D @ 10%         LS         1         \$107,922         \$107,9         \$8.4         \$8.6         \$8.6         \$8.6         \$3.8         \$6,338         \$86,3         \$254,697         \$254,6	70.701 3750	The Artistant of the State of t				- \$0
Dredging (Gross yardage)         CY         423,533         \$0.00           Dredging (Pay yardage)         CY         313,728         \$3.44         \$1,079,2           Damp         LS         1         \$0           LERR         LS         1         \$0           E & D @ 10%         LS         1         \$107,922         \$107,9           S & A @ 8%         LS         1         \$86,338         \$86,3           Contingency @ 20%         LS         1         \$254,697         \$254,6						- \$0
Dredging (Pay yardage)         CY         313,728         \$3.44         \$1,079,2           Damp         LS         1         \$0           LERR         LS         1         \$0           E & D @ 10%         LS         1         \$107,922         \$107,9           S & A @ 8%         LS         1         \$86,338         \$86,3           Contingency @ 20%         LS         1         \$254,697         \$254,6			130			
Damp         LS         1         \$0           LERR         LS         1         \$0           E & D @ 10%         LS         1         \$107,922         \$107,9           S & A @ 8%         LS         1         \$86,338         \$86,3           Contingency @ 20%         LS         1         \$254,697         \$254,6			47.0			
LERR     LS     1     \$0       E & D @ 10%     LS     1     \$107,922     \$107,9       S & A @ 8%     LS     1     \$86,338     \$86,3       Contingency @ 20%     LS     1     \$254,697     \$254,6					<b>V</b>	4.75
E & D @ 10% LS 1 \$107,922 \$107,9 S & A @ 8% LS 1 \$86,338 \$86,3 Contingency @ 20% LS 1 \$254,697 \$254,6		200				
S & A @ 8% LS 1 \$86,338 \$86,3 Contingency @20% LS 1 \$254,697 \$254,6					\$107	
Contingency @20% LS 1 \$254,697 \$254,6						
5		The state of the s		_		
Event lotal \$1,528,1					Event Tota	al \$1,528,182

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Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
12	Construction	LS	1	\$		\$0
-	Pipeline Installation	LS	1	\$	- 4	\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$70,000	\$70,000
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$7,000	\$7,000
	S & A @ 8%	LS	1		\$5,600	\$5,600
	Contingency @20%	LS	1		\$16,520	\$16,520
				Eve	ent Total	\$99,120
Event Year	Item Description	Quantity	Unit	Ui	nit Price	Extended Price
15	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	423,533		\$0.00	\$0
	Dredging (Pay yardage)	CY	313,728		\$3.44	\$1,079,224
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$107,922	\$107,922
	S & A @ 8%	LS	1		\$86,338	\$86,338
	Contingency @20%	LS	1		\$254,697	\$254,697
				Eve	ent Total	\$1,528,182
Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
16	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$70,000	\$70,000
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$7,000	\$7,000
	S & A @ 8%	LS	1		\$5,600	\$5,600
	Contingency @20%	LS	1		\$16,520	\$16,520
				Eve	ent Total	\$99,120
			Dispos	al Site	Total A	\$11,442,539
			Dispos	al Site	Total B	\$33,911,730
				Tota	l	\$45,354,269
			Cost/cy/	capac	city of site	\$4.65

Mile 22-26, CDF 12A, Page24

# River Mile 22 - 26 Disposal Site - 12 B Total Capacity In CY - 7,684,600 Total Capacity In CY for A & B - 9,749,400

Event	Item Description	Quantity	Unit	Unit Price	Extended Price
1	Construction	LS	1	\$	\$0
	Pipeline Installation	LS	1	s -	50
	Dredging (Gross yardage)	CY	847,067	\$0.00	7.0
	Dredging (Pay yardage)	CY	627,457	\$3.44	
	Damp	LS	1	50	
	LERR	LS	1	\$2,802,000	
	E & D @10%	LS	1	\$215,845	
	5 & A @ 8%	LS	1	\$172,676	
	Contingency @15%	LS	1	\$382,046	
				Event Total	\$5,731,019
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
2	Construction	LS	1	S -	50
	Pipeline Installation	LS	1	\$	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	
	Damp	LS	1	\$189,000	\$189,000
	LERR	LS	1	\$0	
	E & D @10%	LS	1	\$18,900	\$18,900
	S & A @ 8%	LS	1	\$15,120	\$15,120
	Contingency @15%	LS	1	\$33,453	\$33,453
				Event Total	\$256,473
Event	A. Charles and a second	2			
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
3	Construction	LS	1	s -	SO
	Pipeline Installation	LS	1	\$ -	50
	Dredging (Gross yardage)	CY	0	\$0.00	-
	Dredging (Pay yardage)	CY	0	\$3.44	
	Damp	LS	1	\$189,000	
	LERR	LS	1	S0	
	E & D @10%	LS	1	\$18,900	\$18,900
	S & A @ 8%	LS	1	\$15,120	
	Contingency @15%	LS	1	\$33,453	\$33,453
Event				Event Total	\$256,473
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
5	Construction	LS	1	\$	50
4	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	1,270,600	\$0.00	
	Dredging (Pay yardage)	CY	941,185	\$3.44	
	LERR	LS	1	\$0	
	E & D @10%	LS	1	\$323,768	
	S & A @ 8%	LS	1	\$259,014	
	Contingency @20%	LS	1	\$764,092	
				Event Total	\$4,584,550
Event					
Year	Item Description	Quantity	Unit	Unit Price	<b>Extended Price</b>
6	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	s -	50
	Dredging (Gross yardage)	CY	5	\$0.00	
	Dredging (Pay yardage)	CY	0	\$0.00	
	Damp	LS	1	\$189,000	
	LERR	LS	1	5105,000	
	E & D @10%	LS	1	\$18,900	
	S & A @ 8%	LS	1	\$15,120	
		LS	1	\$44,604	
	Contingency @20%	1.5	1	\$44,604	544,604

Mile 22-26, CDF 12B, Page25

2.0				Event Total	\$267,624
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
8	Construction	LS	1	\$ 2,316,000	\$2,316,000
	Pipeline Installation	LS	1	\$ -	50
	Dredging (Gross yardage)	CY	0	\$0.00	
	Dredging (Pay yardage)	CY	0	\$3.44	
	Damp	LS	1	50	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$231,600	\$231,600
	S & A @ 8%	LS	1	\$185,280	\$185,280
	Contingency @20%	LS	1	\$546,576	\$546,576
				Event Total	\$3,279,456
Event					
Year	Item Description	Quantity	Unit	Unit Price	<b>Extended Price</b>
9	Construction	LS	1	\$ -	50
	Pipeline Installation	LS	1	5 -	\$0
	Dredging (Gross yardage)	CY	1,270,600	\$0.00	
	Dredging (Pay yardage)	CY	941,185	\$3.44	\$3,237,676
	Damp	LS	1	\$0	50
	LERR	LS	1	\$0	50
	E & D @10%	LS	1	\$323,768	\$323,768
	5 & A @ 8%	LS	1	\$259,014	\$259,014
	Contingency @20%	LS	1	\$764,092	\$764,092
				Event Total	\$4,584,550
Event					
Year	Item Description	Quantity	Unit	Unit Price	<b>Extended Price</b>
10	Construction	LS	1	\$ -	50
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	0	50.00	50
	Dredging (Pay yardage)	CY	0	\$3.44	50
	Damp	LS	1	\$189,000	\$189,000
	LERR	LS	1	50	50
	E & D @10%	LS	1	\$18,900	\$18,900
	S & A @ 8%	LS	1	\$15,120	\$15,120
	Contingency @20%	LS	1	\$44,604	\$44,604
				Event Total	\$267,624
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
13	Construction	LS	1	\$ -	50
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	1,270,600	\$0.00	50
	Dredging (Pay yardage)	CY	941,185	\$3.44	\$3,237,676
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	50
	E & D @10%	LS	1	\$323,768	\$323,768
	S & A @ 8%	LS	1	\$259,014	\$259,014
	Contingency @20%	LS	1	\$764,092	\$764,092
				Event Total	\$4,584,550
Event					
	Item Description	Quantity	Unit	Unit Price	<b>Extended Price</b>
Year		LS	1	\$ -	50
Year 14	Construction		1	5 -	50
	Pipeline Installation	LS	1	9	
		LS	0	\$0.00	
	Pipeline Installation Dredging (Gross yardage)				\$0
	Pipeline Installation	CY	0	\$0.00 \$3.44	\$0 \$0
	Pipeline Installation Dredging (Gross yardage) Dredging (Pay yardage)	CY	0	\$0.00 \$3.44 \$189,000	\$0 \$0 \$189,000
	Pipeline Installation Dredging (Gross yardage) Dredging (Pay yardage) Damp LERR	CY CY LS LS	0 0 1	\$0.00 \$3.44 \$189,000 \$0	\$0 \$0 \$189,000 \$0
	Pipeline Installation Dredging (Gross yardage) Dredging (Pay yardage) Damp LERR E & D @10%	CY CY LS LS	0 0 1 1	\$0.00 \$3.44 \$189,000 \$0 \$18,900	\$0 \$0 \$189,000 \$0 \$18,900
	Pipeline Installation Dredging (Gross yardage) Dredging (Pay yardage) Damp LERR	CY CY LS LS	0 0 1 1	\$0.00 \$3.44 \$189,000 \$0	\$0 \$0 \$189,000 \$0 \$18,900 \$15,120

Mile 22-26, CDF 12B, Page26

Event						
Year	Item Description	Quantity	Unit	11	nit Price	Extended Price
16	Construction	LS	1	5	279,000	\$279,000
	Pipeline Installation	LS	1	5	2,5,000	\$0
	Dredging (Gross yardage)	CY	0	*	\$0.00	
	Dredging (Pay yardage)	CY	0		\$3.44	
	Damp	LS	1		\$0	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$27,900	
	S & A @ 8%	LS	1		\$22,320	4112
	Contingency @20%	LS	1		\$65,844	
	contingency Grow	-				
				Ev	ent Total	\$395,064
Event						
Year	Item Description	Quantity	Unit	U	nit Price	<b>Extended Price</b>
17	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		SO
	Dredging (Gross yardage)	CY	1,270,600		\$0.00	50
	Dredging (Pay yardage)	CY	941,185		\$3.44	\$3,237,676
	Damp	LS	1		50	
	LERR	LS	1		50	SO
	E & D @10%	LS	1		\$323,768	
	5 & A @ 8%	15	1		\$259,014	
	Contingency @20%	LS	1		\$764,092	The state of the s
				Ev	ent Total	\$4,584,550
Event						
Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
18	Construction	LS	1	Ś	-	\$0
	Pipeline Installation	LS	1	5		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	
	Damp	LS	1		\$189,000	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$18,900	
	5 & A @ 8%	15	1		\$15,120	
	Contingency @20%	LS	1		\$44,604	
				Ev	ent Total	\$267,624
Event						
Year	Item Description	Quantity	Unit		nit Price	Extended Price
19	Construction	LS	1	5	int rince	S0
19		LS	1	5		50
	Pipeline Installation	CY	1,270,600	2	\$0.00	
	Dredging (Gross yardage)	CY				
	Dredging (Pay yardage)		941,185		\$3.44	
	Damp	LS	1		\$0	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$323,768	
	S & A @ 8%	LS	1		\$259,014	
	Contingency @20%	LS	1		\$764,092	\$764,092
				Ev	ent Total	\$4,584,550
			Disposa	l Sit	te Total	\$33,911,730
			Disposal Si	te T	otal A	\$11,442,539
			Disposal Si	te T	otal B	\$33,911,730
				Tot	al	\$45,354,269
		Cost/cy/c	apacity of si	te		\$4.65

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#### River Mile 21 - 22 Disposal Site - 15 Total Capacity In CY - 3,504,000

Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
0	Construction	LS	1	5 -	50
	Pipeline Installation	LS	1	\$ -	50
	Dredging (Gross yardage)	CY	445,900	\$0.00	\$0
	Dredging (Pay yardage)	CY	330,296	\$3.44	\$1,136,218
	Damp	LS	1	50	SO
	LERR	LS	1	\$953,000	\$953,000
	E & D @10%	LS	1	\$113,622	\$113,622
	5 & A @ 8%	15	1	\$90,897	\$90,897
	Contingency @15%	LS	1	\$201,111	\$201,111
				Event Total	\$2,494,848
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
1	Construction	LS	1	\$ -	50
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	50
	Dredging (Pay yardage)	CY	0	\$3.44	50
	Damp	LS	1	\$79,000	\$79,000
	LERR	LS	1	50	SO
	E & D @10%	LS	1	\$7,900	\$7,900
	S & A @ 8%	LS	1	\$6,320	\$6,320
	Contingency @15%	LS	1	\$13,983	\$13,983
				Event Total	\$107,203
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
2	Construction	LS	1	5 -	50
	Pipeline Installation	LS	1	\$ -	50
	Dredging (Gross yardage)	CY	0	\$0.00	50
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	15	1	\$79,000	\$79,000
	LERR	LS	1	50	\$0
	E & D @10%	LS	1	\$7,900	\$7,900
	S & A @ 8%	LS	1	\$6,320	\$6,320
	Contingency @15%	LS	1	\$13,983	\$13,983
				<b>Event Total</b>	\$107,203
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
3	Construction	LS	1	\$ 1,244,000	\$1,244,000
	Pipeline Installation	LS	1	\$ -	50
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Shore Protection	LS	1	\$3,712,000	\$3,712,000
	LERR	LS	1	50	\$0
	E & D @10%	LS	1	\$495,600	\$495,600
	5 & A @ 8%	LS	1	\$396,480	\$396,480
	Contingency @15%	LS	1	\$877,212	\$877,212
				Event Total	\$6,725,292

Mile 21-22, CDF 15, Page28

Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
4	Construction	LS	1	S	- 50
	Pipeline Installation	LS	1	5	- \$0
	Dredging (Gross yardage)	CY	445,900	\$0.	
	Dredging (Pay yardage)	CY	330,296	\$3.	
	Damp	LS	1		50 50
	LERR	LS	1		50 50
	E & D @10%	LS	1	\$113,6	
	5 & A @ 8%	LS	1	\$90,8	
	Contingency @15%	LS	1	\$201,1	11 \$201,111
-				Event Tota	
Event	2 2 2 2 2		77.60		Extended
Year	Item Description	Quantity	Unit	Unit Price	
5	Construction	LS	1	\$	- 50
	Pipeline Installation	LS	1	\$	- \$0
	Dredging (Gross yardage)	CY	0	\$0.	
	Dredging (Pay yardage)	LS	1	\$3. \$79,0	
	Damp LERR	LS	1		50 50
	E & D @10%	LS	1	\$7,9	
	5 & A @ 8%	LS	1	\$6,3	
	Contingency @20%	LS	1	\$18,6	
				Event Tota	
				Event rota	
Event	5.772	30 L.V.	24-27	11 50011	Extended
Year	Item Description	Quantity	Unit	Unit Price	
8	Construction	LS	1	\$	- \$0
	Pipeline Installation	LS	1	\$	- 50
	Dredging (Gross yardage)	CY	445,900	\$0.	
	Dredging (Pay yardage)	CY	330,296	\$3.	* P. C. C. C. C. C. C. C. C. C. C. C. C. C.
	Damp	LS	1		\$0 \$0
	LERR	LS	1		50 50
	E & D @10%	LS	1	\$113,6	
	S & A @ 8% Contingency @20%	LS	1	\$90,8 \$268,1	
	Contingency @20%	Ь			
				Event Tota	\$1,608,885
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
9	Construction	LS	1	S	- 50
	Pipeline Installation	LS	1	\$	- 50
	Dredging (Gross yardage)	CY	0	\$0.	00 \$0
	Dredging (Pay yardage)	CY	0	\$3.	
	Damp	LS	1	\$79,0	
	LERR	LS	1		50 50
	E & D @ 10%	LS	1	\$7,9	00 \$7,900
	5 & A @ 8%	LS	1	\$6,3	20 \$6,320
	Contingency @20%	LS	1	\$18,6	\$18,644
				Event Tota	\$111,864
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
	Construction				
12	Pipeline Installation	LS	1	s s	- \$0 - \$0
	Dredging (Gross yardage)	CY	445,900	\$0.	
	Dredging (Pay yardage)	CY	330,296	\$3.	
	Damp	LS	1		50 50
	LERR	LS	1		50 50
	E & D @10%	LS	1	\$113,6	
	5 & A @ 8%	LS	1	\$90,8	
	Contingency @20%	LS	1	\$268,1	
	Mary of Albanyan			Event Tota	
				Lvent iota	31,000,083

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Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	
13	Construction	LS	1	\$	- \$0
	Pipeline Installation	LS	1	S	- 50
	Dredging (Gross vardage)	CY	0	S0.	
	Dredging (Pay yardage)	CY	0	\$3.	.44 50
	Damp	is	1	\$79,0	
	LERR	LS	1		S0 S0
	E & D @10%	LS	1	\$7,9	***
	5 & A @ 8%	LS	1	\$6,3	
	Contingency @20%	LS	1	\$18,6	
				Event Total	al \$111,864
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
15	Construction	LS	1	\$ 302,00	00 \$302,000
	Pipeline Installation	LS	1	5	- 50
	Dredging (Gross yardage)	CY	0	\$0.	
	Dredging (Pay yardage)	CY	0	\$3.	.44 \$0
	Damp	LS	1		\$0 \$0
	LERR	LS	1		S0 S0
	E & D @10%	LS	1	\$30,2	00 \$30,200
	S & A @ 8%	LS	1	\$24,1	
	Contingency @20%	LS	1	\$71,2	20,000
				Event Tota	al \$427,632
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	
16	Construction	LS	1	S	- S0
10	Pipeline Installation	LS	1	S.	- 50
	Dredging (Gross yardage)	CY	445,900	50.	
	Dredging (Pay yardage)	CY	330,296	\$3.	
	Damp	IS	1		\$0 \$0
	LERR	LS	î		50 50
	E & D @10%	LS	1	S113.6	
	S & A @ 8%	LS	1	\$90,8	
	Contingency @20%	LS	1	\$268,1	The state of the s
				Event Tota	
				Event lots	1
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
17	Construction	LS	1	5	- \$0
	Pipeline Installation	LS	1	\$	- \$0
	Dredging (Gross yardage)	CY	0	\$0.	.00 \$0
	Dredging (Pay yardage)	CY	0	\$3.	.44 \$0
	Damp	LS	1	\$79,0	979,000
	LERR	LS	1		\$0 \$0
	E & D @10%	LS	1	\$7,9	00 \$7,900
	S & A @ 8%	LS	1	\$6,3	
	Contingency @20%	LS	1	\$18,6	
				Event Tota	sl \$111,864
			Disposa	al Site Total	\$16,678,137

Mile 21-22, CDF 15, Page30

Cost/cy/capacity of site \$4.76

#### River Mile 21 - 22 Disposal Site - 16 N Total Capacity In CY - 2,710,000

Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
1	Construction	LS	1	\$ 1,130,000	\$1,130,000
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Shore Protection	LS	1	\$2,688,000	\$2,688,000
	LERR	LS	1	\$735,000	\$735,000
	E & D @10%	LS	1	\$381,800	\$381,800
	5 & A @ 8%	LS	1	\$305,440	\$305,440
	Contingency @15%	LS	1	\$671,968	\$671,968
				<b>Event Total</b>	\$5,912,208
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
2	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$	\$0
	Dredging (Gross yardage)	CY	445,900	\$0.00	\$0
	Dredging (Pay yardage)	CY	330,296	\$3.44	\$1,136,218
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	1.5	1	\$113,622	\$113,622
	S & A @ 8%	LS	1	\$90,897	\$90,897
	Contingency @15%	LS	1	\$201,111	\$201,111
				Event Total	\$1,541,848
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
3	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY		\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$0.00	\$0
	Damp	LS	1	\$73,000	\$73,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$7,300	\$7,300
	S & A @ 8%	LS	1	\$5,840	\$5,840
	Contingency @15%	LS	1	\$12,921	\$12,921
				<b>Event Total</b>	\$99,061
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
4	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY		\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	LS	1	\$73,000	\$73,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$7,300	\$7,300
	S & A @ 8%	LS	1	\$5,840	\$5,840
	Contingency @20%	LS	1	\$16,177	\$16,177
				Event Total	\$102,317

Mile 20-21, CDF 16N, Page31

Event					
Year	Item Description	Quantity	Unit.	Unit Price	Extended Price
6	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	445,900	\$0.00	\$0
	Dredging (Pay yardage)	CY	330,296	\$3.44	\$1,136,218
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$113,622	\$113,622
	S & A @ 8%	LS	1	\$90,897	\$90,897
	Contingency @20%	LS	1	\$268,148	\$268,148
				Event Total	\$1,608,885
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
7	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	LS	1	\$73,000	\$73,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$7,300	\$7,300
	5 & A @ 8%	LS	1	\$5,840	\$5,840
	Contingency @20%	LS	1	\$17,228	\$17,228
				Event Total	\$103,368
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
9	Construction	LS	1	\$ 262,000	\$262,000
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY		\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$0.00	\$0
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$26,200	\$26,200
	5 & A @ 8%	LS	1	\$20,960	\$20,960
	Contingency @20%	LS	1	\$61,832	\$61,832
				<b>Event Total</b>	\$370,992
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
10	Construction	LS	1	\$	\$0
	Pipeline Installation	LS	1	\$	\$0
	Dredging (Gross yardage)	CY	445,900	\$0.00	\$0
	Dredging (Pay yardage)	CY	330,296	\$3.44	\$1,136,218
	Damp	LS	1	\$0	\$0
	LERR	LS	1	SO	\$0
	E & D @10%	LS	1	\$113,622	\$113,622
	5 & A @ 8%	LS	1	\$90,897	\$90,897
	Contingency @20%	LS	1	\$268,148	\$268,148
				Event Total	\$1,608,885
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
11	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ .	\$0
	Dredging (Gross yardage)	CY		\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$0.00	\$0
	Damp	LS	1	\$73,000	\$73,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$7,300	\$7,300
	S & A @ 8%	LS	1	\$5,840	\$5,840
	Contingency @20%	LS	1	\$17,228	\$17,228
				Event Total	\$103,368

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Event					
Year	Item Description	Quantity	Unit	Unit Price	<b>Extended Price</b>
14	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	445,900	\$0.00	\$0
	Dredging (Pay yardage)	CY	330,296	\$3.44	\$1,136,218
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$113,622	\$113,622
	5 & A @ 8%	LS	1	\$90,897	\$90,897
	Contingency @20%	LS	1	\$268,148	\$268,148
				Event Total	\$1,608,885
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
15	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	5 -	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	LS	1	\$73,000	\$73,000
	LERR	LS	1	SO	\$0
	E & D @10%	LS	1	\$7,300	\$7,300
	5 & A @ 8%	LS	1	\$5,840	\$5,840
	Contingency @20%	LS	1	\$17,228	\$17,228
	Contingency @20%	LS	1	\$17,228	\$17,228
				Event Total	\$103,368
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
18	Construction	LS	1	\$	\$0
	Pipeline Installation	LS	1	\$	\$0
	Dredging (Gross yardage)	CY	445,900	\$0.00	\$0
	Dredging (Pay yardage)	CY	330,296	\$3.44	\$1,136,218
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$113,622	\$113,622
	S & A @ 8%	LS	1	\$90,897	\$90,897
	Contingency @20%	LS	1	\$268,148	\$268,148
				Event Total	\$1,608,885
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
19	Construction	LS	1	\$ .	\$0
	Pipeline Installation	LS	1	s -	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	SO
	Damp	LS	1	\$73,000	\$73,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$7,300	\$7,300
	S&A@8%	LS	1	\$5,840	\$5,840
	Contingency @20%	LS	1	\$17,228	\$17,228
				Event Total	\$103,368
			Dispos	sal Site Total	\$14,875,438
			Cost/cy/	capacity of site	\$5.49

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### Devil's Elbow Disposal Site - 13 A Total Capacity 13A + B In CY - 11,455,000

Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
0	Construction	LS	1	5	1,425,000	\$1,425,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	SO
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		S0	50
	LERR	LS	1		\$1,990,000	\$1,990,000
	E & D @10%	LS	1		\$142,500	\$142,500
	5 & A @ 8%	15	1		\$114,000	\$114,000
	Contingency @15%	LS	1		\$255,360	\$255,360
				E	vent Total	\$3,926,860
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
0	Construction	LS	1	\$	1.4	\$0
	Pipeline Installation	LS	1	5		50
	Dredging (Gross yardage)	CY	1,031,000		\$0.00	\$0
	Dredging (Pay yardage)	CY	763,704		\$3.44	\$2,627,142
	Damp	LS	1		\$0	\$0
	LERR	LS	1		SO	50
	E & D @10%	LS	1		\$262,714	\$262,714
	S & A @ 8%	LS	1		\$210,171	\$210,171
	Contingency @15%	LS	1		\$465,004	\$465,004
				•	vent Total	\$3,565,031
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
2	Construction	LS	1	5	-	50
	Pipeline Installation	IS	1	\$		50
	Dredging (Gross yardage)	CY	0	1	\$0.00	50
	Dredging (Pay yardage)	CY	0		\$3,44	50
	Damp	LS	1		\$155,000	\$155,000
	LERR	LS	1		\$0	50
	E & D @10%	LS	1		\$15,500	\$15,500
	S & A @ 8%	LS	1		\$12,400	\$12,400
	Contingency @15%	LS	1		\$27,435	\$27,435
				1	vent Total	\$210,335
Event Year	B. C. Lin	0	0.5		Unit Price	Extended Price
Event Year 3	Item Description Construction	Quantity	Unit 1	5	OUR LUCE	Extended Price \$0
3	Pipeline Installation	LS	i	Š		50
	Dredging (Gross yardage)	CY	0	1	\$0.00	SO
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$155,000	\$155,000
	LERR	IS	1		\$0	\$0
	E & D @10%	LS	1		\$15,500	\$15,500
	5 & A @ 8%	LS	1		\$12,400	\$12,400
	Contingency @15%	LS	1		\$27,435	\$27,435
					vent Total	\$210,335
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
4	Construction	LS	1	5	om rice	Extended Price \$0
	Pipeline Installation	LS	1	5		50
	Dredging (Gross yardage)	CY	1,031,000	3	50.00	50
	Dredging (Pay yardage)	CY	763,704		53.44	\$2,627,142
	Dredging (Pay yardage) Damp	LS	1		\$3.44	\$2,627,142
	LERR	LS	1		S0	50
	E & D @10%	LS	1		\$262,714	\$262,714
	S & A @ 8%	LS	1		\$210,171	\$210,171
	Contingency @15%	LS	1		\$465,004	\$465,004
					event Total	\$3,565,031

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Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
5	Construction	LS	1	S -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	LS	1	\$155,000	\$155,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$15,500	\$15,500
	S & A @ 8%	LS	1	\$12,400	\$12,400
	Contingency @20%	1.5	1	\$36,580	\$36,580
				Event Total	\$219,480
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
7	Construction	LS	1	\$ 297,000	\$297,000
	Pipeline Installation	LS	1	5 -	Şt
	Dredging (Gross yardage)	CY	0	\$0.00	St
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$29,700	\$29,700
	S & A @ 8%	LS	1	\$23,760	\$23,760
	Contingency @20%	LS	1	\$70,092	\$70,092
				Event Total	\$420,552
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
8	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	s -	SC
	Dredging (Gross yardage)	CY	1,031,000	\$0.00	St
	Dredging (Pay yardage)	CY	763,704	\$3.44	\$2,627,142
	Damp	LS	1	50	50
	LERR	LS	1	50	SC
	E & D @10%	LS	1	\$262,714	\$262,714
	S & A @ 8%	LS	1	\$210,171	\$210,171
	Contingency @20%	LS	1	\$620,005	\$620,005
				Event Total	\$3,720,033
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
9	Construction	LS	1	5 -	\$0
	Pipeline Installation	LS	1	5 -	SC
	Dredging (Gross yardage)	CY	0	\$0.00	St
	Dredging (Pay yardage)	CY	0	\$3.44	St
	Damp	LS	1	\$155,000	\$155,000
	LERR	LS	1	50	SI
	E & D @10%	LS	1	\$15,500	\$15,500
	S & A @ 8%	LS	1	\$12,400	\$12,400
	Contingency @20%	LS	1	\$36,580	\$36,580
				Event Total	\$219,480
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
12	Construction	LS	1	\$ .	S(
	Pipeline Installation	LS	1	\$ -	SC
		CY	1.031.000	\$0.00	SC
	Dredging (Gross vardage)			\$3.44	\$2,627,142
	Dredging (Gross yardage) Dredging (Pay yardage)	CY	703.704		Sharten . Livings
	Dredging (Pay yardage)	CY	763,704		S.
	Dredging (Pay yardage) Damp	LS	1	\$0	
	Dredging (Pay yardage) Damp LERR	LS	1	\$0 \$0	şı
	Dredging (Pay yardage) Damp LERR E & D @10%	LS	1 1 1	\$0 \$0 \$262,714	\$262,714
	Dredging (Pay yardage) Damp LERR	LS LS	1	\$0 \$0	\$0 \$0 \$262,714 \$210,171 \$620,005

Mile Devils Elbow, CDF 13A, Page35

Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
13	Construction	LS	1	5		\$0
	Pipeline Installation	LS	1	5		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$155,000	\$155,000
	LERR	LS	1		50	\$0
	E & D @10%	LS	1		\$15,500	\$15,500
	5 & A @ 8%	LS	1		\$12,400	\$12,400
	Contingency @20%	LS	1		\$36,580	\$36,580
					Event Total	\$219,480
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
16	Construction	LS	1	5	-	SO.
	Pipeline Installation	LS	1	Š		\$0
	Dredging (Gross yardage)	CY	1,031,000		\$0.00	SO.
	Dredging (Pay yardage)	CY	763,704		\$3.44	\$2,627,142
	Damp	LS	1		\$0	\$0
	LERR	15	1		SO.	S0
	E & D @10%	LS	1		5262,714	\$262,714
	5 & A @ 8%	LS	1		\$210,171	\$210,171
	Contingency @20%	LS	1		\$620,005	\$620,005
					Event Total	\$3,720,033
Event Year	Name Description	A	Unit		Unit Price	Extended Price
17	Item Description Construction	Quantity	1	\$	Unit Price	
17	Pipeline Installation	LS	1	5		\$0 \$0
	Dredging (Gross yardage)	CY	0	2	\$0.00	\$0
	Dredging (Gloss yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$155,000	\$155,000
	LERR	LS	1		50	SO
	E & D @10%	LS	1		\$15,500	\$15,500
	S & A @ 8%	LS	1		\$12,400	\$12,400
	Contingency @20%	LS	1		\$36,580	\$36,580
					Event Total	\$219,480
			Disposa	ıl Si	te Total A	\$23,936,163
			Disposa	ıl Si	te Total B	\$22,098,929
				То	tal	\$46,035,092
			Cost/cy	/cap	pacity of site	\$4.02

Devil's Elbow
Disposal Site - 13 B
Total Capacity 13A + B In CY - 11,455,000

					al	
	Contingency @20%	LS	1	\$620,0		\$620,005
	E & D @10% S & A @ 8%	LS	1	\$262,		\$262,714
	LERR E & D @10%	LS	1	\$262,	\$0	\$0 \$262,714
	Damp	LS	1		SO	\$0
	Dredging (Pay yardage)	CY	763,704		.44	\$2,627,142
	Dredging (Gross yardage)	CY	1,031,000		.00	\$0
0	Pipeline Installation	15	1	5	i.	\$0
Year 6	Item Description Construction	Quantity LS	Unit 1	S Unit Price		Price S0
Event Year	Item Description	Owner	Unit	Unit Price		Extended Price
				Event Tot	al	\$210,335
	Contingency @15%	LS	1	\$27,4		\$27,435
	S & A @ 8%	LS	1	\$12,4		\$12,400
	E & D @10%	LS	1	\$15,5	4.0	\$15,500
	LERR	LS	1	3133,0	50	\$133,000
	Dredging (Pay yardage) Damp	CY LS	0	\$3 \$155,0	.44	\$155,000
	Dredging (Gross yardage)	CY	0		.00	\$0 \$0
	Pipeline Installation	LS	1	\$	*	50
4	Construction	LS	1	5	-	50
Year	Item Description	Quantity	Unit	Unit Price	2	Price
Event				Event Tot	al	\$210,335 Extended
	Contingency @15%	LS	1	\$27,4		\$27,435
	5 & A @ 8%	LS	1	\$12,4		\$12,400
	E & D @10%	LS	1	\$15,5		\$15,500
	LERR	15	1		SO	\$0
	Damp	15	1	\$155,0		\$155,000
	Dredging (Pay yardage)	CY	0		.00	50
	Pipeline Installation Dredging (Gross yardage)	CY	1	5 50	.00	\$0 \$0
3	Construction	LS LS	1	S	18.	\$0 \$0
Year	Item Description	Quantity	Unit	Unit Price	2	Price
Event						Extended
				Event Tot	al	\$3,565,031
	Contraggered for 1378	ы				
	S & A @ 8% Contingency @15%	LS	1	\$465,0		\$465,004
	E & D @10% S & A @ 8%	LS	1	\$262,7 \$210,1		\$262,714 \$210,171
	LERR	LS	1	2.53	\$0	\$0
	Damp	LS	1		\$0	50
	Dredging (Pay yardage)	CY	763,704		44	\$2,627,142
	Dredging (Gross yardage)	CY	1.031.000		.00	50
2	Construction Pipeline Installation	LS	1	\$		\$0 \$0
Year	Item Description	Quantity	Unit	Unit Price		Price
Event						Extended
				Event Tot	al	\$1,933,725
	Contingency @15%	15	1	\$252,2	225	\$252,225
	5 & A @ 8%	LS	1	\$114,0		\$114,000
	E & D @10%	LS	1	\$142,		\$142,500
	LERR	LS	1		\$0	\$0
	Shore Protection	LS	1	55	\$0	\$0
	Dredging (Pay yardage)	CY	0		.44	50
	Dredging (Gross yardage)	CY	0		.00	S0 S0
	Pipeline Installation	LS	1	\$ 1,425,0	00	\$1,425,000 \$0
0						
Year 0	Item Description Construction	Quantity	Unit	Unit Price		Price

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Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
7	Construction	LS	1	\$ -	50
	Pipeline Installation	15	1	\$ -	SO
	Dredging (Gross yardage)	CY	0	\$0.00	50
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	1.5	1	\$155,000	\$155,000
	LERR	LS	1	50	50
	F & D @10%	LS	1	\$15,500	\$15,500
	5 & A @ 8%		1	\$12,400	\$12,400
	Contingency @20%	1.5.	1	\$36,580	\$36,580
				Event Total	\$219,480
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
9	Construction	15	1	\$ 297,000	\$297,000
	Pipeline Installation	LS	1	\$ -	50
	Dredging (Gross yardage)	CY		\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$0.00	SO
	Damp	LS	1	50	50
	LERR	15	1	\$0	\$0
	E & D @10%	LS	1	\$29,700	\$29,700
	5 & A @ 8%	LS	1	\$23,760	\$23,760
	Contingency @20%	LS	1	\$70,092	\$70,092
				Event Total	\$420,552
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
10	Construction	LS	1	\$ -	50
	Pipeline Installation	LS	1	s -	SO
	Dredging (Gross yardage)	CY	1,031,000	\$0.00	50
	Dredging (Pay yardage)	CY	763,704	\$3.44	\$2,627,142
	Damp	LS	1	SO	SO
	LERR	LS	1	50	50
	E & D @10%	1.5	1	5262,714	\$262,714
	5 & A @ 8%	LS	1	\$210,171	\$210,171
	Contingency @20%	LS	1	\$620,005	\$620,005
				Event Total	\$3,720,033
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
11	Construction	LS	1	\$ -	50
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY		\$0.00	SO.
	Dredging (Pay yardage)	CY	0	\$0.00	\$0
	Damp	LS	1	\$155,000	\$155,000
	LERR	LS	1	\$0	50
	E & D @10%	LS	1	\$15,500	\$15,500
	5 & A @ 8% Contingency @20%	LS	1	\$12,400 \$36,580	\$12,400 \$36,580
	Contingency @20%	L3			
				Event Total	\$219,480
Event		1	22.5		Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
14	Construction	LS	1	s -	SO
	Pipeline Installation	LS	1	\$ -	SO
	Dredging (Gross yardage)	CY	1,031,000	\$0.00	50
	Dredging (Pay yardage)	CY	763,704	\$3.44	\$2,627,142
	Damp	LS	1	50	50
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$262,714	\$262,714
	5 & A @ 8%	LS	1	\$210,171	\$210,171
	Contingency @20%	15	1	\$620,005	\$620,005
				Event Total	\$3,720,033

Mile Devils Elbow, CDF 13B, Page 38

Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
15	Construction	15	1	5 -	\$0
	Pipeline Installation	15	1	s -	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	1.5	1	\$155,000	200
	LERR	LS	1	50	50
	E & D @10%	15	1	\$15,500	46.00
	5 & A @ 8%	LS	1	\$12,400	
	Contingency @20%	15	1	\$36,580	\$36,580
				Event Total	\$219,480
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
18	Construction	15	1	\$	\$0
	Pipeline Installation	LS	1	S -	\$0
	Dredging (Gross yardage)	CY	1,031,000	\$0.00	50
	Dredging (Pay yardage)	CY	763,704	\$3.44	\$2,627,142
	Damp	LS	1	SO	SO
	LERR	LS	1	\$0	
	E & D @10%	LS	1	\$262,714	
	5 & A @ 8%	LS	1	\$210,171	
	Contingency @20%	LS	1	\$620,005	\$620,005
				Event Total	\$3,720,033
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	Price
19	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	s -	SO
	Dredging (Gross yardage)	CY	0	\$0.00	SO
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	LS	1	\$155,000	\$155,000
	LERR	LS	1	SO	50
	E & D @10%	1.5	1	\$15,500	\$15,500
	5 & A @ 8%	LS	1	\$12,400	\$12,400
	Contingency @20%	15	1	\$36,580	\$36,580
				Event Total	\$219,480
			Disposal	Site Total B	\$22,098,029
			Disposal Si	te Total A	\$23,936,163
			Disposal Si	te Total B	\$22,098,929
				Total	\$46,035,092
		Cost/cy/ca	apacity of si	te	\$4.02

Mile Devils Elbow, CDF 13B, Page 39

### River Mile 16 -21 Disposal Site - 50 MVN Plan 8-19-10

Total Capacity In CY - 7,158,000

<b>Event Year</b>	Item Description	Quantity	Unit	<b>Unit Price</b>	Extended Price
0	Construction	LS	1	\$330,000	\$330,000
	Pipeline Installation	LS	1	\$576,000	\$576,000
	Dredging (Gross yardage)	CY	1,242,900	\$0.00	\$0
	Dredging (Pay yardage)	CY	920,667	\$5.31	\$4,888,740
	LERR	LS	1	\$553,000	\$553,000
	E & D @10%	LS	1	\$634,774	\$634,774
	S & A @ 8%	LS	1	\$507,819	\$507,819
	Contingency @15%	LS	1	\$1,123,550	\$1,123,550
				Event Total	\$8,600,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
2	Construction	LS	1	\$330,000	\$330,000
	Pipeline Installation	LS	1	\$576,000	\$576,000
	Dredging (Gross yardage)	CY	1,242,900	\$0.00	\$0
	Dredging (Pay yardage)	CY	920,667	\$5.31	\$4,888,740
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$579,474	\$579,474
	S & A @ 8%	LS	1	\$463,579	\$463,579
	Contingency @20%	LS	1	\$1,367,559	\$1,367,559
				Event Total	\$8,200,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
7	Construction	LS	1	\$330,000	\$330,000
	Pipeline Installation	LS	1	\$576,000	\$576,000
	Dredging (Gross yardage)	CY	1,242,900	\$0	\$0
	Dredging (Pay yardage)	CY	920,667	\$5.31	\$4,888,740
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$579,474	\$579,474
	S & A @ 8%	LS	1	\$463,579	\$463,579
	Contingency @20%	LS	1	\$1,367,559	\$1,367,559
				<b>Event Total</b>	\$8,200,000

Mile 16-21, BU 50, Page 40

<b>Event Year</b>	Item Description	Quantity	Unit	<b>Unit Price</b>	<b>Extended Price</b>
15	Construction	LS	1	\$330,000	\$330,000
	Pipeline Installation	LS	1	\$576,000	\$576,000
	Dredging (Gross yardage)	CY	1,241,772	\$0	\$0
	Dredging (Pay yardage)	CY	919,831	\$5.31	\$4,884,303
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$579,030	\$579,030
	S & A @ 8%	LS	1	\$463,224	\$463,224
	Contingency @20%	LS	1	\$1,366,512	\$1,366,512
				Event Total	\$8,200,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
17	Construction	LS	1	\$330,000	\$330,000
	Pipeline Installation	LS	1	\$576,000	\$576,000
	Dredging (Gross yardage)	CY	1,627,914	\$0	\$0
	Dredging (Pay yardage)	CY	1,205,862	\$5.31	\$6,403,128
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$730,913	\$730,913
	S & A @ 8%	LS	1	\$584,730	\$584,730
	Contingency @20%	LS	1	\$1,724,954	\$1,724,954
				Event Total	\$10,300,000
			Disposa	l Site Total	\$43,500,000

Cost/cy/capacity of site

\$6.08

#### Plan C River Mile 16 -21 BU 4

Total Capacity In CY - 1,864,000

Item Description	Quantity	Unit		Unit Price	Extended Price
Construction	LS	1	\$	350,000	\$350,000
Pipeline Installation	LS	1	\$		\$0
Dredging (Gross yardage)	CY	0		\$0.00	\$0
Dredging (Pay yardage)	CY	0		\$5.31	\$0
Damp	LS	1		\$0	\$0
LERR	LS	1		\$339,000	\$339,000
E & D @10%	LS	1		\$35,000	\$35,000
5 & A @ 8%	LS	1		\$28,000	\$28,000
Contingency @20%	LS	1		\$80,150	\$80,150
			E	vent Total	\$832,150
Item Description	Quantity	Unit	1	Unit Price	Extended Price
Construction	LS	1	\$		\$0
Pipeline Installation	LS	1	\$	128,000	\$128,000
Dredging (Gross yardage)	CY	1,864,274		\$0.00	\$0
Dredging (Pay yardage)	CY	1,380,944		\$5.31	\$7,332,813
Damp	LS	1		\$56,000	\$56,000
LERR	LS	1		\$0	\$0
E & D @10%	LS	1		\$751,681	\$751,681
S & A @ 8%	LS	1		\$601,345	\$601,345
Contingency @20%	LS	1		\$1,698,800	\$1,698,800
			E	vent Total	\$10,568,639
		Dispos	al S	ite Total	\$11,400,789
	Construction Pipeline Installation Dredging (Gross yardage) Dredging (Pay yardage) Damp LERR E & D @10% S & A @ 8% Contingency @20%  Item Description Construction Pipeline Installation Dredging (Gross yardage) Dredging (Pay yardage) Damp LERR E & D @10% S & A @ 8%	Construction LS Pipeline Installation LS Dredging (Gross yardage) CY Dredging (Pay yardage) CY Damp LS LERR LS E & D @10% LS Contingency @20% LS  Item Description Quantity Construction LS Pipeline Installation LS Dredging (Gross yardage) CY Dredging (Gross yardage) CY Dredging (Pay yardage) CY Damp LS LERR LS E & D @10% LS S & A @ 8% LS	Construction         LS         1           Pipeline Installation         LS         1           Dredging (Gross yardage)         CY         0           Dredging (Pay yardage)         CY         0           Damp         LS         1           LERR         LS         1           E & D @10%         LS         1           S & A @ 8%         LS         1           Contingency @20%         LS         1    Item Description  Quantity  Unit  Construction  LS 1  Pipeline Installation  LS 1  Dredging (Gross yardage)  CY 1,864,274  Dredging (Pay yardage)  CY 1,380,944  Damp  LS 1  LERR  LS 1  LERR  LS 1  E & D @10%  S & A @ 8%  LS 1  Contingency @20%  LS 1  Contingency @20%  LS 1  LS 1  Contingency @20%  LS 1  LS 1  Contingency @20%  LS 1  Contingency @20%  CY 0  CY 1,864,274	Construction         LS         1         \$           Pipeline Installation         LS         1         \$           Dredging (Gross yardage)         CY         0         0           Dredging (Pay yardage)         CY         0         0           Damp         LS         1         1           LERR         LS         1         1           E & D @10%         LS         1         5           S & A @ 8%         LS         1         5           Contingency @20%         LS         1         5           Item Description         Quantity         Unit         Unit         Construction         LS         1         5           Pipeline Installation         LS         1         \$         5         1         \$           Dredging (Gross yardage)         CY         1,384,274         Dredging (Pay yardage)         CY         1,380,944         Damp         LS         1         LS         1	Construction         LS         1         \$ 350,000           Pipeline Installation         LS         1         \$ -           Dredging (Gross yardage)         CY         0         \$0.00           Dredging (Pay yardage)         CY         0         \$5.31           Damp         LS         1         \$339,000           E & D @10%         LS         1         \$35,000           S & A @ 8%         LS         1         \$28,000           Contingency @20%         LS         1         \$80,150           Event Total           Item Description         Quantity         Unit         Unit Price           Construction         LS         1         \$ -           Pipeline Installation         LS         1         \$ 128,000           Dredging (Gross yardage)         CY         1,864,274         \$0.00           Dredging (Pay yardage)         CY         1,380,944         \$5.31           Damp         LS         1         \$56,000           LERR         LS         1         \$56,000           LERR         LS         1         \$751,681           S & A @ 8%         LS         1         \$601,345

Mile 16-21, BU 4, Page42

Cost/cy/capacity of site

\$6.12

Plan C River Mile 16 -21 Disposal Site - BU 24

Total Capacity In CY - 4,356,000

Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
11	Construction	LS	1	\$ 515,000	\$515,000
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY		\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$5.31	\$0
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$908,000	\$908,000
	E & D @10%	LS	1	\$51,500	\$51,500
	S & A @ 8%	LS	1	\$41,200	\$41,200
	Contingency @20%	LS	1	\$121,540	\$121,540
				Event Total	\$1,637,240
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
12	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ 768,000	\$768,000
	Dredging (Gross yardage)	CY	1,118,565	\$0.00	\$0
	Dredging (Pay yardage)	CY	828,567	\$5.31	\$4,399,691
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$516,769	\$516,769
	S & A @ 8%	LS	1	\$413,415	\$413,415
	Contingency @20%	LS	1	\$1,219,575	\$1,219,575
				Event Total	\$7,317,450
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
14	Construction	LS	1	\$ 515,000	\$515,000
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY		\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$5.31	\$0
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$51,500	\$51,500
	S & A @ 8%	LS	1	\$41,200	\$41,200
	Contingency @20%	LS	1	\$121,540	\$121,540
				Event Total	\$729,240
Event	La Carta de	4			acomparation
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
15	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ 768,000	\$768,000
	Dredging (Gross yardage)	CY	2,485,700	\$0.00	\$0
	Dredging (Pay yardage)	CY	1,841,259	\$5.31	\$9,777,085
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$1,054,509	\$1,054,509
	S & A @ 8%	LS	1	\$843,607	\$843,607
	Contingency @20%	LS	1	\$2,488,640	\$2,488,640
				<b>Event Total</b>	\$14,931,841

Mile 16-21, BU 24, Page43

Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
17	Construction	LS	1	\$ 258,000	\$258,000
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY		\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$5.31	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$25,800	\$25,800
	S & A @ 8%	LS	1	\$20,640	\$20,640
	Contingency @20%	LS	1	\$60,888	\$60,888
				Event Total	\$365,328
Event					
Year	Item Description	Quantity	Unit	Unit Price	Extended Price
17	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ 768,000	\$768,000
	Dredging (Gross yardage)	CY	745,710	\$0.00	\$0
	Dredging (Pay yardage)	CY	552,378	\$5.31	\$2,933,127
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$370,113	\$370,113
	S & A @ 8%	LS	1	\$296,090	\$296,090
	Contingency @20%	LS	1	\$876,797	\$876,797
				Event Total	\$5,244,127
			Disposal Site Total		\$30,225,226
			Cost/cy/capacity of site		\$6.94

# Plan C River Mile 16 -21 Disposal Site - BU 48 Total Capacity In CY - 6,214,000

Event						
Year	Item Description	Quantity	Unit	U	Init Price	Extended Price
1	Construction	LS	1	\$	420,000	\$420,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$749,000	\$749,000
	E & D @10%	LS	1		\$42,000	\$42,000
	S & A @ 8%	LS	1		\$33,600	\$33,600
	Contingency @15%	LS	1		\$74,340	\$74,340
				E	ent Total	\$1,318,940
Event						
Year	Item Description	Quantity	Unit	L	Init Price	<b>Extended Price</b>
2	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	384,000	\$384,000
	Dredging (Gross yardage)	CY	2,485,700		\$0.00	\$0
	Dredging (Pay yardage)	CY	1,841,259		\$5.31	\$9,777,085
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	ŚO
	E & D @10%	LS	1	1	\$1,016,109	\$1,016,109
	5 & A @ 8%	LS	1		\$812.887	\$812,887
	Contingency @15%	LS	1	7	\$1,798,512	\$1,798,512
				Ev	ent Total	\$13,788,593
Event						
Year	Item Description	Quantity	Unit	L	Init Price	Extended Price
5	Construction	LS	1	\$	420,000	\$420,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$5.31	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$42,000	\$42,000
	S & A @ 8%	LS	1		\$33,600	\$33,600
	Contingency @20%	LS	1		\$99,120	\$99,120
				E	ent Total	\$594,720
Event						
Year	Item Description	Quantity	Unit	U	Init Price	Extended Price
5	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	1,118,565		\$0.00	\$0
	Dredging (Pay yardage)	CY	828,567		\$5.31	\$4,399,691
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	ŚO
	E & D @10%	LS	1		\$439,969	\$439,969
	S & A @ 8%	LS	1		\$351,975	\$351,975
	Contingency @20%	LS	1		\$1,038,327	\$1,038,327
				Ev	ent Total	\$6,229,962

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Event						
Year	Item Description	Quantity	Unit	U	Init Price	Extended Price
6	Construction	LS	1	\$	420,000	\$420,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$5.31	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$42,000	\$42,000
	5 & A @ 8%	LS	1		\$33,600	\$33,600
	Contingency @20%	LS	1		\$99,120	\$99,120
				Ev	ent Total	\$594,720
Event						
Year	Item Description	Quantity	Unit	U	Init Price	Extended Price
7	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	384,000	\$384,000
	Dredging (Gross yardage)	CY	1,242,851		\$0.00	\$0
	Dredging (Pay yardage)	CY	920,630		\$5.31	\$4,888,545
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$527,255	\$527,255
	S & A @ 8%	LS	1		\$421,804	\$421,804
	Contingency @20%	LS	1	-	\$1,244,321	\$1,244,321
				Ev	vent Total	\$7,465,924
Event						
Year	Item Description	Quantity	Unit	U	Init Price	<b>Extended Price</b>
11	Construction	LS	1	\$	420,000	\$420,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$5.31	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$42,000	\$42,000
	S & A @ 8%	LS	1		\$33,600	\$33,600
	Contingency @20%	LS	1		\$99,120	\$99,120
				Ev	ent Total	\$594,720
Event						
Year	Item Description	Quantity	Unit	U	Init Price	<b>Extended Price</b>
12	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	384,000	\$384,000
	Dredging (Gross yardage)	CY	1,367,136		\$0.00	\$0
	Dredging (Pay yardage)	CY	1,012,693		\$5.31	\$5,377,400
	Damp	LS	1		\$0	\$0
	LERR	LS	1		50	50
	E & D @10%	LS	1		\$576,140	\$576,140
	S & A @ 8%	LS	1		\$460,912	\$460,912
	Contingency @20%	LS	1		\$1,361,246	\$1,361,246
				Ev	ent Total	\$8,159,698
			Disposa	al Si	te Total	\$38,747,277
			Cost/cy/ca	pac	city of site	\$6.24

Mile 16-21, BU 48, Page46

#### Plan C River Mile 16 -21 Disposal Site - BU 52 Total Capacity In CY - 621,000

					Extended
Item Description	Quantity	Unit	t	Init Price	Price
Construction	LS	1	\$	330,000	\$330,000
Pipeline Installation	LS	1	\$		\$0
Dredging (Gross yardage)	CY	0		\$0.00	\$0
Dredging (Pay yardage)	CY	0		\$5.31	\$0
Damp	LS	1		\$0	\$0
LERR	LS	1		\$81,000	\$81,000
E & D @10%	LS	1		\$33,000	\$33,000
S & A @ 8%	LS	1		\$26,400	\$26,400
Contingency @20%	LS	1		\$77,913	\$77,913
			Ev	ent Total	\$548,313
					Extended
Item Description	Quantity	Unit	L	Init Price	Price
Construction	LS	1	\$	-	\$0
Pipeline Installation	LS	1	\$	64,000	\$64,000
Dredging (Gross yardage)	CY	621,425		\$0.00	\$0
Dredging (Pay yardage)	CY	460,315		\$5.31	\$2,444,273
Damp	LS	1		\$0	\$0
LERR	LS	1		\$0	\$0
E & D @10%	LS	1		\$250,827	\$250,827
S & A @ 8%	LS	1		\$200,662	\$200,662
Contingency @20%	LS	1		\$591,952	\$591,952
			Ev	ent Total	\$3,551,714
		Dispo	sal Si	te Total	\$4,100,027
	Cost/cy/c	apacity of	site		\$6.60
	Construction Pipeline Installation Dredging (Gross yardage) Dredging (Pay yardage) Damp LERR E & D @10% S & A @ 8% Contingency @20%  Item Description Construction Pipeline Installation Dredging (Gross yardage) Dredging (Pay yardage) Damp LERR E & D @10% S & A @ 8%	Construction LS Pipeline Installation LS Dredging (Gross yardage) CY Dredging (Pay yardage) CY Damp LS LERR LS E & D @10% LS S & A @ 8% LS Contingency @20% LS  Item Description Quantity Construction LS Pipeline Installation LS Dredging (Gross yardage) CY Damp LS LERR LS E & D @10% LS S & A @ 8% LS Contingency @20% LS	Construction         LS         1           Pipeline Installation         LS         1           Dredging (Gross yardage)         CY         0           Dredging (Pay yardage)         CY         0           Damp         LS         1           LERR         LS         1           E & D @10%         LS         1           S & A @ 8%         LS         1           Contingency @20%         LS         1    Item Description  Quantity  Unit  Construction  LS  1  Pipeline Installation  LS  1  Dredging (Gross yardage)  CY  621,425  Dredging (Pay yardage)  CY  460,315  Damp  LS  1  LERR  LS  1  E & D @10%  S & A @ 8%  LS  1  Contingency @20%  LS  1  Dispo	Construction         LS         1         \$           Pipeline Installation         LS         1         \$           Dredging (Gross yardage)         CY         0         0           Dredging (Pay yardage)         CY         0         0           Damp         LS         1         1           LERR         LS         1         1           E & D @10%         LS         1         1           S & A @ 8%         LS         1         1           Contingency @20%         LS         1         1           Item Description         Quantity         Unit         L           Construction         LS         1         \$           Pipeline Installation         LS         1         \$           Dredging (Gross yardage)         CY         621,425         \$           Dredging (Pay yardage)         CY         460,315         \$           Damp         LS         1         \$           LERR         LS         1         \$           LERR         LS         1         \$           Contingency @20%         LS         1         \$	Construction         LS         1         \$ 330,000           Pipeline Installation         LS         1         \$ -           Dredging (Gross yardage)         CY         0         \$0.00           Dredging (Pay yardage)         CY         0         \$5.31           Damp         LS         1         \$0           LERR         LS         1         \$81,000           E & D @10%         LS         1         \$33,000           S & A @ 8%         LS         1         \$26,400           Contingency @20%         LS         1         \$777,913           Event Total           Item Description         Quantity         Unit         Unit Price           Construction         LS         1         \$ -           Pipeline Installation         LS         1         \$ 64,000           Dredging (Gross yardage)         CY         621,425         \$0.00           Dredging (Pay yardage)         CY         460,315         \$5.31           Damp         LS         1         \$0           LERR         LS         1         \$250,827           S & A @ 8%         LS         1         \$20,662

#### Plan C River Mile 16 -21 Disposal Site - CDF 17 Total Capacity In CY - 2,336,100

Event						
Year	Item Description	Quantity	Unit		Unit Price	Extended Price
16	Construction	LS	1	\$	1,826,000	\$1,826,000
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$182,600	\$182,600
	S & A @ 8%	LS	1		\$146,080	\$146,080
	Contingency @20%	LS	1		\$418,519	\$418,519
				1	Event Total	\$2,573,199
Event						
Year	Item Description	Quantity	Unit		Unit Price	Extended Price
17	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	1,739,989		\$0.00	\$0
	Dredging (Pay yardage)	CY	1,288,881		\$3.44	\$4,433,751
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$443,375	\$443,375
	S & A @ 8%	LS	1		\$354,700	\$354,700
	Contingency @20%	LS	1		\$1,046,365	\$1,046,365
				1	Event Total	\$6,278,191
Event						
Year	Item Description	Quantity	Unit		Unit Price	Extended Price
18	Construction	LS	1	\$	14	\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$64,000	\$64,000
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$6,400	\$6,400
	5 & A @ 8%	LS	1		\$5,120	\$5,120
	Contingency @20%	LS	1		\$15,104	\$15,104
				1	Event Total	\$90,624
			Dispos	al S	ite Total	\$8,942,014
		Cost/C	CY/capacity	of	site	\$3.83

Mile 16-21, CDF 17 Plan C, Page 48

### River Mile 16-21 Plan B - Disposal Site - 17 (Vertical expansion with new FSD)

Total Capacity In CY - 1,657,000

Event Year	Item Description	Quantity	Unit	Unit Price	<b>Extended Price</b>
11	Construction	LS	1	\$2,544,000	\$2,544,000
	Shore Protection	LF	1,598	\$480	\$767,040
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$290,000	\$290,000
	LERR	LS	1	\$294,000	\$294,000
	E & D @10%	LS	1	\$389,504	\$389,504
	S & A @ 8%	LS	1	\$311,603	\$311,603
	Contingency @20%	LS	1	\$919,229	\$919,229
				Event Total	\$5,500,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
12	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	799,114	\$0.00	\$0
	Dredging (Pay yardage)	CY	591,936	\$3.44	\$2,036,261
	DAMP	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$203,626	\$203,626
	S & A @ 8%	LS	1	\$162,901	\$162,901
	Contingency @20%	LS	1	\$480,558	\$480,558
				Event Total	\$2,900,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
13	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$145,000	\$145,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$14,500	\$14,500
	S & A @ 8%	LS	1	\$11,600	\$11,600
	Contingency @20%	LS	1	\$34,220	
				Event Total	\$200,000

Mile 16-21, CDF 17, Page49

Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
16	Construction	LS	1	\$524,000	\$524,000
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$52,400	\$52,400
	5 & A @ 8%	LS	1	\$41,920	\$41,920
	Contingency @20%	LS	1	\$123,664	\$123,664
				Event Total	\$700,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
17	Construction	LS	1	\$0	\$0
1,	Pipeline Installation	LS	1	\$0	10.7
	Dredging (Gross yardage)	CY	857,886	\$0.00	
	Dredging (Pay yardage)	CY	635,471	\$3.44	
	DAMP	LS	1	\$0	
	LERR	LS	1	\$0	
	E & D @10%	LS	1	\$218,602	
	S & A @ 8%	LS	1	\$174,882	
	Contingency @20%	LS	1	\$515,901	
				Event Total	\$3,100,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
18	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$145,000	\$145,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$14,500	\$14,500
	S & A @ 8%	LS	1	\$11,600	\$11,600
	Contingency @20%	LS	1	\$34,220	\$34,220
				Event Total	\$200,000
			Dispos	al Site Total	\$12,600,000

Cost/CY/capacity of site

\$7.60

#### River Mile 16 -21 Disposal Site - 19

Total Capacity In CY - 2,507,000

Vertical Expansion on all current land with new FSD

Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
3	Construction	LS	1	\$4,288,000	\$4,288,000
	Shore Protection	LF	2,953	\$480	\$1,417,440
	Pipeline Installation	LS	1	SO	50
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$116,000	\$116,000
	LERR	LS	1	\$22,000	\$22,000
	E & D @10%	LS	1	\$584,344	\$584,344
	S & A @ 8%	LS	1	\$467,475	\$467,475
	Contingency @15%	LS	1	\$1,034,289	\$1,034,289
				Event Total	\$7,900,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
5	Construction	LS	1	\$0	SO
	Pipeline Installation	LS	1	so	SO
	Dredging (Gross yardage)	CY	1,242,900	\$0.00	so
	Dredging (Pay yardage)	CY	920,667	\$3.44	\$3,167,093
	DAMP	LS	1	SO	\$0
	LERR	LS	1	so	50
	E & D @10%	LS	1	\$316,709	\$316,709
	S & A @ 8%	LS	1	\$253,367	\$253,367
	Contingency @20%	LS	1	\$747,434	
				Event Total	\$4,500,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
6	Construction	LS	1	\$0	\$0
7	Pipeline Installation	LS	1	so	SO
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	so
	DAMP	LS	1	\$116,000	\$116,000
	LERR	LS	1	ŚO	\$0
	E & D @10%	LS	1	\$11,600	\$11,600
	S & A @ 8%	LS	1	\$9,280	\$9,280
	Contingency @20%	LS	1	\$27,376	\$27,376
				Event Total	\$200,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
8	Construction	LS	1	\$758,500	\$758,500
2	Pipeline Installation	LS	1	\$7.50,500	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	so
	DAMP	LS	1	ŚO	ŚO
		-			
	LERR	LS	1	SO	50
	LERR	-	1		\$0 \$75.850
	LERR E & D @10%	LS	1	\$75,850	\$75,850
	LERR	-	( T		

Mile 16-21, CDF 19, Page 51

<b>Event Year</b>	Item Description	Quantity	Unit	Unit Price	Extended Price
10	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	820,314	\$0.00	\$0
	Dredging (Pay yardage)	CY	607,640	\$3.44	\$2,090,282
	DAMP	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$209,028	\$209,028
	S & A @ 8%	LS	1	\$167,223	\$167,223
	Contingency @20%	LS	1	\$493,306	\$493,306
				Event Total	\$3,000,000
				Evone rotal	\$5,000,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
11	Construction	LS	1	\$503,000	\$503,000
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$116,000	\$116,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$61,900	\$61,900
	S & A @ 8%	LS	1	\$49,520	\$49,520
	Contingency @20%	LS	1	\$146,084	\$146,084
				Event Total	\$900,000
				11.75	F. 1.18.
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
12	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	443,786	\$0.00	\$0
	Dredging (Pay yardage)	CY	328,730	\$3.44	\$1,130,832
	DAMP	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$113,083	\$113,083
	S & A @ 8%	LS	1	\$90,467	\$90,467
	Contingency @20%	LS	1	\$266,876	\$266,876
				Event Total	\$1,600,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
13	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$116,000	\$116,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$11,600	\$11,600
	S & A @ 8%	LS	1	\$9,280	\$9,280
	Contingency @20%	LS	1	\$27,376	\$27,376
				Event Total	\$200,000
			Dispos	al Site Total	\$19,400,000
			Cost/cy/	capacity of site	\$7.74

Mile 16-21, CDF 19, Page 52

#### River Mile 16 -21 Disposal Site - 22 PLAN C

Total Capacity In CY - 1,931,000

Reach Event Requirements In CY - 2,485,800

Event Year	Item Description	Quantity	Unit	Unit Price	<b>Extended Price</b>
7	Construction	LS	1	\$950,000	\$950,000
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	1,242,900	\$0.00	\$0
	Dredging (Pay yardage)	CY	920,667	\$3.44	\$3,167,093
	DAMP	LS	1	\$58,000	\$58,000
	LERR	LS	1	\$22,000	\$22,000
	E & D @10%	LS	1	\$417,509	\$417,509
	S & A @ 8%	LS	1	\$334,007	\$334,007
	Contingency @20%	LS	1	\$968,622	\$968,622

Event Total \$5,917,232

Disposal Site Total \$5,917,232

Cost/CY/capacity of site \$3.06

Mile 16-21, CDF 22, Page53

### River Mile 16 -21 Disposal Site - 22

Total Capacity In CY - 4,575,000 Vertical Expansion with new FSD

Event Year	Harry Danasiation	Overstitus	Unit	Unit Price	Extended Price
Event Year	Item Description Construction	Quantity	1	\$5,410,000	\$5,410,000
3	Pipeline Installation	LS	1	\$5,410,000	\$5,410,000
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$150,000	\$150,000
	LERR	LS	1	\$22,000	\$22,000
	E & D @ 10%	LS	1	\$558,200	\$558,200
	S & A @ 8%	LS	1	\$446,560	\$446,560
	Contingency @15%	LS	1	\$988,014	\$988,014
	containgency & 1070			4200,014	\$550,014
				<b>Event Total</b>	\$7,600,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
5	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	1,242,900	\$0.00	\$0
	Dredging (Pay yardage)	CY	920,667	\$3.44	\$3,167,093
	DAMP	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$316,709	\$316,709
	5 & A @ 8%	LS	1	\$253,367	\$253,367
	Contingency @20%	LS	1	\$747,434	\$747,434
				Event Total	\$4,500,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
6	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$150,000	\$150,000
	LERR	LS	1	\$0	\$0
	E & D @ 10%	LS	1	\$15,000	\$15,000
	5 & A @ 8%	LS	1	\$12,000	\$12,000
	Contingency @20%	LS	1	\$35,400	\$35,400
				<b>Event Total</b>	\$200,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
8	Construction	LS	1	\$1,411,000	\$1,411,000
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3,44	\$0
	DAMP	LS	1	\$0	\$0
	LERR	LS	1	ŚO	\$0
	E & D @10%	LS	1	\$141,100	\$141,100
	S & A @ 8%	LS	1	\$112,880	\$112,880
	Contingency @20%	LS	1	\$332,996	\$332,996
				Event Total	\$2,000,000

Mile 16-21, CDF 22, Page 54

Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
10	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	845,172	\$0.00	\$0
	Dredging (Pay yardage)	CY	626,053	\$3.44	\$2,153,623
	DAMP	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$215,362	\$215,362
	5 & A @ 8%	LS	1	\$172,290	\$172,290
	Contingency @20%	LS	1	\$508,255	\$508,255
				<b>Event Total</b>	\$3,000,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
11	Construction	LS	1	\$642,000	\$642,000
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$150,000	\$150,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$79,200	\$79,200
	S & A @ 8%	LS	1	\$63,360	\$63,360
	Contingency @20%	LS	1	\$186,912	\$186,912
				<b>Event Total</b>	\$1,100,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
12	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	1,242,900	\$0.00	\$0
	Dredging (Pay yardage)	CY	920,667	\$3.44	\$3,167,093
	DAMP	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$316,709	\$316,709
	S & A @ 8%	LS	1	\$253,367	\$253,367
	Contingency @20%	LS	1	\$747,434	\$747,434
				Event Total	\$4,500,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
13	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$150,000	\$150,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$15,000	\$15,000
	S & A @ 8%	LS	1	\$12,000	\$12,000
	Contingency @20%	LS	1	\$35,400	\$35,400
				<b>Event Total</b>	\$200,000

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<b>Event Year</b>	Item Description	Quantity	Unit	Unit Price	Extended Price
15	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	1,244,028	\$0.00	\$0
	Dredging (Pay yardage)	CY	921,502	\$3.44	\$3,169,968
	DAMP	LS	1	\$58,000	\$58,000
	LERR	LS	1	\$0	\$0
	E & D @ 10%	LS	1	\$322,797	\$322,797
	S & A @ 8%	LS	1	\$258,237	\$258,237
	Contingency @20%	LS	1	\$761,800	\$761,800
				Event Total	\$4,600,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
16	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$150,000	\$150,000
	LERR	LS	1	\$0	\$0
	E & D @ 10%	LS	1	\$15,000	\$15,000
	S & A @ 8%	LS	1	\$12,000	\$12,000
	Contingency @20%	LS	1	\$35,400	\$35,400
				Event Total	\$200,000
			Disposa	Site Total	\$27,900,000
		Cost/0	Y/capacity	of site	\$6.10

### River Mile 16-21 Disposal Site - Foreshore Dike

Total Capacity In CY - 8,390,000

	Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
	0	Construction	LS	1	\$5,264,000	\$5,264,000
		Pipeline Installation	LS	1	\$0	\$0
		Dredging (Gross yardage)	CY	1,242,900	\$0.00	\$0
		Dredging (Pay yardage)	CY	920,667	\$3.44	\$3,167,093
		DAMP	LS	1	\$0	\$0
		LERR	LS	1	\$2,000	\$2,000
		E & D @ 10%	LS	1	\$843,309	\$843,309
		S & A @ 8%	LS	1	\$674,647	\$674,647
		Contingency @15%	LS	1	\$1,492,658	\$1,492,658
					<b>Event Total</b>	\$11,400,000
	5V	Name Barrella (car	0	11-14	Halt Balan	Balandad Bilan
	Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
	1	Construction	LS	1	\$0	\$0
		Pipeline Installation	LS	1	\$0	\$0
		Dredging (Gross yardage)	CY	0	\$0.00	\$0
		Dredging (Pay yardage)	CY	0	\$3.44	\$0
		DAMP	LS	1	\$131,000	\$131,000
		LERR	LS	1	\$0	\$0
		E & D @ 10%	LS	1	\$13,100	\$13,100
		S & A @ 8%	LS	1	\$10,480	\$10,480
		Contingency @15%	LS	1	\$23,187	\$23,187
					<b>Event Total</b>	\$200,000
	Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
	2	Construction	LS	1	\$0	\$0
	*	Pipeline Installation	LS	1	\$0	ŚO
		Dredging (Gross yardage)	CY	1,242,900	\$0	\$0
		Dredging (Pay yardage)	CY	920,667	\$3.44	\$3,167,093
		DAMP	LS	1	\$0	\$0,107,033
		LERR	LS	1	\$0	\$0
		E & D @10%	LS	1	\$316,709	\$316,709
		S & A @ 8%	LS	1	\$253,367	\$253,367
		Contingency @15%	LS	1	\$560,576	\$560,576
					Event Total	\$4,300,000
	Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
	3	Construction	LS	1	\$0	\$0
		Pipeline Installation	LS	1	\$0	\$0
		Dredging (Gross yardage)	CY	0	\$0	\$0
		Dredging (Pay yardage)	CY	0	\$3.44	\$0
		DAMP	LS	1	\$131,000	\$131,000
		LERR	LS	1	\$0	\$0
		E & D @ 10%	LS	1	\$13,100	\$13,100
		S & A @ 8%	LS	1	\$10,480	\$10,480
		Contingency @15%	LS	1	\$23,187	\$23,187
		Talling of Tall		•	Event Total	\$200,000

Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
5	Construction	LS	1	\$0	\$0
Goes to 12-16	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	1,217,250	\$0	\$0
	Dredging (Pay yardage)	CY	901,667	\$3.44	\$3,101,733
	DAMP	LS	0	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @ 10%	LS	1	\$310,173	\$310,173
	S & A @ 8%	LS	1	\$248,139	\$248,139
	Contingency @20%	LS	1	\$732,009	\$732,009
				Event Total	\$4,400,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
6	Construction	LS	1	\$2,622,000	\$2,622,000
v	Pipeline Installation	LS	1	\$2,022,000	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	그리고 그리고 얼마나 아내는 그리고 그리고 있다면 다른데 다른데 다른데 다른데 다른데 다른데 다른데 다른데 다른데 다른데	CY	0	\$3.44	\$0
	Dredging (Pay yardage) DAMP	LS	1		\$131,000
		LS	1	\$131,000	\$131,000
	LERR		1	\$0	
	E & D @ 10%	LS LS	1	\$275,300	\$275,300
	S & A @ 8%			\$220,240	\$220,240
	Contingency @20%	LS	1	\$649,708	\$649,708
				Event Total	\$3,900,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
7	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	1,242,900	\$0.00	\$0
	Dredging (Pay yardage)	CY	920,667	\$3.44	\$3,167,093
	DAMP	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @ 10%	LS	1	\$316,709	\$316,709
	S & A @ 8%	LS	1	\$253,367	\$253,367
	Contingency @20%	LS	1	\$747,434	\$747,434
				Event Total	\$4,500,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
8	Construction	LS	1	ŚO	ŚO
-	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$131,000	\$131,000
	LERR	LS	ī	\$0	
	E & D @ 10%	LS	1	\$13,100	\$13,100
	S & A @ 8%	LS	1	\$10,480	\$10,480
	Contingency @20%	LS	1	\$30,916	\$30,916
				Event Total	\$200,000

Event Year		Item Description	Quantity	Unit	Unit Price	Extended Price
10		Construction	LS	1	\$0	\$0
		Pipeline Installation	LS	1	\$0	\$0
		Dredging (Gross yardage)	CY	820,314	\$0.00	\$0
		Dredging (Pay yardage)	CY	607,640	\$3.44	\$2,090,282
		DAMP	LS	1	\$0	\$0
		LERR	LS	1	\$0	\$0
		E&D@10%	LS	1	\$209,028	\$209,028
		S & A @ 8%	LS	1	\$167,223	\$167,223
		Contingency @20%	LS	1	\$493,306	\$493,306
					<b>Event Total</b>	\$3,000,000
Event Year		Item Description	Quantity	Unit	Unit Price	Extended Price
11		Construction	LS	1	\$0	\$0
		Pipeline Installation	LS	1	\$0	\$0
		Dredging (Gross yardage)	CY	0	\$0	\$0
		Dredging (Pay yardage)	CY	0	\$3.44	\$0
		DAMP	LS	1	\$131,000	\$131,000
		LERR	LS	1	\$0	\$0
		E & D @ 10%	LS	1	\$13,100	\$13,100
		S & A @ 8%	LS	1	\$10,480	\$10,480
		Contingency @20%	LS	1	\$30,916	\$30,916
					Event Total	\$200,000
Event Year		Item Description	Quantity	Unit	Unit Price	Extended Price
12	0	Construction	LS	1	\$0	\$0
Goes to		Pipeline Installation	LS	1	\$0	\$0
Mile 12-16		Dredging (Gross yardage)	CY	419,000	\$0	\$0
		Dredging (Pay yardage)	CY	310,370	\$3.44	\$1,067,674
		DAMP	LS	1	\$131,000	\$131,000
		LERR	LS	1	\$0	\$0
		E&D@10%	LS	1	\$119,867	\$119,867
		S & A @ 8%	LS	1	\$95,894	\$95,894
		Contingency @20%	LS	1	\$282,887	\$282,887
					<b>Event Total</b>	\$1,700,000
Event Year		Item Description	Quantity	Unit	Unit Price	Extended Price
13		Construction	LS	1	\$0	\$0
Goes to		Pipeline Installation	LS	1	\$0	\$0
Mile 12-16		Dredging (Gross yardage)	CY	0	\$0	\$0
IL IO		Dredging (Pay yardage)	CY	0	\$3.44	\$0
		DAMP	LS	1	\$131,000	\$131,000
		LERR	LS	1	\$131,000	\$131,000
		E & D @ 10%	LS	1	\$13,100	\$13,100
		S & A @ 8%	LS	1	\$10,480	\$10,480
		Contingency @20%	LS	1	\$30,916	\$30,916
					Event Total	\$200,000
					Lvein rotal	\$200,000

Event Year	Item Description		Quantity	Unit		Unit Price	Extended Price
15	15 Construction	LS			1	0	0
Goes to	Pipeline Installation		LS	1		\$0	\$0
Mile 12-16	Dredging (Gross yardage)		CY	1,217,2	50	\$0	\$0
	Dredging (Pay yardage)		CY	901,667		\$3.44	\$3,101,733
	DAMP		LS	1		\$131,000	\$131,000
	LERR		LS	1		\$0	\$0
	E & D @10%		LS	1		\$323,273	\$323,273
	5 & A @ 8%		LS	1		\$258,619	\$258,619
	Contingency @20%		LS	1		\$762,925	\$762,925
						Event Total	\$4,600,000
Event Year	Item Description		Quantity	Unit		Unit Price	Extended Price
16	Construction		LS	1		\$0	\$0
Goes to	Pipeline Installation		LS	1		\$0	\$0
Mile 12-16	Dredging (Gross yardage)		CY	0		\$0	\$0
	Dredging (Pay yardage)		CY	0		\$3.44	\$0
	DAMP		LS	1		\$131,000	\$131,000
	LERR		LS	1		\$0	\$0
	E & D @ 10%		LS	1		\$13,100	\$13,100
	S & A @ 8%		LS	1		\$10,480	\$10,480
	Contingency @20%		LS	1		\$30,916	\$30,916
						Event Total	\$200,000
Event Year	Item Description		Quantity	Unit		Unit Price	Extended Price
17	Construction		LS	1		\$0	\$0
Goes to	Pipeline Installation		LS	1		\$0	\$0
Mile 12-16	Dredging (Gross yardage)		CY	865,000		\$0	\$0
Wille 12-10	Dredging (Pay yardage)		CY	640,741		\$3.44	\$2,204,148
	DAMP		LS		•)	\$0	\$2,204,148
				1			\$0
	LERR		LS	1		\$0	
	E & D @ 10%		LS	1		\$220,415	\$220,415
	S & A @ 8% Contingency @20%		LS	1		\$176,332 \$520,179	\$176,332 \$520,179
						Event Total	\$3,100,000
Event Year	Item Description		Quantity	Unit		Unit Price	Extended Price
18	Construction		LS	1		\$0	\$0
Goes to	Pipeline Installation		LS	1		\$0	\$0
Mile 12-16	Dredging (Gross yardage)		CY	0		\$0	\$0
	Dredging (Pay yardage)		CY	0		\$3.44	\$0
	DAMP		LS	1		\$131,000	\$131,000
	LERR		LS	1		\$0	\$0
	E & D @10%		LS	1		\$13,100	\$13,100
	S & A @ 8%		LS	1		\$10,480	\$10,480
	Contingency @20%		LS	1		\$30,916	\$30,916
						<b>Event Total</b>	\$200,000
				Dispo	sal	Site Total	\$42,300,000
				Cost/c	y/c	apacity of site	\$5.04

## River Mile 12 - 16 Disposal Site - BU 5

Total Capacity In CY - 8,873,300

Event						
Year	Item Description	Quantity	Unit		Unit Price	Extended Price
0	Construction	LS	1	\$	210,000	\$210,000
	Pipeline Installation	LS	1	\$	128,000	\$128,000
	Dredging (Gross yardage)	CY	2,434,500		\$0.00	\$0
	Dredging (Pay yardage)	CY	1,803,333		\$5.31	\$9,575,700
	LERR	LS	1		\$5,000	\$5,000
	E & D @10%	LS	1		\$991,870	\$991,870
	S & A @ 8%	LS	1		\$793,496	\$793,496
	Contingency @15%	LS	1		\$1,755,610	\$1,755,610
				E	vent Total	\$13,500,000
Event						
Year	Item Description	Quantity	Unit		Unit Price	Extended Price
2	Construction	LS	1	\$	210,000	\$210,000
	Pipeline	LS	1	\$	128,000	\$128,000
	Dredging (Gross yardage)	LS	2,434,500		\$0.00	\$0
	Dredging (Pay yardage)	CY	1,803,333		\$5.31	\$9,575,700
	LERR	CY	1		\$0	\$0
	E & D @10%	LS	1		\$991,370	\$991,370
	S & A @ 8%	LS	1		\$793,096	\$793,096
	Contingency @15%	LS	1		\$1,754,725	\$1,754,725
				E	vent Total	\$13,500,000
Event						
Year	Item Description	Quantity	Unit		Unit Price	Extended Price
12	Construction	LS	1	\$	210,000	\$210,000
	Pipeline Installation	LS	1	\$	128,000	\$128,000
	Dredging (Gross yardage)	CY	1,217,250		\$0.00	\$0
	Dredging (Pay yardage)	CY	901,667		\$5.31	\$4,787,850
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$512,585	\$512,585
	S & A @ 8%	LS	1		\$410,068	\$410,068
	Contingency @20%	LS	1		\$1,209,701	\$1,209,701
				E	vent Total	\$7,300,000

Mile 12 -16, BU 5, Page 61

Event						
Year	Item Description	Quantity	Unit	1	Unit Price	Extended Price
15	Construction	LS	1	\$	210,000	\$210,000
	Pipeline Installation	LS	1	\$	128,000	\$128,000
	Dredging (Gross yardage)	CY	1,217,250		\$0.00	\$0
	Dredging (Pay yardage)	CY	901,667		\$5.31	\$4,787,850
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$512,585	\$512,585
	S & A @ 8%	LS	1		\$410,068	\$410,068
	Contingency @20%	LS	1		\$1,209,701	\$1,209,701
				E	vent Total	\$7,300,000
Event						
Year	Item Description	Quantity	Unit		Unit Price	Extended Price
17	Construction	LS	1	\$	210,000	\$210,000
	Pipeline Installation	LS	1	\$	128,000	\$128,000
	Dredging (Gross yardage)	CY	1,569,500		\$0.00	\$0
	Dredging (Pay yardage)	CY	1,162,593		\$5.31	\$6,173,367
	LERR	LS	1		\$0	\$0
	E & D@10%	LS	1		\$651,137	\$651,137
	S & A @ 8%	LS	1		\$520,909	\$520,909
	Contingency @20%	LS	1		\$1,536,683	\$1,536,683
				E	vent Total	\$9,200,000
			Disposa	al Sit	e Total	\$50,800,000
		Co	st/CY/capaci	ity of	fsite	\$5.73

# Plan C River Mile 12 -16 Disposal Site - BU 6 Total Capacity In CY - 2,191,000

Event	Itani Dannintian	Ourstitu	Unit	Unit Price	Extended Price
Year	Item Description Construction	Quantity	1		
10	Pipeline Installation	LS	1	\$ 105,000	\$105,000
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$5.31	SO
	Damp	LS	1	\$3.31	\$0
	LERR	LS	1	\$301,000	\$301,000
	E & D @10%	LS	1	\$10,500	\$10,500
	5 & A @ 8%	LS	1	\$8,400	\$8,400
	Contingency @20%	LS	1	\$24,780	\$24,780
				Event Total	\$449,680
Event					
Year	Item Description	Quantity	Unit	Unit Price	<b>Extended Price</b>
10	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ 80,000	\$80,000
	Dredging (Gross yardage)	CY	1,217,201	\$0.00	\$0
	Dredging (Pay yardage)	CY	901,630	\$5.31	\$4,787,655
	Damp	LS	1	\$5	\$5
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$486,766	\$486,766
	S & A @ 8%	LS	1	\$389,413	\$389,413
	Contingency @20%	LS	1	\$1,148,768	\$1,148,768
Land.				Event Total	\$6,892,607
Event Year	No. of the second second	0	Hate	Unit Price	Extended Price
12	Item Description Construction	Quantity	Unit 1	\$ 105,000	\$105,000
12	Pipeline Installation	LS	1	\$ 105,000	\$105,000
	The state of the s	CY	0	\$0.00	\$0
	Dredging (Gross yardage)	CY	0	\$5.31	\$0
	Dredging (Pay yardage) Damp	LS	1	\$3.51	\$0
	LERR	LS	1	50	\$0
	E & D @10%	LS	1	\$10,500	\$10,500
	S & A @ 8%	LS	1	\$8,400	\$8,400
	Contingency @20%	LS	1	\$24,780	\$24,780
				Event Total	\$148,680
Event					
Year	Item Description	Quantity	Unit	Unit Price	<b>Extended Price</b>
12	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ 80,000	\$80,000
	Dredging (Gross yardage)	CY	973,760	\$0.00	\$0
	Dredging (Pay yardage)	CY	721,304	\$5.31	\$3,830,124
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$391,012	\$391,012
	S & A @ 8%	LS	1	\$312,810	\$312,810
	Contingency @20%	LS	1	\$924,353	\$924,353
				Event Total	\$5,538,300
			Disposal	Site Total	\$13,029,267
			CY/capacity		\$5.95

Mile 12 -16, BU 6, Plan C, Page 63

# Plan C River Mile 12 - 16 Disposal Site - BU 7 Total Capacity In CY - 3,895,000

	Total Ca	Dacity in CT -	3,03	33,000	
Event					Extended
Year	Item Description	Quantity	Unit	Unit Price	
12	Construction	LS	1	\$ 910,000	
	Pipeline Installation	LS	1	\$ 510,000	- \$0
	Dredging (Gross yardage)	CY	0	\$0.0	
	Dredging (Pay yardage)	CY	0	\$5.3	
	Damp	LS	1		0 \$0
	LERR	LS	1		0 \$0
	E & D @10%	LS	1	\$91,00	
		LS	1	\$72,80	
	S & A @ 8%		1		
	Contingency @20%	LS	1	\$214,76	\$214,760
				<b>Event Tota</b>	
Event					Extended
Year	Item Description	Quantity	Unit	<b>Unit Price</b>	Price
12	Construction	LS	1	\$	- \$0
	Pipeline Installation	LS	1	\$ 128,000	\$128,000
	Dredging (Gross yardage)	CY	1,460,639	\$0.0	0 \$0
	Dredging (Pay yardage)	CY	1,081,955	\$5.3	1 \$5,745,181
	Damp	LS	1	Ś	5 \$5
	LERR	LS	1	Ś	0 50
	E & D @10%	LS	1	\$587,31	9 \$587,319
	5 & A @ 8%	LS	1	\$469,85	
	Contingency @20%	LS	1	\$1,386,07	
Event				Event Tota	\$8,316,432 Extended
Year	Item Description	Quantity	Unit	Unit Price	
17	Construction	LS	1	\$ 105,000	
	Pipeline Installation	LS	1	\$	- \$0
	Dredging (Gross yardage)	CY		\$0.0	
	Dredging (Pay yardage)	CY	0	\$0.0	
	Damp	LS	1		0 \$0
	LERR	LS	1	\$520,00	
	E & D @10%	LS	1	\$10,50	
	S & A @ 8%	LS	1	\$8,40	
	Contingency @20%	LS	1	\$24,78	
Event				Event Tota	I \$668,680 Extended
Year	Itam Dannintian	Our nation	Unit	Unit Price	
	Item Description	Quantity	-		
17	Construction	LS	1	\$ 384,000	
	Pipeline Installation	LS	1	\$	- \$0
	Dredging (Gross yardage)	CY	2,434,400	Charles and the charles are the charles and the charles are th	
	Dredging (Pay yardage)	CY	1,803,259		
	Damp	LS	1		0 \$0
	LERR	LS	1		0 \$0
	E & D @10%	LS	1	\$995,93	
	S & A @ 8%	LS	1	\$796,74	AND THE RESERVE OF THE PARTY OF
	Contingency @20%	LS	1	\$2,350,39	6 \$2,350,396
				Event Tota	\$14,102,376
			Disposa	l Site Total	\$24,376,048

Mile 12 - 16, BU 7, Plan C, Page 64

Cost/CY/capacity of site

\$6.26

River Mile 12 - 16
Disposal Site - D/E Upland MVN Plan 8\_19\_10

Total Capacity In CY - 6,884,500

	Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
	3	Construction	LS	1	8,024,000	\$8,024,000
		Pipeline Installation	LS	1	\$0.00	\$0
		Dredging (Gross yardage)	CY	0	\$0.00	\$0
		Dredging (Pay yardage)	CY	0	\$3.44	\$0
		DAMP	LS	1	\$5	\$5
		LERR	LS	1	\$2,000	\$2,000
		E & D @10%	LS	1	\$802,601	\$802,601
		S & A @ 8%	LS	1	\$642,080	\$642,080
		Contingency @15%	LS	1	\$1,515,310	\$1,515,310
					Event Total	\$11,000,000
	Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
	5	Construction	LS	1	\$0	\$0
		Pipeline Installation	LS	1	\$0	\$0
		Dredging (Gross yardage)	CY	1,217,250	\$0.00	\$0
		Dredging (Pay yardage)	CY	901,667	\$3.44	\$3,101,733
		DAMP	LS	1	\$0	\$0
		LERR	LS	1	\$5	\$5
		E & D @10%	LS	1	\$310,174	\$310,174
		S & A @ 8%	LS	1	\$248,139	\$248,139
		Contingency @20%	LS	1	\$732,010	\$732,010
					Event Total	\$4,400,000
	Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
	6	Construction	LS	1	\$0	\$0
		Pipeline Installation	LS	1	\$0	\$0
		Dredging (Gross yardage)	CY	0	\$0.00	\$0
		Dredging (Pay yardage)	CY	0	\$3.44	\$0
		DAMP	LS	1	\$262,000	\$262,000
		LERR	LS	1	\$0	\$0
		E & D @10%	LS	1	\$26,200	\$26,200
		S & A @ 8%	LS	1	\$20,960	\$20,960
		Contingency @20%	LS	1	\$61,832	\$61,832
					Event Total	\$400,000
	Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
	7	Construction	LS	1	\$0	\$0
		Pipeline Installation	LS	1	\$0	\$0
		Dredging (Gross yardage)	CY	2,434,500	\$0.00	\$0
		Dredging (Pay yardage)	CY	1,803,333	\$3.44	\$6,203,466
		DAMP	LS	1	\$0	\$0
		LERR	LS	1	\$0	\$0
		E & D @10%	LS	1	\$620,347	\$620,347
		S & A @ 8%	LS	1	\$496,277	\$496,277
		Contingency @20%	LS	1	\$1,537,219	\$1,537,219
					Event Total	\$8,900,000

Mile 12 -16, CDF D/E, Rev. Plan B, Page 65

<b>Event Year</b>	Item Description	Quantity	Unit	Unit Price	Extended Price
8	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$262,000	\$262,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$26,200	\$26,200
	S & A @ 8%	LS	1	\$20,960	\$20,960
	Contingency @20%	LS	1	\$61,832	\$61,832
				Event Total	\$400,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
9	Construction	LS	1	\$2,456,000	\$2,456,000
-	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$245,600	\$245,600
	S & A @ 8%	LS	1	\$196,480	\$196,480
	Contingency @20%	LS	1	\$579,616	\$579,616
	Contingency @20%	В	1	\$579,616	\$379,010
				Event Total	\$3,500,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
10	Construction	LS	1	\$0	\$0
7.	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	2,434,500	\$0.00	\$0
	Dredging (Pay yardage)	CY	1,803,333	\$3.44	\$6,203,467
	DAMP	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$620,347	\$620,347
	S & A @ 8%	LS	1	\$496,277	\$496,277
	Contingency @20%	LS	1	\$1,537,219	\$1,537,219
				Event Total	\$8,900,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
11	Construction	LS	1	\$0	\$0
44	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS		\$262,000	\$262,000
			1	\$262,000	
	LERR	LS	1		\$0
	E & D @ 10%	LS	1	\$26,200	\$26,200
	5 & A @ 8% Contingency @20%	LS LS	1	\$20,960 \$61,832	\$20,960 \$61,832
	And and a second				
				Event Total	\$400,000

Mile 12 -16, CDF D/E, Rev. Plan B, Page 66

<b>Event Year</b>	Item Description	Quantity	Unit	Unit Price	Extended Price
12	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	798,250	\$0.00	\$0
	Dredging (Pay yardage)	CY	591,296	\$3.44	\$2,034,059
	DAMP	LS	1	\$131,000	\$131,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$216,506	\$216,506
	S & A @ 8%	LS	1	\$173,205	\$173,205
	Contingency @20%	LS	1	\$510,954	\$510,954
				Event Total	\$3,100,000
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
13	Construction	LS	1	\$0	\$0
	Pipeline Installation	LS	1	\$0	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	DAMP	LS	1	\$262,000	\$262,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$26,200	\$26,200
	S & A @ 8%	LS	1	\$20,960	\$20,960
	Contingency @20%	LS	1	\$61,832	\$61,832
				Event Total	\$400,000
			Dispos	al Site Total	\$41,400,000
		Cost/C	Y/capacity	of site	\$6.01

River Mile 9.5 - 12 Disposal Site - BU18

Total Capacity In CY - 6,946,000

Event Year	Item Description	Quantity	Unit		Unit Price	<b>Extended Price</b>
0	Construction	LS	1	\$	330,000	\$330,000
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$5.31	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$5,000	\$5,000
	E & D @10%	LS	1		\$33,000	\$33,000
	S & A @ 8%	LS	1		\$26,400	\$26,400
	Contingency @15%	LS	1		\$58,410	\$58,410
					Event Total	\$452,810
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
1	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	322,000	\$322,000
	Dredging (Gross yardage)	CY	1,323,100		\$0.00	
	Dredging (Pay yardage)	CY	980,074		\$5.31	\$5,204,193
	Damp	LS	1		\$0	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$552,619	\$552,619
	S & A @ 8%	LS	1		\$442,095	\$442,095
	Contingency @15%	LS	1		\$978,136	\$978,136
					Event Total	\$7,499,044
Event Year	Itaria Bassalakia	O N.	11-26		Unit Dele-	Extended Price
6	Item Description Construction	Quantity LS	Unit 1	•	Unit Price 330,000	\$330,000
0	Pipeline Installation	LS	1	\$		\$350,000
	Dredging (Gross yardage)	CY	0	P	\$0.00	
	Dredging (Pay yardage)	CY	0		\$3.44	
		LS	1			\$0
	Damp LERR	LS	1		\$0 \$0	
		LS	1		\$33,000	\$33,000
	E & D @10%		1			
	S & A @ 8%	LS LS	1		\$26,400	\$26,400
	Contingency @20%	15	1		\$77,880	\$77,880
					<b>Event Total</b>	\$467,280

Mile 9.5 - 12, BU 18, Page 68

Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
7	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$	322,000	\$322,000
	Dredging (Gross yardage)	CY	992,326		\$0.00	
	Dredging (Pay yardage)	CY	735,056		\$5.31	\$3,903,147
	Damp	LS	1		\$0	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$422,515	\$422,515
	S & A @ 8%	LS	1		\$338,012	
	Contingency @20%	LS	1		\$994,600	
					Event Total	\$5,980,274
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
9	Construction	LS	1	\$	330,000	\$330,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0	*	\$0.00	
	Dredging (Pay yardage)	CY	0		\$3.44	
	Damp	LS	1		\$0	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$33,000	
	S & A @ 8%	LS	1		\$26,400	
	Contingency @20%	LS	1		\$77,880	
					Event Total	\$467,280
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
10	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$	322,000	\$322,000
	Dredging (Gross yardage)	CY	661,550		\$0.00	
	Dredging (Pay yardage)	CY	490,037		\$5.31	
	Damp	LS	1		\$0	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$292,410	
	S & A @ 8%	LS	1		\$233,928	
	Contingency @20%	LS	1		\$690,087	\$690,087
					Event Total	\$4,140,521
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
12	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	330,000	\$330,000

Mile 9.5 - 12, BU 18, Page 69

	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$5.31	
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$33,000	\$33,000
	S & A @ 8%	LS	1		\$26,400	\$26,400
	Contingency @20%	LS	1		\$77,880	\$77,880
					Event Total	\$467,280
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
13	Construction	LS	1	\$	-	\$0
13	Pipeline Installation	LS	1	\$	322,000	\$322,000
	Dredging (Gross yardage)	CY	1,323,100	7	\$0.00	
	Dredging (Pay yardage)	CY	980,074		\$5.31	
	Damp	LS	1		\$0	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$552,619	
	S & A @ 8%	LS	1		\$442,095	\$442,095
	Contingency @20%	LS	1		\$1,304,182	\$1,304,182
					Event Total	\$7,825,089
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
15	Construction	LS	1	\$	330,000	\$330,000
13	Pipeline Installation	LS	1	\$	330,000	\$0
	Dredging (Gross yardage)	CY	0	7	\$0.00	\$0
					20.00	JU.
					\$5.31	\$0
	Dredging (Pay yardage)	CY	0		\$5.31	\$0 \$0
	Dredging (Pay yardage) Damp	CY LS	0 1		\$0	\$0
	Dredging (Pay yardage) Damp LERR	CY LS LS	0 1 1		\$0 \$0	\$0 \$0
	Dredging (Pay yardage) Damp LERR E & D @10%	CY LS LS LS	0 1 1 1		\$0 \$0 \$33,000	\$0 \$0 \$33,000
	Dredging (Pay yardage) Damp LERR	CY LS LS	0 1 1		\$0 \$0	\$0 \$0
	Dredging (Pay yardage) Damp LERR E & D @10% S & A @ 8%	CY LS LS LS	0 1 1 1		\$0 \$0 \$33,000 \$26,400	\$0 \$0 \$33,000 \$26,400
Event Year	Dredging (Pay yardage) Damp LERR E & D @10% S & A @ 8% Contingency @20%	CY LS LS LS LS	0 1 1 1 1		\$0 \$33,000 \$26,400 \$77,880 Event Total	\$0 \$33,000 \$26,400 \$77,880 \$467,280
Event Year 16	Dredging (Pay yardage) Damp LERR E & D @10% S & A @ 8% Contingency @20%	CY LS LS LS LS	0 1 1 1 1 1	Ś	\$0 \$33,000 \$26,400 \$77,880 Event Total	\$0 \$33,000 \$26,400 \$77,880 \$467,280
Event Year 16	Dredging (Pay yardage) Damp LERR E & D @10% S & A @ 8% Contingency @20%  Item Description Construction	CY LS LS LS LS LS	0 1 1 1 1 1 Unit	\$ 5	\$0 \$33,000 \$26,400 \$77,880 Event Total	\$0 \$33,000 \$26,400 \$77,880 \$467,280 Extended Price \$0
	Dredging (Pay yardage) Damp LERR E & D @10% S & A @ 8% Contingency @20%  Item Description Construction Pipeline Installation	CY LS LS LS LS LS LS LS	0 1 1 1 1 1 Unit 1	\$ \$	\$0 \$33,000 \$26,400 \$77,880 Event Total Unit Price	\$0 \$33,000 \$26,400 \$77,880 <b>\$467,280</b> Extended Price \$0 \$322,000
	Dredging (Pay yardage) Damp LERR E & D @10% S & A @ 8% Contingency @20%  Item Description Construction Pipeline Installation Dredging (Gross yardage)	CY LS LS LS LS LS CY	0 1 1 1 1 1 Unit 1 1,323,100	\$ \$	\$0 \$33,000 \$26,400 \$77,880 Event Total Unit Price 322,000 \$0.00	\$0 \$33,000 \$26,400 \$77,880 <b>\$467,280</b> Extended Price \$0 \$322,000 \$0
	Dredging (Pay yardage) Damp LERR E & D @10% S & A @ 8% Contingency @20%  Item Description Construction Pipeline Installation Dredging (Gross yardage) Dredging (Pay yardage)	CY LS LS LS LS LS CY CY	0 1 1 1 1 1 1 Unit 1 1,323,100 980,074	\$ \$	\$0 \$33,000 \$26,400 \$77,880 Event Total Unit Price 322,000 \$0.00 \$5.31	\$0 \$33,000 \$26,400 \$77,880 <b>\$467,280</b> Extended Price \$0 \$322,000 \$0 \$5,204,193
	Dredging (Pay yardage) Damp LERR E & D @10% S & A @ 8% Contingency @20%  Item Description Construction Pipeline Installation Dredging (Gross yardage)	CY LS LS LS LS LS CY	0 1 1 1 1 1 Unit 1 1,323,100	\$ \$	\$0 \$33,000 \$26,400 \$77,880 Event Total Unit Price 322,000 \$0.00	\$0 \$33,000 \$26,400 \$77,880 <b>\$467,280</b> Extended Price \$0 \$322,000 \$0 \$5,204,193 \$0

Mile 9.5 - 12, BU 18, Page 70

	S & A @ 8%	LS	1		\$442,095	\$442,095
	Contingency @20%	LS	1		\$1,304,182	\$1,304,182
					Event Total	\$7,825,089
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
18	Construction	LS	1	\$	330,000	\$330,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$5.31	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$33,000	\$33,000
	S & A @ 8%	LS	1		\$26,400	\$26,400
	Contingency @20%	LS	1		\$77,880	\$77,880
					Event Total	\$467,280
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
19	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	322,000	\$322,000
	Dredging (Gross yardage)	CY	1,323,100		\$0.00	\$0
	Dredging (Pay yardage)	CY	980,074		\$5.31	\$5,204,193
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$552,619	\$552,619
	S & A @ 8%	LS	1		\$442,095	\$442,095
	Contingency @20%	LS	1		\$1,304,182	\$1,304,182
					Event Total	\$7,825,089
			Dispos	sal	Site Total	\$43,884,316
			Cost/CY/	сар	acity of site	\$6.32

River Mile 9.5 - 12 Disposal Site - BU49

Total Capacity In CY - 2,315,000

Event Year	Item Description	Quantity	Unit	U	Init Price	Extended Price
3	Construction	LS	1	\$	330,000	\$330,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$5.31	\$0
	Dredging (Pay yardage)	CY	0		\$5.31	\$0
	Shore Protection	LS	1		\$0	\$0
	LERR	LS	1		\$265,000	\$265,000
	E & D@10%	LS	1		\$33,000	\$33,000
	S & A @ 8%	LS	1		\$26,400	\$26,400
	Contingency @15%	LS	1		\$58,410	\$58,410
				Ev	ent Total	\$712,810
Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
4	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	5	432,000	\$432,000
	Dredging (Gross yardage)	CY	1,323,100		\$0.00	
	Dredging (Pay yardage)	CY	980,074		\$5.31	\$5,204,193
	Damp	LS	1		\$0	
	LERR	LS	1		\$0	
	E & D @ 10%	LS	1		\$563,619	\$563,619
	S & A @ 8%	LS	1		\$450,895	
	Contingency @15%	LS	1		\$997,606	the first transfer and the second
				Ev	ent Total	\$7,648,314
Event Year	Item Description	Quantity	Unit	ti	nit Price	Extended Price
6	Construction	LS	1	\$	330,000	\$330,000
17	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	0	7	\$0.00	
	Dredging (Pay yardage)	CY	0		\$5.31	
	Damp	LS	1		\$0	
	LERR	LS	1		\$0	
	E & D @10%	LS	1		\$33,000	
	S & A @ 8%	LS	1		\$26,400	
	Contingency @ 20%	LS	1		\$77,880	
				Ev	ent Total	\$467,280

Mile 9.5 -12, BU 49, Page 72

Event Year	Item Description	Quantity	Unit	L	Init Price	Extended Price
7	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$	432,000	\$432,000
	Dredging (Gross yardage)	CY	330,776		\$0.00	\$0
	Dredging (Pay yardage)	CY	245,019		\$5.31	\$1,301,051
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$173,305	\$173,305
	S & A @ 8%	LS	1		\$138,644	\$138,644
	Contingency @20%	LS	1		\$409,000	\$409,000
				Ev	ent Total	\$2,454,000
Event Year	Itam Description	Ounntitu	Unit		Init Price	Extended Price
9	Item Description Construction	Quantity LS	1	\$	330,000	\$330,000
9	Pipeline Installation	LS	1	\$	330,000	\$330,000
	Dredging (Gross yardage)	CY	1	À	\$0.00	
	Dredging (Pay yardage)	CY	0		\$0.00	-
	Damp	LS	1		\$0.00	
	LERR	LS	1		\$0	
	E & D @ 10%	LS	1		\$33,000	
	S & A @ 8%	LS	1		\$26,400	
	Contingency @20%	LS	1		\$77,880	
				Ev	ent Total	\$467,280
			11-11			F
Event Year	Item Description	Quantity	Unit		Init Price	Extended Price
10	Construction	LS LS	1	\$	422.000	\$0
	Pipeline Installation	-		>	432,000	\$432,000
	Dredging (Gross yardage)	CY	661,550		\$0.00	
	Dredging (Pay yardage)	CY	490,037		\$5.31	
	Damp	LS	1		\$0	
	LERR	LS	1		\$0	
	E & D @ 10%	LS	1		\$303,410	
	S & A @ 8% Contingency @20%	LS LS	1		\$242,728 \$715,091	
				Ev	ent Total	\$4,295,325

Mile 9.5 -12, BU 49, Page 73

Cost/CY/capacity of site

\$6.93

## River Mile 5 - 9.5 Disposal Site - BU 19

Total Capacity In CY - 1,551,000

Event Year	Item Description	Quantity	Unit	Ur	nit Price	Extended Price
6	Construction	LS	1	\$	230,000	\$230,000
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$5.31	\$0
	Damp	LS	1			\$0
	LERR	LS	1		\$135,000	\$135,000
	E & D @10%	LS	1		\$23,000	\$23,000
	S & A @ 8%	LS	1		\$18,400	\$18,400
	Contingency @20%	LS	1		\$54,280	\$54,280
				Eve	ent Total	\$460,680
Event Year	Item Description	Quantity	Unit	Ur	nit Price	Extended Price
7	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$	252,000	\$252,000
	Dredging (Gross yardage)	CY	1,550,399		\$0.00	\$0
	Dredging (Pay yardage)	CY	1,148,444		\$5.31	\$6,098,238
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$635,024	\$635,024
	S & A @ 8%	LS	1		\$508,019	\$508,019
	Contingency @20%	LS	1	5	1,498,085	\$1,498,085
				Eve	ent Total	\$8,991,365
			Dispos	al Site	e Total	\$9,452,045
		Cost/CY/capacity of site			\$6.09	

Mile 5 - 9.5, BU 19, Page 74

## River Mile 5 - 9.5 Disposal Site - BU 20

Total Capacity In CY - 775,000

<b>Event Year</b>	Item Description	Quantity	Unit	ι	Init Price	<b>Extended Price</b>
3	Construction	LS	1	\$	230,000	\$230,000
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$5.31	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$5,000	\$5,000
	E & D @10%	LS	1		\$23,000	\$23,000
	S & A @ 8%	LS	1		\$18,400	\$18,400
	Contingency @15%	LS	1		\$40,710	\$40,710
				Ev	ent Total	\$317,110
Event Year	Item Description	Quantity	Unit	υ	Init Price	Extended Price
4	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	455,000	\$455,000
	Dredging (Gross yardage)	CY	775,200		\$0.00	\$0
	Dredging (Pay yardage)	CY	574,222		\$5.31	\$3,049,119
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$350,412	\$350,412
	S & A @ 8%	LS	1		\$280,330	\$280,330
	Contingency @15%	LS	1		\$619,094	\$619,094
				Ev	ent Total	\$4,753,954
			Dispos	al Si	te Total	\$5,071,064
		Cost/C	Y/capacity	of s	ite	\$6.54

Mile 5 - 9.5, BU 20, Page 75

River Mile 5 - 9.5 Disposal Site - H

Total Capacity In CY - 1,374,400

<b>Event Year</b>	Item Description	Quantity	Unit	U	nit Price	<b>Extended Price</b>
0	Construction	LS	1	\$	719,000	\$719,000
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$5.31	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$2,000	\$2,000
	E & D @10%	LS	1		\$71,900	\$71,900
	S & A @ 8%	LS	1		\$57,520	\$57,520
	Contingency @15%	LS	1		\$127,263	\$127,263
				Ev	ent Total	\$977,683
Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
1	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	14	\$0
	Dredging (Gross yardage)	CY	775,200		\$0.00	\$0
	Dredging (Pay yardage)	CY	574,222		\$3.44	\$1,975,324
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$197,532	\$197,532
	S & A @ 8%	LS	1		\$158,026	\$158,026
	Contingency @15%	LS	1		\$349,632	\$349,632
				Ev	ent Total	\$2,680,514
Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
2	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$	1	\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$62,000	\$62,000
	LERR	LS	1		\$0	\$0
	E & D @10%	LS	1		\$6,200	\$6,200
	S & A @ 8%	LS	1		\$4,960	\$4,960
	Contingency @15%	LS	1		\$10,974	\$10,974
				Ev	ent Total	\$84,134

Mile 5 -9.5, BU 19, Page 76

<b>Event Year</b>	Item Description	Quantity	Unit	Unit Price	<b>Extended Price</b>
3	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	LS	1	\$62,000	\$62,000
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$6,200	\$6,200
	S & A @ 8%	LS	1	\$4,960	
	Contingency @15%	LS	1	\$10,974	\$10,974
				Event Total	\$84,134
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
13	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	465,120	\$0.00	\$0
	Dredging (Pay yardage)	CY	344,533	\$3.44	
	Damp	LS	1	\$0	
	LERR	LS	1	\$0	
	E & D @10%	LS	1	\$118,519	\$118,519
	S & A @ 8%	LS	1	\$94,815	\$94,815
	Contingency @20%	LS	1	\$280,891	\$280,891
				Event Total	\$1,679,419
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
14	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	LS	1	\$62,000	
	LERR	LS	1	\$0	\$0
	E & D @10%	LS	1	\$6,200	\$6,200
	S & A @ 8%	LS	1	\$4,960	\$4,960
	Contingency @20%	LS	1	\$14,958	\$14,958
				Event Total	\$88,118
			Dispos	al Site Total	\$5,594,002
		Cost	/CY/capac	ity of site	\$4.07

Mile 5 -9.5, BU 19, Page 77

River Mile 5 - 9.5 Disposal Site - M

Total Capacity In CY - 5,059,200

Event Year	Item Description	Quantity	Unit		Jnit Price	Extended Price
3	Construction	LS	1	\$	1,972,000	\$1,972,000
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$5.31	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$810,000	\$810,000
	E & D @10%	LS	1		\$197,200	\$197,200
	S & A @ 8%	LS	1		\$157,760	\$157,760
	Contingency @15%	LS	1		\$349,044	\$349,044
				E	vent Total	\$3,486,004
Event Year	Item Description	Quantity	Unit	1	Jnit Price	Extended Price
4	Construction	LS	1	\$	Jillerine	\$0
4	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	775,200	2	\$0.00	\$0
		CY	574,222		\$3.44	\$1,975,324
	Dredging (Pay yardage) Damp	LS	1		\$3.44	\$1,975,324
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		200	100
		LS	1		\$197,532	\$197,532
	5 & A @ 8%				\$158,026	\$158,026
	Contingency @15%	LS	1		\$349,632	\$349,632
				E	vent Total	\$2,680,514
Event Year	Item Description	Quantity	Unit	1	Jnit Price	Extended Price
5	Construction	LS	1	\$	-	ŚO
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$171,000	\$171,000
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$17,100	\$17,100
	S & A @ 8%	LS	1		\$13,680	\$13,680
	Contingency @20%	LS	1		\$40,356	\$40,356
				E	vent Total	\$242,136
Event Year	Item Description	Quantity	Unit		Jnit Price	Extended Price
6	Construction	LS	1	\$	out tile	\$0
	Pipeline Installation	LS	1	S	3	\$0
	Dredging (Gross yardage)	CY	0	4	\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$171,000	\$171,000
	LERR	LS	1		\$171,000	\$171,000
	E & D @ 10%	LS	1		\$17,100	\$17,100
	S & A @ 8%	LS	1		\$13,680	\$17,100
	Contingency @20%	LS	1		\$40,356	\$40,356

Mile 5 - 9.5, CDF M, Page 78

Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
10	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	775,200	\$0.00	\$0
	Dredging (Pay yardage)	CY	574,222	\$3.44	\$1,975,324
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @ 10%	LS	1	\$197,532	\$197,532
	S & A @ 8%	LS	1	\$158,026	\$158,026
	Contingency @20%	LS	1	\$466,176	\$466,176
				Event Total	\$2,797,058
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
11	Construction	LS	1	\$ -	\$0
11	Pipeline Installation	LS	1	\$ -	\$0
		CY	0	\$0.00	
	Dredging (Gross yardage)			60,000	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	LS	1	\$171,000	\$171,000
	LERR	LS	1	\$0	\$0
	E & D @ 10%	LS	1	\$17,100	\$17,100
	S & A @ 8%	LS	1	\$13,680	\$13,680
	Contingency @20%	LS	1	\$40,356	\$40,356
				Event Total	\$242,136
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
13	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	1,085,280	\$0.00	\$0
	Dredging (Pay yardage)	CY	803,911	\$3.44	\$2,765,454
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	
	E & D @ 10%	LS	1	\$276,545	
	S & A @ 8%	LS	1	\$221,236	\$221,236
	Contingency @20%	LS	1	\$652,647	\$652,647
				Event Total	\$3,915,883
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
14	Construction	LS	1	\$ -	\$0
14		LS	1	\$ -	\$0
	Pipeline Installation				
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	LS	1	\$171,000	\$171,000
	LERR	LS	1	\$0	
	E & D @ 10%	LS	1	\$17,100	\$17,100
	S & A @ 8%	LS	1	\$13,680	
	Contingency @20%	LS	1	\$40,356	\$40,356
				<b>Event Total</b>	\$242,136

Mile 5 - 9.5, CDF M, Page 79

Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
15	Construction	LS	1	\$ 351,000	\$351,000
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @ 10%	LS	1	\$35,100	\$35,100
	S & A @ 8%	LS	1	\$28,080	\$28,080
	Contingency @20%	LS	1	\$82,836	\$82,836
				Event Total	\$497,016
		•	11-11		
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
16	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	1,550,399	\$0.00	\$0
	Dredging (Pay yardage)	CY	1,148,444	\$3.44	\$3,950,647
	Damp	LS	1	\$0	\$0
	LERR	LS	1	\$0	\$0
	E & D @ 10%	LS	1	\$395,065	\$395,065
	S & A @ 8%	LS	1	\$316,052	\$316,052
	Contingency @20%	LS	1	\$932,353	\$932,353
				Event Total	\$5,594,117
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
17	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	0	\$0.00	\$0
	Dredging (Pay yardage)	CY	0	\$3.44	\$0
	Damp	LS	1	\$171,000	\$171,000
	LERR	LS	1	\$0	\$0
	E & D @ 10%	LS	1	\$17,100	\$17,100
	S & A @ 8%	LS	1	\$13,680	\$13,680
	Contingency @20%	LS	1	\$40,356	\$40,356
				Event Total	\$242,136
Event Year	Item Description	Quantity	Unit	Unit Price	Extended Price
19	Construction	LS	1	\$ -	\$0
	Pipeline Installation	LS	1	\$ -	\$0
	Dredging (Gross yardage)	CY	775,200	\$0.00	\$0
	Dredging (Pay yardage)	CY	574,222	\$3.44	\$1,975,324
	Damp	LS	1	\$0	\$1,575,524
	LERR	LS	1	\$0	\$0
					The second second
	E & D @ 10%	LS	1	\$197,532	\$197,532
	S & A @ 8% Contingency @20%	LS	1	\$158,026 \$466,176	\$158,026 \$466,176
	S Inc. Brown			Event Total	\$2,797,058
			Dispos	sal Site Total	\$22,978,330
		Sales.			
		Cost/CY/capacity of site			\$4.54

Mile 5 - 9.5, CDF M, Page 80

River Mile 5 - 9.5
Disposal Site - N
Total Capacity In CY - 2,826,400

Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
0	Construction	LS	1	\$	1,446,000	\$1,446,000
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$5.31	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Shore Protection	LS	1		\$0	\$0
	LERR	LS	1		\$772.000	\$772.000
	E & D @ 10%	LS	1		\$144,600	\$144,600
	S & A @ 8%	LS	1		\$115,680	\$115,680
	Contingency @15%	LS	1		\$255,942	\$255,942
				E	vent Total	\$2,734,222
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
1	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	775,200		\$0.00	\$0
	Dredging (Pay yardage)	CY	574,222		\$3.44	\$1,975,324
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$197,532	\$197,532
	5 & A @ 8%	LS	1		\$158,026	\$158,026
	Contingency @15%	LS	1		\$353,583	\$353,583
				E	vent Total	\$2,684,465
Event Year	Item Description	Quantity	Unit		Unit Price	Extended Price
2	Construction	LS	1	\$	Unit Price	\$0
2		LS	1	\$	-	\$0
	Pipeline Installation	CY	1	>	\$0.00	\$0
	Dredging (Gross yardage)	CY	0		1.	\$0
	Dredging (Pay yardage)				\$0.00	
	Damp	LS	1		\$96,000	\$96,000
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$9,600	\$9,600
	S & A @ 8%	LS	1		\$7,680	\$7,680
	Contingency @15%	LS	1		\$16,992	\$16,992
				E	vent Total	\$130,272
Event Year	Item Description	Quantity	Unit	1	Unit Price	Extended Price
3	Construction	LS	1	\$	-	\$0
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$96,000	\$96,000
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$9,600	\$9,600
	5 & A @ 8%	LS	1		\$7,680	\$7,680
	Contingency @15%	LS	1		\$16,992	\$16,992
				E	vent Total	\$130,272
						196 7 197 3

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Event Year	Item Description	Quantity	Unit	U	nit Price	Extended Price
10	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	775,200		\$0.00	\$0
	Dredging (Pay yardage)	CY	574,222		\$3.44	\$1,975,324
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$197,532	\$197,532
	5 & A @ 8%	LS	1		\$158,026	\$158,026
	Contingency @20%	LS	1		\$466,176	\$466,176
				EV	ent Total	\$2,797,058
Event Year	Item Description	Quantity	Unit		nit Price	<b>Extended Price</b>
11	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$		\$0
	Dredging (Gross yardage)	CY	0		\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$3.44	\$0
	Damp	LS	1		\$96,000	\$96,000
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$9,600	\$9,600
	S & A @ 8%	LS	1		\$7,680	\$7,680
	Contingency @20%	LS	1		\$22,656	\$22,656
				Eve	ent Total	\$135,936
F	BB	0	11-4		- in B-1	5.4
Event Year	Item Description	Quantity	Unit		nit Price	Extended Price
18	Construction	LS	1	\$	310,000	\$310,000
	Pipeline Installation	LS	1	\$	40.00	\$0
	Dredging (Gross yardage)	CY			\$0.00	\$0
	Dredging (Pay yardage)	CY	0		\$0.00	\$0
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$31,000	\$31,000
	5 & A @ 8%	LS	1		\$24,800	\$24,800
	Contingency @20%	LS	1		\$73,160	\$73,160
				Eve	ent Total	\$438,960
Event Year	Item Description	Quantity	Unit	Uı	nit Price	Extended Price
19	Construction	LS	1	\$		\$0
	Pipeline Installation	LS	1	\$	-	\$0
	Dredging (Gross yardage)	CY	775,200		\$0.00	\$0
	Dredging (Pay yardage)	CY	574,222		\$3.44	\$1,975,324
	Damp	LS	1		\$0	\$0
	LERR	LS	1		\$0	\$0
	E & D @ 10%	LS	1		\$197,532	\$197,532
	S & A @ 8%	LS	1		\$158,026	\$158,026
	Contingency @20%	LS	1		\$466,176	\$466,176
				Eve	ent Total	\$2,797,058
			Dispo	sal Sit	e Total	\$11,848,244
		Cost/C	Y/capacity	of sit	e	\$4.19

Mile 5-9.5, CDF N, Page 82



**New Orleans District** 

**Dredged Material Management Plan – Revised Plan B Calcasieu River and Pass, Louisiana** 

**Cost Engineering Report - 2008 Dollars** 



PROJECT: DMMP

LOCATION: Calcasieu LA CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS
P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE						HORIZ./BUDO			FULLY FUNDED ESTIMATE				
	EFFECTIVE PRICING LE					EFFECT. PRICING LEVEL: 1 OCT 08								
		COST*	CNTG	CNTG	TOTAL	OMB	COST	CNTG	TOTAL	FEATURE	OMB	COST	CNTG	FULL
YEAR	PROJECT DESCRIPTION	(\$K)	(\$K)	(%)	(\$K)	(%)	(\$K)	(\$K)	(\$K)	CONST PT	(%)	(\$K)	(\$K)	(\$K)
										-				
YEAR 00	CALCASIEU DMMP	\$47,605	\$7,141	15%	\$54,746		\$47,605	\$7,141	\$54,746	OCT 2009	1.86%	\$48,490	\$7,274	\$55,764
YEAR 01	CALCASIEU DMMP	\$30,678	\$4,602	15%	\$35,280		\$30,678	\$4,602	\$35,280	OCT 2010	2.62%	\$31,482	\$4,722	\$36,204
YEAR 02	CALCASIEU DMMP	\$33,448	\$5,017	15%	\$38,465		\$33,448	\$5,017	\$38,465	OCT 2011	4.24%	\$34,866	\$5,230	\$40,096
YEAR 03	CALCASIEU DMMP	\$35,864	\$5,380	15%	\$41,244		\$35,864	\$5,380	\$41,244	OCT 2012	6.08%	\$38,045	\$5,707	\$43,751
YEAR 04	CALCASIEU DMMP	\$23,119	\$3,468	15%	\$26,587		\$23,119	\$3,468	\$26,587	OCT 2013	7.99%	\$24,966	\$3,745	\$28,711
YEAR 05	CALCASIEU DMMP	\$20,243	\$4,049	20%	\$24,292		\$20,243	\$4,049	\$24,292	OCT 2014	9.93%	\$22,253	\$4,451	\$26,704
YEAR 06	CALCASIEU DMMP	\$8,133	\$1,627	20%	\$9,760		\$8,133	\$1,627	\$9,760	OCT 2015	11.91%	\$9,102	\$1,820	\$10,922
YEAR 07	CALCASIEU DMMP	\$35,126	\$7,025	20%	\$42,151		\$35,126	\$7,025	\$42,151	OCT 2016	13.93%	\$40,019	\$8,004	\$48,023
YEAR 08	CALCASIEU DMMP	\$12,631	\$2,526	20%	\$15,157		\$12,631	\$2,526	\$15,157	OCT 2017	15.98%	\$14,649	\$2,930	\$17,579
YEAR 09	CALCASIEU DMMP	\$17,892	\$3,578	20%	\$21,470		\$17,892	\$3,578	\$21,470	OCT 2018	18.07%	\$21,125	\$4,225	\$25,350
YEAR 10	CALCASIEU DMMP	\$34,851	\$6,970	20%	\$41,821		\$34,851	\$6,970	\$41,821	OCT 2019	20.19%	\$41,887	\$8,377	\$50,265
YEAR 11	CALCASIEU DMMP	\$14,445	\$2,889	20%	\$17,334		\$14,445	\$2,889	\$17,334	OCT 2020	22.35%	\$17,673	\$3,535	\$21,208
YEAR 12	CALCASIEU DMMP	\$22,531	\$4,506	20%	\$27,037		\$22,531	\$4,506	\$27,037	OCT 2021	24.56%	\$28,065	\$5,613	\$33,678
YEAR 13	CALCASIEU DMMP	\$16,315	\$3,263	20%	\$19,578		\$16,315	\$3,263	\$19,578	OCT 2022	26.80%	\$20,687	\$4,137	\$24,825
YEAR 14	CALCASIEU DMMP	\$5,711	\$1,142	20%	\$6,853		\$5,711	\$1,142	\$6,853	OCT 2023	29.08%	\$7,372	\$1,474	\$8,846
YEAR 15	CALCASIEU DMMP	\$31,237	\$6,247	20%	\$37,484		\$31,237	\$6,247	\$37,484	OCT 2024	31.40%	\$41,045	\$8,209	\$49,255
YEAR 16	CALCASIEU DMMP	\$18,324	\$3,665	20%	\$21,989		\$18,324	\$3,665	\$21,989	OCT 2025	33.77%	\$24,512	\$4,902	\$29,415
YEAR 17	CALCASIEU DMMP	\$26,813	\$5,363	20%	\$32,176		\$26,813	\$5,363	\$32,176	OCT 2026	36.13%	\$36,501	\$7,300	\$43,801
YEAR 18	CALCASIEU DMMP	\$5,878	\$1,176	20%	\$7,054		\$5,878	\$1,176	\$7,054	OCT 2027	38.49%	\$8,140	\$1,628	\$9,769
YEAR 19	CALCASIEU DMMP	\$15,569	\$3,114	20%	\$18,683		\$15,569	\$3,114	\$18,683	OCT 2028	40.86%	\$21,930	\$4,386	\$26,317
	TOTAL PROJECT COSTS ======>	\$456,413	\$82,747		\$539,160		\$456,413	\$82,747	\$539,160			\$532,811	\$97,670	\$630,481

Revised Plan B	
TOTAL COSTS =======>	630,481

<sup>\*</sup>INCLUDES FUNTIONAL COSTS ASSOCIATED WITH LANDS AND DAMAGES, PLANNING ENGINEERING & DESIGN AND CONSTRUCTION MANAGEMENT

REVISED PLAN B\_TPCS-Calcasieu\_20100925 xls

PROJECT: DMMP

LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS
P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)		AUTHORIZ./BUDGET YEAR: 2009 EFFECT. PRICING LEVEL: 1 OCT 08					FUL	LY FUND	ED
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	
-02-01 -12-04 -12-05 -12-06 -16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$22,634 \$128 \$13,738	\$3,395 \$19 \$2,061	15% 15% 15% 15%	\$26,029 \$147 \$15,799		\$22,634 \$128 \$13,738	\$3,395 \$19 \$2,061	\$26,029 \$147 \$15,799	OCT 2009 OCT 2009 OCT 2009 OCT 2009	1.86% 1.86% 1.86% 1.86%	\$23,055 \$130 \$13,994	
	U. CONSTRUCTION COSTS			450/	A44.075	_			A44.075	-	-		
	TOTAL CONSTRUCTION COSTS ===>	\$36,500	\$5,475	15%	\$41,975		\$36,500	\$5,475	\$41,975	OCT 2009	1.86%	37,179	
1	LANDS AND DAMAGES	\$4,535	\$680	15%	\$5,215		\$4,535	\$680	\$5,215	OCT 2009	1.86%	\$4,619	
30	PLANNING, ENGINEERING & DESIGN	\$3,650	\$548	15%	\$4,198		\$3,650	\$548	\$4,198	OCT 2009	1.86%	\$3,718	
-31	CONSTRUCTION MANAGEMENT	\$2,920	\$438	15%	\$3,358	_	\$2,920	\$438	\$3,358	OCT 2009	1.86%	\$2,974	
	TOTAL PROJECT COSTS ======>	\$47.605	\$7,141	15%	\$54,746		\$47,605	\$7,141	\$54,746			48,490	\$

**YEAR 00**TOTAL COSTS ========> 55,764

REVISED PLAN B\_TPCS-Calcasieu\_20100925.xls

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OJECT:	DMMP		DISTRICT:	NEW ORLEANS
ATION:	Calcasieu LA	CALCASIEU RIVER AND PASS DMMP	P.O.C.:	Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			HORIZ./BUDO			FULLY FUNDED ESTIMATE							
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$18,597 \$367 \$1,346 \$2,556	\$2,790 \$55 \$202 \$383	15% 15% 15% 15%	\$21,387 \$422 \$1,548 \$2,939		\$18,597 \$367 \$1,346 \$2,556	\$2,790 \$55 \$202 \$383	\$21,387 \$422 \$1,548 \$2,939	OCT 2010 OCT 2010 OCT 2010 OCT 2010	2.62% 2.62% 2.62% 2.62%	\$19,084 \$377 \$1,381 \$2,623	\$2,863 \$56 \$207 \$393	\$21,947 \$433 \$1,588 \$3,016
	TOTAL CONSTRUCTION COSTS ===>	\$22,866	\$3,430	15%	\$26,296		\$22,866	\$3,430	\$26,296	OCT 2010	2.62%	23,465	\$3,520	\$26,985
P-01	LANDS AND DAMAGES	\$3,692	\$554	15%	\$4,246		\$3,692	\$554	\$4,246	OCT 2010	2.62%	\$3,789	\$568	\$4,357
P-30	PLANNING, ENGINEERING & DESIGN	\$2,290	\$344	15%	\$2,634		\$2,290	\$344	\$2,634	OCT 2010	2.62%	\$2,350	\$352	\$2,703
P-31	CONSTRUCTION MANAGEMENT	\$1,830	\$275	15%	\$2,105		\$1,830	\$275	\$2,105	OCT 2010	2.62%	\$1,878	\$282	\$2,160
	TOTAL PROJECT COSTS ======>	\$30,678	\$4,602	15%	\$35,280		\$30,678	\$4,602	\$35,280			31,482	\$4,722	\$36,204

YEAR 01 TOTAL COSTS ========> 36,204

REVISED PLAN B\_TPCS-Calcasieu\_20100925.xls

 PROJECT:
 DMMP

 LOCATION:
 Calcasieu LA

 CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)		AUTHORIZ./BUDGET YEAR: 2009 EFFECT. PRICING LEVEL: 1 OCT 08					FULLY FUNDED ESTIN		
ACCOUN <sup>-</sup> NUMBER	Г	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	MB %)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	
02-01 12-04 12-05 12-06 16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$22,634 \$831 \$3,215	\$3,395 \$125 \$482	15% 15% 15% 15%	\$26,029 \$956 \$3,697		\$22,634 \$831 \$3,215	\$3,395 \$125 \$482	\$26,029 \$956 \$3,697	OCT 2011 OCT 2011 OCT 2011 OCT 2011	4.24% 4.24% 4.24% 4.24%	\$23,594 \$866 \$3,351	
	TOTAL CONSTRUCTION COSTS ===>	\$26,680	\$4,002	15%	\$30,682		\$26,680	\$4,002	\$30,682	- OCT 2011	4.24%	27,811	
1	LANDS AND DAMAGES	\$1,958	\$4,002	15%	\$2,252		\$1,958	\$4,002	\$2,252	OCT 2011	4.24%	\$2,041	
30	PLANNING, ENGINEERING & DESIGN	\$2,670	\$401	15%	\$3,071		\$2,670	\$401	\$3,071	OCT 2011	4.24%	\$2,783	
31	CONSTRUCTION MANAGEMENT	\$2,140	\$321	15%	\$2,461		\$2,140	\$321	\$2,461	OCT 2011	4.24%	\$2,231	
	TOTAL PROJECT COSTS ======>	\$33.448	\$5,017	15%	\$38,465	_	\$33,448	\$5,017	\$38,465	_	-	34,866	\$

YEAR 02	
TOTAL COSTS =======>	40,096

PROJECT: DMMP LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE		IORIZ./BUDO			FULLY FUNDED ESTIN							
OUNT IBFR	EFFECTIVE PRICING LE	COST	CNTG	CNTG	TOTAL	OMB	COST	CNTG	TOTAL	FEATURE	OMB	COST	CNTG
	FEATURE DESCRIPTION	(\$K)	(\$K)	(%)	(\$K)	(%)	(\$K)	(\$K)	(\$K)	CONST PT	(%)	(\$K)	(\$K)
)1	RELOCATIONS	N/A											
-04 -05	HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT	\$3,217 \$1,269	\$483 \$190	15% 15%	\$3,700 \$1,459		\$3,217 \$1,269	\$483 \$190	\$3,700 \$1,459	OCT 2012 OCT 2012	6.08%	\$3,413 \$1,346	\$51: \$20:
-05 -06	DIKE CONST, REHAB AND LIFT	\$20,182	\$3,027	15%	\$23,209		\$1,209	\$3,027	\$23,209	OCT 2012	6.08%	\$1,340	\$3,211
6-01	SHORELINE PROTECTION	\$4,907	\$736	15%	\$5,643		\$4,907	\$736	\$5,643	OCT 2012	6.08%	\$5,205	\$781
						_				_	_		
	TOTAL CONSTRUCTION COSTS ===>	\$29,575	\$4,436	15%	\$34,011		\$29,575	\$4,436	\$34,011	OCT 2012	6.08%	31,373	\$4,706
	LANDS AND DAMAGES	\$959	\$144	15%	\$1,103		\$959	\$144	\$1,103	OCT 2012	6.08%	\$1,017	\$153
	PLANNING, ENGINEERING & DESIGN	\$2,960	\$444	15%	\$3,404		\$2,960	\$444	\$3,404	OCT 2012	6.08%	\$3,140	\$471
	CONSTRUCTION MANAGEMENT	\$2,370	\$356	15%	\$2,726	_	\$2,370	\$356	\$2,726	OCT 2012	6.08%	\$2,514	\$377
	TOTAL PROJECT COSTS ======>	\$35,864	\$5,380	15%	\$41,244		\$35,864	\$5,380	\$41,244			38,045	\$5,707

**YEAR 03**TOTAL COSTS ========> **43,751** 

PROJECT: DMMP
LOCATION: Calcasieu LA CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)			ORIZ./BUDG T. PRICING			FULLY FUNDED ESTIMA				
CCOUNT UMBER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CN (\$	
-01	RELOCATIONS	N/A												
-12-04 -12-05 -12-06 -16-01	HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT	\$18,958 \$406	\$2,844 \$61	15% 15% 15%	\$21,802 \$467		\$18,958 \$406	\$2,844 \$61	\$21,802 \$467	OCT 2013 OCT 2013 OCT 2013	7.99% 7.99% 7.99%	\$20,473 \$438	\$3,0 \$	
)1	SHORELINE PROTECTION			15%						OCT 2013	7.99%			
						=				_	-			
	TOTAL CONSTRUCTION COSTS ===>	\$19,364	\$2,905	15%	\$22,269		\$19,364	\$2,905	\$22,269	OCT 2013	7.99%	20,911	\$3,13	
01	LANDS AND DAMAGES	\$265	\$40	15%	\$305		\$265	\$40	\$305	OCT 2013	7.99%	\$286	\$4	
-30	PLANNING, ENGINEERING & DESIGN	\$1,940	\$291	15%	\$2,231		\$1,940	\$291	\$2,231	OCT 2013	7.99%	\$2,095	\$31	
31	CONSTRUCTION MANAGEMENT	\$1,550	\$233	15%	\$1,783	_	\$1,550	\$233	\$1,783	OCT 2013	7.99%	\$1,674	\$25	
	TOTAL PROJECT COSTS ======>	\$23,119	\$3,468	15%	\$26,587		\$23,119	\$3,468	\$26,587			24,966	\$3,74	

YEAR 04	
TOTAL COSTS ========>	28,711

PROJECT: DMMP
LOCATION: Calcasieu LA CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)			HORIZ./BUDO				FUI	LY FUNDED	) ESTIMATE	
COUNT JMBER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	
02-01 12-04 12-05 12-06 16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$15,975 \$768 \$400	\$3,195 \$154 \$80	20% 20% 20% 20%	\$19,170 \$922 \$480		\$15,975 \$768 \$400	\$3,195 \$154 \$80	\$19,170 \$922 \$480	OCT 2014 OCT 2014 OCT 2014 OCT 2014	9.93% 9.93% 9.93% 9.93%	\$17,561 \$844 \$440	\$3,512 \$169 \$88	
	TOTAL CONSTRUCTION COSTS ===>	\$17,143	\$3,429	20%	\$20,572	-	\$17,143	\$3,429	\$20,572	– OCT 2014	9.93%	18,845	\$3,769	
)1	LANDS AND DAMAGES			20%						OCT 2014	9.93%			
0	PLANNING, ENGINEERING & DESIGN	\$1,720	\$344	20%	\$2,064		\$1,720	\$344	\$2,064	OCT 2014	9.93%	\$1,891	\$378	
31	CONSTRUCTION MANAGEMENT	\$1,380	\$276	20%	\$1,656		\$1,380	\$276	\$1,656	OCT 2014	9.93%	\$1,517	\$303	
	TOTAL PROJECT COSTS ======>	\$20,243	\$4,049	20%	\$24,292		\$20,243	\$4,049	\$24,292			22,253	\$4,451	

YEAR 05	
TOTAL COSTS =======>	26,704

LOCATION: Calcasieu LA

THIS ESTIMATE IS BASED ON THE SCOPE CONTAINED IN THE FEASIBILITY REPORT, DATED: FEB-2008

PROJECT: DMMP

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)			IORIZ./BUDO				FUL	LY FUNDED	ESTIMATE	
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$4,689 \$1,136 \$943	\$938 \$227 \$189	20% 20% 20% 20% 20%	\$5,627 \$1,363 \$1,132		\$4,689 \$1,136 \$943	\$938 \$227 \$189	\$5,627 \$1,363 \$1,132	OCT 2015 OCT 2015 OCT 2015 OCT 2015	11.91% 11.91% 11.91% 11.91%	\$5,247 \$1,271 \$1,055	\$1,049 \$254 \$211	\$6,297 \$1,526 \$1,266 \$6
	TOTAL CONSTRUCTION COSTS ===>	\$6,768	\$1,354	20%	\$8,122		\$6,768	\$1,354	\$8,122	OCT 2015	11.91%	7,574	\$1,515	\$9,089
P-01	LANDS AND DAMAGES	\$135	\$27	20%	\$162		\$135	\$27	\$162	OCT 2015	11.91%	\$151	\$30	\$181
P-30	PLANNING, ENGINEERING & DESIGN	\$680	\$136	20%	\$816		\$680	\$136	\$816	OCT 2015	11.91%	\$761	\$152	\$913
P-31	CONSTRUCTION MANAGEMENT	\$550	\$110	20%	\$660	_	\$550	\$110	\$660	OCT 2015	11.91%	\$616	\$123	\$739
	TOTAL PROJECT COSTS ======>	\$8,133	\$1,627	20%	\$9,760		\$8,133	\$1,627	\$9,760			9,102	\$1,820	\$10,922

**YEAR 06**TOTAL COSTS =======> 10,922

PROJECT: DMMP

LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)			ORIZ./BUDO				FUI	LY FUNDED	ESTI
OUNT MBER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)
-01 -04 -05 -06 -01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$28,669 \$315 \$772	\$5,734 \$63 \$154	20% 20% 20% 20%	\$34,403 \$378 \$926		\$28,669 \$315 \$772	\$5,734 \$63 \$154	\$34,403 \$378 \$926	OCT 2016 OCT 2016 OCT 2016 OCT 2016	13.93% 13.93% 13.93% 13.93%	\$32,663 \$359 \$880	\$6,53 \$7 \$17
	TOTAL CONSTRUCTION COSTS ===>	\$29,756	\$5,951	20%	\$35,707	-	\$29,756	\$5,951	\$35,707	– OCT 2016	13.93%	33,901	\$6,78
	LANDS AND DAMAGES			20%						OCT 2016	13.93%		
	PLANNING, ENGINEERING & DESIGN	\$2,980	\$596	20%	\$3,576		\$2,980	\$596	\$3,576	OCT 2016	13.93%	\$3,395	\$679
1	CONSTRUCTION MANAGEMENT	\$2,390	\$478	20%	\$2,868	_	\$2,390	\$478	\$2,868 	OCT 2016 -	13.93% -	\$2,723	\$54
	TOTAL PROJECT COSTS ======>	\$35,126	\$7,025	20%	\$42,151		\$35,126	\$7,025	\$42,151	1		40,019	\$8,00

YEAR 07	
TOTAL COSTS ========>	48,023

LOCATION: Calcasieu LA

THIS ESTIMATE IS BASED ON THE SCOPE CONTAINED IN THE FEASIBILITY REPORT, DATED: FEB-2008

PROJECT: DMMP CALCASIEU RIVER AND PASS DMMP DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)				GET YEAR: 2 LEVEL: 1 C			FUL	LY FUNDED	ESTIMA
OUNT //BER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)
01 04 05 06 01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$3,739 \$496 \$6,322	\$748 \$99 \$1,264	20% 20% 20% 20% 20%	\$4,487 \$595 \$7,586		\$3,739 \$496 \$6,322	\$748 \$99 \$1,264	\$4,487 \$595 \$7,586	OCT 2017 OCT 2017 OCT 2017 OCT 2017	15.98% 15.98% 15.98% 15.98%	\$4,336 \$575 \$7,332	\$867 \$115 \$1,466
	TOTAL CONSTRUCTION COSTS ===>	<u> </u>	\$2,111	20%	\$12,668	-	\$10,557	\$2,111	\$12,668	– OCT 2017	- 15.98%	12,244	\$2,449
	LANDS AND DAMAGES	\$164	\$33	20%	\$197		\$164	\$33	\$197	OCT 2017	15.98%	\$190	\$38
	PLANNING, ENGINEERING & DESIGN	\$1,060	\$212	20%	\$1,272		\$1,060	\$212	\$1,272	OCT 2017	15.98%	\$1,229	\$246
	CONSTRUCTION MANAGEMENT	\$850	\$170	20%	\$1,020	_	\$850	\$170	\$1,020	OCT 2017	15.98%	\$986	\$197
	TOTAL PROJECT COSTS ======>	\$12,631	\$2,526	20%	\$15,157		\$12,631	\$2,526	\$15,157			14,649	\$2,930

YEAR 08 TOTAL COSTS ========> 17,579

PROJECT: DMMP LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)			HORIZ./BUDO				FUL	LY FUNDED	ES
UNT BER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CN <sup>-</sup> (\$1
04 05	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$6,936 \$267 \$7,949	\$1,387 \$53 \$1,590	20% 20% 20% 20%	\$8,323 \$320 \$9,539		\$6,936 \$267 \$7,949	\$1,387 \$53 \$1,590	\$8,323 \$320 \$9,539	OCT 2018 OCT 2018 OCT 2018 OCT 2018	18.07% 18.07% 18.07% 18.07%	\$8,189 \$315 \$9,385	\$1,6 \$ \$1,8
SHORELINE PROTECT	ION			20%						OCT 2018	18.07%		
										_	_		
TOTAL CON	STRUCTION COSTS ===>	\$15,152	\$3,030	20%	\$18,182		\$15,152	\$3,030	\$18,182	OCT 2018	18.07%	17,890	\$3,578
LANDS	AND DAMAGES			20%						OCT 2018	18.07%		
PLAN	NNING, ENGINEERING & DESIGN	\$1,520	\$304	20%	\$1,824		\$1,520	\$304	\$1,824	OCT 2018	18.07%	\$1,795	\$359
Cſ	ONSTRUCTION MANAGEMENT	\$1,220	\$244	20%	\$1,464		\$1,220	\$244	\$1,464	OCT 2018	18.07%	\$1,440	\$288
7	TOTAL PROJECT COSTS ======>	\$17,892	\$3,578	20%	\$21,470	-	\$17,892	\$3,578	\$21,470	_	<del>-</del>	21,125	\$4,22

**YEAR 09**TOTAL COSTS ========> **25,350** 

PROJECT: DMMP LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)			IORIZ./BUDO				FUI	LY FUNDED	ESTIN
ount Iber	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)
·01 ·04 ·05 ·06 ·01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$28,381 \$596 \$544	\$5,676 \$119 \$109	20% 20% 20% 20%	\$34,057 \$715 \$653		\$28,381 \$596 \$544	\$5,676 \$119 \$109	\$34,057 \$715 \$653	OCT 2019 OCT 2019 OCT 2019 OCT 2019	20.19% 20.19% 20.19% 20.19%	\$34,111 \$716 \$654	\$6,822 \$14: \$13 <sup>-</sup>
	TOTAL CONSTRUCTION COSTS ===>	\$29,521	\$5,904	20%	\$35,425	-	\$29,521	\$5,904	\$35,425	– OCT 2019	20.19%	35,481	\$7,096
1	LANDS AND DAMAGES			20%						OCT 2019	20.19%		
)	PLANNING, ENGINEERING & DESIGN	\$2,960	\$592	20%	\$3,552		\$2,960	\$592	\$3,552	OCT 2019	20.19%	\$3,558	\$712
1	CONSTRUCTION MANAGEMENT	\$2,370	\$474	20%	\$2,844	_	\$2,370	\$474	\$2,844	OCT 2019	20.19%	\$2,849	\$570
	TOTAL PROJECT COSTS ======>	\$34,851	\$6,970	20%	\$41,821		\$34,851	\$6,970	\$41,821			41,887	\$8,377

**YEAR 10**TOTAL COSTS ========> 50,265

PROJECT: DMMP LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)			HORIZ./BUD				FUL	LY FUNDED	ESTIMATE	
ACCOUNT NUMBER	Г	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$6,865 \$1,036 \$2,935 \$1,377	\$1,373 \$207 \$587 \$275	20% 20% 20% 20%	\$8,238 \$1,243 \$3,522 \$1,652		\$6,865 \$1,036 \$2,935 \$1,377	\$1,373 \$207 \$587 \$275	\$8,238 \$1,243 \$3,522 \$1,652	OCT 2020 OCT 2020 OCT 2020 OCT 2020	22.35% 22.35% 22.35% 22.35%	\$8,399 \$1,268 \$3,591 \$1,685	\$1,680 \$254 \$718 \$337	\$10,079 \$1,521 \$4,309 \$2,022
	TOTAL CONSTRUCTION COSTS ===>	\$12,213	\$2,443	20%	\$14,656		\$12,213	\$2,443	\$14,656	OCT 2020	22.35%	14,943	\$2,989	\$17,931
P-01	LANDS AND DAMAGES	\$22	\$4	20%	\$26		\$22	\$4	\$26	OCT 2020	22.35%	\$27	\$5	\$33
P-30	PLANNING, ENGINEERING & DESIGN	\$1,230	\$246	20%	\$1,476		\$1,230	\$246	\$1,476	OCT 2020	22.35%	\$1,505	\$301	\$1,806
P-31	CONSTRUCTION MANAGEMENT	\$980	\$196	20%	\$1,176		\$980	\$196	\$1,176	OCT 2020	22.35%	\$1,199	\$240	\$1,439
	TOTAL PROJECT COSTS ======>	\$14,445	\$2,889	20%	\$17,334		\$14,445	\$2,889	\$17,334		_	17,673	\$3,535	\$21,208

**YEAR 11**TOTAL COSTS =========> 21,208

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PROJECT: DMMP

LOCATION: Calcasieu LA CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)			IORIZ./BUDO				FUI	LY FUNDED	ESTIMAT	E
CCOUNT JMBER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	
02-01 12-04 12-05 12-06 16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$18,049 \$397 \$640	\$3,610 \$79 \$128	20% 20% 20% 20%	\$21,659 \$476 \$768		\$18,049 \$397 \$640	\$3,610 \$79 \$128	\$21,659 \$476 \$768	OCT 2021 OCT 2021 OCT 2021 OCT 2021	24.56% 24.56% 24.56% 24.56%	\$22,482 \$495 \$797	\$4,496 \$99 \$159	
	TOTAL CONSTRUCTION COSTS ===>	\$19,086	\$3,817	20%	\$22,903	-	\$19,086	\$3,817	\$22,903	OCT 2021	24.56%	23,774	\$4,755	
)1	LANDS AND DAMAGES	\$5	\$1	20%	\$6		\$5	\$1	\$6	OCT 2021	24.56%	\$6	\$1	
0	PLANNING, ENGINEERING & DESIGN	\$1,910	\$382	20%	\$2,292		\$1,910	\$382	\$2,292	OCT 2021	24.56%	\$2,379	\$476	
31	CONSTRUCTION MANAGEMENT	\$1,530	\$306	20%	\$1,836	_	\$1,530	\$306	\$1,836	OCT 2021	24.56%	\$1,906	\$381	
	TOTAL PROJECT COSTS ======>	\$22,531	\$4,506	20%	\$27,037		\$22,531	\$4,506	\$27,037			28,065	\$5,613	

**YEAR 12**TOTAL COSTS =======> 33,678

PROJECT: DMMP

LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)			HORIZ./BUDO				FUI	LY FUN	IDED
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	
02-01 12-04 12-05	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT	N/A \$12,928 \$887	\$2,586 \$177	20% 20%	\$15,514 \$1,064		\$12,928 \$887	\$2,586 \$177	\$15,514 \$1,064	OCT 2022 OCT 2022	26.80% 26.80%	\$16,393 \$1,125	
2-06 5-01	DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION			20% 20%						OCT 2022 OCT 2022	26.80% 26.80%		
						-				-	-		
	TOTAL CONSTRUCTION COSTS ===>	\$13,815	\$2,763	20%	\$16,578		\$13,815	\$2,763	\$16,578	OCT 2022	26.80%	17,517	
P-01	LANDS AND DAMAGES			20%						OCT 2022	26.80%		
P-30	PLANNING, ENGINEERING & DESIGN	\$1,390	\$278	20%	\$1,668		\$1,390	\$278	\$1,668	OCT 2022	26.80%	\$1,763	
P-31	CONSTRUCTION MANAGEMENT	\$1,110	\$222	20%	\$1,332	_	\$1,110	\$222	\$1,332	OCT 2022	26.80%	\$1,407	
	TOTAL PROJECT COSTS ======>	\$16,315	\$3,263	20%	\$19,578		\$16,315	\$3,263	\$19,578			20,687	

**YEAR 13**TOTAL COSTS =========> **24,825** 

PROJECT: DMMP
LOCATION: Calcasieu LA CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)	
ACCOUNT NUMBER	ī	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$3,739 \$481 \$611	\$748 \$96 \$122	20% 20% 20% 20% 20%	\$4,487 \$577 \$733
	TOTAL CONSTRUCTION COSTS ===>	\$4,831	\$966	20%	\$5,797
P-01	LANDS AND DAMAGES			20%	
P-30	PLANNING, ENGINEERING & DESIGN	\$490	\$98	20%	\$588
P-31	CONSTRUCTION MANAGEMENT	\$390	\$78	20%	\$468
	TOTAL PROJECT COSTS ======>	\$5,711	\$1,142	20%	\$6,853

YEAR 14	
TOTAL COSTS =======>	8,846

PROJECT: DMMP LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			)			HORIZ./BUDO				FUI	LY FUNDED	ESTIMATE	
OUNT IBER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	
2-01 2-04 2-05 2-06 3-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$24,243 \$260 \$1,959	\$4,849 \$52 \$392	20% 20% 20% 20% 20%	\$29,092 \$312 \$2,351		\$24,243 \$260 \$1,959	\$4,849 \$52 \$392	\$29,092 \$312 \$2,351	OCT 2024 OCT 2024 OCT 2024 OCT 2024	31.40% 31.40% 31.40% 31.40%	\$31,855 \$342 \$2,574	\$6,371 \$68 \$515	
	TOTAL CONSTRUCTION COSTS ===>	\$26,462	\$5,292	20%	\$31,754		\$26,462	\$5,292	\$31,754	OCT 2024	31.40%	34,771	\$6,954	
	LANDS AND DAMAGES	\$5	\$1	20%	\$6		\$5	\$1	\$6	OCT 2024	31.40%	\$7	\$1	
	PLANNING, ENGINEERING & DESIGN	\$2,650	\$530	20%	\$3,180		\$2,650	\$530	\$3,180	OCT 2024	31.40%	\$3,482	\$696	
	CONSTRUCTION MANAGEMENT	\$2,120	\$424	20%	\$2,544		\$2,120	\$424	\$2,544	OCT 2024	31.40%	\$2,786	\$557	
	TOTAL PROJECT COSTS ======>	\$31,237	\$6,247	20%	\$37,484		\$31,237	\$6,247	\$37,484		-	41,045	\$8,209	

**YEAR 15**TOTAL COSTS =========> **49,255** 

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PROJECT: DMMP

LOCATION: Calcasieu LA CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE	AUTHORIZ./BUDGET YEAR: 2009 EFFECT. PRICING LEVEL: 1 OCT 08				FULLY FUNDED ESTIMA							
OUNT IBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)
01 04 05 06 01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$14,400 \$714 \$400	\$2,880 \$143 \$80	20% 20% 20% 20%	\$17,280 \$857 \$480		\$14,400 \$714 \$400	\$2,880 \$143 \$80	\$17,280 \$857 \$480	OCT 2025 OCT 2025 OCT 2025 OCT 2025	33.77% 33.77% 33.77% 33.77%	\$19,263 \$955 \$535	\$3,853 \$191 \$107
	TOTAL CONSTRUCTION COSTS ===>	<u> </u>	\$3,103	20%	\$18,617	-	\$15,514	\$3,103	\$18,617	– OCT 2025	33.77%	20,753	\$4,151
	LANDS AND DAMAGES			20%						OCT 2025	33.77%		
	PLANNING, ENGINEERING & DESIGN	\$1,560	\$312	20%	\$1,872		\$1,560	\$312	\$1,872	OCT 2025	33.77%	\$2,087	\$417
I	CONSTRUCTION MANAGEMENT	\$1,250	\$250	20%	\$1,500	_	\$1,250	\$250	\$1,500	OCT 2025	33.77%	\$1,672	\$334
	TOTAL PROJECT COSTS ======>	\$18,324	\$3,665	20%	\$21,989		\$18,324	\$3,665	\$21,989		-	24,512	\$4,902

**YEAR 16**TOTAL COSTS =======> **29,414** 

PROJECT: DMMP LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE	AUTHORIZ./BUDGET YEAR: 2009 EFFECT. PRICING LEVEL: 1 OCT 08				FULLY FUNDED ESTIMATE								
COUNT JMBER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	
2-01 2-04	RELOCATIONS HYDRAULIC DREDGING	N/A \$21,368	\$4,274	20%	\$25,642		\$21,368	\$4,274	\$25,642	OCT 2026	36.13%	\$29,088	\$5,818	
12-05 12-06 16-01	DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	\$525 \$815	\$105 \$163	20% 20% 20%	\$630 \$978		\$525 \$815	\$105 \$163	\$630 \$978	OCT 2026 OCT 2026 OCT 2026	36.13% 36.13% 36.13%	\$715 \$1,109	\$143 \$222	
						-	<u>-</u>			-	-			
	TOTAL CONSTRUCTION COSTS ===>	\$22,708	\$4,542	20%	\$27,250		\$22,708	\$4,542	\$27,250	OCT 2026	36.13%	30,912	\$6,182	
1	LANDS AND DAMAGES	\$5	\$1	20%	\$6		\$5	\$1	\$6	OCT 2026	36.13%	\$7	\$1	
0	PLANNING, ENGINEERING & DESIGN	\$2,280	\$456	20%	\$2,736		\$2,280	\$456	\$2,736	OCT 2026	36.13%	\$3,104	\$621	
31	CONSTRUCTION MANAGEMENT	\$1,820	\$364	20%	\$2,184	_	\$1,820	\$364	\$2,184	OCT 2026	36.13%	\$2,478	\$496	
	TOTAL PROJECT COSTS ======>	\$26,813	\$5,363	20%	\$32,176		\$26,813	\$5,363	\$32,176			36,501	\$7,300	

YEAR 17
TOTAL COSTS =======> 43,801

PROJECT: DMMP
LOCATION: Calcasieu LA CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

CURRENT MCACES ESTIMATE PREPARED: 25 SEP 2010  EFFECTIVE PRICING LEVEL: JUL 2008							AUTHORIZ./BUDGET YEAR: 2009 EFFECT, PRICING LEVEL: 1 OCT 08				FULLY FUNDED ESTIMATE				
UNT BER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)		
-01 -04 -05 -06 -01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$3,739 \$444 \$795	\$748 \$89 \$159	20% 20% 20% 20%	\$4,487 \$533 \$954		\$3,739 \$444 \$795	\$748 \$89 \$159	\$4,487 \$533 \$954	OCT 2027 OCT 2027 OCT 2027 OCT 2027	38.49% 38.49% 38.49% 38.49%	\$5,178 \$615 \$1,101	\$1,036 \$123 \$220	:	
	TOTAL CONSTRUCTION COSTS ===>	\$4,978	\$996	20%	\$5,974	_	\$4,978	\$996	\$5,974	OCT 2027	38.49%	6,894	\$1,379		
)	LANDS AND DAMAGES PLANNING, ENGINEERING & DESIGN	\$500	\$100	20%	\$600		\$500	\$100	\$600	OCT 2027	38.49% 38.49%	\$692	\$138		
,	CONSTRUCTION MANAGEMENT	\$400	\$80	20%	\$480	_	\$400	\$80	\$480	OCT 2027	38.49%	\$554	\$111		
	TOTAL PROJECT COSTS ======>	\$5,878	\$1,176	20%	\$7,054		\$5,878	\$1,176	\$7,054			8,140	\$1,628		

YEAR 18	
TOTAL COSTS ========>	9,769

REVISED PLAN B\_TPCS-Calcasieu\_20100925.xls

PROJECT: DMMP

DISTRICT: NEW ORLEANS CALCASIEU RIVER AND PASS DMMP P.O.C.: Paul Varnado LOCATION: Calcasieu LA

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE	AUTHORIZ./BUDGET YEAR: 2009 EFFECT. PRICING LEVEL: 1 OCT 08				FULLY FUNDED ESTIMATE								
CCOUNT JMBER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	Fl (\$
02-01 -12-04 -12-05 -12-06 -16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$12,929 \$260	\$2,586 \$52	20% 20% 20% 20% 20%	\$15,515 \$312		\$12,929 \$260	\$2,586 \$52	\$15,515 \$312	OCT 2028 OCT 2028 OCT 2028 OCT 2028	40.86% 40.86% 40.86% 40.86%	\$18,212 \$366	\$3,642 \$73	\$2
	TOTAL CONSTRUCTION COSTS ===>	\$13,189	\$2,638	20%	\$15,827		\$13,189	\$2,638	\$15,827	OCT 2028	40.86%	18,578	\$3,716	\$2
01	LANDS AND DAMAGES			20%						OCT 2028	40.86%			
0	PLANNING, ENGINEERING & DESIGN	\$1,320	\$264	20%	\$1,584		\$1,320	\$264	\$1,584	OCT 2028	40.86%	\$1,859	\$372	\$
31	CONSTRUCTION MANAGEMENT	\$1,060	\$212	20%	\$1,272		\$1,060	\$212	\$1,272	OCT 2028	40.86%	\$1,493	\$299	\$
	TOTAL PROJECT COSTS ======>	\$15,569	\$3,114	20%	\$18,683		\$15,569	\$3,114	\$18,683			21,930	\$4,386	\$2

YEAR 19 TOTAL COSTS ========> 26,317

REVISED PLAN B\_TPCS-Calcasieu\_20100925.xls

## Dredged Material Management Plan (DMMP) Calcasieu River and Pass, Louisiana Cost Narrative

#### 1. Project Description

- A. General: The Calcasieu River and Pass, Louisiana, project spans 36 miles from Lake Charles, Louisiana, to the Gulf of Mexico, and 32 miles offshore. The Calcasieu Ship Channel handles about 50 million tons of cargo every year. The existing dredged material disposal capacity is not adequate for maintaining the channel over the long term. Existing disposal sites are at or near capacity. Other disposal sites have been lost to commercial development. The DMMP identified areas for the placement of dredged material for the 20-year life of the project.
- B. <u>Purpose</u>: The purpose of the DMMP is to develop a plan for the placement of material dredged from the maintenance of the Calcasieu Ship Channel, and anticipated improvements for the next 20 years.
- C. <u>Design Features</u>: To prepare the disposal areas to receive the dredged material, site rehabilitation, dike raising, dike construction, shore protection, and site management will occur. The various disposal area placement sites are shown in the project's site plan which is included in Appendix A.

#### 2. Basis of Estimate

#### A. Basis of Design:

- "Calcasieu River and Pass, Louisiana, Dredged Material Management Plan, Appendix D Cost Estimates," dated February 2008.
- "Calcasieu River and Pass, Louisiana, Dredged Material Management Plan, Supplemental Environmental Impact Statement, Volume I," dated May 2008.
- B. <u>Basis of Quantities</u>: The estimate is based on the overall quantities for Revised Plan B provided by the designer. The overall quantities are presented in Appendix B.

The quantity estimates include loss factors as listed below:

Dredge Material Pay Volume Reduction 35% Dike Construction Shrinkage 15% to 40%

#### 3. Design, and Construction Schedule

Sign PCA February 2009.
Initiate Planning, Engineering, and Design February 2009.
Advertise August 2009.
Initiate Construction October 2009.
Complete Construction October 2029.

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The estimate is based on construction and operation and maintenance occurring over a 20-year period. The tentative project schedule and implementation schedule are presented in Appendix C.

#### A. Overtime:

- Typical construction, crew (1 shift) working 12hr/day, and 7 day weeks.
- Typical dredge construction, crew (2 shifts) working 12hr/shift/day, and 7 day weeks.
- B. <u>Construction Windows</u>: Continuous construction activity is anticipated.

#### 4. Contracting Plan

The dredging portion of the project will likely be contracted to one prime construction contractor. The dike rehabilitation and lifting will likely be assigned to a second prime construction contractor. No subcontractors are anticipated. For estimating purposes, one prime construction contractor was used for the entire project to reflect prime contractor mark-ups only to the costs.

#### 5. Project Construction

- A. <u>Borrow Areas</u>: The project is self sufficient in terms of borrow material, except for the rock shore protection.
- B. <u>Construction Methodology</u>: The construction activities proposed at the various placement sites include site rehabilitation, and initial dike raising (RLIFT), active dredging, and placement (PUMP), disposal area management (DAMP), secondary dike raising (LIFT), new dike construction (CONST), and shore protection (SP).

RLIFT includes rehabilitating, and raising existing dikes and installing weirs at confined disposal facilities (CDF). The total width of the dike will be raised during RLIFT. Dikes will be raised by side-casting material from construction activities including perimeter, and interior ditching to obtain dike lifting material. To create the perimeter, and interior drainage ditches two passes will be made around the exterior by a marshbuggie backhoe, and one around the interior by a rotary ditcher. At some CDFs the degrading of dikes will occur.

After RLIFT has occurred, PUMP, and DAMP will occur. DAMP construction activities include perimeter, and interior ditching to obtain future dike lifting material. To create the perimeter, and interior drainage ditches two passes will be made around the exterior by a marshbuggie backhoe, and one around the interior by a rotary ditcher.

PUMP includes dredging and pumping the material from the river to the placement sites. Dredging will be performed by a 27-inch discharge hydraulic cutter head dredge operating alone or utilizing 1 or 2 booster pumps depending on the pipeline lengths required for placement.

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LIFT will not include any ditching as fill material will have been previously made available during DAMP. LIFT is the secondary lifting of the dikes. After LIFT has occurred, PUMP, and DAMP will typically occur again.

At locations along the river where no dikes exist, typically beneficial use (BU) sites, new dikes will be constructed. This process is referred to as CONST. These dikes will be 5 feet high constructed using adjacent borrow material with a marshbuggie backhoe an 8-cubic yard (CY) bucket dredge if in marsh conditions.

There are two types of SP that will be used: traditional SP will have an 8-foot top elevation, a -2-foot bottom elevation, 3:1 side slopes, and 0.27-tons of rock/square foot (SF)/linear foot (LF). Rock dike SP will have a 6-foot top elevation, a -3-foot bottom elevation, 2.5:1 side slopes, and 0.27-tons of rock/SF/LF.

The site specific construction activities that will occur along river miles 5 to 36 are listed below:

- 1) River Reach (Reach) 34-36: Reach 34-36's dredged material will be disposed of at Placement Sites (Sites) 1, and 2. Sites 1 and 2 both have an existing perimeter dike with lengths of 6,300-linear feet (LF), and 5,400-LF, and interior areas of 50-acres, and 44-acres, respectively. The construction activities that will occur at these sites are given below:
  - RLIFT: Site 1, and 2's dikes will be rehabilitated, and raised 5-feet.
  - PUMP: Three PUMP events will occur at Sites 1 and 2 each over the 20-year construction period. A total volume of 1,359,020-CY will be dredged from Reach 34-36, and disposed of at these placement sites. The dredged material will be side-cast to the placement site. No booster pumps will be required.
  - DAMP: Perimeter, and interior ditches will be constructed at both sites over their entire areas.
  - CONST: None.
  - LIFT: The dikes at Sites 1, and 2 will be raised another 5-feet after RLIFT has occurred.
  - SP: None.
- 2) Reach 30-34: Reach 30-34's dredged material will be disposed of at Sites 3, and 7. Both sites have an existing perimeter dikes with lengths of 11,000-LF, and 13,000-LF, and interior areas of 113-acres, and 129-acres, respectively. 6,500-feet of Site 7's dike will be rehabilitated, and raised in conjunction with Reach 30-34, and the remaining 6,500-LF will be rehabilitated, and raised in conjunction with Reach 26-30. Costs for Site 7 are split between the two reaches. Detailed construction activities are given below:
  - RLIFT: Site 3 and 7's dikes will be rehabilitated, and raised 4-feet.

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- PUMP: Three PUMP events will occur at Site 3, and two will occur at Site 7 over the 20-year construction period. A total volume of 2,690,210-CY will be dredged from Reach 30-34, and disposed of at these placement sites. The dredged material will be side-cast to the placement site. No booster pumps will be required.
- DAMP: Perimeter, and interior ditches will be constructed at both sites over their entire areas. DAMP will be applied at Site 7 initially in preparation for rehabilitation, and dike raising due to wet existing conditions.
- CONST: None.
- LIFT: Sites 3 and 7's dikes will be raised another 6-feet, and 4-feet, respectively, after RLIFT has occurred.
- SP: None.
- 3) Reach 26-30: Reach 26-30's dredged material will be disposed of at Sites 7, 8, and 9. Sites 8, and 9 have exterior dikes with lengths of 14,400-LF, and 12,500-LF, respectively. Sites 7, 8, and 9 have areas of 129-acres, 192-acres, and 170-acres, respectively. Detailed construction activities are given below:
  - RLIFT: Site 7, 8, and 9's dikes will be rehabilitated, and raised 4-feet. The second half of Site 7's 13,000-LF dike will be rehabilitated, and raised as that portion was left undone from Reach 30-34.
  - PUMP: Two PUMP events will occur at Sites 7, 8, and 9 each over the 20-year construction period. A total volume of 3,264,240-CY will be dredged from Reach 26-30, and disposed of at these placement sites. The dredged material will be side-cast to the placement site. No booster pumps will be required.
  - DAMP: Perimeter, and interior ditches will be constructed at the three sites over their entire areas.
  - CONST: None.
  - LIFT: The three sites' dikes will be raised another 4-feet after RLIFT has occurred.
  - SP: None.
- 4) Reach 22-26: Reach 22-26's dredged material will be disposed of at Sites 10, 11, 12A, and 12B. Sites 10, 11, 12A, and, 12B have existing perimeter dikes with lengths of 10,100-LF, 10,000-LF, 12,000-LF, and 23,600-LF, respectively. Sites 10, 11, 12A, and 12B have areas of 135-acres, 135-acres, 160-acres, and 433-acres, respectively. Detailed construction activities are given below:
  - RLIFT: The dikes at Sites 10, 11, 12A, and 12B will be rehabilitated, and raised 5-feet.
  - PUMP: Three PUMP events will occur at Site 10, four will occur at Sites 11, and 12A, and six will occur at Site 12B. A total volume of 9,412,800-CY will be dredged from Reach 22-26, and disposed of at these placement sites. The dredged material will be side-cast to the placement site. No booster pumps will be required.
  - DAMP: Perimeter and interior ditches will be constructed at the four sites over their entire areas.

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- CONST: None.
- LIFT: The four sites' dikes will be raised another 3-feet after RLIFT has occurred.
- SP: None.
- 5) Reach 21-22: Reach 21-22's dredged material will be disposed of at Sites 15, and 16N. Sites 15, and 16N consist of existing dikes with lengths of 12,800-LF, and 11,100-LF, respectively. Sites 15, and 16 have areas of 181-acres, and 168-acres, respectively. Detailed construction activities are given below:
  - RLIFT: The dikes at Sites 15, and 16N will be rehabilitated, and raised 5-feet.
  - PUMP: Five PUMP events will occur at each site. A total volume of 3,302,800-CY will be dredged from Reach 21-22, and disposed of at these placement sites. The dredged material will be side-cast to the placement site. No booster pumps will be required.
  - DAMP: Perimeter, and interior ditches will be constructed at both sites over their entire areas.
  - CONST: None.
  - LIFT: The two sites' dikes will be raised another 5-feet after RLIFT has occurred.
  - SP: 5,800-LF and 4,200-LF of SP will be applied along the channel side of Sites 15, and 16N, respectively.
- 6) Devil's Elbow: Devil Elbow's dredged material will be disposed of at Sites 13A, and 13B. Both sites have existing perimeter dikes with lengths of 11,500-feet. Both sites have areas of 355-acres. Detailed construction activities are given below:
  - RLIFT: The dikes at Sites 13A, and 13B will be rehabilitated, and raised 5-feet.
  - PUMP: Five PUMP events will occur at both sites. A total volume of 7,636,100-CY will be dredged from Reach Devil's Elbow, and disposed of at these placement sites. The dredged material will be side-cast to the placement site. No booster pumps will be required.
  - DAMP: Perimeter, and interior ditches will be constructed at both sites over their entire areas.
  - CONST: None.
  - LIFT: The two sites' dikes will be raised another 5-feet after RLIFT has occurred.
  - SP: None.
- 7) Reach 16-21: Reach 16-21's dredged material will be disposed of at Sites 17, 19, 22, Mercantel (BU 50), Garrison (BU 3), and Foreshore Dike (FSD). Sites 17, 19, and 22 consist of existing dikes with lengths of 39,200-LF, and 11,600-LF, respectively. Sites BU 50 and FSD have no existing dikes, but will have new ones constructed. Their lengths will be 30,000-LF and 24,000-LF each, respectively. Sites 17, 19, 22, and FSD have areas of 160-acres, 149-acres, 236-acres, and 300-acres, respectively. Detailed construction activities are given below:

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- RLIFT: The typical 12-FT wide crown dike at Sites 17, 19 and 22 will be rehabilitated and raised 5-feet. Dikes with poor foundation and prone to erosion on the lakeside will be constructed with a 25-FT wide crown and 4:1 side slopes. Additionally existing land and existing dikes along the west side of the Sites will be degraded to allow the FSD and upland sites to be utilized as one area.
- PUMP: Two PUMP events will occur at Site 17, three will occur at site 19, four will occur at Site 22, five will occur at BU 50, and four will occur at FSD within the 20-year construction period. A total volume of 14,730,700-CY will be dredged from Reach 16-21, and disposed of at these placement sites. The dredged material will be side-cast to the placement site, and will not require booster pumps. Site BU 50 dredge pipeline length will be 36,000-feet, and will require a booster pump.
- DAMP: The DAMP at Site FSD is applied for 1-year initially. Subsequent applications following fill events will occur for the first year only.
- CONST: Sites BU 50 will have a 5-feet high dike constructed. FSD will have 10-feet high dike constructed in two 5-foot lifts.
- LIFT: The dikes at Sites 17, 19, and 22 will be raised another 5-feet respectively.
- SP: 2,953-LF of traditional SP will be applied to Site 17, and 2,953-LF of SP will be applied at Site 19.
- 8) Reach 12-16: Reach 12-16's dredged material will be disposed of at Sites D/E, FSD, and Sabine (BU 5). Site BU 5 doesn't have dikes, but will have a new one constructed. The length will be 30,000-LF. No work will be done to Site FSD's dike. Sites FSD, and BU 5 have areas of 300-acres, and 2,200-acres, respectively. Site D/E has an area of 403-acres. Detailed construction activities are given below:
  - RLIFT: The dikes at Site D/E will be rehabilitated. The typical 12-FT wide crown dikes will be rehabilitated and raised 5-feet. Dikes with poor foundation and prone to erosion on the lakeside will be constructed with a 25-FT wide crown and 4:1 side slopes. Additionally existing land and existing dikes along the west side of the Sites will be degraded to allow the FSD and upland sites to be utilized as one area.
  - PUMP: Four PUMP events will occur at Site D/E, five will occur at BU 5, and four will occur at Site FSD over the 20-year construction period. A total volume of 14,426,700-CY will be dredged from Reach 12-16, and disposed of at these placement sites. The dredged material will be side-cast to the placement site. No booster pumps will be required. Site BU 5 will utilize an 8,000-foot pipeline in conjunction with the CWWPRA pipeline totaling 42,000-feet and two booster pumps.
  - DAMP: The DAMP at the Foreshore Dike site is applied only for 1 year initially, as opposed to the typical 2-year application, since the site is mostly new, and relatively dry, and consolidated. Subsequent applications following fill events are also applied for 1 year only.
  - CONST: Site BU 5 will have new dikes constructed to a height of 5-feet.
  - LIFT: The dike at Site D/E will be raised another 5-feet.
  - SP: None.

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- 9) Reach 9.5-12: Reach 9.5-12's dredged material will be disposed of at Sites Cameron SB (BU 49), and Sabine (BU 18). New dikes will be constructed at sites BU 49, and BU 18 with lengths of 18,000-feet, and 36,000-feet, respectively. The sites areas are 600-acres, and 2,300-acres, respectively. Detailed construction activities are given below:
  - RLIFT: None.
  - PUMP: Three PUMP events will occur at Site BU 49, and six will occur at Site BU 18 over the 20-year construction period. A total volume of 6,860,518-CY will be dredged from Reach 9.5-12, and disposed of at these placement sites. The sites will utilize a 27,000-feet pipeline, and 23,000-feet pipeline, respectively. One booster pumps will be required.
  - DAMP: None.
  - CONST: Sites BU 49 and BU 18 will both have new dikes constructed to heights of 5-feet.
  - LIFT: None.
  - SP: None.
- 10) Reach 5-9.5: Reach 5-9.5's dredged material will be disposed of at Sites H, M, N, Cameron WR (BU 19), and Cameron WR (BU 20). Sites H, M, and N have existing dikes with lengths of 13,000-foot, 18,600-foot, and 16,400-foot, respectively. Sites BU 19 and BU 20 don't have dikes, but will have new ones constructed each with a length of 4,000feet. Sites H, M, N, BU 19, and BU 20 have areas of 142-acres, 392-acres, 219-acres, 300-acres, and 300-acres, respectively. Detailed construction activities are given below:
  - RLIFT: Site H, M, and N's dikes will be rehabilitated, and raised 4-feet.
  - PUMP: Two PUMP events will occur at Site H, five will occur at Site M, three will occur at Site N, and one will occur at Sites BU 19, and BU 20 over the 20-year construction period. A total volume of 8,039,476-CY will be dredged from Reach 5-9.5, and disposed of at these placement sites. The dredged material will be side-cast to the placement site, and no booster pumps. Site BU 19, and BU 20 will utilize an 18,000-feet, and 31,000-feet pipeline, respectively. They will not require booster pumps.
  - DAMP: Perimeter, and interior ditches will be constructed at Sites H, M, and N over their entire areas.
  - CONST: Sites BU 19 and BU 20 will both have new dikes constructed to heights of 5-feet.
  - LIFT: The dikes at Sites M, and N will be raised another 4-feet after RLIFT has occurred.
  - SP: None.
- C. <u>Unusual Conditions</u>: Unusual conditions that might influence construction costs all sites include unusually wet weather conditions, flooding and river currents. Unusual

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conditions that might influence construction costs of the beneficial use sites include marsh stability issues, unforeseen owner requirement, and unforeseen property impacts.

- D. <u>Unique Construction Techniques</u>: The dredging will be performed by hydraulic cutterhead dredges with pipelines to the placement sites. The dredge area management ditching will be performed by marshbuggie backhoes and rotary ditchers. The dike construction will be performed by marshbuggie backhoes or bucket dredges depending on the marsh site conditions. The rock shore protection will be placed by barge mounted cranes.
- E. <u>Equipment/Labor Availability and Distance Traveled</u>: All equipment is assumed to be available in the Calcasieu area. Some labor may have to come from other parts of the country.

#### 6. Environmental Concerns

There is assumed little or no environmental issues or mitigation requirements affecting costs or implementation.

#### 7. Effective Dates for Labor, Equipment, and Material Pricing

The labor, equipment, and material pricing were developed using the MCACES 2006 English Unit Cost Library, Local 25 Southern Labor Rates, and the 2005 Equipment Library (Region III) for the base estimate. The index pricing data has been prepared in July 2008 dollars.

The labor rates from the MCACES 2006 National Labor Library were compared with the current Davis-Bacon Wage rates (General Decision County Index LA20080011, and LA20080015) and actual wage rates (provided by New Orleans District), and Local 25 Southern Rates, Effective Through 30 September 2008 (see Appendix D). The Local 25 Southern Rates are higher than Davis-Bacon Wage Rates. Using current Davis-Bacon Wage Rates may not be appropriate for this market due to the extended period of construction duration in an area that is planned to be saturated with construction activity. Therefore the higher Local 25 Southern Labor Rates were used in the estimate. The higher rates along with the overtime will likely be needed to attract labor to this market.

The base estimate has been updated with current quoted fuel prices of \$3.76/gal for off-road diesel (provided by the Designer and approved by the Corps), \$4.59/gal for on-road diesel and \$3.90/gal for gasoline costs in the Calcasieu Louisiana area.

<u>Labor and Equipment Crews Production Output</u>: Production rates for the construction crews have also been estimated based on project conditions. See Appendix E for the Estimated Production Rates and General Assumptions.

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#### 8. Project Markups

<u>Escalation</u>: Escalation has been calculated in two steps. Price levels were to be first escalated from effective price levels of the construction cost estimate for July 2008 to an effective price level for October 2008 to match the authorized budget year (FY2009). Since this initial escalation was calculated to be negative based on current OMB data, a zero escalation factor was used per the direction of Walla Walla District Corps of Engineers. Price levels are then escalated again from the budget year to an effective price level for year of construction (i.e. Year 00 price level = October 2009. The escalation cost factors for CWBS Feature Code 12 Navigation Ports and Harbors were taken from EM 1110-2-1304 Civil Works Construction Cost Index System (tables revised 31 March, 2009).

<u>Contingency</u>: Contingencies represent allowances to cover unknowns, uncertainties and/or unanticipated conditions that are not possible to adequately evaluate from the data on hand at the time the cost estimate is prepared but must be represented by a sufficient cost to cover the identified risks.

A 15% contingency has been used for construction years YR00 thru YR04 to cover design changes and uncertainties in quantities and unit prices. The 15% contingency is based on engineering judgment and ER 1110-2-1302, for a Project/Feature Design Memorandum level project.

A 20% contingency has been used for construction years YR05 thru YR19 to cover unpredictable future economic trends as well as design changes and uncertainties in quantities and unit prices.

#### 9. Functional Costs

Functional costs associated with this work were estimated as follows:

A. <u>01 Account – Lands and Damages</u>: Costs for this account were provided by the U.S. Army Corps of Engineers, and are for Real Estate Costs.

Real Estate Costs developed for this plan capture the 1 in 3 rule, which refers to the idea that at least one in every three land owners of both Confined Disposal Facilities and Beneficial Use sites will possibly be unwilling to participate in the disposal of dredged material on their site. These litigation costs have been provided via the Real Estate Plan that was prepared by the New Orleans District Real Estate team.

- B. <u>30 Account Planning, Engineering, and Design</u>: Costs for this account were estimated at 10% of the construction cost. This account covers the preparation of Plans Specifications and Estimate for construction.
- C. <u>31 Account Construction Management</u>: Costs for this account were estimated at 8% of the construction cost. This account covers construction management during the construction contract.

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#### 10. Project Cost Estimate

The construction cost estimate was developed using MCACES 2nd Generation (MII) estimating software in accordance with guidance contained in ER 1110-2-1302, Civil Works Cost Engineering. The MCACES construction cost estimate includes the Lands and Damages, Planning, Engineering and Design and the Construction Management costs, however it does not include the project markups noted in Section 8. See Appendix F for the MCACES output report.

The Total Project Cost Summary (TPCS) was developed using an excel spreadsheet which incorporates the MCACES construction cost estimate, project mark-ups, and the functional costs.



## Calcasieu River and Pass, Louisiana Dredged Material Management Plan

# 2010 Cost Estimate (MII) for the Recommended Plan

2010 Dollars

### U.S. Army Corps of Engineers, New Orleans District

November, 2010

## Completion of Agency Technical Review Deep Draft Navigation Planning Center of Expertise

## Calcasieu River and Pass Dredged Material Management Plan

New Orleans District has completed the Calcasieu River and Pass Dredged Material Management Plan, which presents a Total Project Cost of \$799,333,000 over a period of twenty years. Notice is hereby given that a review team from the Deep Draft Navigation Planning Center of Expertise has performed agency technical review that is appropriate to the level of risk and complexity inherent in the project. The report was reviewed for compliance with established principles and procedures, and use of clearly justified and valid assumptions. Further, study methods and procedures were reviewed to determine the appropriateness, correctness, and reasonableness of results, including determination of whether the project meets the customer's needs consistent with law and existing Corps policy.

All concerns from the agency technical review of the report have been entered into Dr. Checks (<a href="https://projnet.org/projnet/binKornHome/index-">https://projnet.org/projnet/binKornHome/index-</a>

<u>reports2.cfm?strKornCob=DrCkCommentAllReport</u>) and are provided as an attachment to this notification. The review included the Cost Engineering DX of Walla Walla District. At this time, comments have been addressed in Dr. Checks and document revisions have been verified (November 10, 2010).

We certify that the Calcasieu Report & Environmental Document agency technical review was performed as required by Engineer Circular 1165-2-203, <u>Technical and Policy Compliance Review</u>, dated October 1996.

Agency Technical Review Team

Bernard E. Møseby, Supervisory Economist

Planning and Environmental Division, Mobile District

**CESAM-PD-FE** 

Mike McKown, Geotechnical Engineer Geotechnical and Geology Section

Engineering Division, Mobile District

CESAM-EN-GG

(	Home	C. Beether	
	Thomas F		
	Navigatio	n Section	

Operations Division, Mobile District CESAM-OP-TN

Wade A. Ross, P.K. Chief Coastal Hydrology & Hydraulics Engineering Division, Mobile District CESAM-EN-HH

Melissa L. Shirley, Environmental Engineer

Environmental and HTRW Section Engineering Division, Mobile District

CESAM-EN-GE

Jennifer L. Jacobson Supervisory Oceanographer Planning and Environmental Division, Mobile District Coastal Environment Team CESAM-PD-EC

**CESAM-OC** 

James A. Wagoner, III Assistant District Counsel Lead Real Estate Attorney Mobile District



James G. Neubauer

Cost Engineering DX, Walla Walla District

CENWW-EC-X

Mark Hammond, Economist

Navigation Planning Center

LRD, Huntington District

CELRH-NC

James Edward Henderson, Jr., PE, CCE

Regional Technical Specialist (Dredging)

SAC, Charleston District

CESAC-TS-EN-D

\*INCLUDES FUNTIONAL COSTS ASSOCIATED WITH LANDS AND DAMAGES, PLANNING ENGINEERING & DESIGN AND CONSTRUCTION MANAGEMENT

CHIEF, COST ENGINEERING, THOMAS D. MURPHY, P.E.

PROJECT MANAGER, PAUL VARNADO

CHIEF, REAL ESTATE, LINDA LABURE

2010 cost summary from District.xlsx

PROJECT: DMMP
LOCATION: Calcasieu LA CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE		HORIZ./BUDO			FULLY FUNDED ESTIMATE								
COUNT MBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	
2-01 2-04 2-05 2-06 6-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$26,189 \$167 \$14,239	\$4,714 \$30 \$2,563	18% 18% 18% 18%	\$30,903 \$197 \$16,802	0.50% 0.50% 0.50% 0.50%	\$26,320 \$168 \$14,310	\$4,738 \$30 \$2,576	\$31,058 \$198 \$16,886	OCT 2012 OCT 2012 OCT 2012 OCT 2012	2.60% 2.60% 2.60% 2.60%	\$27,004 \$172 \$14,682	\$4,861 \$31 \$2,643	
	TOTAL CONSTRUCTION COSTS ===> LANDS AND DAMAGES	\$40,595 \$4,535	\$7,307 \$816	18% 18%	\$47,902 \$5,351	0.50%	\$40,798 \$4,558	\$7,344 \$820	\$48,142 \$5,378	- OCT 2012 OCT 2012	2.60% 2.60%	41,859 \$4,676	\$7,535 \$842	
)	PLANNING, ENGINEERING & DESIGN	\$4,060	\$731	18%	\$4,791	0.50%	\$4,080	\$734	\$4,815	OCT 2012	2.60%	\$4,186	\$754	
1	CONSTRUCTION MANAGEMENT	\$3,248	\$585	18%	\$3,833	0.50%	\$3,264	\$588	\$3,852	OCT 2012	2.60%	\$3,349	\$603	
	TOTAL PROJECT COSTS ======>	\$52,438	\$9,439	18%	\$61,877		\$52,700	\$9,486	\$62,186	_	-	54,070	\$9,733	

YEAR 00	
TOTAL COSTS =======>	63,803

PROJECT: DMMP LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE						HORIZ./BUDO			FULLY FUNDED ESTIMATE					
OUNT BER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)		
-01	RELOCATIONS	N/A	<b>*</b> 4 4 1 2 2	100/	07.107	2.100/	<b>*</b> 00.740	44.0/0	¢07.070	0.07.0042	4.700/	404.440	<b>* * * * * * * * * *</b>		
-04 -05 -06	HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT	\$22,997 \$293 \$1,073	\$4,139 \$53 \$193	18% 18% 18%	\$27,137 \$346 \$1,266	3.10% 3.10% 3.10%	\$23,710 \$302 \$1,106	\$4,268 \$54 \$199	\$27,978 \$356 \$1,305	OCT 2013 OCT 2013 OCT 2013	1.70% 1.70% 1.70%	\$24,113 \$307 \$1,125	\$4,340 \$55 \$203		
5-01	SHORELINE PROTECTION	\$2,366	\$426	18%	\$2,792	3.10%	\$2,439	\$439	\$2,878	OCT 2013	1.70%	\$2,481	\$447		
						-				_	-				
	TOTAL CONSTRUCTION COSTS ===>	\$26,729	\$4,811	18%	\$31,540		\$27,558	\$4,960	\$32,518	OCT 2013	1.70%	28,026	\$5,045		
l	LANDS AND DAMAGES	\$3,692	\$665	18%	\$4,357	3.10%	\$3,806	\$685	\$4,492	OCT 2013	1.70%	\$3,871	\$697		
)	PLANNING, ENGINEERING & DESIGN	\$2,673	\$481	18%	\$3,154	3.10%	\$2,756	\$496	\$3,252	OCT 2013	1.70%	\$2,803	\$504		
l	CONSTRUCTION MANAGEMENT	\$2,138	\$385	18%	\$2,523	3.10%	\$2,204	\$397	\$2,601	OCT 2013	1.70%	\$2,242	\$404		
	TOTAL PROJECT COSTS ======>	\$35,232	\$6,342	18%	\$41,574		\$36,324	\$6,538	\$42,863			36,942	\$6,650		

**YEAR 01**TOTAL COSTS =======> 43,591

PROJECT: DMMP LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE						HORIZ./BUDO			FULLY FUNDED ESTIMAT					
OUNT 1BER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)		
2-01 2-04 2-05 2-06 5-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$26,189 \$531 \$2,986	\$4,714 \$96 \$537	18% 18% 18% 18%	\$30,903 \$627 \$3,523	4.90% 4.90% 4.90% 4.90%	\$27,472 \$557 \$3,132	\$4,945 \$100 \$564	\$32,417 \$657 \$3,696	OCT 2014 OCT 2014 OCT 2014 OCT 2014	1.70% 1.70% 1.70% 1.70%	\$27,939 \$566 \$3,186	\$5,029 \$102 \$573		
	TOTAL CONSTRUCTION COSTS ===>	\$29,706	\$5,347	18%	\$35,053	-	\$31,162	\$5,609	\$36,771	OCT 2014	1.70%	31,691	\$5,704		
	LANDS AND DAMAGES	\$1,958	\$352	18%	\$2,310	4.90%	\$2,054	\$370	\$2,424	OCT 2014	1.70%	\$2,089	\$376		
)	PLANNING, ENGINEERING & DESIGN CONSTRUCTION MANAGEMENT	\$2,971 \$2,376	\$535 \$428	18% 18%	\$3,506 \$2,804	4.90%	\$3,117 \$2,492	\$561 \$449	\$3,678 \$2,941	OCT 2014 OCT 2014	1.70%	\$3,170 \$2,535	\$571 \$456		
	TOTAL PROJECT COSTS ======>	\$37,011	\$6,662	18%	\$43,673		\$38,825	\$6,988	\$45,813			39,485	\$7,107		

**YEAR 02**TOTAL COSTS =======> 46,592

PROJECT: DMMP

LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS
P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE							GET YEAR: 2 LEVEL: 1 C		FULLY FUNDED ESTIMATE				
OUNT //BER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	
2-01 2-04	RELOCATIONS HYDRAULIC DREDGING	N/A \$6,041	\$1,087	18%	\$7,129	6.70%	\$6,446	\$1,160	\$7,606	OCT 2015	1.70%	\$6,555	\$1,180	-
2-05 2-06 6-01	DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	\$758 \$34,287 \$5,603	\$136 \$6,172 \$1,009	18% 18% 18%	\$894 \$40,459 \$6,612	6.70% 6.70% 6.70%	\$809 \$36,584 \$5,978	\$146 \$6,585 \$1,076	\$954 \$43,169 \$7,055	OCT 2015 OCT 2015 OCT 2015	1.70% 1.70% 1.70%	\$823 \$37,206 \$6,080	\$148 \$6,697 \$1,094	
	TOTAL CONSTRUCTION COSTS ===>	\$46,689	\$8,404	18%	\$55,093		\$49,817	\$8,967	\$58,784	OCT 2015	1.70%	50,664	\$9,120	
1	LANDS AND DAMAGES	\$959	\$173	18%	\$1,132	6.70%	\$1,023	\$184	\$1,207	OCT 2015	1.70%	\$1,041	\$187	
)	PLANNING, ENGINEERING & DESIGN	\$4,669	\$840	18%	\$5,509	6.70%	\$4,982	\$897	\$5,879	OCT 2015	1.70%	\$5,067	\$912	
1	CONSTRUCTION MANAGEMENT	\$3,735	\$672	18%	\$4,407	6.70%	\$3,985	\$717	\$4,703	OCT 2015	1.70%	\$4,053	\$730	
	TOTAL PROJECT COSTS ======>	\$56,052	\$10,089	18%	\$66,141		\$59,807	\$10,765	\$70,573			60,824	\$10,948	

**YEAR 03**TOTAL COSTS ========> 71,773

PROJECT: DMMP

LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS
P.O.C.: Paul Varnado
P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE				GET YEAR: 2 LEVEL: 1 O		FULLY FUNDED ESTIMATE							
ACCOUNT NUMBER	Г	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	ı
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$24,924 \$311	\$4,486 \$56	18% 18% 18% 18%	\$29,411 \$367	8.50% 8.50% 8.50% 8.50%	\$27,043 \$337	\$4,868 \$61	\$31,910 \$398	OCT 2016 OCT 2016 OCT 2016 OCT 2016	1.80% 1.80% 1.80% 1.80%	\$27,529 \$344	\$4,955 \$62	\$3
	TOTAL CONSTRUCTION COSTS ===>	\$25,235	\$4,542	18%	\$29,777	-	\$27,380	\$4,928	\$32,308	- OCT 2016	1.80%	27,873	\$5,017	\$3
P-01	LANDS AND DAMAGES	\$265	\$48	18%	\$313	8.50%	\$288	\$52	\$339	OCT 2016	1.80%	\$293	\$53	
P-30	PLANNING, ENGINEERING & DESIGN	\$2,524	\$454	18%	\$2,978	8.50%	\$2,739	\$493	\$3,231	OCT 2016	1.80%	\$2,788	\$502	\$
P-31	CONSTRUCTION MANAGEMENT	\$2,019	\$363	18%	\$2,382	8.50%	\$2,191	\$394	\$2,585	OCT 2016	1.80%	\$2,230	\$401	,
	TOTAL PROJECT COSTS ======>	\$30,043	\$5,408	18%	\$35,451		\$32,597	\$5,867	\$38,464			33,183	\$5,973	\$3

YEAR 04	
TOTAL COSTS =======>	39,156

PROJECT: DMMP
LOCATION: Calcasieu LA CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS
P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE						HORIZ./BUDO			FULLY FUNDED ESTIMATE						
ACCOUNT	EFFECTIVE PRICING LE	.VEL: NOV 201 COST	CNTG	CNTG	TOTAL	OMB	CT. PRICING COST	CNTG	TOTAL	FEATURE	OMB	COST	CNTG	FULL		
		(\$K)	(\$K)	(%)	(\$K)	(%)	(\$K)	(\$K)	(\$K)	CONST PT	(%)	(\$K)	(\$K)	(\$K)		
		(+)	(+)	(,	(+)	()	(+)	(+7	(+)		(1-5)	(+)	(+)	(+)		
C-02-01	RELOCATIONS	N/A														
C-12-04	HYDRAULIC DREDGING	\$15,731	\$2,832	18%	\$18,563	10.40%	\$17,367	\$3,126	\$20,493	OCT 2017	1.80%	\$17,680	\$3,182	\$20,862		
C-12-05	DRAINAGE AREA MANAGEMENT	\$498	\$90	18%	\$588	10.40%	\$550	\$99	\$649	OCT 2017	1.80%	\$560	\$101	\$660		
C-12-06	DIKE CONST, REHAB AND LIFT	\$371	\$67	18%	\$438	10.40%	\$410	\$74	\$483	OCT 2017	1.80%	\$417	\$75	\$492		
C-16-01	SHORELINE PROTECTION			18%		10.40%				OCT 2017	1.80%			\$0		
										_	-					
	TOTAL CONSTRUCTION COSTS ===>	\$16.600	\$2.988	18%	\$19.588		\$18,326	\$3.299	\$21.625	OCT 2017	1.80%	18,656	\$3.358	\$22.014		
P-01	LANDS AND DAMAGES		\$0	18%	\$0	10.40%	\$0	\$0	\$0	OCT 2017	1.80%	\$0	\$0	\$0		
P-30	PLANNING, ENGINEERING & DESIGN	\$1,660	\$299	18%	\$1,959	10.40%	\$1,833	\$330	\$2,163	OCT 2017	1.80%	\$1,866	\$336	\$2,201		
P-31	CONSTRUCTION MANAGEMENT	\$1,328	\$239	18%	\$1,567	10.40%	\$1,466	\$264	\$1,730	OCT 2017	1.80%	\$1,493	\$269	\$1,761		
						-				=	-					
	TOTAL PROJECT COSTS ======>	\$19,588	\$3,526	18%	\$23,114		\$21,625	\$3,893	\$25,518			22,015	\$3,963	\$25,977		

**YEAR 05**TOTAL COSTS =======> **25,977** 

PROJECT: DMMP

LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS
P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE				GET YEAR: 2 LEVEL: 1 C		FULLY FUNDED ESTIMATE							
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$6,890 \$5,230 \$1,168	\$1,240 \$941 \$210	18% 18% 18% 18%	\$8,130 \$6,171 \$1,378	12.40% 12.40% 12.40% 12.40%	\$7,744 \$5,879 \$1,313	\$1,394 \$1,058 \$236	\$9,138 \$6,937 \$1,549	OCT 2018 OCT 2018 OCT 2018 OCT 2018	1.80% 1.80% 1.80% 1.80%	\$7,884 \$5,984 \$1,336	\$1,419 \$1,077 \$241	\$9,303 \$7,062 \$1,577 \$0
	TOTAL CONSTRUCTION COSTS ===>	\$13,288	\$2,392	18%	\$15,680		\$14,936	\$2,688	\$17,624	OCT 2018	1.80%	15,205	\$2,737	\$17,941
P-01	LANDS AND DAMAGES	\$135	\$24	18%	\$159	12.40%	\$152	\$27	\$179	OCT 2018	1.80%	\$154	\$28	\$182
P-30	PLANNING, ENGINEERING & DESIGN	\$1,329	\$239	18%	\$1,568	12.40%	\$1,494	\$269	\$1,763	OCT 2018	1.80%	\$1,521	\$274	\$1,794
P-31	CONSTRUCTION MANAGEMENT	\$1,063	\$191	18%	\$1,254	12.40%	\$1,195	\$215	\$1,410	OCT 2018	1.80%	\$1,216	\$219	\$1,435
	TOTAL PROJECT COSTS ======>	\$15,815	\$2,847	18%	\$18,662		\$17,776	\$3,200	\$20,976			18,096	\$3,257	\$21,353

YEAR 06	
TOTAL COSTS ========>	21,353

LOCATION: Calcasieu LA

THIS ESTIMATE IS BASED ON THE SCOPE CONTAINED IN THE FEASIBILITY REPORT, DATED: FEB-2008

PROJECT: DMMP

DISTRICT: NEW ORLEANS CALCASIEU RIVER AND PASS DMMP P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			GET YEAR: 2 LEVEL: 1 C			FUI	LLY FUNDED	ESTIMATE					
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$32,719 \$263 \$826	\$5,889 \$47 \$149	18% 18% 18% 18%	\$38,609 \$310 \$975	14.40% 14.40% 14.40% 14.40%	\$37,431 \$301 \$945	\$6,737 \$54 \$170	\$44,168 \$355 \$1,115	OCT 2019 OCT 2019 OCT 2019 OCT 2019	1.80% 1.80% 1.80% 1.80%	\$38,104 \$306 \$962	\$6,859 \$55 \$173	\$44,963 \$361 \$1,135 \$0
	TOTAL CONSTRUCTION COSTS ===>	\$33,808	\$6,085	18%	\$39,893		\$38,676	\$6,962	\$45,638	OCT 2019	1.80%	39,373	\$7,087	\$46,460
P-01	LANDS AND DAMAGES			18%		14.40%				OCT 2019	1.80%			\$0
P-30	PLANNING, ENGINEERING & DESIGN	\$3,381	\$609	18%	\$3,990	14.40%	\$3,868	\$696	\$4,564	OCT 2019	1.80%	\$3,937	\$709	\$4,646
P-31	CONSTRUCTION MANAGEMENT	\$2,705	\$487	18%	\$3,192	14.40%	\$3,095	\$557	\$3,652	OCT 2019	1.80%	\$3,150	\$567	\$3,717
	TOTAL PROJECT COSTS ======>	\$39,894	\$7,181	18%	\$47,075		\$45,639	\$8,215	\$53,854			46,460	\$8,363	\$54,823

YEAR 07	
TOTAL COSTS =======>	54,823

THIS ESTIMATE IS BASED ON THE SCOPE CONTAINED IN THE FEASIBILITY REPORT, DATED: FEB-2008

DISTRICT: NEW ORLEANS

PROJECT: DMMP
LOCATION: Calcasieu LA CAI

CALCASIEU RIVER AND PASS DMMP

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE		HORIZ./BUDO				FUL	LY FUNDED	ESTIMATE					
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$6,889 \$358 \$5,933	\$1,240 \$64 \$1,068	18% 18% 18% 18%	\$8,129 \$422 \$7,001	16.50% 16.50% 16.50% 16.50%	\$8,026 \$417 \$6,912	\$1,445 \$75 \$1,244	\$9,470 \$492 \$8,156	OCT 2020 OCT 2020 OCT 2020 OCT 2020	1.80% 1.80% 1.80% 1.80%	\$8,170 \$425 \$7,036	\$1,471 \$76 \$1,267	\$9,641 \$501 \$8,303 \$0
	TOTAL CONSTRUCTION COSTS ===>	\$13,180	\$2,372	18%	\$15,552		\$15,355	\$2,764	\$18,119	OCT 2020	1.80%	15,631	\$2,814	\$18,445
P-01	LANDS AND DAMAGES	\$164	\$30	18%	\$194	16.50%	\$191	\$34	\$225	OCT 2020	1.80%	\$194	\$35	\$230
P-30	PLANNING, ENGINEERING & DESIGN	\$1,318	\$237	18%	\$1,555	16.50%	\$1,535	\$276	\$1,812	OCT 2020	1.80%	\$1,563	\$281	\$1,844
P-31	CONSTRUCTION MANAGEMENT	\$1,054	\$190	18%	\$1,244	16.50%	\$1,228	\$221	\$1,449	OCT 2020	1.80%	\$1,250	\$225	\$1,475
	TOTAL PROJECT COSTS =====>	\$15,716	\$2,829	18%	\$18,545		\$18,309	\$3,296	\$21,605		_	18,639	\$3,355	\$21,994

YEAR 08	
TOTAL COSTS =======>	21,994

P.O.C.: Paul Varnado

PROJECT: DMMP
LOCATION: Calcasieu LA CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE		HORIZ./BUDO			FULLY FUNDED ESTIMATE								
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$10,922 \$238 \$15,405	\$1,966 \$43 \$2,773	18% 18% 18% 18%	\$12,888 \$281 \$18,178	18.60% 18.60% 18.60% 18.60%	\$12,953 \$282 \$18,270	\$2,332 \$51 \$3,289	\$15,285 \$333 \$21,559	OCT 2021 OCT 2021 OCT 2021 OCT 2021	1.80% 1.80% 1.80% 1.80%	\$13,187 \$287 \$18,599	\$2,374 \$52 \$3,348	\$15,560 \$339 \$21,947 \$0
	TOTAL CONSTRUCTION COSTS ===>	\$26,565	\$4,782	18%	\$31,347		\$31,506	\$5,671	\$37,177	OCT 2021	1.80%	32,073	\$5,773	\$37,846
P-01	LANDS AND DAMAGES			18%		18.60%				OCT 2021	1.80%			\$0
P-30	PLANNING, ENGINEERING & DESIGN	\$2,657	\$478	18%	\$3,135	18.60%	\$3,151	\$567	\$3,718	OCT 2021	1.80%	\$3,208	\$577	\$3,785
P-31	CONSTRUCTION MANAGEMENT	\$2,125	\$383	18%	\$2,508	18.60%	\$2,520	\$454	\$2,974	OCT 2021	1.80%	\$2,566	\$462	\$3,027
	TOTAL PROJECT COSTS =====>	\$31,347	\$5,642	18%	\$36,989		\$37,178	\$6,692	\$43,869	_	-	37,847	\$6,812	\$44,659

**YEAR 09**TOTAL COSTS =======> 44,659

PROJECT: DMMP

LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS
P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			GET YEAR: 2 LEVEL: 1 O	-	FULLY FUNDED ESTIMATE								
ACCOUNT NUMBER	ī	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$27,505 \$409 \$504	\$4,951 \$74 \$91	18% 18% 18% 18%	\$32,456 \$483 \$595	20.70% 20.70% 20.70% 20.70%	\$33,199 \$494 \$608	\$5,976 \$89 \$109	\$39,174 \$583 \$718	OCT 2022 OCT 2022 OCT 2022 OCT 2022	1.80% 1.80% 1.80% 1.80%	\$33,796 \$503 \$619	\$6,083 \$90 \$111	\$39,879 \$593 \$731 \$0
	TOTAL CONSTRUCTION COSTS ===>	\$28,418	\$5,115	18%	\$33,533		\$34,301	\$6,174	\$40,475	OCT 2022	1.80%	34,918	\$6,285	\$41,203
P-01	LANDS AND DAMAGES			18%		20.70%				OCT 2022	1.80%			\$0
P-30	PLANNING, ENGINEERING & DESIGN	\$2,842	\$512	18%	\$3,354	20.70%	\$3,430	\$617	\$4,048	OCT 2022	1.80%	\$3,492	\$629	\$4,121
P-31	CONSTRUCTION MANAGEMENT	\$2,273	\$409	18%	\$2,682	20.70%	\$2,744	\$494	\$3,237	OCT 2022	1.80%	\$2,793	\$503	\$3,296
	TOTAL PROJECT COSTS ======>	\$33,533	\$6,036	18%	\$39,569		\$40,474	\$7,285	\$47,760			41,203	\$7,417	\$48,619

**YEAR 10**TOTAL COSTS ========> 48,619

PROJECT: DMMP LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE		IORIZ./BUDO				FUI	LY FUNDED	ESTIMATE					
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$10,045 \$638 \$5,518 \$1,345	\$1,808 \$115 \$993 \$242	18% 18% 18% 18%	\$11,853 \$753 \$6,511 \$1,587	22.90% 22.90% 22.90% 22.90%	\$12,345 \$784 \$6,782 \$1,653	\$2,222 \$141 \$1,221 \$298	\$14,568 \$925 \$8,002 \$1,951	OCT 2023 OCT 2023 OCT 2023 OCT 2023	1.80% 1.80% 1.80% 1.80%	\$12,568 \$798 \$6,904 \$1,683	\$2,262 \$144 \$1,243 \$303	\$14,830 \$942 \$8,146 \$1,986
	TOTAL CONSTRUCTION COSTS ===>	\$17,546	\$3,158	18%	\$20,704		\$21,564	\$3,882	\$25,446	OCT 2023	1.80%	21,952	\$3,951	\$25,904
P-01	LANDS AND DAMAGES	\$22	\$4	18%	\$26	22.90%	\$27	\$5	\$32	OCT 2023	1.80%	\$28	\$5	\$32
P-30	PLANNING, ENGINEERING & DESIGN	\$1,755	\$316	18%	\$2,071	22.90%	\$2,157	\$388	\$2,545	OCT 2023	1.80%	\$2,196	\$395	\$2,591
P-31	CONSTRUCTION MANAGEMENT	\$1,404	\$253	18%	\$1,657	22.90%	\$1,726	\$311	\$2,036	OCT 2023	1.80%	\$1,757	\$316	\$2,073
	TOTAL PROJECT COSTS ======>	\$20,727	\$3,731	18%	\$24,458		\$25,473	\$4,585	\$30,059			25,932	\$4,668	\$30,600

**YEAR 11**TOTAL COSTS =======> 30,600

PROJECT: DMMP

LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS
P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE		HORIZ./BUDO				FUI	LY FUNDED	ESTIMATE					
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$18,201 \$306 \$912	\$3,276 \$55 \$164	18% 18% 18% 18%	\$21,477 \$361 \$1,076	25.10% 25.10% 25.10% 25.10%	\$22,769 \$383 \$1,141	\$4,099 \$69 \$205	\$26,868 \$452 \$1,346	OCT 2024 OCT 2024 OCT 2024 OCT 2024	1.80% 1.80% 1.80% 1.80%	\$23,179 \$390 \$1,161	\$4,172 \$70 \$209	\$27,352 \$460 \$1,371 \$0
	TOTAL CONSTRUCTION COSTS ===>	\$19,419	\$3,495	18%	\$22,914		\$24,293	\$4,373	\$28,666	OCT 2024	1.80%	24,730	\$4,451	\$29,182
P-01	LANDS AND DAMAGES	\$5	\$1	18%	\$6	25.10%	\$6	\$1	\$7	OCT 2024	1.80%	\$6	\$1	\$8
P-30	PLANNING, ENGINEERING & DESIGN	\$1,942	\$350	18%	\$2,292	25.10%	\$2,429	\$437	\$2,867	OCT 2024	1.80%	\$2,473	\$445	\$2,918
P-31	CONSTRUCTION MANAGEMENT	\$1,554	\$280	18%	\$1,834	25.10%	\$1,944	\$350	\$2,294	OCT 2024	1.80%	\$1,979	\$356	\$2,335
	TOTAL PROJECT COSTS ======>	\$22,920	\$4,126	18%	\$27,046		\$28,673	\$5,161	\$33,834			29,189	\$5,254	\$34,443

YEAR 12	
TOTAL COSTS ========>	34,443

PROJECT: DMMP
LOCATION: Calcasieu LA CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS
P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE			GET YEAR: 2			FUI	LY FUNDED	ESTIMATE					
ACCOLINI	EFFECTIVE PRICING LE			CNITC	TOTAL			LEVEL: 1 C		FEATURE	OMD	T202	CNITC	FILL
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01	RELOCATIONS	N/A												
C-12-04 C-12-05 C-12-06	HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT	\$15,504 \$560	\$2,791 \$101	18% 18% 18%	\$18,295 \$661	27.30% 27.30% 27.30%	\$19,737 \$713	\$3,553 \$128	\$23,289 \$841	OCT 2025 OCT 2025 OCT 2025	1.80% 1.80% 1.80%	\$20,092 \$726	\$3,617 \$131	\$23,708 \$856 \$0
C-16-01	SHORELINE PROTECTION			18%		27.30%				OCT 2025	1.80%			\$0
										_	-			
	TOTAL CONSTRUCTION COSTS ===>	\$16,064	\$2,892	18%	\$18,956		\$20,449	\$3,681	\$24,131	OCT 2025	1.80%	20,818	\$3,747	\$24,565
P-01	LANDS AND DAMAGES			18%		27.30%				OCT 2025	1.80%			\$0
P-30	PLANNING, ENGINEERING & DESIGN	\$1,606	\$289	18%	\$1,895	27.30%	\$2,044	\$368	\$2,412	OCT 2025	1.80%	\$2,081	\$375	\$2,456
P-31	CONSTRUCTION MANAGEMENT	\$1,285	\$231	18%	\$1,516	27.30%	\$1,636	\$294	\$1,930	OCT 2025	1.80%	\$1,665	\$300	\$1,965
	TOTAL PROJECT COSTS ======>	\$18,955	\$3,412	18%	\$22,367		\$24,130	\$4,343	\$28,473		-	24,564	\$4,422	\$28,986

YEAR 13	
TOTAL COSTS =======>>	28,986

PROJECT: DMMP
LOCATION: Calcasieu LA CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			GET YEAR: 2 LEVEL: 1 O		FULLY FUNDED ESTIMATE								
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$6,889 \$350 \$565	\$1,240 \$63 \$102	18% 18% 18% 18%	\$8,129 \$413 \$667	29.60% 29.60% 29.60% 29.60%	\$8,928 \$454 \$732	\$1,607 \$82 \$132	\$10,536 \$535 \$864	OCT 2026 OCT 2026 OCT 2026 OCT 2026	1.80% 1.80% 1.80% 1.80%	\$9,089 \$462 \$745	\$1,636 \$83 \$134	\$10,725 \$545 \$880 \$0
	TOTAL CONSTRUCTION COSTS ===>	\$7,804	\$1,405	18%	\$9,209		\$10,114	\$1,821	\$11,935	OCT 2026	1.80%	10,296	\$1,853	\$12,149
P-01	LANDS AND DAMAGES			18%		29.60%				OCT 2026	1.80%			\$0
P-30	PLANNING, ENGINEERING & DESIGN	\$780	\$140	18%	\$920	29.60%	\$1,011	\$182	\$1,193	OCT 2026	1.80%	\$1,029	\$185	\$1,214
P-31	CONSTRUCTION MANAGEMENT	\$624	\$112	18%	\$736	29.60%	\$809	\$146	\$954	OCT 2026	1.80%	\$823	\$148	\$971
	TOTAL PROJECT COSTS ======>	\$9,208	\$1,657	18%	\$10,865		\$11,934	\$2,148	\$14,082			12,148	\$2,187	\$14,335

YEAR 14	
TOTAL COSTS =======>	14,335

PROJECT: DMMP LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS
P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE			GET YEAR: 2		FULLY FUNDED ESTIMATE								
ACCOUNT NUMBER	Г	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$28,362 \$235 \$1,873	\$5,105 \$42 \$337	18% 18% 18% 18%	\$33,467 \$277 \$2,210	31.90% 31.90% 31.90% 31.90%	\$37,409 \$310 \$2,470	\$6,734 \$56 \$445	\$44,144 \$366 \$2,915	OCT 2027 OCT 2027 OCT 2027 OCT 2027	1.80% 1.80% 1.80%	\$38,083 \$316 \$2,515	\$6,855 \$57 \$453	\$44,938 \$372 \$2,968 \$0
	TOTAL CONSTRUCTION COSTS ===>	\$30,470	\$5,485	18%	\$35,955		\$40,190	\$7,234	\$47,424	OCT 2027	1.80%	40,913	\$7,364	\$48,278
P-01	LANDS AND DAMAGES	\$5	\$1	18%	\$6	31.90%	\$7	\$1	\$8	OCT 2027	1.80%	\$7	\$1	\$8
P-30	PLANNING, ENGINEERING & DESIGN	\$3,047	\$548	18%	\$3,595	31.90%	\$4,019	\$723	\$4,742	OCT 2027	1.80%	\$4,091	\$736	\$4,828
P-31	CONSTRUCTION MANAGEMENT	\$2,438	\$439	18%	\$2,877	31.90%	\$3,216	\$579	\$3,795	OCT 2027	1.80%	\$3,274	\$589	\$3,863
	TOTAL PROJECT COSTS ======>	\$35,960	\$6,473	18%	\$42,433		\$47,431	\$8,538	\$55,969			48,285	\$8,691	\$56,976

YEAR 15	
TOTAL COSTS =======>>	56,976

PROJECT: DMMP LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE		HORIZ./BUDO			FULLY FUNDED ESTIMATE								
CCOUNT IUMBER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FUI (\$H
-02-01 -12-04 -12-05 -12-06 -16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$16,358 \$8,243 \$371	\$2,944 \$1,484 \$67	18% 18% 18% 18%	\$19,303 \$9,727 \$438	34.30% 34.30% 34.30% 34.30%	\$21,969 \$11,070 \$498	\$3,954 \$1,993 \$90	\$25,924 \$13,063 \$588	OCT 2028 OCT 2028 OCT 2028 OCT 2028	1.80% 1.80% 1.80% 1.80%	\$22,364 \$11,270 \$507	\$4,026 \$2,029 \$91	\$26 \$13
	TOTAL CONSTRUCTION COSTS ===>	\$24,972	\$4,495	18%	\$29,467	-	\$33,537	\$6,037	\$39,574	OCT 2028	1.80%	34,141	\$6,145	\$40
01	LANDS AND DAMAGES			18%		34.30%				OCT 2028	1.80%			
30	PLANNING, ENGINEERING & DESIGN	\$2,497	\$449	18%	\$2,946	34.30%	\$3,353	\$604	\$3,957	OCT 2028	1.80%	\$3,414	\$614	\$4
31	CONSTRUCTION MANAGEMENT	\$1,998	\$360	18%	\$2,358	34.30%	\$2,683	\$483	\$3,166	OCT 2028	1.80%	\$2,732	\$492	\$3
	TOTAL PROJECT COSTS ======>	\$29,467	\$5,304	18%	\$34,771		\$39,574	\$7,123	\$46,698			40,287	\$7,252	\$47

**YEAR 16**TOTAL COSTS ========> **47,538** 

PROJECT: DMMP

LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS
P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE PREPARED: 5 NOV 2010  EFFECTIVE PRICING LEVEL: NOV 2010							GET YEAR: 2 LEVEL: 1 C		FULLY FUNDED ESTIMATE					
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)	
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$27,668 \$373 \$1,201	\$4,980 \$67 \$216	18% 18% 18% 18%	\$32,648 \$440 \$1,417	36.70% 36.70% 36.70% 36.70%	\$37,822 \$510 \$1,642	\$6,808 \$92 \$296	\$44,631 \$602 \$1,937	OCT 2029 OCT 2029 OCT 2029 OCT 2029	1.80% 1.80% 1.80% 1.80%	\$38,503 \$519 \$1,671	\$6,931 \$93 \$301	\$45,434 \$61: \$1,972 \$6	
	TOTAL CONSTRUCTION COSTS ===>	\$29,242	\$5,264	18%	\$34,506	•	\$39,974	\$7,195	\$47,169	OCT 2029	1.80%	40,693	\$7,325	\$48,018	
P-01	LANDS AND DAMAGES	\$5	\$1	18%	\$6	36.70%	\$7	\$1	\$8	OCT 2029	1.80%	\$7	\$1	\$8	
P-30	PLANNING, ENGINEERING & DESIGN	\$2,924	\$526	18%	\$3,450	36.70%	\$3,997	\$719	\$4,717	OCT 2029	1.80%	\$4,069	\$732	\$4,80	
P-31	CONSTRUCTION MANAGEMENT	\$2,339	\$421	18%	\$2,760	36.70%	\$3,197	\$576	\$3,773	OCT 2029	1.80%	\$3,255	\$586	\$3,84	
	TOTAL PROJECT COSTS ======>	\$34,510	\$6,212	18%	\$40,722		\$47,175	\$8,492	\$55,667	_	-	48,024	\$8,644	\$56,66	

YEAR 17	
TOTAL COSTS =======>	56,669

PROJECT: DMMP

LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS
P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE				I		IORIZ./BUDO			FULLY FUNDED ESTIMATE					
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)	
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$6,882 \$331 \$847	\$1,239 \$60 \$152	18% 18% 18% 18%	\$8,121 \$391 \$999	39.20% 39.20% 39.20% 39.20%	\$9,580 \$461 \$1,179	\$1,724 \$83 \$212	\$11,304 \$544 \$1,391	OCT 2030 OCT 2030 OCT 2030 OCT 2030	1.80% 1.80% 1.80% 1.80%	\$9,752 \$469 \$1,200	\$1,755 \$84 \$216	\$11,508 \$553 \$1,416 \$0	
	TOTAL CONSTRUCTION COSTS ===>	\$8,060	\$1,451	18%	\$9,511		\$11,220	\$2,020	\$13,239	OCT 2030	1.80%	11,421	\$2,056	\$13,477	
P-01	LANDS AND DAMAGES			18%		39.20%				OCT 2030	1.80%			\$0	
P-30	PLANNING, ENGINEERING & DESIGN	\$806	\$145	18%	\$951	39.20%	\$1,122	\$202	\$1,324	OCT 2030	1.80%	\$1,142	\$206	\$1,348	
P-31	CONSTRUCTION MANAGEMENT	\$645	\$116	18%	\$761	39.20%	\$898	\$162	\$1,059	OCT 2030	1.80%	\$914	\$165	\$1,079	
	TOTAL PROJECT COSTS ======>	\$9,511	\$1,712	18%	\$11,223		\$13,239	\$2,383	\$15,622		_	13,478	\$2,426	\$15,904	

YEAR 18	
TOTAL COSTS =======>>	15,904

PROJECT: DMMP LOCATION: Calcasieu LA

CALCASIEU RIVER AND PASS DMMP

DISTRICT: NEW ORLEANS P.O.C.: Paul Varnado

	CURRENT MCACES ESTIMATE EFFECTIVE PRICING LE		IORIZ./BUDO			FULLY FUNDED ESTIMATE								
ACCOUNT NUMBER		COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE CONST PT	OMB (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
C-02-01 C-12-04 C-12-05 C-12-06 C-16-01	RELOCATIONS HYDRAULIC DREDGING DRAINAGE AREA MANAGEMENT DIKE CONST, REHAB AND LIFT SHORELINE PROTECTION	N/A \$15,466 \$235	\$2,784 \$42	18% 18% 18% 18%	\$18,250 \$277	41.70% 41.70% 41.70% 41.70%	\$21,915 \$333	\$3,945 \$60	\$25,860 \$393	OCT 2031 OCT 2031 OCT 2031 OCT 2031	1.80% 1.80% 1.80% 1.80%	\$22,310 \$339	\$4,016 \$61	\$26,32 \$40 \$ \$
	TOTAL CONSTRUCTION COSTS ===>	\$15,701	\$2,826	18%	\$18,527		\$22,248	\$4,005	\$26,253	OCT 2031	1.80%	22,649	\$4,077	\$26,72
P-01	LANDS AND DAMAGES			18%		41.70%				OCT 2031	1.80%			\$0
P-30	PLANNING, ENGINEERING & DESIGN	\$1,570	\$283	18%	\$1,853	41.70%	\$2,225	\$400	\$2,625	OCT 2031	1.80%	\$2,265	\$408	\$2,672
P-31	CONSTRUCTION MANAGEMENT	\$1,256	\$226	18%	\$1,482	41.70%	\$1,780	\$320	\$2,100	OCT 2031	1.80%	\$1,812	\$326	\$2,138
	TOTAL PROJECT COSTS ======>	\$18,527	\$3,335	18%	\$21,862		\$26,253	\$4,725	\$30,978		-	26,725	\$4,811	\$31,53