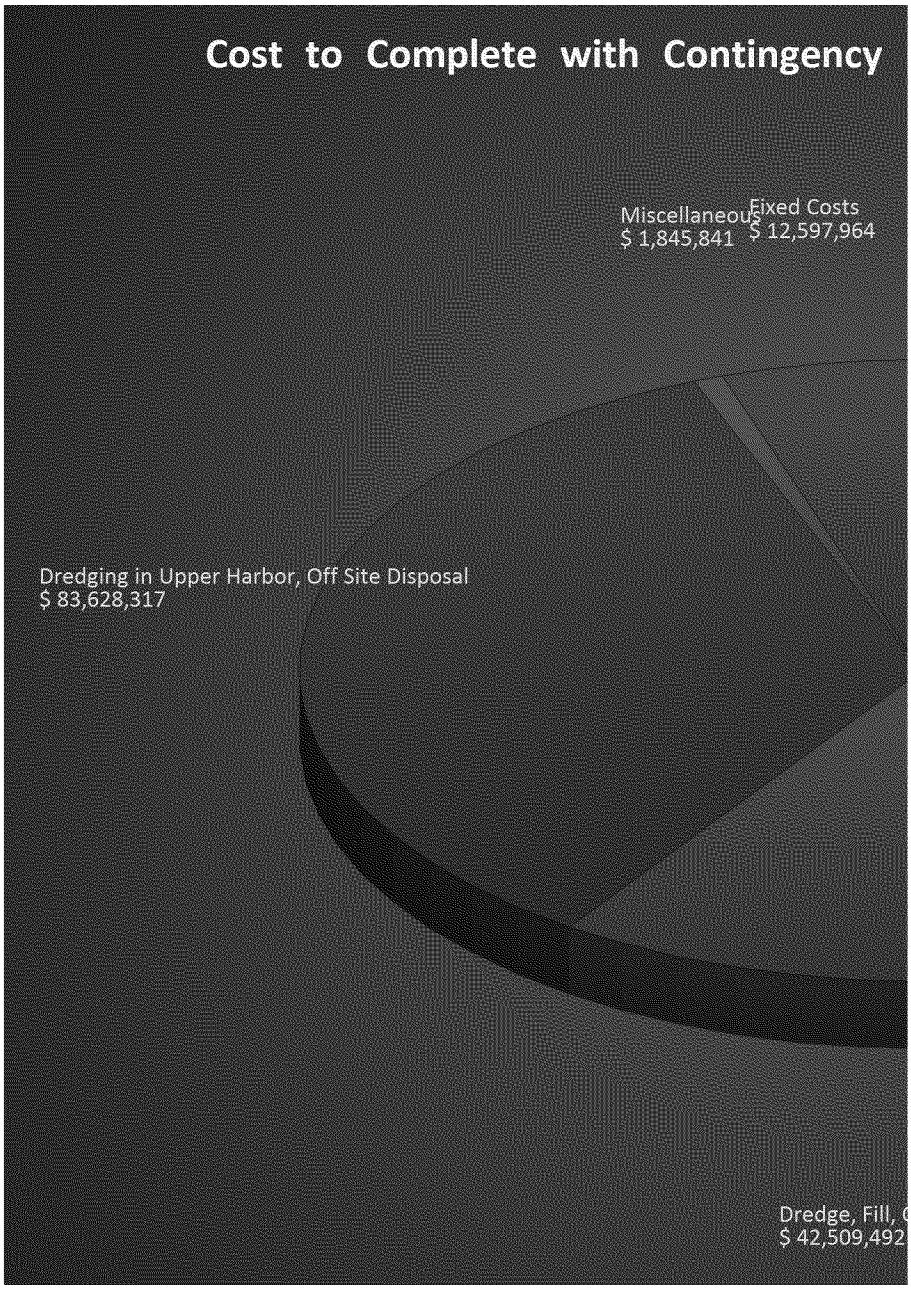
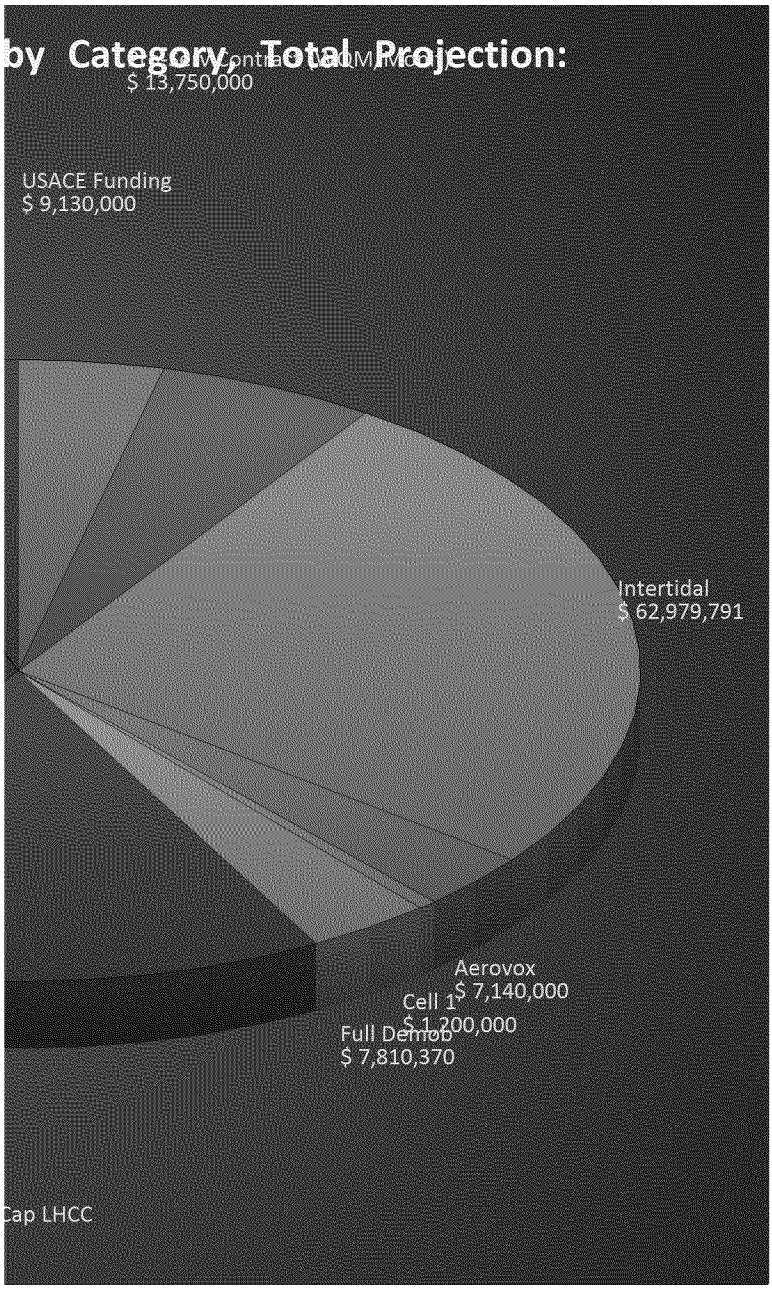
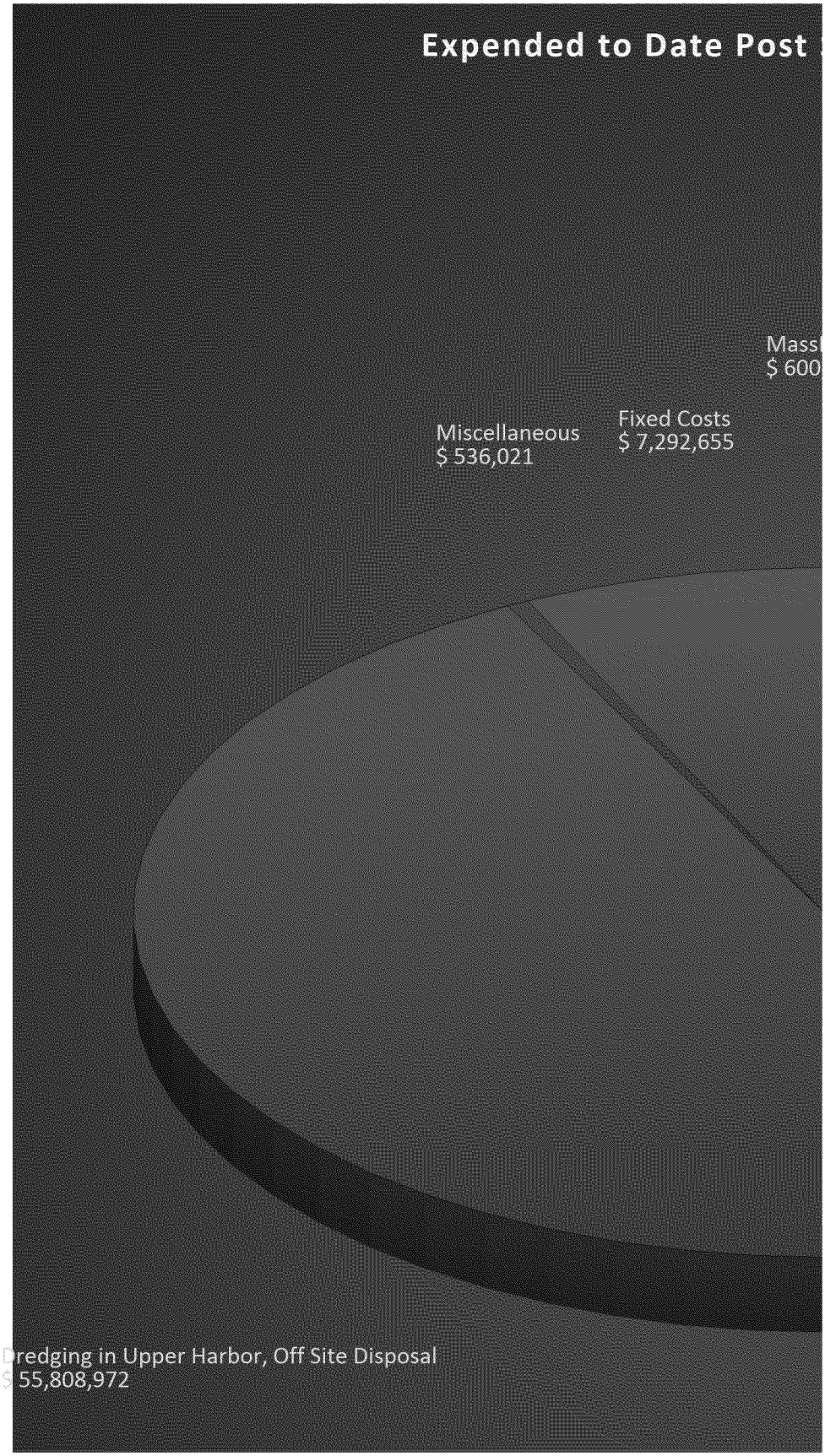
DRAFT
Comprehensive Plan Cost Comparison
3/8/2018

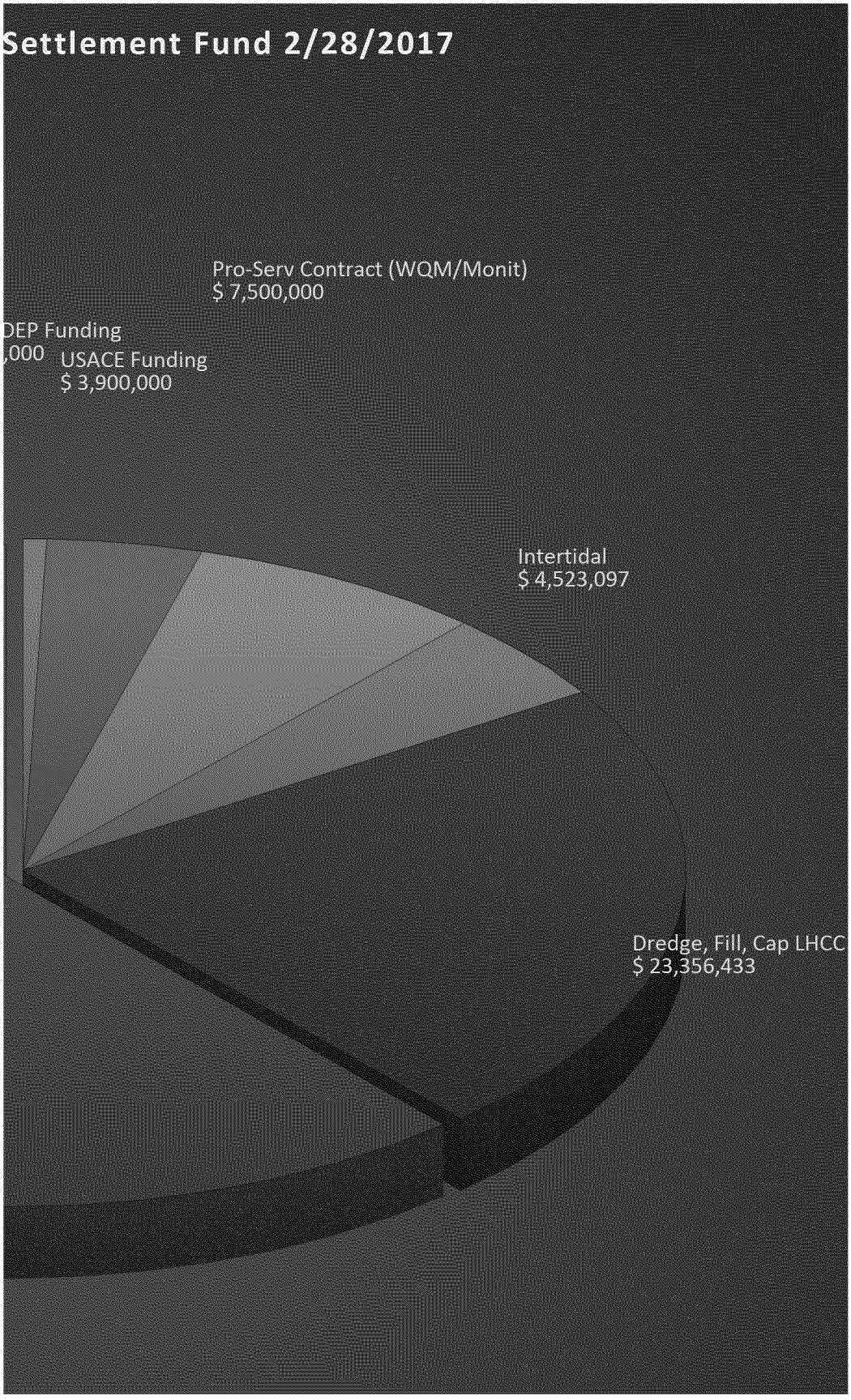
	UAO COST ESTIMATE JULY 2012	EXPENDED TO DATE POST SETTLEMENT 02/28/2017	COST TO COMPLETE REMAINING 2017-2021	TOTAL COST AT COMPLETION IN 5 YEARS	TOTAL COST AT COMPLETION WITH CONTINGENCIES	% Contingency	Cost to complete with contingency	Cost to Complete with Contingency by Category	2017	2018	2019	2020	2021	SUBTOTAL	2022	2023	2024	TOTAL (Cost to Complete Remaining includes below the line LTM costs)	RFP date	Start	Finish	NOTES
			Project Complete in 5 Years																			
MassDEP Funding		$ 600,000	$ 1,000,000	$ 1,600,000	$ 1,600,000	0%	$ 1,000,000	$ 1,000,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 1,000,000				$ 1,000,000.00				2014-2021 - ETD for 3 years - Needs verification from 3/9/17 meeting - based on EPA comment
USACE Funding		$ 3,900,000	$ 8,300,000	$ 12,200,000	$ 13,420,000	10%	$ 9,130,000	$ 9,130,000	$ 2,750,000	$ 2,750,000	$ 1,210,000	$ 1,210,000	$ 1,210,000	$ 9,130,000				$ 9,130,000.00				Per Corps - $5.9M (2014-2016), 2.5M (2017-2018) $1.1M/yr (2019 - 2021)
Pro-Serv Contract (WQM/Monit)		$ 7,500,000	$ 12,500,000	$ 20,000,000	$ 22,000,000	10%	$ 13,750,000	$ 13,750,000	$ 2,750,000	$ 2,750,000	$ 2,750,000	$ 2,750,000	$ 2,750,000	$ 13,750,000				$ 13,750,000.00				assumes $2.5M/yr - cost provided by Corps
Intertidal	$ 76,400,763	$ 4,523,097					$ -	$ 62,979,791														
UH Intertidal	$ -		$ 44,611,200	$ 44,611,200	$ 53,533,440	20%	$ 53,533,440		$ 12,000,000	$ 41,533,440				$ 53,533,440				$ 53,533,440.00	12/1/2017	5/1/2018	6/1/2019	Assume work start in 3/18 and is fully funded and east and west sides will is simultaneously
Parcel 265		$ 2,224,499	$ -	$ 2,224,499	$ 2,224,499	0%	$ -															Not included in UAO estimate
PMC		$ 2,298,598	$ 3,805,887	$ 6,104,485	$ 6,714,934	10%	$ 4,186,476		$ 4,186,476					$ 4,186,476				$ 4,186,476.10				UAO included this with intertidal volume. CTC includes SES, T&D, sheetpile install, addl 936 CY due to resurvey
LH		$ -	$ 1,622,085	$ 1,622,085	$ 2,433,128	50%	$ 2,433,128		$ 2,433,128					$ 2,433,128				$ 2,433,127.58	12/1/2017	5/1/2018	4/1/2019	Estimate from Jacobs proposal dated May 17, 2016, added fee in Rev9
BIB		$ -	$ 949,770	$ 1,044,747	$ 1,044,747	10%	$ 1,044,747			$ 1,044,747				$ 1,044,747				$ 1,044,747.00	5/1/2018	9/30/2018	10/29/2018	
Marsh Island	$ 3,380,452		$ 1,620,000	$ 1,620,000	$ 1,782,000	10%	$ 1,782,000		$ 1,782,000					$ 1,782,000				$ 1,782,000.00	4/1/2017	6/1/2017	11/1/2017	1800 cubic yards and average cost for on shore and mechanical dredge (PMC). $900/cy
Aerovox		$ -					$ -	$ 7,140,000														
Aerovox Interim Cap		$ -	$ 4,800,000	$ 4,800,000	$ 6,240,000	30%	$ 6,240,000		$ 6,240,000					$ 6,240,000				$ 6,240,000.00	12/1/2017	5/1/2018	7/1/2018	Assumed 3 ft carbon sand cover (per Corps direction). Temporary solution does not complete final remedy.
Interim Cap LTM			$ 750,000	$ 750,000	$ 900,000	20%	$ 900,000			$ 180,000	$ 180,000	$ 180,000	$ 180,000	$ 720,000	$ 180,000.00			$ 900,000.00				Assumed annual benthic and sampling of cover and reporting. No replacement costs.
							$ -															
Cell 1	$ 23,958,650	$ -					$ -	$ 1,200,000														
Cell 1 Interim Remedy			$ 1,000,000	$ 1,000,000	$ 1,200,000	20%	$ 1,200,000			$ 1,000,000	$ 50,000	$ 50,000	$ 100,000	$ 1,200,000				$ 1,200,000.00	1/1/2018	6/1/2018	6/1/2022	
							$ -															
Full Demob	$ 7,977,325	$ -	$ 5,785,460	$ 5,785,460	$ 7,810,370	35%	$ 7,810,370	$ 7,810,370			$ 3,250,000	$ 3,250,000	$ 1,310,370	$ 7,810,370				$ 7,810,370.47	10/1/2018	1/1/2019	1/1/2023	CTC from May 2016 Jacobs proposal. Contingency based upon undefined future status and necessary improvement of Areas C and D
Dredge, Fill, Cap LHCC	$ 39,838,604	$ 23,356,433		$ 23,356,433	$ 23,356,433	0%	$ -	$ 42,509,492														
Construct CAD Cell		$ 9,563,000	$ -	$ 9,563,000	$ 9,563,000	0%	$ -							$ -								
Dredge and Fill LHCC - Jacobs		$ 13,000,000	$ -	$ 13,000,000	$ 13,000,000	0%	$ -							$ -								UAO costs for all work related to CAD Cell, less the $11.3M from EPA HQ (need to verify if paid back)
Pre-BV - LH & LH to LHCC Mechanical - Jacobs		$ 793,433	$ 3,406,219	$ 4,199,653	$ 5,039,583	20%	$ 4,087,463			$ 4,087,463				$ 4,087,463				$ 4,087,463.38	2/18/2018	6/1/2018	10/29/2018	Jacobs LH dredging to date
Post BV - UH & LH to LHCC Mechanical - Jacobs		$ -	$ 3,469,400	$ 3,469,400	$ 3,816,340	10%	$ 3,816,340					$ 3,591,942		$ 3,591,942				$ 3,591,942.00				Completed
Dredge and Fill LHCC - BV		$ -	$ 17,000,000	$ 17,000,000	$ 18,700,000	10%	$ 18,700,000		$ 18,700,000					$ 18,700,000				$ 18,700,000.00	1/1/2017	6/1/2017	5/1/2018	One plant 120 days (existing UH CTC plus 37CAD, MU25, T&T), includes current Jacobs costs
Survey Contract - BV		$ -	$ 700,000	$ 700,000	$ 700,000	0%	$ 700,000		$ 700,000					$ 700,000				$ 700,000.00		5/1/2017	5/1/2018	Per USACE Email (3/16/17) changed from $18M to $17M. Fixed Cost Contract estimate
Between the Bridges Subtidal		$ -	$ 5,378,657	$ 5,378,657	$ 6,454,388	20%	$ 6,454,388			$ 6,454,388				$ 6,454,388				$ 6,454,388.16	5/1/2018	9/30/2018	10/29/2018	Per USACE Email (3/16/17) changed from $800k to $700k. Based on award to Bryant
Dredge Cleanup Passes - Jacobs			$ 2,508,000	$ 2,508,000	$ 2,758,800	10%	$ 2,758,800			$ 2,758,800				$ 2,758,800				$ 2,758,800.00	2/1/2018	6/1/2018	8/1/2018	Negotated and Awarded, added fee in Rev9
Cap LHCC	$ 5,780,303	$ -	$ 5,100,000	$ 5,100,000	$ 5,992,500	18%	$ 5,992,500				$ 5,992,500			$ 5,992,500				$ 5,992,500.00	7/1/2019	11/1/2019	1/1/2020	10% cleanup passes, based on BV CTC
														$ -								Cost estimate from EPA
Dredging in Upper Harbor, Off Site Disposal	$ 154,456,091	$ 55,808,972	$ -	$ 55,808,972	$ 55,808,972	0%	$ -	$ 63,628,317						$ -								
Temporary Pipeline Relo		$ -	$ 1,235,659	$ 1,235,659	$ 1,235,659	0%	$ 1,235,659		$ 1,235,659					$ 1,235,659				$ 1,235,659.00				2014 through 2016 dredging less $12M, PMC, Parcel 265 and fixed costs
Capping DDA		$ -	$ -	$ -	$ -	20%	$ -							$ -				$ -				Negotated and Awarded
Residual management sand		$ -	$ 11,700,000	$ 11,700,000	$ 12,870,000	10%	$ 12,870,000			$ 12,870,000				$ 12,870,000				$ 12,870,000.00	11/1/2018	3/1/2019	11/1/2019	Capping of DDA cost estimated from ESD 4
																						This is an assumed volume of 100,000 cy, mechanical placement
Miscellaneous		$ 536,021						$ 1,849,641														
LHCC O&M	$ 580,163	$ -	$ 689,052	$ 689,052	$ 689,052	0%	$ 689,052					$ 80,000	$ 80,000	$ 160,000	$ 80,000.00		$ 80,000.00	$ 320,000.00				Cost to Complete is escalated UAO cost (3.5%)
Seafood Monitoring	$ 721,387	$ -	$ 579,290	$ 579,290	$ 579,290	0%	$ 579,290				$ 579,290			$ 579,290		$ -	$ 579,289.63	$ 1,158,579.26				Costs from MassDEP
Site Wide Benthic LTM	$ 618,703	$ 536,021	$ 550,000	$ 1,086,021	$ 1,140,322	5%	$ 577,500							$ 577,500		$ 577,500.00		$ 1,155,000.00				Cost to Complete is escalated UAO cost (3.5%), assume 1/5yr
Fixed Costs	$ 54,927,518	$ 7,292,655					$ -	$ 12,597,964														Jacobs Fixed Costs
Project Management and Admin		$ 3,696,600	$ 6,244,994	$ 9,941,394	$ 10,935,534	10%	$ 6,869,054		$ 666,126	$ 1,332,253	$ 1,332,253	$ 1,332,253	$ 1,332,254	$ 5,995,136	$ 666,126.30			$ 6,661,264.00				
Site Ops and Warehouse		$ 2,628,572	$ 4,440,155	$ 7,068,727	$ 7,775,600	10%	$ 4,884,171		$ 484,598	$ 969,196	$ 969,196	$ 969,196	$ 969,196	$ 4,361,383	$ 484,598.10			$ 4,845,981.00				
Air Monitoring		$ 967,284	$ 767,945	$ 1,735,228	$ 1,908,751	10%	$ 844,739			$ 168,948	$ 168,948	$ 168,948	$ 168,948	$ 675,791	$ 168,485.39			$ 844,276.61				

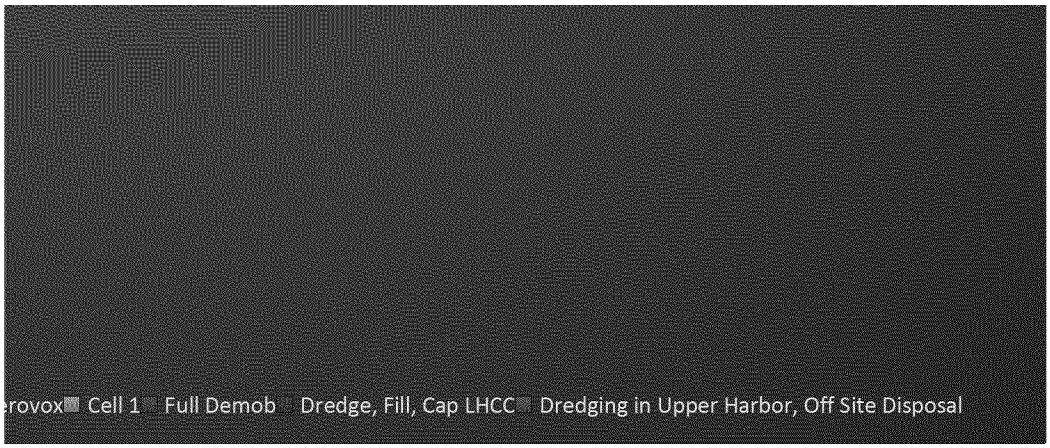

Cost to Complete with Contingency
Miscellaneous
$ 1,845,841
Fixed Costs
$ 12,597,964
Dredging in Upper Harbor, Off Site Disposal
$ 83,628,317
Dredge, Fill, C
$ 42,509,492


by Category, Total Projection:
$ 13,750,000
USACE Funding
$ 9,130,000
Intertidal
$ 62,979,791
Aerovox
$ 7,140,000
Cell 1
$ 1,200,000
Full Demob
$ 7,810,370
Cap LHCC


Expended to Date Post
Mass
$ 600
Miscellaneous
$ 536,021
Fixed Costs
$ 7,292,655
redging in Upper Harbor, Off Site Disposal
55,808,972

MassDEP Funding
USACE Funding
Pro-Serv Contract (WQM/Monit)
Intertidal
Ae
Miscellaneous
Fixed Costs


Settlement Fund 2/28/2017
Pro-Serv Contract (WQM/Monit)
$ 7,500,000
DEP Funding
,000
USACE Funding
$ 3,900,000
Intertidal
$ 4,523,097
Dredge, Fill, Cap LHCC
$ 23,356,433


rovox
Cell 1
Full Demob
Dredge, Fill, Cap LHCC
Dredging in Upper Harbor, Off Site Disposal