Project Name: New England ODMDS - 2018 Massachusetts Bay Disposal Site (MBDS)
Project Manager: Jean Brochi
Date to Be Performed: 2018 late summer
Date Prepared: 07MAR2017

Survey Objective: The large improvement dredging project for Boston Harbor is anticipated to begin later in 2017 and continue into 2018. Material from this project is planned to be placed within an expanded boundary MBDS to restore areas that had historically received mixed waste. This survey will track placement of the material as well as provide site-wide data for a revision of the SMMP.

Activity/Item	Unit	# of Units	Unit Cost	Total Cost
Ship Time - day trips on ~50' vessel				
Mobilization	Days	1	$ 2,800.00	$ 2,800.00
Multibeam survey	Days	5	$ 2,800.00	$ 14,000.00
Refit for SPI/PV survey	Days	1	$ 2,800.00	$ 2,800.00
SPI/PV survey	Days	4	$ 2,800.00	$ 11,200.00
Sediment grab collection	Days	2	$ 2,800.00	$ 5,600.00
Demobilization	Days	1	$ 2,800.00	$ 2,800.00
				$ -
Ship Time Total		**14**		**$ 39,200.00**
Laboratory and Analytical - Subcontractor				
SPI/PV image analysis	sample	180	$ 70.00	$ 12,600.00
benthic community analysis	sample	25	$ 500.00	$ 12,500.00
grain size, % moisture, specific gravity, TOC	sample	40	$ 333.00	$ 13,320.00
				$ -
Laboratory and Analytical Total				**$ 38,420.00**
Contractor Services				
Initial Planning/Field - planning, APP preparation, QAPP preparation, logistics, mob, survey, demob, basic cruise reporting	Hour	875	$ 110.00	$ 96,250.00
Analysis - multibeam, backscatter, side-scan analysis, SPI/PV analysis and statistics, physical/chemical analysis, data review meeting, data figures	Hour	345	$ 135.00	$ 46,575.00
Reporting - outline with figures and tables, draft report, redline report, final proof, final, technical support notebook	Hour	480	$ 145.00	$ 69,600.00
				$ -
				$ -
Contractor Services Total				**$ 212,425.00**

Equipment Rental and Other Expenses - Subcontractor				
tide gage	day	5	$ 120.00	$ 600.00
hypack + GPS	day	12	$ 300.00	$ 3,600.00
heave compensator	day	5	$ 360.00	$ 1,800.00
CTD	day	5	$ 90.00	$ 450.00
multibeam system	day	6	$ 900.00	$ 5,400.00
SPI/PV system	day	5	$ 898.70	$ 4,493.50
grab sampler	day	2	$ 90.00	$ 180.00
box corer	day	2	$ 100.00	$ 200.00
other supplies (sampling)	lump sum	2	$ 400.00	$ 800.00
light duty truck	day	14	$ 82.00	$ 1,148.00
heavy duty truck	day	14	$ 106.00	$ 1,484.00
				$ -
Equipment and Other Total				**$ 20,155.50**
Total Estimated Ship Costs				**$ 310,200.50**

Total Estimated Cost Summary

Category	Total Cost
Ship Time	$ 39,200.00
Laboratory and Analytical	$ 38,420.00
Contractor Services	$ 212,425.00
Equipment Rental & Other	$ 20,155.50
Total Cost	**$ 310,200.50**
Total Days Ship Time (Days)	**14**

This cost estimate format is intended to help the survey designer plan the survey from an operational point of view.

Project Name: New England ODMDS - 2019 Central/Eastern Long Island Sound Disposal Sites (CLDS/ELDS)
Project Manager: Jean Brochi
Date to Be Performed: 2020 late summer
Date Prepared: 07MAR2017

Survey Objective: CLDS has historically been the most active of the New England ODMDS, and ELDS is the newest New England site. This combined survey is intended to be both a standard confirmatory survey to map the recent placement of dredged material and expected biological recovery as well as a focused survey to refine mapping of sediment chemistry that may have been affected by historical placement at the site.

Activity/Item	Unit	# of Units	Unit Cost	Total Cost
Ship Time - day trips on ~50' vessel				
Mobilization/transit	Days	2	$ 2,912.00	$ 5,824.00
Multibeam survey	Days	2	$ 2,912.00	$ 5,824.00
Refit for SPI/PV survey	Days	1	$ 2,912.00	$ 2,912.00
SPI/PV survey	Days	3	$ 2,912.00	$ 8,736.00
Sediment grab collection	Days	3	$ 2,912.00	$ 8,736.00
Transit/demobilization	Days	2	$ 2,912.00	$ 5,824.00
				$ -
Ship Time Total		**13**		**$ 37,856.00**
Laboratory and Analytical - Subcontractor				
SPI/PV image analysis	sample	160	$ 72.80	$ 11,648.00
benthic community analysis	sample	36	$ 520.00	$ 18,720.00
grain size, % moisture, specific gravity, TOC	sample	36	$ 346.32	$ 12,467.52
sediment metals, PAH, pesticides, PCB	sample	36	$ 751.92	$ 27,069.12
				$ -
Laboratory and Analytical Total				**$ 69,904.64**
Contractor Services				
Initial Planning/Field - planning, APP preparation, QAPP preparation, logistics, mob, survey, demob, basic cruise reporting	Hour	750	$ 114.40	$ 85,800.00
Analysis - multibeam, backscatter, side-scan analysis, SPI/PV analysis and statistics, physical/chemical analysis, data review meeting, data figures	Hour	320	$ 140.40	$ 44,928.00
Reporting - outline with figures and tables, draft report, redline report, final proof, final, technical support notebook	Hour	460	$ 150.80	$ 69,368.00
				$ -

				$ -
Contractor Services Total				**$ 200,096.00**
Equipment Rental and Other Expenses - Subcontractor				
tide gage	day	2	$ 124.80	$ 249.60
hypack + GPS	day	10	$ 312.00	$ 3,120.00
heave compensator	day	2	$ 374.40	$ 748.80
CTD	day	2	$ 93.60	$ 187.20
multibeam system	day	3	$ 936.00	$ 2,808.00
SPI/PV system	day	4	$ 934.65	$ 3,738.59
grab sampler	day	2	$ 93.60	$ 187.20
box corer	day	2	$ 104.00	$ 208.00
other supplies (sampling)	lump sum	2	$ 416.00	$ 832.00
light duty truck	day	13	$ 85.28	$ 1,108.64
heavy duty truck	day	13	$ 110.24	$ 1,433.12
				$ -
Equipment and Other Total				**$ 14,621.15**
Total Estimated Ship Costs				**$ 322,477.79**

Total Estimated Cost Summary

Category	Total Cost
Ship Time	$ 37,856.00
Laboratory and Analytical	$ 69,904.64
Contractor Services	$ 200,096.00
Equipment Rental & Other	$ 14,621.15
Total Cost	**$ 322,477.79**
Total Days Ship Time (Days)	**13**

This cost estimate format is intended to help the survey designer plan the survey from an operational point of view.

Project Name: New England ODMDS - 2020 Western Long Island Sound Disposal Site (WLDS)
Project Manager: Jean Brochi
Date to Be Performed: 2020 mid summer
Date Prepared: 07MAR2017

Survey Objective: Although less active than other sites within Long Island Sound, there is a record of historical placement of dredged material in the general area of WLDS. The proposed survey is intended to be both a standard confirmatory survey to map the recent placement of dredged material and expected biological recovery as well as a focused survey to refine mapping of sediment chemistry that may have been affected by historical placement at the site.

Activity/Item	Unit	# of Units	Unit Cost	Total Cost
Ship Time - day trips on ~50' vessel				
Mobilization/transit	Days	2	$ 3,028.48	$ 6,056.96
Multibeam survey	Days	2	$ 3,028.48	$ 6,056.96
Refit for SPI/PV survey	Days	1	$ 3,028.48	$ 3,028.48
SPI/PV survey	Days	2	$ 3,028.48	$ 6,056.96
Sediment grab collection	Days	2	$ 3,028.48	$ 6,056.96
Transit/demobilization	Days	2	$ 3,028.48	$ 6,056.96
				$ -
Ship Time Total		**11**		**$ 33,313.28**
Laboratory and Analytical - Subcontractor				
SPI/PV image analysis	sample	120	$ 75.71	$ 9,085.44
benthic community analysis	sample	12	$ 540.80	$ 6,489.60
grain size, % moisture, specific gravity, TOC	sample	36	$ 360.17	$ 12,966.22
sediment metals, PAH, pesticides, PCB	sample	36	$ 782.00	$ 28,151.88
				$ -
Laboratory and Analytical Total				**$ 56,693.15**
Contractor Services				
Initial Planning/Field - planning, APP preparation, QAPP preparation, logistics, mob, survey, demob, basic cruise reporting	Hour	680	$ 118.98	$ 80,903.68
Analysis - multibeam, backscatter, side-scan analysis, SPI/PV analysis and statistics, physical/chemical analysis, data review meeting, data figures	Hour	290	$ 146.02	$ 42,344.64
Reporting - outline with figures and tables, draft report, redline report, final proof, final, technical support notebook	Hour	400	$ 156.83	$ 62,732.80

				$ -
				$ -
Contractor Services Total				**$ 185,981.12**
Equipment Rental and Other Expenses - Subcontractor				
tide gage	day	2	$ 129.79	$ 259.58
hypack + GPS	day	8	$ 324.48	$ 2,595.84
heave compensator	day	2	$ 389.38	$ 778.75
CTD	day	2	$ 97.34	$ 194.69
multibeam system	day	3	$ 973.44	$ 2,920.32
SPI/PV system	day	3	$ 972.03	$ 2,916.10
grab sampler	day	2	$ 97.34	$ 194.69
box corer	day	2	$ 108.16	$ 216.32
other supplies (sampling)	lump sum	2	$ 432.64	$ 865.28
light duty truck	day	11	$ 88.69	$ 975.60
heavy duty truck	day	11	$ 114.65	$ 1,261.15
				$ -
Equipment and Other Total				**$ 13,178.32**
Total Estimated Ship Costs				**$ 289,165.87**

Total Estimated Cost Summary

Category	Total Cost
Ship Time	$ 33,313.28
Laboratory and Analytical	$ 56,693.15
Contractor Services	$ 185,981.12
Equipment Rental & Other	$ 13,178.32
Total Cost	**$ 289,165.87**
Total Days Ship Time (Days)	**11**

This cost estimate format is intended to help the survey designer plan the survey from an operational point of view.

Project Name: New England ODMDS - 2021 Portland Disposal Site (PDS) and Rhode Island Sound Disposal Site (R
Project Manager: Jean Brochi
Date to Be Performed: 2020 late summer
Date Prepared: 07MAR2017

Survey Objective: The combined survey at PDS and RIDS is intended to be a standard confirmatory survey to map the recent placement of dredged material and expected biological recovery as well as a focused survey to refine mapping of sediment chemistry at these sites.

Activity/Item	Unit	# of Units	Unit Cost	Total Cost
Ship Time - day trips on ~50' vessel				
Mobilization/transit	Days	3	$ 3,149.62	$ 9,448.86
Multibeam survey	Days	4	$ 3,149.62	$ 12,598.48
Refit for SPI/PV survey	Days	1	$ 3,149.62	$ 3,149.62
SPI/PV survey	Days	4	$ 3,149.62	$ 12,598.48
Sediment grab collection	Days	2	$ 3,149.62	$ 6,299.24
Transit/demobilization	Days	2	$ 3,149.62	$ 6,299.24
				$ -
Ship Time Total		**16**		**$ 50,393.91**
Laboratory and Analytical - Subcontractor				
SPI/PV image analysis	sample	200	$ 78.74	$ 15,748.10
benthic community analysis	sample	18	$ 562.43	$ 10,123.78
grain size, % moisture, specific gravity, TOC	sample	24	$ 374.58	$ 8,989.91
sediment metals, PAH, pesticides, PCB	sample	24	$ 813.28	$ 19,518.64
				$ -
Laboratory and Analytical Total				**$ 54,380.43**
Contractor Services				
Initial Planning/Field - planning, APP preparation, QAPP preparation, logistics, mob, survey, demob, basic cruise reporting	Hour	900	$ 123.74	$ 111,361.54
Analysis - multibeam, backscatter, side-scan analysis, SPI/PV analysis and statistics, physical/chemical analysis, data review meeting, data figures	Hour	345	$ 151.86	$ 52,390.54
Reporting - outline with figures and tables, draft report, redline report, final proof, final, technical support notebook	Hour	510	$ 163.11	$ 83,183.69
				$ -
				$ -

Contractor Services Total				**$ 246,935.77**
Equipment Rental and Other Expenses - Subcontractor				
tide gage	day	4	$ 134.98	$ 539.93
hypack + GPS	day	12	$ 337.46	$ 4,049.51
heave compensator	day	4	$ 404.95	$ 1,619.80
CTD	day	4	$ 101.24	$ 404.95
multibeam system	day	5	$ 1,012.38	$ 5,061.89
SPI/PV system	day	4	$ 1,010.92	$ 4,043.66
grab sampler	day	2	$ 101.24	$ 202.48
box corer	day	2	$ 112.49	$ 224.97
other supplies (sampling)	lump sum	2	$ 449.95	$ 899.89
light duty truck	day	16	$ 92.24	$ 1,475.82
heavy duty truck	day	16	$ 119.24	$ 1,907.77
				$ -
Equipment and Other Total				**$ 20,430.68**
Total Estimated Ship Costs				**$ 372,140.78**

ISDS)

Total Estimated Cost Summary

Category	Total Cost
Ship Time	$ 50,393.91
Laboratory and Analytical	$ 54,380.43
Contractor Services	$ 246,935.77
Equipment Rental & Other	$ 20,430.68
Total Cost	**$ 372,140.78**
Total Days Ship Time (Days)	**16**

This cost estimate format is intended to help the survey designer plan the survey from an operational point of view.