

ANNEX J

MARINE WATER QUALITY MONITORING RESULTS FOR SILT CURTAIN PILOT TEST

Pilot Test Water Quality Data Log Sheet

Date: 2022/01/18

Round: 1

Jetting Work Rate: 30 m/hr

Tidal State: Ebb tide

Monitoring Station	Weather Condition	Sea Condition**	Sampling Time	Water Depth	Depth Level ***	Current Velocity (m/s)	Current Direction	Temperature (°C)		Salinity (ppt)		pH		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity (NTU)			Suspended Solids (mg/L)				
								Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
A1	Cloudy	Calm	12:37	13.1	S	0.73	113	18.54	18.54	33.39	33.39	8.14	8.15	97.6	97.7	7.49	7.50	7.49	3.2	3.3	4.6	4.5	4.4	6.8		
						0.74	255	18.54		33.39		8.15		97.7		7.50			3.3			4.3				
						0.82	283	18.51		33.39		8.15		97.5		7.48			4.5			5.9				
					M	0.72	278	18.51	18.51	33.39	33.39	8.14	8.15	97.4	97.5	7.48	7.48	4.4	4.5	4.4	4.5	5.8	5.9			
						0.48	247	18.51		33.39		8.14		97.4		7.48		6.0		9.4						
						0.48	247	18.51		33.39		8.14		97.8		7.51		6.2		10.9						
B	0.48	247	18.51	18.51	33.39	33.39	8.14	8.14	98.2	98.0	7.54	7.53	7.53	6.0	6.1	6.0	6.1	9.4	10.9							
	0.48	247	18.51		33.39		8.14		97.8		7.51		6.2	10.9												
	0.48	247	18.51		33.39		8.14		97.8		7.51		6.2	10.9												
A2	Cloudy	Calm	12:27	13.2	S	0.22	317	18.53	18.53	33.36	33.36	8.14	8.14	97.8	97.8	7.51	7.51	7.51	5.3	5.8	5.6	7.7	7.2	7.3		
						0.22	317	18.53		33.36		8.14		97.8		7.51			6.3			6.7				
						0.58	65	18.51		33.30		8.13		97.8		7.51			5.2			6.4				
					M	0.76	40	18.52	18.52	33.30	33.30	8.14	8.14	97.7	97.8	7.50	7.51	7.51	4.8	5.0	4.8	5.0	5.8	6.1		
						0.13	280	18.51		33.31		8.12		98.2		7.58		6.1	7.6							
						1.05	304	18.51		33.32		8.12		98.2		7.54		5.9	9.4							
B	0.13	280	18.51	18.51	33.31	33.32	8.12	8.12	98.7	98.5	7.58	7.56	7.56	6.1	6.0	6.1	6.0	7.6	8.5							
	1.05	304	18.51		33.32		8.12		98.2		7.54		5.9	9.4												
	1.05	304	18.51		33.32		8.12		98.2		7.54		5.9	9.4												
A3	Cloudy	Calm	12:17	13.0	S	1.54	269	18.51	18.51	33.36	33.36	8.10	8.10	98.0	98.0	7.52	7.52	7.53	13.2	13.0	15.1	15.7	17.9	19.1		
						1.54	269	18.51		33.36		8.10		98.0		7.52			12.7			20.0				
						0.67	117	18.51		33.36		8.08		98.2		7.54			15.9			21.0				
					M	0.40	73	18.51	18.51	33.36	33.36	8.09	8.09	98.1	98.2	7.53	7.54	7.54	15.1	15.5	15.1	15.5	19.7	20.4		
						0.96	306	18.51		33.35		8.05		99.0		7.60		15.2	20.1							
						0.96	306	18.51		33.35		8.07		98.5		7.56		18.2	17.8							
B	0.96	306	18.51	18.51	33.35	33.35	8.07	8.06	99.0	98.8	7.60	7.58	7.58	15.2	16.7	15.2	16.7	17.8	19.0							
	0.96	306	18.51		33.35		8.07		98.5		7.56		18.2	17.8												
	0.96	306	18.51		33.35		8.07		98.5		7.56		18.2	17.8												
B1	Cloudy	Calm	12:51	13.0	S	0.62	223	18.54	18.54	33.36	33.36	8.17	8.17	97.8	97.8	7.50	7.51	7.51	3.9	3.9	5.3	5.1	5.1	7.1		
						0.62	223	18.53		33.36		8.17		97.8		7.51			3.8			5.0				
						0.92	122	18.53		33.38		8.17		98.0		7.52			4.3			5.4				
					M	0.16	175	18.52	18.53	33.38	33.38	8.17	8.17	97.8	97.9	7.51	7.52	7.52	5.0	4.7	5.0	4.7	4.2	4.8		
						0.11	308	18.52		33.38		8.17		99.2		7.61		7.2	11.7							
						0.11	308	18.52		33.38		8.17		98.4		7.55		7.3	11.0							
B	0.11	308	18.52	18.52	33.38	33.38	8.17	8.17	98.4	98.8	7.55	7.58	7.58	7.2	7.3	7.2	7.3	11.7	11.4							
	0.11	308	18.52		33.38		8.17		98.4		7.55		7.3	11.0												
	0.11	308	18.52		33.38		8.17		98.4		7.55		7.3	11.0												
B2	Cloudy	Calm	12:58	13.0	S	1.24	360	18.53	18.53	33.36	33.37	8.19	8.19	97.8	97.8	7.51	7.51	7.51	3.5	3.5	5.1	4.9	4.8	6.2		
						0.36	117	18.53		33.37		8.19		97.8		7.51			3.5			4.6				
						0.95	257	18.52		33.32		8.18		97.8		7.51			5.4			7.1				
					M	0.94	48	18.53	18.53	33.32	33.32	8.19	8.19	97.6	97.7	7.49	7.50	7.50	5.1	5.3	5.1	5.3	6.3	6.7		
						0.90	209	18.52		33.33		8.18		99.2		7.62		6.8	6.9							
						0.90	209	18.52		33.33		8.18		98.3		7.55		6.2	7.3							
B	0.90	209	18.52	18.52	33.33	33.33	8.18	8.18	98.3	98.8	7.55	7.59	7.59	6.2	6.5	6.2	6.5	7.3	7.1							
	0.90	209	18.52		33.33		8.18		98.3		7.55		6.2	7.3												
	0.90	209	18.52		33.33		8.18		98.3		7.55		6.2	7.3												
B3	Cloudy	Calm	13:05	13.2	S	1.00	318	18.52	18.52	33.38	33.38	8.19	8.19	97.7	97.7	7.50	7.50	7.49	6.3	6.3	6.6	7.4	7.7	7.6		
						1.00	318	18.52		33.38		8.19		97.6		7.49			6.3			8.0				
						0.50	57	18.53		33.36		8.19		97.6		7.49			7.2			8.9				
					M	0.53	289	18.53	18.53	33.36	33.36	8.19	8.19	97.5	97.6	7.48	7.49	7.49	7.5	7.5	7.5	7.5	8.9	8.2		
						0.53	289	18.53		33.36		8.19		97.5		7.48		7.8	7.5							
						1.08	60	18.52		33.37		8.19		99.2		7.61		5.7	7.2							
B	1.08	60	18.52	18.52	33.37	33.37	8.19	8.19	99.2	98.7	7.61	7.58	7.58	5.7	6.1	5.7	6.1	7.2	7.0							
	0.59	68	18.52		33.37		8.19		98.2		7.54		6.4	6.7												
	0.59	68	18.52		33.37		8.19		98.2		7.54		6.4	6.7												

Remark: * DA: Depth-Averaged

** Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

*** S: 1 m below the sea surface; M: mid-depth; B: 1 m above the seabed

Pilot Test Water Quality Data Log Sheet

Date: 2022/01/18

Round: 2

Jetting Work Rate: 30 m/hr

Tidal State: Flood tide

Monitoring Station	Weather Condition	Sea Condition**	Sampling Time	Water Depth	Depth Level ***	Current Velocity (m/s)	Current Direction	Temperature (°C)		Salinity (ppt)		pH		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity (NTU)			Suspended Solids (mg/L)									
								Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
								DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*
A1	Cloudy	Calm	16:31	13.6	S	0.57	53	18.51	18.52	33.37	33.37	8.26	8.26	97.7	97.75	7.50	7.51	7.49	4.3	4.2	10.9	6.2	6.1	14.0							
						0.62	266	18.52		33.37		8.26		97.8		7.51			4.1			6.0									
						0.73	109	18.52		33.37		8.26		97.4		7.48			6.0			6.3									
					M	0.35	101	18.52	18.52	33.37	33.37	8.26	8.26	97.5	97.45	7.48	7.48	5.1	5.6	5.1	5.6	6.1	6.2	28.4	30						
						1.11	93	18.53		33.37		8.26		98.4		7.55		22.3		30.8											
						1.11	93	18.53		33.37		8.26		97.6		7.49		23.4		30.8											
A2	Cloudy	Calm	16:24	13.5	S	0.99	218	18.52	18.52	33.37	33.37	8.27	8.27	97.7	97.85	7.50	7.51	7.50	5.5	5.3	11.1	6.1	5.8	14.3							
						0.52	204	18.52		33.37		8.27		98.0		7.52			5.1			5.4									
						0.31	182	18.52		33.37		8.26		97.6		7.49			6.4			7.3									
					M	0.42	18	18.52	18.52	33.37	33.37	8.26	8.26	97.6	97.60	7.49	7.49	5.6	6.0	5.6	6.0	8.6	8.0	30.2	29.1						
						0.59	269	18.53		33.36		8.26		98.6		7.57		21.4		27.9											
						1.12	278	18.53		33.36		8.26		97.7		7.50		22.6		27.9											
A3	Cloudy	Calm	16:15	13.4	S	0.57	102	18.53	18.53	33.35	33.35	8.27	8.27	98.2	98.20	7.54	7.54	7.53	5.4	5.3	10.8	6.8	6.8	15.4							
						0.57	102	18.53		33.35		8.27		98.2		7.54			5.1			6.7									
						0.22	57	18.52		33.36		8.27		98.0		7.52			6.0			7.1									
					M	0.70	43	18.52	18.52	33.36	33.36	8.27	8.27	98.1	98.05	7.53	7.53	5.4	5.7	5.4	5.7	7.8	7.5	34.5	32.0						
						0.57	71	18.53		33.36		8.27		98.7		7.57		20.4		29.5											
						0.57	71	18.53		33.36		8.27		98.1		7.53		22.4		29.5											
B1	Cloudy	Calm	16:58	13.7	S	1.43	260	18.52	18.52	33.37	33.37	8.25	8.25	97.6	97.55	7.49	7.49	7.51	19.3	18.3	17.2	22.9	22.0	22.7							
						1.43	260	18.52		33.37		8.25		97.5		7.48			17.3			21.0									
						0.57	189	18.52		33.37		8.25		98.2		7.54			15.1			22.5									
					M	0.57	189	18.52	18.52	33.37	33.37	8.25	8.25	98.0	98.10	7.52	7.53	17.8	16.5	17.8	16.5	21.7	22.1	21.7	22.1						
						0.46	257	18.52		33.37		8.25		99.2		7.61		23.1		24.1											
						0.46	290	18.52		33.37		8.25		98.7		7.58		17.8		25.0											
B2	Cloudy	Calm	17:05	13.7	S	0.80	291	18.52	18.52	33.37	33.37	8.24	8.24	98.1	98.15	7.53	7.54	7.52	2.7	2.8	4.3	4.3	4.4	6.4							
						0.80	291	18.51		33.37		8.24		98.2		7.54			2.8			4.5									
						0.16	98	18.52		33.37		8.24		97.9		7.51			3.3			3.8									
					M	0.30	257	18.52	18.52	33.37	33.37	8.24	8.24	97.9	97.90	7.51	7.51	2.9	3.1	2.9	3.1	4.2	4.0	4.2	4.0						
						0.78	245	18.51		33.37		8.24		98.4		7.55		7.2		11.6											
						0.78	245	18.51		33.37		8.24		97.9		7.52		7.1		10.0											
B3	Cloudy	Calm	17:13	13.8	S	0.54	119	18.51	18.51	33.34	33.34	8.24	8.24	97.9	97.95	7.52	7.52	7.51	2.5	2.7	4.1	4.7	4.5	6.9							
						0.54	119	18.51		33.34		8.24		98.0		7.52			2.8			4.2									
						0.96	244	18.51		33.35		8.24		97.6		7.49			2.9			5.2									
					M	0.32	344	18.51	18.51	33.35	33.35	8.24	8.24	97.6	97.60	7.49	7.49	3.3	3.1	3.3	3.1	5.2	5.2	5.2	5.2						
						1.40	262	18.51		33.35		8.23		98.0		7.52		7.2		11.2											
						1.40	262	18.51		33.35		8.24		97.4		7.48		6.1		10.6											

Remark: * DA: Depth-Averaged

** Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

*** S: 1 m below the sea surface; M: mid-depth; S: 1 m above the seabed

Monitoring Station	Weather Condition	Sea Condition**	Sampling Time	Water Depth	Depth Level ***	Current Velocity (m/s)	Current Direction	Temperature (°C)		Salinity (ppt)		pH		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity (NTU)			Suspended Solids (mg/L)									
								Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
								DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*	DA*
A1	Cloudy	Calm	17:59	14.4	S	1.14	256	18.49	18.49	33.37	33.37	8.23	8.23	97.5	97.45	7.49	7.49	7.48	3.4	3.7	13.6	4.0	3.8	13.6	3.5	5.7					
						1.14	256	18.49	18.49	33.37	33.37	8.23	8.23	97.4	97.35	7.48	7.48		4.0	3.7		5.3									
						0.94	291	18.50	18.50	33.37	33.37	8.23	8.23	97.4	97.35	7.48	7.48		5.9	5.4		6.1									
					M	0.51	253	18.50	18.50	33.37	33.37	8.23	8.23	97.3	97.35	7.47	7.48		4.9	5.4		6.1	31.8		29.4	31.8	26.7	31	35.9		
						0.15	50	18.50	18.51	33.37	33.37	8.23	8.23	98.5	98.10	7.56	7.53		29.4	31.8		26.7									
						0.15	50	18.51	18.51	33.37	33.37	8.23	8.23	97.7	98.10	7.50	7.53		34.1	31.8		35.9									
A2	Cloudy	Calm	17:52	14.2	S	0.25	0	18.49	18.49	33.30	33.31	8.23	8.23	97.6	97.65	7.50	7.51	7.49	2.8	2.7	17.0	3.4	3.1	14.5	2.8	5.5					
						0.40	131	18.49	18.50	33.31	33.33	8.23	8.23	97.7	97.25	7.51	7.47		2.5	5.5		5.3									
						0.40	26	18.50	18.50	33.33	33.33	8.23	8.23	97.2	97.25	7.47	7.47		5.9	5.5		5.6									
					M	0.61	224	18.50	18.50	33.33	33.33	8.23	8.23	97.3	97.25	7.47	7.47		5.1	5.5		5.6	42.7		39.4	34.9	39.0	34.9	30.8		
						0.48	215	18.51	18.51	33.26	33.30	8.24	8.24	98.3	97.90	7.55	7.52		39.4	42.7		39.0									
						0.48	215	18.51	18.51	33.33	33.33	8.24	8.24	97.5	97.90	7.49	7.52		46.0	42.7		30.8									
A3	Cloudy	Calm	17:45	14.2	S	1.37	279	18.50	18.50	33.37	33.37	8.24	8.24	97.8	97.80	7.51	7.51	7.50	2.8	2.9	19.1	3.8	4.2	12.9	4.6	6.1					
						0.55	227	18.49	18.50	33.37	33.37	8.24	8.24	97.8	97.80	7.51	7.51		2.9	5.1		6.3									
						0.18	239	18.50	18.50	33.37	33.37	8.24	8.24	97.6	97.55	7.49	7.49		5.8	5.1		5.8									
					M	0.64	75	18.50	18.50	33.37	33.37	8.24	8.24	97.5	97.55	7.49	7.49		4.4	5.1		5.8	49.5		45.7	49.5	29.2	28.4	27.5		
						1.13	297	18.51	18.51	33.37	33.37	8.24	8.24	98.8	98.30	7.59	7.55		45.7	49.5		29.2									
						1.24	101	18.51	18.51	33.37	33.37	8.24	8.24	97.8	98.30	7.51	7.55		53.2	49.5		27.5									
B1	Cloudy	Calm	18:13	14.5	S	0.50	291	18.49	18.49	33.33	33.33	8.23	8.23	97.5	97.50	7.49	7.49	7.49	4.0	3.8	5.1	3.9	4.2	7.2	4.5	6.5					
						0.50	291	18.48	18.50	33.33	33.34	8.23	8.23	97.5	97.55	7.49	7.50		4.6	5.0		6.3									
						0.27	213	18.50	18.50	33.34	33.34	8.23	8.23	97.6	97.55	7.50	7.50		4.6	5.0		6.6									
					M	0.17	239	18.50	18.50	33.34	33.34	8.23	8.23	97.5	97.55	7.49	7.50		5.3	5.0		6.6	6.5		6.8	11.0	11.3	11.0	10.7		
						0.43	251	18.50	18.50	33.34	33.34	8.24	8.24	98.7	98.40	7.58	7.56		6.8	6.5		11.3									
						1.40	290	18.50	18.50	33.34	33.34	8.23	8.24	98.1	98.40	7.53	7.56		6.1	6.5		10.7									
B2	Cloudy	Calm	18:19	14.6	S	0.67	287	18.48	18.49	33.37	33.37	8.23	8.23	97.2	97.25	7.47	7.47	7.47	4.2	4.1	5.3	6.2	6.3	7.3	6.4	9.0					
						0.67	287	18.49	18.49	33.37	33.37	8.23	8.23	97.3	97.25	7.47	7.47		4.0	4.1		6.4									
						0.29	108	18.50	18.50	33.37	33.37	8.23	8.23	97.2	97.15	7.46	7.46		5.8	5.5		6.3									
					M	0.84	223	18.49	18.50	33.37	33.37	8.23	8.23	97.1	97.15	7.46	7.46		5.1	5.5		7.1	6.4		6.5	6.4	6.5	6.4	6.7		
						0.42	223	18.50	18.50	33.37	33.37	8.23	8.23	98.0	97.80	7.53	7.51		6.5	6.4		8.6									
						0.42	223	18.50	18.50	33.37	33.37	8.23	8.23	97.6	97.80	7.49	7.51		6.2	6.4		9.4									
B3	Cloudy	Calm	18:26	14.4	S	1.04	34	18.49	18.49	33.35	33.35	8.23	8.23	97.2	97.20	7.47	7.47	7.47	4.6	4.4	5.1	5.6	5.8	7.1	6.0	6.8					
						1.04	34	18.49	18.50	33.35	33.36	8.23	8.23	97.2	97.25	7.47	7.47		4.1	5.0		6.0									
						0.52	315	18.50	18.50	33.36	33.36	8.23	8.23	97.3	97.25	7.47	7.47		4.8	5.0		6.8									
					M	0.51	354	18.50	18.50	33.36	33.36	8.23	8.23	97.2	97.25	7.46	7.47		5.1	5.0		6.7	6.1		6.1	6.1	6.1	6.1	8.9		
						0.92	302	18.50	18.50	33.36	33.36	8.22	8.23	98.3	98.30	7.55	7.55		6.1	6.1		9.5									
						0.92	302	18.50	18.50	33.36	33.36	8.23	8.23	98.3	98.30	7.55	7.55		6.1	6.1		8.2									

Remark: * DA: Depth-Averaged

** Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

*** S: 1 m below the sea surface; M: mid-depth; S: 1 m above the seabed