Appendix 6.4- Estimated Marine Sediment to be generated
Land-Based Sediment

Estimation of Types of Sediment to be Excavated from Each Exacavation Area

Sampling Grid	Proposed 610 mm Diameter Bored Pile		Average Tentative 610mm BP Piling Depth	Proposed 1.5m Diameter Bored Pile		Average Tentative 1.5m BP Piling Depth (mbgl)	Proposed 1.8m Diameter Bored Pile		Average Tentative 1.8m BP Piling Depth (mbgl)	Proposed 2.0m Diameter Bored Pile		Average Tentative 2.0m BP Piling Depth (mbgl)	Total Piling Area at the Grid (m^2)	Sediment Depth (mbgl)		Sediment Thickness (m)	Estimated Quantity of Sediment to be Generated(m^3)	Total Estimated Quantity of Sediment to be Generated(m^3)	Disposal Arrangement According to ETWB TC(W) No. 34/2002
	Nos.	Area (m^2)		Nos.	Area (m^2)		Nos.	Area (m^2)		Nos.	Area (m^2)			From	To				
Grid represented by BHD1	0	0.29	0.00	0	1.77	0.00	0	2.54	0.00	14	3.14	57.46	43.98	12.00	13.00	1.00	43.98	417.83	Type 1 - Open Sea Disposal
														13.00	14.00	1.00	43.98		Type 1 - Open Sea Disposal
														14.00	15.00	1.00	43.98		Type 1 - Open Sea Disposal
														15.00	18.00	3.00	131.95		Type 1 - Open Sea Disposal
														18.00	21.00	3.00	131.95		Type 1 - Open Sea Disposal
														21.00	21.50	0.50	21.99		Type 1 - Open Sea Disposal
Grid represented by BHD2	0	0.29	0.00	4	1.77	61.27	8	2.54	55.20	4	3.14	60.83	39.99	14.00	15.00	1.00	39.99	279.95	Type 1 - Open Sea Disposal
														15.00	16.00	1.00	39.99		Type 1 - Open Sea Disposal
														16.00	17.00	1.00	39.99		Type 1 - Open Sea Disposal
														17.00	19.90	2.90	115.98		Type 1 - Open Sea Disposal
														19.90	21.00	1.10	43.99		Type 1 - Open Sea Disposal (Dedicated Sites)
Grid represented by BHD3	0	0.29	0.00	4	1.77	48.94	6	2.54	50.35	0	3.14	0.00	22.34	15.00	16.00	1.00	22.34	189.86	Type 1 - Open Sea Disposal (Dedicated Sites)
														16.00	17.00	1.00	22.34		Type 1 - Open Sea Disposal
														17.00	18.00	1.00	22.34		Type 1 - Open Sea Disposal
														18.00	21.00	3.00	67.01		Type 1 - Open Sea Disposal
														21.00	22.00	1.00	22.34		Type 1 - Open Sea Disposal
														22.00	23.00	1.00	22.34		Type 1 - Open Sea Disposal
														23.00	23.50	0.50	11.17		Type 1 - Open Sea Disposal
Grid represented by BHD7	50	0.29	43.67	0	1.77	0.00	0	2.54	0.00	0	3.14	0.00	14.61	5.00	6.00	1.00	14.61	151.33	Type 1 - Open Sea Disposal
														6.00	7.00	1.00	14.61		Type 1 - Open Sea Disposal
														11.00	12.00	1.00	14.61		Type 1 - Open Sea Disposal (Dedicated Sites)
														12.00	14.90	2.90	42.38		Type 1 - Open Sea Disposal
														14.90	17.90	3.00	43.84		Type 1 - Open Sea Disposal (Dedicated Sites)
Grid represented by BHD8	86	0.29	24.87	0	1.77	0.00	0	2.54	0.00	0	3.14	0.00	25.13	12.00	13.00	1.00	25.13	223.69	Type 1 - Open Sea Disposal
														13.00	14.00	1.00	25.13		Type 1 - Open Sea Disposal
														14.00	15.00	1.00	25.13		Type 1 - Open Sea Disposal
														15.00	17.90	2.90	72.89		Type 1 - Open Sea Disposal
														17.90	20.90	3.00	75.40		Type 1 - Open Sea Disposal
Grid represented by BHD9	15	0.29	55.25	0	1.77	0.00	0	2.54	0.00	0	3.14	0.00	4.38	17.50	18.50	1.00	4.38	52.17	Type 1 - Open Sea Disposal
														18.50	19.50	1.00	4.38		Type 1 - Open Sea Disposal
														19.50	20.50	1.00	4.38		Type 1 - Open Sea Disposal
														20.50	23.40	2.90	12.71		Type 1 - Open Sea Disposal
														23.40	26.40	3.00	13.15		Type 1 - Open Sea Disposal (Dedicated Sites)
														26.40	29.40	3.00	13.15		Type 1 - Open Sea Disposal (Dedicated Sites)
Grid represented by BHD10	6	0.29	41.31	0	1.77	0.00	8	2.54	42.90	0	3.14	0.00	22.11	19.00	20.00	1.00	22.11	130.45	Type 1 - Open Sea Disposal
														20.00	21.00	1.00	22.11		Type 1 - Open Sea Disposal
														21.00	22.00	1.00	22.11		Type 1 - Open Sea Disposal
														22.00	24.90	2.90	64.12		Type 1 - Open Sea Disposal
Grid represented by BHD11	18	0.29	56.31	0	1.77	0.00	9	2.54	26.31	0	3.14	0.00	28.16	16.00	17.00	1.00	28.16	349.22	Type 1 - Open Sea Disposal
														17.00	18.00	1.00	28.16		Type 1 - Open Sea Disposal
														18.00	19.00	1.00	28.16		Type 1 - Open Sea Disposal
														19.00	21.90	2.90	81.67		Type 1 - Open Sea Disposal
														21.90	24.90	3.00	84.49		Type 1 - Open Sea Disposal
														24.90	27.90	3.00	84.49		Type 1 - Open Sea Disposal
														27.90	28.40	0.50	14.08		Type 1 - Open Sea Disposal (Dedicated Sites)
Grid represented by BHD12	0	0.29	0.00	0	1.77	0.00	9	2.54	61.96	0	3.14	0.00	22.90	19.00	20.00	1.00	22.90	272.54	Type 1 - Open Sea Disposal
														20.00	21.00	1.00	22.90		Type 1 - Open Sea Disposal
														21.00	22.00	1.00	22.90		Type 1 - Open Sea Disposal
														22.00	24.90	2.90	66.42		Type 1 - Open Sea Disposal
														24.90	27.90	3.00	68.71		Type 1 - Open Sea Disposal
														27.90	30.90	3.00	68.71		Type 1 - Open Sea Disposal (Dedicated Sites)
Grid represented by BHD13	8	0.29	47.23	0	1.77	0.00	0	2.54	0.00	0	3.14	0.00	2.34	14.50	15.50	1.00	2.34	13.79	Type 1 - Open Sea Disposal
														15.50	16.50	1.00	2.34		Type 1 - Open Sea Disposal
														16.50	17.50	1.00	2.34		Type 1 - Open Sea Disposal
														17.50	20.40	2.90	6.78		Type 1 - Open Sea Disposal
Grid represented by BHD14	4	0.29	35.83	0	1.77	0.00	0	2.54	0.00	0	3.14	0.00	1.17	15.00	16.00	1.00	1.17	7.48	Type 1 - Open Sea Disposal
														16.00	17.00	1.00	1.17		Type 1 - Open Sea Disposal
														17.00	18.00	1.00	1.17		Type 1 - Open Sea Disposal
														18.00	20.90	2.90	3.39		Type 1 - Open Sea Disposal
														20.90	21.40	0.50	0.58		Type 1 - Open Sea Disposal
Grid represented by BHD15	0	0.29	0.00	0	1.77	0.00	0	2.54	0.00	0	3.14	0.00	0.00	15.00	16.00	1.00	22.90	57.26	Type 1 - Open Sea Disposal
														16.00	17.00	1.00	22.90		Type 1 - Open Sea Disposal
														17.00	17.50	0.50	11.45		Type 1 - Open Sea Disposal
Grid represented by BHD16	4	0.29	28.89	0	1.77	0.00	0	2.54	0.00	0	3.14	0.00	1.17	16.00	17.00	1.00	1.17	1.75	Type 1 - Open Sea Disposal
														17.00	17.50	0.50	0.58		Type 1 - Open Sea Disposal
Grid represented by BHD17	0	0.29	0.00	0	1.77	0.00	0	2.54	0.00	0	3.14	0.00	0.00	10.50	11.50	1.00	0.00	0.00	Type 1 - Open Sea Disposal
														11.50	12.50	1.00	0.00		Type 1 - Open Sea Disposal
														12.50	13.50	1.00	0.00		Type 1 - Open Sea Disposal
														13.50	14.50	1.00	0.00		Type 1 - Open Sea Disposal
Grid represented by BHD18	10	0.29	21.91	0	1.77	0.00	0	2.54	0.00	0	3.14	0.00	2.92	11.00	12.00	1.00	2.92	9.64	Type 1 - Open Sea Disposal
														12.00	13.00	1.00	2.92		Type 1 - Open Sea Disposal
														13.00	14.30	1.30	3.80		Type 1 - Open Sea Disposal
Grid represented by BHD19	0	0.29	0.00	0	1.77	0.00	0	2.54	0.00	0	3.14	0.00	0.00	14.30	15.30	1.00	0.00	0.00	Type 1 - Open Sea Disposal
														15.30	16.30	1.00	0.00		Type 1 - Open Sea Disposal
														16.30	17.30	1.00	0.00		Type 1 - Open Sea Disposal
														17.30	20.20	2.90	0.00		Type 1 - Open Sea Disposal
														20.20	20.70	0.50	0.00		Type 1 - Open Sea Disposal

Note:[1] It is estimated by Nos. of Proposed 610 mm Diameter Bored Pile x area of each pile which is calculated by (π x $(0.61/2)^2$) m2
It is estimated by Nos. of Proposed 610 mm Diameter Bored Pile x area of each pile which is calculated by (π x $(1.50/2)^2$) m2
It is estimated by Nos. of Proposed 610 mm Diameter Bored Pile x area of each pile which is calculated by (π x $(1.80/2)^2$) m2
It is estimated by Nos. of Proposed 610 mm Diameter Bored Pile x area of each pile which is calculated by (π x $(2.00/2)^2$) m2
[2] mbgl = meters below ground level
[3] Off-site disposal should be the last resort

Total Estimated Quantity of Sediment to be Generated (m^3) 2135.7

Sediment for Type 1 - Open Sea Disposal (m^3)[3] 1901.8
Sediment for Type 1 - Open Sea Disposal (Dedicated Sites) (m^3)[3] 233.9