## Appendix 5.1 Calculation of Sediment Loss Rate for Sediment Plume Modelling

Item	Activities	Programme	Production Rate	<b>Bulk Density</b>	Fine Content	Loss Rate	Release Rate	Mitigation	Duration per	Cycle	Working Hours	Duration	Total Loss Rate
									Event				per Event
			m3/event/day	kg/m3			kg/m3		min	Event/day	hr/day	Day/Month	kg/s
	CBL												
1	Dredging Main Bridge Piles / Pile Caps	May 2017 - Mar 2018	400				25	80.0% <sup>[1]</sup>	600	1	10	19	0.06
2	Dredging Eastern Approach Piles / Pile Caps	May 2017 - July 2018	400				25	80.0% <sup>[1]</sup>	600	1	10	20	0.06
3	Dredging Western Approach Piles / Pile Caps	Dec 2017 - Aug 2018	400				25	80.0% <sup>[1]</sup>	600	1	10	12	0.06
4	Filling Main Bridge	May 2017 - Mar 2018	769	1900	25%	5%	23.75	75.0% <sup>[2]</sup>	240	1	10	10	0.32
5	Filling Eastern Approach	May 2017 - July 2018	769	1900	25%	5%	23.75	75.0% <sup>[2]</sup>	240	1	10	10	0.32
6	Filling Western Approach	Dec 2017 - Aug 2018	769	1900	25%	5%	23.75	75.0% <sup>[2]</sup>	240	1	10	6	0.32
	T2 <sup>[3]</sup>												
17	Dredging	Mar 2012 to Jan 2014	8000				20	75.0% <sup>[2]</sup>	720	1	12	25	0.93
18	Dredging	Feb 2015 to May 2017	8000				20	75.0% <sup>[2]</sup>	720	1	12	25	0.93
19	Filling - Public Fill	May 2012 to Dec 2012	9000	1600	20%	5%	16	75.0% <sup>[2]</sup>	720	1	12	25	0.83
20	Filling - Public Fill	Apr 2013 to Dec 2016	9000	1600	20%	5%	16	75.0% <sup>[2]</sup>	720	1	12	25	0.83
	LTT Reclamation												
23	Reclamation filling	Jul 2018 to Oct 2018	1000	1900	25%	5%	23.75	95.0%	180	1	12	25	0.11
	CLP Windfarm				_								
24	Grab Dredging - Cable	Jan 2017 to Apr 2017	6300				25	75.0%	720	1	12	25	0.91
25	Jetting - Cable	Jan 2017 to Apr 2017	4804	1105	100%	20%	221	0.0%	960	1	16	6	18.43
26	Suction Cassion - Windfarm foundation	Apr 2017 to Sep 2017	9600	165.8	100%	20%	33.16	0.0%	480	1	8	25	11.05

Note:
[1] Dredging/Filling activities for construction of CBL will be carried out within the cofferdam. Sediment loss reduction efficiency for dredging works within the cofferdam is assumed to be 80% in conservative as described in CBL EIA report.
[2] Silt curtain is adopted as mitigation measures. Sediment loss reduction efficiency for implementation of silt curtain around the dredging/filling works is assumed to be 75% (according to "Contaminated Spoil Management Study").
[3] According to the approved EIA report for Cruise Terminal (EIA-138/2007) and Submarine Gas Pipeline (EIA-182/2010), plume from T2 project will be localized in Kai Tak Approach Channel and will not encroach to Junk Bay.