

Appendix 9.1: Construction Groundborne Noise Assessment Results - TBM

Project: SCL (HHS)

Item	NSR	Location	Floor	Horizontal Distance		Vertical Distance		Slant Distance		Distance Attenuation	Source Term [1]	Building Coupling Loss	Floor to Floor Attenuation	Conversion from Vibration to Noise	Conversion to A-Weighted Noise Level	Predicted $L_{eq, 30min}$	EIAO-TM Criteria (Daytime)	Criteria Achieved?
				Up Track	Down Track	Up Track	Down Track	Up Track	Down Track									
1	DIH-11-1	Lung Wan House	1	80	65	25	25	84	70	-22.1	115.9	-10	-1	-27	-20	36	65	Yes

Note : [1] The source RMS vibration velocity of 0.625 mm/s is extracted from the approved EIA report^[9-3].

[2] A 5dB(A) reduction to the daytime criterion is adopted for school during examination period as the worst case scenario.

[2] A -18 dB should be adopted for coupling loss of bedrock to pile. However, this correction depends on actual site condition and as a conservative approach, 0 dB is assumed.