

## **Appendix 4-7A**

### **Calculation of Noise Levels Due to Fixed Noise Sources at Nearby Existing Village Houses (Worst Case Scenario)**

**Appendix 4-7A-1 - Fixed Noise Sources Calculation Results at Nearest Village House to the Industrial Site (Day-Time)**

NSR	Noise Source ID	Industrial Activities	Sound Power Level (SWL), dB(A) #	No. of Equipment	Total SWL, dB(A)	Horizontal Distance from Source to Receiver (m)	Dist. Corr., dB(A)	Façade Corr. dB(A)	Un-mitigated Noise level, dB(A)	Noise Criteria (ANL) *	Comply with Noise Criteria or not
M1 (Villa Camilla)	S1-1	Operating noise at workshop	94	1	94	84	-47	3	50	60	Yes
M1 (Villa Camilla)	S2-3	Loading and unloading using forklift	91	1	91	84	-47	3	47	60	Yes
M1 (Villa Camilla)	S2-1	Movement of Lorry	99	2	102	84	-47	3	58	60	Yes
M1 (Villa Camilla)	S2-2	Lifting of container by a mobile crane	97	1	97	84	-47	3	53	60	Yes
<b>Total</b>							<b>Cumulative Total @:</b>		<b>60</b>	60	Yes

NSR	Noise Source ID	Industrial Activities	Sound Power Level (SWL), dB(A) #	No. of Equipment	Total SWL, dB(A)	Horizontal Distance from Source to Receiver (m)	Dist. Corr., dB(A)	Façade Corr. dB(A)	Un-mitigated Noise level, dB(A)	Noise Criteria (ANL) *	Comply with Noise Criteria or not
M2 (Ha San Wai)	S10-1	Loading and unloading using forklift	91	2	94	91	-47	3	50	60	Yes
M2 (Ha San Wai)	S10-2	Movement of lorry	99	3	104	91	-47	3	60	60	Yes
<b>Total</b>							<b>Cumulative Total @:</b>		<b>60</b>	60	Yes

**Note:**

Only NSR locations that are within 300m radius from the identified industrial noise sources are included in the noise assessment as per Project Study Brief requirements.

# Sound Power Level is based on site measurement during the operation of the concerned industrial plant.

@ The cumulative noise level at the receiver point. Calculation is based on general acoustic principle using the equation =  $10 \times \log((L1/10)+(L2/10)+(L3/10)...+(Ln/10))$ ; where, L1, L2, L3, Ln are the respective noise level at the receiver due to individual noise source.

\* For existing NSR, the operation of the industrial sites will need to meet the noise criteria (i.e. ANL) specified in the "Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Places or Construction Sites" under the Noise Control Ordinance (NCO) (hereinafter referred to as "NCO-TM"). The ANL for village house is 60dB(A) and 50dB(A) for day-time and night-time, respectively.

\*\* Based on the existing NSR nearest to the industrial site as shown in Figure App 4-7A-1.

**Appendix 4-7A-2 - Fixed Noise Sources Calculation Results at Nearest Village House to the Industrial Site (Night-Time)**

NSR	Noise Source ID	Industrial Activities	Sound Power Level (SWL), dB(A) #	No. of Equipment	Total SWL, dB(A)	Horizontal Distance from Source to Receiver (m)	Dist. Corr., dB(A)	Façade Corr. dB(A)	Un-mitigated Noise level, dB(A)	Noise Criteria (ANL) *	Comply with Noise Criteria or not
M1 (Villa Camilla)	S1-1	Operating noise at workshop	94	1	94	84	-47	3	50	50	Yes
<b>Total</b>							<b>Cumulative Total @:</b>		<b>50</b>	50	Yes

NSR	Noise Source ID	Industrial Activities	Sound Power Level (SWL), dB(A) #	No. of Equipment	Total SWL, dB(A)	Horizontal Distance from Source to Receiver (m)	Dist. Corr., dB(A)	Façade Corr. dB(A)	Un-mitigated Noise level, dB(A)	Noise Criteria (ANL) *	Comply with Noise Criteria or not
M2 (Ha San Wai)	S10-1	Loading and unloading using forklift	91	2	94	91	-47	3	50	50	Yes
<b>Total</b>							<b>Cumulative Total @:</b>		<b>50</b>	50	Yes

**Note:**

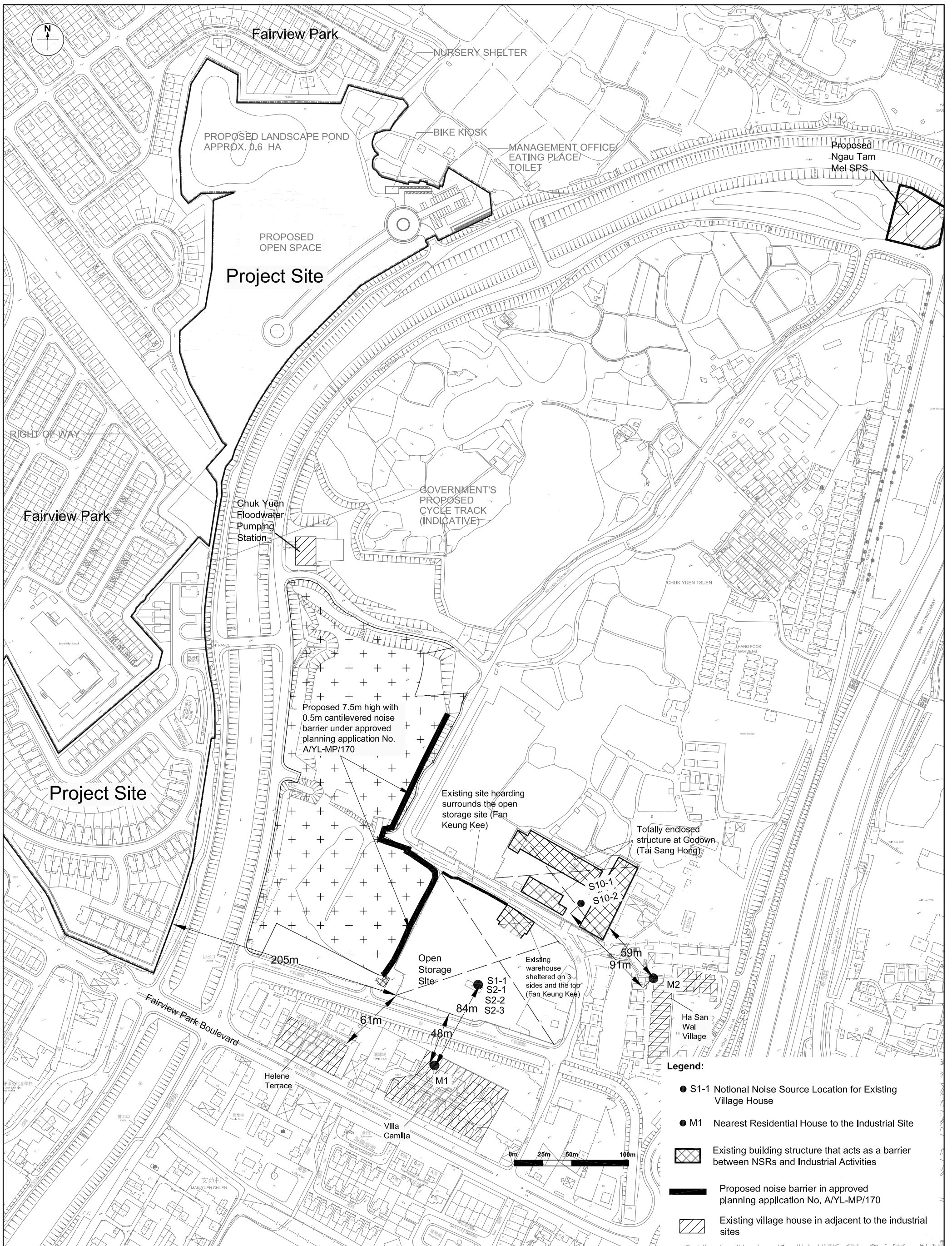
Only NSR locations that are within 300m radius from the identified industrial noise sources are included in the noise assessment as per Project Study Brief requirements.

# Sound Power Level is based on site measurement during the operation of the concerned industrial plant.

@ The cumulative noise level at the receiver point. Calculation is based on general acoustic principle using the equation =  $10 \times \log((L1/10)+(L2/10)+(L3/10)...+(Ln/10))$ ; where, L1, L2, L3, Ln are the respective noise level at the receiver due to individual noise source.

\* For existing NSR, the operation of the industrial sites will need to meet the noise criteria (i.e. ANL) specified in the "Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Places or Construction Sites" under the Noise Control Ordinance (NCO) (hereinafter referred to as "NCO-TM"). The ANL for village house is 60dB(A) and 50dB(A) for day-time and night-time, respectively.

\*\* Based on the existing NSR nearest to the industrial site as shown in Figure App 4-7A-1.



**Figure:** App 4-7A-1

**Title:** Location of Nearest Existing NSR to the Industrial Sites, and Separation Distances to the Notional Noise Source Locations.

**Project:** EIA for Proposed Residential and Passive Recreation Development within "Recreation" (REC) Zone and "Residential (Group C)" Zone at Various Lots in DD 104, Yuen Long, N.T.



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