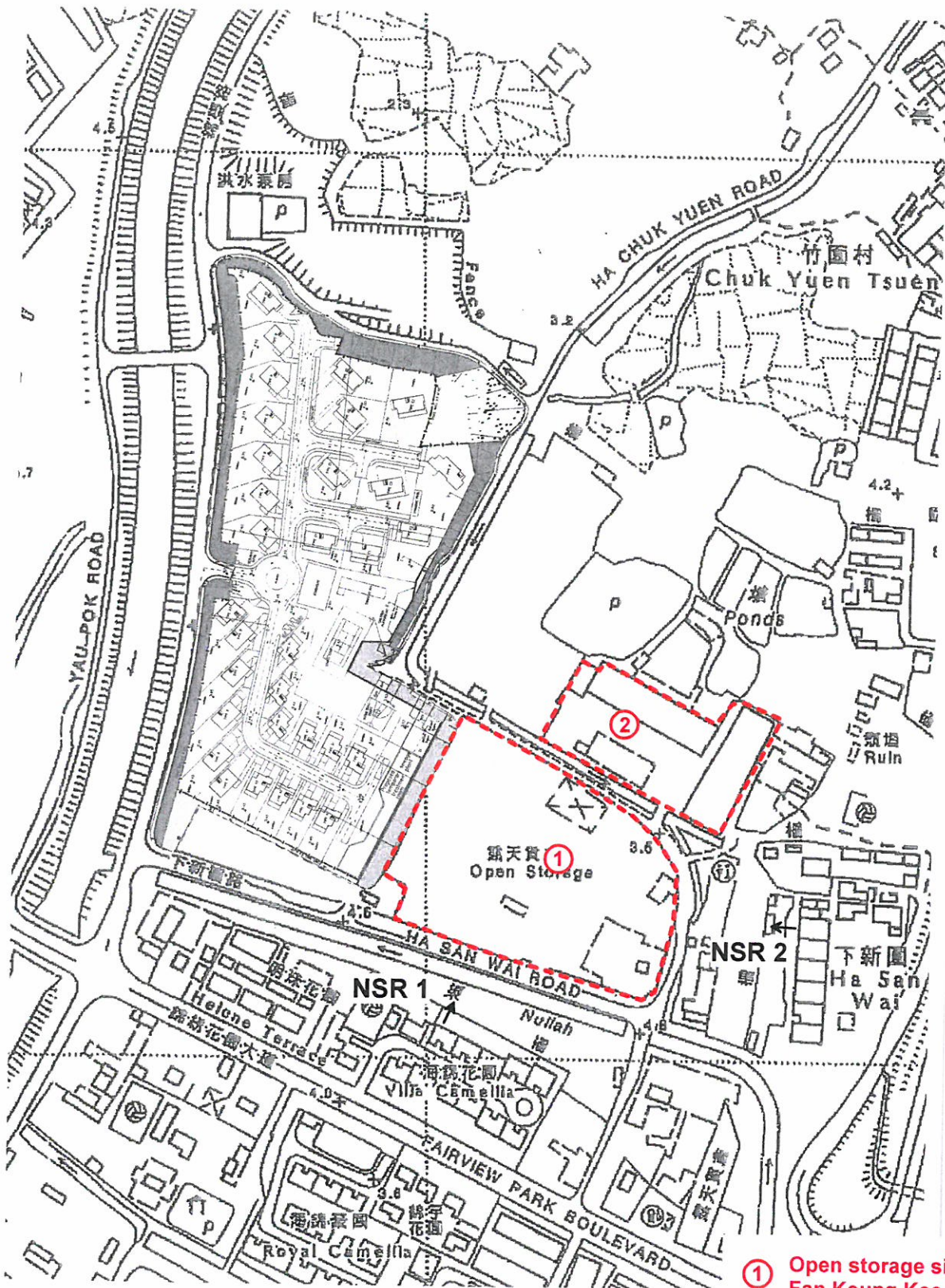


Appendix 4-5

Industrial Noise Calculation at Nearby Existing Village Houses (Worst Case Scenario)



- ① Open storage site:
Fan Keung Kee
- ② Enclosed godown:
Shing Fat Logistics Ltd.

Figure: -

Title: Existing NSRs
(Villa Camellia and Ha San Wai)

Project: EIA for Proposed Low-rise and Low-density Residential Development at Various Lots and Their Adjoining Government Land in D.D. 104, East of Kam Pok Road, Mai Po, Yuen Long, N.T.

RAMBOLL ENVIRON

Drawn by: CC

Checked by: KW

Rev.: -

Date: November 2015

Predicted Industrial Noise Levels in Daytime Period

Job Title.: Kam Pok Road
 Job No.: 22080
 Date: 5/7/2014
 Scenario:

Floor	NSR 1	NSR 2
G/F	59.2	58.5
1/F	59.2	58.4
2/F	59.2	58.4

Max: 59.2 58.5
 (ANL) Criterion 60.0 60.0
 Compliance YES YES

Predicted Industrial Noise Levels in Night-time Period

Job Title.: Kam Pok Road
 Job No.: 22080
 Date: 5/7/2014
 Scenario:

Floor	NSR 1	NSR 2
G/F	48.2	49.2
1/F	48.2	49.2
2/F	48.2	49.2

Max:	48.2	49.2
(ANL) Criterion	50.0	50.0
Compliance	YES	YES

Calculation of Industrial Noise Levels (Daytime Period)

Westwood Hong & Associates Ltd.

Job Title.: Kam Pok Road
 Job No.: 22080
 Date: 07/07/14

NSR	NSR 1		Xr : 823521 Yr : 837014 Hr : 11.2									
	2/F											
Code	Description	SWL	Source location & distance			Corrections					CNL	
			Xs	Ys	Hs	Lsr	Cno	CLsr	Catm	Csri	Cfac	dB(A)
S2-2	Mobile Crane (Fan Keung Kee)	97	823539.1	837124	4.5	112.0	0	-49.0	0.0	0.0	3	51.0
S2-1	Lorry (Fan Keung Kee)	99	823537.6	837122	4.5	110.0	3	-48.8	0.0	0.0	3	56.2
S1-1	Operating Noise (Fan Keung Kee)	94	823579.5	837132	4.5	131.9	0	-50.4	0.0	0.0	3	46.6
S2-3	Forklift (Fan Keung Kee)	91	823587.9	837132	4.5	136.0	0	-50.7	0.0	0.0	3	43.3
S10-1	Forklift (Shing Fat Logistics Ltd.)	91	823597.1	837193	4.5	195.0	3	-53.8	0.0	0.0	3	43.2
S10-2	Lorry (Shing Fat Logistics Ltd.)	99	823596.8	837191	4.5	192.6	5	-53.7	0.0	0.0	3	53.1
TOTAL											59.2	

Definition of terms:

- SWL - the sound power level of a source, dB(A)
- LAeq - the equivalent continuous noise level over a 30 minute period, dB(A)
- No. - the number of items of plant operating simultaneously
- Xr, Yr, Hr - the coordinates of the NSR, m
- Xs, Ys, Hs - the coordinates of the source, m
- Lsr - the horizontal distance between the source and NSR, m
- Cno - correction for no. of plant items
- CLsr - the correction for slant distance between the source and the NSR, dB(A)
- Catm - the air absorption using CONCAWE methodology
- Cfac - the facade correction, dB(A)
- Csri - the sound reduction provided by the building envelope, dB(A)
- CNL - the corrected noise level, dB(A)(30 minutes)

Calculation of Industrial Noise Levels (Night-time Period)

Westwood Hong & Associates Ltd.

Job Title.: Kam Pok Road
 Job No.: 22080
 Date: 07/07/14

Code	Description	SWL	Source location & distance			Corrections				CNL dB(A)			
			Xs	Ys	Hs	Lsr	Cno	CLsr	Catm		Csri	Cfac	
NSR	NSR 1												
	2/F												
			Xr : 823521 Yr : 837014 Hr : 11.20										
			No.										
S2-2	Mobile Crane (Fan Keung Kee)	97	0	823539	837124	4.5	112.0	0	-49.0	0.0	0.0	3	0.0
S2-1	Lorry (Fan Keung Kee)	99	0	823538	837122	4.5	110.0	0	-48.8	0.0	0.0	3	0.0
S1-1	Operating Noise (Fan Keung Kee)	94	1	823580	837132	4.5	131.9	0	-50.4	0.0	0.0	3	46.6
S2-3	Forklift (Fan Keung Kee)	91	0	823588	837132	4.5	136.0	0	-50.7	0.0	0.0	3	0.0
S10-1	Forklift (Shing Fat Logistics Ltd.)	91	2	823597	837193	4.5	195.0	3	-53.8	0.0	0.0	3	43.2
S10-2	Lorry (Shing Fat Logistics Ltd.)	99	0	823597	837191	4.5	192.6	0	-53.7	0.0	0.0	3	0.0
TOTAL											48.2		

Definition of terms:

- SWL - the sound power level of a source, dB(A)
- LAeq - the equivalent continuous noise level over a 30 minute period, dB(A)
- No. - the number of items of plant operating simultaneously
- Xr, Yr, Hr - the coordinates of the NSR, m
- Xs, Ys, Hs - the coordinates of the source, m
- Lsr - the horizontal distance between the source and NSR, m

- Cno - correction for no. of plant items
- CLsr - the correction for slant distance between the source and the NSR, dB(A)
- Catm - the air absorption using CONCAWE methodology
- Cfac - the facade correction, dB(A)
- Csri - the sound reduction provided by the building envelope, dB(A)
- CNL - the corrected noise level, dB(A)(30 minutes)

Calculation of Industrial Noise Levels (Daytime Period)

Westwood Hong & Associates Ltd.

Job Title.: Kam Pok Road
 Job No.: 22080
 Date: 07/07/14

NSR	Xr: 823703 Yr: 837091 Hr: 11.2										
	NSR 2 2/F	SWL		Source location & distance			Corrections			CNL	
Code	Description	No.	Xs	Ys	Hs	Lsr	Clsr	Catm	Csri	Cfac	dB(A)
S2-2	Mobile Crane (Fan Keung Kee)	1	823539.1	837124	4.5	167.4	-52.5	0.0	0.0	3	47.5
S2-1	Lorry (Fan Keung Kee)	2	823537.6	837122	4.5	168.5	-52.5	0.0	0.0	3	52.5
S1-1	Operating Noise (Fan Keung Kee)	1	823579.5	837132	4.5	130.2	-50.3	0.0	0.0	3	46.7
S2-3	Forklift (Fan Keung Kee)	1	823587.9	837132	4.5	122.4	-49.8	0.0	0.0	3	44.2
S10-1	Forklift (Shing Fat Logistics Ltd.)	2	823597.1	837193	4.5	147.2	-51.4	0.0	0.0	3	45.7
S10-2	Lorry (Shing Fat Logistics Ltd.)	3	823596.8	837191	4.5	145.7	-51.3	0.0	0.0	3	55.5
TOTAL										58.4	

Definition of terms:

- SWL - the sound power level of a source, dB(A)
- LAeq - the equivalent continuous noise level over a 30 minute period, dB(A)
- No. - the number of items of plant operating simultaneously
- Xr, Yr, Hr - the coordinates of the NSR, m
- Xs, Ys, Hs - the coordinates of the source, m
- Lsr - the horizontal distance between the source and NSR, m

- Cno - correction for no. of plant items
- Clsr - the correction for slant distance between the source and the NSR, dB(A)
- Catm - the air absorption using CONCAWE methodology
- Cfac - the facade correction, dB(A)
- Csri - the sound reduction provided by the building envelope, dB(A)
- CNL - the corrected noise level, dB(A)(30 minutes)

Calculation of Industrial Noise Levels (Night-time Period)

Westwood Hong & Associates Ltd.

Job Title.: Kam Pok Road
 Job No.: 22080
 Date: 07/07/14

Code	Description	SWL	Source location & distance			Corrections						CNL dB(A)	
			Xs	Ys	Hs	Lsr	Cno	CLsr	Catm	Csri	Cfac		
S2-2	Mobile Crane (Fan Keung Kee)	97	823539	837124	4.5	167.4	0	-52.5	0.0	0.0	0.0	3	0.0
S2-1	Lorry (Fan Keung Kee)	99	823538	837122	4.5	168.5	0	-52.5	0.0	0.0	0.0	3	0.0
S1-1	Operating Noise (Fan Keung Kee)	94	823580	837132	4.5	130.2	0	-50.3	0.0	0.0	0.0	3	46.7
S2-3	Forklift (Fan Keung Kee)	91	823588	837132	4.5	122.4	0	-49.8	0.0	0.0	0.0	3	0.0
S10-1	Forklift (Shing Fat Logistics Ltd.)	91	823597	837193	4.5	147.2	3	-51.4	0.0	0.0	0.0	3	45.7
S10-2	Lorry (Shing Fat Logistics Ltd.)	99	823597	837191	4.5	145.7	0	-51.3	0.0	0.0	0.0	3	0.0
TOTAL											49.2		

Xr : 823703
 Yr : 837091
 Hr : 11.20

Definition of terms:

- SWL - the sound power level of a source, dB(A)
- LAeq - the equivalent continuous noise level over a 30 minute period, dB(A)
- No. - the number of items of plant operating simultaneously
- Xr, Yr, Hr - the coordinates of the NSR, m
- Xs, Ys, Hs - the coordinates of the source, m
- Lsr - the horizontal distance between the source and NSR, m
- Cno - correction for no. of plant items
- CLsr - the correction for slant distance between the source and the NSR, dB(A)
- Catm - the air absorption using CONCAWE methodology
- Cfac - the facade correction, dB(A)
- Csri - the sound reduction provided by the building envelope, dB(A)
- CNL - the corrected noise level, dB(A)(30 minutes)