

Area Sensitive Ratings for Representative NSRs For Rail Noise and Fixed Noise Sources Impact Assessment

Existing NSR – TCE

Ying Tung Estate, The Visionary, Caribbean Coast and Tung Chung Crescent are high dense residential areas located in Tung Chung. Tung Chung Station Bus Terminus, Citygate and various Government, Institution and Community ("GIC") facilities are found in these areas. Given the high density and residential land uses, it is considered that these above areas are considered as "Area other than those above". North Lantau Highway (NLH) has an Annual Average Daily Traffic (AADT) of 74,980 in Year 2019 and hence it is considered as an Influencing Factor (IF) as its daily traffic flow is greater than 30,000 vehicles. Hong Kong International Airport (HKIA) is located on the west of these area and it is considered as an IF.

Existing NSR – TCW

Ma Wan Chung is located in at Tung Chung Bay with low rise residential building. According to OZP, it is classified as village type development. Given its land uses, it is considered that Ma Wan Chung as "Rural Area, including country parks or village type developments". HKIA is located on the north of the Ma Wan Chung and it is considered as an IF.

Yat Tung Estate and Mun Tung Estate along the Yu Tung Road. There are 29 high rise residential blocks. Given the high density and residential land uses, it is considered that all the area is considered as "Area other than those above". Yu Tung Road has an AADT of 24,560 in Year 2019 and hence it is not considered as an IF as its daily traffic flow is less than 30,000 vehicles. HKIA is located on the north of these public housing estate and it is considered as an IF.

Sheung Ling Pei, Ha Ling Pei and Wong Ka Wai are located along Tung Chung Road facing Yu Tung Road. According to OZP, it is classified as village type development. Given their land uses, it is considered that these village areas as "Rural Area, including country parks or village type developments". Yu Tung Road has an AADT of 24,560 and Tung Chung Road has an AADT of 4,750 in Year 2019 and hence they are not considered as an IF as its daily traffic flow is less than 30,000 vehicles. HKIA is located on the north of these village and it is considered as an IF.

Planned NSR – TCE

Scenario A for Phase 1 Population intake after Q2 2023:

There will be 11 nos. of high rise residential blocks with new PTI for TCE Phase 1 development. TCE Phase 1 development is located on the west of reclaimed land with planned commercial use land and adjoining to Ying Tung Estate and Ying Tung Shopping. Given the high density and residential land uses, it is considered that all the area within the Phase 1 is considered as "Area other than those above". NLH has an AADT of 74,980 in Year 2019 and hence it is considered as an IF as its daily traffic flow is greater than 30,000 vehicles. HKIA is located on the west of TCE and it is considered as an IF.

Scenario B for Phase 1 to Phase 3 (Area 113 only) Population intake after Q2 2027:

There will be more than 20 nos. of high rise residential blocks with new PTIs for Phase 1 – 3 development. A large commercial / retail area, public transport interchange and new TCE rail station will be also be provided at Area 113. Similar to Scenario A, given the high density and residential land uses, it is considered that all the area within the Phase 1 – Phase 3 (Area 113 only) is considered as "Area other than those above". NLH has an AADT of 74,980 in Year 2019 and hence it is considered as an IF as its daily traffic flow is greater than 30,000 vehicles. HKIA is located on the west of TCE and it is considered as an IF.

Area 58 is located on Man Tung Road and at the east of Caribbean Coast. It will be completed for population intake at 2029 and there will be 3 residential blocks of 47 residential storeys high. Similar to Caribbean Coast, given the high density and residential land uses, it is considered that these above areas are considered as "Area other than those above". NLH has an AADT of 74,980 in Year 2019 and hence it is considered as an IF as its daily traffic flow is greater than 30,000 vehicles. HKIA is located on the west of the Area 58 and it is considered as an IF.

Scenario C for Phase 1 to Phase 3 Population intake after Q2 2029:

There will be more than 20 nos. of high rise residential blocks competed. Similar to Scenario B, given the high density and residential land uses, it is considered that all the area within the Phase 1 – Phase 3 is considered as "Area other than those above". NLH has an AADT of 74,980 in Year 2019 and hence it is considered as an IF as its daily traffic flow is greater than 30,000 vehicles. HKIA is located on the west of TCE and it is considered as an IF.

Scenario D for Phase 1 to Phase 4 Population intake after Q1 2030:

According to the current development scheme, there will be more than 20 nos. of high dense residential blocks competed for population intake. A large commercial / retail area, public transport interchange and sports ground will be also be provided at Phase 4 development. Similar to Scenario C, given the high density and residential land uses, it is considered that all the area within the Phase 1 – Phase 4 is considered as "Area other than those above". NLH has an AADT of 74,980 in Year 2019 and hence it is considered as an IF as its daily traffic flow is greater than 30,000 vehicles. HKIA is located on the west of TCE and it is considered as an IF.

Planned NSR – TCW

Area 23 is located on the north of Yat Tung Estate and Area 33 is located on the west of Yat Tung Estate. There will be 6 nos. and 7 nos. of high dense residential blocks for Area 23 and Area 33 respectively. Similar to Yat Tung Estate, given the high density and residential land uses, it is considered that all the area within Area 23 and Area 33 is considered as “Area other than those above”. Given the high density and residential land uses, it is considered that all the area is considered as “Area other than those above”.

Table A1 Area Sensitivity Rating for fixed noise and rail noise assessment

No. ^[1]	NSR ^[2]	Uses ^[3]	Scenario for Rail Noise Assessment	NAP ^[4]	Type of Area	Influencing Factor	Degree of NSR affected ^[5]	Area Sensitivity Rating ^[6]
E1	Ying Tung Estate	R	Scenario A – D	YTT-01a	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
				YTT-01f	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
				YTT-02a	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
				YTT-02e	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
				YTT-02f	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
				YTT-02m	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
				YTT-02p	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
				YTT-04a	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
				YTT-04f	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
E2	The Visionary	R	Scenario A – D	TV-03a	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
E3	Caribbean Coast	R	Scenario A – D	CC-01a	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
E8a	Tung Chung Crescent	R	– [7]	TCC-02a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	– [8]	TCC-03a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	– [8]	TCC-09a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
E10	Ma Wan Chung	V	– [8]	MWC-02a	Rural Area ^[9]	HKIA	Indirectly Affected	B
		V	– [7]	MWC-03a	Rural Area ^[9]	HKIA	Indirectly Affected	B
E11a	Yat Tung Estate	R	– [8]	YTE-01a	Area other than those above	HKIA	Indirectly Affected	B
		R	– [8]	YTE-03a	Area other than those above	HKIA	Indirectly Affected	B
		R	– [7]	YTE-14a	Area other than those above	HKIA	Indirectly Affected	B
		R	– [8]	YTE-15a	Area other than those above	HKIA	Indirectly Affected	B
E12	Mun Tung Estate	R	– [8]	MTE-01b	Area other than those above	HKIA	Indirectly Affected	B
E15	Sheung Ling Pei	V	– [8]	SLP-01a	Rural Area ^[9]	HKIA	Indirectly Affected	B
E16	Ha Ling Pei	V	– [8]	HLP-03a	Rural Area ^[9]	HKIA	Indirectly Affected	B
E17	Wong Ka Wai	V	– [8]	WKW-01a	Rural Area ^[9]	HKIA	Indirectly Affected	B
E21	Lantau North (Extension) Country Park	O	Scenario A – D	LNCP-01	N/A ^[10]	N/A ^[10]	N/A ^[10]	N/A ^[10]
P1	Residential Premises in Tung Chung East (Planned NSR)	R	Scenario A	A99-01b	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	C
		R	Scenario B – D	A99-01b	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario A	A99-01d	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	C
		R	Scenario B – D	A99-01d	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario A	A99-02b	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	C
		R	Scenario B – D	A99-02b	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario A	A99-02f	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	C
		R	Scenario B – D	A99-02f	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario A	A99-02s	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	C
		R	Scenario B – D	A99-02s	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario A	A99-02z	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	C

No. ^[1]	NSR ^[2]	Uses ^[3]	Scenario for Rail Noise Assessment	NAP ^[4]	Type of Area	Influencing Factor	Degree of NSR affected ^[5]	Area Sensitivity Rating ^[6]
		R	Scenario B – D	A99-02z	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario A – D	A100-01b	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario A – D	A100-01d	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario A – D	A100-01k	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario A – D	A100-01p	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario A – D	A100-01x	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario A	A100-02a	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario B – D	A100-02a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario A – D	A100-02h	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario A – D	A100-02n	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario A – D	A100-02s	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario A – D	A100-02t	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario A – D	A100-02z	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario A	A100-03b	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario B – D	A100-03b	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario A	A100-03c	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario B – D	A100-03c	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A114-01c	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A114-01e	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A114-01j	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	– [8]	A114-02a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A114-02b	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A114-02e	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A115-03a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A115-03d	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A115-03g	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A116-01a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A116-01d	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A116-01g	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A116-02a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C – D	A116-02d	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	– [8]	A116-02e	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C	A117-02b	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario D	A117-02b	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario C	A117-02e	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario D	A117-02e	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario D	A133a-01b	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario D	A133a-01c	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	– [8]	A133a-01e	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario D	A133a-01k	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario D	A133a-01q	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B

No. ^[1]	NSR ^[2]	Uses ^[3]	Scenario for Rail Noise Assessment	NAP ^[4]	Type of Area	Influencing Factor	Degree of NSR affected ^[5]	Area Sensitivity Rating ^[6]
		R	Scenario D	A133a-01s	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario D	A133a-02a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario D	A133a-02f	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario D	A133a-03q	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario D	A133a-04c	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario D	A133c-02c	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
P2	Residential Premises in Tung Chung West (Planned NSRs)	R	– ^[8]	A23-01a	Area other than those above	HKIA	Indirectly Affected	B
		R	– ^[8]	A33-02a	Area other than those above	HKIA	Indirectly Affected	B
		R	– ^[8]	A33-05a	Area other than those above	HKIA	Indirectly Affected	B
P4	Tung Chung at Area 113	R	– ^[8]	A113-01e	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario B – D	A113-01g	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario B – D	A113-01k	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario B – D	A113-02a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario B – D	A113-03a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario B – D	A113-04a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario B – D	A113-06a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario B – D	A113-07a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario B – D	A113-09a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario B – D	A113-10a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario B – D	A113-10d	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario B – D	A113-11a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario B – D	A113-12a	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	B
		R	Scenario B – D	A113-12e	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario B – D	A113-12k	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario B – D	A113-13a	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario B – D	A113-13b	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario B – D	A113-13f	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
R	Scenario B – D	A113-22g	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C		
R	Scenario B – D	A113-22k	Area other than those above	NLH / HKIA	Indirectly / Indirectly Affected	C		
P6	Tung Chung Area 58	R	Scenario B – D	A58-01a	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C
		R	Scenario B – D	A58-01b	Area other than those above	NLH / HKIA	Directly / Indirectly Affected	C

Notes:

[1] The assessment will only include NSRs which rely on opened windows for ventilation.

[2] Only the first layer of NSRs has been selected for assessment.

[3] R – Residential Premises, V – Village type development, O – Others.

[4] NAP – Noise Assessment Point.

[5] According to IND – TM, “directly affected” means that the NSR is at such a location that noise generated by the IF is readily noticeable at the NSR and is a dominant feature of the noise climate of the NSR; “indirectly affected” means that the NSR is at such a location that noise generated by the IF, whilst noticeable at the NSR, is not a dominant feature of the noise climate of the NSR; “not affected” means that the NSR is at such a location that noise generated by the IF is not noticeable at the NSR.

[6] The corresponding Area Sensitivity Ratings of the NSRs are determined based on the best available information and is for indicative assessment only. Area Sensitive Ratings of the representative NSRs are defined subject the building layout, phasing development and IFs. The Area Sensitivity Rating would be reviewed as necessary based on the contemporary conditions/situations such as adjoining land uses, IFs or the latest development layout.

[7] Only for groundborne rail noise assessment only.

[8] Only for fixed noise sources assessment only.

[9] Rural Area – Rural Area, including country parks or village type developments

[10] In accordance with Annex 13 of the EIAO–TM, country parks are considered to be a NSR. However, the EIAO–TM and IND–TM do not provide a specific noise limits for Country Parks.