

Attachment 3

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ENVIRONMENTAL REVIEW

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Table 5-3 Background Air Quality at Tung Chung Air Quality Monitoring Station

Pollutant	Averaging time	Concentration 2019-2023 ($\mu\text{g}/\text{m}^3$)[1][2]					AQO ($\mu\text{g}/\text{m}^3$)
		2019	2020	2021	2022	2023	
SO ₂	4 th peak 10-min	57	24	19	26	22	500
	4 th peak 24-hr	18	8	9	11	11	40
PM ₁₀	10 th peak 24-hr	<u>75</u>	66	63	57	51	75
	Annual Average	<u>30</u>	25	26	23	22	30
PM _{2.5}	19 th peak 24-hr	<u>43</u>	34	<u>38</u>	36	28	37.5
	Annual Average	<u>19</u>	14	<u>17</u>	14	14	15
NO ₂	19 th peak 1-hr	149	113	115	94	118	200
	10 th peak 24-hr	80	64	61	51	58	120
	Annual Average	33	28	28	25	26	40
O ₃	10 th peak 8-hr	<u>208</u>	<u>168</u>	158	<u>171</u>	156	160
	Peak season	<u>104</u>	90	82	89	79	100
CO	1 st peak 1-hr	2260	1530	1240	1170	1280	30,000
	1 st peak 8-hr	1874	1388	1073	1151	1095	10,000
	1 st peak 24-hr	1644	1157	865	1011	1007	4,000

Notes:

[1] Monitoring result(s) exceeding the AQO is/are bolded and underlined.

[2] All air quality data were extracted from EPD's Environmental Protection Interactive Centre.

5.3.2. Exceedance of concentration of PM_{2.5}, PM₁₀ and O₃ in the AQO has been recorded at Tung Chung Air Quality Monitoring Station. The exceedance of PM_{2.5} and PM₁₀ are likely due to the influence from exhaust emission from traffic on the busy networks (e.g. North Lantau Highway) in Tung Chung Area, whereas the exceedance of O₃ is mainly caused by regional air pollution and is not directly emitted from man-made sources. In general, the results show a decreasing trend in the concentration of most pollutants in these 5 years.

Future Background Air Quality Condition

5.3.3. In view of the tentative completion year of the proposed development will be in Q4 2031, it is noted that the PATH v3.0 dataset only provides the nearest projected nearest background air quality concentrations for Year 2030. Therefore, the Year 2030 projections at Grid (19, 31), Grid (19,32) and Grid (18,31) have been adopted as the best available representation of the future background air quality for the Application Site. A summary of the Year 2030 background air quality concentrations is presented in **Table 5-4**.

Table 5-4 Background Air Quality Concentration of Pollutants

Pollutant	Averaging time	AQOs Concentration limit ($\mu\text{g}/\text{m}^3$) (number of exceedances to be allowed)	Background (19,31)	Background (19,32)	Background (18,31)
SO ₂	4th peak 10-min	500 (3)	31.35	32.42	29.87
	4th peak 24-hr	40 (3)	6.9	6.96	7.08
PM ₁₀	10th peak 24-hr	75 (9)	51.06	51.25	51.18
	Annual Average	30	18.66	18.86	18.78
PM _{2.5}	19th peak 24-hr	37.5 (18)	27.43	27.66	27.91
	Annual Average	15	11.31	11.48	11.40
NO ₂	19th peak 1-hr	200 (18)	88.29	96.73	94.32
	10th peak 24-hr	120 (9)	39.88	46.27	44.99
	Annual Average	40	16.77	20.32	17.74
O ₃	10th peak 8-hr	160 (9)	<u>180.48</u>	<u>181.35</u>	<u>183.59</u>
	Peak season	100	<u>113.13</u>	<u>112.35</u>	<u>113.77</u>
CO	1st peak 1-hr	30,000 (0)	532.14	529.74	536.52
	1st peak 8-hr	10,000 (0)	500.48	502.89	502.84
	1st peak 24-hr	4,000 (0)	469.55	473.84	471.01

Notes:

[1] Prediction result(s) exceeding the AQO is/are bolded and underlined.

[2] Future background air quality is represented using PATH data at Level 1.

5.3.4. These data have demonstrated that the concentrations of pollutants are below the AQOs, except for O₃. O₃ is not directly emitted from an emission source. It is formed by the chemical reactions of NO_x and VOCs under the presence of sunlight and a regional pollution problem. O₃ is therefore not considered as a key parameter in this assessment.

5.4. Assessment Area and Representative Air Quality Sensitive Receivers (ASRs)

5.4.1. In general, the assessment area for an air quality impact assessment (AQIA) is defined by a distance of 500m from the site boundary.

5.4.2. Representative air quality sensitive receivers (ASRs) were identified and the separation distance between ASRs and Application Site are shown in **Figure 5.1** and summarized in **Table 5-5**.

PRELIMINARY ENVIRONMENTAL REVIEW FOR PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PERMITTED FLAT (POLICE MARRIED QUARTERS) IN “GOVERNMENT, INSTITUTION OR COMMUNITY (1)” ZONE AND PROPOSED FLAT (POLICE MARRIED QUARTERS) IN “GOVERNMENT, INSTITUTION OR COMMUNITY” ZONE GOVERNMENT LAND AT TUNG CHUNG AREAS 134 AND 135, TUNG CHUNG, LANTAU ISLAND

5.4.3. The planned ASRs were identified based on best available information from at the time of preparation of this report, including:

- Tung Chung Line Extension (TCLE) EIA report (AEIAR-235/2022);
- Tung Chung New Town Extension (TCNTE) EIA (AEIAR-196/2016); and
- Hong Kong Housing Authority (HKHA) report Public Housing Development at Tung Chung Area 133A, 133B and 133C Environmental Assessment Study Final Report”

Table 5-5 Representative Air Sensitive Receivers (ASRs)

ASR ID	Description	No. of Storey (approx.) ^[1]	Land Use ^[2]	Shortest distance from project boundary (m)
ASR01	Proposed Post Secondary Institution	118	E	188
ASR02	Proposed Fire Station	9	GIC	119
ASR03	Proposed Police Station	6	GIC	98
ASR04	Proposed International School	11	E	108
ASR05	Proposed Residential Development (C2-2)	32	R	236
ASR06	Proposed Residential Development (C2-1)	28	R	27
ASR07	Proposed Commercial Development (COM-3)	28	CDA	151
ASR08	Proposed Residential Development (C1-1)	37	R	327
ASR09	Proposed Commercial Development (COM-2)	34	CDA	332
ASR10	Proposed Comprehensive Development (A1-2)	30	CDA	454
ASR11	Proposed Comprehensive Development (A1-2)	30	CDA	381
ASR12	Proposed Residential Development (A2-4)	32	R	435
ASR13	Proposed Residential Development (E1-5)	31	R	489
ASR14	Proposed Residential Development (F1-1)	10	R	338
ASR15	Proposed Residential Development (F1-2)	13	R	309
ASR16	Proposed Residential Development (F1-1)	10	R	443
ASR17	Proposed Secondary School (F1)	8	E	496
ASR18	Proposed Primary School (F)	8	E	467
ASR19	Proposed Primary School (F)	8	E	443
ASR20*	Tower 1 - Master Bedroom	27	R	-
ASR21*	Tower 1 - Master Bedroom	27	R	-
ASR22*	Tower 1 - Master Bedroom	27	R	-

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ASR ID	Description	No. of Storey (approx.) ^[1]	Land Use ^[2]	Shortest distance from project boundary (m)
ASR23*	Tower 1 - Master Bedroom	27	R	-
ASR24*	Tower 2 - Master Bedroom	27	R	-
ASR25*	Tower 2 - Master Bedroom	27	R	-
ASR26*	Tower 2 - Master Bedroom	27	R	-
ASR27*	Tower 1 - Master Bedroom	27	R	-
ASR28*	Management Office	1	R	-

Remark:

[1] Reference from (TCNTE) EIA (AEIAR-196/2016) and HKHA report.

[2] E = Education; R = Residential Development; CDA = Comprehensive Development Area; GIC = Government Institution or Community; C = Commercial

[3] * = ASRs within Proposed Development

- 5.4.4. Openable windows will be provided at habitable rooms at residential units at Tower 1 and Tower for ventilation. Management office at podium will be provided with air-conditioning. These rooms are considered as ASRs within the project site.

5.5. Potential Air Quality Impact - Construction Phase

Emissions Sources from the Project

- 5.5.1. Foundation and superstructure works during the construction period would be anticipated in construction phase, dust emission in terms of Total suspended particulates (TSP), respirable suspended particulates (RSP) and fine suspended particulates (FSP) are the key air pollutants during construction. No demolition works will be carried out as there is no existing structure to demolished. MiC construction method will be adopted. No basement will be provided and thus deep excavation is not expected. In view of the project nature and scale, the construction activities will be limited to localised at-grade construction works.

- 5.5.2. The construction activities are expected to generate about 7,131m³ of inert C&D waste as shown in **Table 9-1**. The construction will last for 4 years, assuming a capacity of 7m³ per truck, bulk factor of 1.2, 25 working days a month and the works will not be conducted simultaneously, it is estimated that a maximum of 1 truck trip per day would be required for the delivery of excavated material. In view of the estimated number of dump trucks arising from the transportation of inert C&D materials is low, the impacts from transportation off-site are expected to be limited.
- 5.5.3. Diesel-fueled machinery operating on-site, including construction trucks and powered mechanical equipment (PMEs) may be potential source of PM₁₀, PM_{2.5}, NO₂, SO₂, and CO during construction stage. Number of PME to be used per time over the work site shall be kept to minimum and subject to selection of Contractor and future construction management. Concurrent operation of PMEs will be avoided and PMEs are to be placed away from the ASRs as far as practicable to avoid adverse impact to the nearby ASRs.

Emissions from Concurrent Projects

- 5.5.4. All potential concurrent projects within 500m assessment area during construction phase of the proposed development have been identified and tabulated in table below and shown in **Figure 5.2**.

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Concurrent Projects		Construction Programme	Potential Cumulative Impacts		Approximate Distance from the Application Site
			Construction Phase	Operational Phase	
	and Public Transport Interchange (PTI) in Area 113 ^[2]				
14.	Residential Development at Area 122 ^[2]	2024 till 2030	Yes	No	461m
15.	Residential Development at Area 140 ^[2]	2024 till 2030	Yes	No	376m
16.	Residential Development at Area 141 ^[2]	2024 till 2030	Yes	No	299m
17.	Sports Centre at Area 140 ^[2]	2024 till 2030	Yes	No	435m

Note:

[1] reference to Tung Chung Line Extension (TCLE) EIA report (AEIAR-235/2022)

[2] reference to Tung Chung New Town Extension (TCNTE) EIA (AEIAR-196/2016)

[3] reference to Hong Kong Housing Authority (HKHA) report “Public Housing Development at Tung Chung Area 133A, 133B and 133C Environmental Assessment Study Final Report” (April 2024)

[4] reference to “Section 16 Planning Application for Proposed Minor Relaxation of Building Height Restrictions for Permitted Public Housing Development at Tung Chung Area 114 and Tung Chung Area 117, Lantau Island” (August 2024)

5.5.5. With reference to findings in TCNTE EIA report (AEIAR-196/2016), it is anticipated that appropriate mitigation measures for air quality impact stipulated in Air Pollution Control (Construction Dust) Regulation will be implemented by the contractors of the concurrent project. In addition, careful programme management liaison will be arranged to ensure that construction activities near ASRs are efficiently scheduled to prevent concurrent works at the same interfacing locations. Review of the Environmental Monitoring and Audit (EM&A) Reports of the TCNTE EIA (AEIAR-196/2016) from August 2020 to August 2025 indicates that the dust monitoring data recorded no exceedance of Action and Limit Levels for construction air quality monitoring during the reporting period. As a result, adverse cumulative air quality impact during the construction phase of the proposed development is not expected.

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- The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcore.
 - Vehicles within the site are restricted to a maximum speed of 10 kph.
 - Vehicles are inspected regularly and well maintained to ensure that they are operating efficiently and that exhaust emissions are not causing nuisance.
 - Vehicle engines are turned off when they are not in use.
 - Haul road of the subject site is located as far as possible from nearby ASRs.
- 5.5.7. Due to small in development scale, the construction works to be involved the Application Site would be very limited. Also, requirements set out in the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation to control potential emissions from non-road mobile machinery (NRMM) will need to be fully complied with. Therefore, gaseous emission from diesel-fueled construction equipment would be minor and would not cause any significant adverse air quality impact.
- 5.5.8. To reduce SO₂ emission from diesel-fueled machinery operating on-site, Air Pollution Control (Fuel Restriction) Regulations was enacted in 1990 to impose legal control on the types of fuel allowed for use and their sulphur contents in commercial and industrial processes. To improve air quality and protect public health, EPD has introduced the Air Pollution control (Non-road Mobile Machinery) (Emission) Regulation since 1 December 2015, under which only approved or exempted NRMMS are allowed to be used in construction sites. In addition, all construction plants are required to use ULSD (defined as diesel fuel containing not more than 0.001% sulphur by weight) as stipulated in Environment, Transport and Works Bureau Technical Circular (ETWB-TC(W)) No.19/2005 on Environmental Management on Construction Sites. Furthermore, given the localized and small scale of the Project, as well as the small number of PMEs involved, adverse air quality impacts due to emissions from the use of PMEs would be unlikely.
- 5.5.9. Requirements set out in DEVB's TC No.1/2015, Emissions Control of NRMMS in Capital Works Contracts of Public Work need to comply by the Contractor. This Circular promulgates the requirements for the use of NRMMS approved under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation (“the Regulation”) in new capital works contracts of public works including design and build contracts, in addition to the statutory requirements of the Regulation.

5.5.10. The Contractor should also adhere to DEVB’s TC No. 13/2020, Timely Application of Temporary Electricity and Water Supply for Public Works Contracts and Wider Use of Electric Vehicles in Public Works Contracts. In response to the carbon emission reduction target as specific in the “Hong Kong Climate Action Plan 2030+”, at the detailed design stage, the Project Team should timely apply for the temporary electricity with a target that the necessary cables laying works could be completed before the commencement of the works contract. In addition, timely provision of electricity to construction sites can facilitate the use of Electric Vehicles (EVs) in public works contracts. The Project Team should specify the use of EV(s) as well as the installation of designated medium-speed charger for each EV as a standard provision at the site accommodation in each public works contract.

5.6. Potential Air Quality Impact – Operation Phase

Vehicular Emissions from Open Road Traffic

- 5.6.1. The major air pollution source in the vicinity of the Subject Site during operational phase would be tailpipe emission generated from road traffic along open road.
- 5.6.2. The Subject Site is bounded by two roads, namely Road L7 facing to the south and Road D2 along its east. With reference to Roadworks and Noise Mitigation Measures Design Report under TCNTE (East) – Design and Construction and the respective Technical Note on Traffic Forecast for Environmental Impact Assessment for Planning Review for Population Increase and Development Intensity in TCNTE (East), Road L7 is classified as local distributor while Road D2 is classified as district distributor. In accordance with HKPSG, the buffer distance between the proposed residential towers and the nearby roads should be adopted, which are summarised in **Table 5-7** and presented in **Figure 5.3**.

Vehicular Emissions from Public Transport Interchange

- 5.6.5. For the concurrent project of Planned Public Transport Interchange (PTI) will be located at Area 113 and Area 133B as shown in **Figure 5.4**. With reference to the approved TCNTE EIA (AEIAR-196/2016) and TCLE EIA (AEIAR-235/2022), the PTI would be decked under proposed Area 113 development. The proposed PTI at Area 113 is planned by other parties, any design, maintenance, and operating requirements stipulated in Practice Note for Professional Persons (ProPECC PN) 1/22 “Control of Air Pollution in Semi-Confined Public Transport Interchanges” relevant to any air quality impacts to its neighbouring developments shall be considered and addressed by other parties. The planned PTI at Area 133B will be designed with due consideration to the HKPSG as far as practicable. Besides, ProPECC PN 1/22 be followed as appropriate for designing and operating the PTI to meet the air quality guidelines inside the PTI. With the provision of implementing appropriate mitigation by the future operator, no adverse air quality impacts are anticipated.

Vehicular Emissions from Tunnel Portal and Ventilation Building

- 5.6.6. Other than vehicular emission along open roads, those emitted from the tunnel portals and ventilation buildings would also cause cumulative air quality impact. They are outside 500m assessment area as shown in **Appendix 5.1** and thus adverse air quality impact from these facilities are not anticipated.

Industrial Chimney Emissions

- 5.6.7. Based on desktop study and site survey conducted on 29 Aug 2025, no existing chimney were found within 500m of the subject site. According to the Air Quality Impact Assessments Review for Population Increase and Development Intensity - CASE 2: Scenario 2A (Final) under TCNTE (East) – Design and Construction conducted in May 2021, no chimney is also planned within 500m of the subject site. Given the proposed development is for residential use, which is not environmental polluting in nature and does not have provision of chimney. Hence, no chimney emission will arise from the proposed development and no adverse air quality due to chimney emission is anticipated.

Odour Emission from the proposed Sewage Pumping Station

- 5.6.8. With reference to deliverable PI49 (Sewerage System and Sewage Treatment Implication Review for Population Increase and Development Intensity – Case 2) of CEDD, the latest design of proposed Sewage Pumping Station (SPS) is located to the south of Application Site, with a separation distance of 27m from the building façade of the current development scheme. Given the mitigation measures stipulated in TCNTE EIA Report (AEIAR-196/2016) will be incorporated, including installation of de-odourisation system within the pump house, design exhaust outlets further away from sensitive receivers, and full enclosure of pumps within building. It is anticipated that with the implementation of appropriate mitigation measures, potential odour impact from the SPS to the proposed development could be properly controlled.

Marine Emission from the proposed Marina at TCE

- 5.6.9. According to TCNTE EIA report (AEIAR-196/2016), the proposed Marina is located outside 500m assessment of the proposed site as shown in **Appendix 5.1**. No marine routing is identified within 500m assessment area. In view of large separation distance, no adverse air quality impacts are anticipated.

Marine Emission from Existing Local Vessels

- 5.6.10. Apart from proposed Marina at TCE, gaseous emission from the existing local vessels operating at the Tung Chung Pier for the transportation between Tuen Mun, Tung Chung, Sha Lo Wan and Tai O are observed to the west of project as shown in **Appendix 5.1**. As these vessels are located outside 500m assessment area and thus no adverse air quality impact from existing local vessels is anticipated.

Air Quality Impact arising from the Proposed Development

- 5.6.11. The nature of the proposed development is not environmental polluting and it is primarily for residential use. Car parks will be provided at G/F and 1/F. The air quality inside the car park shall comply with the air pollutant standards as recommended by the ProPECC PN 2/96 Control of Air Pollution in Car Parks. Therefore, the mechanical ventilation system of car park shall be properly designed away not to encroach buffer zone of nearby roads. Furthermore, the exhaust outlet of the mechanical ventilation system of the carpark shall also be designed by facing away from the air sensitive uses to ensure not to cause a nuisance to the occupants/residents of the air sensitive uses including the surrounding developments and the Proposed Development. The location of the exhaust outlet and fresh air intake of the mechanical

ventilation system is not available yet and will be provided at the detailed design stage.

Impact from proposed car park shall be reviewed again during the later stage to ensure no adverse air quality impact to the nearby air sensitive uses.

5.7. Conclusions

- 5.7.1. With the implementation of dust suppression measures of the Proposed development and provision of good site practice as stipulated under the Air Pollution Control (Construction Dust) Regulation, Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation and Air Pollution Control (Fuel Restriction) Regulations, fugitive dust impacts and gaseous emission from diesel-fueled construction equipment and machinery to the nearby air sensitive receivers due to construction works are expected to be insignificant.
- 5.7.2. For vehicular emission, a sufficient horizontal buffer distance between Road L7 and Road D2 to the Application Site is proposed in accordance with the requirements set out in the HKPSG. No significant adverse air quality impact due to vehicular emission on the proposed development is anticipated.
- 5.7.3. In view of no chimney was identified within the assessment area, no air quality impact with respect to industrial chimney emission on the future domestic users in the proposed development is anticipated. The proposed development does not include any chimney provision, no adverse air quality impact from chimney emissions is expected on nearby sensitive receivers.
- 5.7.4. For odour emission, with the adoption of appropriate odour control measures as outlined in the TCNTE EIA report (AEIAR-196/2016) and commonly implemented in other sewage pumping stations in Hong Kong, no adverse air quality impact due to odour emission is anticipated from the proposed SPS at Area 132 on the Application Site.
- 5.7.5. For marine emission, given the proposed marina at TCE and the existing local vessels are located outside the 500m assessment area, no adverse air quality impact due to marine emissions is anticipated.
- 5.7.6. Given that the exhaust outlet of mechanical ventilation system of car parks will be carefully designed and located away from fresh air intakes of proposed development and nearby ASRs, no adverse air quality impact during operation phase is expected.

6. Noise Impact Assessment

6.1. Introduction

6.1.1. As observed, potential traffic noise, fixed noise, railway noise, helicopter noise and aircraft noise impact are identified upon the proposed development.

6.1.2. The potential traffic noise impact is mainly dominated by Road P1, Road D2, Road L7, North Lantau Highway, Cheung Tung Road and Shun Long Road within the assessment area, road traffic noise impact assessment is conducted to evaluate potential adverse noise impact arising from the carriageways in the vicinity of the Application Site (detailed in **Section 6.3**).

6.1.3. Since the Application Site is surrounded by numerous residential and commercial buildings in its vicinity, potential fixed noise impact on the proposed development is envisaged. Therefore, fixed noise impact assessment has been conducted (detailed in **Section 6.3.25**).

6.1.4. The following reports have been made reference for analysing the traffic noise, railway noise fixed noise, helicopter noise and aircraft noise impact within 300m assessment area of proposed development.

- Tung Chung Line Extension (TCLE) EIA report (AEIAR-235/2022)

- Tung Chung New Town Extension (TCNTE) EIA (AEIAR-196/2016).

- Hong Kong Housing Authority (HKHA) report “Public Housing Development at Tung Chung Area 133A, 133B and 133C Environmental Assessment Study Final Report”

- Deliverable PI49 (Sewerage System and Sewage Treatment Implication Review for Population Increase and Development Intensity – Case 2) of CEDD

6.2. Design Strategy for Noise Consideration

6.2.1. General guidance is provided in the HKPSG and EPD’s website on Innovative Noise Mitigation Designs and Measures to reduce noise exposure. These guidelines have been duly considered in the design layout of the Proposed development. **Table 6-1** below summarizes the design strategies adopted in the Proposed development.

- 6.3.4. This approach considers the worst-case scenario of 15 years from the tentative completion date (Year 2031) of the proposed development. For worst case scenario evaluation, the assessment year has been chosen to be Year 2046, which has the maximum forecasted traffic flow within the 15-year period, per the advice by the traffic engineer.
- 6.3.5. **Appendix 6.1** presents the predicted peak hour traffic flows and percentage of heavy vehicle of road carriageways within 300m assessment area from the Application Site for Year 2046, with Transport Department’s no objection on such traffic forecast data supplemented as shown in **Appendix 5.2**.
- 6.3.6. The procedure of “*Calculation of Road Traffic Noise*” adopted by U.K.’s Department of Transport was used to predict the hourly $L_{10(1\text{-hour})}$ noise levels generated from road traffic at selected representative NSRs. The predicted noise levels were compared to the noise standard set out in the HKPSG (i.e. $L_{10(1\text{-hour})}$ 70dB(A) for domestic use. Practicable noise mitigation measures have been recommended where necessary.
- 6.3.7. Low noise road surfacing (LNRS) is currently in place on North Lantau Highway and Shun Long Road and the extent of LNRS is shown in **Figure 6.1**. It is considered in the assessment in both Base Scheme Scenario and Mitigated Scenario.

Noise Sensitive Receivers

- 6.3.8. Noise Sensitive Receivers (NSR) within the Proposed development have been selected to assess the road traffic noise impact to the noise sensitive uses. Assessment points for the residential blocks have been assigned to all openable windows for ventilation at all habitable rooms. All noise assessment points (NAPs) were taken at 1.2m above the floor level and 1m away from the façade of openable windows in rooms of sensitive uses.
- 6.3.9. Based on **Appendix 3.1**, the management office is located on the G/F and will be provided with air conditioning without relying on openable window for ventilation. Therefore, the management office is not considered as NSR for assessment.
- 6.3.10. **Figure 6.2** shows the location of the selected NSRs for traffic noise impact assessment.

Assessment Result Under Based Scheme Scenario (Scenario 1)

- 6.3.11. The road traffic noise prediction results indicate that the residential units are likely to be exposed to traffic noise levels exceeding the HKPSG traffic noise criterion of 70 dB(A). The predicted noise levels at all the NAPS at different levels under this “Base Scheme Scenario” (Scenario 1) are shown in **Appendix 6.2**. Summary of traffic noise prediction results is shown in **Table 6-2**. Residential flats facing Road L7 are anticipated to be the worst-affected locations.
- 6.3.12. Under the “Base Scheme Scenario” (Scenario 1), 52% of residential flats of the proposed development will be subjected to noise levels within the stipulated noise limit of 70 dB (A). The remaining flats will be subjected to noise levels higher than 70 dB (A), in the range of 71-74dB(A). The results of the assessment have indicated that the highest predicted noise level is 72 dB(A) for Tower 1 and 74 dB(A) for Tower 2.
- 6.3.13. **Table 6-2** summarizes the results of the traffic noise assessment under “Base Scheme Scenario” (Scenario 1). Predicted noise levels at the representative NSRs are presented in **Appendix 6.2**.

Table 6-2 Traffic Noise Prediction Results, Base Scheme Scenario

	Residential Towers		
	Tower 1	Tower 2	Overall
Maximum Predicted Traffic Noise Level, $L_{10,peak\ hr}$ in dB(A)	72	74	74
Noise Criteria $L_{10,1\ hr}$ in dB(A)	70	70	NA
Total No. of Units	216	216	432
Total No. of Units Exceed Traffic Noise Criteria	74	135	209
Percentage of Compliance	66%	38%	52%

- 6.3.19. Each BAW comprises of two layers of window, i.e. typical window at outer layer and sliding glazing at inner layer. While the prescriptive requirements of ventilation openings under Building (Planning) Regulations can be met by an unobstructed opening that allows air flow, noise reduction is achieved when the opening is obstructed by sliding glazing. The noise reduction performance shall be further enhanced by locating the opening of the outer layer of window away from dominant noise sources.
- 6.3.20. Optimal noise reduction performance of BAW would be considered when location of openable window and fixed glazing at outer layer is arranged in favourable setting. Openable window at outer layer are arranged further apart from dominant noise source, while fixed glazing is closer to the dominant noise source in general. In case there is a noise barrier structure, e.g. architectural fin, screening the openable window from noise source, openable window is arranged adjacent to the barrier structure.
- 6.3.21. For living rooms, bedrooms and master bedrooms with predicted traffic noise exceedance, BAW are proposed designed in accordance with EPD's "Practice Note on Application of INNOVATIVE NOISE MITIGATION DESIGNS in Planning Private Residential Developments against Road Traffic Noise Impact" as detailed in **Table 6-4** and **Table 6-5**.
- 6.3.22. To ensure the noise reduction performance of the acoustic window BAW, only one window opening with the acoustic window design will be allowed in each habitable room. This design arrangement is strictly followed. The openable window is well-gasketed with at least 6mm thick window panel.

Table 6-4 BAW (Configuration 1) and Living Room

Parameters	PN BAW2 w/o SAM	Proposed development (Living Room)
Size of Room ^[1] (m ²)	18	20
Maximum relative noise reduction required (dB(A))	/	2.8
Noise reduction adopted (dB(A))	7	7
Required Opening Area ^[2] (m ²)	/	1.11
Opening Area Provided ^[3] , (W) x (H) = Area (m and m ²)	/	Subject to detailed design stage
Acoustic Window Height (m)	1.5	
Gap Width (mm)	100 - 175	
Overlapping Length ^[4] (mm)	100	
Outer Opening Dimensions (W) x (H) = Area (m and m ²)	0.75 x 1.5 = 1.125	
Inner Opening Dimensions (W) x (H) = Area (m and m ²)	0.75 x 1.5 = 1.125	
Absorption Lining ^[5]	No	

Notes:

[1] Size of room in terms of Usable Floor Area (UFA) of subject room, excluding area of enclosed kitchens or toilets

[2] Size of opening required to satisfy ventilation requirement under Building Regulations, this area excludes area occupied by window frames.

[3] Opening when inner and outer opening aligned, i.e. the minimum of inner and outer opening area in above acoustic window (baffle type) configurations.

[4] Overlapping length of exterior and interior glazing measured from centres of aluminium frames (standard aluminium frame size of 50mm).

[5] Absorption Lining: on 3 sides of window frame (Top, Left and Right), with 30mm thick acoustic infill, rock wool, wrapped in sound transparent membrane in perforated casing of minimum 23% perforation. NRC 0.7 or above

Table 6-5 BAW (Configuration 2), Master Bedroom and Bedroom

Parameters	PN BAW1 w/o SAM	Proposed development (Master Bedroom)	Proposed development (Bedroom)
Size of Room ^[1] (m ²)	8	7.1	4.9
Maximum relative noise reduction required (dB(A))	/	3.6	3.1
Noise reduction adopted (dB(A))	6	5.5	3.9
Required Opening Area ^[2] (m ²)	/	0.45	0.31
Opening Area Provided ^[3] , (W) x (H) = Area (m and m ²)	/	Subject to detailed design stage	Subject to detailed design stage
Acoustic Window Height (m)	0.87		
Gap Width (mm)	100 - 175		
Overlapping Length ^[4] (mm)	100		
Outer Opening Dimensions (W) x (H) = Area (m and m ²)	0.6 x 0.87 = 0.522		
Inner Opening Dimensions (W) x (H) = Area (m and m ²)	0.58 x 0.87 = 0.5046		
Absorption Lining ^[5]	No		

Notes:

[1] Size of room in terms of Usable Floor Area (UFA) of subject room, excluding area of enclosed kitchens or toilets

[2] Size of opening required to satisfy ventilation requirement under Building Regulations, this area excludes area occupied by window frames.

[3] Opening when inner and outer opening aligned, i.e. the minimum of inner and outer opening area in above acoustic window (baffle type) configurations.

[4] Overlapping length of exterior and interior glazing measured from centres of aluminium frames (standard aluminium frame size of 50mm).

[5] Absorption Lining: on 3 sides of window frame (Top, Left and Right), with 30mm thick acoustic infill, rock wool, wrapped in sound transparent membrane in perforated casing of minimum 23% perforation. NRC 0.7 or above

Assessment Result under Mitigated Scenario (Scenario 2)

6.3.23. The details of the noise mitigation measures adopted in the scenarios for road traffic noise impact assessment are tabulated in **Table 6-6**. The road traffic noise prediction results for mitigated scenario are shown in **Table 6-7**. The predicted noise levels are provided in **Appendix 6.3**.

Table 6-6 Noise Mitigation Measures Adopted in the Scenarios

	Scenarios	
	Base Scheme (Scenario 1)	Mitigated Scenario (Scenario 2)
Existing Low Noise Surfacing	Adopted	Adopted
Building Layout	Adopted	Adopted
Podium	Adopted	Adopted
Vertical Architectural Fins	-	Adopted
BAW	-	Adopted

Table 6-7 Traffic Noise Prediction Result

	Tower 1	Tower 2	Overall
Total No. of Units: 432	216	216	432
Scenario 1: Base Scheme			
Max. predicted traffic noise level ($L_{10(1\text{hour})}$, dB(A))	72	74	74
Total No. of NSRs exposed to noise level > 70dB(A) $L_{10(1\text{hour})}$	74	135	209
Percentage of Compliance	66%	38%	52%
Scenario 2: Mitigated Scenario			
Max. predicted traffic noise level ($L_{10(1\text{hour})}$, dB(A))	70	70	70
Total No. of NSRs exposed to noise level > 70dB(A) $L_{10(1\text{hour})}$	0	0	0
Percentage of Compliance	100%	100%	100%

Table 6-8 Area Sensitivity Ratings (ASRs) of NSRs

Type of Area Containing NSR	Degree to which NSR is affected by Influencing Factors (IFs)		
	Not affected	Indirectly affected	Directly affected
I. Rural area, including country parks, or village type developments	A	B	B
II. Low density residential area consisting of low-rise or isolated high-rise developments	A	B	C
III. Urban area	B	C	C
IV. Area other than those above	B	B	C

Table 6-9 Acceptable Noise Level for Fixed Noise Sources

Time Period	ANL, dB(A)		
	ASR “A”	ASR “B”	ASR “C”
Day (0700 to 1900 hours)	60	65	70
Evening (1900 to 2300 hours)	60	65	70
Night (2300 to 0700 hours)	50	55	60

- 6.4.5. The site is planned for high-rise residential development, it is surrounded by planned residential developments in TCNTE (East). The types of area (i) rural area; (ii) low density residential area consisting of low-rise or isolated high-rise developments and (iii) urban area according to IND-TM cannot reflect the future environs of the subject site and are all not applicable. Thus, the whole site shall fall into type (iv) “Area other than those above” according to IND-TM.
- 6.4.6. Review of the Annual Traffic Census (ATC) for Year 2023, indicated that North Lantau Highway had an AADT of 41,340, which is considered as an Influencing Factor (IF) under the IND-TM. All façades of Tower 1 except the south east façade will not have line of sight to the North Lantau Highway and therefore considered to be not affected by the IF. An ASR of B is assigned. The ANL for “B” should be 65 dB(A) and 55 dB(A) for daytime and night-time respectively. As the south east façade of Tower 1 will be exposed to IF as shown in **Figures 6.4a to 6.4c**. The corresponding ANLs should be 70 dB(A) and 60 dB(A) for daytime and night-time respectively.

Sports Ground

- 6.4.12. Noise sources of sports ground including the operation of the facility and PA system during daytime and evening time operation. With reference to the approved TCNTE EIA (AEIAR-196/2016), it was recommended to incorporate measures for the PA system and/ or the sound amplification system, if used during the outdoor noise activities. The recommended measures include the adoption of a cluster of small power loudspeakers instead of a few large power loudspeakers, adoption of directional loudspeakers with orientation to point away from the nearby NSRs; and the inclusion of a “Limiter” device in the system to set the upper bound of the output sound level. Besides, as concluded in the TCNTE EIA, the sports ground is a DP under Item O.7 of Schedule 2 of Technical Memorandum on the Environmental Impact Assessment Process, a separate EIA study would be required to be conducted by the future operator to fulfil all the statutory requirements and procedures under the EIAO. Any potential environmental noise impacts caused by the planned sports ground shall be addressed in the respective future EIA and mitigated by appropriate at source mitigation measures where necessary to ensure no noise exceedance at all nearby sensitive receivers including the proposed development.

Representative NAP for Fixed Noise Impact Assessment

- 6.4.13. Representative NAPs with short separation distance from different potential noise sources are selected within the proposed development and are shown in **Figure 6.4.**

Potential Fixed Noise Impact on the Proposed Development

- 6.4.14. The summary of the predicted fixed plant noise level is tabulated in **Table 6-11**. Detailed calculation of fixed noise impact assessment is presented in **Appendix 6.5**.
- 6.4.15. The maximum predicted fixed noise levels for representative NAP at Tower 1 during daytime/ evening time are up to 51dB(A), whilst for the night-time period, it is 47dB(A). Therefore, the assessment criteria for fixed noise levels are 65dB(A) and 55 dB(A) for day/ evening time and night time periods can be complied with.
- 6.4.16. The maximum predicted fixed noise levels for representative NAPs at Tower 2 during daytime/ evening time are up to 57dB(A), whilst for the night-time period, it is 44dB(A). Therefore, the assessment criteria for fixed noise levels are 70dB(A) and 60dB(A) for day/ evening time and night time periods can be complied with.

Review of Potential Rail Noise Impact

- 6.5.4. The TCLE is a Designated Project under the EIAO. An EIA was conducted and approved under the EIAO on 12 July 2022 (AEIAR-235/2022).
- 6.5.5. The planned TCLE are located at about 170m to the south of the subject site as shown in **Figure 5.2**. The committed commercial development at Area 129 and 130, G/IC developments at Area 131, 132, 136 and 137 are located between the railway and the subject site. Shielding can be provided by these developments.
- 6.5.6. With reference to the approved TCLE EIA (AEIAR-235/2022), rail noise impact assessment was conducted. The railway noise contours of $L_{eq(30min)} / L_{max}$ at 7.2mPD, 15mPD and 30mPD are extracted and reviewed as shown in **Appendix 6.6**.
- 6.5.7. For daytime criteria, LA_{eq} 65dB and 70dB for ASR of “B” and “C” is adopted for Tower 1 and Tower 2. With reference to the predicted railway noise levels at 7.2mPD, 15mPD and 30mPD from TCLE EIA report in **Appendix 6.6 (daytime)**, the worst affected Southeast façade of Tower 2 is assigned with ASR of “C” and fall into the contour of LA_{eq} 55dB. The corrected noise level of this contour line shall refer LA_{eq} 57.5dB which has taken the 2.5dB façade correction into consideration. It is thus anticipated that the predicted noise levels at all the units at Tower 1 and Tower 2 are below the criteria of LA_{eq} 65dB and 70dB in view of the predicted railway noise level at the worst affected façade in the application site is below 57.5 dB, the rail noise impact during daytime could comply with the noise standard of HKPSG.
- 6.5.8. The night criterion of ASR “C” in Tower 1 and Tower 2 is LA_{eq} 60dB. With reference to the predicted railway noise levels at 7.2mPD, 15mPD and 30mPD from TCLE EIA report in **Appendix 6.6 (night-time)**, the worst affected Southeast façade of Tower 2 fall into the contour of LA_{eq} 55dB. The corrected noise level of this contour line shall refer to LA_{eq} 57.5dB which has taken the 2.5dB façade correction into consideration. The predicted noise level of the worst affected ASR “C” in the proposed development is below the criterion of LA_{eq} 60dB, the rail noise impact during night-time could comply with the noise standard of HKPSG.
- 6.5.9. The night criterion of ASR “B” in Tower 1 and Tower 2 is LA_{eq} 55dB. With reference to the railway noise contours given in the TCLE EIA report in **Appendix 6.6 (night-time)**, the worst affected façade assigned with ASR “B” would be southwest façade of Tower 1. The contours demonstrated that the said façade is fall beyond the contour for LA_{eq} 55 dB (corrected LA_{eq} 57.5 dB). In order to demonstrate the full compliance of 55 dB(A) for rooms with ASR of “B” for nighttime, further review is conducted by making reference to railway noise impact assessment conducted for Area 133C in the approved EIA Report AEIAR-196/2016 for Tung

Chung New Town Extension which is of similar separation distance and view angle to railway.

6.5.10. Railway noise impact assessment was conducted for Area 133C, which is in the immediate west to the Proposed Development, including the potential railway noise impact on the façade of NAP “C2-1-03”. “NAP “C2-1-03” is considered comparable to NAP “T1-O33” and “T2-O19” within the Application Site which are considered as the worst affected NAPs having the most stringent noise criteria for ASR of “B” and shortest separation distance. The NAP “C2-1-03” is assigned with ASR “B”, and has no direct angle of view to rail track with a separation distance to the nearest rail track of approximately 180m, the unmitigated predicted noise levels for day and night time are LA_{eq} 49-55 dB for openings up to 33F (100.6mPD) which could comply with the railway noise criteria of HKPSG. The NAPs of ASR “B” in Tower 1 and Tower 2 (NAP T1-O33 and T2-O19) have a minimum separation distance of 176m and the angle of view are either blocked by the buildings in Area 129 and Area 130 or blocked by the façade of Tower 1 or Tower 2. The NAPs of ASR “B” in the proposed development have the tilted vision to the railway tracks and are screened by full height architectural fins in T1-O33 and T2-O19 as noise mitigation measures in **Figure 6.3**. Given the similar angle of view and similar separation distance from the rail track in the Proposed Development and NAP “C2-1-03” of EIA Report AEIAR-196/2016, and the additional architectural fins, the railway noise impact of NAPs of ASR “B” in Tower 1 and Tower 2 shall comply with the night-time criterion of LA_{eq} 55dB.

6.5.11. With reference to the predicted railway noise levels at 7.2mPD, 15mPD and 30mPD from TCLE EIA report in **Appendix 6.6 (L_{max})**, the distance from rail track to the contour line of LA_{max} 85dB is 25m, while the distance between the project site and the rail track is 170m. According to acoustic principles, the sound pressure level will decay by 3dB per doubling the distance of a line source. The sound pressure level is assumed to decay by 8dB from 25m to 170m separation. Thus, the rail noise impact of LA_{max} 85dB could comply with the noise standard of HKPSG.

6.5.12. Therefore, potential rail noise impact is not anticipated on the current scheme.

Conclusions

6.5.13. Potential railway noise impact on the proposed development has been assessed. According to the railway noise impact assessment result from TCLE EIA report (AEIAR-235/2022) and Tung Chung New Town Extension EIA Report (AEIAR-196/2016), the proposed development would not subject to significant adverse railway noise impact on the current scheme. The railway noise impact will be reviewed again in the detailed design stage.

6.6. Review on Helicopter Noise Assessment**Introduction**

- 6.6.1. Helicopter noise assesment is prepared to assess the potential helicopter noise impact on the noise sensitive uses of the proposed development and recommend mitigation measures where practicable to attenuate the noise impact, if any. Helicopter noise will be generated during manoeuvring over the helipad and during lateral (approach/departure) flight. With reference to the TCNTE EIA Report (AEIAR- 196/2016), potential helicopter noise impacts are anticipated due to Government Flying Services (GFS) and business helicopter operations.

Assessment Criteria

- 6.6.2. In accordance with the HKPSG, a helipad should not be located in such a way that the daytime (07:00- 19:00 hours) maximum noise levels at sensitive uses will be exceeded.

Table 6-13 Daytime Helicopter Noise Assessment Criteria

Uses	Assessment Criteria L _{max} , dB(A)
All domestic premises	85
Hotels and Hostels	85
Offices	90
Educational institutions including kindergartens, nurseries and all others where unaided voice communication is required	85
Places of public worship and courts of law	85
Hospitals, clinics, convalescences and homes for the aged, diagnostic rooms, wards	85

Evaluation of Potential Helicopter Noise Impact

- 6.6.3. For the area in Tung Chung in particular, the helicopters operated by both Government Flying Services (GFS) and commercial company would be using the airspace in the vicinity. GFS has a headquarters within the Hong Kong International Airport (HKIA) and its helicopters serve both routine and emergency services. According to the information given in the TCNTE EIA report, all the routine services (including flying support for all bureau and departments) would be conducted during daytime period only while emergency services (including air ambulance, Search & Rescue (SAR), supporting law enforcement agencies, fire fighting) have to be conducted on an as-required basis to suit actual circumstances.

- 6.6.4. Hong Kong Business Aviation Centre (HKBAC) is a helicopter landing services company providing a facility for commercial helicopters to use. According to the TCNTE EIA report, there had only been 2 flight events between HKIA and Macau, and another 2 flights between HKIA and Kowloon during daytime period.
- 6.6.5. GFS and HKBAC are located at the south-western of the Hong Kong International Airport (HKIA). The separation distances from the GFS and HKBAC to the nearest NSR (T1-003) are 5.5km and 5.2km respectively as shown in **Figure 6.7**. Noise impact generated from helicopter approaching, take-off and manoeuvring are not anticipated.
- 6.6.6. The helicopter holding areas are identified which may generate helicopter noise by flyover mode as shown in **Table 6-14** and **Appendix 6.7**. The flight paths extracted from TCNTE EIA report are given in **Appendix 6.7** and **Figure 6.6**.

Table 6-14 Location of Helicopter Holding Areas

ID	Location
H5	Pak Mong
H6	Cathay City
H7	Freight Centre
H10	Tung Chung Bay

- 6.6.7. According to the helicopter noise assessment in the TCNTE EIA report, the first layer of NSRs within 130m horizontal to the helicopter flight path are identified for assessment and results demonstrated that the maximum predicted noise levels at the identified NSRs ranged from 79 - 81 dB(A), which is below the assessment criteria of L_{max} 85dB(A).
- 6.6.8. For the application site, the shortest separation distance from the flight path is maintained at 290m (i.e. NAP T2-O12). It is anticipated that the application site is not exposed to helicopter noise impact and no mitigation measures are required.

Conclusions

- 6.6.9. Potential helicopter noise impact on the proposed development has been reviewed. According to the helicopter noise impact assessment result from TCNTE EIA report (AEIAR-196/2016), the proposed development would not subject to significant adverse helicopter noise impact on the current scheme and no mitigation measures are proposed.

6.7. Review on Aircraft Noise Assessment

Introduction

- 6.7.1. Aircraft noise assessment is prepared to assess the potential aircraft noise impact on the noise sensitive uses of the proposed development and recommend mitigation measures where practicable to attenuate the noise impact, if any. Hong Kong International Airport is located to the northwest of the application site. The minimum separation distance from the southern runway and the nearest NSR is 3,071m (NSR T1-O08) as shown in **Figure 6.7**.

Assessment Criteria

- 6.7.2. In accordance with the HKPSG, NSRs relying on opened windows for ventilation should be planned beyond the NEF25 contour, except for offices which should be beyond the NEF30 contour, as shown in **Table 6-15**.

Table 6-15 Assessment Criteria for Aircraft Noise

Uses	Aircraft Noise (Noise Exposure Forecast : NEF)
All domestic premises	25
Hotels and Hostels	25
Offices	30
Educational institutions including kindergartens, nurseries and all others where unaided voice communication is required	25
Places of public worship and courts of law	25
Hospitals, clinics, convalescences and homes for the aged, diagnostic rooms, wards	25

Evaluation of Potential Aircraft Noise Impact

- 6.7.3. Based on the NEF results from approved EIA report TCNTE (AEIAR-196/2016), the predicted NEF 25 contours of the 3 Runway System (3RS) for year 2030 and 2032 would be away from the boundary of TCE upon the full commissioning of the 3RS in year 2024. The relevant contours are given in **Appendix 6.8**. The boundary of the application site will be away from the predicted NEF 25 contours under the operation of 3RS. Adverse aircraft noise impact is therefore not anticipated. No mitigation measures are required.

Conclusion

- 6.7.4. Potential aircraft noise impact on the proposed development has been reviewed. According to the aircraft noise impact assessment result from TCNTE EIA report (AEIAR-196/2016), the proposed development would not subject to significant adverse aircraft noise impact on the current scheme and no mitigation measures are proposed.

PRELIMINARY ENVIRONMENTAL REVIEW FOR PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PERMITTED FLAT (POLICE MARRIED QUARTERS) IN “GOVERNMENT, INSTITUTION OR COMMUNITY (1)” ZONE AND PROPOSED FLAT (POLICE MARRIED QUARTERS) IN “GOVERNMENT, INSTITUTION OR COMMUNITY” ZONE GOVERNMENT LAND AT TUNG CHUNG AREAS 134 AND 135, TUNG CHUNG, LANTAU ISLAND

Table 9-1 Summary of Construction Waste Generated

Type of Waste	Total Waste Generation Quantity	On-Site Reused Quantity	Handling Arrangement and Outlets	Remark
Inert C&D Materials ^[1]	7,131 m ³	1,426m ³ (assume 20% of reusable rate)	Delivered to the public fill reception facilities	With reference to “A Guide for Managing and Minimizing Building and Demolition Waste” published by the Hong Kong Polytechnic University in May 2001, the construction waste generation rate for Housing Projects in Hong Kong is 0.250m³/m² GFA (including non-inert C&D materials (or C&D wastes)). According to Hong Kong Waste Statistics for 2023, a total of 90% of construction waste generated will be used as public fill. (65% of C&D waste was delivered to public fill reception facilities, while 25% of C&D waste was transferred to other projects for direct reuse) Tentative GFA = 31,694 m². Inert C&D Waste Generation Index: = $0.9 \times 0.250 \text{ m}^3/\text{m}^2 \text{ GFA}$ = $0.225 \text{ m}^3/\text{m}^2 \text{ GFA}$ Total Quantity = Inert C&D waste index $\times$ GFA = $0.225 \times 31,694$
Non-inert C&D Materials (or C&D waste) Generated ^[2]	713m ³	Recycled and reused as much as practicable	Disposed of at the landfill	With reference to “A Guide for Managing and Minimizing Building and Demolition Waste,” published by the Hong Kong Polytechnic University in May 2001, the construction waste generation rate for Housing Projects in Hong Kong is 0.250 m³/m² GFA (including non-inert C&D materials (or C&D wastes)). According to Hong Kong Waste Statistics for 2023, 9% of C&D waste was disposed of at landfill. Tentative GFA: 31,694 m² Non-inert C&D Waste Generation Index: = $0.09 \times 0.250 \text{ m}^3/\text{m}^2 \text{ GFA}$ = $0.0225 \text{ m}^3/\text{m}^2 \text{ GFA}$ Total Quantity = Non-inert C&D waste index $\times$ GFA = $0.0225 \times 31,694$
Chemical Waste ^[3]	few cubic metres per month	-	Collected by licensed collector for the disposal of at licensed treatment facilities (e.g. Chemical Waste Treatment Centre (CWTC) at Tsing Yi)	Advised by project team
General Refuse from Workforce ^[4]	74 kg/day	Recycled as much as Practicable	Disposed of at the landfill	Assumed maximum of 135 workers working simultaneously at the Application Site. According to Hong Kong Waste Statistics for 2023, the generation rate of industrial and commercial waste is 0.55 kg/person/day

Note:

[1] Includes, but not limited to excavated soil, broken concrete, granular materials etc.

[2] Includes, but not limited to, bamboo, timber, paper and plastic, etc.

[3] Includes, but not limited to, scrap batteries or acid/alkali from construction plant maintenance activities; used paints, engine oils, hydraulic fluids and waste fuel, etc.

[4] Includes, but not limited to, food waste, aluminum cans, waste paper, etc.

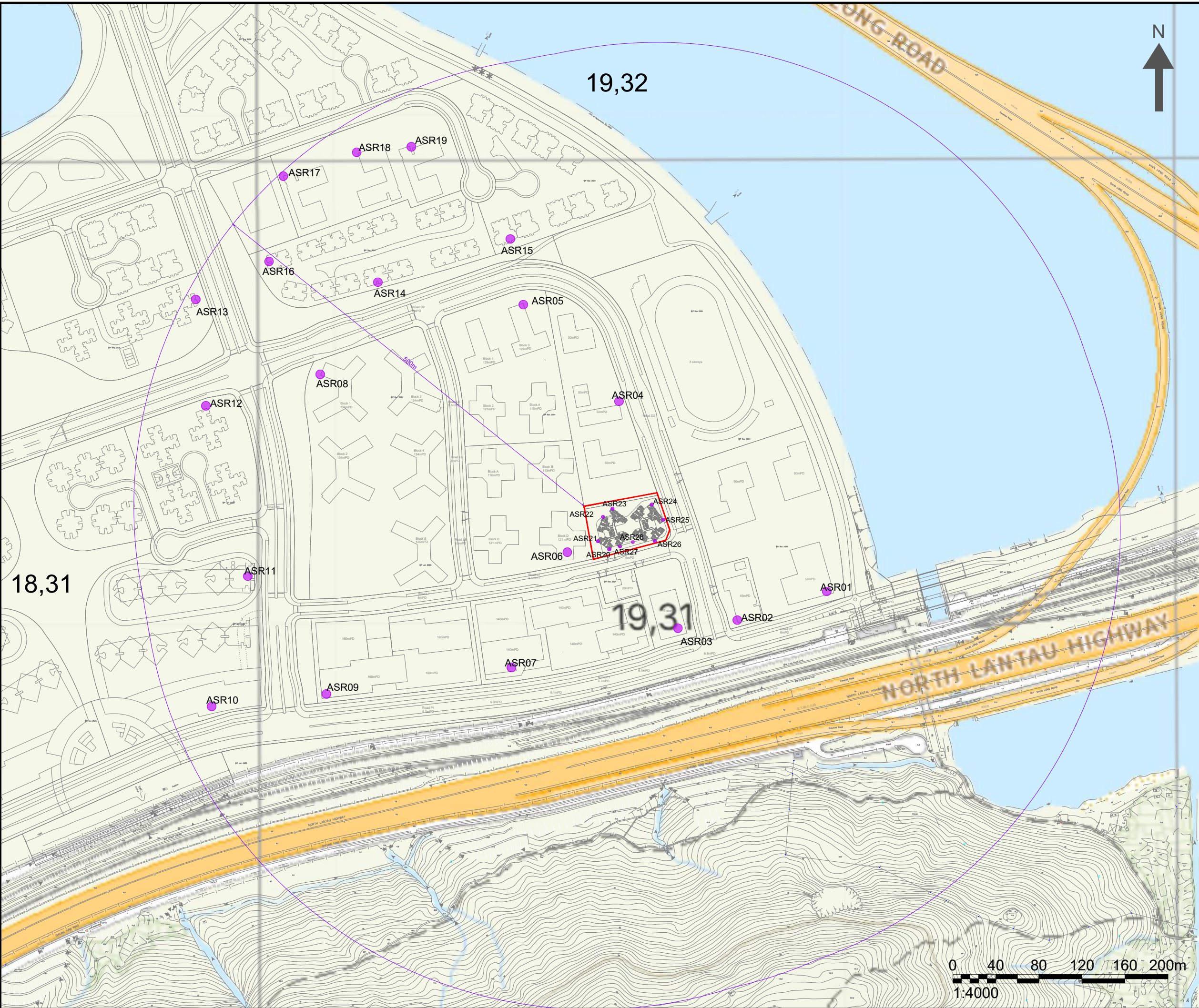
General Refuse

- 9.4.8. Recycling bins should also be placed to encourage recycling. Enclosed and covered areas should be provided for general refuse collection to prevent waste materials from being blown around by the wind, flushed or leached into nearby waters, or creating an odour nuisance or pest and vermin problem. Also, routine cleaning for these areas should be implemented to keep areas clean, so that intentional or accidental release into the surrounding environment does not occur without proper management.
- 9.4.9. With the implementation of good waste management practices at the Site, and the abovementioned mitigation measures at the Application Site, adverse environmental impacts are not expected to arise from the storage, handling and transportation of C&D materials, chemical waste and general refuse generated during construction phase.

9.5. Potential Impacts and Mitigation Measures during Operation Phase

General Refuse

- 9.5.1. The major type of waste generated from the operation phase is general refuse. With reference to *Monitoring of Solid Waste in Hong Kong - Waste Statistics for 2023* by EPD, the disposal rate of domestic waste was 0.89 kg/person/day. The estimated quantities of general refuse anticipated will be 1,040.4 kg/day (0.89 kg/person/day x 1,169 residents).
- 9.5.2. General refuse will be removed on regular basis to minimize odour, pest and litter impacts. To promote the recycling of waste paper, aluminium cans and plastic bottles, the 3-coloured waste separation bins for the collection of recyclable municipal waste will be clearly labelled and placed at convenient locations. The recyclable materials will then be collected by reliable waste recycling agents on a regular basis. Waste generated will be disposed of at government waste disposal facilities such as WENT Landfill in Nim Man. Hence, adverse waste management implication is not anticipated during the operation phase.
- 9.5.3. Food waste is the main source of generating unpleasant odour and causing environmental hygiene concerns during operation phase. The Project Team will explore the feasibility of providing separate recycling bins for food waste to facilitate the recycling of food waste on-site or off-site in a hygienic manner in detailed design stage. The collected food waste will be disposed of at Organic Resources Recovery Centre (ORRC).



NOTES :

-  Subject Site
-  500m assessment area
-  Air Sensitive Receiver (ASR)

Consultant



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Project No. : 2240

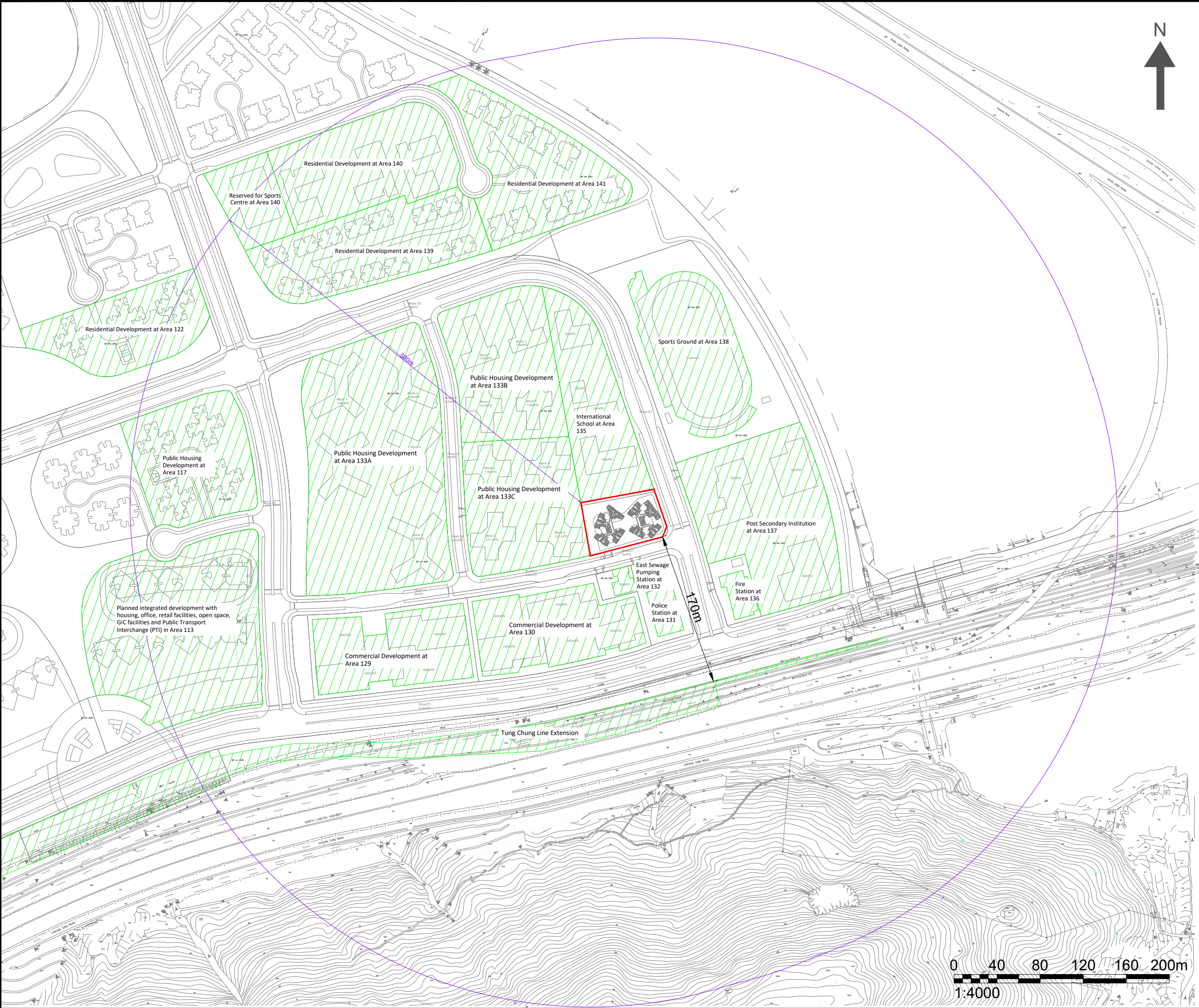
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Project :
S16 PLANNING APPLICATION FOR PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PERMITTED FLAT (POLICE MARRIED QUARTERS) IN "GOVERNMENT, INSTITUTION OR COMMUNITY (1)" ZONE AND PROPOSED FLAT (POLICE MARRIED QUARTERS) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONE IN GOVERNMENT LAND AT TUNG CHUNG AREAS 134 AND 135, TUNG CHUNG, LANTAU ISLAND

Drawing Title :
LOCATION OF AIR SENSITIVE RECEIVERS (ASRs)

Drawing No : FIGURE 5.1	Revision : 2
Scale : AS SHOWN	Date : OCT 2025

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NOTES :

Subject Site

Concurrent Projects

500m assessment area

Consultant



Allied Environmental Consultants Limited

Project No. : 2240

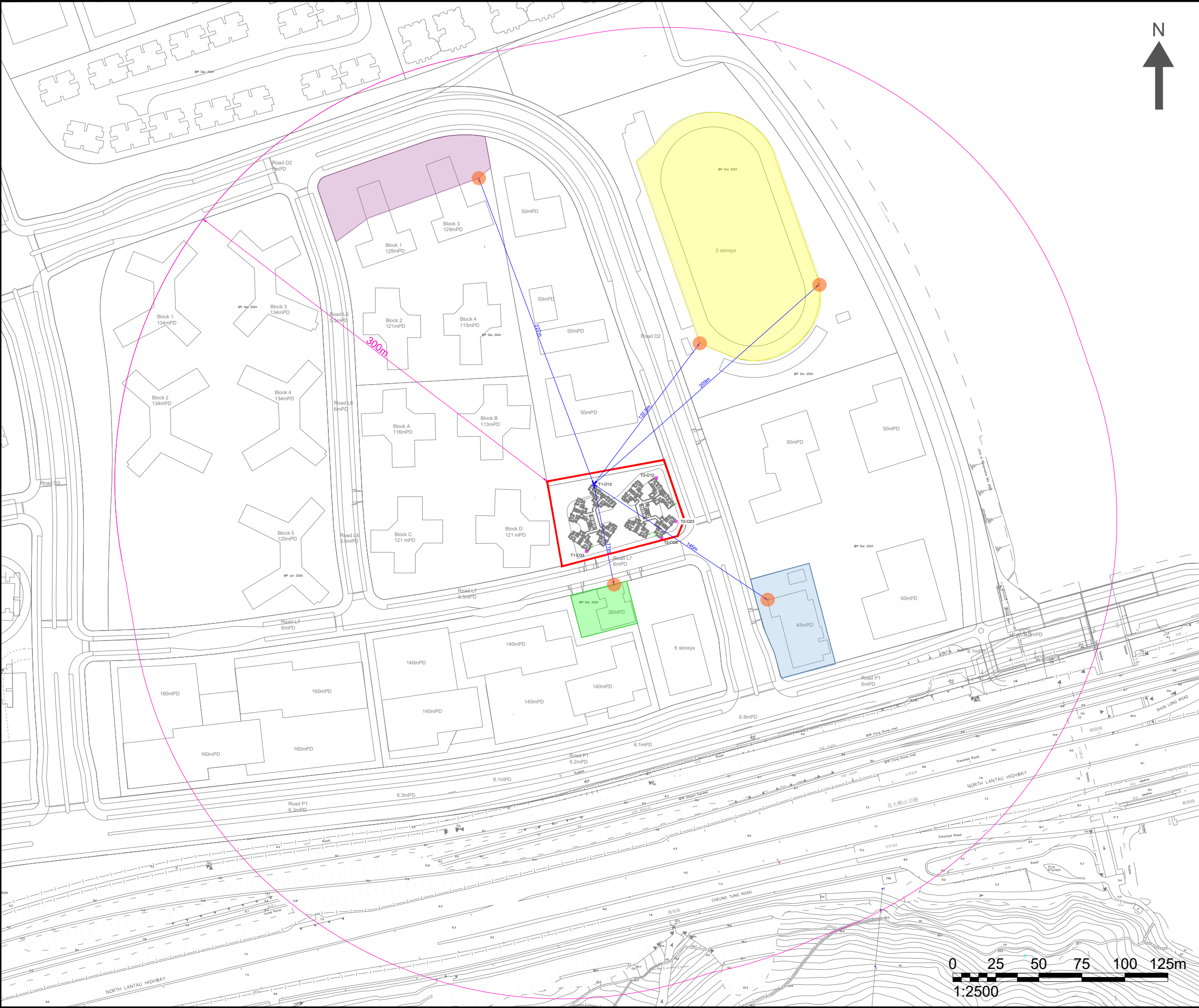
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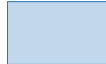
Project :
S16 PLANNING APPLICATION FOR PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PERMITTED FLAT (POLICE MARRIED QUARTERS) IN “GOVERNMENT, INSTITUTION OR COMMUNITY (1)” ZONE AND PROPOSED FLAT (POLICE MARRIED QUARTERS) IN “GOVERNMENT, INSTITUTION OR COMMUNITY” ZONE IN GOVERNMENT LAND AT TUNG CHUNG AREAS 134 AND 135, TUNG CHUNG, LANTAU ISLAND

Drawing Title :
LOCATION OF CONCURRENT PROJECTS

Drawing No : FIGURE 5.2	Revision : 1
Scale : AS SHOWN	Date : AUG 2025

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- NOTES :
-  Subject Site
 -  300m assessment area
 -  Sports Ground (Area 138)
 -  Fire Station (Area 136)
 -  Eastern Sewage Pumping Station (Area 132)
 -  Public Transport Interchange (PT1) (Area 133B)
 -  Noise Sensitive Receiver (NSR)
 -  Architectural fins
 -  Noise Assessment Point of Fixed Noise sources

Consultant



Allied Environmental Consultants Limited

Project No. : 2240

Drawing By : CC

Project :
S16 PLANNING APPLICATION FOR PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PERMITTED FLAT (POLICE MARRIED QUARTERS) IN "GOVERNMENT, INSTITUTION OR COMMUNITY (1)" ZONE AND PROPOSED FLAT (POLICE MARRIED QUARTERS) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONE IN GOVERNMENT LAND AT TUNG CHUNG AREAS 134 AND 135, TUNG CHUNG, LANTAU ISLAND

Drawing Title :
LOCATION OF PLANNED FIXED NOISE SOURCES

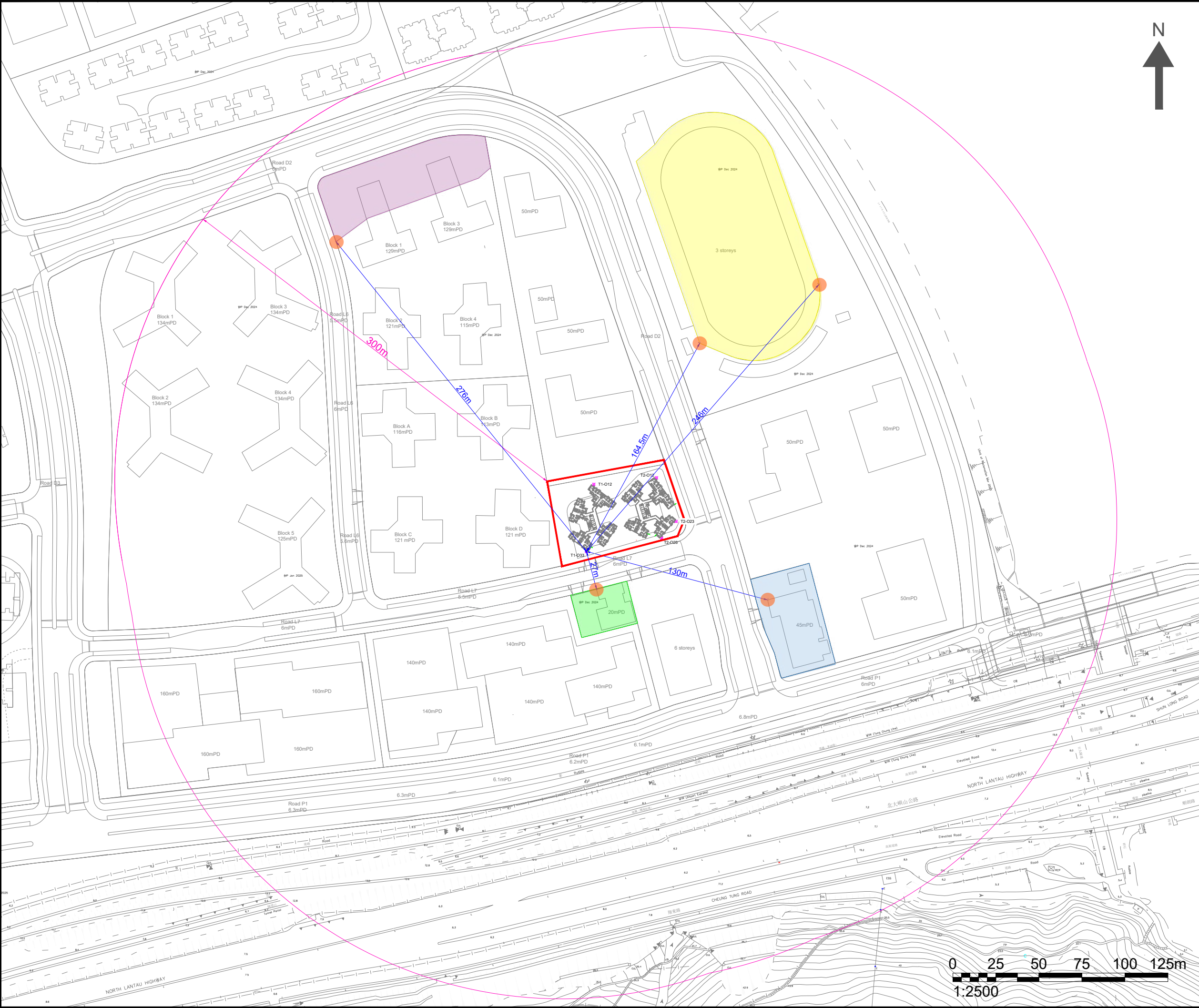
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FIGURE 6.5a

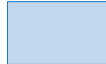
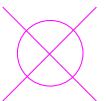
Scale :
AS SHOWN

Revision :
1

Date :
AUG 2025

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- NOTES :
-  Subject Site
 -  300m assessment area
 -  Sports Ground (Area 138)
 -  Fire Station (Area 136)
 -  Eastern Sewage Pumping Station (Area 132)
 -  Public Transport Interchange (PT1) (Area 133B)
 -  Noise Sensitive Receiver (NSR)
 -  Architectural fins
 -  Noise Assessment Point of Fixed Noise sources

Consultant



AEC

Allied Environmental Consultants Limited

Project No. : 2240

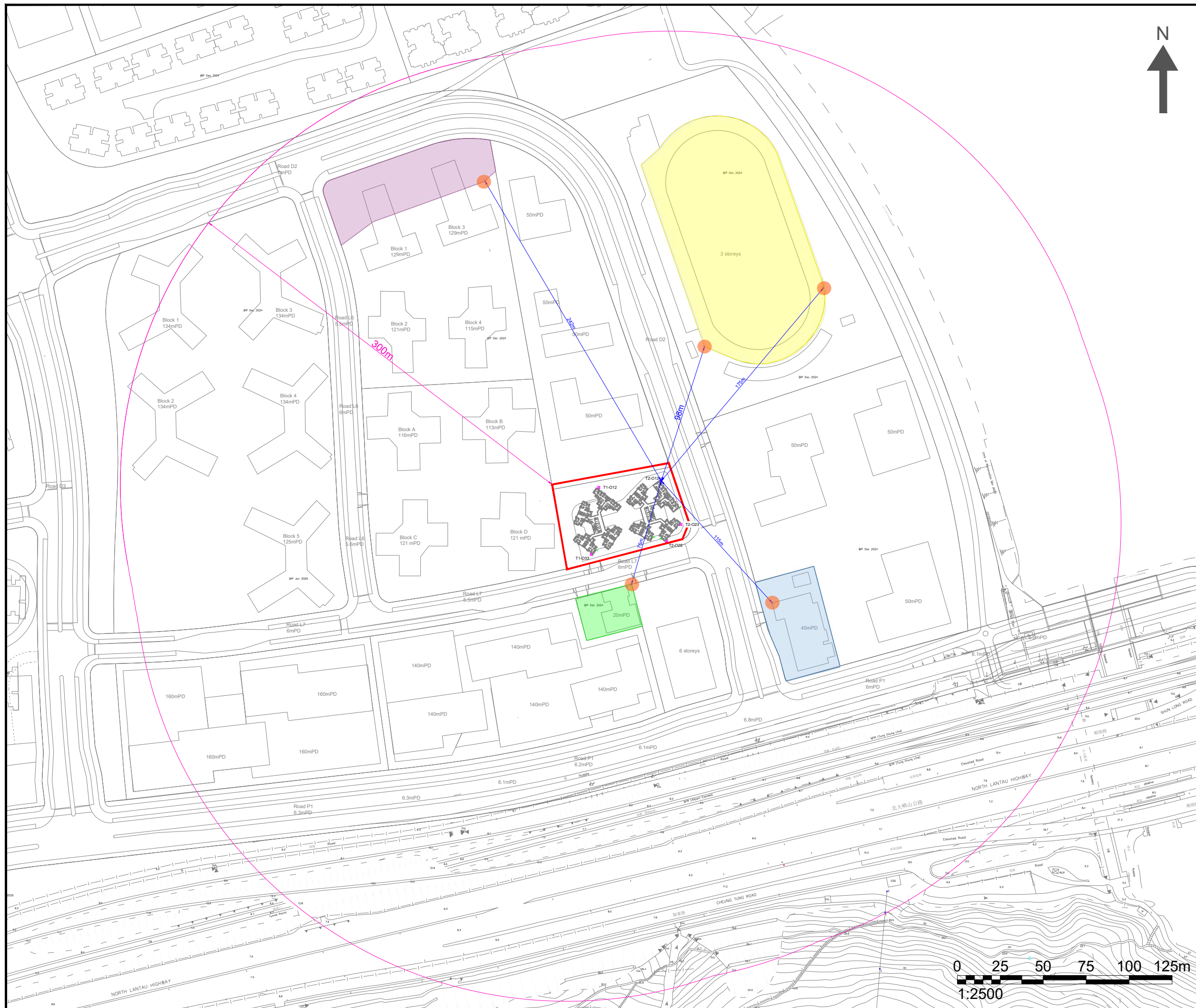
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Project :
S16 PLANNING APPLICATION FOR PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PERMITTED FLAT (POLICE MARRIED QUARTERS) IN “GOVERNMENT, INSTITUTION OR COMMUNITY (1)” ZONE AND PROPOSED FLAT (POLICE MARRIED QUARTERS) IN “GOVERNMENT, INSTITUTION OR COMMUNITY” ZONE IN GOVERNMENT LAND AT TUNG CHUNG AREAS 134 AND 135, TUNG CHUNG, LANTAU ISLAND

Drawing Title :
LOCATION OF PLANNED FIXED NOISE SOURCES

Drawing No : FIGURE 6.5b	Revision : 1
Scale : AS SHOWN	Date : AUG 2025

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NOTES :



Subject Site



300m assessment area

Sports Ground (Area 138)



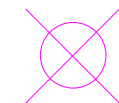
Fire Station (Area 136)



Eastern Sewage Pumping
Station (Area 132)



Public Transport Interchange (PT1) (Area 133B)



Noise Sensitive Receiver
(NSR)



- Architectural fins



Noise Assessment Point
of Fixed Noise sources

Consultant

**Allied Environmental Consultants Limited**

Project No. : 2240

Drawing By : CC

Project :

S16 PLANNING APPLICATION FOR PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PERMITTED FLAT (POLICE MARRIED QUARTERS) IN "GOVERNMENT, INSTITUTION OR COMMUNITY (1)" ZONE AND PROPOSED FLAT (POLICE MARRIED QUARTERS) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONE IN GOVERNMENT LAND AT TUNG CHUNG AREAS 134 AND 135, TUNG CHUNG, LANTAU ISLAND

Drawing Title :

LOCATION OF PLANNED FIXED NOISE SOURCES

Drawing No :

FIGURE 6.5c

Scale :

AS SHOWN

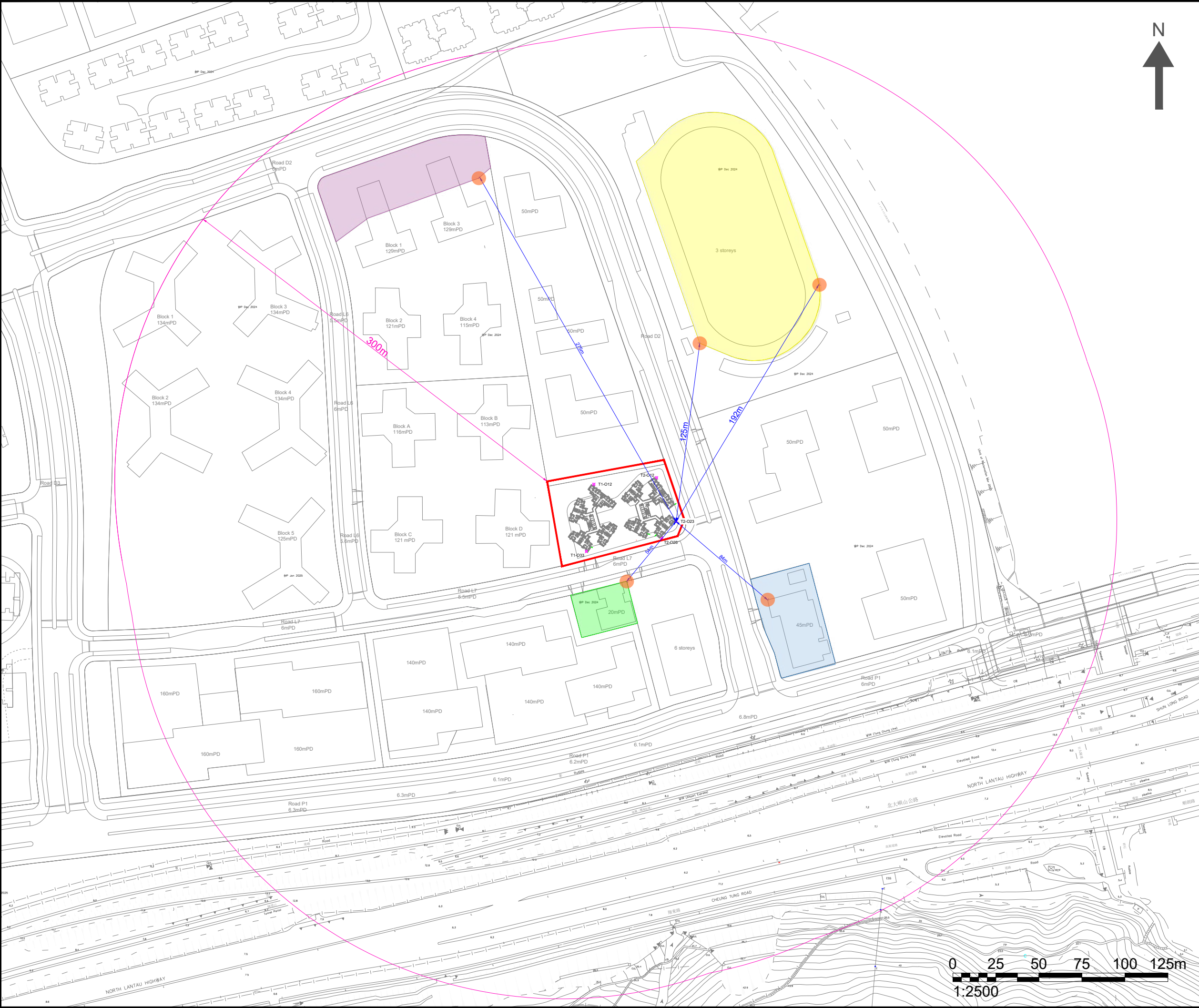
Revision :

1

Date :

AUG 2025

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- NOTES :
- Subject Site
 - 300m assessment area
 - Sports Ground (Area 138)
 - Fire Station (Area 136)
 - Eastern Sewage Pumping Station (Area 132)
 - Public Transport Interchange (PT1) (Area 133B)
 - Noise Sensitive Receiver (NSR)
 - Architectural fins
 - Noise Assessment Point of Fixed Noise sources

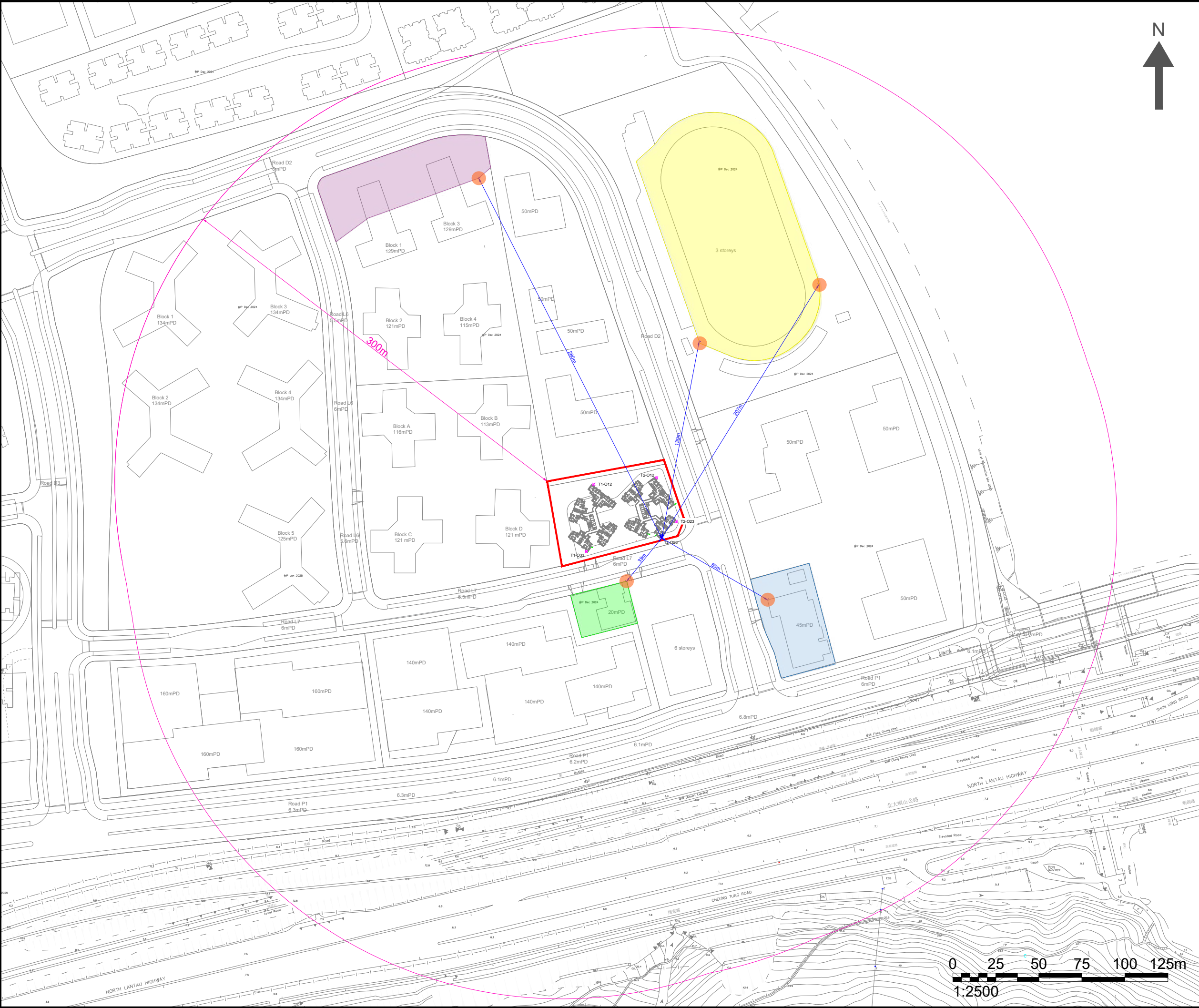
Consultant



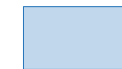
AEC

Allied Environmental Consultants Limited

Project No. : 2240	
Drawing By : CC	
Project : S16 PLANNING APPLICATION FOR PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PERMITTED FLAT (POLICE MARRIED QUARTERS) IN “GOVERNMENT, INSTITUTION OR COMMUNITY (1)” ZONE AND PROPOSED FLAT (POLICE MARRIED QUARTERS) IN “GOVERNMENT, INSTITUTION OR COMMUNITY” ZONE IN GOVERNMENT LAND AT TUNG CHUNG AREAS 134 AND 135, TUNG CHUNG, LANTAU ISLAND	
Drawing Title : LOCATION OF PLANNED FIXED NOISE SOURCES	
Drawing No : FIGURE 6.5d	Revision : 1
Scale : AS SHOWN	Date : AUG 2025
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NOTES :

-  Subject Site
-  300m assessment area
-  Sports Ground (Area 138)
-  Fire Station (Area 136)
-  Eastern Sewage Pumping Station (Area 132)
-  Public Transport Interchange (PT1) (Area 133B)
-  Noise Sensitive Receiver (NSR)
-  Architectural fins
-  Noise Assessment Point of Fixed Noise sources

Consultant



Allied Environmental Consultants Limited

Project No. : 2240

Drawing By : CC

Project :
S16 PLANNING APPLICATION FOR PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PERMITTED FLAT (POLICE MARRIED QUARTERS) IN "GOVERNMENT, INSTITUTION OR COMMUNITY (1)" ZONE AND PROPOSED FLAT (POLICE MARRIED QUARTERS) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONE IN GOVERNMENT LAND AT TUNG CHUNG AREAS 134 AND 135, TUNG CHUNG, LANTAU ISLAND

Drawing Title :
LOCATION OF PLANNED FIXED NOISE SOURCES

Drawing No :
FIGURE 6.5e

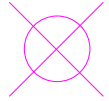
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Scale :
AS SHOWN

Date :
AUG 2025

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- NOTES :
-  Subject Site
 -  Noise Sensitive Receiver (NSR)
 -  Hong Kong Business Aviation Centre (HKBAC)
 -  Government Flying Services (GFS)

Consultant



AEC

Allied Environmental Consultants Limited

Project No. : 2240

Drawing By : CC

Project :
S16 PLANNING APPLICATION FOR PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PERMITTED FLAT (POLICE MARRIED QUARTERS) IN "GOVERNMENT, INSTITUTION OR COMMUNITY (1)" ZONE AND PROPOSED FLAT (POLICE MARRIED QUARTERS) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" ZONE IN GOVERNMENT LAND AT TUNG CHUNG AREAS 134 AND 135, TUNG CHUNG, LANTAU ISLAND

Drawing Title :
LOCATION OF NEAREST NSR TO HONG KONG INTERNATIONAL AIRPORT, HONG KONG BUSINESS AVIATION CENTRE (HKBAC) AND GOVERNMENT FLYING SERVICES (GFS)

Drawing No : FIGURE 6.7	Revision : 1
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Scale : AS SHOWN	Date : OCT 2025
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Appendix 5.1

Extract of Proposed Marina & Existing Local Vessels from TCNTE
EIA Report (AEIAR 196/2016)

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LEGEND

- POSSIBLE DEVELOPMENT AREA
- WORKS AREA FOR ROAD P1 (TUNG CHUNG - TAI HO SECTION)
- 500M ASSESSMENT AREA
- CHIMNEY
- PROPOSED MARINA
- MARINE EMISSION
- MARINE ROUTE
- VENTILATION BUILDING
- TUNNEL PORTAL

PROPOSED EXPANSION OF
HONG KONG INTERNATIONAL AIRPORT
(BY OTHERS)

HK BOUNDARY CROSSING
FACILITIES OF HZMB
(BY OTHERS)

TMCLK LINK
(BY OTHERS)

OWTF (Phase 1)

HONG KONG
INTERNATIONAL AIRPORT

LOCATION OF MARINA

500m assessment area

HK LINK ROAD OF HZMB
(BY OTHERS)

TUNG CHUNG PIER

Subject Site

PROPOSED LANTAU LOGISTICS PARK
(BY OTHERS)
(REF. REVISED CONCEPT PLAN
FOR LANTAU)

B	SECOND ISSUE	GL	08/15
A	FIRST ISSUE	GL	05/15
Rev	Description	By	Date

Consultant

ARUP

Project title

Tung Chung
New Town Extension

Drawing title

Locations of Chimney,
Proposed Marina and
Existing Local Vessel

Drawing no. **Figure 3.15** Rev. **B**

Drawn GL	Date 08/15	Checked LK	Approved FC
Scale 1:30000 @A3	Status PRELIMINARY		

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土木工程拓展署
Civil Engineering and
Development Department

Appendix 6.2

Predicted Traffic Noise Levels for Residential Blocks (Base Scheme Scenario)

Road Traffic Impact Assessment

Project No: 2240 Tung Chung IPOMQ
Scenario: All use case
Traffic Date: 2046
Scheme: Scheme (rev ii)_20250522, 20250428 Elevation

T1 summary	
Max Noise Level	74
Total no. of unit with exceedance	74
Total no. of units	216
Compliance rate	66

T2 summary	
Max Noise Level	74
Total no. of unit with exceedance	135
Total no. of units	432
Compliance rate	38

Overall summary	
Max Noise Level	74
Total no. of unit with exceedance	209
Total no. of units	232
Compliance rate	52

70 Compliance
71 Non-compliance

Tower	Flat	Tower 1																								Tower 2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Road Traffic Impact Assessment

Project No: 2240 Tung Chung IPOMQ
Scenario: PM base case
Traffic Date: 2046
Scheme: Scheme (rev ii)_20250522, 20250428 Elevation

T1 summary	
Max Noise Level	72
Total no. of unit with exceedance	42
Total no. of units	216
Compliance rate	81

T2 summary	
Max Noise Level	73
Total no. of unit with exceedance	118
Total no. of units	216
Compliance rate	45

Overall summary	
Max Noise Level	73
Total no. of unit with exceedance	160
Total no. of units	432
Compliance rate	63

70 Compliance
71 Non-compliance

Tower	Flat	Tower 1																																Tower 2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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		BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR	LIV	BR	MBR	BR

Appendix 6.3

Predicted Traffic Noise Levels for Residential Blocks (Mitigated Scenario)

Road Traffic Impact Assessment

Project No:	2240 Tung Chung JPOMQ
Scenario:	AM mit case (with fin & BAW)
Traffic Date:	2046
Scheme:	Scheme (rev J)_20250522 , 20250428 Elevation

T1 summary	
Max Noise Level	70
Total no. of unit with exceedance	0
Total no. of units	216
Compliance rate	100

T2 summary	
Max Noise Level	70
Total no. of unit with exceedance	0
Total no. of units	216
Compliance rate	100

Overall summary	
Max Noise Level	70
Total no. of unit with exceedance	0
Total no. of units	432
Compliance rate	100

70	Compliance
71	Non-compliance

	1.0m fin
	1.2m fin
	BAW Configuration 1
	BAW Configuration 2

[illegible]

Road Traffic Impact Assessment

Project No: 2240 Tung Chung JPOMQ
Scenario: PM mit case (with fin & BAW)
Traffic Date: 2046
Scheme: Scheme (rev J)_20250522 , 20250428 Elevation

T1 summary	
Max Noise Level	70
Total no. of unit with exceedance	0
Total no. of units	216
Compliance rate	100

T2 summary	
Max Noise Level	70
Total no. of unit with exceedance	0
Total no. of units	216
Compliance rate	100

Overall summary	
Max Noise Level	70
Total no. of unit with exceedance	0
Total no. of units	432
Compliance rate	100

70	Compliance
71	Non-compliance

	1.0m fin
	1.2m fin
	BAW Configuration 1
	BAW Configuration 2

[illegible]

Appendix 6.5

Fixed Noise Calculation

Predicted Sound Pressure Level from Sports Ground

Project No.: 2240

Project: Junior Police Office Married Head Quarters (JPOMQ)

Assessment Point	Spectator	SWL, dB(A)	Distance, D (m)	Dimensions		Conformal Area		Correction				
				Length, L (m)	Width, W (m)	Area, A (m2) [4]	Correction, dB(A) [5]	Façade, dB(A) [6]	Directivity, dB(A) [2]	SPL, dB(A) [1]	Daytime Criteria, dB(A) [3]	Compliance
T1-O12	NW	105.0	122.5	150	10	157362	-52	3	0	56		
	SE	101.0	209	87	10	339015	-55	3	0	49		
Predicted Total SPL dB(A)										57	65	YES
T1-O33	NW	105.0	164.5	150	10	254211	-54	3	0	54		
	SE	101.0	246	87	10	456068	-57	3	0	47		
Predicted Total SPL dB(A)										55	65	YES
T2-O12	NW	105.0	98	150	10	111104	-50	3	0	58		
	SE	101.0	175	87	10	246621	-54	3	0	50		
Predicted Total SPL dB(A)										58	70	YES
T2-O23	NW	105.0	125	150	10	162507	-52	3	0	56		
	SE	101.0	192	87	10	291002	-55	3	0	49		
Predicted Total SPL dB(A)										57	70	YES
T2-O28	NW	105.0	139	150	10	192766	-53	3	0	55		
	SE	101.0	207	87	10	333178	-55	3	0	49		
Predicted Total SPL dB(A)										56	70	YES

Remarks:

[1] Noise calculation is made reference to the approved TCNTE EIA (AEIAR-196/2016)

[2] Directivity correction of 5dB(A) is applied when the spectator is at more than 90 degree from the NSR, 10dB(A) is applied when the spectator is completely not facing the NSR.

[3] According to the approved TCNTE EIA (AEIAR-196/2016), Sports Ground are operated during daytime and evening time only

[4] The following formula was used for calculating the conformal area:

$$A = (L+W)(2C + \pi d) + 2\pi d(C+d) + (DL)$$

C = measured noise level, assume same height as noise receiver, C = 0m

[5] Correction factor for conformation area (dB(A)) = - 10 log (area)

[6] Façade Correction (dB(A)) = + 3

Fixed Noise Impact Assessment Calculation
Project No.: 2240
Project: Junior Police Office Married Head Quarters (JPOMQ)
NAP ID T1-O12
ASR B

Day-time Criterion: 65 dB(A)														Correction								Resultant Noise Level dB(A)	Compliance (Yes/No)
Fixed Noise Source							NSR Location			Horizontal Distance (m)	Vertical Distance (m)	Slant Distance (m)	% on time over 30mins	Distance	Quantity	Façade	Tonality	Impulsive	Intermittency	Barrier	% on time		
Source Location	Source Description	X-coordinate	Y-coordinate	Height (mPD)	SWL dB(A)	Remark	X-coordinate	Y-coordinate	Height (mPD)					(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)		
CO-3	Tung Chung East Sewage Pumping Station	814365.5	817885.7	24.5	88.0	[1][4]	814351.2	817955.3	24.5	71	0	71	100%	-45	0	3	3	0	0	-10	0	39	
C2-2	Tung Chung East Public Transport Interchange	814271.6	818167.7	24.5	82.0	[1][3]	814351.2	817955.3	24.5	227	0	227	100%	-55	0	3	3	0	0	-10	0	23	
G0-3	Tung Chung East Fire Station	814472.1	817875.1	24.5	97.0	[1][2]	814351.2	817955.3	24.5	145	0	145	100%	-51	0	3	3	0	0	-10	0	42	
Overall																					44	YES	

Night-time Criterion: 55 dB(A)														Correction								Resultant Noise Level dB(A)	Compliance (Yes/No)
Fixed Plant Noise Source							NSR Location			Horizontal Distance (m)	Vertical Distance (m)	Slant Distance (m)	% on time over 30mins	Distance	Quantity	Façade	Tonality	Impulsive	Intermittency	Barrier	% on time		
ID	Name	X-coordinate	Y-coordinate	Height (mPD)	SWL dB(A)	Remark	X-coordinate	Y-coordinate	Height (mPD)					(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)		
CO-3	Tung Chung East Sewage Pumping Station	814365.5	817885.7	24.5	88	[1][4]	814351.2	817955.3	24.5	71	0	71	100%	-45	0	3	3	0	0	-10	0	39	
C2-2	Tung Chung East Public Transport Interchange	814271.6	818167.7	24.5	82	[1][3]	814351.2	817955.3	24.5	227	0	227	100%	-55	0	3	3	0	0	-10	0	23	
Overall																					39	YES	

Remarks for SWLs:

- [1]

The following formula was used for calculating the SPLs at NSRs :
SPL = SWL+QC+DC+FC+BC+OC+TC+IMC+INTC
SPL Sound Pressure Level (dB(A))
SWL Sound Power Level (dB(A))
QC Correction factor for quantity (dB(A)) = + 10 log (quantity)
DC Distance Attenuation (dB(A)) = SWL - 20 log (distance) - 8
FC Façade Correction (dB(A)) = + 3
BC Barrier Correction (dB(A)): While NSR with no direct line of sight to the source/opening, a -10dB(A) correction would be applied. While NSR is partially screened, a -5dB(A) correction would be applied.
OC Correction for Percentage on-time over 30 minutes (dB(A)) = - 10 log (on-time %)
TC Correction for Tonality (dB(A))
IMC Correction for Impulsiveness (dB(A))
INTC Correction for Intermittency (dB(A))
- [2]

Based on the information provided by Fire Service Department, the proposed daily activities to be carried out at the fire station will take place during daytime only
- [3]

With reference to HKHA Report, Planned PTI at Area 133B will be covered under a podium decking with full height double bank louvre, solid boundary wall and hanger louver/fins at vehicular and pedestrian accesses, to avoid line of sights to the planned noise sensitive uses in the proximity as far as practicable.
- [4]

With reference to deliverable PI49 (Sewerage System and Sewage Treatment Implication Review for Population Increase and Development Intensity – Case 2) of CEDD, the latest design of proposed SPS will enclose the pumps within building.

Fixed Noise Impact Assessment Calculation
Project No.: 2240
Project: Junior Police Office Married Head Quarters (JPOMQ)
NAP ID T1-O33
ASR B

Day-time Criterion: 65 dB(A)														Correction								Resultant Noise Level dB(A)	Compliance (Yes/No)
Fixed Noise Source							NSR Location			Horizontal Distance (m)	Vertical Distance (m)	Slant Distance (m)	% on time over 30mins	Distance	Quantity	Façade	Tonality	Impulsive	Intermittency	Barrier	% on time		
Source Location	Source Description	X-coordinate	Y-coordinate	Height (mPD)	SWL dB(A)	Remark	X-coordinate	Y-coordinate	Height (mPD)					(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)		
CO-3	Tung Chung East Sewage Pumping Station	814353.4	817882.5	24.5	88.0	[1][4]	814346.5	817908.8	24.5	27	0	27	100%	-37	0	3	3	0	0	-10	0	47	
C2-2	Tung Chung East Public Transport Interchange	814172.6	818123.6	24.5	82.0	[1][3]	814346.5	817908.8	24.5	276	0	276	100%	-57	0	3	3	0	0	-10	0	21	
G0-3	Tung Chung East Fire Station	814472.1	817875.1	24.5	97.0	[1][2]	814346.5	817908.8	24.5	130	0	130	100%	-50	0	3	3	0	0	-5	0	48	
Overall																					51	YES	

Night-time Criterion: 55 dB(A)														Correction								Resultant Noise Level dB(A)	Compliance (Yes/No)
Fixed Plant Noise Source							NSR Location			Horizontal Distance (m)	Vertical Distance (m)	Slant Distance (m)	% on time over 30mins	Distance	Quantity	Façade	Tonality	Impulsive	Intermittency	Barrier	% on time		
ID	Name	X-coordinate	Y-coordinate	Height (mPD)	SWL dB(A)	Remark	X-coordinate	Y-coordinate	Height (mPD)					(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)		
CO-3	Tung Chung East Sewage Pumping Station	814353.4	817882.5	24.5	88	[1][4]	814346.5	817908.8	24.5	27	0	27	100%	-37	0	3	3	0	0	-10	0	47	
C2-2	Tung Chung East Public Transport Interchange	814172.6	818123.6	24.5	82	[1][3]	814346.5	817908.8	24.5	276	0	276	100%	-57	0	3	3	0	0	-10	0	21	
Overall																					47	YES	

Remarks for SWLs:

- [1]

The following formula was used for calculating the SPLs at NSRs :
SPL = SWL+QC+DC+FC+BC+OC+TC+IMC+INTC
SPL Sound Pressure Level (dB(A))
SWL Sound Power Level (dB(A))
QC Correction factor for quantity (dB(A)) = + 10 log (quantity)
DC Distance Attenuation (dB(A)) = SWL - 20 log (distance) - 8
FC Façade Correction (dB(A)) = + 3
BC Barrier Correction (dB(A)): While NSR with no direct line of sight to the source/opening, a -10dB(A) correction would be applied. While NSR is partially screened, a -5dB(A) correction would be applied.
OC Correction for Percentage on-time over 30 minutes (dB(A)) = - 10 log (on-time %)
TC Correction for Tonality (dB(A))
IMC Correction for Impulsiveness (dB(A))
INTC Correction for Intermittency (dB(A))
- [2]

Based on the information provided by Fire Service Department, the proposed daily activities to be carried out at the fire station will take place during daytime only
- [3]

With reference to HKHA Report, Planned PTI at Area 133B will be covered under a podium decking with full height double bank louvre, solid boundary wall and hanger louver/fins at vehicular and pedestrian accesses, to avoid line of sights to the planned noise sensitive uses in the proximity as far as practicable.
- [4]

With reference to deliverable PI49 (Sewerage System and Sewage Treatment Implication Review for Population Increase and Development Intensity – Case 2) of CEDD, the latest design of proposed SPS will enclose the pumps within building.

Fixed Noise Impact Assessment Calculation
Project No.: 2240
Project: Junior Police Office Married Head Quarters (JPOMQ)
NAP ID T2-O12
ASR C

Day-time Criterion: 70 dB(A)														Correction								Resultant Noise Level dB(A)	Compliance (Yes/No)
Fixed Noise Source							NSR Location			Horizontal Distance (m)	Vertical Distance (m)	Slant Distance (m)	% on time over 30mins	Distance	Quantity	Façade	Tonality	Impulsive	Intermittency	Barrier	% on time		
Source Location	Source Description	X-coordinate	Y-coordinate	Height (mPD)	SWL dB(A)	Remark	X-coordinate	Y-coordinate	Height (mPD)					(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)		
CO-3	Tung Chung East Sewage Pumping Station	814374.3	817888.1	24.5	88.0	[1][4]	814395	817959.8	24.5	75	0	75	100%	-46	0	3	3	0	0	-10	0	39	YES
C2-2	Tung Chung East Public Transport Interchange	814271.6	818167.7	24.5	82.0	[1][3]	814395	817959.8	24.5	242	0	242	100%	-56	0	3	3	0	0	-10	0	22	
G0-3	Tung Chung East Fire Station	814472.1	817875.1	24.5	97.0	[1][2]	814395	817959.8	24.5	115	0	115	100%	-49	0	3	3	0	0	0	0	54	
Overall																					54	YES	

Night-time Criterion: 60 dB(A)														Correction								Resultant Noise Level dB(A)	Compliance (Yes/No)
Fixed Plant Noise Source							NSR Location			Horizontal Distance (m)	Vertical Distance (m)	Slant Distance (m)	% on time over 30mins	Distance	Quantity	Façade	Tonality	Impulsive	Intermittency	Barrier	% on time		
ID	Name	X-coordinate	Y-coordinate	Height (mPD)	SWL dB(A)	Remark	X-coordinate	Y-coordinate	Height (mPD)					(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)		
CO-3	Tung Chung East Sewage Pumping Station	814374.3	817888.1	24.5	88	[1][4]	814395	817959.8	24.5	75	0	75	100%	-46	0	3	3	0	0	-10	0	39	
C2-2	Tung Chung East Public Transport Interchange	814271.6	818167.7	24.5	82	[1][3]	814395	817959.8	24.5	242	0	242	100%	-56	0	3	3	0	0	-10	0	22	
Overall																					39	YES	

Remarks for SWLs:

- [1]

The following formula was used for calculating the SPLs at NSRs :
SPL = SWL+QC+DC+FC+BC+OC+TC+IMC+INTC
SPL Sound Pressure Level (dB(A))
SWL Sound Power Level (dB(A))
QC Correction factor for quantity (dB(A)) = + 10 log (quantity)
DC Distance Attenuation (dB(A)) = SWL - 20 log (distance) - 8
FC Façade Correction (dB(A)) = + 3
BC Barrier Correction (dB(A)): While NSR with no direct line of sight to the source/opening, a -10dB(A) correction would be applied. While NSR is partially screened, a -5dB(A) correction would be applied.
OC Correction for Percentage on-time over 30 minutes (dB(A)) = - 10 log (on-time %)
TC Correction for Tonality (dB(A))
IMC Correction for Impulsiveness (dB(A))
INTC Correction for Intermittency (dB(A))
- [2]

Based on the information provided by Fire Service Department, the proposed daily activities to be carried out at the fire station will take place during daytime only
- [3]

With reference to HKHA Report, Planned PTI at Area 133B will be covered under a podium decking with full height double bank louvre, solid boundary wall and hanger louver/fins at vehicular and pedestrian accesses, to avoid line of sights to the planned noise sensitive uses in the proximity as far as practicable.
- [4]

With reference to deliverable PI49 (Sewerage System and Sewage Treatment Implication Review for Population Increase and Development Intensity – Case 2) of CEDD, the latest design of proposed SPS will enclose the pumps within building.

Fixed Noise Impact Assessment Calculation
Project No.: 2240
Project: Junior Police Office Married Head Quarters (JPOMQ)
NAP ID T2-O23
ASR C

Day-time Criterion: 70 dB(A)														Correction								Resultant Noise Level dB(A)	Compliance (Yes/No)
Fixed Noise Source							NSR Location			Horizontal Distance (m)	Vertical Distance (m)	Slant Distance (m)	% on time over 30mins	Distance	Quantity	Façade	Tonality	Impulsive	Intermittency	Barrier	% on time		
Source Location	Source Description	X-coordinate	Y-coordinate	Height (mPD)	SWL dB(A)	Remark	X-coordinate	Y-coordinate	Height (mPD)					(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)		
CO-3	Tung Chung East Sewage Pumping Station	814374.3	817888.1	24.5	88.0	[1][4]	814408.6	817929.5	24.5	54	0	54	100%	-43	0	3	3	0	0	-10	0	41	YES
C2-2	Tung Chung East Public Transport Interchange	814271.6	818167.7	24.5	82.0	[1][3]	814408.6	817929.5	24.5	275	0	275	100%	-57	0	3	3	0	0	-10	0	21	
G0-3	Tung Chung East Fire Station	814472.1	817875.1	24.5	97.0	[1][2]	814408.6	817929.5	24.5	84	0	84	100%	-46	0	3	3	0	0	0	0	57	
Overall																					57	YES	

Night-time Criterion: 60 dB(A)														Correction								Resultant Noise Level dB(A)	Compliance (Yes/No)
Fixed Plant Noise Source							NSR Location			Horizontal Distance (m)	Vertical Distance (m)	Slant Distance (m)	% on time over 30mins	Distance	Quantity	Façade	Tonality	Impulsive	Intermittency	Barrier	% on time		
ID	Name	X-coordinate	Y-coordinate	Height (mPD)	SWL dB(A)	Remark	X-coordinate	Y-coordinate	Height (mPD)					(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)		
CO-3	Tung Chung East Sewage Pumping Station	814374.3	817888.1	24.5	88	[1][4]	814408.6	817929.5	24.5	54	0	54	100%	-43	0	3	3	0	0	-10	0	41	
C2-2	Tung Chung East Public Transport Interchange	814271.6	818167.7	24.5	82	[1][3]	814408.6	817929.5	24.5	275	0	275	100%	-57	0	3	3	0	0	-10	0	21	
Overall																					41	YES	

Remarks for SWLs:

- [1]

The following formula was used for calculating the SPLs at NSRs :
SPL = SWL+QC+DC+FC+BC+OC+TC+IMC+INTC
SPL Sound Pressure Level (dB(A))
SWL Sound Power Level (dB(A))
QC Correction factor for quantity (dB(A)) = + 10 log (quantity)
DC Distance Attenuation (dB(A)) = SWL - 20 log (distance) - 8
FC Façade Correction (dB(A)) = + 3
BC Barrier Correction (dB(A)): While NSR with no direct line of sight to the source/opening, a -10dB(A) correction would be applied. While NSR is partially screened, a -5dB(A) correction would be applied.
OC Correction for Percentage on-time over 30 minutes (dB(A)) = - 10 log (on-time %)
TC Correction for Tonality (dB(A))
IMC Correction for Impulsiveness (dB(A))
INTC Correction for Intermittency (dB(A))
- [2]

Based on the information provided by Fire Service Department, the proposed daily activities to be carried out at the fire station will take place during daytime only
- [3]

With reference to HKHA Report, Planned PTI at Area 133B will be covered under a podium decking with full height double bank louvre, solid boundary wall and hanger louver/fins at vehicular and pedestrian accesses, to avoid line of sights to the planned noise sensitive uses in the proximity as far as practicable.
- [4]

With reference to deliverable PI49 (Sewerage System and Sewage Treatment Implication Review for Population Increase and Development Intensity – Case 2) of CEDD, the latest design of proposed SPS will enclose the pumps within building.

Fixed Noise Impact Assessment Calculation
Project No.: 2240
Project: Junior Police Office Married Head Quarters (JPOMQ)
NAP ID T2-O28
ASR C

Day-time Criterion: 70 dB(A)														Correction								Resultant Noise Level dB(A)	Compliance (Yes/No)
Fixed Noise Source							NSR Location			Horizontal Distance (m)	Vertical Distance (m)	Slant Distance (m)	% on time over 30mins	Distance	Quantity	Façade	Tonality	Impulsive	Intermittency	Barrier	% on time		
Source Location	Source Description	X-coordinate	Y-coordinate	Height (mPD)	SWL dB(A)	Remark	X-coordinate	Y-coordinate	Height (mPD)					(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)		
CO-3	Tung Chung East Sewage Pumping Station	814374.3	817888.1	24.5	88.0	[1][4]	814398.6	817918	24.5	39	0	39	100%	-40	0	3	3	0	0	-10	0	44	
C2-2	Tung Chung East Public Transport Interchange	814271.6	818167.7	24.5	82.0	[1][3]	814398.6	817918	24.5	280	0	280	100%	-57	0	3	3	0	0	-10	0	21	
G0-3	Tung Chung East Fire Station	814472.1	817875.1	24.5	97.0	[1][2]	814398.6	817918	24.5	85	0	85	100%	-47	0	3	3	0	0	0	0	56	
Overall																					57	YES	

Night-time Criterion: 60 dB(A)														Correction								Resultant Noise Level dB(A)	Compliance (Yes/No)
Fixed Plant Noise Source							NSR Location			Horizontal Distance (m)	Vertical Distance (m)	Slant Distance (m)	% on time over 30mins	Distance	Quantity	Façade	Tonality	Impulsive	Intermittency	Barrier	% on time		
ID	Name	X-coordinate	Y-coordinate	Height (mPD)	SWL dB(A)	Remark	X-coordinate	Y-coordinate	Height (mPD)					(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)		
CO-3	Tung Chung East Sewage Pumping Station	814374.3	817888.1	24.5	88	[1][4]	814398.6	817918	24.5	39	0	39	100%	-40	0	3	3	0	0	-10	0	44	
C2-2	Tung Chung East Public Transport Interchange	814271.6	818167.7	24.5	82	[1][3]	814398.6	817918	24.5	280	0	280	100%	-57	0	3	3	0	0	-10	0	21	
Overall																					44	YES	

Remarks for SWLs:

- [1]

The following formula was used for calculating the SPLs at NSRs :
SPL = SWL+QC+DC+FC+BC+OC+TC+IMC+INTC
SPL Sound Pressure Level (dB(A))
SWL Sound Power Level (dB(A))
QC Correction factor for quantity (dB(A)) = + 10 log (quantity)
DC Distance Attenuation (dB(A)) = SWL - 20 log (distance) - 8
FC Façade Correction (dB(A)) = + 3
BC Barrier Correction (dB(A)): While NSR with no direct line of sight to the source/opening, a -10dB(A) correction would be applied. While NSR is partially screened, a -5dB(A) correction would be applied.
OC Correction for Percentage on-time over 30 minutes (dB(A)) = - 10 log (on-time %)
TC Correction for Tonality (dB(A))
IMC Correction for Impulsiveness (dB(A))
INTC Correction for Intermittency (dB(A))
- [2]

Based on the information provided by Fire Service Department, the proposed daily activities to be carried out at the fire station will take place during daytime only
- [3]

With reference to HKHA Report, Planned PTI at Area 133B will be covered under a podium decking with full height double bank louvre, solid boundary wall and hanger louver/fins at vehicular and pedestrian accesses, to avoid line of sights to the planned noise sensitive uses in the proximity as far as practicable.
- [4]

With reference to deliverable PI49 (Sewerage System and Sewage Treatment Implication Review for Population Increase and Development Intensity – Case 2) of CEDD, the latest design of proposed SPS will enclose the pumps within building.

Appendix 6.8

Extract of NEF Contours from TCNTE EIA Report

(AEIAR-196/2016)

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LEGEND



POSSIBLE DEVELOPMENT AREA

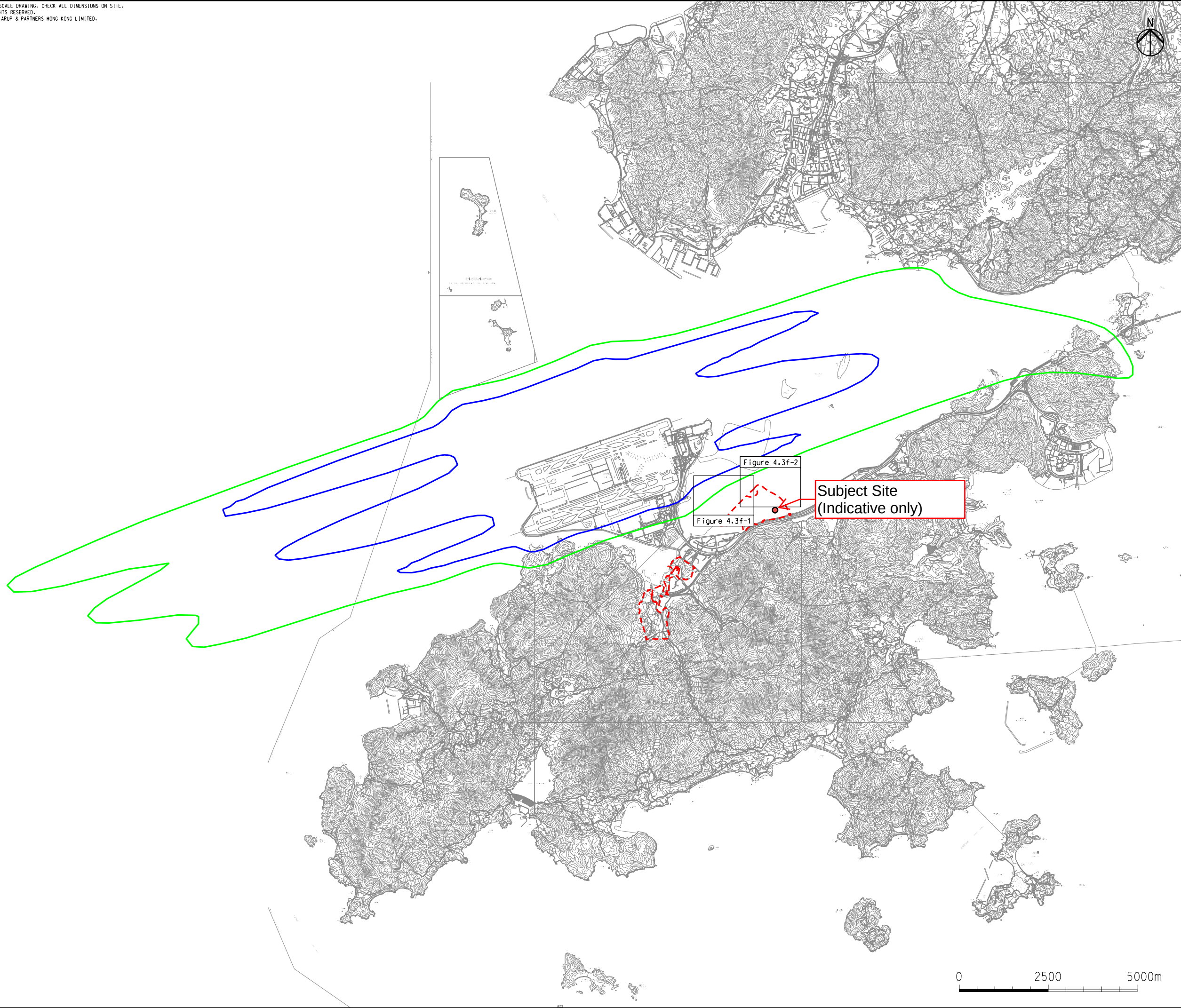


NEF25 CONTOUR



NEF30 CONTOUR

EXTRACTED FROM "EXPANSION OF HONG KONG
INTERNATIONAL AIRPORT INTO A THREE-RUNWAY
SYSTEM" EIA REPORT



D	FOURTH ISSUE	GL	10/15
C	THIRD ISSUE	GL	08/15
B	SECOND ISSUE	GL	06/15
A	FIRST ISSUE	GL	04/15
Rev	Description	By	Date

Consultant
ARUP

Project title
**Tung Chung
New Town Extension**

Drawing title
**NEF Contours Against
TCE Phasing
(Year 2030)
(Sheet 1 of 3)**

Drawing no. Figure 4.3e			Rev. D
Drawn GL	Date 10/15	Checked LK	Approved FC
Scale 1:100000 @A3		Status PRELIMINARY	

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Civil Engineering and
Development Department



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LEGEND



POSSIBLE DEVELOPMENT AREA



NEF25 CONTOUR



NEF30 CONTOUR

EXTRACTED FROM "EXPANSION OF HONG KONG
INTERNATIONAL AIRPORT INTO A THREE-RUNWAY
SYSTEM" EIA REPORT

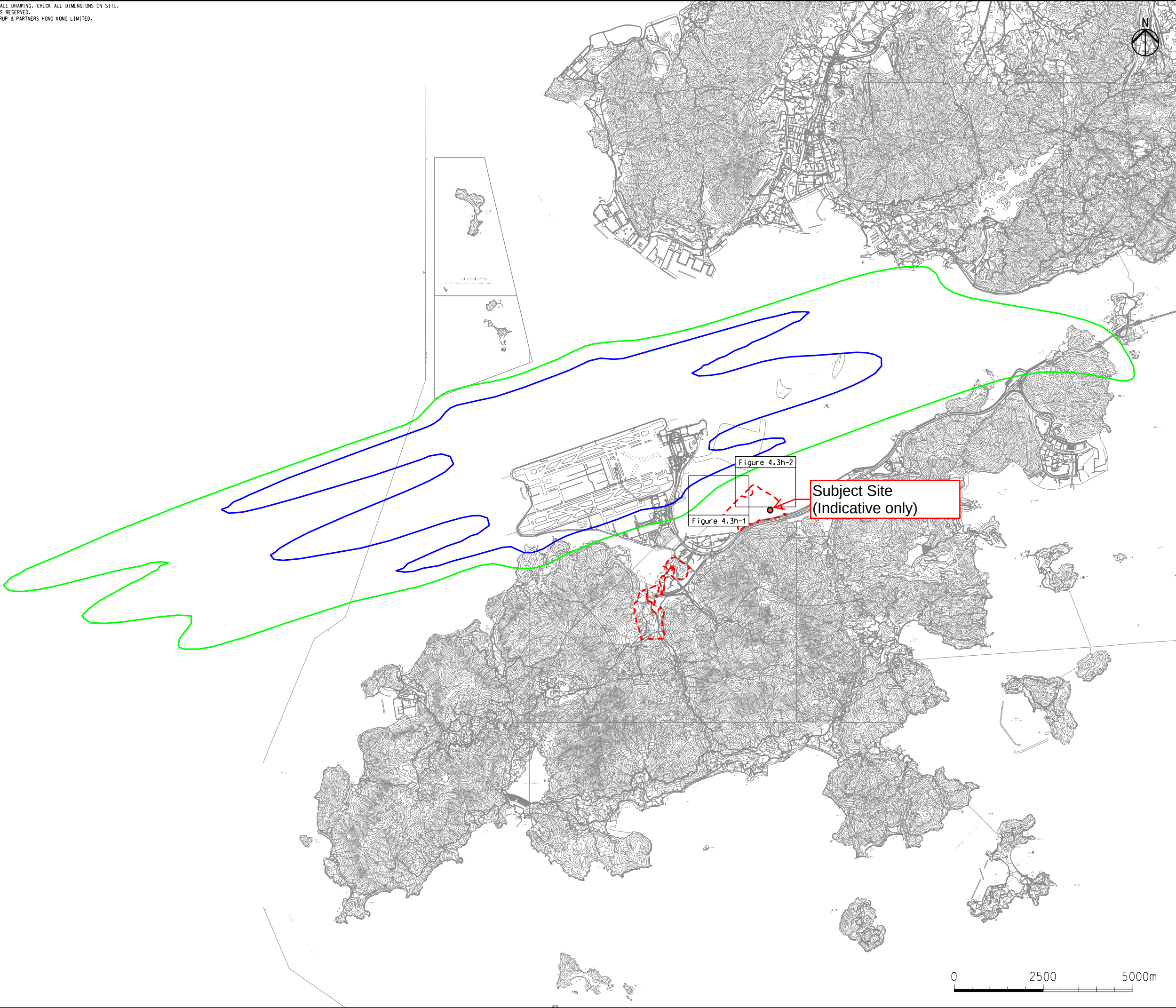


Figure 4.3h-2

Figure 4.3h-1

Subject Site
(Indicative only)

D	FOURTH ISSUE	GL	10/15
C	THIRD ISSUE	GL	08/15
B	SECOND ISSUE	GL	06/15
A	FIRST ISSUE	GL	04/15
Rev	Description	By	Date

Consultant

ARUP

Project title

Tung Chung
New Town Extension

Drawing title

NEF Contours Against
TCE Phasing
(Year 2032)
(Sheet 1 of 3)

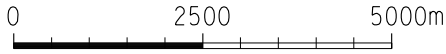
Drawing no.	Figure 4.3g	Rev.	D
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Drawn	Date	Checked	Approved
GL	10/15	LK	FC
Scale	1:100000 @A3	Status	PRELIMINARY

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Civil Engineering and
Development Department



Attachment 4

CORRESPONDENCE ON THE LATEST EAS

Re: [2240] Information Request on concurrent projects for Areas 134 and Area 135 Tung Chung JPOMQ S16 Planning Application

From Alan KK LAU <alan.lau@housingauthority.gov.hk>
 Date Thu 16/10/2025 10:32
 To Christine Goh Siew Yinn <christinegoh@aecasia.io>

Dear Christine,

I have forward your email to our Civil Engineer, who is responsible for the EAS, for her action please.

Regards,
 Alan

From: "Christine Goh Siew Yinn" <christinegoh@aecasia.io>
 To: "alan.lau@housingauthority.gov.hk" <alan.lau@housingauthority.gov.hk>
 Date: 2025/10/16 10:12 上午
 Subject: [2240] Information Request on concurrent projects for Areas 134 and Area 135 Tung Chung JPOMQ S16 Planning Application

Dear Mr Alan Lau (Planning Offr 11),

1. Tried to call you but in vain, please feel free to contact me at 5290 3688 at your convenience.
2. We are the Environmental Consultant conducting an Environmental Assessment for the Proposed Junior Police Married Quarters (JPOMQ) at Area in Tung Chung New Town Extension East (Subject Site) at Area 134 for S16 Planning Application.
3. We refer to EPD comments dated 14.10.2025 as below is referred.

"Table 5-6 – For Note [3], please check if there is update in the EAS version."

Table 5-6 List of Concurrent Projects

Concurrent Projects	Construction Programme	Potential Cumulative Impacts		Approximate Distance from the Application Site
		Construction Phase	Operational Phase	
1. Public Housing Development at Area 133A, Area 133B and Area 133C [3]	2024/25 till 2029/30	Yes	No	Area 133A: 156m Area 133B: 93m Area 133C: 3m

Note:
 [1] reference to Tung Chung Line Extension (TCLE) EIA report (AEIAR-235/2022)
 [2] reference to Tung Chung New Town Extension (TCNTE) EIA (AEIAR-196/2016)
 [3] reference to Hong Kong Housing Authority (HKHA) report Public Housing Development at Tung Chung Area 133A, 133B and 133C Environmental Assessment Study Final Report" (April 2024)
 [4] reference to "Section 16 Planning Application for Proposed Minor Relaxation of Building Height Restrictions for Permitted Public Housing Development at Tung Chung Area 114 and Tung Chung Area 117, Lantau Island" (August 2024)

4. To facilitate our review, we would like to request information on the construction programme of nearby concurrent projects, particularly Areas 133A, Area 133B, and Area 133C, for our environmental assessment.

5. It would be grateful if you can provide us with latest Environmental Assessment Report to verify whether the construction programme of these areas are still remains valid and up-to-date.

Thank you very much for your kind attention and assistance.

Best regards,

Christine Goh – Assistant Consultant
 **Environmental Consultancy | Green & Healthy Building**

T: (852) 5290 3688 | E: christinegoh@aecasia.io

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