

Prepared for

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Ramboll Hong Kong Limited

**PROPOSED PUBLIC HOUSING / STARTER HOMES
DEVELOPMENT AND PRIVATE RESIDENTIAL DEVELOPMENT
WITH GOVERNMENT, INSTITUTION OR COMMUNITY
FACILITIES AT VARIOUS LOTS IN D.D. 122 AND ADJOINING
GOVERNMENT LAND, YUEN LONG, NEW TERRITORIES (LAND
SHARING PILOT SCHEME (APPLICATION NO.: LSPS / 005))**

AIR VENTILATION ASSESSMENT – EXPERT EVALUATION

Date **21 August 2025**

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1. INTRODUCTION

1.1 Project Background

- 1.1.1 Ramboll Hong Kong Limited is commissioned by the Land Sharing Pilot Scheme (LSPS) Applicant to prepare the Air Ventilation Assessment (AVA) Study Report – Expert Evaluation (EE) for the Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005)). Architectural drawings and technical information are provided by the Project team.
- 1.1.2 The Application Site is situated in Yuen Long District. The proposed residential development is to be located next to Wing Ning Tsuen and would provide both private and public housing / starter homes along with necessary infrastructures.

1.2 Objectives

- 1.2.1 This AVA-EE report has been prepared to evaluate whether the proposed development would have any impact on the overall air ventilation performance in its surrounding area by comparing with the existing condition (the Baseline Scheme). This AVA-EE has been conducted according to the HPLB/ETWB Technical Circular No. 1/06 on AVAs.

1.3 Application Site and its Environ

- 1.3.1 **Figure 1.1** shows the location of the Application Site and its environ.
- 1.3.2 The Application Site consists of (i) Development Sites with an area of about 45,465 m²; and (ii) proposed public access road of about 17,132 m². It is next to the planned Wang Chau Public Housing Development (Phase 1) ("WCPH1"). The portion of the Site north of MTR Tuen Ma Line ("TML") Viaduct (including the area under the viaduct) falls within an area zoned "Green Belt" ("GB") while the remaining part of the Site to the south of TML Viaduct is zoned as "Comprehensive Development Area" ("CDA") under the Approved Ping Shan Outline Zoning Plan ("OZP") No. S/YL-PS/20. The Application Site currently comprises plant nursery and low-rise structures such as temporary structures used for storage and squatters, car parks, etc.

1.4 Baseline Scheme

- 1.4.1 The Baseline Scheme consists of the existing condition at the Application Site. The Site mostly contains rural land, low-rise village squatters and various temporary structures scattered throughout the Site.

1.5 Proposed Scheme

- 1.5.1 **Appendix 1** shows the building layout and section plans of the Proposed Scheme.
- 1.5.2 The proposed development consists of Development Sites, namely A1, A2, B, C1, C2 and D, spanning across the entirety of the Application Site with different planned uses. Details of each Development Site are as follows:
- Site A1
 - Reserved for private housing
 - Site formation level of about 14 mPD to 16 mPD
 - Proposed building height of not more than +175 mPD (under proposed zoning)
 - Residential towers (T1-T6)

- 39-storey (excluding refuge floor) residential towers with building heights ranging between +157 mPD (T1-T2) and +175 mPD (T3-T6)
- T1 to T2 share one podium with a building height of about +30 mPD for clubhouse
- T3 to T6 share one podium with a building height of about +38 mPD for public transportation facilities underneath
- Site A2
 - Reserved for public housing / starter homes development (“PH / SH development”)
 - Site formation level of about 13 mPD to +14 mPD
 - Proposed building height of not more than +160 mPD (under proposed zoning)
 - Residential towers (T1-T2)
 - One 44-storey (excluding refuge floor) (T1) and one 39-storey (excluding refuge floor) (T2) residential towers with a building height of around +160 mPD and +145 mPD respectively
 - T1 and T2 shares a podium of around +25.35 mPD for retail and carpark purposes
- Site B
 - Reserved for PH / SH development
 - Site formation level of about +14 mPD
 - Proposed building height of not more than +160 mPD (under proposed zoning)
 - Residential towers (T1-T2)
 - 45-storey (excluding refuge floor) residential towers with a building height of around +160 mPD
 - Each residential tower is located on top of a podium of around +29.8 mPD for retail/GIC and carpark purposes
- Site C1
 - Reserved for PH / SH development
 - Site formation level of about +10 mPD
 - Proposed building height of not more than +160 mPD (under proposed zoning)
 - Residential tower (T1)
 - One 45-storey (excluding refuge floor) residential tower with a building height of around +160 mPD
 - Located on top of a podium with a height of around +25.3 mPD for retail/GIC and carpark purposes
- Site C2
 - Reserved for PH / SH development
 - Site formation level of about +10 mPD to 14 mPD
 - Proposed building height of not more than +160 mPD (under proposed zoning)

- Residential towers (T1-T3)
 - One 45-storey (excluding refuge floor) residential tower (T1) with a building height of around +160 mPD
 - T1 is located on top of a podium with a height of around +25.3 mPD for retail/GIC and carpark purposes
 - Two 12-storey (excluding refuge floor) residential tower (T2-T3) with a building height of around +61 mPD
 - Site D
 - Reserved for PH / SH development
 - Site formation level of +8 mPD
 - Proposed building height of not more than +160 mPD (under proposed zoning)
 - Residential towers (T1)
 - One 45-storey (excluding refuge floor) residential tower with a building height of +160 mPD
 - Located on top of a podium with a height of around +22.2 mPD for GIC and carpark purposes
- 1.5.3 The building block layout for the proposed public housing development is indicative only and is still in a preliminary stage. The exact number, block, and schematic design are subject to review in the detailed design stage. The width of building separation and setback is identified in this AVA-EE as possible mitigation measures, which are subject to review by the project proponent in the detailed design stage.

2. SITE WIND AVAILABILITY

2.1 Site Wind Availability Data

RAMS Model

- 2.1.1 According to the Planning Department's website, a meso-scale Regional Atmospheric Modelling System (RAMS) was used to produce a simulated 10-year wind climate at the horizontal resolution of 0.5 km x 0.5 km covering the whole territory of Hong Kong. The simulated wind data represents the annual, winter and summer wind condition at various levels, i.e., 200 m, 300 m, and 500 m above terrain.
- 2.1.2 According to the site location, Development Site A1 fall within the grid (X: 047 Y: 072), Sites A2 and B fall within the grid (X: 047 Y: 071) and Sites C1, C2 and D within the grid (X: 048 Y: 071). The RAMS data of those grids has been extracted from the Site Wind Availability Data of Planning Department's website.
- 2.1.3 Based on the wind roses with different heights (200, 300 or 500m) available. A lower level of wind roses at 200 m height is selected to study the prevailing wind condition as it represents the incoming wind to the Application Site and considers the influence on the prevailing winds by the surrounding topography. As such, the 200 m site wind availability data represents wind data that takes into account the topographical effect around the Application Site.
- 2.1.4 **Figure 2.1a-c** shows the relevant wind rose diagrams representing the frequency and wind speed distribution at 200 m height during the annual and summer conditions of Grid (X: 047 Y: 072), Grid (X: 047 Y: 071) and Grid (X: 048 Y: 071). The wind frequency data under the annual and summer conditions at 200 m altitude are shown in **Table 2.1** below.
- 2.1.5 According to the wind roses at 200 m altitude, the annual prevailing wind directions of the Development Sites are NNE, NE and E while the summer prevailing wind directions for the Application Site are SSE, S, SSW.

Table 2.1 Summary of RAMS Data and Wind Direction

Wind Direction	Grid (X: 047 Y: 072)		Grid (X: 047 Y: 071)		Grid (X: 048 Y: 071)	
	% of Annual Occurrence	% of Summer Occurrence	% of Annual Occurrence	% of Summer Occurrence	% of Annual Occurrence	% of Summer Occurrence
0° (N)	3.4%	1.1%	3.5%	1.1%	3.6%	1.1%
22.5° (NNE)	12.6%	1.3%	13.2%	1.4%	13.3%	1.5%
45° (NE)	11.1%	1.8%	10.2%	1.8%	9.9%	1.7%
67.5° (ENE)	7.2%	2.8%	7.1%	2.7%	7.2%	2.7%
90° (E)	16.0%	8.8%	15.8%	8.7%	15.9%	8.8%
112.5° (ESE)	7.0%	5.2%	6.6%	5.1%	6.6%	4.9%
135° (SE)	6.8%	9.0%	7.1%	9.1%	7.0%	9.0%
157.5° (SSE)	9.5%	15.7%	10.1%	16.7%	9.6%	15.8%
180° (S)	8.9%	18.6%	8.8%	18.4%	9.7%	20.1%
202.5° (SSW)	4.6%	11.3%	4.4%	10.9%	4.1%	10.2%
225° (SW)	3.9%	10.4%	3.8%	10.2%	3.7%	10.0%
247.5° (WSW)	2.1%	4.3%	2.0%	4.3%	2.0%	4.4%
270° (W)	2.6%	4.9%	2.7%	5.0%	2.7%	4.9%
292.5° (WNW)	1.5%	2.5%	1.7%	2.5%	1.7%	2.7%
315° (NW)	1.2%	1.2%	1.3%	1.2%	1.3%	1.3%
337.5° (NNW)	1.6%	1.1%	1.6%	0.9%	1.7%	1.1%

Note: Bold characters highlighted in grey represent the selected prevailing wind directions for evaluation

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- 2.1.6 As shown in **Figure 1.1**, the planned WCPH1 is located to the immediate east of the Application Site which might affect the annual prevailing wind availability for the Application Site. Referring to the air ventilation assessment report done for Wang Chau Public Housing Development Phase 1 Site B (WCPH1B AVA-EE report), the prevailing wind directions identified in the report were NNE, NE, ENE, E, SSE and S under annual conditions while summer prevailing wind directions were ESE, SSE, S, SSW, SW and WSW. The wind roses are extracted from the report and presented in **Figure 2.2**.
- 2.1.7 Mitigation measures proposed in the WCPH1B AVA-EE report are shown in **Figure 2.3**, including the provision of building setback of about 17m (blue strip) from the western site boundary for Block A and about 10m (green strip) from the eastern site boundary for Block D, and building separation of about 22m (yellow strip) between Block B and the social welfare block and at least 20m (yellow strip) between Block A and Block B. The mitigation measures are intended to minimize the impact on the wind environment in the surrounding areas, including the Application Site to the west.
- 2.1.8 Since the wind data in this report has not covered the whole area of the Application Site, this would not necessarily reflect the wind environment at the Application Site. Hence, 200m RAMS wind data covering the Application Site is considered to be more suitable for assessment for the Application Site and the prevailing wind directions previously identified under RAMS 200m data is used for further directional analysis.

2.2 Topography and Building Morphology

Topography

- 2.2.1 The Application Site is located in the Yuen Long District. Elevation level of the terrain at the Application Site increases from the southern portion of the Site towards the hillier terrain of the north. The existing ground level raises from around 8.2 mPD (Site D) and 13.2 mPD (Site B) at the southern portion of the Site to 10.7 mPD (Site C1), 13.3 mPD (Site C2) and 19.4 mPD (Sites A1 and A2) at the northern part of the Site. The landscape in the vicinity of the Site mostly follows the same pattern, the ground elevation level increases from the south to the north where the hilly terrain of Kai Shan is.
- 2.2.2 The mountain range of Kai Shan with its two nearest peaks (1) north of Site A1 and Site A2 and (2) north of Phase 1 Wang Chau Public Housing Development have a height of +67.8 and +53.2 mPD respectively. It would mainly affect the incoming annual northeasterlies from reaching the Site since the hills of Kai Shan would provide a sheltering effect for the incoming wind from reaching the Site. In addition, E wind towards Ha Mei San Tsuen would encounter the knoll of Kai Shan directly north of Site A2 and low-level wind would be blocked by this peak. However, between these two peaks is a low-lying area where northeasterlies would be able to flow from Wang Chau to the structures between Sites A2 and C1. Overall, it is expected the topography would have a moderate influence on the wind environment around the Site. The influence of the surroundings on summer southerlies would be minimal due to the flat topography of the area to the south of the Application Site, which is around +6.7 mPD.

Existing Building Morphology

- 2.2.3 Based on findings from published information in the Statutory Planning Portal under the Town Planning Board regarding planned/committed developments and the study for Wang Chau Public Housing Development, there are a number of existing and

planned low to high-rise buildings surrounding the Application Site. The wind flow pattern at the Application Site would be influenced by the surrounding built environment even without the proposed development at the Application Site. **Table 2.2** can be referred to for building heights of existing structures in the surroundings. The building height information of identified existing developments was extracted from Geo-Reference Database (BG1000) provided by Survey and Mapping Office of Lands Department.

- 2.2.4 Potential building blockage effect due to the surrounding developments is considered low at the vicinity of the Site. Incoming easterlies would encounter the high-rise buildings of Long Ping Estate (max. +102 mPD) then village houses in Wang Chau South (max. around +26.4 mPD), Shui Tin Tsuen (max. around +23.1 mPD) and Fung Chi Tsuen (max. around +19 mPD). Nonetheless, as Long Ping Estate is more than 300m away from the Application Site while the village houses nearer to the Application Site are of low building height profile, the blockage of incoming winds caused by these structures is considered to be low. Additionally, other surrounding developments such as Wing Ning Tsuen South (max. around +24.6 mPD), Hai Mei San Tsuen (max. around +29.4 mPD) and Wing Ning Tsuen North (max. around +24.6 mPD) situated to the south, northwest and north of the Application sites, respectively, comprise low-rise buildings. Consequently, these structures have a negligible impact on hindering the flow of incoming winds.
- 2.2.5 The TML viaduct is located between Sites A and B with an elevation of about +24.4 mPD and Sites C and D with an elevation of about +19.9 mPD. The viaduct, by its nature, is built above ground level and is elevated on supporting columns with no significant enclosures. This design does not create significant blockage or disruption to the natural wind patterns in the vicinity. Therefore, the TML viaduct, being an elevated structure, maintains a minimal impact on wind flow, allowing for air movement and ventilation around the Application Site.

Building Morphology – Planned Developments

- 2.2.6 For the planned developments, one large-scale development, WCPH1, is located to the immediate east of the Application Site. Latest information available online about the building height of the planned WCPH1 is referenced from the WCPH1B AVA-EE report for proposed amendments to the Ping Shan OZP. According to Ping Shan OZP, the building height restriction of R(A)4 zone is +145 mPD. The Master Layout Plan of WCPH1A and WCPH1B shows that the development has a building height of around +135 and 145 mPD. Table 2.2 highlights the general building height of the surrounding planned developments.
- 2.2.7 The CEDD is currently commissioning an engineering feasibility study for public housing development at the brownfield site west of Site B. However, no development layout pertaining that study is concluded and available at this preliminary study stage. Hence, it is not included in the analysis of this AVA Report.
- 2.2.8 Taking into consideration of the various planned developments, the potential air ventilation blockage cause by these planned structures is considered to be moderate. WCPH1 would mainly be obstructing prevailing annual wind directions. WCPH1 is directly upstream of the eastern incoming wind of the Application Site and this wind would be blocked by the high-rise public housing in WCPH1. This also applies to incoming northeasterlies and hinders the wind access particularly to Sites C and D.

Table 2.2 Surrounding Developments

Name of Development	Building Height (mPD)	Location from Application Site
Long Ping Estate	+19.8 to +102	East
Wang Chau Public Housing Phase 1 Site A (WCPH1A)	~+135	East
Wang Chau Public Housing Phase 1 Site B (WCPH1B)	~+145	East
Wang Chau South	+16.1 to + 26.4	East
Shui Tin Tsuen	+8.5 to +23.1	Southeast
Fung Chi Tsuen	+11.8 to +19	Southeast
Wing Ning Tsuen South	+9.6 to +24.6	South
Hai Mei San Tsuen	+7.8 to +29.4	Northwest
Wing Ning Tsuen North	+16.5 to +24.6	North

2.3 Summary of Site Wind Availability

- 2.3.1 RAMS wind data covering the Application Site is recommended to be used for further directional analysis. According to the RAMS wind availability data in **Table 2.1**, wind from the E direction is considered to be the dominant wind direction for the area. NNE and NE wind are also dominant prevailing wind directions apart from the E wind.
- 2.3.2 Incoming annual winds are expected to be primarily hampered by the planned development WCPH1 and the terrain of Kai Shan. The effect on the incoming wind to the Site is considered to be moderate.
- 2.3.3 For summer winds, the prevailing wind directions were found to be S, SSW and SSE. Upstream of the Site from these directions are mainly rural land with low-rise structures and most summer wind would still be able to flow to the Site unobstructed.

3. EXPERT EVALUATION OF AIR VENTILATION PERFORMANCE OF THE PROPOSED DEVELOPMENT

3.1 Evaluation of Merit/Demerit of Design Features of the Proposed Development

3.1.1 Under the Proposed Scheme, good design features beneficial to air ventilation have been incorporated as far as possible into the design of the proposed development taking into account various site constraints (including the irregular shape of the Site area, housing supply and infrastructure requirements that needs to be fulfilled at the Site, etc.). Mitigation measures such as inclusion of open space, building setback, building separation are included in the design. The details of the design measures in the site layout for enhancing the air ventilation of the proposed development and the surrounding areas are summarised below and indicated in **Figure 3.1**.

- Building setback of up to 51m from the site boundary was included in the design to facilitate incoming winds to penetrate through the Site to downstream areas.
- Basement design for Site A1 to minimise the height of the podium. Across the Application Site, podiums of up to 4 storeys maintain a low height to facilitate wind flow. The above-ground carpark, as required by the Housing Department, for the public housing / starter homes will adopt a typical open-sided design to facilitate cross ventilation.
- Building separation of minimum 15m (at ground level) is provided for wind flow to penetrate the site through the gaps created.
- Open space is provided throughout the Site to offer more space for pedestrian-level wind flow.
- High ground level headroom clearance are allowed under some residential towers to enhance the permeability of ground-level wind flow.

Air Corridors

3.1.2 **Figure 3.2** and **Figure 3.3** illustrate the prevailing wind from both annual and summer wind directions for the Baseline Scheme respectively. **Figure 3.4 a-c** and **Figure 3.5 a-c** depict the prevailing wind from both annual and summer wind directions for the Proposed Scheme.

3.1.3 Under annual wind conditions, some portion of the annual winds would be blocked by the planned WCPH1 before reaching the Application Site. However, a large portion of easterly winds would still be able to reach and flow along the corridor of the TML and the open area provided by a 40m separation between tall structures at Sites A1&A2 and Site B and 29m between tall structures at Site C2 and Site D to reach downstream areas of the Application Site. Although the said corridor aligns to ESE wind direction, the significant open area along this corridor would still allow a portion of easterly wind to flow across the Application Site. Moreover, a separation between tall structures of more than 55m as shown in **Figure 3.4b** by the setback of T2 of Site A2, T1 of Site C1 and the area of low-rise buildings in Wing Ning Tsuen North and the open area between Site B and Site D offer a corridor aligning to NE-SW direction for prevailing northeasterly and southerly winds to flow unobstructedly through the Application Site. Therefore, it is expected there would be high wind availability flowing through the Application Site.

Development Permeability

- 3.1.4 This building layout design has minimized negative impact to the incoming pedestrian-level wind by the proposed structures and to allow ground level wind to reach downstream areas. High ground level headroom clearance are implemented to minimize the podium footprint of the proposed development (e.g., T1 in Site A1). This design allows for reduced building footprint of the podiums which in turn provides the Site with more open space at grade and more building separations between the residential towers at ground level.
- 3.1.5 T2 and T3 in Site C2 has adopted a raised floor design (ie only essential lift and minimised lobby structure are located on ground floor) to provide ground level headroom clearance of about 6.5m under the building and thus increasing building permeability on ground level to facilitate air flow.
- 3.1.6 Building separation, especially the separation at ground level, improves pedestrian comfort at the Application Site and downstream areas by allowing more at-grade wind flow through the gaps of the development. The introduction of vehicular accesses serves as a deliberate measure to reduce the building bulk which optimizes the airflow at ground level for pedestrian amenity.

3.2 Directional Analysis of the Development

- 3.2.1 As discussed in **Section 2**, it is identified that the prevailing annual wind are from NNE, NE and E directions while the prevailing summer wind are from SSE, S and SSW directions. The proposed development will be evaluated against the identified annual and summer prevailing wind directions and compared with the Baseline Scheme. **Figure 3.2** and **Figure 3.3** indicate the expected wind flow for the existing condition of the Site under annual and summer conditions while **Figure 3.4 a-c** and **Figure 3.5 a-c** indicate the expected wind flow for the Proposed Scheme.

E Wind (Figure 3.4c)

- 3.2.2 E wind would largely come from the Yuen Long New Town to the low-rise area of Shui Tin Tsuen and Fung Chi Tsuen. The E wind is mainly blocked by the structures in Yuen Long New Town and Long Ping Estate but is able to recover at those low-rise village areas before reaching Long Ping Road, the low-rise GIC structure of WCPH1 and Site D of the Site. The low-rise structures at the villages are not able to effectively obstruct the incoming E wind and it is able to reach the Site with little interference. The planned WCPH1 which is close to Sites C1 and C2 has a moderate impact on the wind flow experienced in these areas and the wind flow towards Site C2 would be weakened. However, the blockage effect is alleviated by the provision of a 17m building separation arrangement between the "ISWB" building and "Block B" structures, as illustrated in **Figure 2.3**. This intentional configuration facilitates the wind flow towards Site C2 and Wing Ning Tsuen North. The TML viaduct and separations between tall structures of Sites A1&A2 and Site B and between Sites C2 and Site D forms a corridor aligned to ESE direction, which could still receive E wind and allows a portion of relatively unobstructed flow of wind across the Application Site.
- 3.2.3 Under the Baseline Scheme, the wind reaching the Application Site would flow largely undisturbed through the Site as the Site comprises mostly open area and scattered low-rise structures. E wind reaching the Application Site would be able to flow unobstructedly to downstream areas such as Wing Ning Tsuen North, Wing Ning Tsuen South and Ha Mei San Tsuen.
- 3.2.4 For the Proposed Scheme, the proposed development has extended the design features of WCPH1 in its design to minimize the disturbance of the proposed development on the surrounding environment. For example, building separation

between T1 and T2 in Site C2 and a low-rise podium at Site C1 serves the purpose of maintaining the continuity of high-level wind flow between the "ISWB" building and "Block B" in the planned WCPH1 for E wind to flow downstream to the Wing Ning Tsuen North. At Site D, the building setback of 18m from its southern boundary and 22m from its northern boundary (making up a 29m separation between buildings of Site D and Site C2) are able to provide passage for a significant amount of E wind at all levels to Wing Ning Tsuen South and beyond. Site C2 incorporates a building setback of 10m from its northern site boundary, which is further complemented by the generally open area to the north of the Application Site to facilitate wind flow along the northern boundary to reach Wing Ning Tsuen North. However, E wind will be obstructed from reaching the Chomolongma Multicultural Community Centre due to potential blockage by Site B. This impact is minimised, although the effectiveness not being significant, by incorporating an open area formed by the access road at Site B near the community centre and maximising building setback at Site B from the community centre. Moreover, a building setback of 16m from the southern site boundary at Site B could also enable E wind at all levels to pass through to the area immediate downstream of Site B (e.g. area south of the Chomolongma Multicultural Community Centre). Whilst the E wind is slightly blocked by the topography viz, the footage of Kai Shan between Site A2 and Site C in any event, Site A1 features a building setback of 29m from its northern site boundary, allowing some E wind at all levels to flow through the northern part of Site A1 to reach Ha Mei San Tsuen. Some high-level E wind upon reaching the high-rise buildings at Site A2 would also be captured as downwash to ventilate the Wing Ning Tsuen North area.

- 3.2.5 To sum up, even though the Proposed Scheme with high-rise buildings may have some blockage to E wind as compared to the Baseline Scheme, the blockage effect is alleviated with the good air ventilation design measures adopted in the proposed scheme. Hence, it is anticipated that the proposed development would not have a significant negative air ventilation impact at all levels under E wind conditions.

NE Wind (Figure 3.4b)

- 3.2.6 Incoming NE wind to the Application Site would largely come from the hilly terrain of Kai Shan. As mentioned before, lower-level wind to the Site is obstructed by the hills of Kai Shan but it can reach the centre of the Site and pass to downstream areas of Wing Ning Tsuen South through the low-lying area between the two peaks as downwash. A portion of NE wind will be obstructed by the planned WCPH1 reducing wind availability to Sites C1 and C2. Nevertheless, the blockage effect is alleviated by the provision of 20m building separation between "Block A" and "Block B" of the WCPH1. Long Ping Road creates an air corridor that allows the unobstructed flow of NE wind to the southern side of the Application Site.
- 3.2.7 Under the Baseline Scheme, the NE wind coming from the gaps of planned WCPH1 and Kai Shan would be uninterrupted by the existing low-rise and scattered structures within the Application Site on its downwind flow to the area of Wing Ning Tsuen South.
- 3.2.8 For the Proposed Scheme, wind flow to Wing Ning Tsuen South is mainly preserved through the large separation (55m for all elevations) between Site A2 and Site C1 provided by the setback ranging from 8m to 13m of T2 in Site A2 from its eastern boundary, setback of 10m of T1 in Site C1 from its western boundary, and the area of low-rise buildings in Wing Ning Tsuen North. Such large separation allows for all levels of wind to pass from the low-lying area in the middle of the two Kai Shan peaks to the existing structures and through the separation of Site A2 and Site C1 and the 11m building setback of T2 of Site B into Wing Ning Tsuen South. The wind flow in this area is comparable between the two schemes. At the western portion of the Application Site, high-level NE wind is able to flow through the Site via the 15m building separation

between T1 in Site A1 and T1 in Site A2 above the podium, the access road and then reaching T1 of Site B, where the continuity of NE wind flow through Site B is obstructed. Whilst NE wind to the area immediate downstream of Site B (e.g. Chomolongma Multicultural Community Centre) and part of Wing Ning Tsuen South is slightly blocked by the proposed development at Site B, Site B features a building setback of 50m from its western site boundary, allowing some diverged high-level NE wind to flow along to the western part of those affected areas to minimize the impact. Furthermore, the presence of ground level headroom clearance at ground floor level of T1 (14m in height) in Site A1 serves the purpose of augmenting the permeability of ground-level wind flow. T6 at Site A1 has also incorporated a building setback of 8m from the western site boundary. NE wind at all levels can make use of the building setback together with the adjacent open area to flow along the western edge of Site A1 to downstream area to the west of Wing Ning Tsuen South. At the eastern portion of the Application Site, blockage of NE wind is expected at the area immediate downstream of Sites C1 and C2, yet this area comprises mainly open storage area characterized by a low density of population. Potential air ventilation impact in this area is therefore not considered of significant concern. Although NE wind cannot penetrate through Sites C1 and C2 directly, the design has incorporated headroom clearance at ground floor level of T2, T3 and the northern leg of T1 in Site C2, which serve the purpose of increasing the permeability of ground-level wind flow. Moreover, to enhance NE wind flow through the Site, the village access road between Sites C1 and C2 is designed to align along the NE-SW direction which can maximise NE wind movement through the gap between the buildings in Site C1 and Site C2 to the downstream open storage area west of Site D.

- 3.2.9 In conclusion, despite the possibility of some obstruction to NE winds due to the presence of high-rise buildings in the Proposed Scheme compared to the Baseline Scheme, the impact on air ventilation is alleviated by the incorporation of good design measures into the proposed scheme. Consequently, it is anticipated that the proposed development will not exert a significant adverse impact on air ventilation under NE wind conditions.

NNE Wind (Figure 3.4a)

- 3.2.10 Incoming NNE wind flow to the Application Site is similar to NE wind. NNE wind would be partially blocked by the hilly terrain of Kai Shan and the high-rise development of the planned WCPH1.
- 3.2.11 Under the Baseline Scheme, NNE wind coming from the gaps of the planned WCPH1 and Kai Shan would be uninterrupted by the existing low-rise and scattered structures within the Application Site and is able to flow freely to downstream areas of Wing Ning Tsuen South.
- 3.2.12 For the Proposed Scheme, the impact to the wind flow brought by the proposed development is alleviated through the provision of mitigation measures throughout the Application Site. Similar to NE wind, the separation (more than 65m for all elevations) between Site A2 and Site C1 provided by the setback ranging from 6m to 8m of T2 in Site A2 from its eastern boundary, setback of 10m of T1 in Site C1 from its western boundary, and the area of low-rise buildings in Wing Ning Tsuen North allows all levels of wind to pass from the low-lying area in the middle of the two Kai Shan peaks to the existing structures and through the building separation into Wing Ning Tsuen South. The wind flow in this area is comparable between the two schemes. Building separation of 15m above podium level between T4 and T5 at Site A1 together with the building setback of 51m from the western boundary in Site B and building setback of 7m of T6 from the western site boundary in Site A1 further enhances NNE wind penetration through the western portion of the Application Site to Wing Ning Tsuen South. At the

eastern portion of the Application Site, blockage of NNE wind is expected at the area immediate downstream of Sites C1 and C2 directly, yet this area comprises mainly open storage area characterized by a low density of population. Potential air ventilation impact in this area is therefore not considered of significant concern. Although NNE wind cannot penetrate through Sites C1 and C2 directly, the design has incorporated ground level headroom clearance at ground floor level of T2, T3 and the northern leg of T1 in Site C2, which serve the purpose of increasing the permeability of ground-level wind flow. Moreover, to enhance NNE wind flow through the Site, the village access road between Sites C1 and C2 is designed to align along the NE-SW direction which can maximise NNE wind movement through the gap between the buildings in Site C1 and Site C2 to the downstream open storage area west of Site D.

- 3.2.13 Overall, despite the possibility of some obstruction to NNE winds due to the presence of high-rise buildings in the Proposed Scheme compared to the Baseline Scheme, the impact on air ventilation is alleviated by the incorporation of good design measures into the proposed scheme. Consequently, it is anticipated that the proposed development will not induce significant adverse air ventilation impact on the surrounding environment under NNE wind condition.

S Wind (Figure 3.5b)

- 3.2.14 Under S wind condition, incoming wind to the Application Site would mainly flow above the open storage area to the south of the Site as well as the low-rise structures of Wing Ning Tsuen. The low building height profile of this area will not effectively obstruct the wind flowing to the Site and S wind is able to flow to the Site mostly unhindered.
- 3.2.15 At the Application Site under the Baseline Scheme, little to no blockage is expected from the low-rise structures and open areas of the Site. Incoming S wind can flow to downstream areas freely. At the centre of the Application Site, S wind is able to pass above and below the TML viaduct structure to reach the existing structures of Wing Ning Tsuen North and beyond to the low-lying area between the two peaks of Kai Shan.
- 3.2.16 For the Proposed Scheme, the proposed high-rise buildings would block a portion of S wind to downstream area compared to the Baseline Scheme. Nonetheless, the layout of the Proposed Scheme has included good design measures to ensure that the air ventilation performance of the Proposed Scheme does not differ greatly from the Baseline Scheme. At the centre portion of the Application Site, the wind flow to Wing Ning Tsuen North is generally undisturbed due to the large separation of around 67m between Site A2 and Site C1 provided by the 7m setback of T2 in Site A2 from its eastern boundary, 9m setback of T1 in Site C1 from its western boundary, and the area of low-rise buildings in Wing Ning Tsuen North. S wind at all levels can pass through the existing TML viaduct structure, then the proposed access road and through this large separation to reach Wing Ning Tsuen North. The wind flow in this area is comparable between the two schemes. At the western portion of the Application Site, T6 at Site A1 has incorporated a building setback of 8m from the western site boundary. S wind at all levels can make use of the building setback together with the adjacent open area to flow along the western edge of Site A1 to downstream area of Ha Mei San Tsuen. At the eastern portion of the Application Site, Site D may present a minor blockage to S wind flow to Area C2. Yet due to the presence of open area to the immediate west and east of Site D, a majority of high-level S wind is capable to diverge at the edge of Site D with the building setback above podium level of up to 23m from the western boundary at Site D and reaching the area between Site C1 and Site C2. While T1 of Site C1 would slightly obstruct the wind, a portion of the wind would still be able to flow along its edge and further to the open area to the north of Site C1 via the 26m building separation between T1 in Site C1 and T1 in Site C2 along the village access road and the low-rise podium at the northeastern portion of Site C1.

In addition, T2 and T3 in Site C2 are proposed to be elevated by 6.5m from ground level to further optimize the permeability of wind flow at all levels and enhance the overall wind environment. Some high-level S wind upon reaching T1 of Site C2 would become downwash to enhance wind flow at ground level for area between T1 of Site C2 and the ISWB building at the planned WCPH1. Aside from the structures of Wing Ning Tsuen North, downwind areas of the Application Site under S wind condition are the terrain of Kai Shan which is only frequented by occasional hikers. Potential air ventilation impact in this area is therefore not considered of significant concern.

- 3.2.17 To conclude, with the incorporation of good design measures into the proposed scheme, the proposed development is not anticipated to have significant adverse air ventilation impact to the surrounding area under S wind.

SSW wind (Figure 3.5c)

- 3.2.18 Like S wind, SSW wind would flow over the same area as S wind and similar wind paths are expected from the southerlies. The open area and low-rise structures of Wing Ning Tsuen South will not likely block SSW wind significantly from entering the Site.
- 3.2.19 As the Application Site mostly consists of open area and low-rise structures in the Baseline Scheme, SSW wind flow is allowed to the downstream areas through the open area of the existing landscape.
- 3.2.20 Under the Proposed Scheme, while residential towers are proposed which would block SSW wind to a certain extent, wind flow is preserved through the building separation and building setback throughout the Site. The wind flow towards Wing Ning Tsuen North remains largely uninterrupted due to the substantial separation of more than 65m at ground level between Site A2 and Site C1 provided by the setback ranging from 6m to 8m of T2 in Site A2 from its eastern boundary, setback of 10m of T1 in Site C1 from its western boundary, and the area of low-rise buildings in Wing Ning Tsuen North. The wind flow in this area is comparable between the two schemes. At the western portion of the Application Site, the 15m building separation between T4 and T5 of Site A1 together with the building setback of 51m from the western boundary in Site B and the 7m building setback from the western site boundary of Site A1 allow high-level SSW wind flow to the hilly terrain of Kai Shan (albeit no major receivers). At the eastern portion of the Application Site, SSW wind is able to flow directly into Site C2 along the access road reaching the open area near T2 and T3 of Site C2. The proposed development would block SSW wind from reaching the immediate downstream area of Block A of WCPH1. In view of the potential blockage, T2 and T3 in Site C2 are proposed to be elevated by 6.5m from ground level and to make use of the nearby open area to further optimize the permeability of wind flow at pedestrian level and enhance the overall wind environment in the northern portion of Area C2 and the planned WCPH1. T1 of Site D has incorporated a building setback of 14m from the eastern boundary which enable SSW wind at all levels to flow along the eastern edge of the site to reach the planned WCPH1.
- 3.2.21 Overall, with the incorporation of good design measures into the proposed scheme, the proposed development is not anticipated to have significant adverse air ventilation impact to the surrounding area under SSW wind.

SSE wind (Figure 3.5a)

- 3.2.22 The context for S and SSW wind generally applies to the SSE wind condition. SSE wind can flow over the open areas and other low-rise structures south of the TML to the Site.

- 3.2.23 Under the Baseline Scheme, the Application Site allows SSE wind to flow to downstream areas such as Wing Ning Tsuen North and Ha Mei San Tsuen unobstructed as the Application Site is mostly an open area.
- 3.2.24 For the Proposed Scheme, a portion of SSE wind to Wing Ning Tsuen North and Ha Mei San Tsuen will be impacted by the high-rise building of proposed development. Site C1 and Site D may slightly obstruct SSE wind towards Wing Ning Tsuen North. Nevertheless, the wind flow towards Wing Ning Tsuen North remains largely uninterrupted due to the substantial separation of 54m at ground level between Site A2 and Site C1 provided by the 10m setback of T2 in Site A2 from its eastern boundary, 24m setback of T1 in Site C1 from its western boundary, and the area of low-rise buildings in Wing Ning Tsuen North. At the western portion of the Application Site, all levels of SSE wind can utilise the building setback of 9m from the western boundary of Site A1 together with the adjacent open area to flow along the western edge of the Site to the downstream area of Ha Mei San Tsuen.
- 3.2.25 Apart from Ha Mei San Tsuen and Wing Ning Tsuen North, the downstream area of the Application Site is mostly the hilly terrain of Kai Shan and does not contain major receivers. Hence, while certain SSE wind would be blocked by the Proposed Scheme as compared to the Baseline Scheme, the potential air ventilation impact is not considered of significant concern. Overall, with the incorporation of good design measures into the proposed scheme, the proposed development is not anticipated to have significant adverse air ventilation impact to the surrounding area under SSE wind.

3.3 Summary of Relative Air Ventilation Performance

- 3.3.1 The air ventilation performance of the proposed development has been appraised. The proposed development has allowed air paths to facilitate wind flow through careful disposition of structures and provision of open area and building separations as well as building setbacks. Hence, it is not expected that the proposed development will have significant adverse impact to the surrounding wind environment.

4. CONCLUSION

- 4.1.1 A qualitative assessment of the wind performance of the proposed development at Wing Ning Tsuen under the LSPS application has been conducted.
- 4.1.2 According to the findings of this AVA-EE, annual prevailing wind comes from E, NNE and NE direction and summer prevailing wind comes from S, SSW and SSE directions. The assessment has taken into consideration of the existing topography, the location of the existing built areas, planned developments and provision of mitigation measures to lower the potential air ventilation impact on the downwind areas including Wing Ning Tsuen North, Wing Ning Tsuen South, Ha Mei San Tsuen, Block A of WCPH1, the Chomolongma Multicultural Community Centre, open storage area and Kai Shan. The design measures taken into consideration to address air ventilation and airflow concerns are as follows:
- Building setback from the boundary of Application Site which create spaces that allow for unobstructed wind movement along the edge of the Application Site.
 - Building separations are implemented to facilitate wind penetration in and through the Application Site along the prevailing wind direction.
 - Carpark is accommodated at basement for Site A1 to minimise the podium bulk. Across the Application Site, podiums of up to 4 storeys maintain a low height as practicable to facilitate wind flow.
 - Open space is provided throughout the Site to offer more space for pedestrian-level wind flow.
 - Ground level headroom clearance are allowed to enhance the permeability of ground-level wind flow.
 - Raised floor design (elevated by 6.5m from ground level) has been adopted to maximise headroom clearance on ground level to further optimize the permeability of wind flow.
 - Aligned the village access road along NE/SW direction to maximise northeasterly wind movement through the gap between Site C1 and Site C2.
- 4.1.3 The proposed development may cause wind blockage to areas located immediate downwind. The potential concerned area identified in the AVA-EE would be Block A of the planned WCPH1 located immediate northeast of Site C2 where SSW wind are blocked by the proposed development. T2 and T3 in Site C2 are proposed to be elevated by 6.5m from ground level to further optimize the permeability. It is recommended that the opportunity to enlarge the building separation between T2 and T3 in Area C2 should be further explored during detailed design stage to enhance SSW wind flow through Site C2. In addition, the E wind will be somewhat obstructed from reaching the Chomolongma Multicultural Community Centre. This impact is minimised, although the effectiveness is not significant, by incorporating an open area formed by the access road at Site B near the community centre and maximising building setback at Site B from the community centre.
- 4.1.4 The following mitigation measures are considered to enhance the particular wind flow:
- E Wind (Figure 3.4c)
- Building setback of 16m and 18m from the southern boundary of Site B and D, respectively, as well as 29m, 10m and 22m from the northern boundary of Site A1, C2 and D, respectively. These setbacks create spaces that allow for unobstructed wind movement along the edge of the Application Site.

- A 17m separation between T1 and T2 in Site C2 allow the wind to flow downstream to the Wing Ning Tsuen North and Wing Ning Tsuen South, respectively.

NE Wind (Figure 3.4b)

- Building setback of 8m from the western boundary of Site A1 together with the adjacent open area to allow wind flow along the western edge of Site A1 to downstream area of Wing Ning Tsuen South.
- Building separation of 15m between T1 in Site A1 and T1 in Site A2 allows wind flow to reach T1 of Site B. While T1 of Site B would obstruct the continuity of NE wind flow through Site B, a portion of wind would still be able to diverge to the edge of T1 and make use of the building setback of 50m from the western boundary of Site B and flow further downstream to the area west of Wing Ning Tsuen South.
- The large separation (55m for all elevations) between Site A2 and Site C1 provided by the setback ranging from 8m to 13m of T2 in Site A2 from its eastern boundary, setback of 10m of T1 in Site C1 from its western boundary together with the building setback of 11m from the eastern boundary of Site B, and the area of low-rise buildings in Wing Ning Tsuen North.

NNE Wind (Figure 3.4a)

- Building separation of 15m above podium level between T4 and T5 in Site A1 together with the building setback of 51m from the western boundary in Site B and building setback of 7m from the western site boundary in Site A1 enhances NNE wind penetration through the western portion of the Application Site to Wing Ning Tsuen South.
- The separation (more than 65m for all elevations) between Site A2 and Site C1 provided by the setback ranging from 6m to 8m of T2 in Site A2 from its eastern boundary, setback of 10m of T1 in Site C1 from its western boundary, and the area of low-rise buildings in Wing Ning Tsuen North.

S Wind (Figure 3.5b)

- Building setback of 8m from the western boundary of Site A1 together with the adjacent open area to allow all levels of wind flow along the western edge of Site A1 to downstream area of Ha Mei San Tsuen.
- The high-level S wind can reach the open area between Site C1 and Site C2 with the building setback above podium level of up to 23m from the western boundary at Site D. While T1 of Site C1 would slightly obstruct the wind, the design of the Proposed Development has allowed a 26m building separation between T1 in Site C1 and T1 in Site C2 along the village access road and a low-rise podium at the northeastern portion of Site C1, allowing a portion of the diverged S wind to flow along the edge of T1 of Site C1 and further to the open area to the north of Site C1.
- The large separation of around 67m between Site A2 and Site C1 provided by the 7m setback of T2 in Site A2 from its eastern boundary, 9m setback of T1 in Site C1 from its western boundary, and the area of low-rise buildings in Wing Ning Tsuen North.

SSW Wind (Figure 3.5c)

- The 15m building separation between T4 and T5 of Site A1 together with the building setback of 51m from the western boundary in Site B and the 7m building

setback from the western site boundary of Site A1 allow high-level SSW wind flow to the hilly terrain of Kai Shan.

- The substantial separation of more than 65m at ground level between Site A2 and Site C1 provided by the setback ranging from 6m to 8m of T2 in Site A2 from its eastern boundary, setback of 10m of T1 in Site C1 from its western boundary, and the area of low-rise buildings in Wing Ning Tsuen North.
- T1 of Site D has incorporated a building setback of 14m from the eastern boundary which enable SSW wind to flow along the western edge of the site to reach the planned WCPH1.

SSE Wind (Figure 3.5a)

- All levels of SSE wind can utilise the building setback of 9m from the western boundary of Site A1 together with the adjacent open area to flow along the western edge of the Site to the downstream area of Ha Mei San Tsuen.
- The substantial separation of 54m at ground level between Site A2 and Site C1 provided by the 10m setback of T2 in Site A2 from its eastern boundary, 24m setback of T1 in Site C1 from its western boundary, and the area of low-rise buildings in Wing Ning Tsuen North.

4.1.5 With these design measures incorporated into the proposed development, significant adverse air ventilation impacts on the surrounding environment from the proposed development is not anticipated.

4.1.6 The building block layout for the proposed development is indicative only and is still in a preliminary stage, with the exact number, block, and schematic design subject to review in the detailed design stage. Building separation and setback are identified in this AVA-EE as possible mitigation measures, which are also subject to review by the project proponent in the detailed design stage. The proposed development shall explore and include other features as far as possible at the detailed design stage, including the provision of effective building separation(s), setback aligned to the prevailing wind directions and permeability design, to facilitate penetration of wind across the Site. Mitigation measures for air ventilation will be reviewed again at the next stage with reference to the PNAP APP-152 Sustainable Building Design Guidelines and the detailed architectural layout design.

Figures

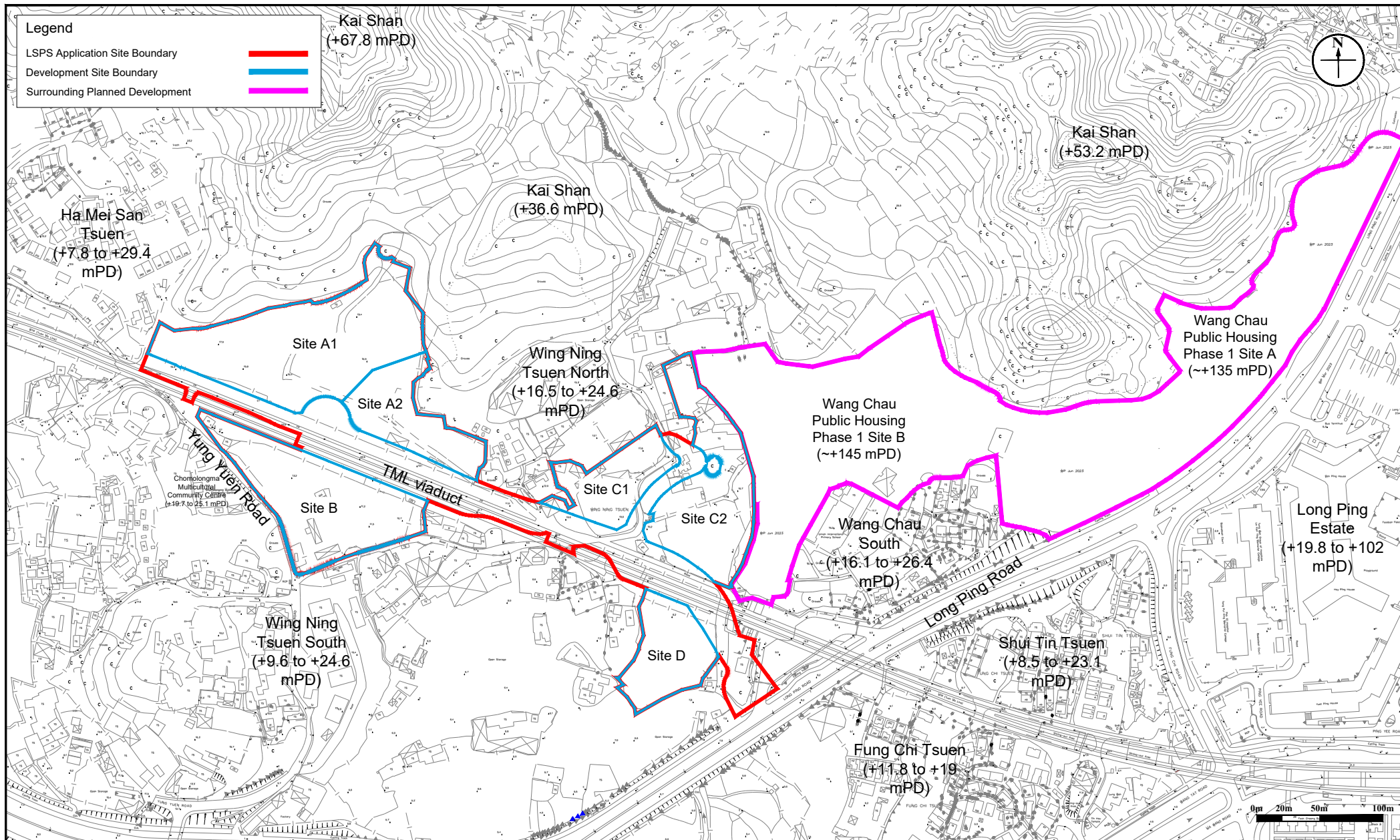


Figure: 1.1

Title: Location of Application Site and its Environ

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

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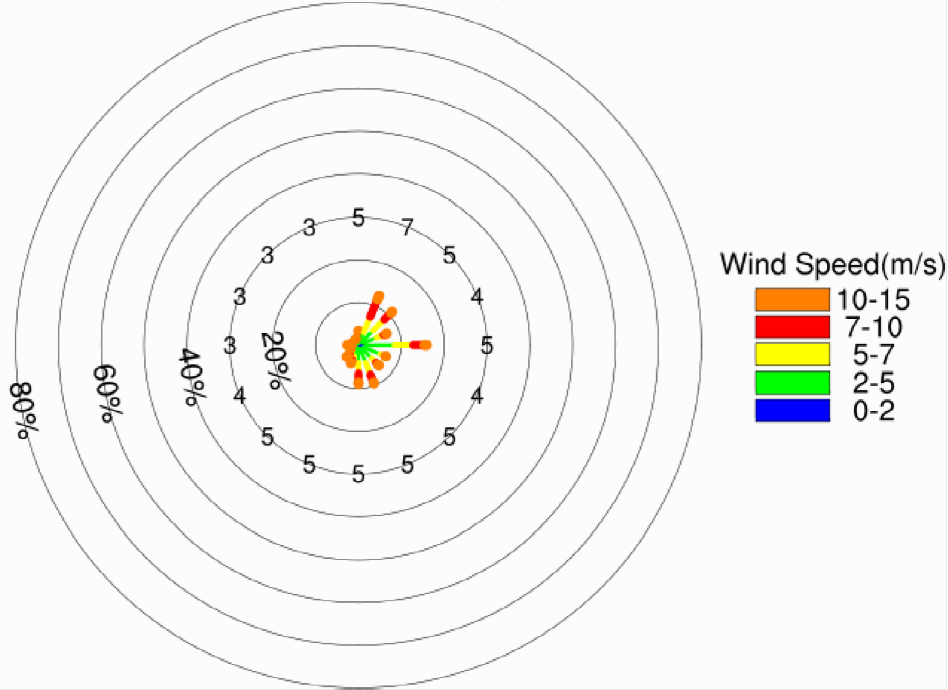
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Rev.: 10.0

Date: Aug 2025

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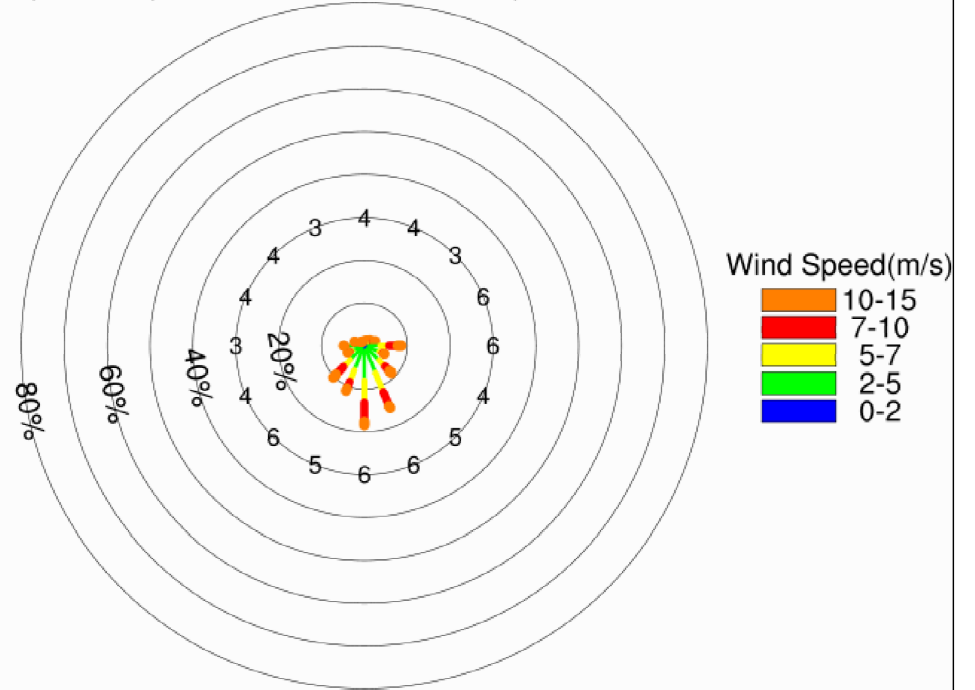
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Summer Condition

Figure: 2.1a

Title: Annual and Summer Wind Roses Representing V^∞ of the Area under Concern at 200m Above Ground (X:047, Y:072)

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

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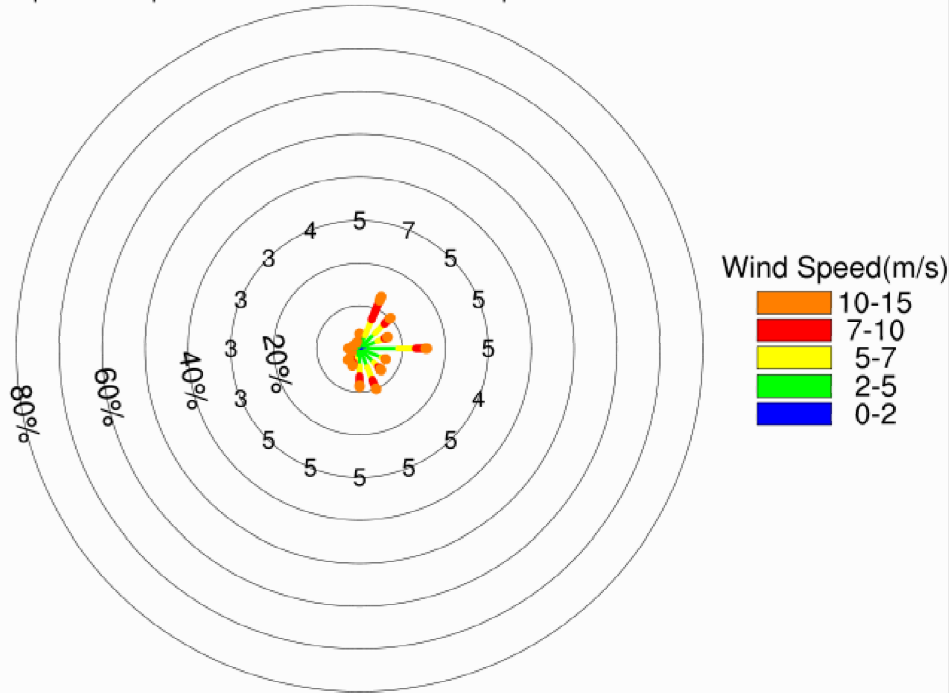
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Date: Jun 2025

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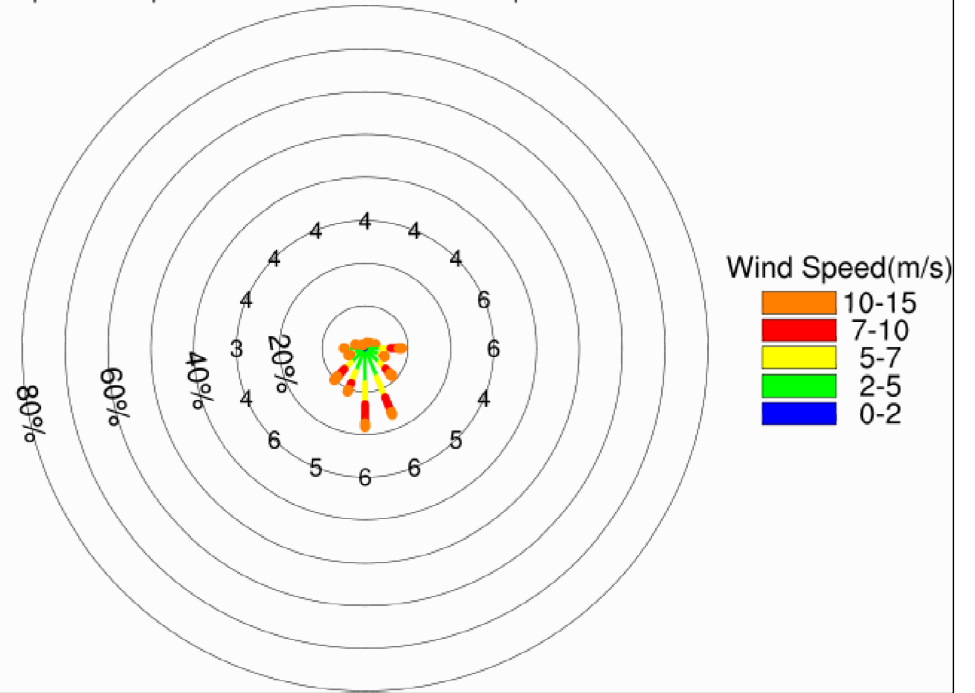
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Summer Condition

Figure: 2.1b

Title: Annual and Summer Wind Roses Representing V^∞ of the Area under Concern at 200m Above Ground (X:047, Y:071)

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

RAMBOLL

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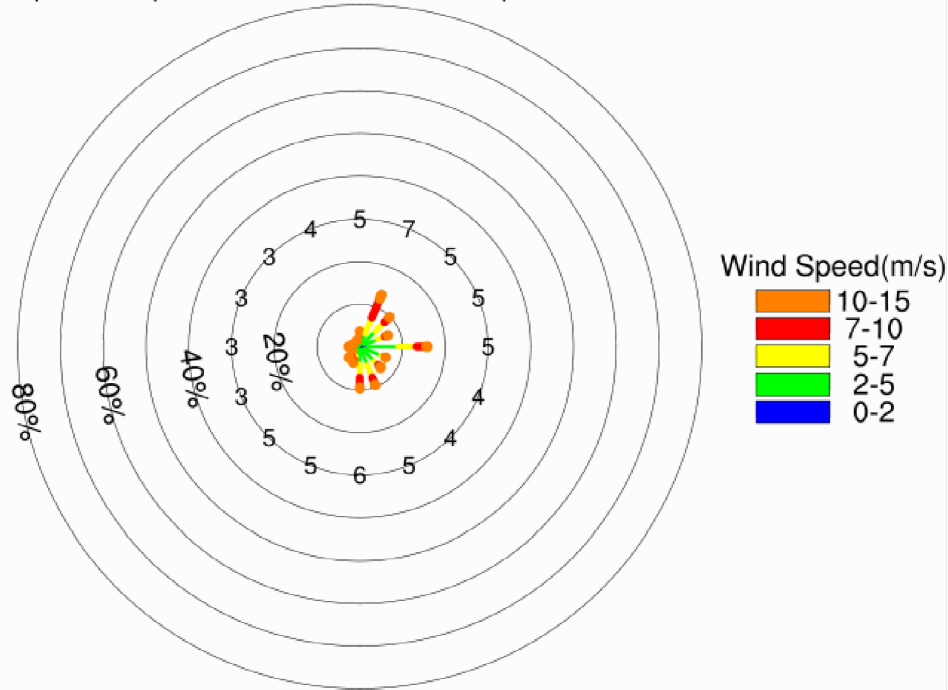
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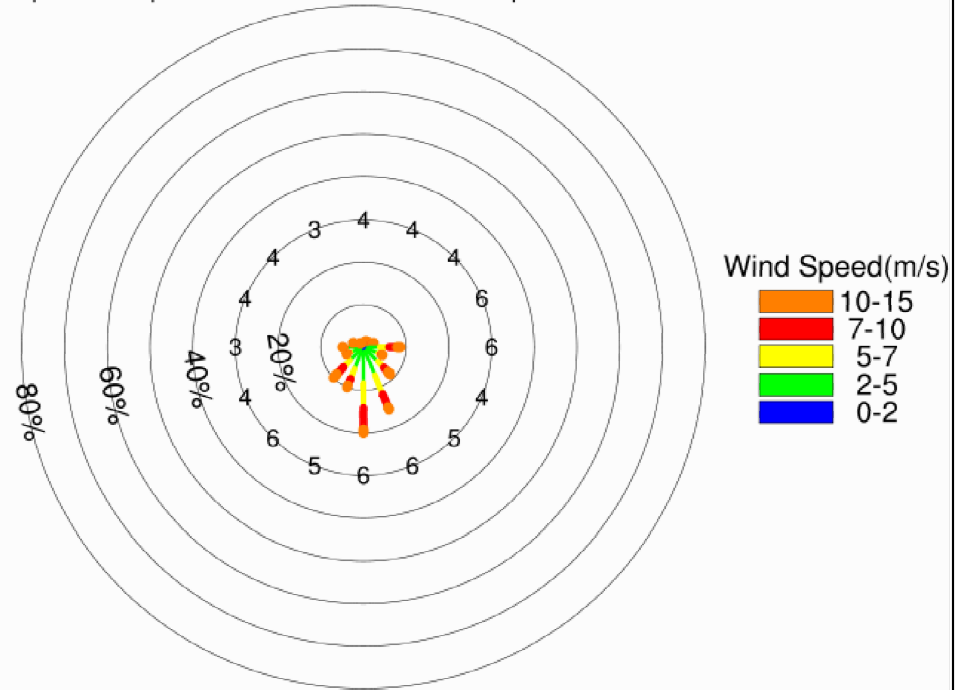
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Summer Condition

Figure: 2.1c

Title: Annual and Summer Wind Roses Representing V_{∞} of the Area under Concern at 200m Above Ground (X:048, Y:071)

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

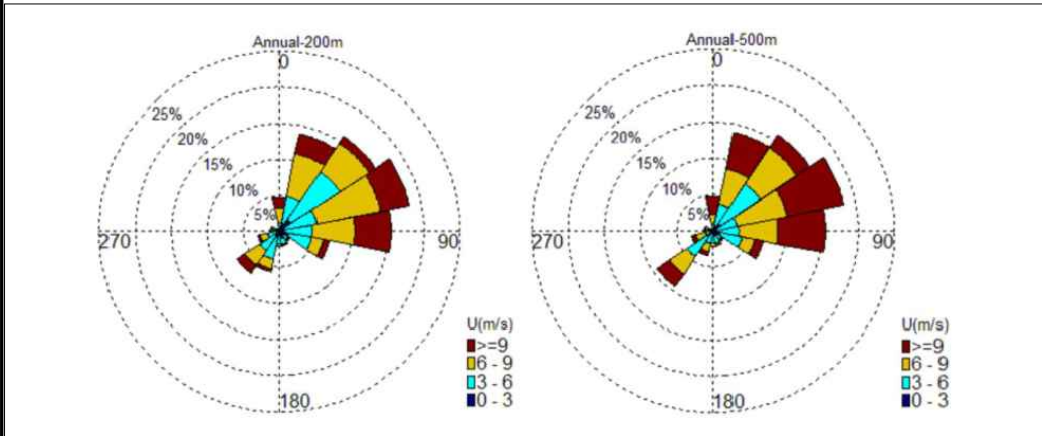
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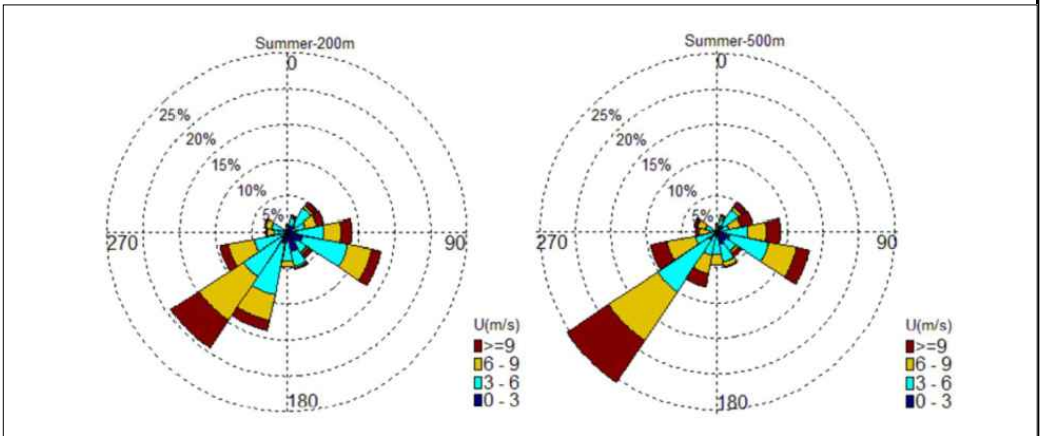
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Date: Jun 2025



Annual Condition



Summer Condition

Figure: 2.2			
Title: Annual and Summer Wind Roses above the Proposed Development extracted from the AVA Report of Public Housing Development at Wang Chau, Yuen Long		Drawn by: SC	
		Checked by: KY	
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		Date: Jun 2025	

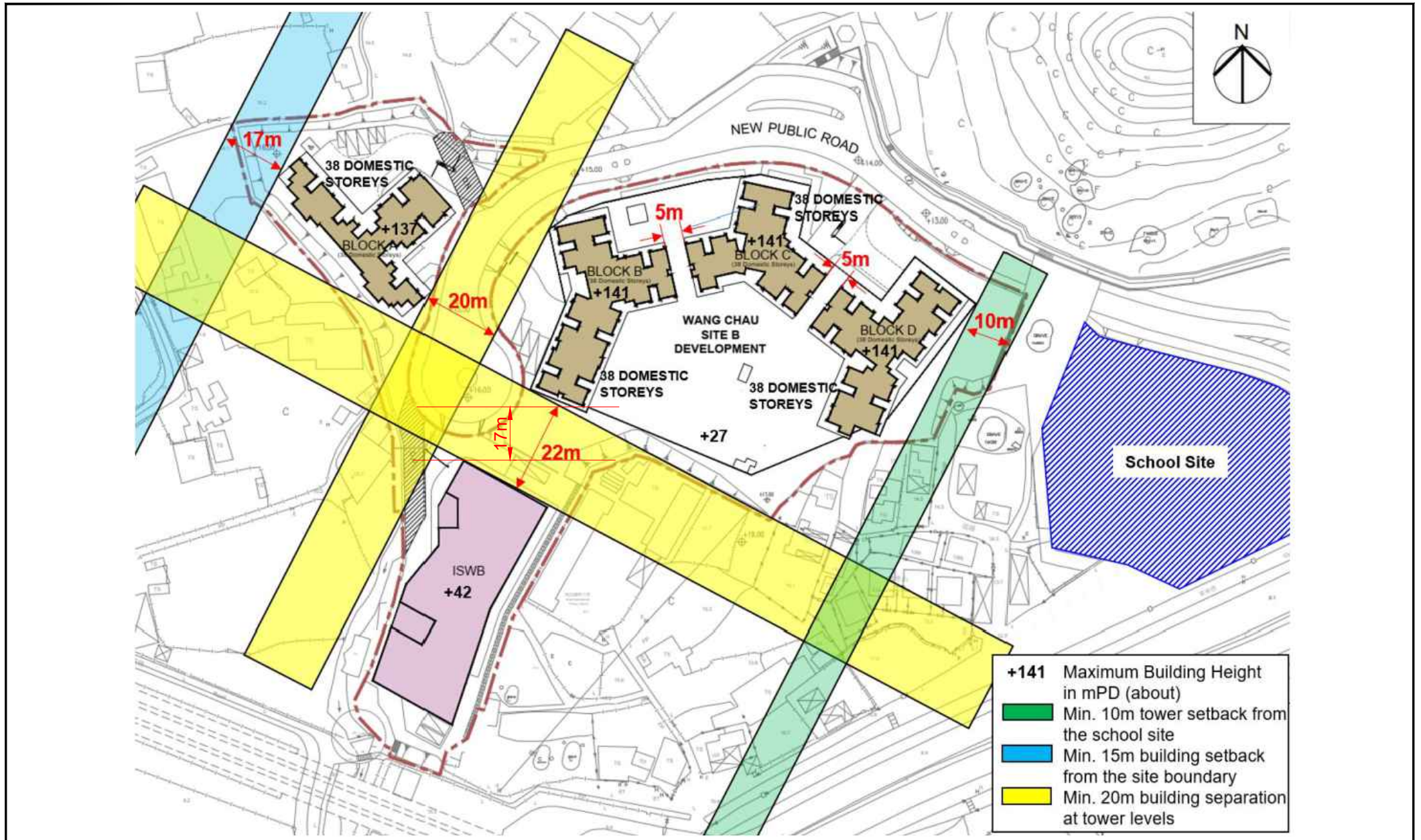


Figure: 2.3

Title: Mitigation measures of WCPH1 proposed in the Wang Chau AVA report (Extracted from Environmental Study for Public Housing Development at Wang Chau – Expert Evaluation)

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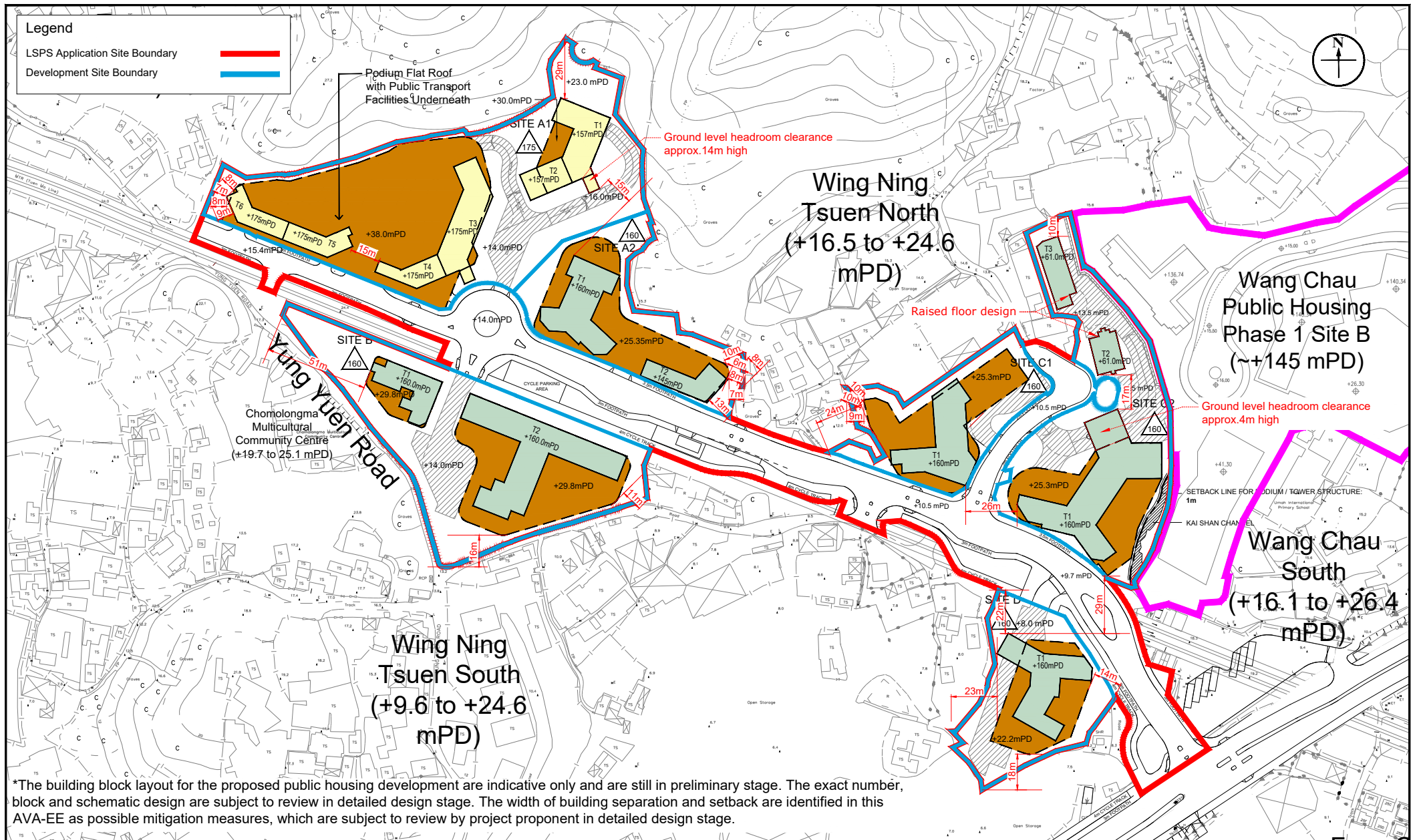


Figure: 3.1

Title: Proposed Mitigation Measures within the Proposed Development

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

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Date: Aug 2025

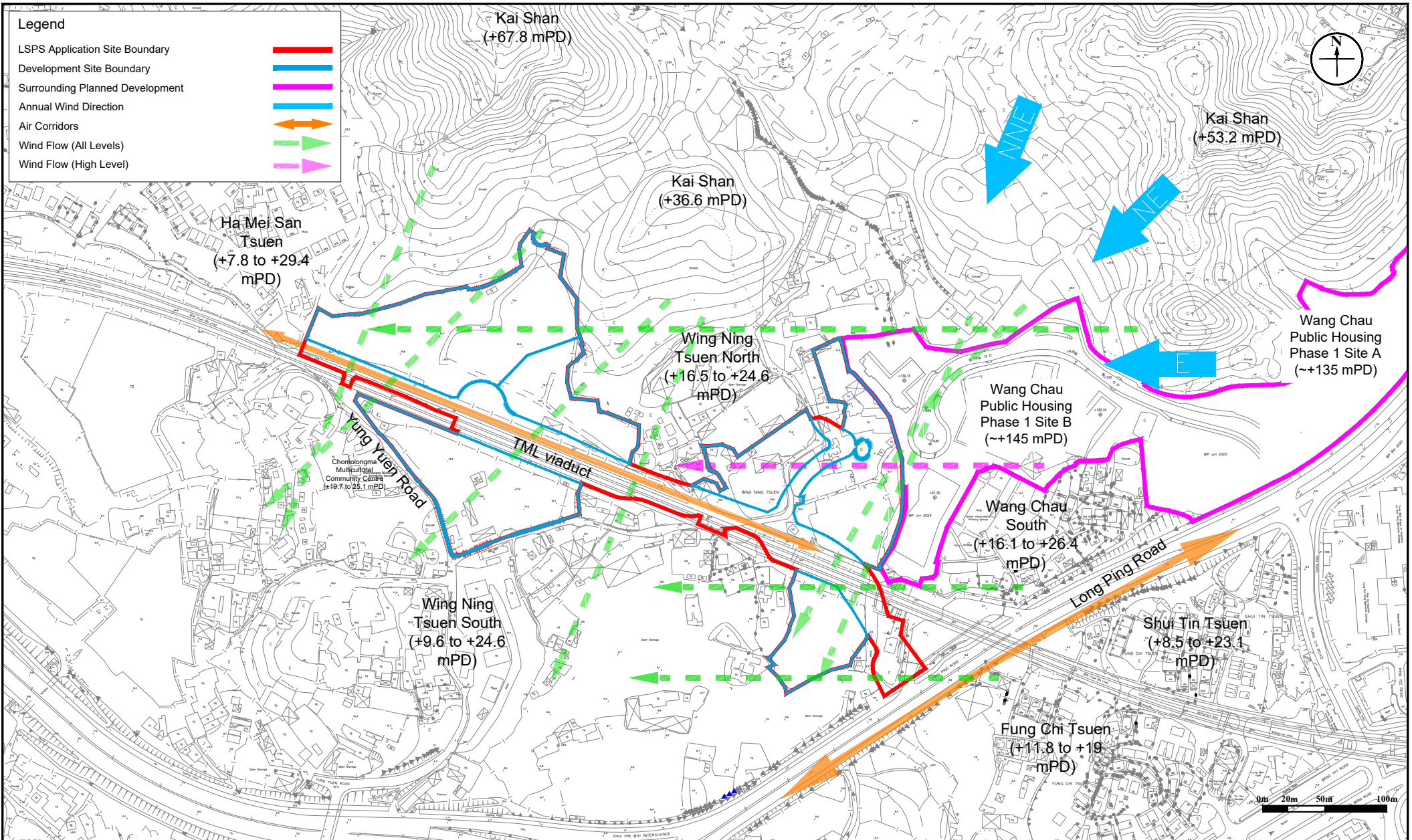


Figure: 3.2

Title: Illustration of Existing Annual Wind Flow

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

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Checked by: KY

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Date: Aug 2025

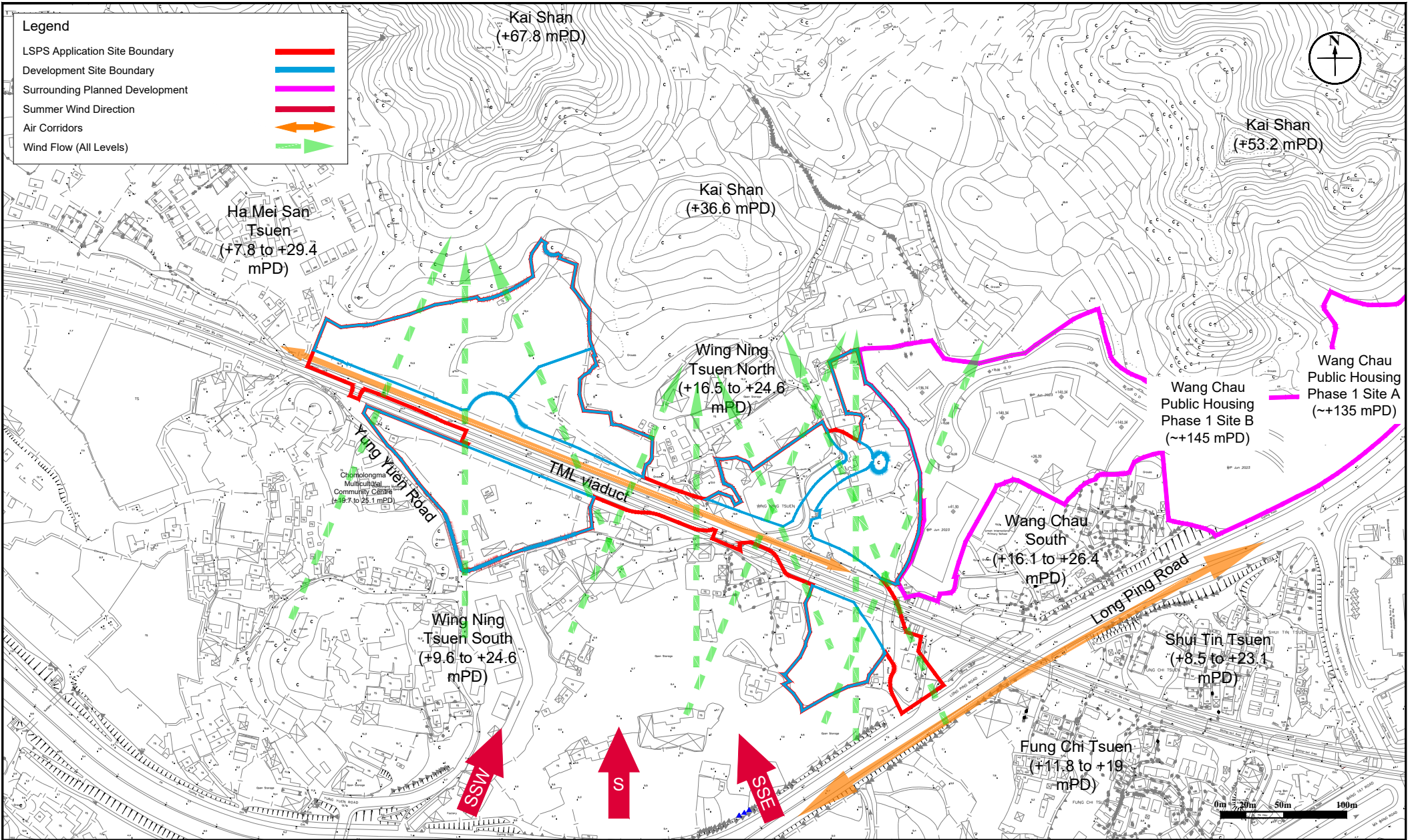


Figure: 3.3

Title: Illustration of Existing Summer Wind Flow

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

RAMBOLL

Drawn by: SC

Checked by: KY

Rev.: 10.0

Date: Aug 2025

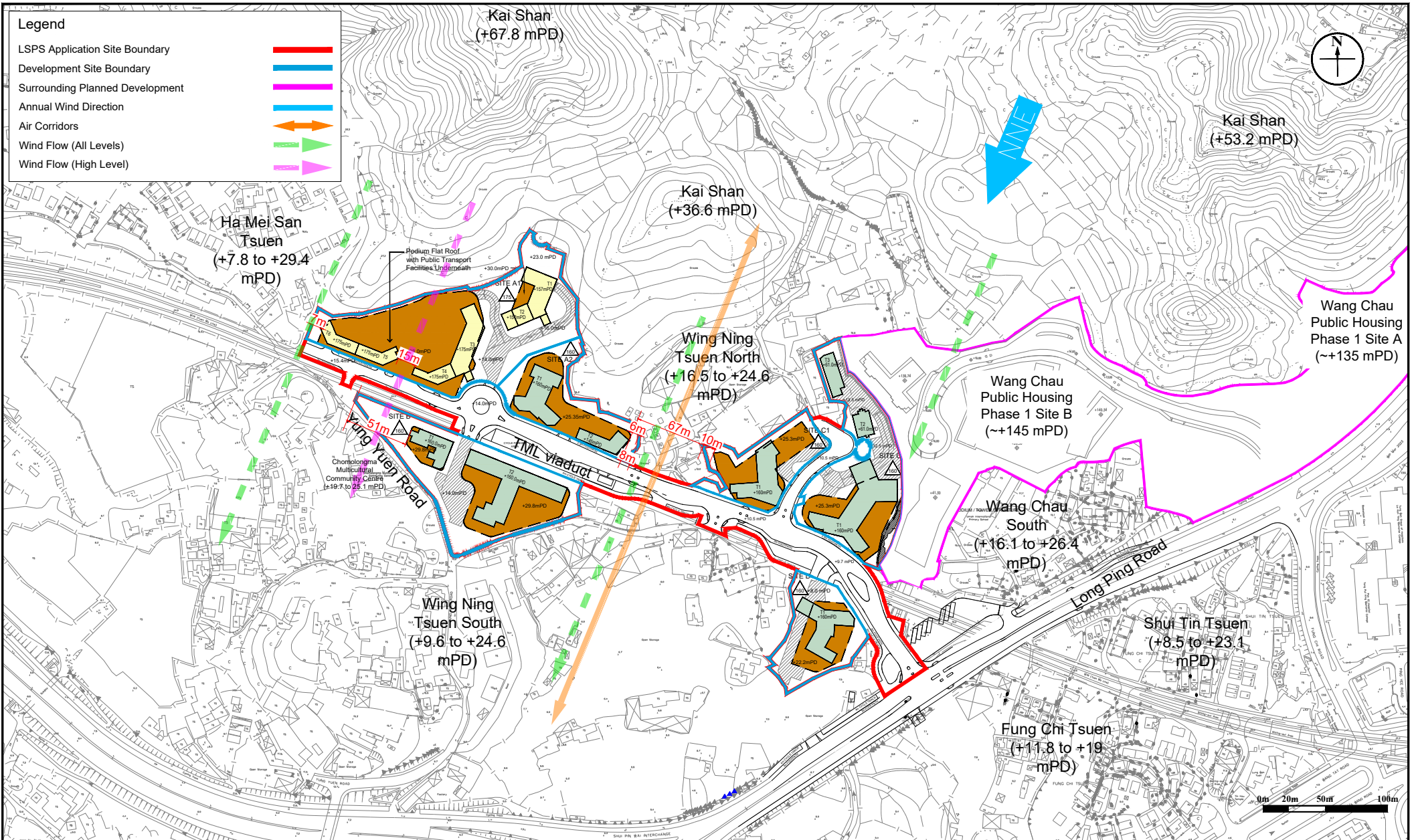


Figure: 3.4a

Title: Illustration of Annual Wind Flow (NNE) under the Proposed Scheme

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

RAMBOLL

Drawn by: SC

Checked by: KY

Rev.: 10.0

Date: Aug 2025

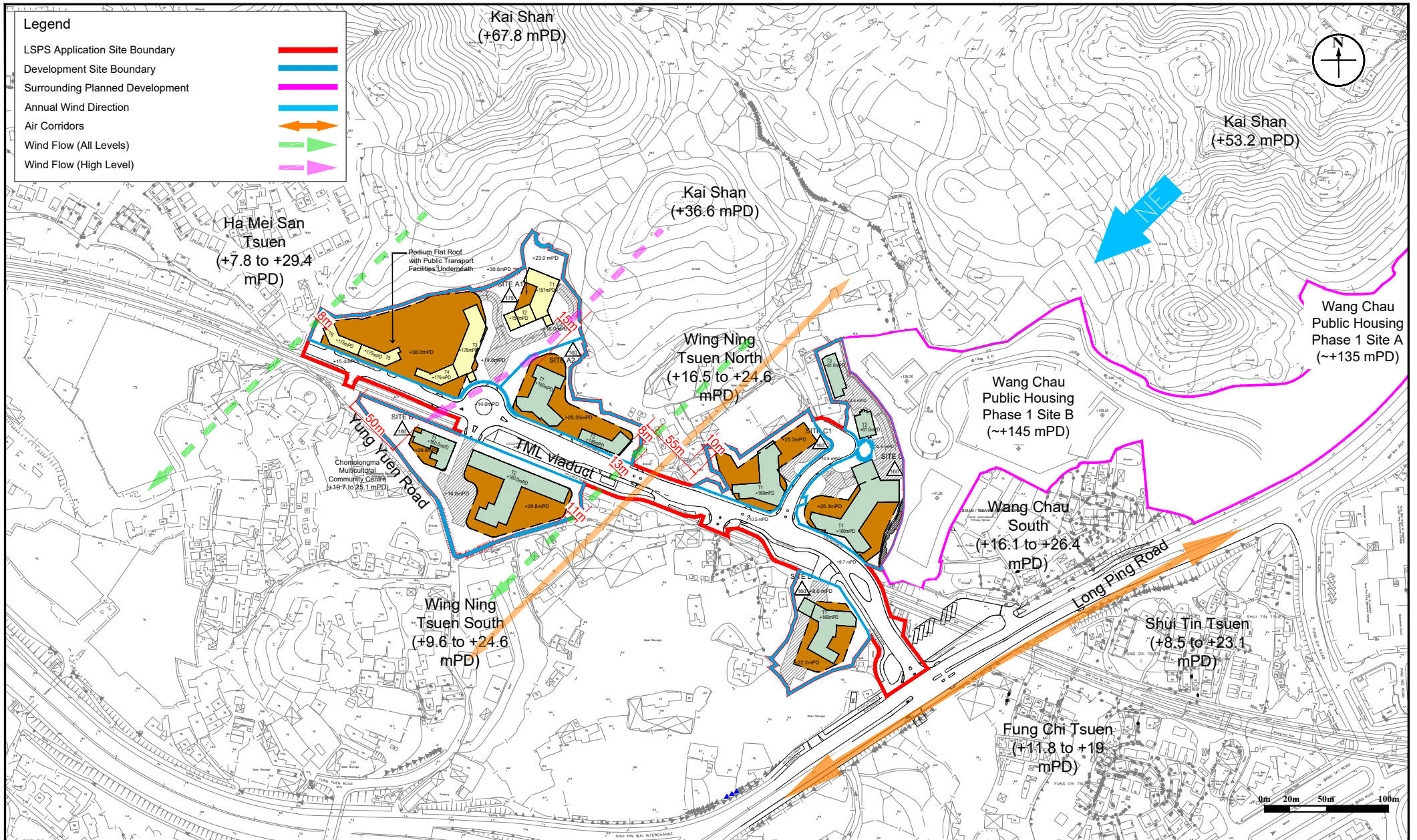


Figure: 3.4b

Title: Illustration of Annual Wind Flow (NE) under the Proposed Scheme

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

RAMBOLL

Drawn by: SC

Checked by: KY

Rev.: 10.0

Date: Aug 2025

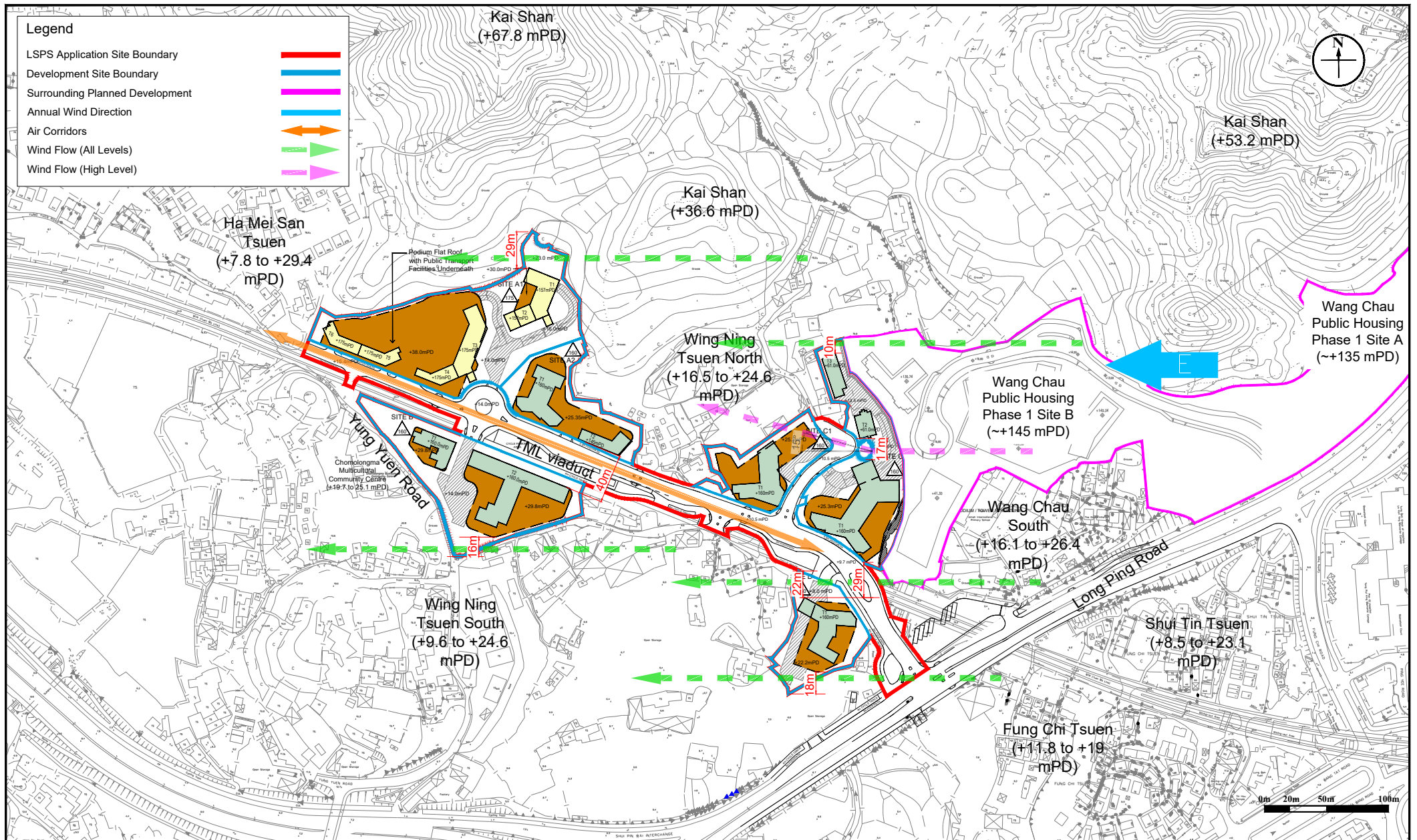


Figure: 3.4c

Title: Illustration of Annual Wind Flow (E) under the Proposed Scheme

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

RAMBOLL

Drawn by: SC

Checked by: KY

Rev.: 10.0

Date: Aug 2025

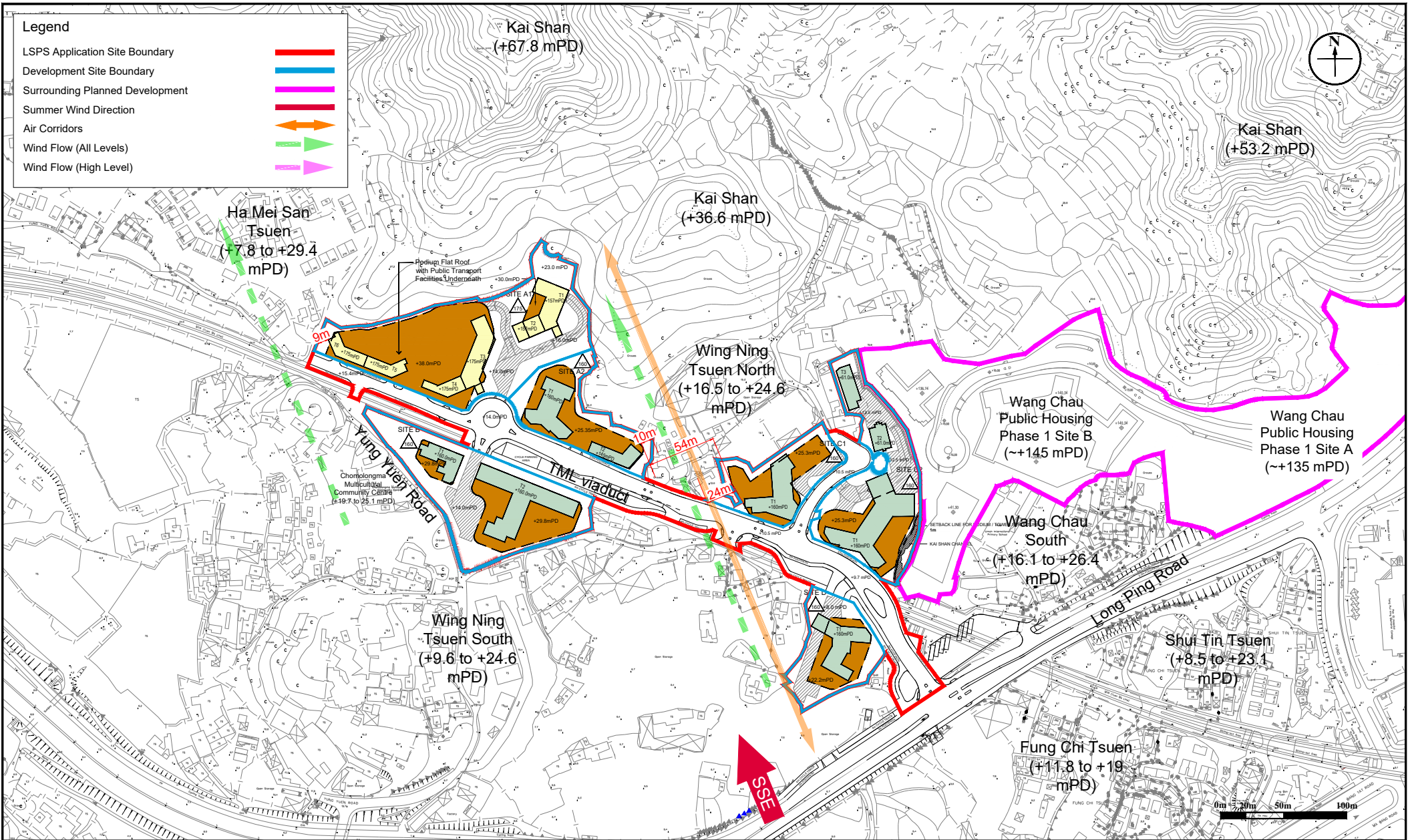


Figure: 3.5a

Title: Illustration of Summer Wind Flow (SSE) under the Proposed Scheme

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

RAMBOLL

Drawn by: SC

Checked by: KY

Rev.: 10.0

Date: Aug 2025

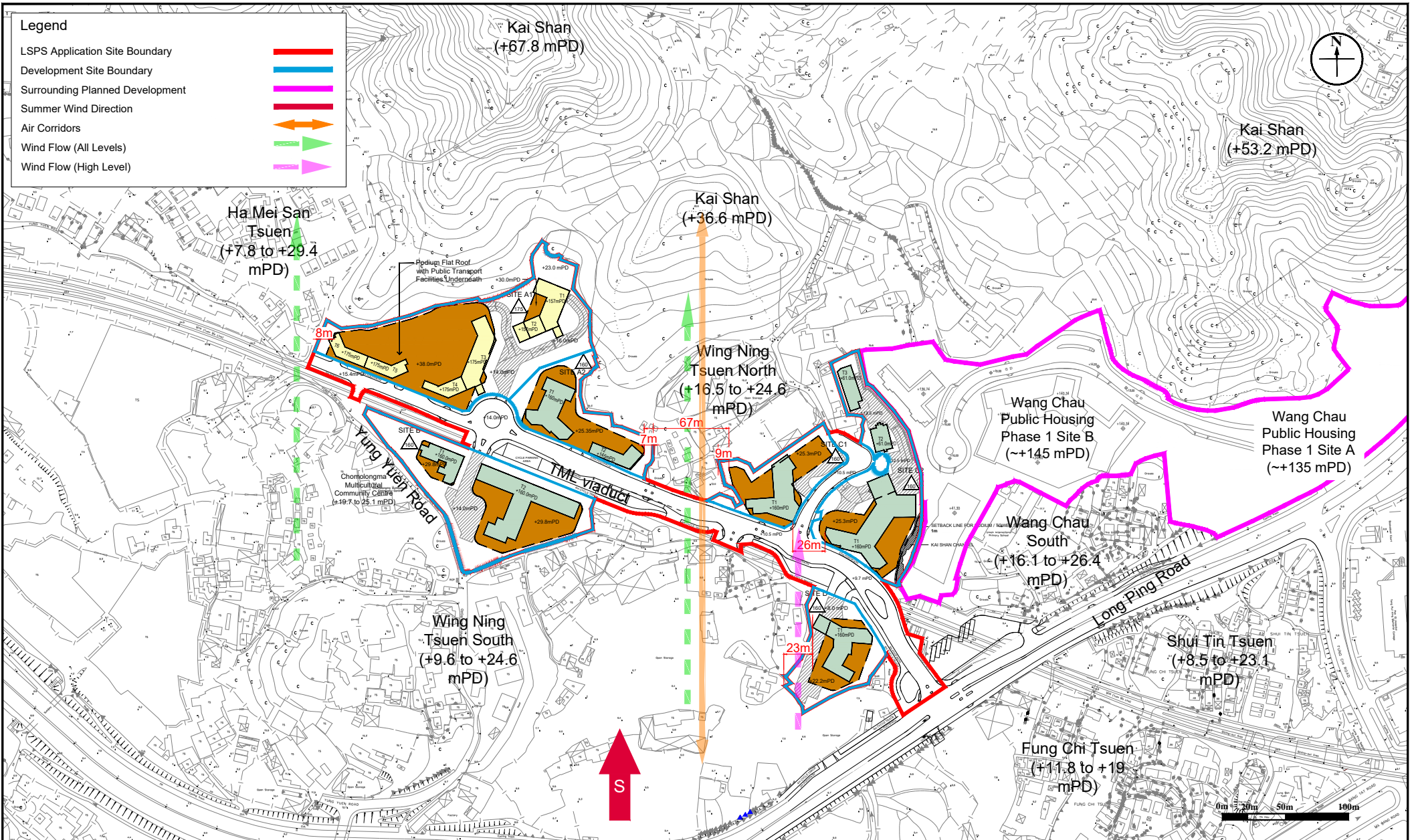


Figure: 3.5b

Title: Illustration of Summer Wind Flow (S) under the Proposed Scheme

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

RAMBOLL

Drawn by: SC

Checked by: KY

Rev.: 10.0

Date: Aug 2025

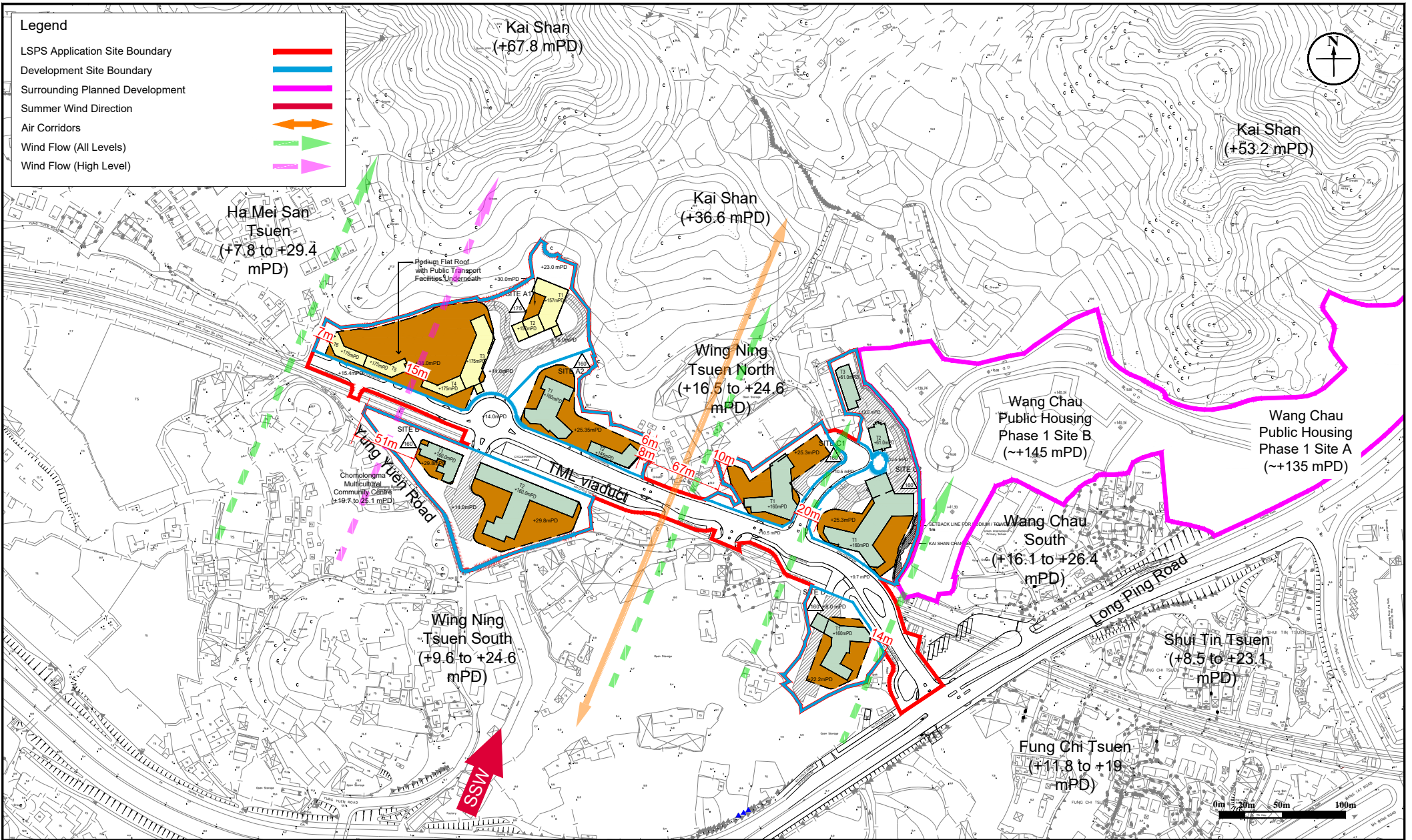


Figure: 3.5c

Title: Illustration of Summer Wind Flow (SSW) under the Proposed Scheme

Project: Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D. 122 and Adjoining Government Land, Yuen Long, New Territories (Land Sharing Pilot Scheme (Application No.: LSPS / 005))

RAMBOLL

Drawn by: SC

Checked by: KY

Rev.: 10.0

Date: Aug 2025

Appendix 1

Layout Plan of the Proposed Scheme



Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D.122 and Adjoining Government Land, Wing Ning Tsuen, Yuen Long, N.T. - Land Sharing Pilot Scheme

Preliminary Blocking Layout



JUN 2025
1:1500 (A3)



- Legend:**
- Development Site Boundary
 - West Rail Vested Land Boundary
 - Private Housing
 - Public Housing/Starter Homes
 - Podium / Car Park
 - Internal Road / EVA
 - Landscape Area
 - Open-cut Slope/ Retaining Structure
 - ▲ Vehicular Access
 - ▲ Pedestrian Access
 - ▲ Ingress & Egress of Public Transport Facilities (Bus Terminus, GMB Terminus & Taxi Stand)
 - XXX Proposed Building Max. Height Restriction under OZP
 - Burial Ground / Existing Grave
 - Pai Lau
 - Pak Kung Shrine

Ingress & Egress of Public Transport Facilities (Bus Terminus, GMB Terminus, Taxi Stand)

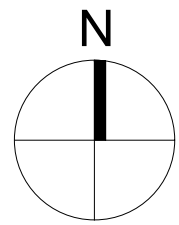


Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D.122 and Adjoining Government Land, Wing Ning Tsuen, Yuen Long, N.T. - Land Sharing Pilot Scheme

GROUND FLOOR PLAN

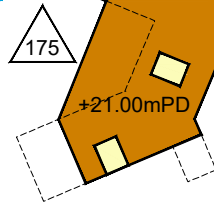
LWK
+PARTNERS

JUN 2025
1:1500 (A3)

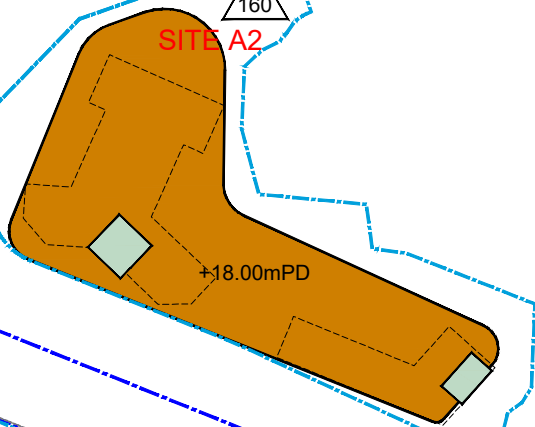


High level of Public Transport Facilities

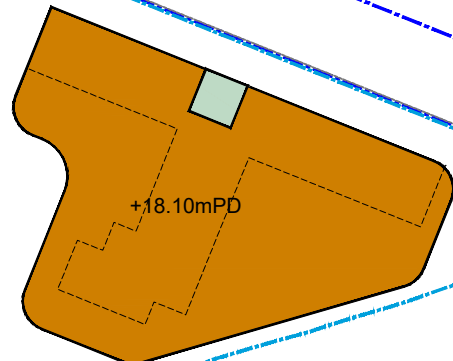
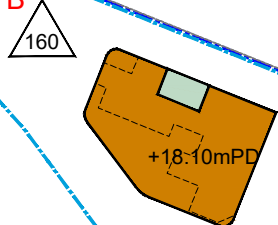
SITE A1



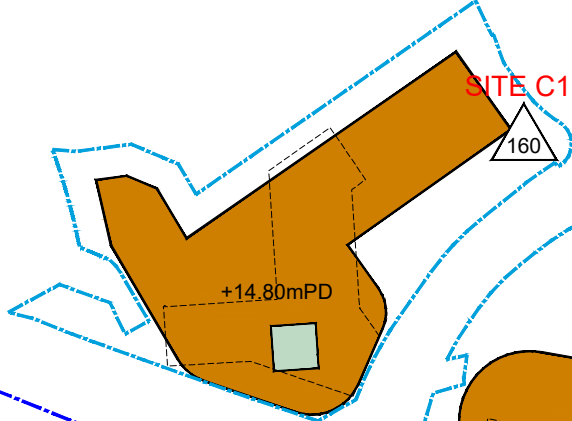
SITE A2



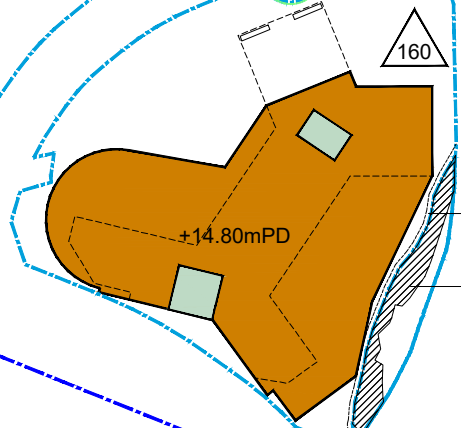
SITE B



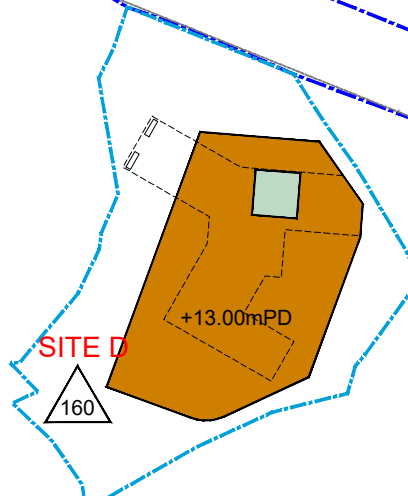
SITE C1



SITE C2



SITE D



Legend:

- Development Site Boundary
- West Rail Vested Land Boundary
- Private Housing
- Public Housing/Starter Homes
- Podium / Car Park

SETBACK LINE FOR PODIUM / TOWER STRUCTURE: 1m

KAI SHAN CHANNEL

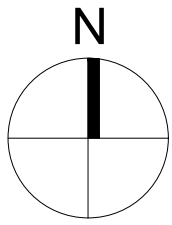
0m 25m 50m 100m 200m

Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D.122 and Adjoining Government Land, Wing Ning Tsuen, Yuen Long, N.T. - Land Sharing Pilot Scheme

FIRST FLOOR PLAN

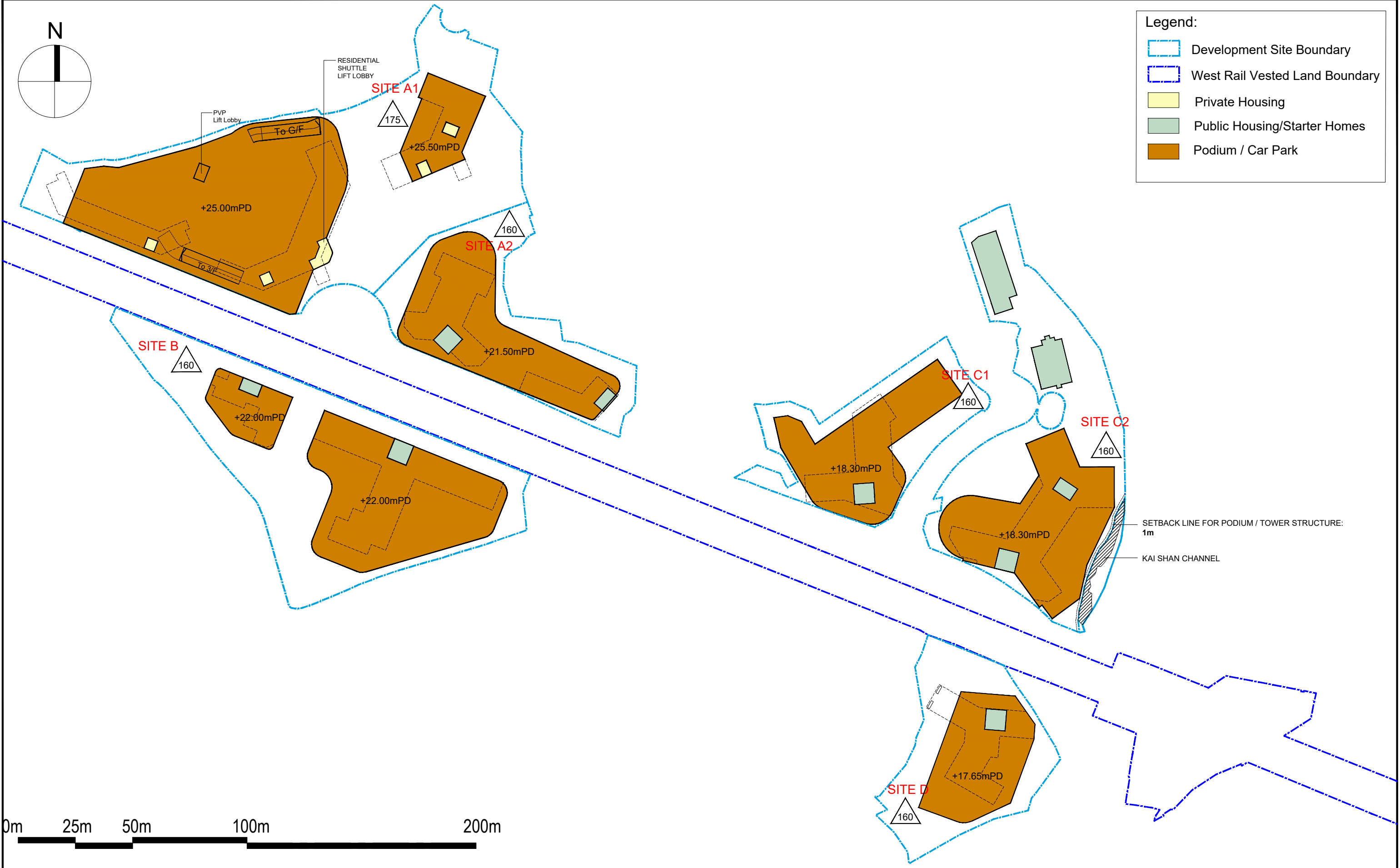


JUN 2025
1:1500 (A3)



Legend:

- Development Site Boundary
- West Rail Vested Land Boundary
- Private Housing
- Public Housing/Starter Homes
- Podium / Car Park

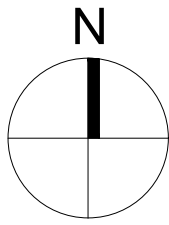


Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D.122 and Adjoining Government Land, Wing Ning Tsuen, Yuen Long, N.T. - Land Sharing Pilot Scheme

SECOND FLOOR PLAN

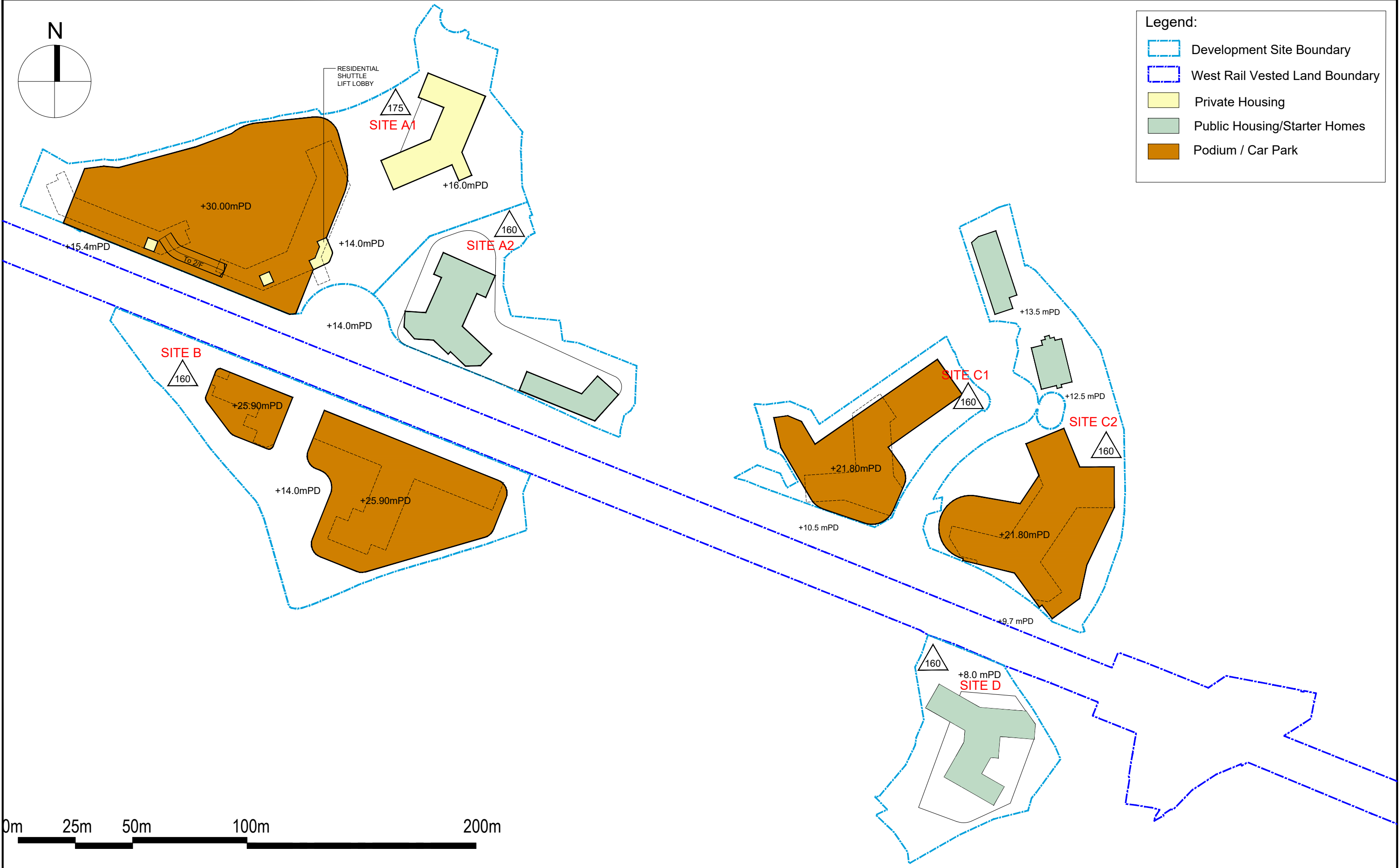


JUN 2025
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Legend:

- Development Site Boundary
- West Rail Vested Land Boundary
- Private Housing
- Public Housing/Starter Homes
- Podium / Car Park

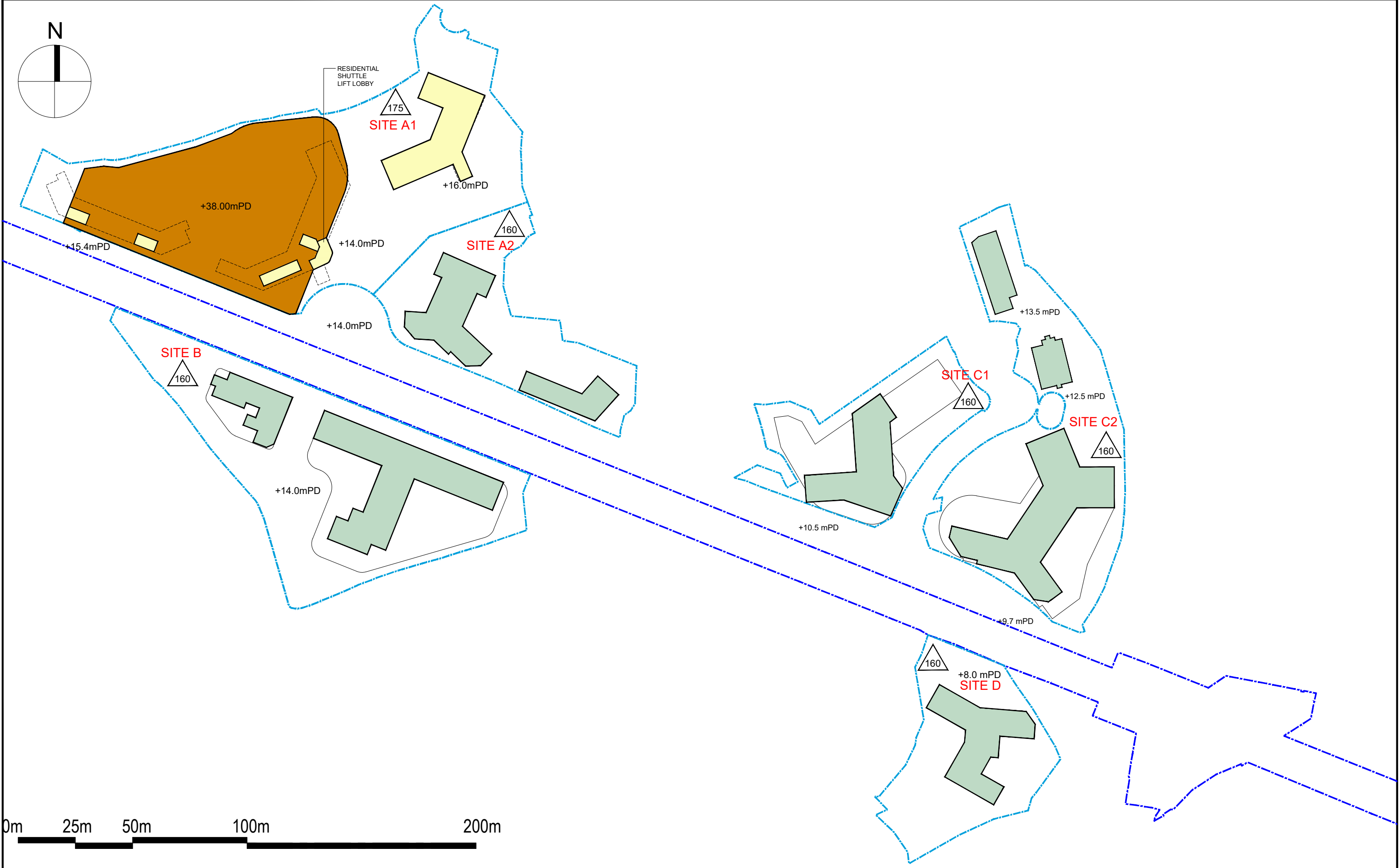
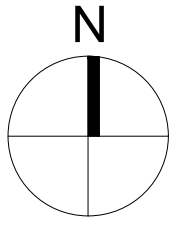


Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D.122 and Adjoining Government Land, Wing Ning Tsuen, Yuen Long, N.T. - Land Sharing Pilot Scheme

THIRD FLOORPLAN



JUN 2025
1:1500 (A3)

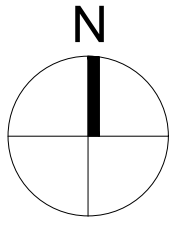


Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D.122 and Adjoining Government Land, Wing Ning Tsuen, Yuen Long, N.T. - Land Sharing Pilot Scheme

FOURTH FLOOR PLAN

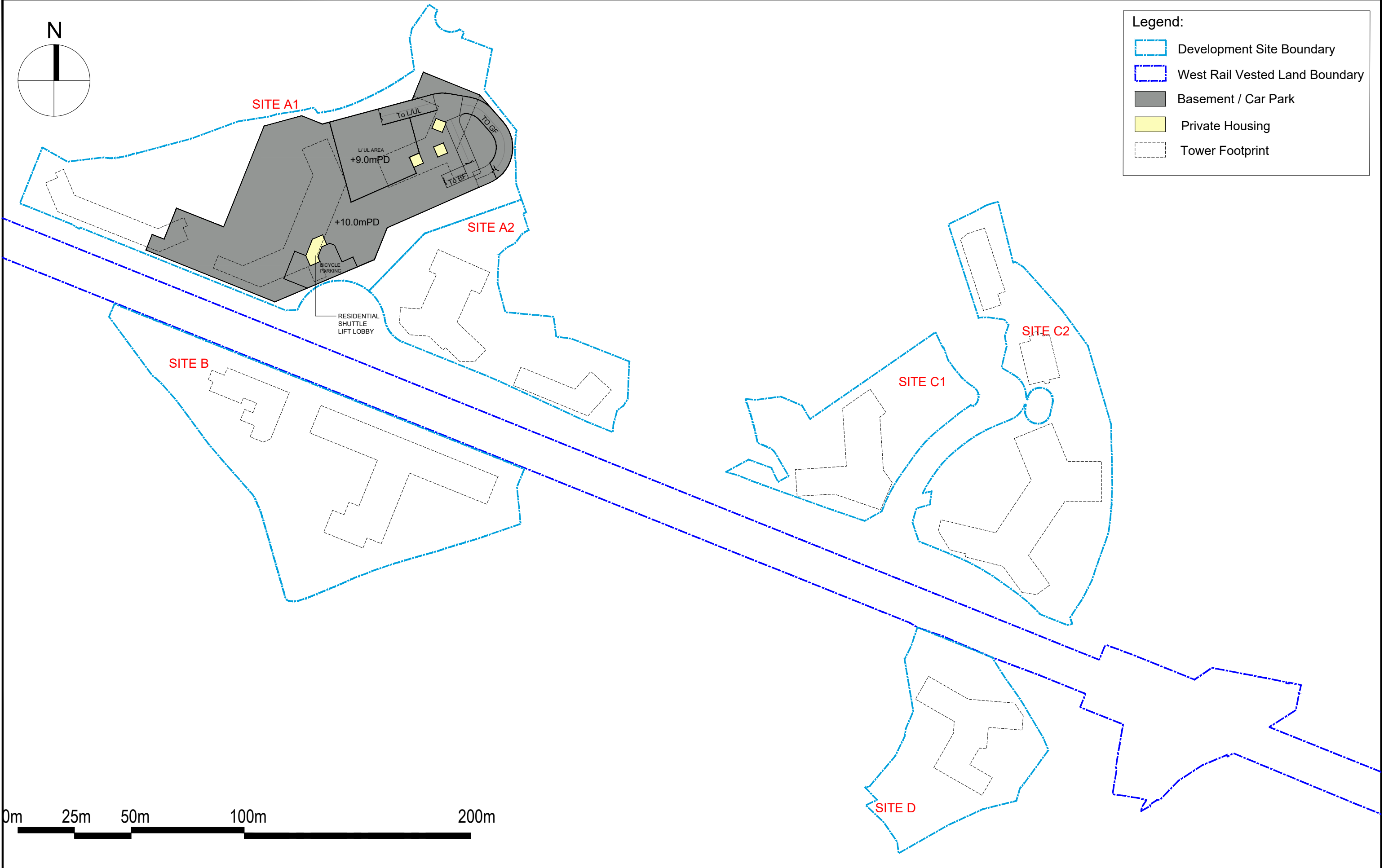


JUN 2025
1:1500 (A3)



Legend:

- Development Site Boundary
- West Rail Vested Land Boundary
- Basement / Car Park
- Private Housing
- Tower Footprint



Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D.122 and Adjoining Government Land, Wing Ning Tsuen, Yuen Long, N.T. - Land Sharing Pilot Scheme

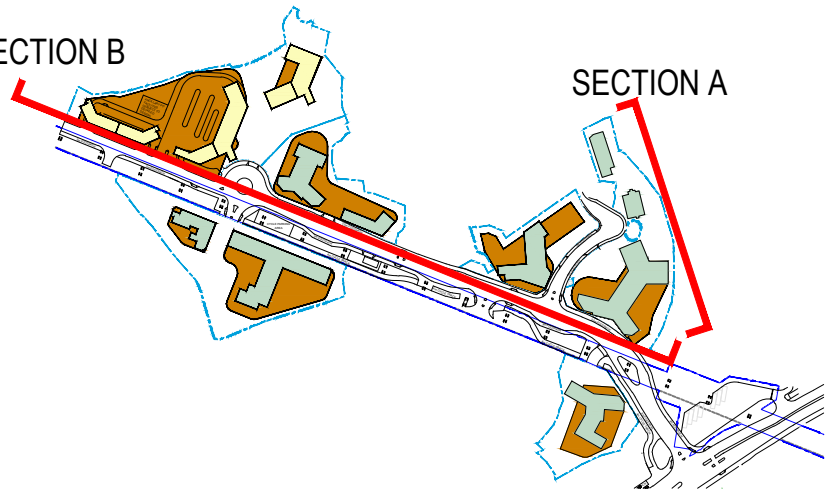
BASEMENT PLAN B1/F



JUN 2025
1:1500 (A3)

SECTION B

SECTION A



SITE C2
PUBLIC HOUSING/
STARTER HOME



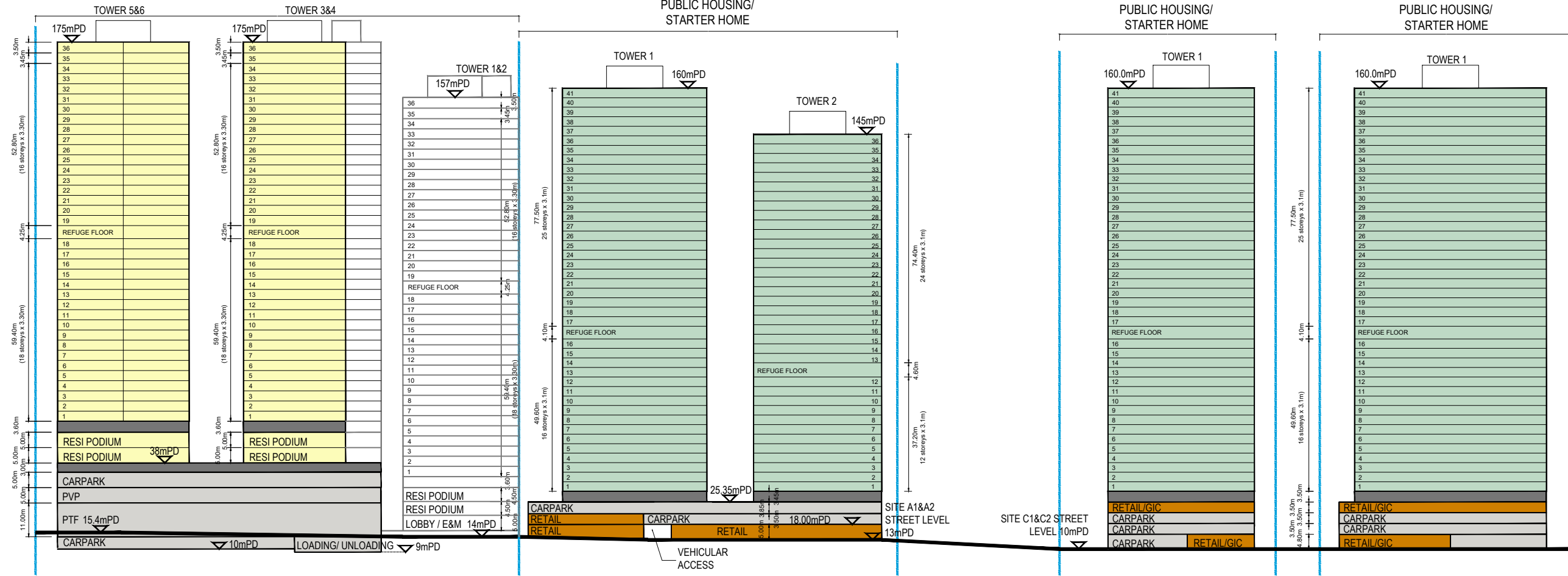
SECTION A

SITE A1
PRIVATE HOUSING

SITE A2
PUBLIC HOUSING/
STARTER HOME

SITE C1
PUBLIC HOUSING/
STARTER HOME

SITE C2
PUBLIC HOUSING/
STARTER HOME



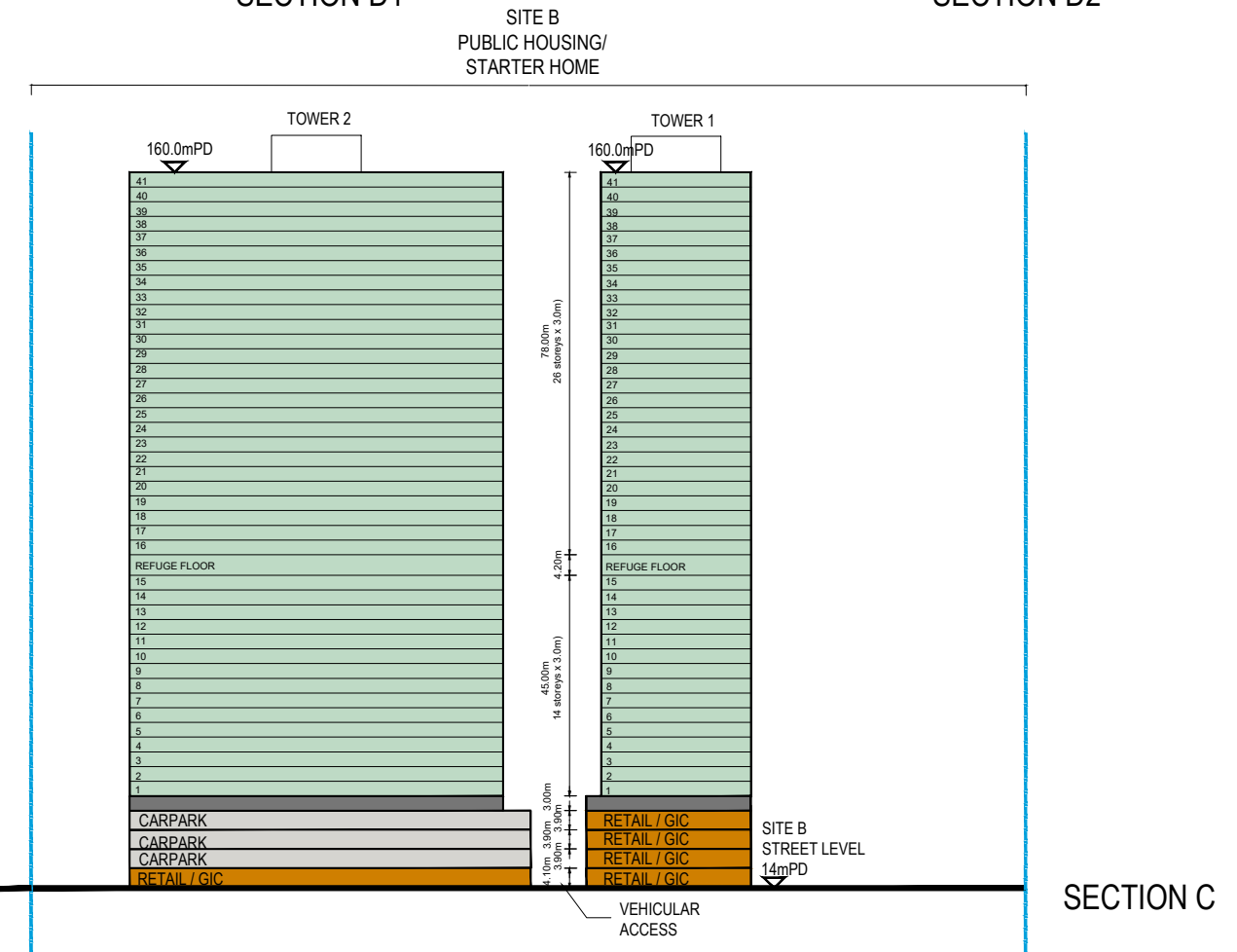
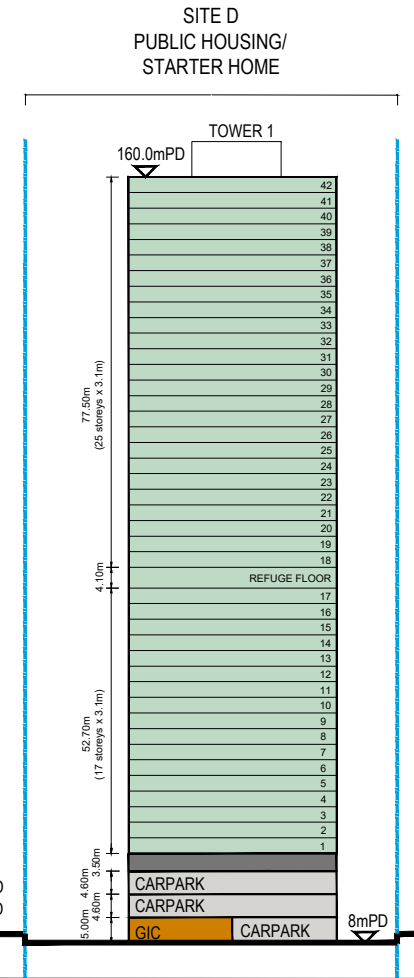
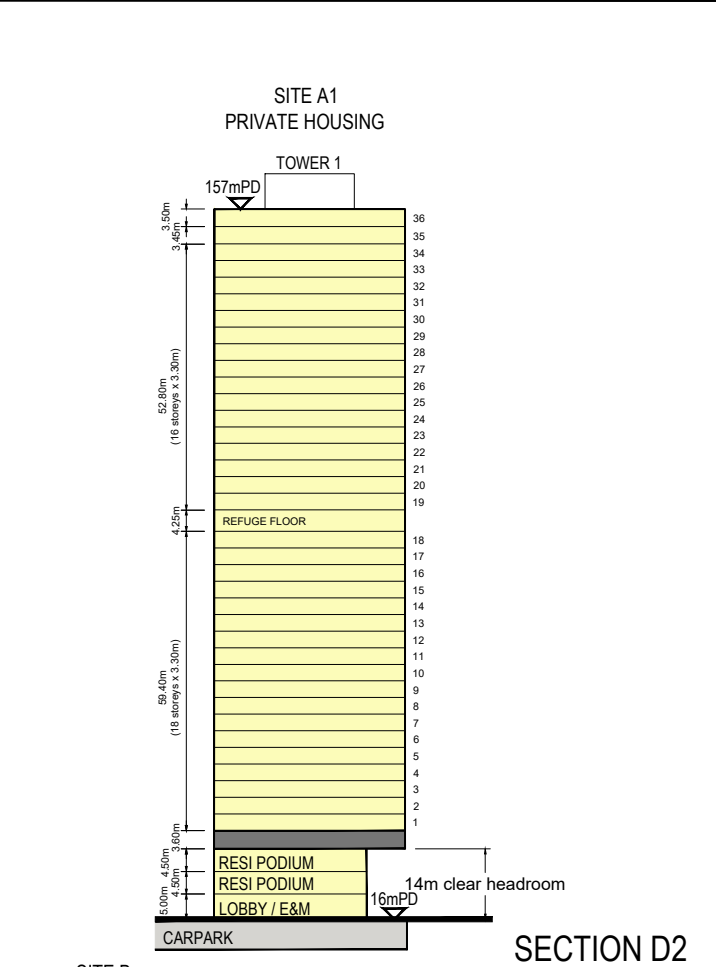
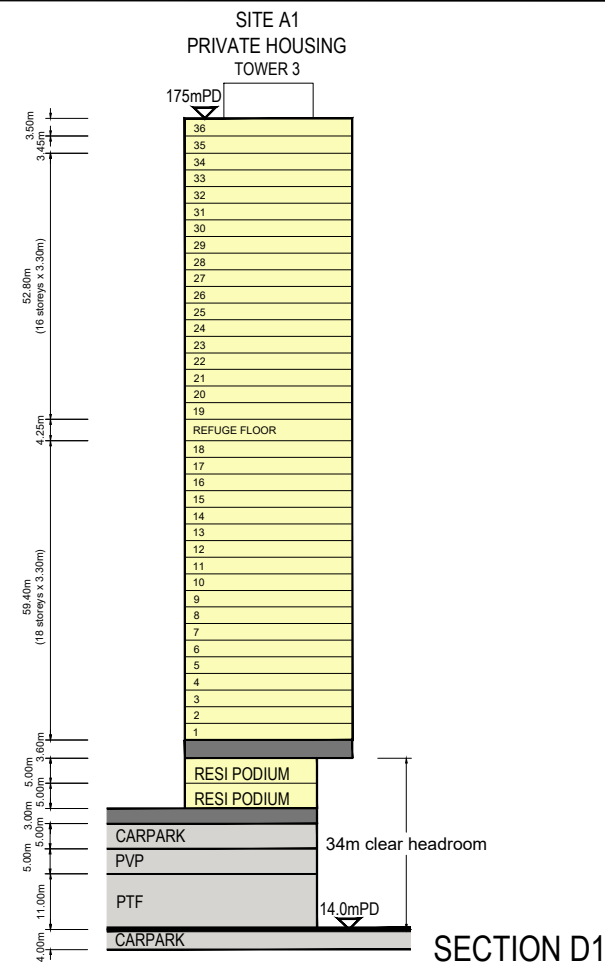
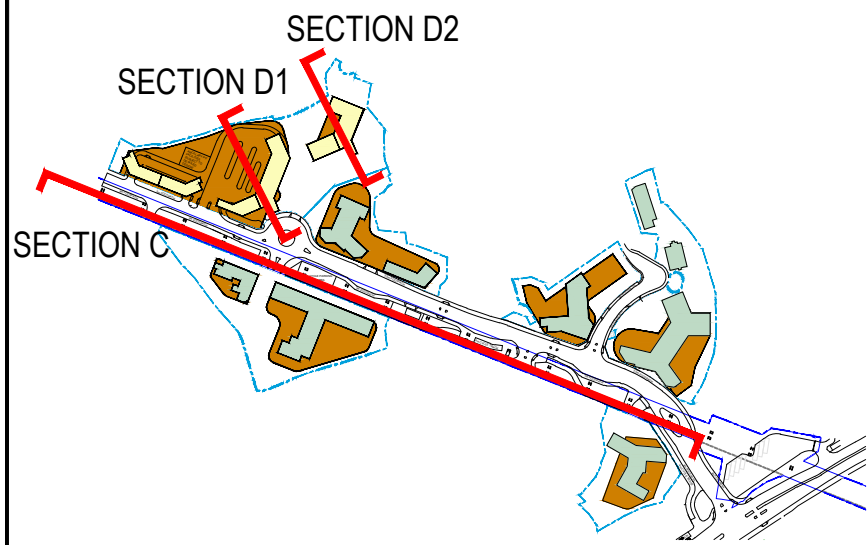
SECTION B

Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D.122 and Adjoining Government Land, Wing Ning Tsuen, Yuen Long, N.T. - Land Sharing Pilot Scheme

SCHEMATIC SECTION



JUN 2025
1:1500 (A3)



Proposed Public Housing / Starter Homes Development and Private Residential Development with Government, Institution or Community Facilities at Various Lots in D.D.122 and Adjoining Government Land, Wing Ning Tsuen, Yuen Long, N.T. - Land Sharing Pilot Scheme

SCHEMATIC SECTION

