

Prepared for

Kam Luk Investment Company Limited

Prepared by

Ramboll Hong Kong Limited

**PROPOSED PUBLIC RESIDENTIAL HOUSING / STARTER
HOMES DEVELOPMENT AT UDWYT LOT 14RP AND
ADJOINING GOVERNMENT LAND (SITE A) & PROPOSED
PRIVATE RESIDENTIAL DEVELOPMENT AT UDWYT LOT 11
RP AND ADJOINING GOVERNMENT LAND (SITE B), WONG
YUE TAN, TAI PO**

AIR VENTILATION ASSESSMENT (EXPERT EVALUATION)

Date **February 2025**

Prepared by **Mike Kwan**
Assistant Environmental Consultant



Signed _____

Approved by **Calvin Chiu**
Senior Manager



Signed _____

Project Reference **NFDUDWYTEI00**

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Ramboll Hong Kong Limited

21/F, BEA Harbour View Centre
56 Gloucester Road, Wan Chai, Hong Kong

Tel: (852) 3465 2888
Fax: (852) 3465 2899
Email: hkinfo@ramboll.com

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1. INTRODUCTION

1.1 Background

- 1.1.1 Referring to the Lands Sharing Pilot Scheme ("LSPS") application at Lo Fai Road/ Ting Kok Road with application no. LSPS/001 on 19 July 2021, the applicant has revised the submission.
- 1.1.2 The application involves two private lots, namely Lot 14 RP and Lot 11 RP in Unsurveyed District at Wong Yue Tan ("UDWYT") and adjoining Government Lands ("GL"). Lot 14RP and adjoining Government Land (Site A) would be designated for public housing / Starter Homes Housing development, whereas Lot 11 RP and adjoining Government Land (Site B) would be designated for proposed private residential development.
- 1.1.3 Ramboll Hong Kong Limited has been commissioned by the applicant to prepare this Air Ventilation Assessment (Expert Evaluation) (AVA-EE) report for the Proposed Development (proposed public housing / Starter Homes Housing development and proposed private residential development) at Site A and Site B.
- 1.1.4 Architectural drawings and other technical information on the Proposed Development are provided by the Project Architect (DLN).

1.2 Objective

- 1.2.1 This AVA-EE report has been prepared to evaluate if the proposed development would have any impact on the overall air ventilation performance of the assessment area by comparing the Proposed Development with prevailing condition.

1.3 Site A and Site B and its Environs

- 1.3.1 The existing use of Site A and Site B is vacant and covered with dense vegetation.
- 1.3.2 Site A and Site B are located at Ting Kok Road in Tai Po with residential developments and Tai Po Industrial Estate nearby. The area on opposite side of Ting Kok Road to the south is the restored Shuen Wan Landfill for which afteruse consists of a golf driving range.
- 1.3.3 Site A is bounded by Ting Kok Road to the south, and Lo Fai Road to the west. The area to the north to east is vegetated slope area zoned Green Belt. In addition to the restored landfill (50m apart), other uses nearby within 300m from nearest site boundary include Casa Marina I (60m apart), Richwood Park (190m apart) and Forest Hill (220m apart) north of Ting Kok Road; Tai Po East Fire Station (140m apart), DSD Ting Kok Road Pumping Station No. 5 (155m apart), Kee Wah (180m apart), Meyer (200m apart) and Transtech (250m apart) south of Ting Kok Road.
- 1.3.4 Site B is bounded by Ting Kok Road to the south. The area to the south to east is vegetated slope area zoned Green Belt. In addition to the restored landfill (75m apart), other uses nearby within 300m from nearest site boundary include Fortune Garden (40m apart) to the south and Tycoon Place (100m apart) to the north.
- 1.3.5 Site A and Site B are separated by over 500m apart. The location and its environs are shown in **Figure 1**.

1.4 Baseline Scheme

- 1.4.1 The Baseline Scheme refers to the existing site condition. Site A and Site B are greenfield in nature without permanent building structure.

1.5 Proposed Scheme

- 1.5.1 Site A will consist of public residential housing / SH housing with 5 residential towers where T1 to T4 are elevated at 83mPD, T5 elevated at 80mPD. A 3-storey aboveground carpark is also provided in Site A to meet car parking requirement. While Site B will have 1 private residential tower that is elevated at 78.2mPD. In addition, GIC uses such as residential care home for elderly (RCHE) and retail facilities will be included in Site A as well.
- 1.5.2 The proposed development with a site area of over 2 hectares, and overall PR of below 5 as well as a total GFA not exceeding 100,000m² has not fallen under the criteria set out in the Joint HPLB and ETWB Technical Circular on AVA No. 1/06.
- 1.5.3 Block layout of the Proposed Development is shown in **Figure 5** to **Figure 8**.

2. SITE WIND AVAILABILITY DATA

2.1 Site Wind Availability Data From RAMS

- 2.1.1 According to the Planning Department's website, a meso-scale Regional Atmospheric Modeling 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 The RAMS data of the grid (X: 084, Y: 074 representing Lot 14 RP; X: 085, Y: 074 and X: 085, Y: 073 representing Lot 11 RP) 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, the 200m site wind availability data represents wind data that takes into account the topographical effect around Site A and Site B. Therefore, 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 Site A and Site B and considers the influence on the prevailing winds by the surrounding topography.
- 2.1.4 According to the wind roses at 200 m altitude, three annual and three summer prevailing wind directions for Site A are respectively E, ESE & ENE wind; and E, SSE & SE wind. Three annual and four summer prevailing wind directions for Site B are respectively E, ENE & ESE wind; and E, SSE, SE & SSW wind. **Figure 2a** and **Figure 2b** show the relevant wind roses diagrams representing the frequency and wind speed distribution at 200m height in annual and summer conditions for Site A and Site B respectively. The wind frequency data is provided in **Table 2.1** and **Table 2.2** below.

Table 2.1 Summary of RAMS Data and Wind Direction at 200m for Site A

Site A		
Wind Direction	Probability for Annual Condition (%)	Probability for Summer Condition (%)
N	3.1%	0.9%
NNE	4.4%	1.0%
NE	5.9%	1.5%
ENE	10.8%	3.8%
E	30.1%	14.8%
ESE	11.8%	9.9%
SE	7.6%	11.4%
SSE	5.5%	11.6%
S	3.7%	8.0%
SSW	4.2%	10.6%
SW	3.0%	8.2%
WSW	2.2%	5.9%
W	2.8%	5.7%
WNW	1.9%	3.5%
NW	1.3%	1.5%
NNW	1.7%	0.8%

Table 2.2 Summary of RAMS Data and Wind Direction at 200m for Site B

Site B				
Wind Direction	X: 085 Y:074		X: 085 Y:073	
	Probability for Annual Condition (%)	Probability for Summer Condition (%)	Probability for Annual Condition (%)	Probability for Summer Condition (%)
N	2.9%	0.9%	2.8%	0.9%
NNE	4.7%	1.1%	4.6%	1.2%
NE	6.6%	1.6%	7.0%	1.5%
ENE	11.7%	4.1%	12.4%	4.3%
E	29.6%	14.8%	28.6%	14.7%
ESE	10.7%	9.4%	9.7%	8.1%
SE	6.9%	10.5%	6.8%	10.3%
SSE	5.7%	11.8%	5.6%	11.8%
S	3.8%	8.2%	4.0%	8.4%
SSW	4.2%	10.3%	4.3%	10.4%
SW	3.3%	9.0%	3.7%	9.8%
WSW	2.2%	5.6%	2.0%	5.2%
W	2.9%	6.8%	3.0%	6.9%
WNW	1.9%	3.5%	2.1%	3.9%
NW	1.4%	1.7%	1.6%	1.8%
NNW	1.5%	0.8%	1.7%	0.9%

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

2.2 Wind Data from HKO Station

- 2.2.1 According to the wind data of Tai Po Kau Station which is nearest to the sites, the annual prevailing winds are mainly from northeast quadrant (generally E to NE) and summer (Jun- August) prevailing wind are generally from W, NE and SW. **Figure 2c & 2d** show the wind roses for Tai Po Station. However, as Tai Po Station is elevated lower (6m above mean sea level) and over 2km apart, the wind data is less representative of the likely situation of the Site. Therefore, this study mainly refers to the RAMS data.

2.3 Topography

- 2.3.1 Site A and Site B are located in Tai Po area. Regarding the surrounding, the southern side is closet shore and topographically flat while hills are found on the north to northwest side so that the topography is sloping upward on these directions. Apparently, topography would not hinder annual and summer prevailing wind flow (from ENE to SSW) to the sites.

2.4 Building Morphology

- 2.4.1 Built areas in the surrounding include Tai Po Industrial Estate (not more than 20m above ground for building nearer to the sites) on southwest side of Site A and southwest to west side of Site B, and scattered low-rise residential developments (e.g. Casa Marina, Villa Lucca on north side; Fortune Garden on south side). It is confirmed that there are no major noise barriers, elevated structures, planned and committed developments identified within the surrounding area other than the existing building context.

- 2.4.2 Under the existing wind condition, the surrounding areas are low-rise buildings generally. Potential building blockage effect due to the surrounding existing are considered low.

2.5 Summary of Existing Site Wind Availability

- 2.5.1 According to the wind availability data, it is considered that the annual prevailing winds come from E, ESE & ENE directions and summer prevailing wind from E, SSE & SE directions for Site A. For Site B, the annual prevailing winds come from E, ENE & ESE directions and summer prevailing wind from E, SSE, SE & SSW directions.
- 2.5.2 From **Table 2.1** above, the wind probability from the E direction is around 30% and is considered to be the most dominant annual wind direction for the area. The ENE and ESE (10%~12%) wind are also dominant annual prevailing wind directions.
- 2.5.3 It is anticipated that the surrounding traffic network and open areas would be the main air corridors under the annual condition, especially Ting Kok Road aligned with most prevailing wind direction. As the building density of the surrounding is low, there are ample open areas for wind penetration as well.
- 2.5.4 During summer condition, prevailing winds from E, SSE, SE & SSW are the dominant wind directions. Similar to annual wind conditions, it is anticipated that the surrounding traffic network (Ting Kok Road and Lo Fai Road under E and SSW wind directions) and open areas.
- 2.5.5 **Figure 3** and **Figure 4** show the annual and summer prevailing wind directions under the Baseline Scheme.

3. EXPERT EVALUATION OF AIR VENTILATION OF THE PROPOSED DEVELOPMENT

3.1 Important Areas

3.1.1 Important surrounding areas that the public would often access have been identified as the following:

- Roads surrounding the sites (Ting Kok Road and Lo Fai Road); and
- Nearby residential developments.

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

3.2.1 Under the Proposed Scheme, various good design feature beneficial to air ventilation such as separation of building from site boundary, optimal building disposition and building separation advantageous to prevailing wind penetration are incorporated.

Site A

- There is building tower setback of not less than 5m from ALL site boundaries to minimise obstruction to wind flow along Ting Kok Road, Lo Fai Road and north/east site boundary.
- Vacant area comprising proposed cut slopes at the northern portion (north of T2 and T3) and open area at southwestern corner (near T5) of the Subject Site to allow effective prevailing wind penetration.
- A 15m gap is provided between T3 & T4 oriented to east to southeast direction and allow annual and summer prevailing E, ESE and SE wind to penetrate through. Gap between T1 & T2 is to the west of the aforementioned gap with more than 15m width so that it can facilitate further penetration of E wind. It is noted that while building gaps are provided facing various different directions, the prevailing wind may not be able to penetrate through the development but would dissipate within the site. They can only benefit the circulation area with the Subject Site.
- Minimised podium bulk is incorporated so that less wind obstruction to the downwind area shall be expected.

Site B

- The northern portion of Site B contains slope area so that there is difficulty to deposit block on northern side. Effort has been made to provide about 3m building tower setback from southern site boundary and about 5m from the road kerb of Ting Kok Road to minimise obstruction of wind flow.
- Underground carpark is proposed with reduced building massing on the ground level to enable larger ground level wind penetration. Therefore, the prevailing wind would flow around the building tower at the ground level more easily.
- The proposed design is complied with Sustainable Building Design Guidelines for both Site A & Site B

3.2.2 Further discussion of the scheme based on the good design features above is included below. **Figure 5** to **Figure 8** highlight the design features of the proposed scheme.

Air corridors/ Air paths

- 3.2.3 **Figure 3** and **Figure 4** illustrate the prevailing wind from annual and summer wind directions for the Baseline Scheme. The prevailing wind from annual and summer wind directions are illustrated in **Figure 5** to **Figure 8** for the Proposed Scheme.
- 3.2.4 Major wind corridors nearby the sites is Ting Kok Road. With respect to this wind corridors, the Proposed Scheme is designed so that the buildings allow setback from boundary immediate to them. At Site A, for instance, there are building tower setback of T1/4/5 from southern boundary with at least 5m from the wind corridor, Ting Kok Road, which enable ventilation from the ESE prevailing wind (see Marker (2) in Figure 5c). Therefore, the impact due to the Proposed Scheme on air flow along wind corridors have been avoided/minimised.
- 3.2.5 Referring to Site A, the prevailing E to SE wind would flow through the building separation between T3 & T4 (about 15m) (see Marker (2) in Figure 5b and Marker (1) in Figure 7b). E wind would then facilitated towards the western site boundary by flow over the 3-storey carpark building and out of the building separation between T1 and T2 (about 15m) (see Marker (2) in Figure 5b). The prevailing SE and ESE wind after flowing through the building separation between T3 & T4 (about 15m) would dissipate after reaching T2 so that it can only benefit the circulation area within the Subject Site (see Mark (1) in Figure 7b and Marker (1) in Figure 5c). Referring to Site B, only one block is proposed and building separation is not applicable.

Building Disposition and Setback from Site Boundary

- 3.2.6 For Site A, there are building tower setback from east, south, and west of the site boundaries, and from southwest site corner. Building tower setbacks would facilitate all prevailing wind directions wind flow around the development.
- 3.2.7 For Site B, there is building tower setback from southern site boundary and can facilitate E wind flow around it. Potential blockage impact has been ameliorated.

Building Height

- 3.2.8 The proposed maximum building height at Site A is about 68.5m (+83mPD) and Site B is about 62.7m (+78.2mPD). The building height is higher than surrounding developments. It would likely cast larger wake area at immediate downwind area.
- 3.2.9 For Site A, building tower setback from east, south, and west site boundary can help to reduce impact under all prevailing wind.
- 3.2.10 For Site B, since only one block is proposed, wind flowing around the block on two sides can more easily spread to the immediate downwind area of the block so that the impact should be localised to nearer to the block. There is no important pedestrian area at immediate downwind location under all identified prevailing wind directions (generally densely vegetated so that the impact is not considered significant).
- 3.2.11 As building height of the proposed development is higher than the surrounding, building downwash effect would likely occur and some wind will be brought down from higher level and benefit nearby areas of the tower blocks.

3.3 Directional Analysis of the Proposed development

- 3.3.1 As discussed in Section 2.1 to 2.3, winds from E, ESE & ENE directions are prevailing annually for both Site A and Site B whereas winds from E, SSE & SE directions are dominant in summer for Site A and E, SSE, SE & SSW directions are dominant in summer for Site B. The baseline scheme refers to existing situation where no building is erected within the sites so that there is no wind diversion and any significant

increase/decrease of wind flow after passing through the sites. The following appraises the situation with respect to the proposed scheme.

ENE and E Winds

- 3.3.2 For Site A, some ENE and E wind can flow around and through the open area at the northern side of T2 & T3 (see Marker (1) in Figure 5a and Marker (1) in Figure 5b and Figure 7a). It is expected that the wake area along Lo Fai Road has been minimised. The building tower setback from the southeast corner would facilitate ENE wind flow towards the downwind area (e.g. Golf Park) (see Marker (2) in Figure 5a). Meanwhile, it would further widen the wind corridor at Ting Kok Road for E wind penetration towards the west of the surrounding area (see Marker (3) in Figure 5b and Figure 7a). With the provision of building separation between T3 & T4, E wind can penetrate through the building separation and improve wind ventilation within the Subject Site. E wind is then facilitated towards the western site boundary by flow over the 3-storey carpark building and out of the building separation between T1 and T2 (see Marker (2) in Figure 5b).
- 3.3.3 For Site B, the building tower setback from southern and northern site boundary allows ENE and E wind to reach and flow along Ting Kok Road easier and further flow towards the downwind area (e.g. Golf Park) (see Marker (1) & (2) in Figure 6a and Figure 6b). The single building block in the proposed development provide high permeability for the northern and eastern prevailing wind to circulate surrounding the building tower and reach the downwind side (e.g. Golf Park). Again, the wake area behind and along Ting Kok Road has been minimised.
- 3.3.4 Therefore, the unfavourable impact in terms of wind availability on the surrounding pedestrian areas is expected to be reduced.

ESE and SE Wind

- 3.3.5 For Site A, building tower setback from northern and southern site boundary allow ESE wind to reach and flow along Ting Kok Road easier (see Marker (2) & (3) in Figure 5c). The wake area behind and along Ting Kok Road and Lo Fai Road has been minimised. Besides, the building tower setback from southwest and northeast corner allows SE wind to reach and flow along Ting Kok Road, as well as to Lo Fai Road easier (see Marker (2) in Figure 7b). The wake area behind and along Lo Fai Road has been further minimised.
- 3.3.6 Moreover, SE and ESE wind can enter the site through the building separation between T3 and T4, they then hit the building frontage of T2 and downwash to provide wind ventilation within the Subject Site (see Marker (1) in Figure 7b and Figure 5c). Therefore, with the adequate building tower setback provided in the Proposed Development, the unfavourable impact in terms of wind availability on the surrounding pedestrian areas is expected to be reduced and offset in some degree.
- 3.3.7 For Site B, there is no important pedestrian area immediate downwind of the site. Nevertheless, the building tower setback from northern, southern, and eastern site boundary helps ESE and SE wind to flow along Ting Kok Road easier (see Marker (2) in Figure 6c). The development can also capture more wind to flow along Ting Kok Road (e.g. building downwash). Wind availability along Ting Kok Road should be benefited. Meanwhile, the single building design allows the SE prevailing wind to reach its downwind area easily (see Marker (1) & (2) in Figure 8b).

SSE and SSW Wind

- 3.3.8 For Site A, the building tower setback from southwest corner and northern site boundary allows more SSE wind to reach and flow along Lo Fai Road. The development can also capture more wind to flow along Ting Kok Road (e.g. building downwash). The

building tower setback from southwest corner and northern site boundary would be considered as the major merit to facilitate SSE wind flow to the surrounding area at Site A (see Marker (1) & (2) in Figure 7c).

- 3.3.9 For Site B, the development can capture more wind to flow along Ting Kok Road (e.g. building downwash). Wind availability along Ting Kok Road should be benefited. The SSE and SSW wind could flow along the building tower setback from northwest, southwest, and southeast corner towards the northern side of the surrounding area (see Marker (1) & (2) in Figure 8c and Figure 8d). The wind availability at the northern portion of the surrounding area shall not be reduced (e.g. Tycoon Place). As there is only one single block erected, the residential development downwind (over 100m apart) is not likely subject to significant wind blockage impact under both SSE and SSW prevailing wind.

3.4 Summary of Relative Air Ventilation Performance

- 3.4.1 The air ventilation performance of the Baseline Scheme and the Proposed Scheme has been appraised. Regarding the Proposed Scheme, the proposed building height (+83mPD for Site A and +78.2mPD for Site B) is relatively high in comparing with the other existing development in the surrounding. It is considered that it may alter wind flow and result in some wind blockage impact to its downwind area such as Golf Park and Tycoon Place under prevailing wind condition selected for this analysis, when compared to the Baseline Scheme. However, under southerly wind condition (SSE and SSW), the building frontage of the proposed development induced building downwash and provide wind availability on Ting Kok Road at the pedestrian level.
- 3.4.2 On the other hand, with optimal building disposition (building tower setback from site boundary and open area) and building separation proposed, the air ventilation performance could be enhanced and potential air ventilation impacts could be minimized. Therefore, the Proposed Scheme would unlikely impose significant impacts on the surrounding important pedestrian areas from air ventilation perspective.
- 3.4.3 Based on the directional analysis, it is expected that wind wake area could be induced by the proposed development. Moreover, the distance between Site A and B (about 450m) is sufficient for the impact of wake area to gradually dissipate over distance. There should have no cumulative wind impacts induced by both Site A and Site B to their downwind areas in considering the proposed building height and the distance between the two sites.

4. CONCLUSION

- 4.1.1 A qualitative assessment on the air ventilation performance of the Proposed Development has been carried out.
- 4.1.2 According to the findings of this AVA-EE, the annual prevailing winds come from E, ESE & ENE directions and summer prevailing wind from E, SSE & SE directions for Site A. For Site B, the annual prevailing winds come from E, ENE & ESE directions and summer prevailing wind from E, SSE, SE & SSW directions.
- 4.1.3 Good design features of the Proposed Development include building tower setback on various directions from the boundaries of Site A and Site B and open area will facilitate wind penetration while building separation with larger or equal to 15m in width at Site A oriented with different prevailing wind direction would improve wind ventilation within the Site.
- 4.1.4 After considering the potential air ventilation impacts of the sites, the layout of the Proposed Development has incorporated good design measures to enhance its air ventilation performance. The Proposed Scheme with the design measures incorporated is unlikely to impose significant impact on the surrounding sites from air ventilation perspective.

Figures

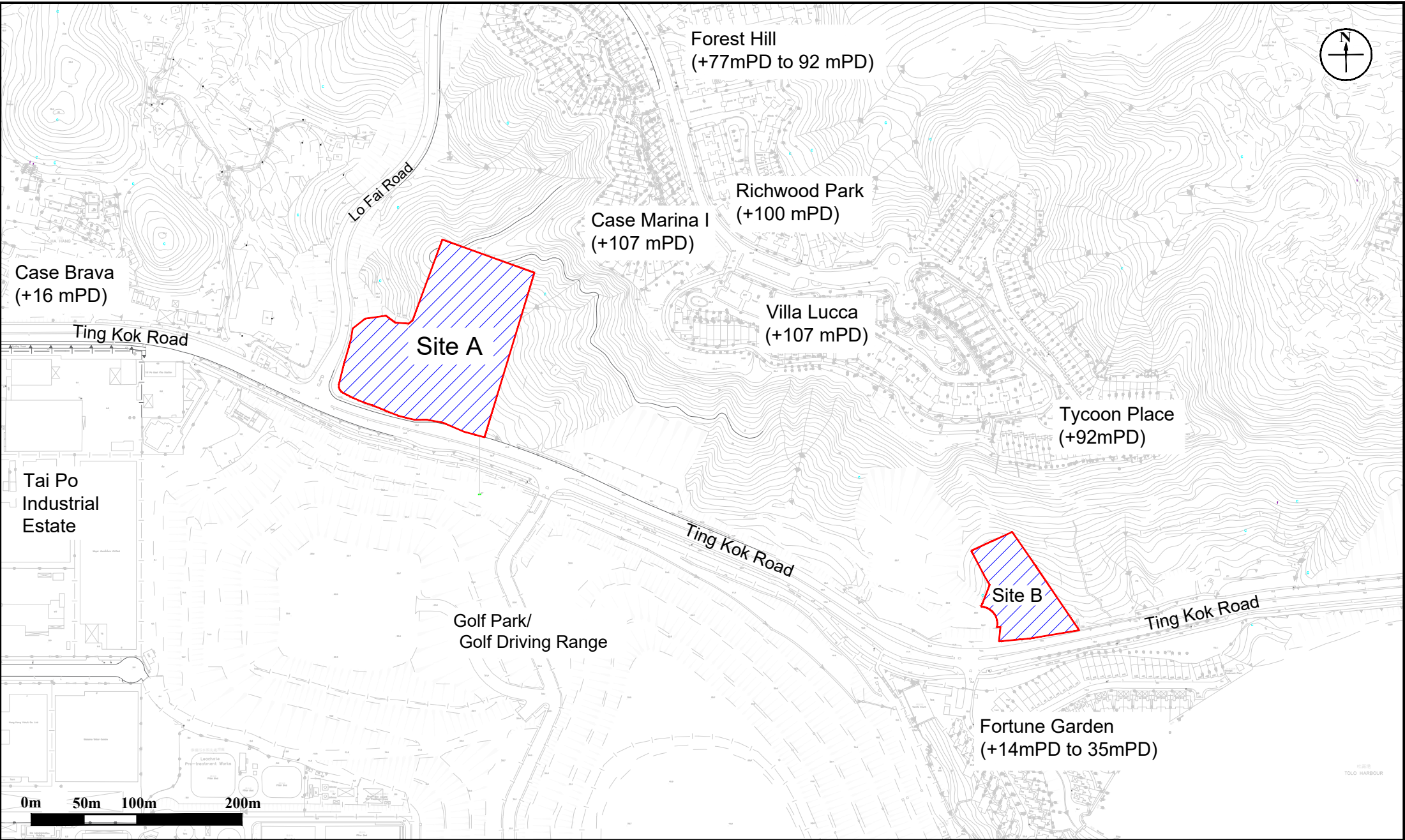


Figure: 1		RAMBOLL	
Title: Location of the Application Site and Its Environs		Drawn by: MK	
Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11RP (Site B), Wong Yue Tan, Tai Po		Checked by: CC	
		Rev.: 1.5	
		Date: Dec 2024	

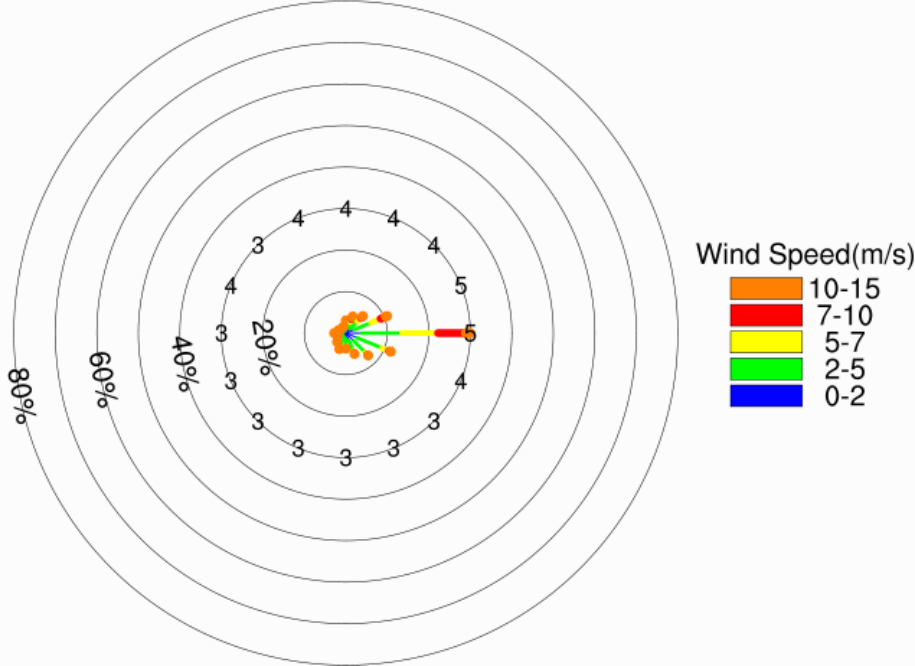
Site A

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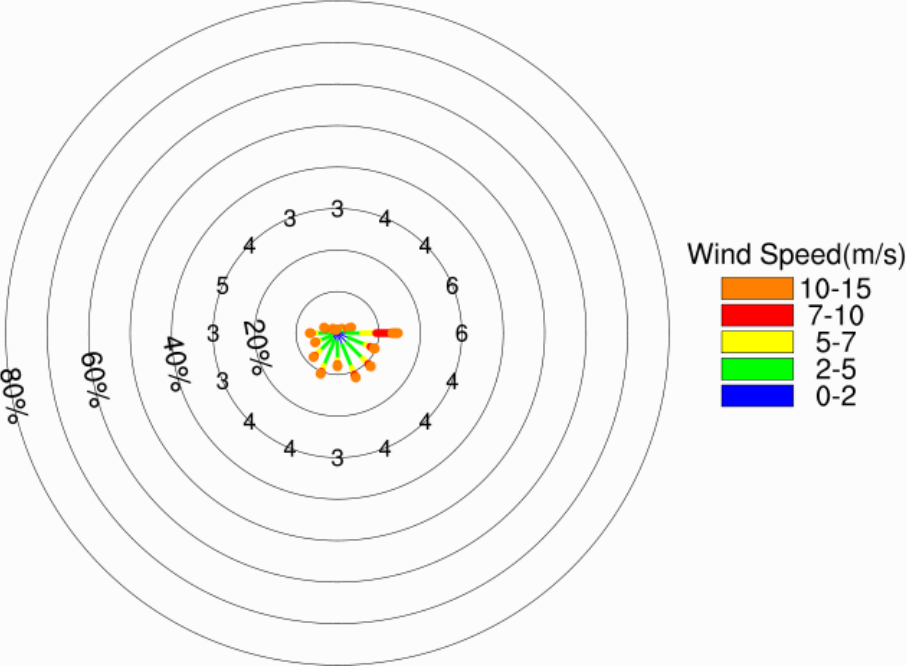
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SpdAve=4 SpdStd=3 DirAve=146 No Calm Reports Nwnd=22078



Annual Condition



Summer Condition

Figure: 2a			
Title: Windrose Diagram representing V_{∞} of the Area under Concern at 200m above ground for Site A (X:084, Y:074)		Drawn by: AW	
		Checked by: CC	
Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP and Adjoining Government Land (Site A) & Proposed Private Residential Development at UDWYT Lot 11 RP and Adjoining Government Land (Site B), Wong Yue Tan, Tai Po		Rev.: 1.2	
		Date: Aug 2023	

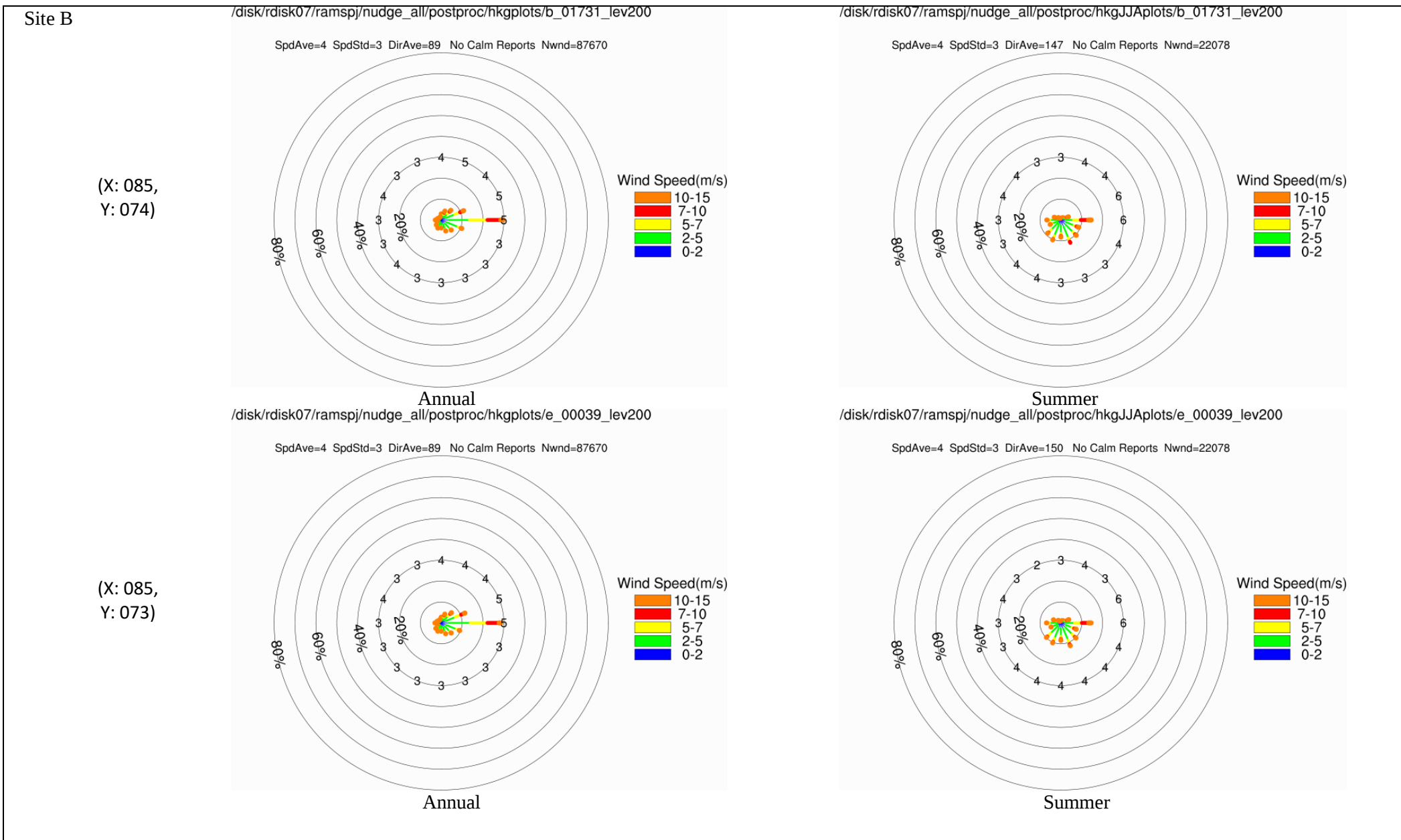


Figure: 2b

Title: Windrose Diagram representing V_{∞} of the Area under Concern at 200m above ground for Site B (X:085, Y:074; X:085, Y:073)

Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP and Adjoining Government Land (Site A) & Proposed Private Residential Development at UDWYT Lot 11 RP and Adjoining Government Land (Site B), Wong Yue Tan, Tai Po

RAMBOLL

Drawn by: AW

Checked by: CC

Rev.: 1.2

Date: Aug 2023

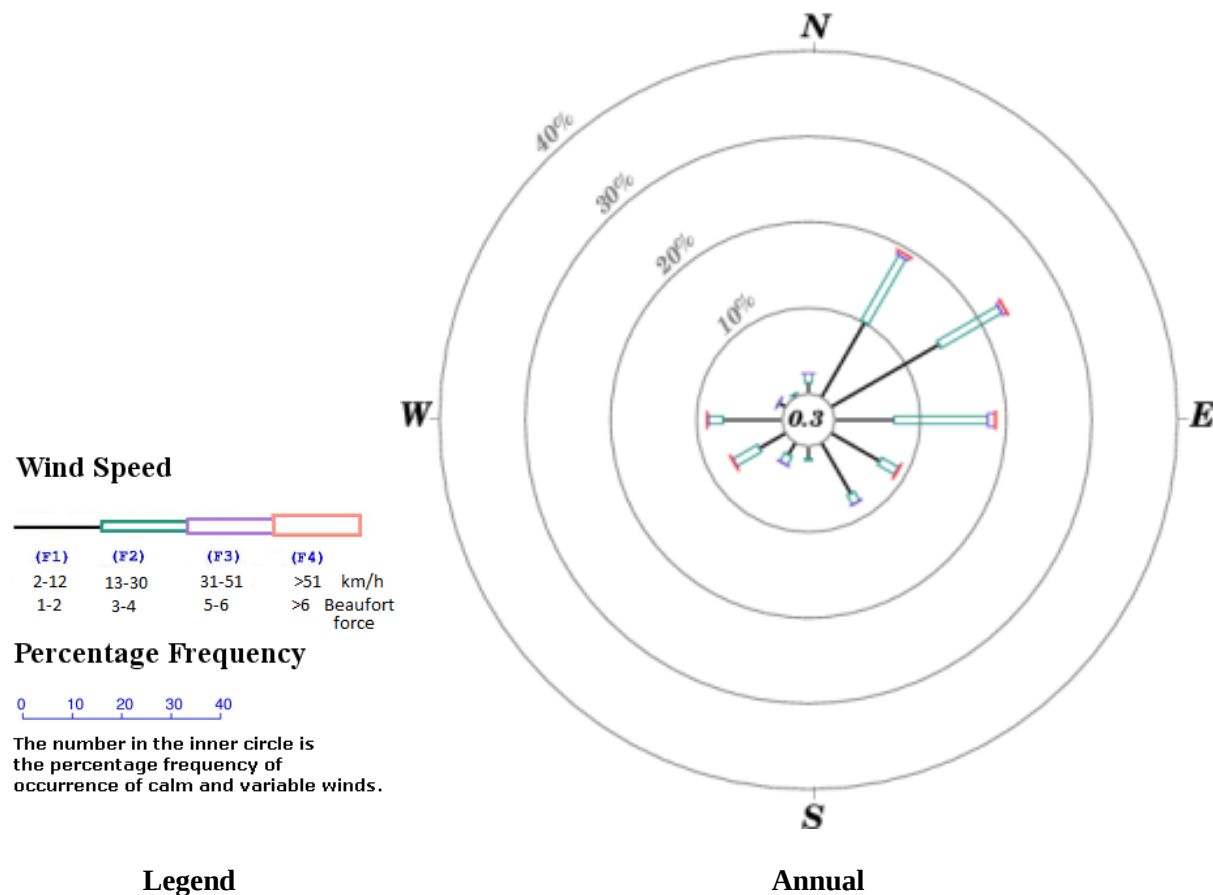


Figure: 2c

Title: Annual Wind Rose Diagram of Tai Po Kau Hong Kong Observatory Wind Station (2000-2021)

Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP and Adjoining Government Land (Site A) & Proposed Private Residential Development at UDWYT Lot 11 RP and Adjoining Government Land (Site B), Wong Yue Tan, Tai Po

RAMBOLL

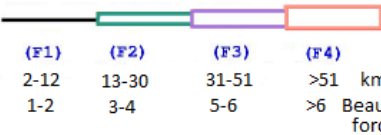
Drawn by: MK

Checked by: CC

Rev.: 1.3

Date: Mar 2024

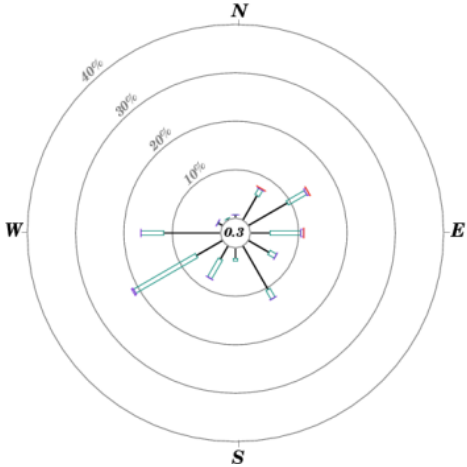
Wind Speed



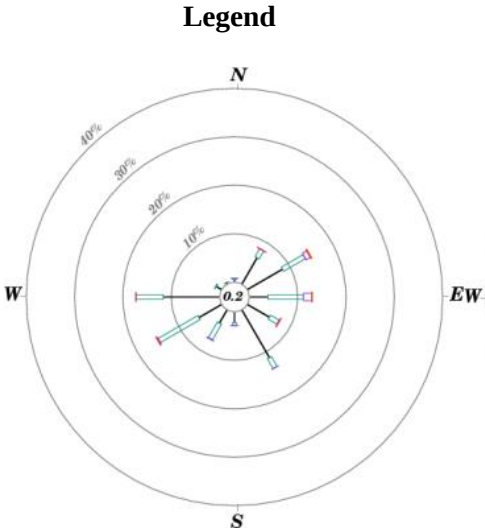
Percentage Frequency



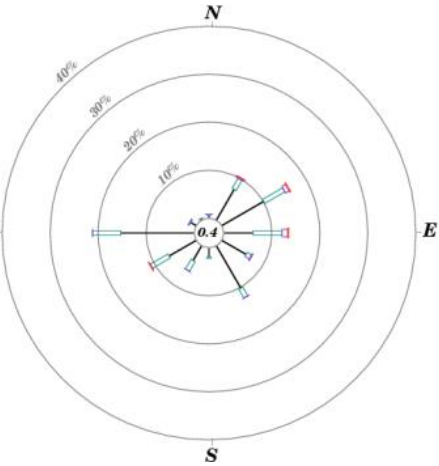
The number in the inner circle is the percentage frequency of occurrence of calm and variable winds.



June



July



August

Figure:	2d	RAMBOLL
Title:	Summer Wind Rose Diagram of the Tai Po Kau Hong Kong Observatory Wind Station (2000-2021)	Drawn by: MK
		Checked by: CC
Project:	Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP and Adjoining Government Land (Site A) & Proposed Private Residential Development at UDWYT Lot 11 RP and Adjoining Government Land (Site B), Wong Yue Tan, Tai Po	Rev.: 1.3
		Date: Mar 2024

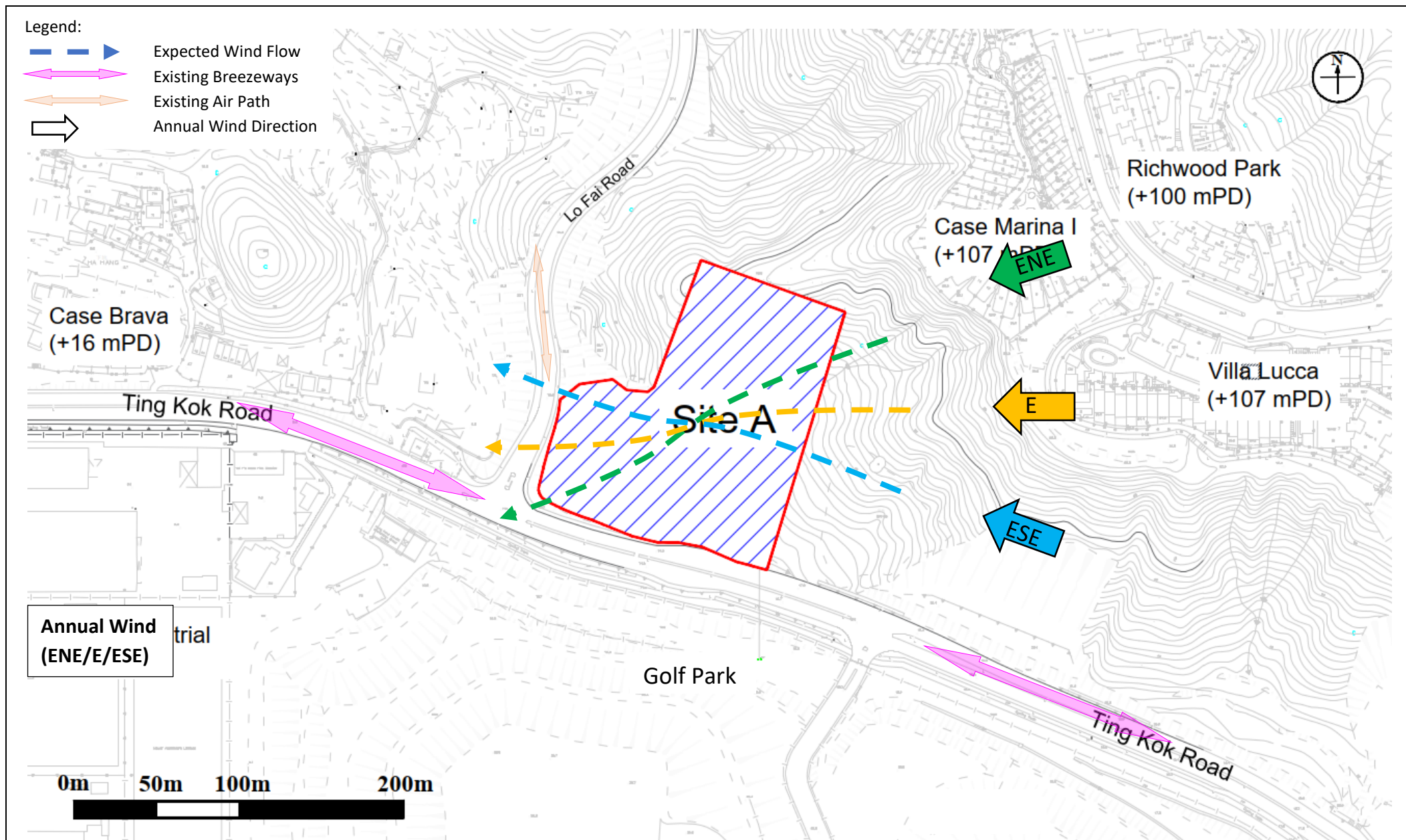


Figure: 3a	RAMBOLL
Title: Illustration of Wind Flow from Annual Wind Directions for Baseline Scheme at Site A	Drawn by: MK
	Checked by: CC
Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po	Rev.: 1.5
	Date: Dec 2024

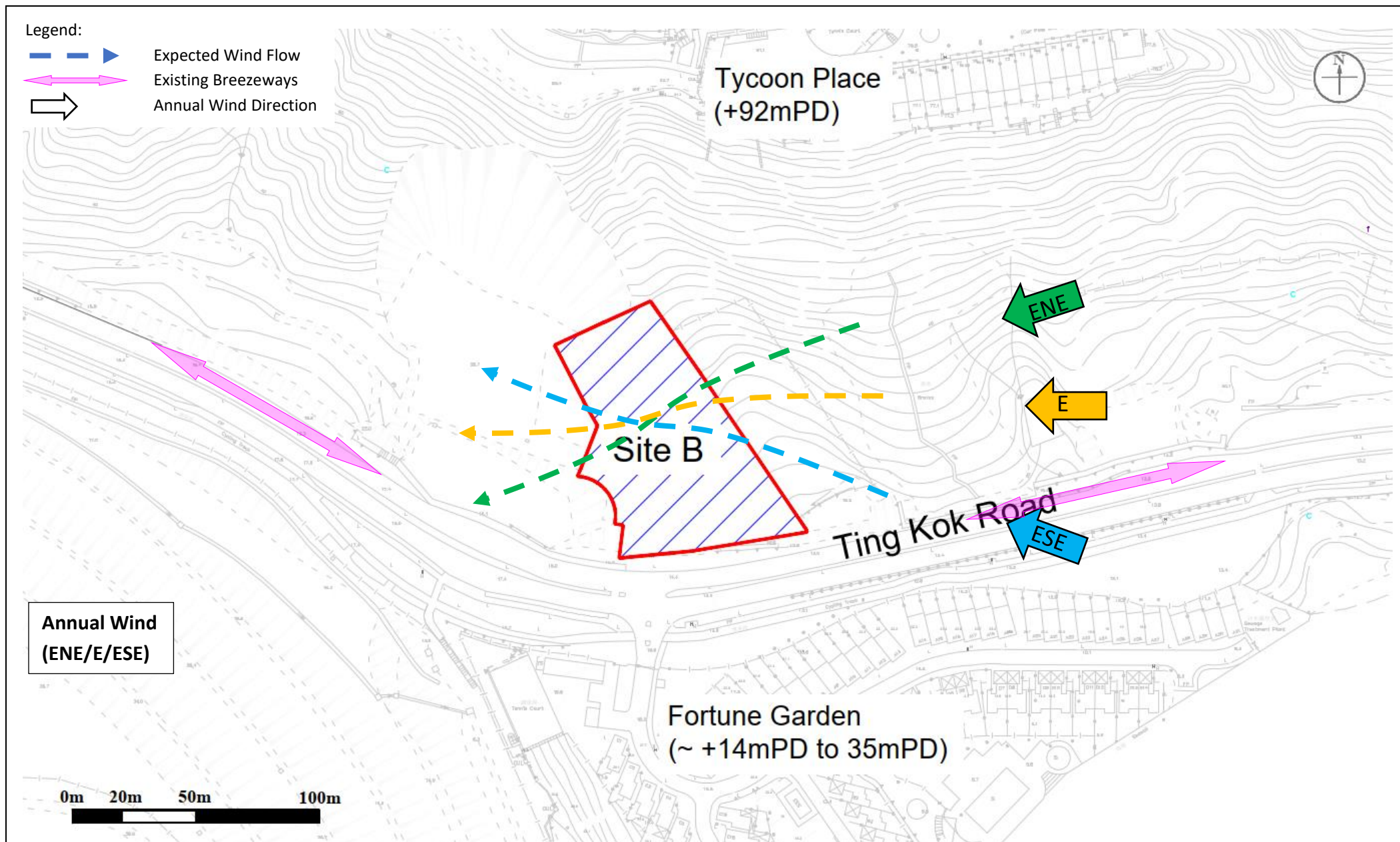


Figure: 3b	RAMBOLL
Title: Illustration of Wind Flow from Annual Wind Directions for Baseline Scheme at Site B	Drawn by: MK
Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po	Checked by: CC
	Rev.: 1.5
	Date: Dec 2024

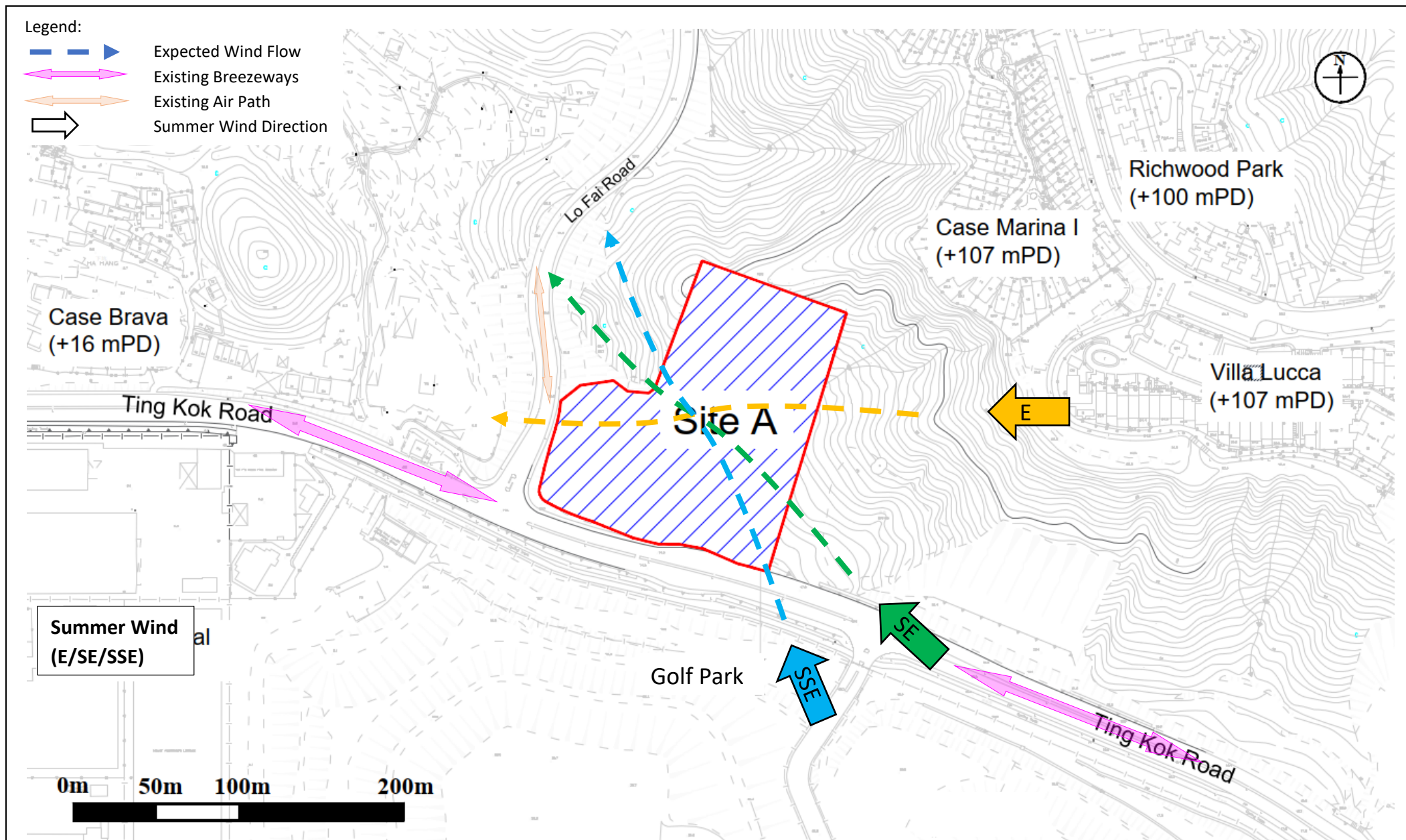


Figure: 4a	RAMBOLL
Title: Illustration of Wind Flow from Summer Wind Directions for Baseline Scheme at Site A	Drawn by: MK
Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po	Checked by: CC
	Rev.: 1.5
	Date: Dec 2024

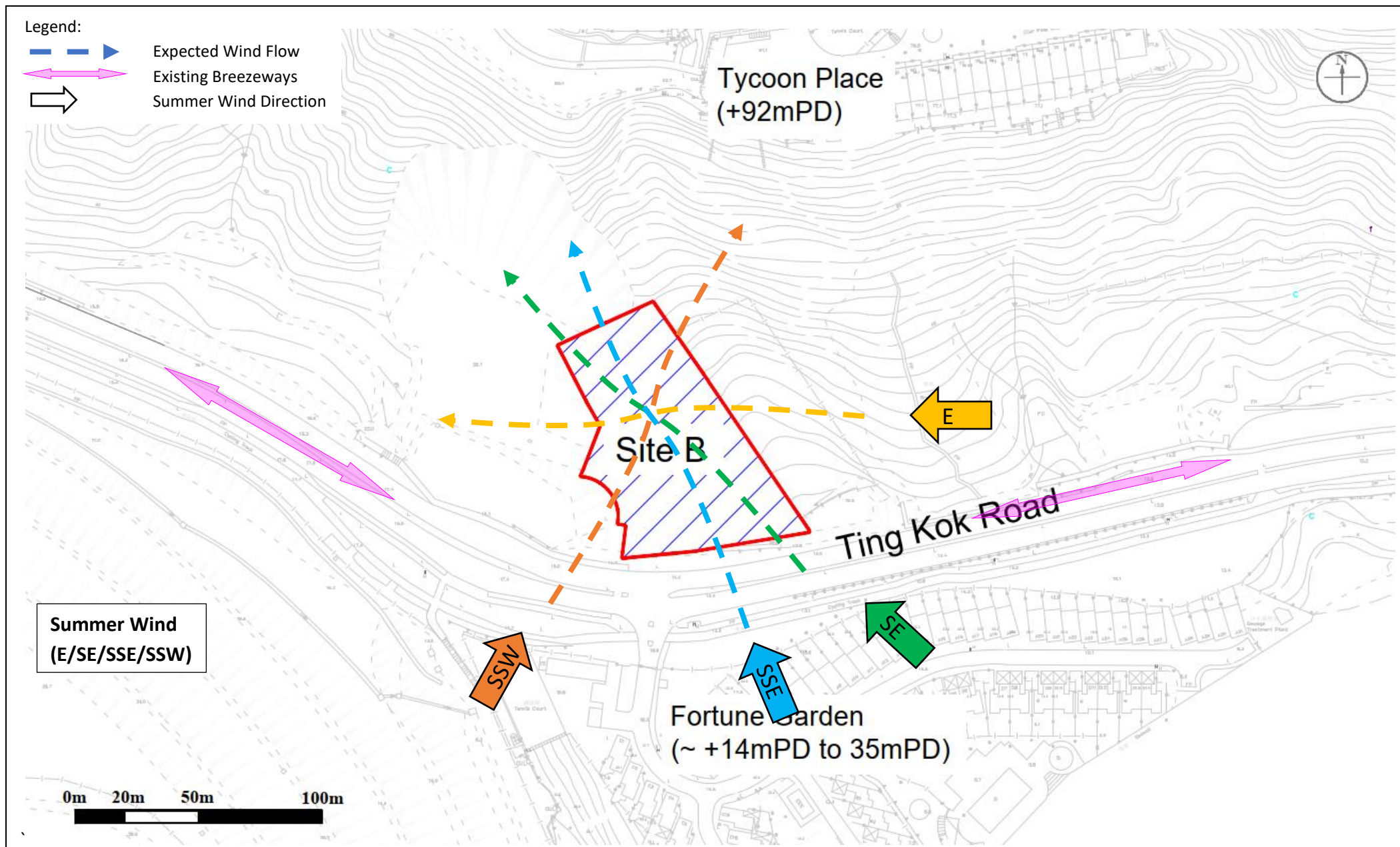


Figure: 4b	RAMBOLL
Title: Illustration of Wind Flow from Summer Wind Directions for Baseline Scheme at Site B	Drawn by: MK
Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po	Checked by: CC
	Rev.: 1.5 Date: Dec 2024

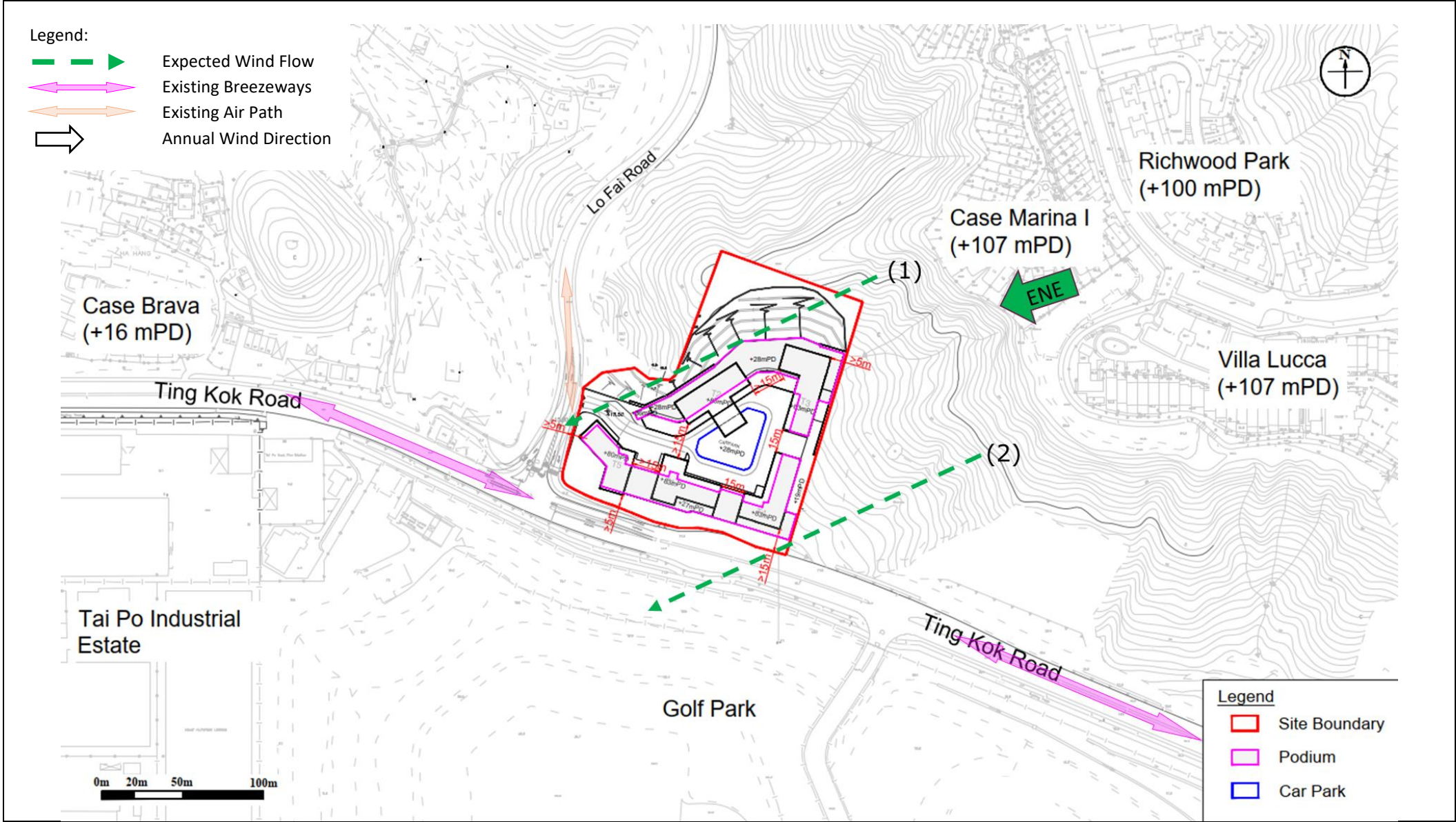


Figure: 5a	RAMBOLL
Title: Illustration of Wind Flow from Annual Wind Directions for Proposed Scheme at Site A (ENE Wind)	Drawn by: MK Checked by: CC
Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po	Rev.: 1.5 Date: Dec 2024

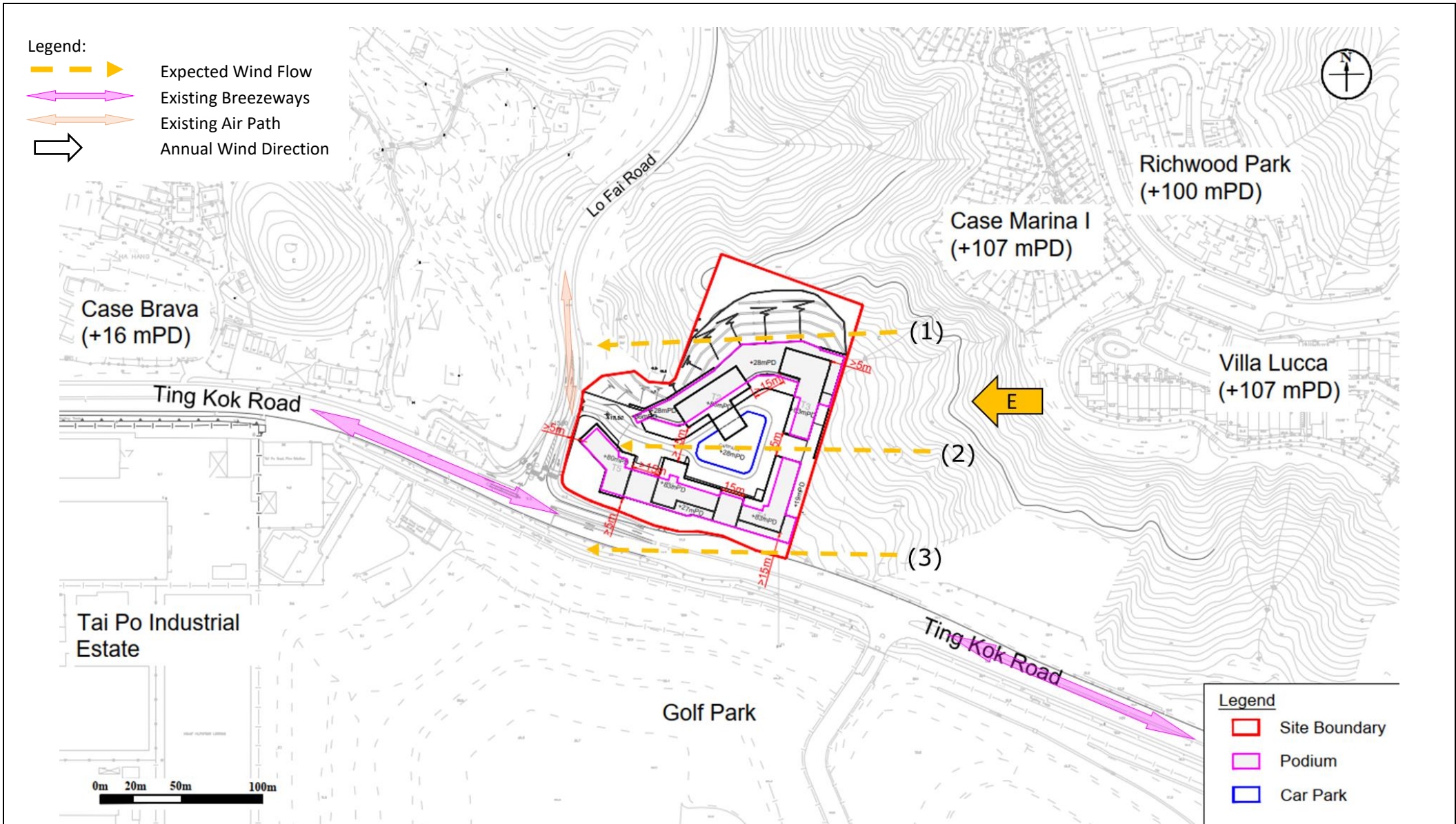


Figure: 5b

Title: Illustration of Wind Flow from Annual Wind Directions for Proposed Scheme at Site A (E Wind)

Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po

RAMBOLL

Drawn by: MK

Checked by: CC

Rev.: 1.5

Date: Dec 2024

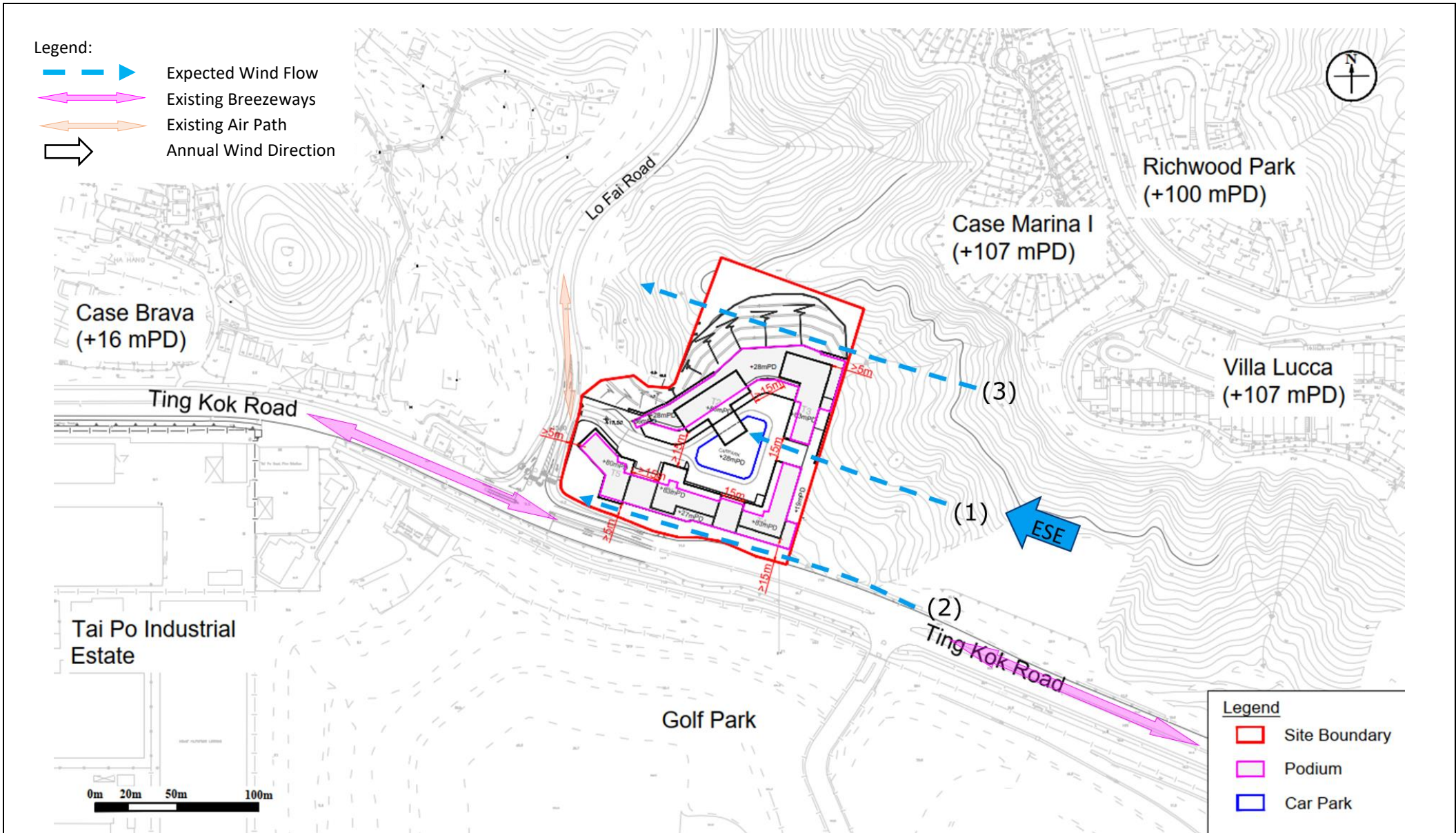
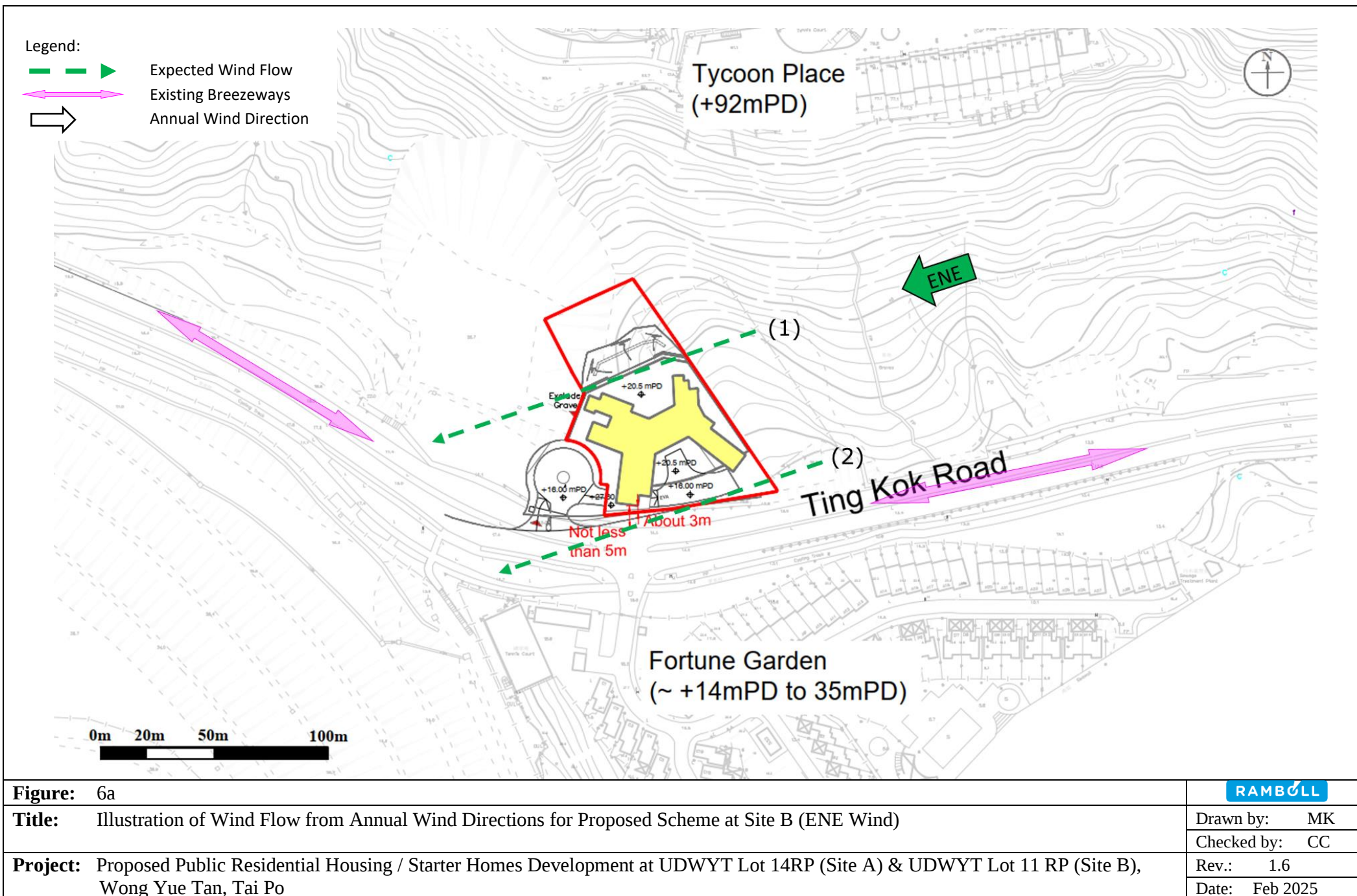


Figure: 5c		RAMBOLL	
Title: Illustration of Wind Flow from Annual Wind Directions for Proposed Scheme at Site A (ESE Wind)	Drawn by: MK		
	Checked by: CC		
Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po	Rev.: 1.5		
	Date: Dec 2024		



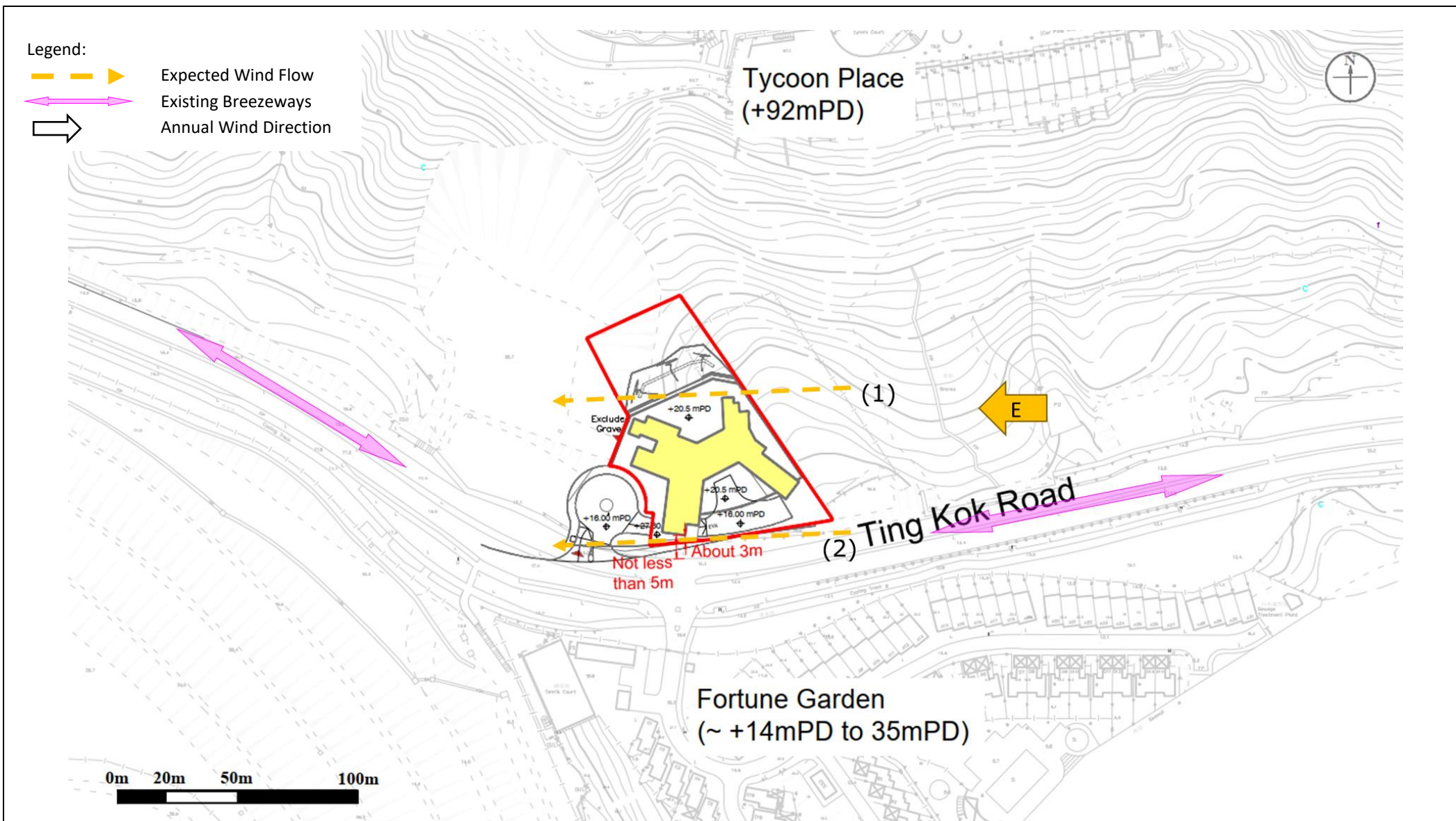


Figure: 6b

Title: Illustration of Wind Flow from Annual Wind Directions for Proposed Scheme at Site B (E Wind)

Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po

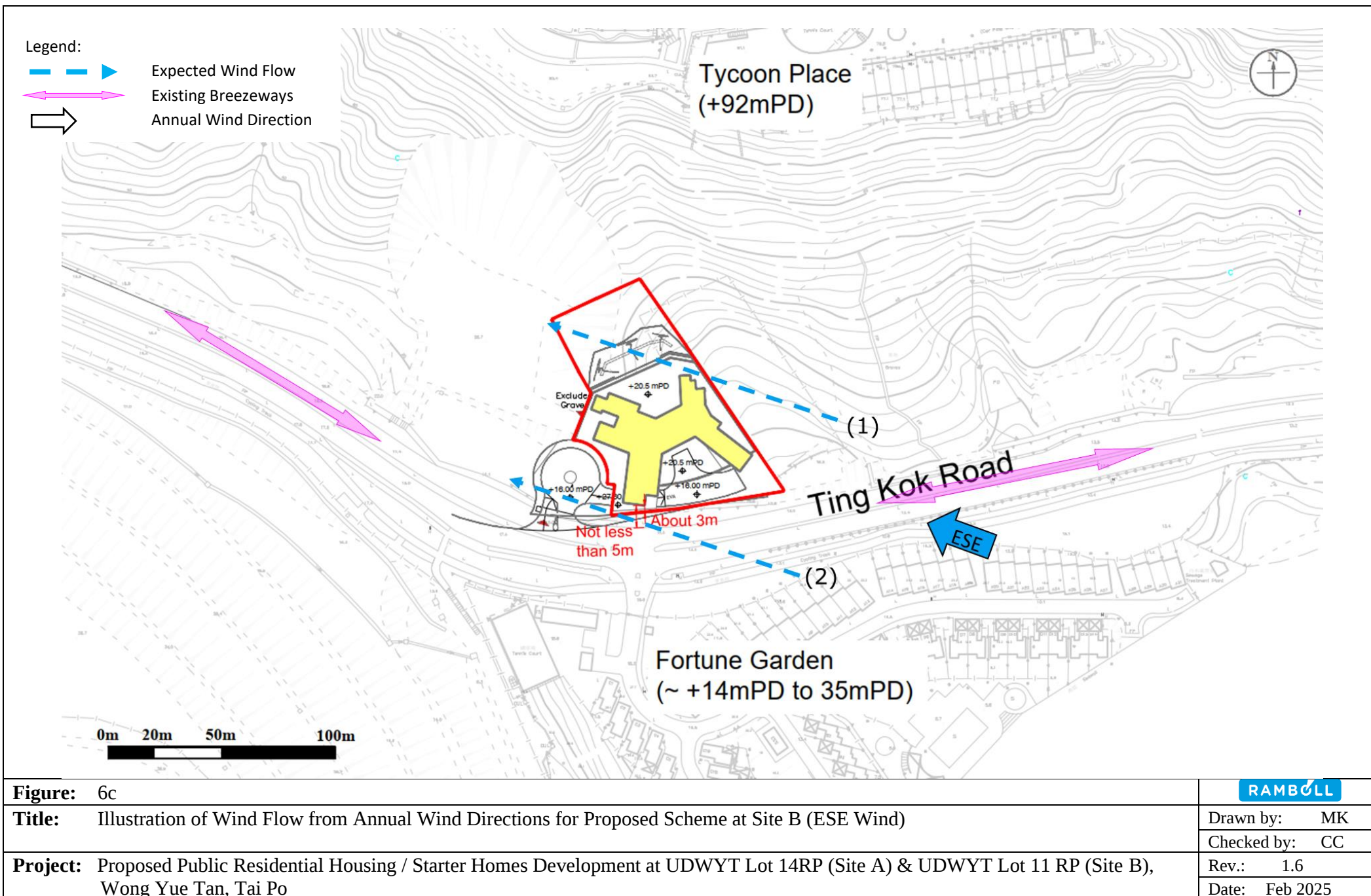
RAMBOLL

Drawn by: MK

Checked by: CC

Rev.: 1.6

Date: Feb 2025



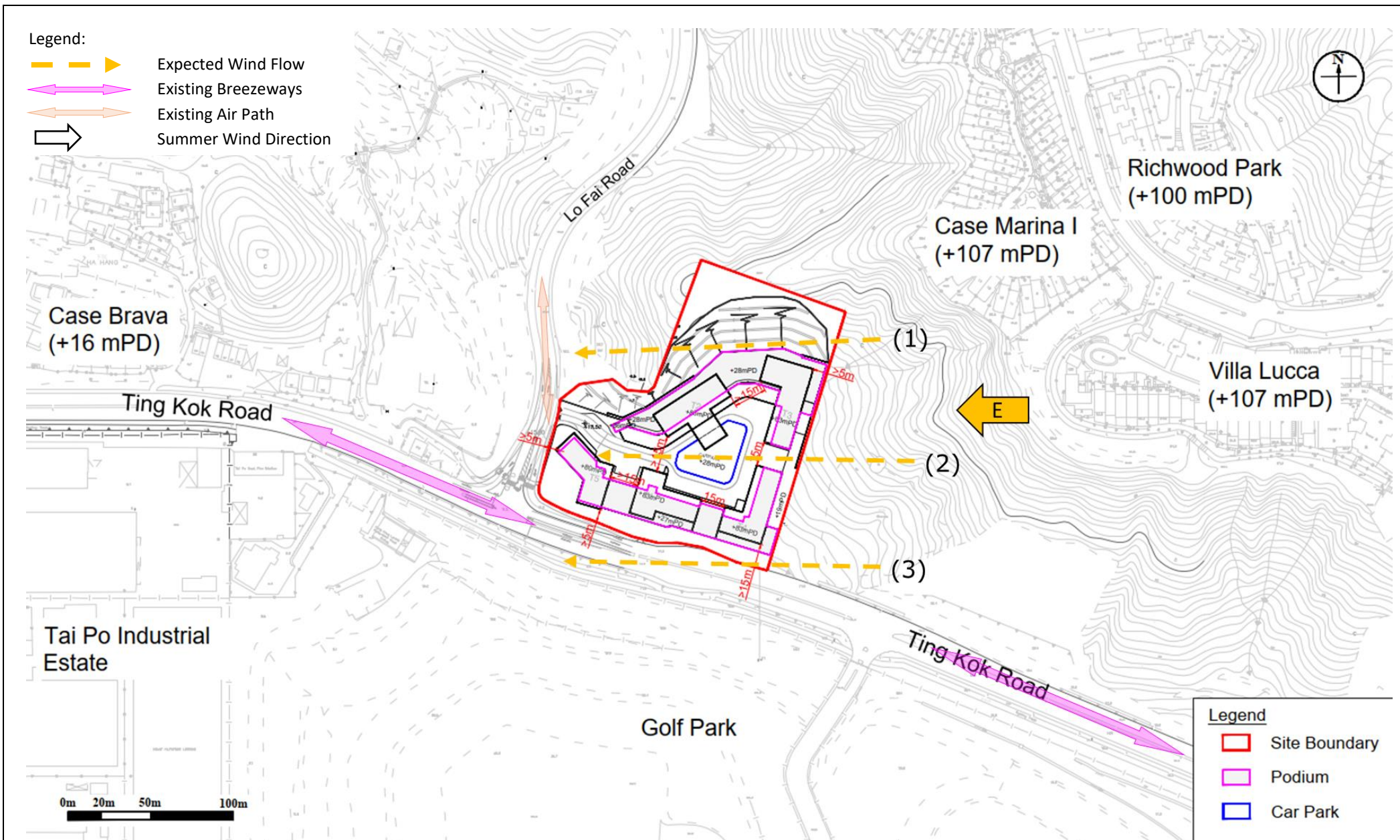


Figure: 7a

Title: Illustration of Wind Flow from Summer Wind Directions for Proposed Scheme at Site A (E Wind)

Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po

RAMBOLL

Drawn by: MK

Checked by: CC

Rev.: 1.5

Date: Dec 2024

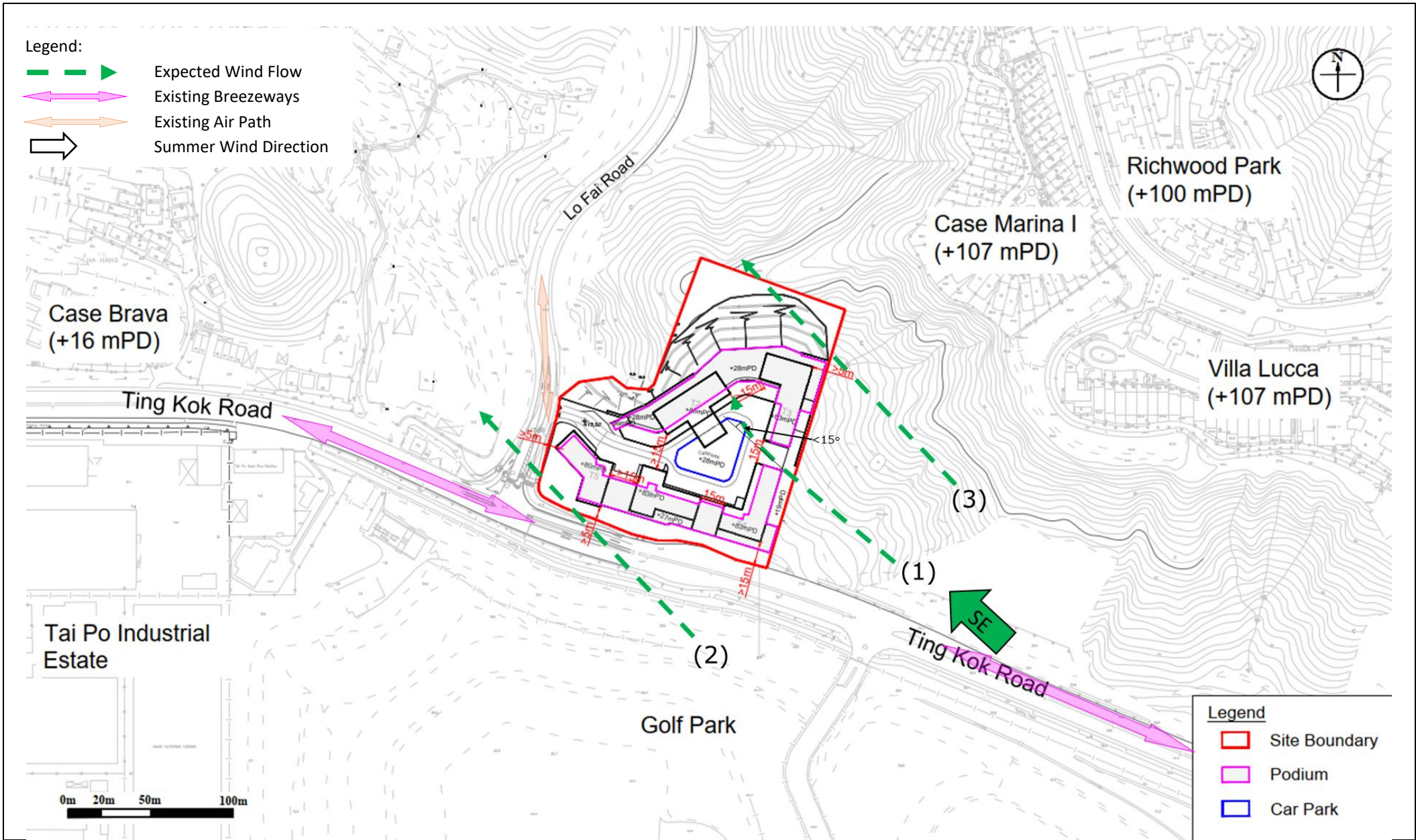


Figure: 7b

Title: Illustration of Wind Flow from Summer Wind Directions for Proposed Scheme at Site A (SE Wind)

Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po

RAMBOLL

Drawn by: MK

Checked by: CC

Rev.: 1.5

Date: Dec 2024

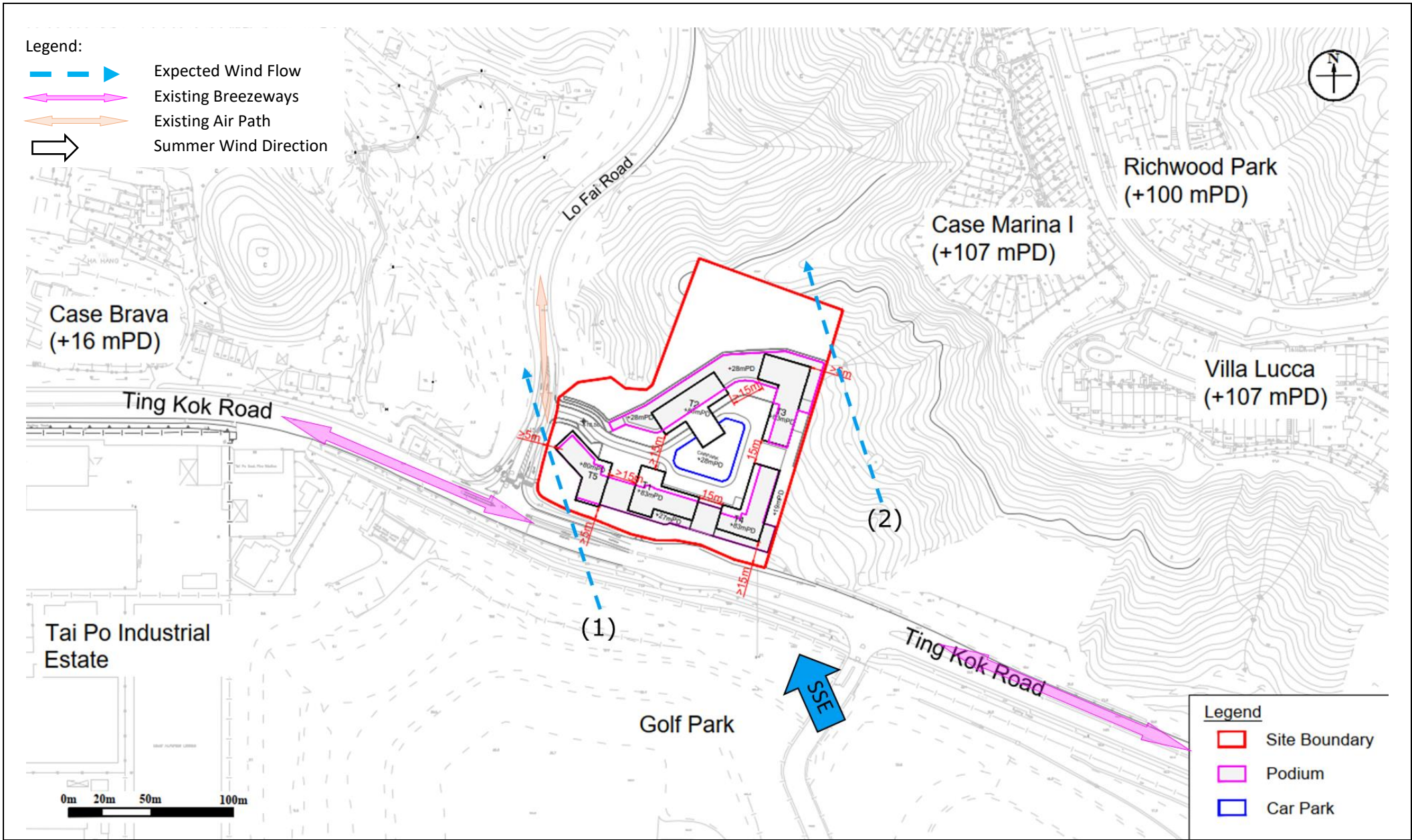


Figure: 7c	RAMBOLL
Title: Illustration of Wind Flow from Summer Wind Directions for Proposed Scheme at Site A (SSE Wind)	Drawn by: MK
Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po	Checked by: CC
	Rev.: 1.5
	Date: Dec 2024

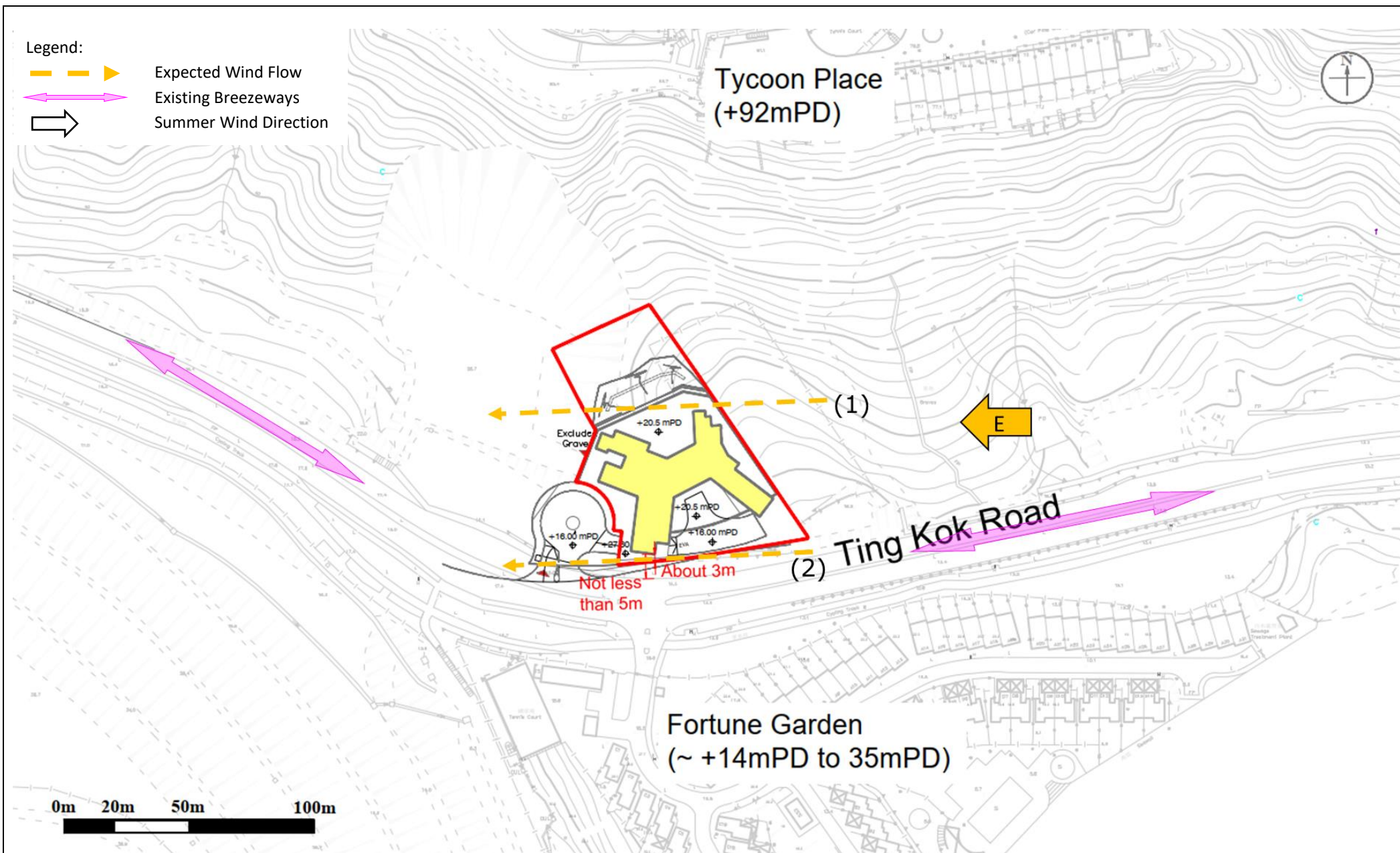


Figure: 8a

Title: Illustration of Wind Flow from Summer Wind Directions for Proposed Scheme at Site B (E Wind)

Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po

RAMBOLL

Drawn by: MK

Checked by: CC

Rev.: 1.5

Date: Dec 2024

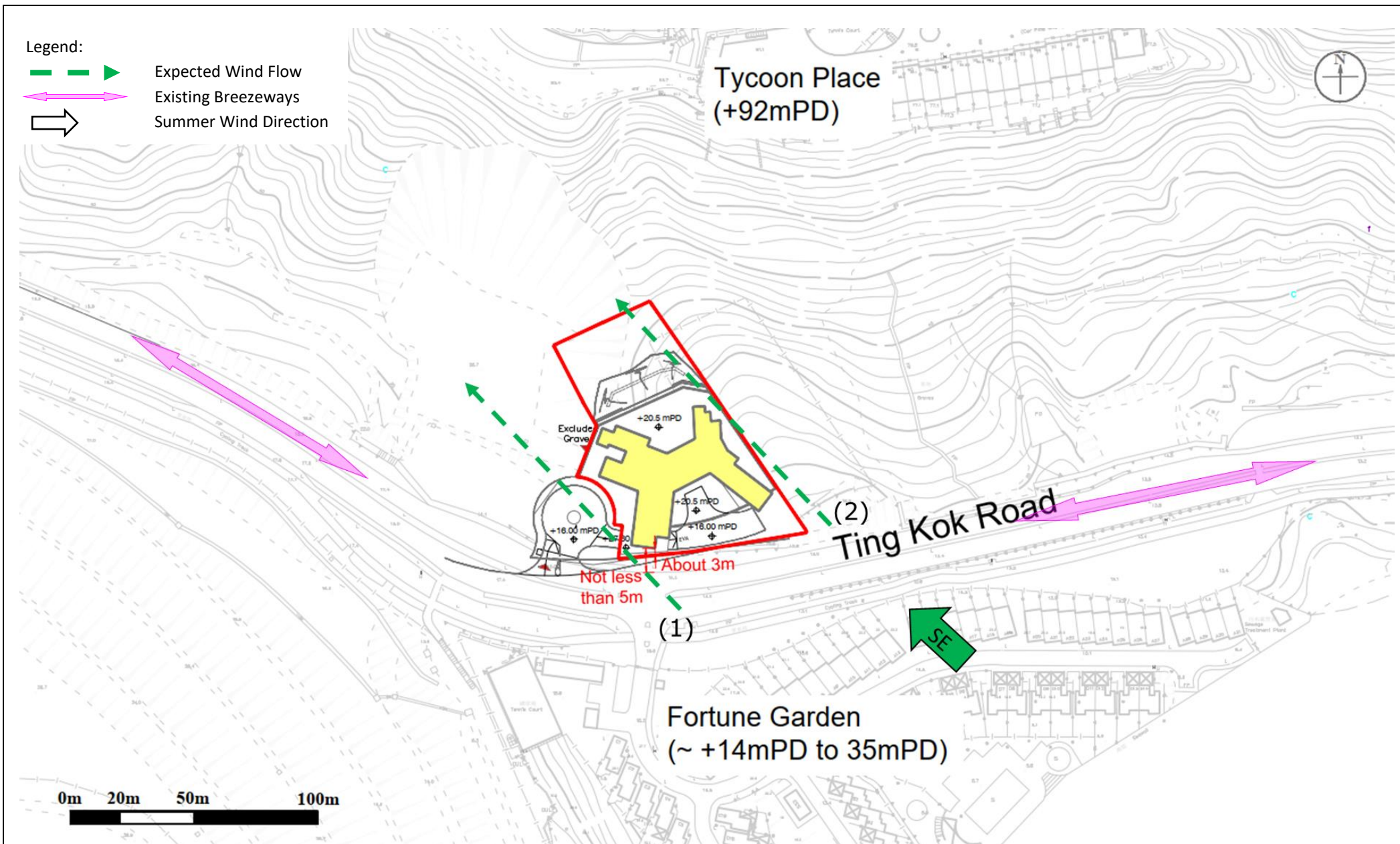


Figure: 8b

Title: Illustration of Wind Flow from Summer Wind Directions for Proposed Scheme at Site B (SE Wind)

Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po

RAMBOLL

Drawn by: MK

Checked by: CC

Rev.: 1.5

Date: Dec 2024

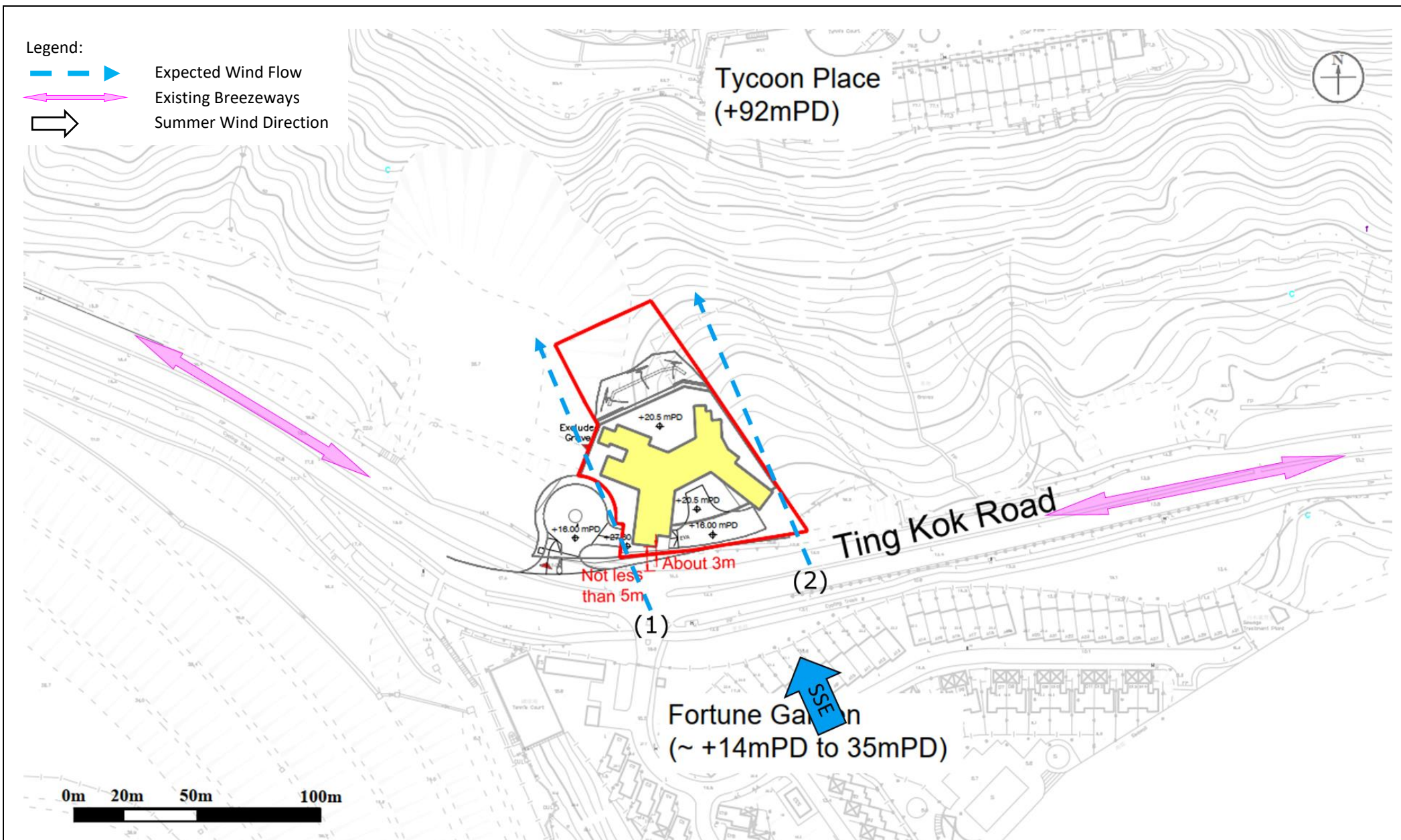


Figure: 8c

Title: Illustration of Wind Flow from Summer Wind Directions for Proposed Scheme at Site B (SSE Wind)

Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po

RAMBOLL

Drawn by: MK

Checked by: CC

Rev.: 1.5

Date: Dec 2024

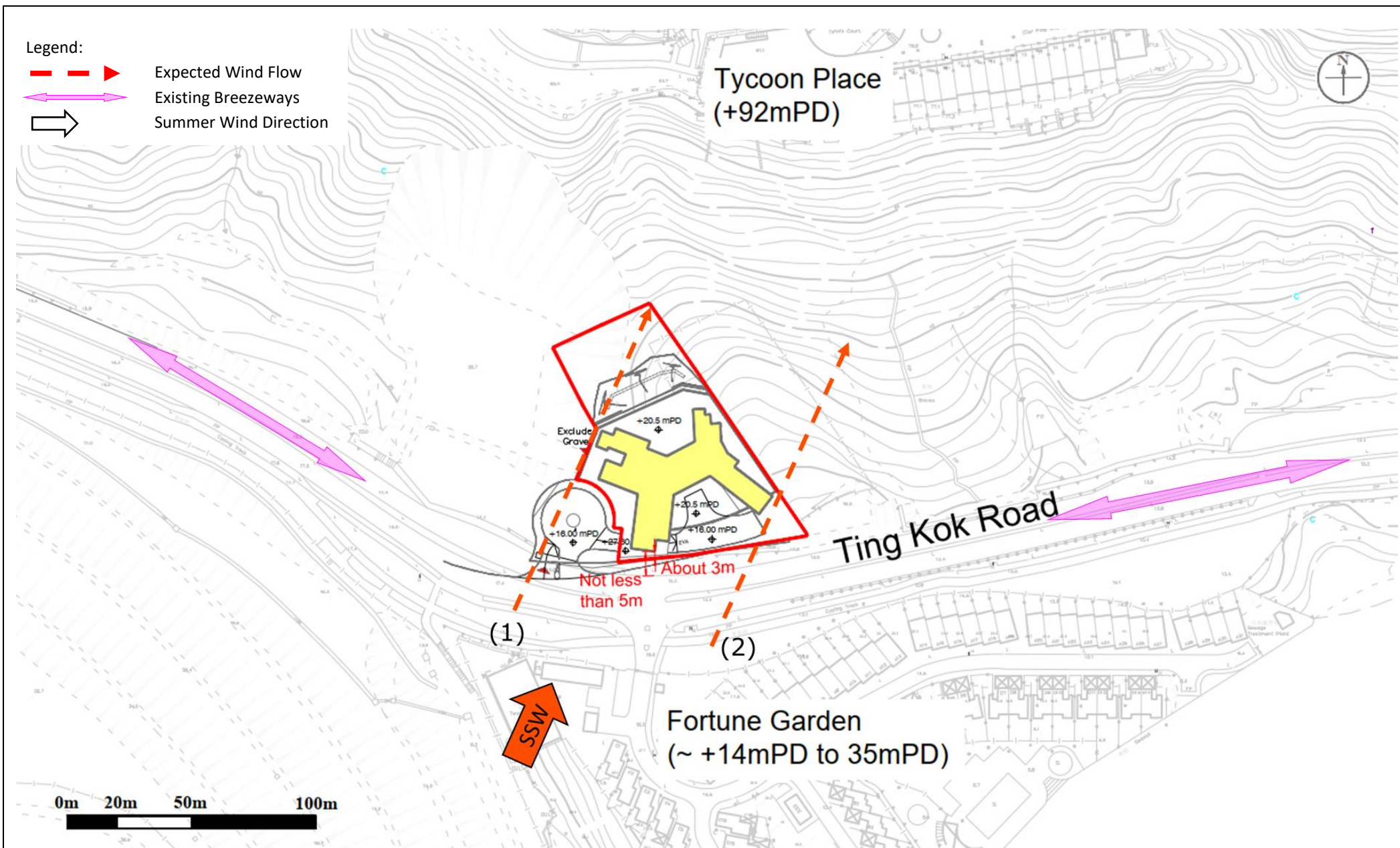


Figure: 8d

Title: Illustration of Wind Flow from Summer Wind Directions for Proposed Scheme at Site B (SSW Wind)

Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po

RAMBOLL

Drawn by: MK

Checked by: CC

Rev.: 1.5

Date: Dec 2024

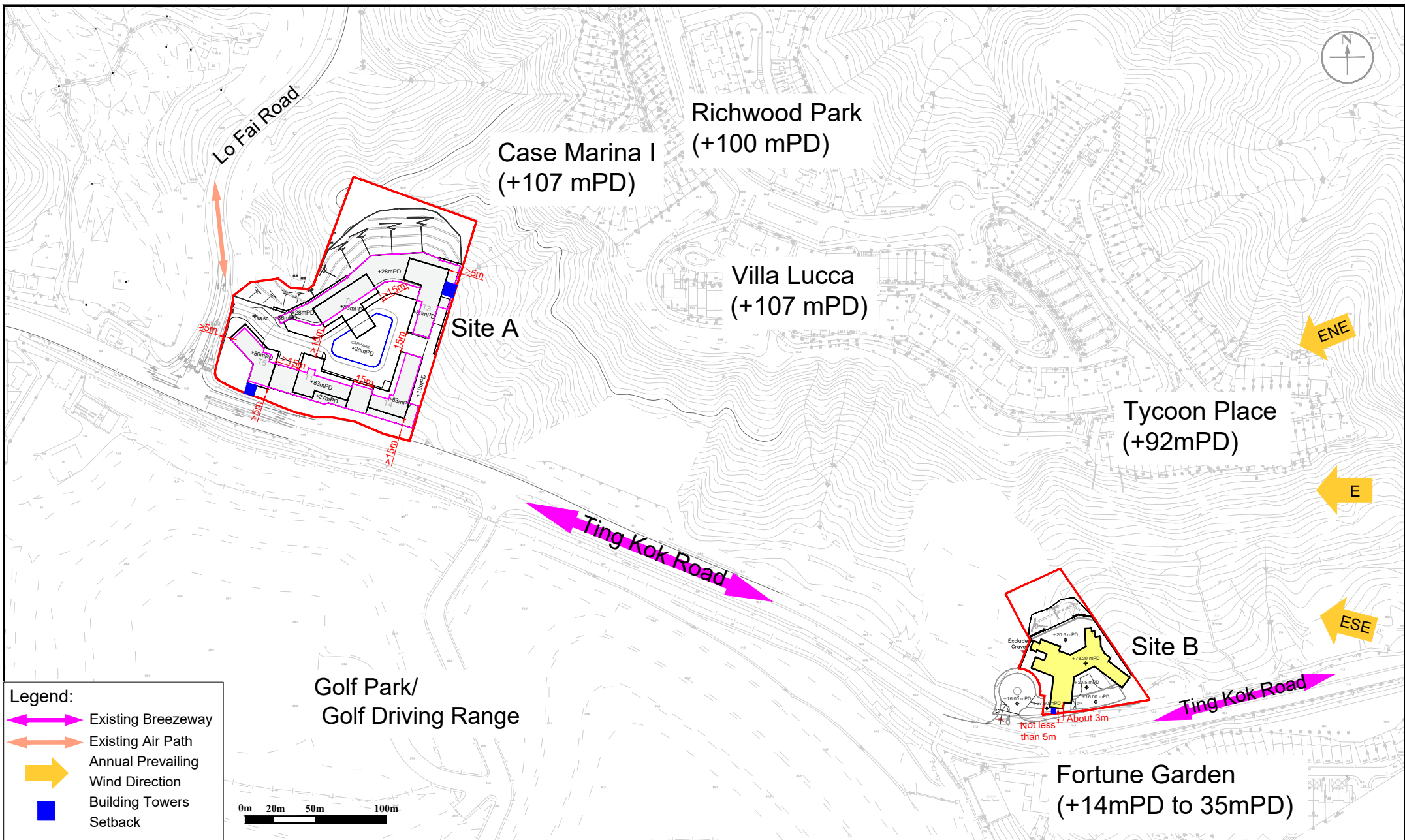
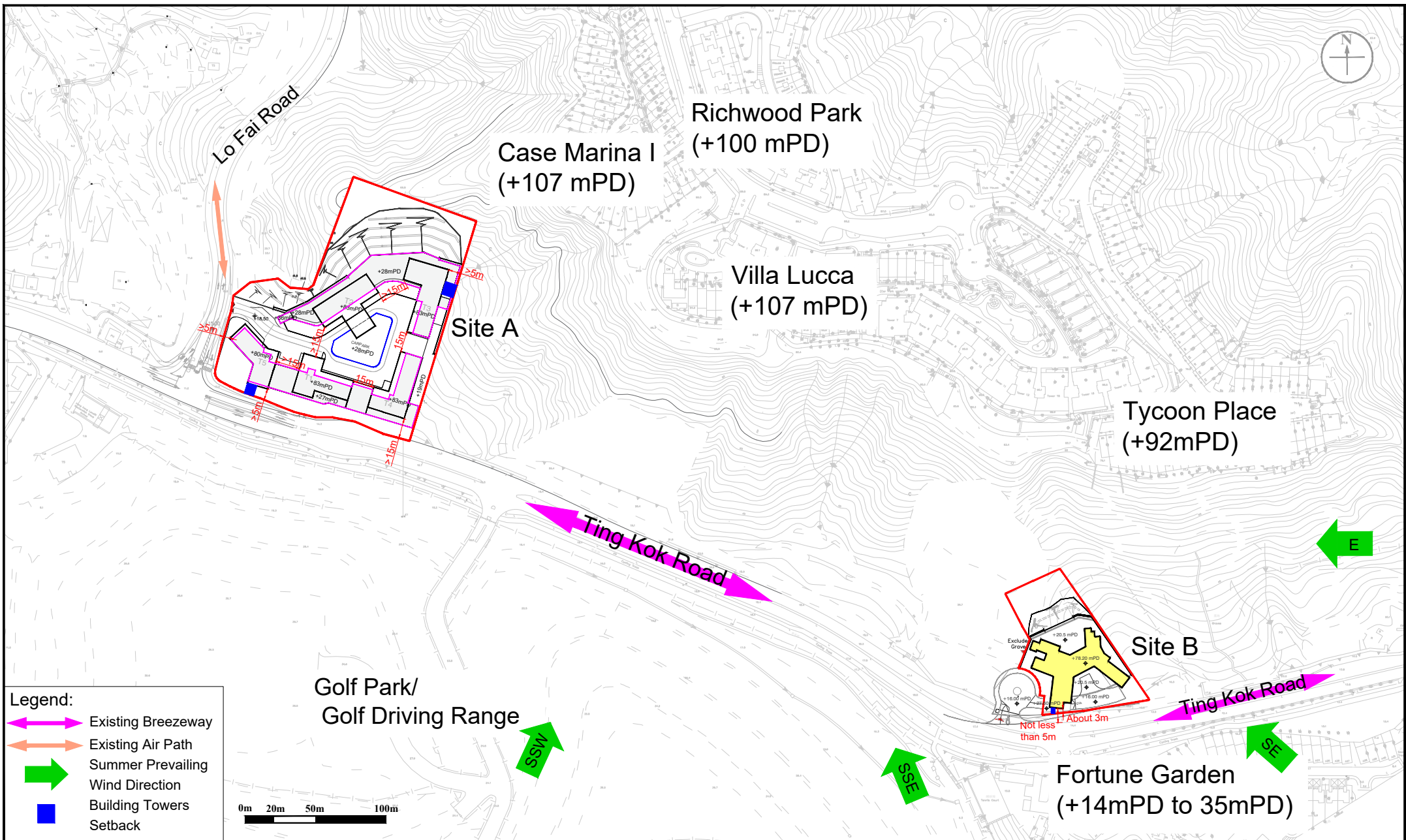


Figure: 9	RAMBOLL
Title: Summary of Annual Prevailing Wind Directions and Mitigation Measures for Site A & Site B	Drawn by: CC Checked by: MK
Project: Proposed Public Residential Housing / Starter Homes Development at UDWYT Lot 14RP (Site A) & UDWYT Lot 11 RP (Site B), Wong Yue Tan, Tai Po	Rev.: 1.0 Date: Feb 2025



RAMBOLL

Drawn by: CC
 Checked by: MK
 Rev.: 1.0
 Date: Feb 2025