

Annex J

Replacement Pages of Air Ventilation Assessment

- relaxation of the maximum building height restriction of the site falling within "Government, institution or community" ("G/IC") zone from 2 storeys to 8 storeys [Area (B)].

1.1.8 Ramboll Hong Kong Limited is commissioned by the Applicant to prepare the Air Ventilation Assessment (AVA) Study report – Expert Evaluation (EE) based on this rezoning proposal. Architectural drawings and technical information are provided by the Applicant.

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 the existing condition.

1.3 Development Site and its Environs

1.3.1 **Figure 1** shows the location of the Development Site and its environs. The Development Site (comprising Area (A) and Area (B)) consists of various lots and adjoining Government land at Fung Yuen, Tai Po. It is known as Fung Yuen which is at the northern fringe of Tai Po New Town. The Development Site consists of two separate portions (Area (A) currently zoned "CDA(1)" and Area (B) currently zoned "Government, Institution or Community" ("G/IC")).

1.3.2 There are existing residential development Case Papillon (+20mPD) & Mont Vert (+102mPD) to its north and Fung Yuen Road to its east, Tai Po Industrial Estate (+70mPD) and Ting Kok Road to its further southeast and south.

1.3.3 Village type developments to the immediate east, southwest, west and northwest include Tin Sam (around +8mPD to 17mPD), Yue Kok Tsuen (around +10.9mPD to 33mPD), Fung Mei Wai (formerly Kau Shi Wai) (around +17mPD) and Lau Hang (around +20mPD) respectively.

1.3.4 Tai Po Hospital (+59mPD), Fu Heng Estate (+110mPD), Chung Nga Court (+110mPD), Fu Tip Estate (+25 to 157mPD) and planned public housing developments at Chung Nga Road West (+172mPD), and Alice Ho Miu Ling Nethersole Hospital (around +66.5mPD) are distributed to the further west to southwest of the Development Site. A "Green Belt" ("GB") zone is situated between the village type developments at the immediate west of the Development Site and Tai Po Hospital.

1.3.5 To the southeast, south and further west of the Development Site are areas zoned "G/IC". Fung Yuen Playground and a site occupied by Society of Horticulture are situated within "G/IC" zone to the southeast.

1.4 Existing Site

1.4.1 Area (A) of the Development Site is mostly covered with vegetation with a watercourse running within and mainly along the eastern side of the Development Site adjoining Fung Yuen Road. Area (B) is currently occupied by sewage pumping station (along its southern boundary but without any massive aboveground structure) and has the watercourse running and occupying its western part. Area (A) and Area (B) are separated by at least 40m. the Development Site is readily available for development as it is well-supported by existing infrastructure in terms of drainage, sewerage and roads.

that wind availability from these directions (e.g. N wind) will be lowered due to the existing building morphology.

Table 2.2 Building Height of Surrounding Development

Name of Development	Maximum Building Height mPD	Maximum Building Height m	Location from the Development Site
Mont Vert	~102	~ 80	North
Village type developments including Tin Sam, Yue Kok, Fung Mei Wai, Lau Hang	~8 to 33	~10	Immediate East, Southwest & West
Tai Po Industrial Estate	~70	~65	Southeast
Alice Ho Miu Ling Nethersole Hospital	~66.5	~46	Southwest
Tai Po Hospital	~59	~37	West
Fu Heng Estate	~110	~100	West
Chung Nga Court	~110	~100	West
Fu Tip Estate (Podium)	~25 to 48	~12 to 14	West
Fu Tip Estate (Tower)	~140 to 157	~95 to 103	West

2.5 Summary of Existing Site Wind Availability

- 2.5.1 According to the wind availability data from Tai Po-EE, it is stated that the annual wind of the study area is mainly from the East, with a smaller component of the North. The Summer wind is mainly coming from the East and the Southerly quarters. For the dataset of the Location A, the annual wind directions of the Development Site is from E, while the summer prevailing winds are mainly from E, ESE and SE.
- 2.5.2 According to the wind roses at 200m from RAMS data, the annual prevailing wind directions for the Development Site are E, ESE and SE; whereas the summer prevailing wind direction are E, ESE and SE.
- 2.5.3 Based on both wind data, it is considered that the annual prevailing winds come from E, ESE and SE directions, and with N wind also concerned based on identified valley wind system. While in summer condition, the prevailing winds mainly come from E, ESE and SE directions.
- 2.5.4 It is anticipated that the surrounding traffic network and open space would be the main air corridors, including Fung Yuen Road, Ting Kok Road, open space sandwiched between the Development Site and the village type developments to the immediate north and west and GB zone in further east and west.
- 2.5.5 Under E wind condition, the presence of low-rise developments to the east of the Development Site should not impose any significant obstruction to wind flow. In addition, the section of Ting Kok Road acts as wind corridor for E wind direction.
- 2.5.6 The topography on the northern side is generally higher but separated away. The existing high-rise Mont Vert to the north will reduce the wind availability to the Development Site under N wind.
- 2.5.7 In addition, under ESE and SE wind directions, wind should flow atop Tai Po Industrial Estate towards the Development Site and its surroundings. As a result, the wind availability at pedestrian level is expected to be reduced.
- 2.5.8 **Figure 3 to Figure 5** show the E, ESE/SE and N prevailing wind directions under exiting condition (with no massive aboveground structure onsite).