SECTION 16 PLANNING APPLICATION TOWN PLANNING ORDINANCE (CAP. 131)

PROPOSED MINOR RELAXATION OF NON-BUILDING AREA RESTRICTION FOR PROPOSED FOOTBRIDGE CONNECTIONS AT MA SIK ROAD, FANLING, NEW TERRITORIES (FSSTL NO. 297)

- Supplementary Planning Statement -

TOWNLAND CONSULTANTS LIMITED

SECTION 16 PLANNING APPLICATION

PROPOSED MINOR RELAXATION OF NON-BUILDING AREA RESTRICTION FOR PROPOSED FOOTBRIDGE CONNECTIONS AT MA SIK ROAD, FANLING, NEW TERRITORIES (FSSTL NO. 297)

SUPPLEMENTARY PLANNING STATEMENT

Applicant

Planning Consultant, Visual Impact Specialist & Townland Consultants Limited

Architect

Air Ventilation Consultant

Submitting Agent

Allied Environmental Consultants Limited

File Reference: WNLYFN

For and on behalf of Townland Consultants Ltd.
Approved by :
Position : Associate Director
Date : 8 July 2025

8 July 2025

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EXECUTIVE SUMMARY

This Section 16 Planning Application (the "S16 Application") is submitted on behalf of Sun Prosper Company Limited (the "Applicant") to seek permission from the Town Planning Board ("TPB"/ the "BOARD") for Minor Relaxation of Non-Building Area ("NBA") within Fanling Sheung Shui Town Lot ("FSSTL") No. 297 at Ma Sik Road, Fanling, New Territories (the "Application Site") to enable two (2) footbridge connections ("Proposed Footbridge Connections"), each consisting of a weather-proof footbridge at 1/F and an open-sided covered walkway at 3/F above for the Approved Composite Commercial/Residential Development.

The Applicant had previously sought S16 Planning Approval for minor relaxation of Building Height ("BH") Restriction to enable the adoption of Modular Integrated Construction ("MiC") for a Permitted Composite Commercial/Residential Development at the Application Site, which was approved by the Rural and New Town Planning Committee ("RNTPC") of the TPB on 22 November 2024 ("Approved Development"). After detailed design considerations, the Applicant proposes further optimising the pedestrian connectivity and circulation of the Approved Development by provision of the Proposed Footbridge Connections.

According to the Approved Fanling North Outline Zoning Plan No. S/FLN/4 (the "Approved OZP") gazetted on 29 September 2023, the Application Site is zoned "Residential (Group A)1" ("R(A)1"). As shown on the Approved OZP, a 20m-wide NBA running in northeast to southwest direction is designated within the Application Site. As indicated in the Statutory Notes of the Approved OZP, minor relaxation of the NBA restrictions as shown on the OZP may be considered by the TPB on application under section 16 of the Town Planning Ordinance ("TPO").

The Proposed Footbridge Connections will enhance pedestrian connectivity by providing comfortable, barrier-free access between the bisected retail and clubhouse portions of the Approved Development across the NBA, benefiting both residents and the general public. Designed to maintain the intention of the NBA, the elevated structure maintains wind penetration while enhancing street vibrancy below, creating opportunities to enrich ground-level experiences and foster an inclusive urban environment. There will be <u>no change</u> to the approved Plot Ratio and Building Height of the Approved Development under TPB No. A/FLN/32 as result of the Proposed Footbridge Connections.

The Proposed Footbridge Connections are justified on the following grounds:

- The Proposed Footbridge Connections will provide seamless, barrier-free access between two
 originally fragmented podium portions, enhancing mobility for persons with disabilities and individuals
 of all ages by reducing unnecessary vertical transitions and improving overall convenience and user
 experience;
- It will offer a direct, safe, and weather-protected pedestrian link between two retail podium portions and residential towers, increasing movement efficiency and particularly benefiting wheelchair users during inclement weather;
- The Proposed Footbridge Connections will enhance fire safety by providing additional evacuation routes, minimise dead-end corridors, and improving emergency responder access, ensuring better compliance with life safety standards and more effective rescue operations for the Approved Development under emergencies;
- The Proposed Footbridge Connections, in lieu of sacrificing ground level space for much hard-paved and uncovered circulation space, will maximise the ground-level at the NBA for curated landscaped areas, seating zones, and multipurpose event spaces with more lively design of accesses, which will foster community engagement, elevate pedestrian experience, and enhance street vibrancy along Ma Sik Road;
- The Proposed Footbridge Connections will result in only a minimal increase to the Approved Site Coverage; and
- No significant adverse visual or air ventilation impacts are anticipated.

Based on the above justifications and as detailed in this Supplementary Planning Statement ("SPS"), Members of the BOARD are therefore sincerely requested to give their favourable consideration to the Application.

行政撮要 (內文如有差異,應以英文版本為準)

我司代表泰陽有限公司(下稱「申請人」)根據城市規劃條例第十六條向城市規劃委員會(下稱「城規會」)呈交規劃申請書,申請就位於新界粉嶺馬適路粉嶺上水市地段第297號的非建築用地(下稱「申請地點」)作出略為放寬限制,為已獲核准的綜合商住發展建造兩座行人天橋(下稱「擬議天橋」),每座天橋包括位於一樓的全天候行人天橋及位於三樓四周開敞的有蓋行人通道。

申請人之前根據城市規劃條例第十六條,就位於申請地點內已准許的綜合商住發展尋求略為放寬最高建築物高度及地積比率限制的規劃許可,以便採用「組裝合成」建築法。該申請已於二零二四年十一月二十二日獲城規會轄下的鄉郊及新市鎮規劃小組委員會核准(下稱「**已核准發展**」)。經詳細設計考量後,申請人進一步提議建造擬議行人天橋,以優化已核准發展項目的行人暢達度與流通性。

根據二零二三年九月二十九日刊憲的《粉嶺北分區計劃大綱核准圖編號S/FLN/4》(下稱「**核准圖**」),申請地點為「住宅(甲類)1」地帶。如核准圖所示,申請地點設有一塊由東北至西南方向、闊 20 米的非建築用地。按照核准圖的注釋,城規會可根據城市規劃條例第十六條考慮略為放寬核准圖上所顯示的非建築用地限制。

擬議行人天橋將提供舒適及無障礙通道,連接已核准發展中橫跨非建築用地的零售和會所部分,從而提升行人暢達度,使居民和公眾均能受惠。該高架建築設計可維持非建築用地的設立意向,在保持透風效能同時提升街道活力,創造機會豐富地面體驗,並促進城市包容性。擬議行人天橋不會改變已核准發展(城規申請編號A/FLN/32)的地積比率及建築物高度限制。

擬議行人天橋具備以下充分理據的支持:

- 擬議行人天橋將連接兩個原本分開的平台部分,提供無縫接駁的無障礙通道,並透過減少不必要的上下走動,從而提升殘障人士及各年齡層人士的通行便利性,同時優化行人整體使用體驗;
- 擬議行人天橋將為兩個零售平台部分及住宅大樓之間建立一條直接、安全且不受天氣 影響的行人通道,提升通行效率,尤為便利輪椅使用者於惡劣天氣時出行;
- 擬議行人天橋通過提供額外的疏散路線、減少盡頭路,並改善緊急救援人員的進出通道,從而提升消防安全,確保更符合生命安全標準,並在緊急情況下為已核准發展項目提供更有效的救援行動;
- 擬議行人天橋將避免犧牲地面空間作大面積無遮蓋硬鋪面通道,從而充分善用非建築 用地的地面空間為精心規劃的園景區、休憩區及多功能活動空間,輔以設計更生動的 出入安排,促進社區互動,優化行人體驗,並提升馬適路沿路街道活力;
- 擬議的行人天橋僅會輕微增加已核准的上蓋面積;以及
- 預計不會構成顯著負面視覺及通風影響。

基於上述理據及此規劃綱領內的詳述資料,懇請城規會委員對是次規劃申請予以支持。



Reference WNLYFN/AGNES/02

Date 8 July 2025

TO THE TOWN PLANNING BOARD:

SECTION S16 PLANNING APPLICATION TOWN PLANNING ORDINANCE (CHAPTER 131)

PROPOSED MINOR RELAXATION OF NON-BUILDING AREA RESTRICTION FOR PROPOSED FOOTBRIDGE CONNECTIONS AT MA SIK ROAD, FANLING, NEW TERRITORIES

(FSSTL NO. 297)

- SUPPLEMENTARY PLANNING STATEMENT -

1 INTRODUCTION

- 1.1 We are instructed by Sun Prosper Company Limited (the "Applicant") to submit this Section 16 ("S16") Planning Application to seek permission from the Town Planning Board ("TPB"/ the "BOARD") for Minor Relaxation of Non-Building Area ("NBA") within Fanling Sheung Shui Town Lot ("FSSTL") No. 297 at Ma Sik Road, Fanling, New Territories (the "Application Site") to enable two (2) footbridge connections ("Proposed Footbridge Connections"), each consisting of a weather-proof footbridge at 1/F and an open-sided covered walkway at 3/F above for the Approved Composite Commercial/Residential Development.
- 1.2 The Applicant had previously sought S16 Planning Approval for minor relaxation of Building Height ("BH") Restriction to enable the adoption of Modular Integrated Construction ("MiC") for a Permitted Composite Commercial/Residential Development at the Application Site, which was approved by the Rural and New Town Planning Committee ("RNTPC") of the TPB on 22 November 2024 ("Approved Development"). After detailed design considerations, the Applicant proposes the provision of the Proposed Footbridge Connections to optimise the pedestrian connectivity and circulation of the Approved Development.
- 1.3 The Proposed Footbridge Connections allow for enhanced pedestrian connectivity and circulation and improvement to barrier-free access between the two separate portions of retail/ancillary clubhouse of the Approved Development bisected by the NBA benefiting both residents and the general public. There will be <u>no change</u> to the approved Plot Ratio and Building Height of the Approved Development under TPB No. A/FLN/32 as result of the Proposed Footbridge Connections.
- The Application Site falls within a "Residential (Group A)1" ("**R(A)1**") zone on the Approved Fanling North Outline Zoning Plan No. S/FLN/4 ("**Approved OZP**") gazetted on 29 September 2023 (*Figures 1.1* and 1.2 refer). As shown on the Approved OZP, a 20m-wide NBA running in northeast to southwest direction is designated within the Application Site. As indicated in the Statutory Notes of the Approved OZP, minor relaxation of the NBA restrictions as shown on the OZP may be considered by the TPB on application under section 16 of the Town Planning Ordinance ("**TPO**") for developments and/or redevelopments under exceptional circumstances.
- 1.5 This Supplementary Planning Statement ("SPS") provides relevant information on the Application to facilitate the BOARD's consideration including justifications on planning, design and technical grounds.

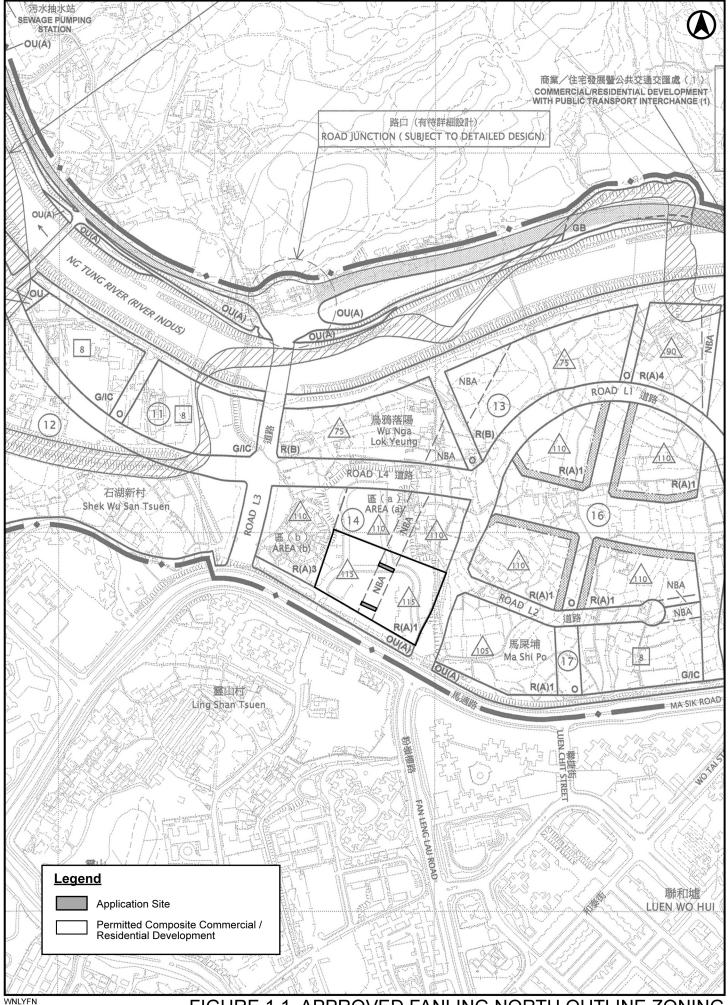


FIGURE 1.1 APPROVED FANLING NORTH OUTLINE ZONING PLAN NO. S/FLN/4

SCALE 1:5,000

-1- <u>S/FLN/4</u>

RESIDENTIAL (GROUP A)

Column 1 Uses always permitted

Column 2
Uses that may be permitted with or without conditions on application to the Town Planning Board

Ambulance Depot

Flat

Government Use (not elsewhere specified)

House Library

Market

Place of Recreation, Sports or Culture

Public Clinic

Public Transport Terminus or Station

(excluding open-air terminus or station)

Residential Institution

School (in free-standing purpose-designed

building only) Social Welfare Facility

Utility Installation for Private Project

Commercial Bathhouse/

Massage Establishment

Eating Place

Educational Institution

Exhibition or Convention Hall

Government Refuse Collection Point

Hospital Hotel

Institutional Use (not elsewhere specified)

Mass Transit Railway Vent Shaft and/or

Other Structure above Ground Level

other than Entrances

Office

Petrol Filling Station

Place of Entertainment

Private Club

Public Convenience

Public Transport Terminus or Station (not

elsewhere specified) Public Utility Installation

Public Vehicle Park

(excluding container vehicle)

Religious Institution

School (not elsewhere specified)

Shop and Services (not elsewhere specified)

Training Centre

In addition, the following uses are always permitted (a) on the lowest two floors of a building excluding basements, or (b) in a free-standing purpose-designed non-domestic building up to five storeys:

Eating Place

Educational Institution

Institutional Use (not elsewhere specified)

Off-course Betting Centre

Office

Place of Entertainment

Private Club

Public Convenience

Recyclable Collection Centre

School

Shop and Services

Training Centre

(Please see next page)

- 2 - <u>S/FLN/4</u>

RESIDENTIAL (GROUP A) (Cont'd)

Planning Intention

This zone is intended primarily for high-density residential developments. Commercial uses are always permitted on the lowest two floors of a building excluding basements, or in a free-standing purpose-designed non-domestic building up to five storeys. For the "Residential (Group A) 3" ("R(A)3") and "Residential (Group A) 4" ("R(A)4") zone, the planning intention is purely for residential development.

Remarks

- (a) On land designated "R(A)1", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a total maximum plot ratio of 6 (of which the domestic plot ratio should not exceed 5), or the plot ratio of the existing building, whichever is the greater.
- (b) On land designated "R(A)2", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a total maximum plot ratio of 5 (of which the domestic plot ratio should not exceed 4), or the plot ratio of the existing building, whichever is the greater.
- (c) On land designated "R(A)3", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 5, or the plot ratio of the existing building, whichever is the greater.
- (d) On land designated "R(A)4", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 4, or the plot ratio of the existing building, whichever is the greater.
- (e) On land designated "R(A)5", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 4.85, or the plot ratio of the existing building, whichever is the greater.
- (f) On land designated "R(A)6", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 6.5, or the plot ratio of the existing building, whichever is the greater.
- (g) On land designated "R(A)1", "R(A)2", "R(A)3", "R(A)4", "R(A)5" and "R(A)6", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum building height in terms of metres above Principal Datum as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (h) On land designated 'Terraced Podium' in the "R(A)1", "R(A)2" and "R(A)6" zones, the terraced podium is subject to a maximum building height of 5m.

(Please see next page)

- 3 - <u>S/FLN/4</u>

RESIDENTIAL (GROUP A) (Cont'd)

Remarks (Cont'd)

- (i) In determining the maximum plot ratio for the purposes of paragraphs (a) to (f) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, or caretaker's quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (j) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and/or building height restrictions stated in paragraphs (a) to (h) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.
- (k) Under exceptional circumstances, for developments and/or redevelopments, minor relaxation of the non-building area restrictions as shown on the Plan may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

MNLYFN FIGURE 1.2 (CONT'D) STATUTORY NOTES OF APPROVED FANLING NORTH OUTLINE ZONING PLAN NO. S/FLN/4 (EXTRACT)



2 SITE CONTEXT

2.1 Site Location and Existing Use

2.1.1 The Application Site, consisting of the two (2) Proposed Footbridge Connections, is located within FSSTL No. 297, Ma Sik Road, Fanling, and at the tail-end of the four designated NBA sites in Planning Areas 13 and 14 (*Figures 2.1* and *2.2* refer). The Application Site is currently under construction for the Approved Development.

2.2 Land Status

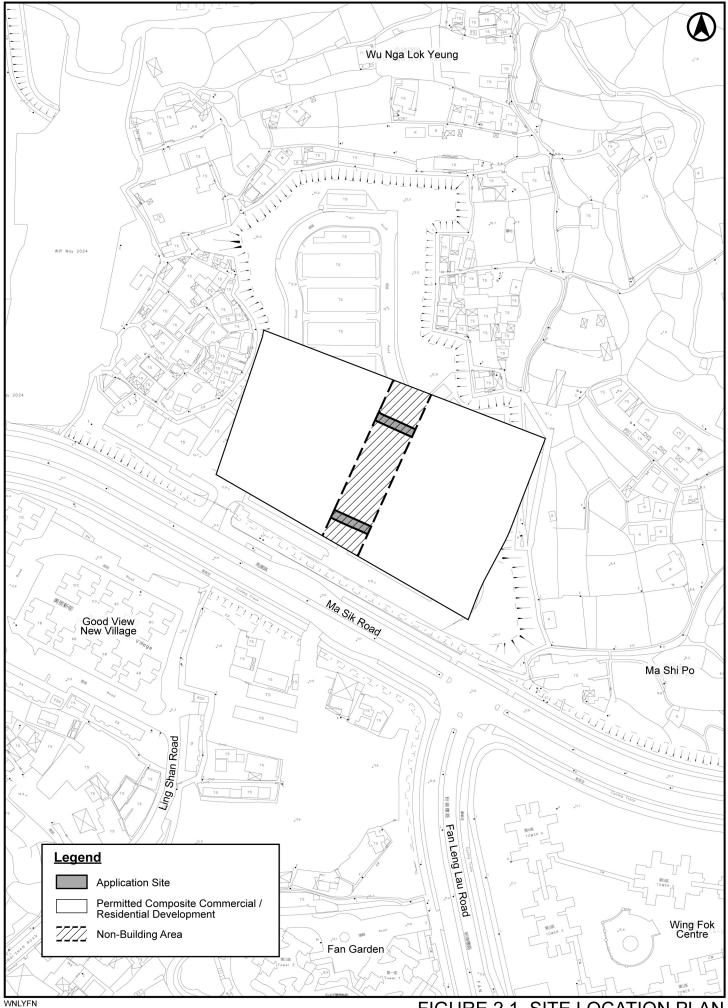
2.2.1 The Application Site falls within Fanling Sheung Shui Town Lot ("FSSTL") No. 297.

2.3 Surrounding Land Uses

- 2.3.1 The Application Site is located within the Remaining Phase of the Fanling North New Development Area ("FLN NDA") and is generally surrounded by a mix of high-rise existing and planned residential developments, low-rise residential developments, and village settlements (*Figure 2.2* refers).
 - The Application Site is located within the District Centre at the eastern part of FLN NDA. To the immediate north, east and west of the Application Site are the planned high-rise public and private residential developments in Wu Nga Lok Yeung and Ma Shi Po with BHs ranging from 120mPD to 135mPD as approved under Planning Application No. A/FLN/30. To the further northeast of the Application Site is the planned public housing development with a maximum BH of 137mPD (TPB No. A/FLN/28).
 - To the further north of the Application Site is Ng Tung River and village houses, residential dwellings/ temporary structures with BHs approx. 20mPD with hilly terrain.
 - To the further southeast of the Application Site across Ma Sik Road is a cluster of existing high-rise residential developments ranging from approx. 81mPD to 118mPD, including Wing Fok Centre, Wing Fai Centre, Union Plaza and Mount One. Fanling Lau Road Playground and Wu Muk Road Playground are also located to the further southeast of the Application Site.
 - To the immediate south of the Application Site is a site currently occupied by open-air carpark that will be developed for a planned private high-rise residential development with a BH of approx. 132mPD (TPB No. A/FSS/294) located at the intersection of Ma Sik Road and Fan Leng Lau Road. To the further south of the Application Site are Fan Garden with a BH of approx. 110mPD and Fanling Garden with a BH approx. 26.2mPD along Fan Leng Lau Road.
 - To the immediate southwest of the Application Site across Ma Sik Road is a cluster of lowrise village houses, residential dwellings/temporary structures including Good View New Village with and Ling Shan Tsuen in Ling Hill with BHs approx. 24.4mPD and 25.2mPD respectively.
 - To the further west of the Site consists of a medium rise residential development (Noble Hill) with a maximum BH of 82mPD and various low-rise temporary structures and settlements within Shek Wu San Tsuen.

2.4 Accessibility

- 2.4.1 Vehicular and pedestrian access to the Approved Development is provided via Ma Sik Road. Public transport services currently available include franchised bus and Green Minibus (GMB) routes operating along Ma Sik Road (*Figure 2.2* refers).
- 2.4.2 In addition, various infrastructures are planned in FLN NDA to enhance area-wide connectivity and link the planned developments, including the Approved Composite Commercial/Residential Development, to Fanling/Sheung Shiu New Town. The planned infrastructures comprise planned Road L1 to be implemented by Civil Engineering and Development Department ("CEDD") to the immediate east of the Application Site, a Public Transport Interchange in Area 15, a series of footbridges near Area 15, 16 and 18, and cycle paths within FLN NDA.



SITE LOCATION PLAN

SCALE 1: 2,000

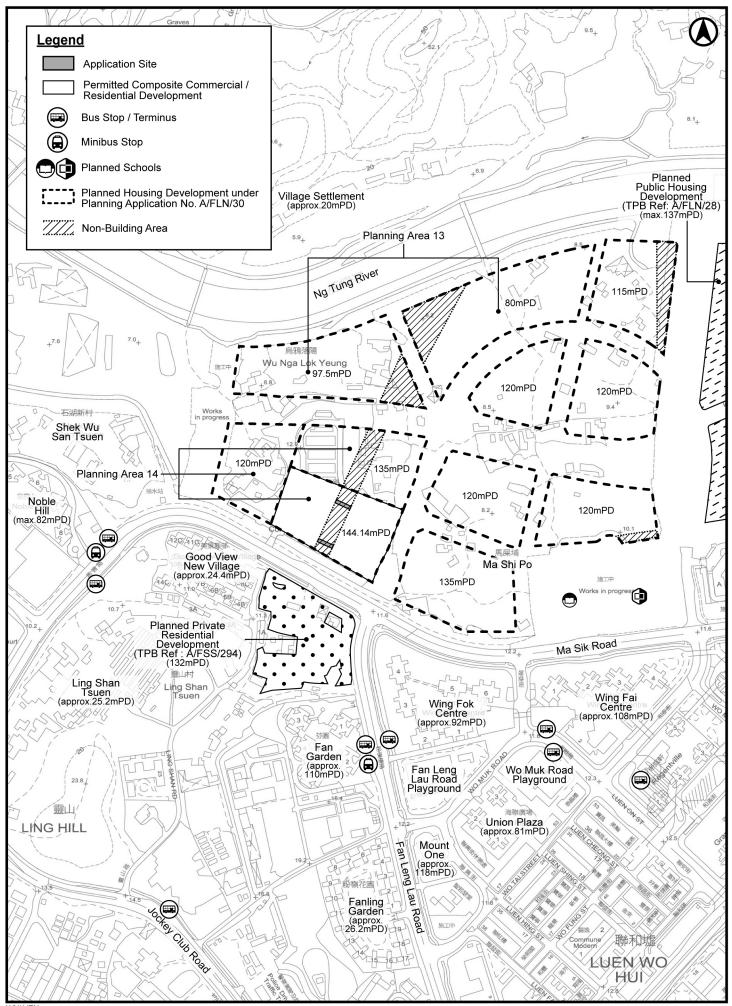


FIGURE 2.2 SITE LOCATION PLAN

SCALE 1:5,000



3 PLANNING CONTEXT

3.1 Statutory Planning Context

Approved Fanling North Outline Zoning Plan No. S/FLN/4

3.1.1 The Application Site falls within the "Residential (Group A)1" ("R(A)1") zone on the Approved OZP (Figures 1.1 and 1.2 refer). According to the Statutory Notes of the Approved OZP, minor relaxation of the NBA restrictions as shown on the OZP may be considered by the TPB on application under section 16 of the TPO for developments and/or redevelopments under exceptional circumstances.

3.2 Non-Statutory Planning Context

Explanatory Statement of the Approved Fanling North Outline Zoning Plan No. S/FLN/4

- 3.2.1 As stated in the Explanatory Statement ("ES") which accompanies the Approved OZP, the designation of NBA predominantly functions as major breezeways to enhance wind penetration at pedestrian/street level within Fanling North Area and allow the airflow penetrating to the wider Fanling/Sheung Shui Area. Several strips of NBA have been designated within FLN NDA, including the 20m-wide NBA running north to south, bisecting Planning Area 16, to facilitate the wind flow through the NBA and into wider Fanling/ Sheung Shui area. Landscaping and street furniture within the NBA is permitted.
- 3.2.2 The ES also indicated that minor relaxation of NBA as shown on the Approved OZP may be considered by TPB on application under section 16 of TPO under exceptional circumstances.

3.3 Planning History

3.3.1 The Application is subject of seven (7) previous planning applications for residential development. Pertinent to this S16 Planning Application includes:

TPB Ref	Application for	Approval Date
A/FLN/30	minor relaxation of PR and BH restrictions	Approved on 23 September
(by CEDD)	for 20 planned public and private housing	2022
	sites (including FSSTL No.297) in FLN NDA	
	(where minor relaxation of domestic PR	
	from 5 to 6, non-domestic PR from 1 to 1.2,	
	and BH from115mPD to 140mPD was	
	sought for the Site)	
A/FLN/32	minor relaxation of BH restriction (140mPD	Approved on 22 November
(by the	to 144.14mpD) solely to facilitate the	2024
Applicant)	adoption of MiC for the permitted Composite	
	Commercial/Residential Development (no	
	change to the domestic PR of 6 and non-	
	domestic PR of 1.2 approved under the TPB	
	No. A/FLN/30)	

3.3.2 General Building Plans ("**GBP**") under these parameters of TPB No. A/FLN/32 were approved on 10 January 2025.



4 THE DEVELOPMENT PROPOSAL

4.1 The Proposed Footbridge Connections

- 4.1.1 In order to advance the design and optimise pedestrian connectivity and circulation of the Approved Development, two (2) footbridge connections are put forward, each consisting of a weather-proof footbridge at 1/F with an open-sided covered walkway at 3/F above. No Commercial use is proposed within the Proposed Footbridge Connections.
- 4.1.2 Each weather-proof footbridge would have a dimension of about 21.5m (L) x 6m (W) x 9.4m (H), which will link up the retail uses of the two separated podium portions of the Development at 1/F. A clearance of 3.4 to 4.5m from ground level is provided for the Proposed Footbridge Connections, where the clearance of 4.5m will be provided above the EVA, which is in line with the minimum headroom requirement of 4.5m for EVAs required by the Buildings Department and the Fire Services Department. The EVA will be used for emergency vehicles only. A clearance ranging from 3.4m up to 4.5m from the podium structure will be provided to accommodate structural support of the footbridge connections to avoid the need for supporting pillars.
- 4.1.3 At 3/F, above the weather-proof footbridge, an open-sided walkway is proposed to connect the landscape areas and recreational facilities at 3/F for residents' enjoyment. The walkway (about 21.5m (L) x 6m (W)) will be provided with a 2m wide canopy along the length of the walkway for weather protection and protection from falling objects. Planters will also be provided to add visual interest and amenity along the walkway.

The Conceptual Architectural Drawings and the Indicative Artist Impression of the Proposed Footbridge Connections are provided in *Appendix 1* and *Appendix 2* respectively.

4.2 Technical and Accommodation Schedule

4.2.1 No change to the major development parameters (PR, GFA, and BH) of the Approved Development under TPB No. A/FLN/32 is proposed. The Technical and Accommodation Schedule is provided in *Table 4.1* below.

Table 4.1 Technical and Accommodation Schedule

TECHNICAL SCHEDULE	
Area of FSSTL No. 297	Approx. 14,432m ²
Application Site Area	Approx. 258m² (2 nos. of footbridge connections)
Total PR of the Approved Development ^{*1}	Not more than 7.2
Domestic	Not more than 6.0
Non-Domestic* ⁽¹⁾	Not more than 1.2
Total GFA of the Approved Development*1	Not more than 103,910.4m ²
Domestic	Not more than 86,592m ²
Non-Domestic* ⁽¹⁾	Not more than 17,318.4m ²
GFA of the Proposed Footbridge Connections	Not more than 516m ²
Domestic	Nil
Non-Domestic	Not more than 516m ² *(2)
Dimensions of each Proposed Footbridge Connections (Approx. length, width, height)	
Weather-Proof Footbridge	21.5m (L) x 6m (W) x 9.4m (H)
Open-sided Covered Walkway*(3):	21.5m (L) x 2m (W)*(3)



WITH REFERENCE TO THE APPROVED DEVELOPMENT (A/FLN/32)	
Site Coverage ("SC")	
Podium	Not more than 64.29%* ⁽⁴⁾
Residential Tower	Not more than 37.5%
Building Height: Main Roof (mPD) of the Approved Development	Not more than +144.14mPD
Building Height of the Proposed Footbridge Connections	Not more than 25.45mPD
No. of Residential Blocks	4 (providing about 2,300 Residential Units)
No. of Storeys	32 storeys atop 4 levels of Podium excluding 2 basement floors
Private Open Space	About 6,440 m ² (Not less than 1m ² per person)
Minimum Site Coverage of Greenery	Not less than 20%

- (1) There is no change to the Approved PR and GFA under TPB No. A/FLN/32. The Proposed Non-Domestic GFA of the Proposed Footbridge Connections will be accommodated within the Approved Non-Domestic PR of 1.2 and GFA of 17,318.4m² of the Approved Development.
- (2) The proposed non-domestic GFA has taken into account double counting of GFA due to the high headroom of the two (2) two-storey weather-proof footbridges in which modification and exemption of GFA of void under PNAP APP-2 Para. 2(c) will be sought, where the total area of void shall not exceed 10% of the total GFA of the shopping arcade.
- (3) The Open-Sided Walkway with a width of 6m at 3/F will be provided with a 2m-wide Covered Canopy for weather protection. Exemption of GFA calculation of the 2m-wide canopy (horizontal screen) will be sought per PNAP APP-42.
- (4) An additional SC of 1.79% to account for the Proposed Footbridge Connections to the Approved SC of 62.5% for the Podium of the Approved Development under TPB No. A/FLN/32. For height of building not exceeding 15m, the maximum SC allowable under the Building (Planning) Regulations shall be 100%.

4.3 Design Considerations

- 4.3.1 The Proposed Footbridge Connections enable a comfortable and convenient connection for visitors and residents while maintaining wind penetration in the area so as to respect the intention of the NBA. This is achieved by the following considerations:
 - Provision of Direct Elevated Linkages and Offering Comfortable and Safe Walking Environment:
 The Proposed Footbridge Connections feature an enclosed design to provide visitors and residents with all weather protection and a secure and comfortable passage ensuring uninterrupted accessibility despite adverse weather.
 - Maximising Visual Permeability and Air Porosity on NBA: A glass façade design will be adopted to maximise the visual permeability within the NBA, while allowing ample natural light throughout the footbridges to create a bright, open, and inviting atmosphere, at the same time complementing to the aesthetic and modern design of the Approved Development. To ensure optimal air porosity and visual permeability within the NBA, a minimal structural design is adopted, eliminating the need for ground-level supporting pillars. This approach will maximise opportunities for air flow to penetrate through the NBA. Air Ventilation Assessment Expert Evaluation has been conducted to assess the air ventilation impact of the Proposed Footbridge Connection, as detailed in Appendix 4.
 - Maximising Greening Opportunities at the Proposed Footbridge Connections: Greening opportunities have been seamlessly incorporated to enhance the visual amenity within the NBA. Greenery will be at 3/F along the walkway and above the canopy, creating visual interest at pedestrian level and offering a visually appealing and tranquil setting that enriches the experience of traversing the open-sided covered footbridges.
 - Enhancing Street-level Vibrancy on NBA: The Proposed Footbridge Connections are designed to be at around 4.5m above ground. By elevating pedestrian circulation and adopting a minimal structural design, increased opportunities for resting and gathering activities at G/F will be created. With reduced pedestrian circulation at ground level, the NBA can be redesigned to incorporate resting benches and improved landscaping, creating an inviting and versatile communal space for



the general public and enhancing the overall vibrancy and usability of NBA. In addition, the NBA serving as an extensive space provides a unique opportunity to fostering social interactions, community engagement, and lively street-level atmosphere on the NBA. The design considerations not only maximise the functionality of the Proposed Footbridge Connections for better connectivity and pedestrian circulation at elevated levels but also enrich the ground-level experience for the general public, fostering a dynamic and inclusive urban environment.

5 PLANNING JUSTIFICATIONS

5.1 Establishing Improved Barrier-Free Access for People with Disabilities and the People of All Ages

- 5.1.1 The Proposed Footbridge Connections will provide same-level, barrier-free access between the two separate portions of the retail podium, ensuring seamless and inclusive accessibility for all users, including persons with disabilities, the elderly, parents with strollers, and those with temporary or permanent mobility challenges. The Proposed Footbridge Connections eliminates the need for users to move to ground level every time and go up to access facilities on 1/F or above (*Appendix 1* refers), significantly improving convenience, accessibility and overall user experience. A similar footbridge provision is also included in the podium for the public housing development over a NBA in Area 15 East of the FLN NDA for the same circulation purposes.
- 5.1.2 By incorporating comprehensive barrier-free features, such as tactile guide paths slip-resistant surfaces and appropriately designed handrails, the Proposed Footbridge Connections will enhance safety and navigability for the persons with disabilities at the same level. The proposed design will fully comply with The Design Manual Barrier Free Access 2008 (2024 Edition) to ensure universal accessibility and inclusivity. The barrier-free connections will promote social equity by providing all users equal access to the landscaped retail facilities, and amenities within the Approved Development without need of unnecessary vertical movements. The Minor Relaxation of NBA is essential to facilitate the Proposed Footbridge Connections, which also in line with the Government's commitment to create an inclusive, age-friendly, and barrier-free built environment for all individuals.

5.2 Provision of Essential and Safe Linkages for The Public and the Residents for Greater Movement Efficiency from End-User Experience

- 5.2.1 The Proposed Footbridge Connections will improve pedestrian accessibility by creating a direct, safe, efficient and weather-protected linkage between the two retail podium portions and the residential towers above. The Footbridge Connections at 1/F will enable uninterrupted direct access between the currently separated podium portions, making it easier for both residents and visitors, and especially wheelchair uses, to move between key areas for daily services, dining, or shopping without the need to go down to the ground floor and crossing outside, especially during inclement weather. The comparison of the circulation routes of the schemes with and without Proposed Footbridge Connections are demonstrated in *Appendix 1*.
- 5.2.2 The Proposed Footbridge Connections will eliminate dead-end corridors at the 1/F retail level by seamlessly connecting the two disconnected podium portions, creating a continuous and effective pedestrian circulation flow. By bridging the two podium portions, the Proposed Footbridge Connections avoid congestion or bottlenecks. This seamless circulation is crucial for ensuring that foot flow remains steady and uninterrupted and eliminating backtracking and abrupt corridor terminations.

5.3 Enhancing Fire Safety Standard of the Permitted Composite Commercial/Residential Development

5.3.1 The Proposed Footbridge Connections will serve as fire escape routes, directly linking to the means of escape staircases of the opposite podium portions. Given the scale of the Approved Development and anticipated pedestrian flow, the strategically placed footbridge connections are



- designed to significantly reduce evacuation time during emergencies, ensuring the public and the residents can exit swiftly before conditions become untenable. By minimising dead-end travel distances and providing alternative egress paths, the Proposed Footbridge Connections will enhance overall life safety compliance and mitigate overcrowding risks in primary escape routes.
- 5.3.2 Furthermore, the additional access points will improve operational efficiency for firefighters, enabling faster deployment and more effective rescue operations. The interconnected podium portions will facilitate building navigation. The Proposed Footbridge Connections will enhance the resilience of the Approved Development and in line with the primary intent of fire safety regulations prioritising occupant protection and emergency response effectiveness.

5.4 Enabling the Non-building Area at G/F to be Used More Effectively for Landscaped Area and the Public's Enjoyment

- 5.4.1 The Proposed Footbridge Connections between the two podium portions will serve as a transformative solution, significantly reducing need of making extensive ground-level pedestrian walkways that would otherwise occupy much of the NBA at G/F with uncovered circulation areas. By elevating pedestrian circulation over the NBA by around 4.5m above ground fulfilling the EVA requirements, the Proposed Footbridge Connections will unlock valuable space at G/F, allowing the NBA to be reimagined as a vibrant and multi-functional landscaped area. This carefully curated space will feature thoughtfully designed landscaping, seating areas, and recreational spaces, creating an inviting and engaging environment for both residents and visitors.
- 5.4.2 It should be noted that the Approved Development is not connected to other developments via footbridge systems, i.e. the main access remains at G/F level and the street vibrancy at G/F along the NBA is paramount to create a sense of welcoming. As such, the activation of NBA offers various opportunities for placemaking and innovative urban design, including strategically placed greenery, open-air seatings, and weekend markets. Collectively, these enhancements will enrich the street-level, elevate the quality of the public realm, foster social interactions, improve pedestrian circulations, and contribute to a more liveable and attractive environment within the Approved Development. The better connections between the two retail portions can also enhance shopping experience for local residents, avoiding fragmentation and helping to bring in vibrancy.

5.5 Enhancing Pedestrian Connectivity While Maintaining Minimal Site Coverage within the NBA

5.5.1 The Proposed Footbridge Connections feature a thoughtfully designed and efficient spatial layout, occupying only approximately 12.96% site coverage ("SC") within the NBA, representing a minimal 1.79% increase in site coverage compared to the Approved Development at the Podium Level. These connections effectively address the current pedestrian disconnection between the two podium portions by creating seamless circulation pathways, all while maintaining full compliance with the permissible site coverage outlined in the Building (Planning) Regulations (B(P)R). The Proposed Footbridge Connections will enhance functionality and enrich the public realm across the entire development while simultaneously in compliance with the statutory requirements.



6 TECHNICAL JUSTIFICATIONS

6.1 No Adverse Visual Impact

- 6.1.1 The Proposed Footbridge Connections will not result in any increase in PR and BH of the Approved Development. In this regard, there will not be deviation in development scale and intensity of the Approved Development. No visual changes from key public viewing points or adverse visual impact on the surrounding area characterised by high-rise developments ranging from 80mPD to 170mPD is anticipated.
- 6.1.2 The Approved Development is flanked by the planned public housing development with a BH of approx.135mPD to the immediate north and the private residential development with a BH of approx.132mPD to the immediate south. This development pattern has limited the visual permeability of the NBA, particularly open sky views towards the south where no NBA is imposed.
- 6.1.3 Nevertheless, the Proposed Footbridge Connections will be sensitively designed to minimise visual impact at ground level while enhancing connectivity and pedestrian experience. By adopting a lightweight and pillar-free structure design, the Proposed Footbridge Connections will ensure unobstructed space below while maintaining visual permeability on the NBA through glass walls for the weather-proof footbridges and open-sided design for the covered walkways above. The design approach will reduce the visual prominence of the footbridge structures so that it remains visual unobtrusive. To further enhance the visual amenity and reduce the prominence of the structures, aesthetic and greening features will be incorporated. These include integrated planters along open-sided walkways and rooftop greenery above the covered sections. Together, these elements will enrich the pedestrian experience at 3/F and contribute to a more visually appealing and comfortable environment for both residents and the public.
- 6.1.4 Artist's Impressions of the Proposed Footbridge Connections (for illustration purposes) are provided in *Appendix 2*. As demonstrated, the Proposed Footbridge Connections will be in harmony with the Approved Development and the planned developments nearby and the visual impact of the Proposed Footbridge Connections is considered to be not significant.

6.2 No Adverse Air Ventilation Impact

6.2.1 An Air Ventilation Assessment – Expert Evaluation ("AVA-EE") was conducted (*Appendix 3* refers) to assess the ventilation performance of the Proposed Scheme (i.e. The Proposed Footbridge Connections) against the Baseline Scheme (i.e. the Approved Scheme for the Permitted Composite Commercial/Residential Development under Planning Application No. A/FLN/32), which concluded that the Proposed Footbridge Connections will not lead to significant adverse impact to the wind environment at the pedestrian level and the overall wind environment.



7 CONCLUSION

- 7.1 This S16 Application seeks planning permission from the BOARD for the Minor Relaxation of the Non-Building Area Restriction as shown on the Approved OZP to enable the Proposed Footbridge Connections at Ma Sik Road, Fanling, New Territories. This SPS has demonstrated that the Proposal is justified for the following reasons:
 - The Proposed Footbridge Connections will provide seamless, barrier-free access between two
 originally fragmented podium portions, enhancing mobility for persons with disabilities and
 individuals of all ages by reducing unnecessary vertical transitions and improving overall
 convenience and user experience;
 - It will offer a direct, safe, and weather-protected pedestrian link between two retail podium portions and residential towers, increasing movement efficiency and particularly benefiting wheelchair users during inclement weather;
 - The Proposed Footbridge Connections will enhance fire safety by providing additional evacuation routes, minimise dead-end corridors, and improving emergency responder access, ensuring better compliance with life safety standards and more effective rescue operations for the Approved Development;
 - The Proposed Footbridge Connections, in lieu of sacrificing ground level space for much hardpaved and uncovered circulation space, will maximise the ground-level at the NBA for curated landscaped areas, seating zones, and multipurpose event spaces with more lively design of accesses, which will foster community engagement, elevate pedestrian experience, and enhance street vibrancy along Ma Sik Road;
 - The Proposed Footbridge Connections will result in only a minimal increase to the Approved Site Coverage; and
 - No significant adverse visual or air ventilation impacts are anticipated.

7.2 In light of the planning and design merits and justifications put forward in this SPS, we trust that the BOARD will give favourable consideration to the Application.

Approved and

Edited by:

Vincent Lau

Prepared by:

Agnes Leung

Date:

8 July 2025

File Ref:

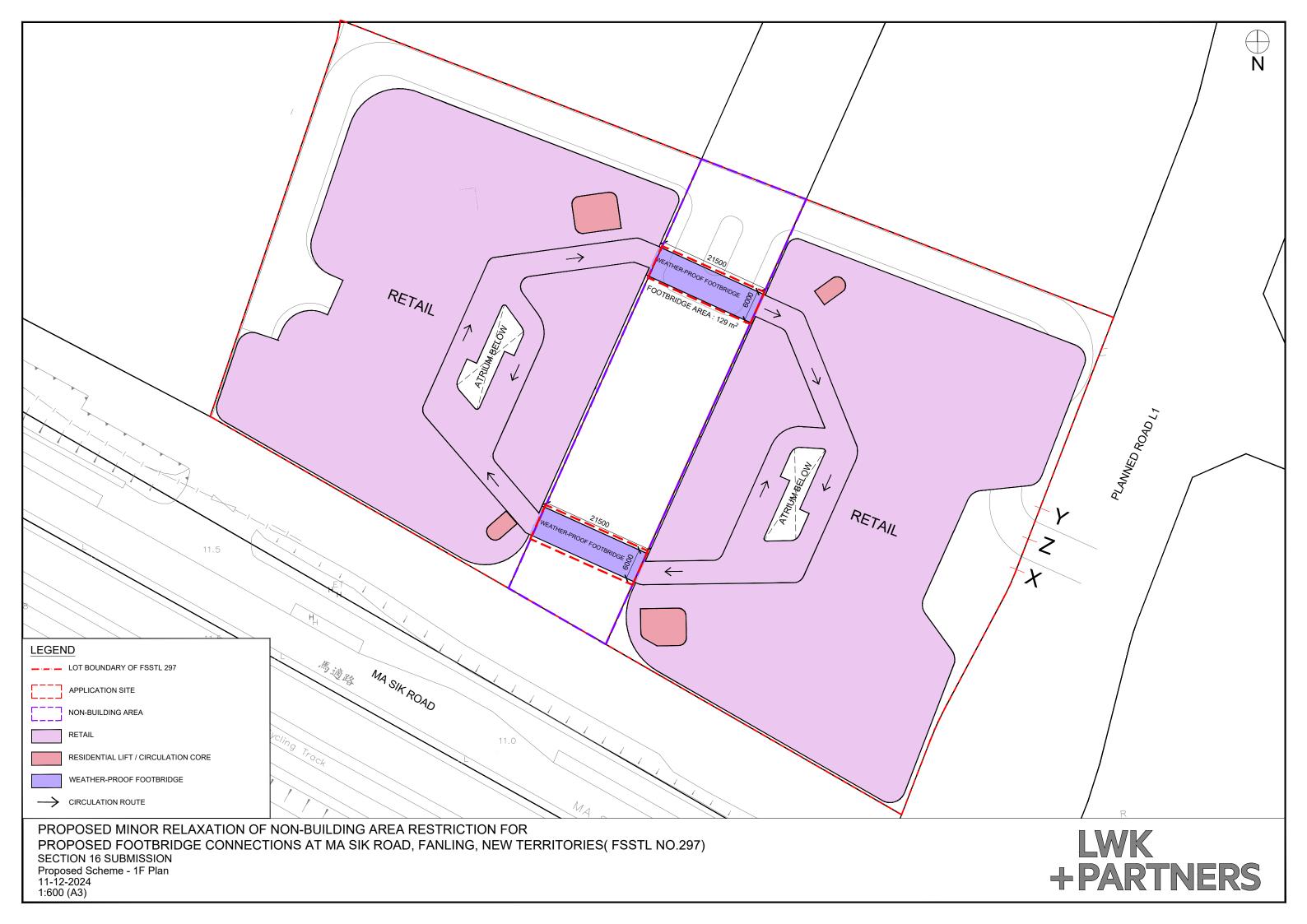
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Appendix 1

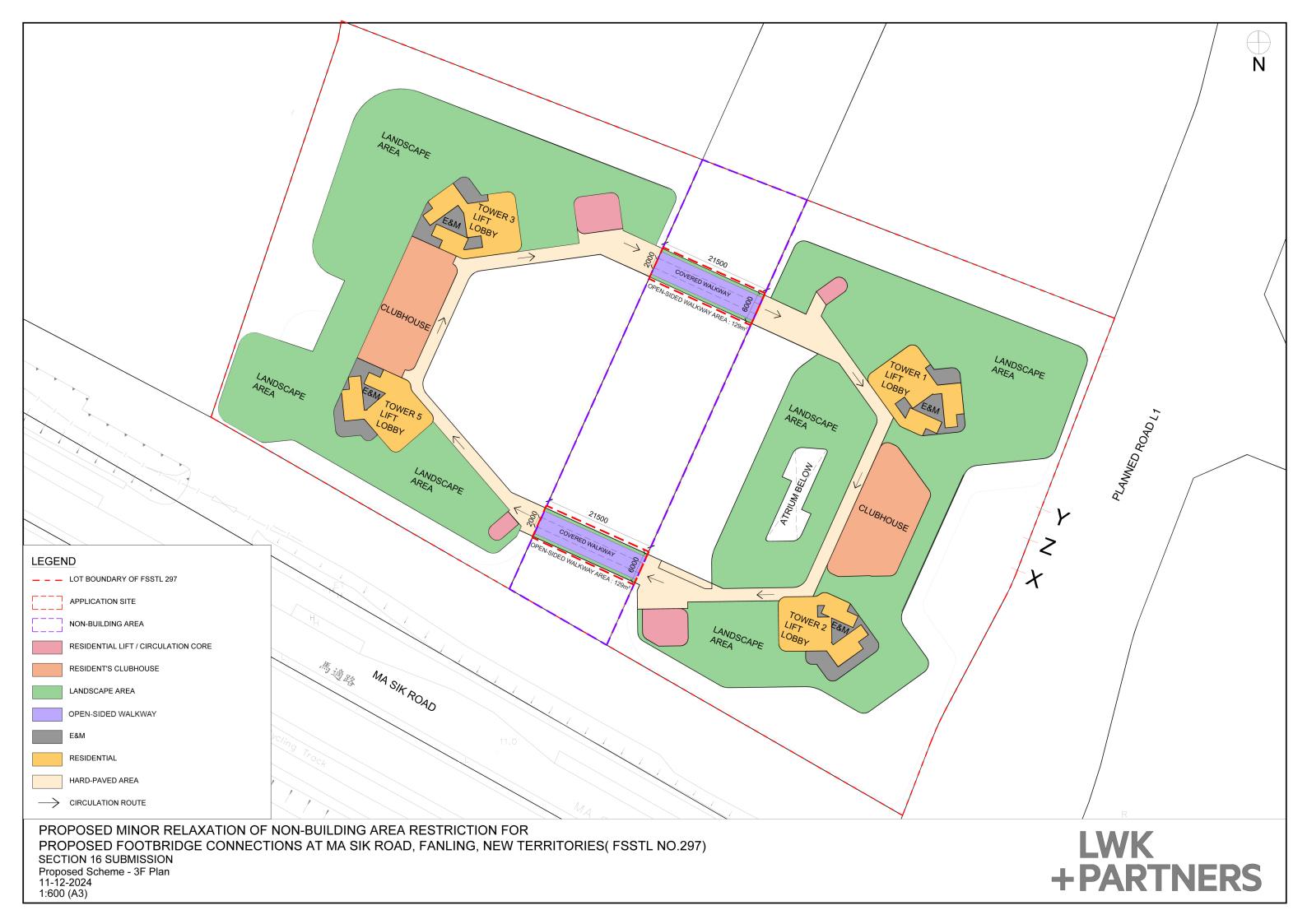
CONCEPTUAL ARCHITECTURAL DRAWINGS

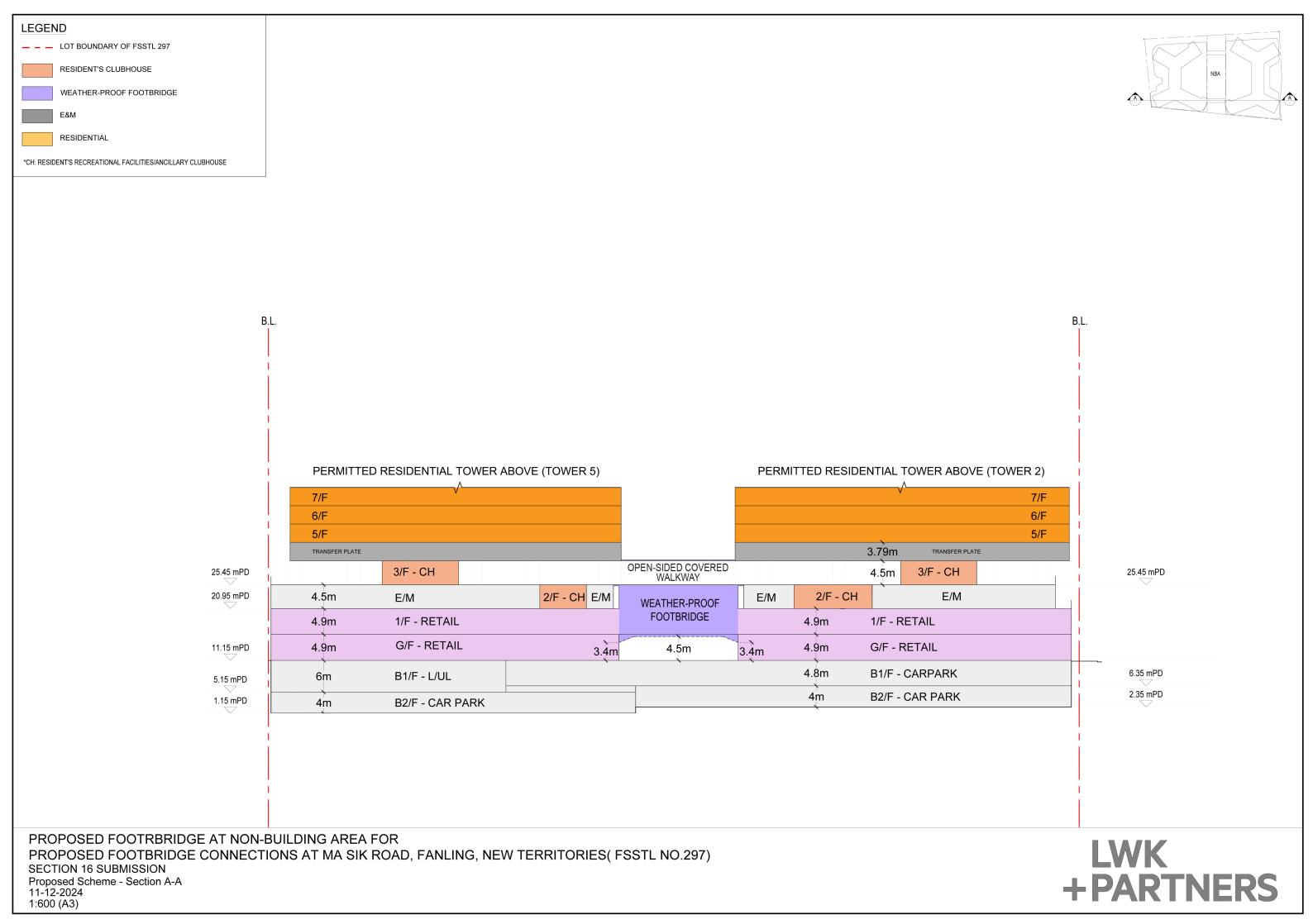


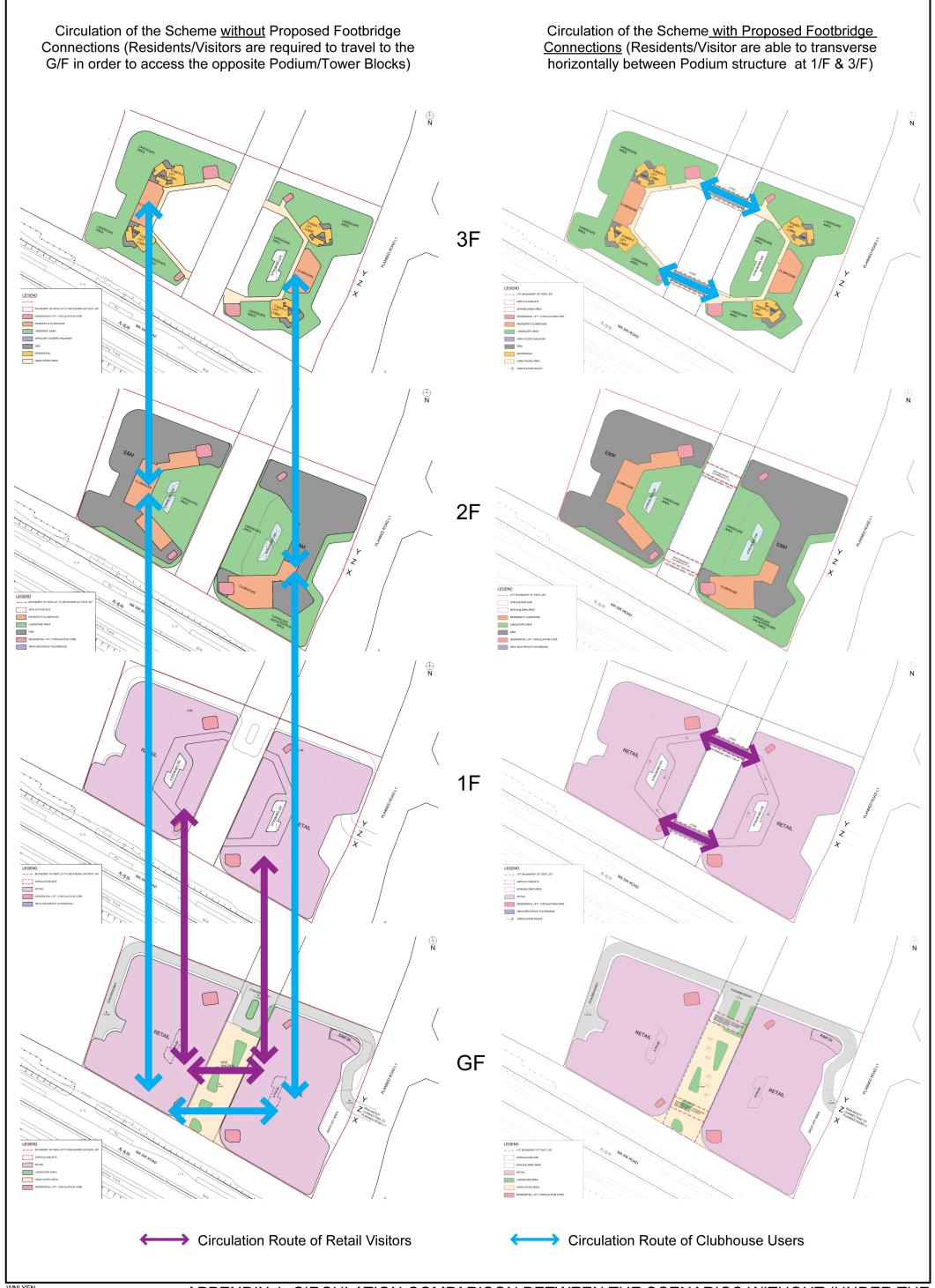








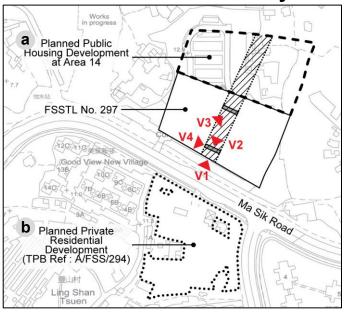




Appendix 2

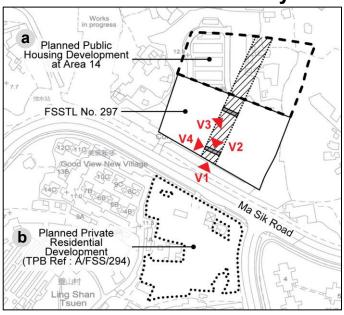
INDICATIVE ARTIST'S IMPRESSIONS





- The Proposed Footbridge Connections provide **direct linkages** for all end-users to traverse between the currently separated podium portions at each side. The weather-proof footbridge will provide a **safe and comfortable** passage for the end-users, ensuring **uninterrupted** accessibility in all weather conditions.
- The adoption of the glass wall design at the weatherproof footbridge enhances visual permeability, allowing ample natural lighting on the NBA. This design creates a welcoming, comfortable and safe environment for end-users, both indoors and throughout the NBA, in all weather conditions.
- The minimal structural design reduces the need for ground-level supporting pillars. This approach maximises the opportunity of air penetration at pedestrian level and ensures an unobstructed view at pedestrian level and preserves the NBA for highquality landscaping, open-air seating, and resting areas.
- 4 The open-sided design of the covered walkway and the canopy with a width of 2m can effectively minimise the overall structural bulk of Proposed Footbridge Connections, to preserve the visual openness and to maximise air penetration on NBA.





- The Proposed Footbridge Connections elevates the pedestrian circulation with a minimal structural design, creating opportunities for ground-level resting benches, gathering spaces, and enhanced landscaping. This design transforms the NBA into a welcoming space, fostering street vibrancy and enhancing its functionality. Additionally, the space can provide opportunities for vibrant weekend markets that encourage social interactions and community engagement. The Proposed Footbridge Connections will enrich the ground-level atmosphere and create a dynamic and inclusive space within the NBA.
- The incorporation of **greenery** on the rooftops of the canopies of the covered walkway, along with **planters** on both sides of the walkway, will **soften the visual prominence** of the Proposed Footbridge Connections while **adding visual interest** to the NBA at pedestrian level and offering a visually appealing and tranquil setting for the residents.

Appendix 3

AIR VENTILATION ASSESSMENT – EXPERT EVALUATION

Issue No. : Issue 1 Issue Date : July 2025 Project No. : 819.5357



AIR VENTILATION ASSESSMENT - EXPERT EVALUATION

FOR

PROPOSED MINOR
RELAXATION OF NONBUILDING AREA
RESTRICTION FOR PROPOSED
FOOTBRIDGE CONNECTIONS
AT MA SIK ROAD, FANLING,
NEW TERRITORIES

Prepared by

Allied Environmental Consultants Limited

COMMERCIAL-IN-CONFIDENCE

Document Verification



Project Title Proposed Minor Relaxation Project No. of Non-Building Area 819.5357

of Non-Building Area Restriction for Proposed Footbridge Connections at Ma Sik Road, Fanling, New

Territories

Document Title Air ventilation Assessment - EXPERT EVALUATION

Issue No.Issue DateDescriptionPrepared byChecked byApproved byIssue 1July 20251st SubmissionToby LamJoanne NgGrace Kwok

Allied Environmental Consultants Limited

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Project No. 819.5357

Air ventilation Assessment - EXPERT EVALUATION for Proposed Minor Relaxation of Non-Building Area Restriction for Proposed Footbridge Connections at Ma Sik Road, Fanling, New Territories

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Appendix A Schematic Layout Plan – Scheme with Proposed Footbridge Connections

1. Executive Summary

1.1.1. With the good design features to improve air ventilation performance, including a 3.4m to 4.5m clearance from the ground and the open-sided covered walkway design over the weather proof footbridge to maintain the permeability as practicable, no significant adverse impact to the wind environment at pedestrian level associated with the Proposed Footbridge Connections is anticipated.

2. Introduction

2.1.1. This Air Ventilation Assessment – Expert Evaluation is prepared and submitted in support of the Minor Relaxation of the Non-Building Area ("NBA") to enable two footbridge connections, each consisting of a weather-proof footbridge at 1/F and an open-sided covered walkway at 3/F above (hereafter refer to as the "Proposed Footbridge Connections") at Ma Sik Road, Fanling, New Territories (hereafter refer to as the "Application Site").

3. Objectives

3.1.1. The main objective of the study is to evaluate potential air ventilation impacts associated with the Proposed Footbridge Connections on pedestrian wind environment within and in the vicinity of the Application Site using the methodology framework as set out by relevant government standard, guidelines and technical circulars.

4. Site Description

4.1.1. The Application Site is at the tail-end of the four designated NBA sites in Planning Areas 13 and 14, and is currently zoned "Residential (Group A) 1" ("R(A)1") on the Approved Fanling North Outline Zoning Plan ("OZP") No. S/FLN/4. The surrounding areas are mainly zoned "Residential (Group A) 1" ("R(A)1"), "Residential (Group A) 3" ("R(A)3"), "Residential (Group B)" ("R(B)"), "Residential (Group A) 12" ("R(A)12") and "Other Specified Uses (Amenity Area)" ("OU(A)"). A site location plan with surrounding environment is shown in *Figure 4-1*.

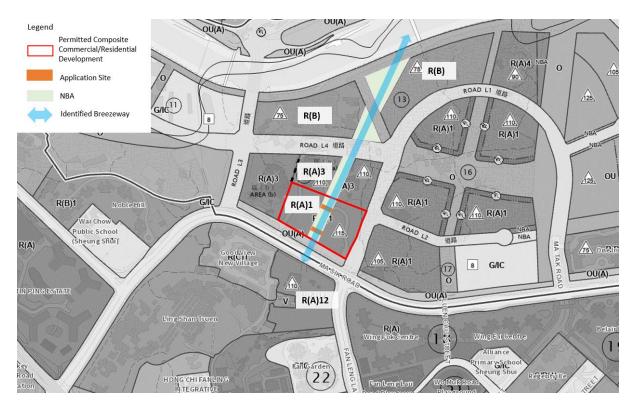


Figure 4-1 Application Site Location

5. Methodology

- 5.1.1. The methodology framework of this study is set out in the Technical Circular No. 1/06 and its Annex A Technical Guide for Air Ventilation Assessment for Development in Hong Kong. The Technical Circular is jointly issued by Housing, Planning and Lands Bureau (HPLB) and Environment, Transport and Work Bureau (ETWB) in July 2006 (Technical Guide).
- 5.1.2. The scope of this study shall cover the following:
 - To identify any major wind corridors which should be preserved or reserved;
 - To identify any potentially affected areas due to the Proposed Footbridge Connections design including the layout and deposition;
 - To identify good design features; and
 - To provide recommendations for alleviating the potential air ventilation impact identified.

6. Assessment Methodology

6.1. WIND AVAILABILITY DATA

Hong Kong Observatory

- 6.1.1. The Hong Kong Observatory records the metrological data in Hong Kong. Among all the weather stations in Hong Kong, wind data from Ta Kwu Ling station shall be used for the discussion on overall wind environment in the region.
- 6.1.2. According to the wind availability data from Ta Kwu Ling Station from 1986 2024, the annual wind rose revealed winds flowing from the east and southeast quadrant (i.e. E, ESE) throughout the year. The wind data from July to September is adopted as the summer prevailing wind, where predominant summer winds are flowing from the southeast quadrant (i.e. E, ESE). The wind rose during annual and summer conditions are shown in *Figure 6-1* and *Figure 6-2*.

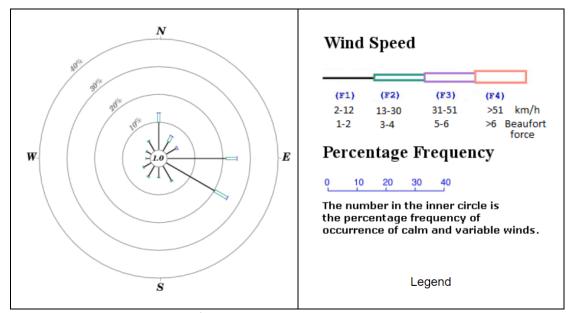


Figure 6-1 Annual Wind Rose for Tai Po, 1986 - 2024

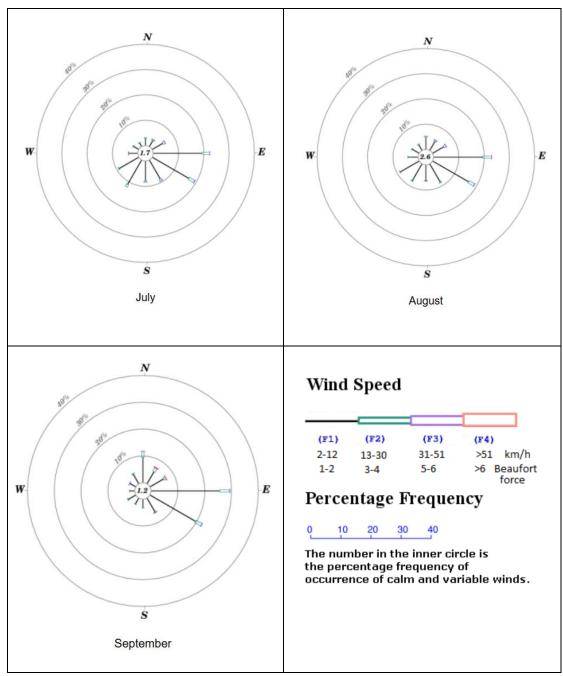


Figure 6-2 Summer Wind Rose for Tai Po, 1986 - 2024

Regional Atmospheric Modelling System (RAMS)

6.1.3. Wind availability to the Application Site is evaluated with reference to the "Consultancy Study on Establishment of Simulated Site Wind Availability Data for Air Ventilation Assessments in Hong Kong" simulated by the meso-scale model of Regional Atmospheric Modelling System (RAMS) Version 6.0 at the horizontal resolution of 0.5km * 0.5km.

6.1.4. The Application Site is located within grid (073,083) in Fanling. Wind availability data at 200m was adopted in this assessment. According to PlanD's simulated data, wind roses, wind direction and wind probability data are provided in *Figure 6-3* and *Table 6-1*.

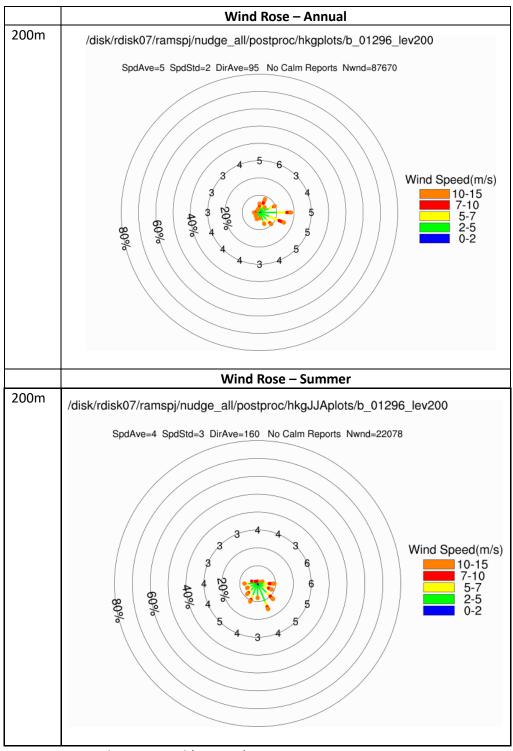


Figure 6-3 Wind Rose at Grid (073,083)

Table 6-1 Wind Probability at 200m (Grid 073,083)

Wind Direction	Annual Probability	Summer Probability
N	5%	1%
NNE	8%	1%
NE	4%	1%
ENE	10%	3%
E	18%	10%
ESE	15%	9%
SE	10%	12%
SSE	7%	16%
S	3%	8%
SSW	4%	11%
SW	3%	8%
WSW	2%	6%
W	3%	7%
WNW	2%	4%
NW	2%	2%
NNW	2%	1%

- 6.1.5. According to RAMS wind data, annual prevailing winds are the incoming winds flowing from the east and southeast quadrant while summer prevailing winds are flowing southwest and southeast quadrant.
- 6.1.6. **Table 6-2** summarises the identified prevailing wind conditions in Fanling area. Ta Kwu Ling Station is located inside the Ta Kwu Ling Farm at the northern part of the New Territories which is far away from the Application Site. For a comprehensive discussion on air ventilation performance of the Application Site and the wind environment at pedestrian level, prevailing winds from RAMS data are therefore adopted for air ventilation assessment.

Table 6-2 Wind Data Summary

Sources	Annual Wind	Summer Wind
Hong Kong Observatory (Tai Po station from 1986)	E, ESE	E, ESE
RAMS data (Grid 073,083)	ENE, E, ESE, SE	E, SE, SSE, SSW

7. Project Description

- 7.1.1. The Proposed Footbridge Connections, consisting of 2 sets of an open-sided covered walkway atop weather-proof footbridge, is proposed to enhance the circulation of the Permitted Composite Commercial/Residential Development. No Commercial use is proposed within the Proposed Footbridge Connections.
- 7.1.2. The weather-proof footbridges would have a dimension of about 21.5 m (length) x 6 m (width) x 9.4 m (height), which will link up the retail uses of the two separated podium portions of the Development at 1/F. Glass façade design will be adopted for the weather-proof footbridges to maximise the visual permeability on the NBA. A clearance of around 3.4m to 4.5m from the Ground is provided.
- 7.1.3. At 3/F, an open-sided covered walkway, with a dimension of about 21.5 m (length) x 2 m (width) is proposed above the footbridge to connect the landscape areas and recreational facilities at 3/F for residents' enjoyment. Planters will be provided along the open-sided covered walkway to enhance the visual amenity of the Proposed Footbridge Connections.

7.2. Surrounding Environment

Urban Morphology

7.2.1. The Application Site is mainly surrounded by high-rise residential buildings (approx. 80-135 mPD). The surrounding environment is shown in *Table 7-1* and *Figure 7-1*.

Table 7-1 Building Heights of Major Development in the Surroundings

Surrounding Buildings	Building Heights (mPD)
Good View New Village	~24.4
Ling Shan Tsuen	~20.8
Fan Garden	~106
Wing Fok Centre	~91.4
Permitted Composite Commercial/Residential Development	~144
Proposed Private Housing	~80-132
Proposed Public Housing	~97.5-135
Proposed School	Max. 8-storey

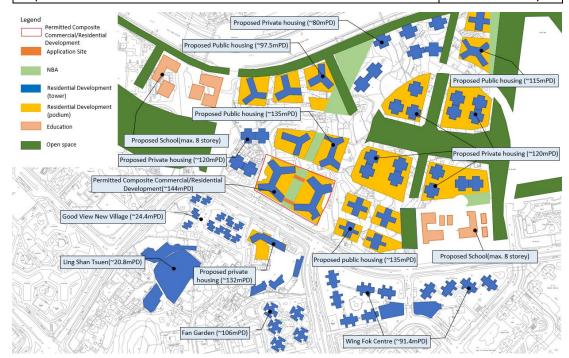


Figure 7-1 Surrounding environment

Road Pattern, Breezeway and open space

- 7.2.2. Road network facilitates wind penetration to the Application Site and the surrounding areas. The location of Proposed Footbridge Connections is at Residential (Group A) ("R(A)")1 site as shown in *Figure 4-1*. There are four NBAs aligned in NE to SW direction are designated within "R(A)1", "R(A)3" and "R(B)" sites in Planning Areas 13 and 14 to divert wind to penetrate through these sites to the Fanling area. Based on the Approved OZP, it is identified that the four NBAs are serving as a breezeway to enhance penetration of wind which is aligned approximately in northeast and southwest directions. These unobstructed breezeways allow the prevailing winds to penetrate into the built environment of the Area as well as the downstream Fanling/Sheung Shui area.
- 7.2.3. Further to the south-west of the Proposed Footbridge Connections, there is a high-rise proposed private Housing (~132mPD) located at site R(A)12, where no NBA is incorporated. Therefore, prevailing ENE wind penetrate through the four NBAs and likely to collide at the high-rise building in site R(A)12, leading to a downwash effect at Ma Sik Road. On the other hand, only high-level prevailing SSW and SSE wind could skim over the high-rise building at R(A)12 site and penetrate through the NBAs to the downwind areas. Therefore, due to the absence of NBA in site R(A)12, the effect of NBAs is significantly reduced. Open space is situated to the east and west of the Application Site, as illustrated in *Figure 7-1*, with high-rise buildings surrounding the Application site.

Topography

7.2.4. The Application Site is located on relatively flat area of about 12.5mPD that shares similar topography to its immediate area. Hilly topographies are found lying to the north of the Application Site with increasing topological heights further away from the Application Site. The hilly terrain act as a shelter to the annual ENE prevailing winds, and reduce the magnitude of this wind.

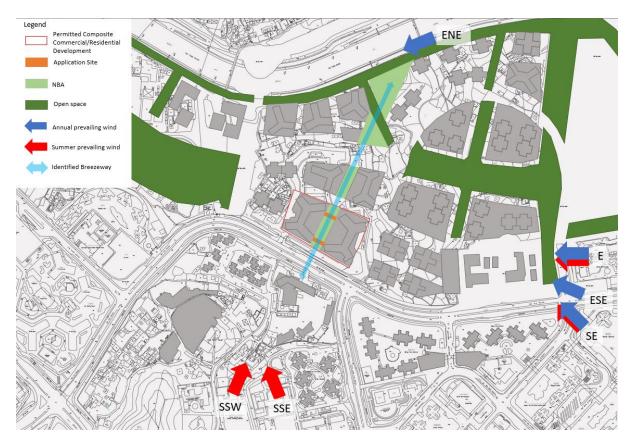


Figure 7-1 Prevailing Wind Environment in the Study Area

8. Baseline Scheme and Scheme with Proposed Footbridge Connections

8.1. Design Parameters

- 8.1.1. The Application Site is at the tail-end of the four designated NBA sites in Planning Areas 13 and 14, where is currently zoned R(A)1 on the Approved Fanling North OZP No. S/FLN/4. The existing condition of the NBA is incorporated in Baseline Scheme and is compared with the Scheme with Proposed Footbridge Connections in the discussion of this report.
- 8.1.2. The major design parameters of Proposed Footbridge Connections are summarized in *Table 8-1.* Layout plans and section drawing are shown in *Appendix A.* Comparison between Baseline Scheme (Reference to Approved Scheme for Permitted Composite Commercial/Residential Development under Planning Application No. A/FLN/32' (i.e. BH of 144.14mPD)) and the Scheme with Proposed Footbridge Connections are made to evaluate any impacts on the overall air ventilation performance in its surrounding area.

Table 8-1 Major design parameters of Scheme with Proposed Footbridge Connections

Parameter	Proposed Footbridge Connections
Site Area (m²)	Approx. 258m ²
Gross Floor Area (m²)	Not more than 516m ²
Site Coverage (%)	 Not more than 1.79 % (in relation to the Development Site (FSSTL No. 297 (approx. 14,432m2)) Not more than 12.96 % (in relation to the NBA within the Development Site (approx. 1,991 m2))
Dimensions of the Proposed	
Footbridge Connections (length, width,	
height)	
 Weather- Proof Footbridge 	21.5 m (L) x 6 m (W) x 9.4 m (H)
 Open-Sided Covered Walkway 	21.5 m (L) x 2 m (W)

8.2. Good Design Features

Clearance at pedestrian level

8.2.1. A clearance of around 3.4m to 4.5m from the ground is provided for the Proposed Footbridge Connections as shown in *Figure 8-1*. This design is to maintain the wind corridor to the prevailing wind at ground level and beneficial to the downwind areas. It is anticipated that the incoming wind at low-level could penetrate through the Proposed Footbridge Connections and high-level wind will not be obstructed by the Proposed Footbridge Connections. It is anticipated the wind environment at pedestrian level would not be significantly affected.

Weather-proof Footbridge with an open-sided covered walkway

8.2.2. The structures of the Proposed Footbridge Connections are only minimal -- its proportion to the site coverage is merely not more than 12.96 % of the NBA. A wake zone would be created on the immediate leeward side of the Proposed Footbridge Connections. However, since the top level of the footbridge is about 25mPD as shown in *Figure 8-1*, it is expected that the adverse impact on downwind areas will be reduced due to its minimal obstruction. In addition, an open-sided covered walkway above the footbridge only poses less obstruction to the incoming wind and would not induce significant obstruction to the downwind areas.

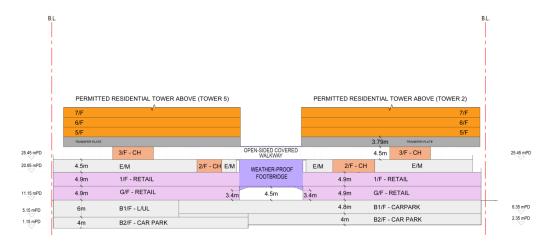


Figure 8-1 Section of the Proposed Footbridge Connections

9. Expert Evaluation

ENE wind (Annual Prevailing Wind)

- 9.1.1. Under annual prevailing wind condition, incoming ENE wind would flow along the NBAs at the north and reach the Application Site as shown in *Figure 9-1*.
- 9.1.2. Under the Baseline Scheme, ENE wind could penetrate through the Application Site and reach the downwind area of proposed private housing (~132mPD) across Ma Sik Road. However, no NBA is incorporated in the downwind area of Proposed private housing. The prevailing wind would collide at the high-rise proposed private housing development and thus lead to a downwash effect at Ma Sik Road. Therefore, the effect of the NBA is largely minimized due to the consistent NBA arrangement.
- 9.1.3. Under the Scheme with Proposed Footbridge Connections, the prevailing ENE wind at low-level would collide at the Proposed bridge and a wake zone would be created on the immediate leeward side of the Proposed Footbridge Connections. However, since a clearance of around 3.4m to 4.5m from the ground is provided for the Proposed Footbridge Connections and the top level of the footbridge is merely about 25mPD, it is expected that the adverse impact on downwind areas will be minimal due to the relatively small structure of Proposed Footbridge Connections. It is anticipated that the incoming wind at low-level could penetrate through and will not be significantly affect the wind environment at pedestrian level. In addition, there would be no obstruction in the NBA at high-level and the high-level prevailing ENE wind could flow freely through the Application Site.
- 9.1.4. In addition, an open-sided covered walkway above the footbridge only poses less obstruction to the incoming wind and would not induce significant obstruction to the downwind areas.
- 9.1.5. Eventually, the incoming ENE wind would flow through the Application Site and collide at the downwind areas of high-rise residential buildings. Therefore, significant adverse impact from the Proposed Footbridge Connections to the wind performance at the downwind area is not anticipated.

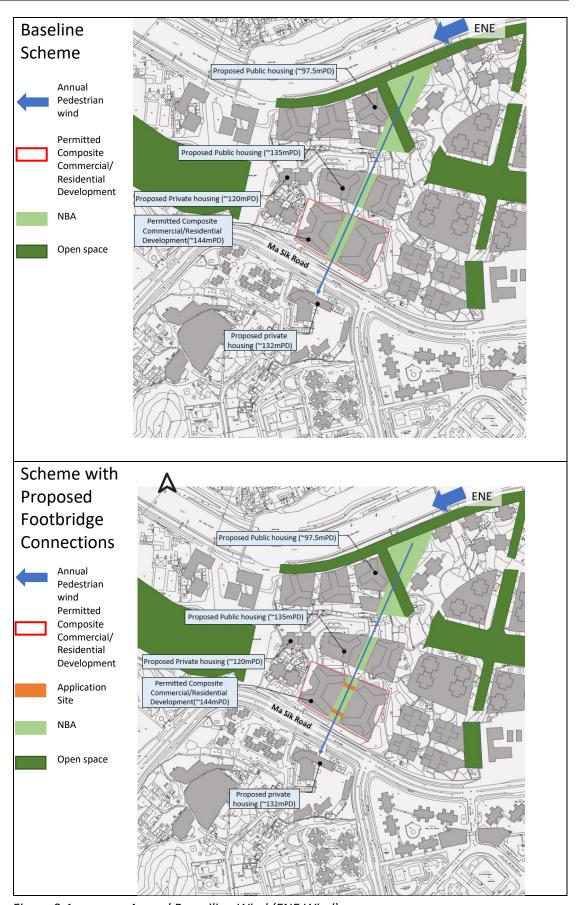


Figure 9-1 Annual Prevailing Wind (ENE Wind)

E and SE wind (Annual and Summer Prevailing Wind) and ESE (Annual Prevailing Wind)

- 9.1.6. Incoming E and SE wind under annual and summer wind condition and ESE wind under annual condition from open space and Road L2 would flow through the Application Site as shown in *Figure 9-2*.
- 9.1.7. Under the Baseline Scheme, the high-rise buildings located at the east of the Application Site (i.e. the Permitted Composite Commercial/Residential Development and the proposed private/public housing developments, etc.) with about 120-144mPD which block the prevailing E and ESE wind from reaching the Application Site. The prevailing wind would be diverted and flow through the Road L2 and Ma Sik Road and reach the downwind area of Application Site (i.e. open space).
- 9.1.8. Under the Scheme with Proposed Footbridge Connections, the incoming E and ESE wind would be obstructed by high-rise buildings of the Permitted Composite Commercial/Residential Development and the proposed private/public housing developments. Hence, the Proposed Footbridge Connections would be predominantly shielded by these high-rise buildings and the provision of Proposed Footbridge Connections would not cause significant ventilation impact.
- 9.1.9. In addition, the incoming wind would likely be diverted towards the Road L2 and Ma Sik Road. In view of the relatively small structure, the Proposed Footbridge Connections are unlikely pose major obstruction to Road L2 and Ma Sik Road. Therefore, it is anticipated that the ventilation impact induced by the provision of Proposed Footbridge Connections is minimal.

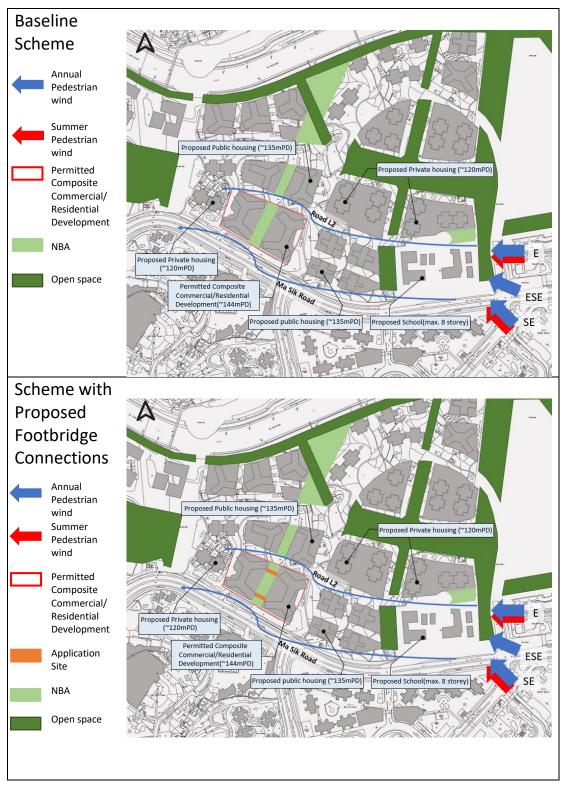


Figure 9-2 Annual Prevailing Wind (E, ESE and SE Wind)

SSW and SSE wind (Summer Prevailing Wind)

- 9.1.10. Under summer prevailing wind conditions, SSW and SSE wind would flow from the directions at the high-rise buildings (i.e. proposed private housing with 132mPD) located at the immediate southwest and reach the Application Site as shown in *Figure 9-3*.
- 9.1.11. Under the Baseline Scheme, the high-rise buildings at the immediate southwest of Application Site reduces the wind penetration to Application Site by generating wake zone at Application Site as shown in *Figure 9-3*. Due to the large obstruction to the incoming SSW and SSE wind, it is anticipated that the air movement within the Proposed Footbridge Connections would be reduced. The turbulence created would further diminish the effectiveness of the NBAs. Only high-level incoming wind could skim over the high-rise building and reach the Application Site. The Application Site is predominantly shielded by these high-rise buildings and the NBA only slightly facilitates penetration of these wind directions to the North.
- 9.1.12. Under the Scheme with Proposed Footbridge Connections, only incoming wind at high level could skim over the high-rise building at southwest and reach the Application Site. Nevertheless, a clearance of around 3.4m to 4.5m from the ground is provided for the Proposed Footbridge Connections. It is expected that the adverse impact on downwind areas of Application Site will be minimal due to the relatively small structure of Proposed Footbridge Connections.
- 9.1.13. In addition, an open-sided covered walkway above the footbridge only poses less obstruction to the incoming wind and would not induce significant obstruction to the downwind areas.
- 9.1.14. Eventually, the Proposed Footbridge Connections would be predominantly shielded by the high-rise buildings and significant adverse impact from the Proposed Footbridge Connections to the wind performance at the downwind area is not anticipated.

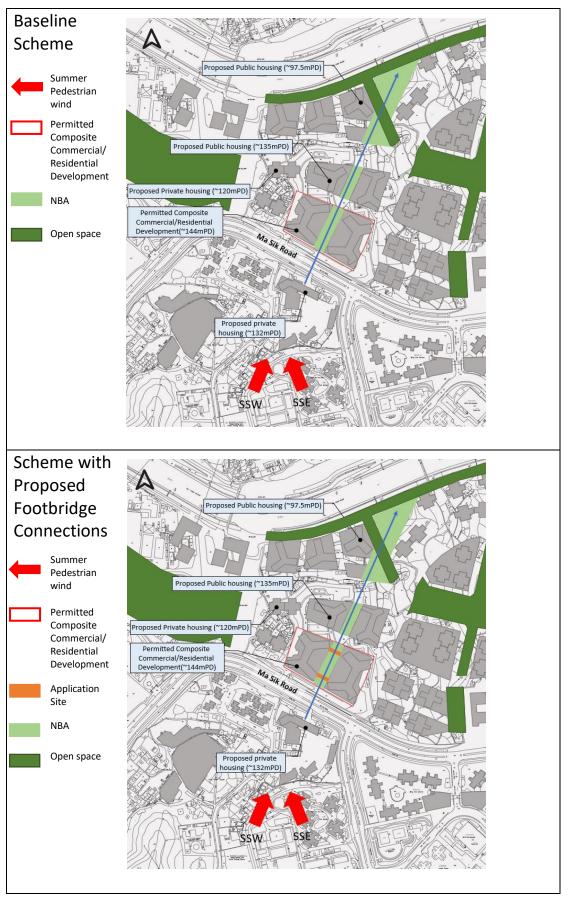


Figure 9-3 Summer Prevailing Wind (SSW and SSE Wind)

10. Conclusions

- 10.1.1. An AVA-EE study was conducted for the Proposed Minor Relaxation of Non-Building Area Restriction for Proposed Footbridge Connections at Ma Sik Road to provide qualitative evaluation of wind performance under baseline scenario and that with the Proposed Footbridge Connections.
- 10.1.2. Under Annual condition, most annual prevailing winds (E, ESE, SE wind) may not significantly benefit from the NBA as the wind directions do not align with the direction of NBAs. It is anticipated that only the third prevailing ENE wind could penetrate through the Application Site and reach the downwind areas. However, high-rise residential buildings will exist at the southwest of the Proposed Footbridge Connections. The incoming ENE wind would flow through the Proposed Footbridge Connections and then collide at the high-rise buildings, leading to a downwash effect at Ma Sik Road. It is anticipated that the incoming wind flow along the NBA would be then obstructed by the buildings at downwind area.
- 10.1.3. Under Summer condition, the high-rise buildings at the immediate southwest of Application Site reduces the wind penetration from incoming SSW and SSE wind to Application Site by generating wake zone at Application Site. Due to the large obstruction, it is anticipated that the air movement within the NBA would be reduced by the turbulence created. Only high-level incoming wind could skim over the high-rise building and reach the Application Site. The Application Site is predominantly shielded by these high-rise buildings and the NBA only slightly facilitates wind penetration of the summer prevailing winds to the North.
- 10.1.4. To reduce any ventilation impact, a clearance of around 3.4m to 4.5m from the ground is provided for the Proposed Footbridge Connections. Since the top level of the footbridges is merely about 25mPD, it is expected that the adverse impact on downwind areas will be minimal due to the relatively small structure of Proposed Footbridge Connections. It is anticipated that the incoming wind at low-level could penetrate through and will not be significantly affect the wind environment at pedestrian level. In addition, there would be no obstruction in the NBA at high-level and the high-level prevailing wind could flow freely through the Application Site.
- 10.1.5. As evaluated in the AVA-EE, with the provision of abovementioned good design features, it is anticipated that there will be no significant adverse impact to the wind environment in the surrounding area associated with the Proposed Footbridge Connections.

