

Reference WNLYFN/AGNES/10  
Date 22 August 2025

By HAND & EMAIL

The Secretary, Town Planning Board  
c/o Planning Department  
15/F North Point Government Offices  
333 Java Road, North Point, HONG KONG

Dear Sir / Madam,

**SECTION 16 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)  
(TPB Ref: A/FLN/33)**

We write regarding the captioned Planning Application submitted to the Town Planning Board ("TPB") on 8 July 2025.

Further to comments received from Urban Design and Landscape Unit of Planning Department on 15 August 2025 and the Public, please find attached the Responses-to-Comments ("R-to-C") table in **Attachment 1** which has fully addressed the comments received. Please note that these responses are clarifications only and there are no changes to the S16 Planning Application.

Should there be any queries, please do not hesitate to contact the undersigned or Ms Agnes Leung.

Yours faithfully,  
FOR AND ON BEHALF OF  
TOWNLAND CONSULTANTS LIMITED

  
Vincent Lau  
Associate Director

VIN/AGNES

Enc – SIP

CC



城  
市  
規  
劃  
願  
問

MAIN HONG KONG OFFICE :

2801, 28th Floor, 148 Electric Road, North Point, Hong Kong  
Telephone : (852) 2521 2911 Facsimile : (852) 2521 6631  
E-mail address : tcld@townland.com Website : www.townland.com

CHINA OFFICE :

Room 1111, Building 1, Yagang Industry and Trade Building, No.18 Fuan Avenue,  
Hehua Community, Pinghu Street, Longgang District, Shenzhen, PRC. Postal Code 518111  
Telephone : (86) 181 2417 9366  
E-mail address : tcld@townland.com

INDIA OFFICE :

Coworking Space Ministry of New, 3rd Floor, Kitab Mahal,  
192 Dr Dadabhai Naoroji Road, Azad Maidan, Fort, Mumbai, India  
Telephone : (91) 9819919804  
E-mail address : tcpl@townland.com

INDONESIA OFFICE :

Gedung Menara Anugrah, Lantai 21  
Kantor Taman E.3.3, Jl. DR. Ide Anak Agung Gde Agung Lot.8.6-8.7  
Kawasan Mega Kuningan, Jakarta Selatan 12950, Indonesia  
Telephone : (62 21) 2941 0621  
E-mail address : tcjkt@townland.com

ASSOCIATED COMPANIES :

TOWNLAND CONSULTANTS (INTERNATIONAL) LIMITED (International)

TOWNLAND CONSULTANTS (SHENZHEN) LIMITED (China)

TOWNLAND CONSULTANTS PVT. LIMITED (India)

PT TOWNLAND INTERNATIONAL (Indonesia)

HOWARD & SEDDON PARTNERSHIP (United Kingdom)



ISO 9001: 2015  
Certificate No.: CC844

**PROPOSED MINOR RELAXATION OF NON-BUILDING AREA RESTRICTION FOR PROPOSED FOOTBRIDGE CONNECTIONS AT MA SIK ROAD, FANLING, NEW TERRITORIES(FSSTL NO. 297) (TPB REF: A/FLN/33)**

Comments/ Suggestions		Applicant's Responses
<b>A.</b>	<b><u>Comments received from Urban Design and Landscape Section of Planning Department on 15.08.2025 (Contact Person: Ms Nicole Lee (Tel.: 3565 3945)):</u></b>	
	<p>Observations/comments from air ventilation, urban design and visual perspectives are as follows:</p> <p><u>General</u></p> <p>1. Two sets of footbridges spanning the NBA are proposed. Each set of footbridges comprises a fully enclosed footbridge connecting the retail portion of podium with dimension of 21.5m (L) x 6m (W) and 9.4m (H), leaving a headroom of about 4.5m above ground, and with an open-sided covered walkway connecting the clubhouse portion with dimension of 21.5m (L) x 2m (W) and 4.5m (H) on top. Please confirm whether the height of this portion is 4.5m as well.</p> <p>2. The proposed footbridges with a height of about 14.3m (top level at about 29.95mPD and headroom of about 4.5m above ground level of 11.15mPD as shown in Section A-A). The scale of the proposed footbridges are considered relatively massive, potential visual and air ventilation impacts would inevitably be anticipated. Their impacts should be acknowledged in the submission and appropriate mitigation measures should be proposed.</p> <p><u>Urban Design and Visual Perspectives</u></p> <p>3. The scale of the proposed footbridges are considered relatively massive, please provide justifications on its scale from pedestrian connectivity perspective.</p>	<p>Please be confirmed the headroom of the open-sided walkway at 3/F is also 4.5m.</p> <p>Please refer to our responses below.</p> <p>The scale of the Proposed Footbridge Connections has been carefully determined to balance pedestrian functionality with urban design sensitivity. Their dimensions are proportionate to the role they play in linking two major retail podiums beneath residential towers, where large and diverse user flows are anticipated. The generous width and height are essential to ensure a safe, comfortable, and inclusive pedestrian experience. This allows residents, shoppers, families, and users with mobility aids to move seamlessly and without congestion, while also providing a weather-proof, barrier-free environment that enhances accessibility across the development.</p> <p>The apparent mass of the structures is deliberately softened through an integrated and permeable design. The weather-proof bridge incorporates glass walls and ample headroom to create transparency and lightness, while the 3/F walkway adopts an open-sided arrangement with glass fencing and planting to reduce visual bulk and harmonize with its landscaped surroundings. Greenery along the walkway edges and rooftop</p>

**PROPOSED MINOR RELAXATION OF NON-BUILDING AREA RESTRICTION FOR PROPOSED FOOTBRIDGE CONNECTIONS AT MA SIK ROAD, FANLING, NEW TERRITORIES(FSSTL NO. 297) (TPB REF: A/FLN/33)**

Comments/ Suggestions	Applicant's Responses
<p>4. Para. 6.1.2 of Planning Statement – the Consultant claimed that no NBA is imposed to the immediate north and immediate south that has limited the visual permeability of the NBA. The description is misleading. Currently, the NBA of the Site forms part of an unobstructed strip of NBA in south-west to north-east direction leading to the planned riverside promenade along Ng Tung River in the further north.</p> <p><u>Air Ventilation Perspective (AVA-EE)</u></p> <p>5. While the Consultant stated that most identified prevailing winds during the annual and summer condition may not significantly benefit from the NBA, the subject NBA was designated on the OZP for better penetration of the prevailing</p>	<p>planting on the canopy further mitigate scale and help the bridges blend into the overall public realm.</p> <p>The provision of the open-sided covered walkways at 3/F above the double storey footbridge connection design minimizes the need for new structural components and vertical supports and thereby also minimising visual obstruction. The double storey design adopts a glass façade which will maintain the sense of openness while providing a comfortable passage for the users.</p> <p>Importantly, by elevating pedestrian circulation, the Proposed Footbridge Connection enables the use of the NBA at ground level for landscaped amenities, open seating, and gathering spaces. This not only enriches the public realm but also maintains air flow, sightlines, and openness within the pedestrian zone and create a more vibrant and enjoyable ground-level environment.</p> <p>In summary, the necessity of the Proposed Footbridge Connections is appropriate. In view of the double storey footbridge design, open-sided design at 3/F is adopted and a 4.5m headroom at G/F is maintained in most areas so that the impact to pedestrian will be minimized. It directly supports pedestrian movement within the composite residential/commercial development, ensures comfort and inclusivity, and provides safe and resilient linkages in all weather conditions. At the same time, the design minimizes visual impact, enhances permeability, and preserves the quality of the ground-level NBA.</p> <p>While it is noted that the NBA of the Site forms part of an unobstructed strip of NBA in south-west to north-east direction leading to the planned riverside promenade along Ng Tung River in the further north, the NBA does not further extend further south-west across Ma Sik Road, where a planned residential development with a BH of Approx. 132mPD is located within the “R(A)12” zone. Para. 6.1.2 of the Supplementary Planning Statement has been revised to prevent potential misunderstanding (<b>Appendix 1</b> refers).</p> <p>Noted. The impact of the Proposed Footbridge Connections compared to the baseline condition, including its impact in the low zone area, is discussed in Section 9 of the revised AVA-EE (<b>Appendix 2</b> refers).</p>

**PROPOSED MINOR RELAXATION OF NON-BUILDING AREA RESTRICTION FOR PROPOSED FOOTBRIDGE CONNECTIONS AT MA SIK ROAD, FANLING, NEW TERRITORIES(FSSTL NO. 297) (TPB REF: A/FLN/33)**

Comments/ Suggestions	Applicant's Responses
<p>wind in the Fanling North NDA as well as the downstream Fanling/Sheung Shui area as stated in the Explanatory Statement of the OZP. The Consultant should focus on discussing the impact of the proposed enclosed footbridges to the wind environment as compared to the <b>baseline condition (i.e. without the footbridge and with the planned developments)</b>, especially its impact in the Low Zone area.</p> <p>6. Please provide justifications on the adoption fully enclosed instead of open-sided footbridges for the retail portion from air ventilation perspective.</p> <p>7. The description relating to provision of clearance of around 3.4m to 4.5m from the ground for the proposed footbridge connections to reduce any ventilation impact in para. 10.1.4 is misleading. The proposed footbridges are erected that leaving a clearance of around 3.4m to 4.5m from the ground only, instead of provision of a clearance of 3.4m to 4.5m from the ground to reduce any ventilation impact. Please review relevant paragraphs.</p>	<p>It is understood that the prevailing wind at low-level would possibly collide at the Proposed Footbridge Connections and a wake zone would be created on the immediate leeward side of the Proposed Footbridge Connections comparing to the baseline scenario. However, the Proposed Footbridge Connections are erected leaving a clearance of around 3.4m to 4.5m from the ground, it is expected that the prevailing wind could pass through the clearance at the pedestrian level. In addition, given the relatively minimal structure of Proposed Footbridge Connections, impediment to the downwind area will be limited. As such, the adverse impact on downwind areas will be minimal.</p> <p>The primary design intent of the weather-proof (enclosed) footbridges connecting the retail portions of the Podiums is to provide a safe, inclusive, and weather-protected passage for the public and residents. Compared to open-sided designs, the weather-proof footbridges protect all users, including those with mobility challenges, from inclement weather, enhance safety by reducing risks like wind exposure or slipping hazards, and ensure a comfortable and seamless experience for all users year-round regardless of weather conditions.</p> <p>The Proposed Footbridge Connections balance the above with visual and air ventilation permeability. The Proposed Footbridge Connections still allow air permeability to be maintained at ground level (the Proposed Footbridge Connections are elevated with a clearance of approx. 3.4 m to 4.5 m above ground, which allows prevailing winds to pass beneath the structures), while the open-sided covered walkway at 3/F above continues to maintain local air movement patterns. As a result, the overall wind penetration at street level would not be significantly obstructed. Also given the minimal structure of Proposed Footbridge Connections, impediment to the downwind area will be limited, adverse impact on downwind areas will be minimal. This balanced approach enables the Proposed Footbridge Connections to deliver meaningful pedestrian benefits without compromising environmental quality within the NBA.</p> <p>Noted. Description of the clearance is revised to “To reduce any ventilation impact, <b>the proposed footbridges are erected that leaving a clearance of around 3.4m to 4.5m from the ground.....</b>” to avoid any confusion. Please refer to the revised para.10.1.4 of AVA-EE (<b>Appendix 2</b> refers).</p>

**PROPOSED MINOR RELAXATION OF NON-BUILDING AREA RESTRICTION FOR PROPOSED FOOTBRIDGE CONNECTIONS AT MA SIK ROAD, FANLING, NEW TERRITORIES(FSSTL NO. 297) (TPB REF: A/FLN/33)**

Comments/ Suggestions		Applicant's Responses
8.	Please clarify what is the top level of the footbridges. According to the section A-A, an open-sided covered walkway with a height of 4.5m is erected above the fully enclosed footbridge at 25.45mPD. Please review whether the description of "the top level of the footbridge us merely about 25mPD" at para. 9.1.3 is accurate.	Please note that the top level of the weather-proof footbridge is approx. 25.45mPD and the level of the 2m-wide canopy of the open-sided walkway is at approx. 29.95mPD.  Para. 9.1.3 of the AVA-EE has been revised as follows accordingly: "..... clearance of around 3.4m to 4.5m from the ground is provided for the Proposed Footbridge Connections and the top level of the <b>weather-proof footbridge</b> is merely about 25mPD..." ( <b>Appendix 2</b> refers).
9.	It is stated in para. 10.1.2 that the incoming ENE wind would flow through the proposed footbridge connections. The Consultant should discuss the performance of wind penetration as compared with the baseline condition, i.e., without the footbridges.	Please note that discussion on the performance of wind penetration as compared with the baseline condition is provided in the revised para.10.1.2 of the AVA-EE ( <b>Appendix 2</b> refers).
10.	According to the artist's impressions in Appendix 2, the open-sided covered walkways comprise glass fence wall. Please advise the height of the glass fence wall and update the description in AVA-EE as appropriate.	It is confirmed that the height of glass fence wall on both sides of the open-sided covered walkway wall is 1100mm. Paras.1.1.2, 7.1.3, 9.1.4, 9.1.12, of AVA-EE have also been updated accordingly ( <b>Appendix 2</b> refers).
11.	Further to the comments above, please suitably update the executive summary of the AVA-EE.	Noted. Please refer to the updated executive summary of the AVA-EE in <b>Appendix 2</b> .
<b>B.</b>	<b>Public Comment</b>	
1.	<p>A total of 3 public comment, including 1 no. of supporting comment, 1 no. of 'no comment' and 1 no. of opposing comment, was received during the formal publication period of the S16 Planning Application which raised the following comments:</p> <p><i>Supporting Comments</i></p> <p>The Proposed Footbridge Connections is in line with the recent guidelines for elderly-friendly building design, emphasising the importance of accessible facilities for the elderly.</p> <p><i>Opposing Comments</i></p> <p>The need for footbridge should be confined to one as they will block the already restricted sky views and sunlight penetration and affect ventilation.</p>	<p>Supporting Comment is noted.</p> <p>As demonstrated, the provision of the two footbridge connections has been carefully considered and allows for pedestrian flows to be evenly distributed, avoiding congestion, improving user choice, and better connecting with the different circulation patterns of the retail podiums and residential towers above.</p> <p>Several design measures have been adopted to balance the functionality of the Proposed Footbridge Connections while minimise visual and air ventilation impacts, including glass façade to maximise the visual</p>

**PROPOSED MINOR RELAXATION OF NON-BUILDING AREA RESTRICTION FOR PROPOSED FOOTBRIDGE CONNECTIONS AT MA SIK ROAD, FANLING, NEW TERRITORIES(FSSTL NO. 297) (TPB REF: A/FLN/33)**

Comments/ Suggestions	Applicant's Responses
<p>Other Comments raised unrelated to the Planning Application</p> <ul style="list-style-type: none"> <li>- There is a pattern of fragmented shopping malls in Fanling North New Development Area, which makes navigation difficult, particularly for vulnerable groups such as the elderly, pregnant women, and children.</li> <li>- Absence of transportation connections in the area, such as bus stops and dedicated bus routes, near Wing Fok Centre and Wing Fai Centre, which limits the access to the essential services and daily activities among the residents</li> </ul>	<p>permeability towards open sky backdrop to the north and allow ample natural lights from both sides, which will create a bright, open and inviting atmosphere within the footbridge connections and along the NBA. In addition, a minimal structural design has been adopted to eliminate supporting pillars at ground level, which will help achieve a lighter-weight and less bulky structure and maximise the views towards the open-sky at pedestrian level.</p> <p>The Proposed Footbridge Connections also allows the air permeability at ground level through the elevated design. A clearance of an approx. 3.4m to 4.5m clearance above ground is provided to allow the prevailing winds to pass beneath the structures. In addition, the open-sided covered walkway at 3/F further maintains the air movement patterns along the NBA.</p> <p>As such, the overall wind penetration at street level will not be significantly obstructed. The impediment to downwind areas will also be limited due to the minimal structural design.</p>

The following Government Departments have no comment:

- Water Supplies Department
- Fire Services Department
- Transport Department
- Architectural Services Department
- Lands Department

Date: 22 August 2025

File Ref: WNLYFN

# *Appendix 1*

---

REPLACEMENT PAGE OF SUPPLEMENTARY  
PLANNING STATEMENT

## 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. While the NBA of the Site forms part of an unobstructed strip of NBA in south-west to north-east direction leading to the planned riverside promenade along Ng Tung River in the further north, the NBA does not further extend further south-west across Ma Sik Road, where a planned residential development with a BH of Approx. 132mPD is located within the "R(A)12" zone, potential limiting visual permeability and open sky views towards the south.
- 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.



# *Appendix 2*

---

REPLACEMENT PAGES OF AIR VENTILATION  
ASSESSMENT – EXPERT EVALUATION

Issue No. : Issue 2  
Issue Date : Aug 2025  
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**

Prepared by

Allied Environmental Consultants Limited

**COMMERCIAL-IN-CONFIDENCE**

**Allied Environmental Consultants Limited**

Member of AEC Group (HKEX Stock Code: 8320.HK)

27/F, Overseas Trust Bank Building, 160 Gloucester Road, Wan Chai, Hong Kong

www.asecg.com T: +852 2815 7028 F: +852 2815 5399

**沛然環境評估工程顧問有限公司**

沛然環保集團成員 (港交所股份代號: 8320.HK)

香港灣仔告士打道 160 號海外信託銀行大廈 27 樓

# Document Verification



Project Title                      Proposed Minor Relaxation  
of Non-Building Area                      **Project No.**  
Restriction for Proposed                      819.5357  
Footbridge Connections at  
Ma Sik Road, Fanling, New  
Territories

Document Title                      Air ventilation Assessment - EXPERT EVALUATION

Issue No.	Issue Date	Description	Prepared by	Checked by	Approved by
Issue 1	July 2025	1st Submission	Toby Lam	Joanne Ng	Grace Kwok
Issue 2	August 2025	2nd Submission	Various	Joanne Ng	Grace Kwok

## Allied Environmental Consultants Limited

Member of AEC Group (HKEX Stock Code: 8320.HK)

27/F, Overseas Trust Bank Building, 160 Gloucester Road, Wan Chai, Hong Kong

www.asecg.com    T: +852 2815 7028    F: +852 2815 5399

## 沛然環境評估工程顧問有限公司

沛然環保集團成員 ( 港交所股份代號 : 8320.HK )

香港灣仔告士打道 160 號海外信託銀行大廈 27 樓

## 1. Executive Summary

- 1.1.1. 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.
- 1.1.2. Good design features are incorporated to improve air ventilation performance, including a Proposed Footbridge Connections, consisting of 2 sets of an open-sided covered walkway atop weather-proof footbridge. The proposed footbridges are erected that leaving a clearance of around 3.4m to 4.5m from the ground. Also Both sides of the open-sided walkway will be equipped with a 1100mm high non-perforated glass fence wall, leaving a 3.4m open perforation at the top.
- 1.1.3. As evaluated in the AVA-EE, with the provision of abovementioned good design features, no significant adverse impact to the wind environment in the surrounding area associated with the Proposed Footbridge Connections is anticipated.

## 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. Both sides of the walkway will be equipped with a 1100mm high non-perforated glass fence wall, leaving a 3.4m open perforation at the top. Planters will be provided along the open-sided covered walkway to enhance the visual amenity of the Proposed Footbridge Connections.

## 8.2. Good Design Features

### Clearance at pedestrian level

- 8.2.1. The Proposed Footbridge Connections are erected that leaving a clearance of around 3.4m to 4.5m from the ground 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 weather-proof 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, both sides of the open-sided covered walkway will be equipped with a 1100mm high non-perforated glass fence wall, leaving a 3.4m open perforation at the top, it poses minimal obstruction to the incoming wind and would not induce significant obstruction to the downwind areas.

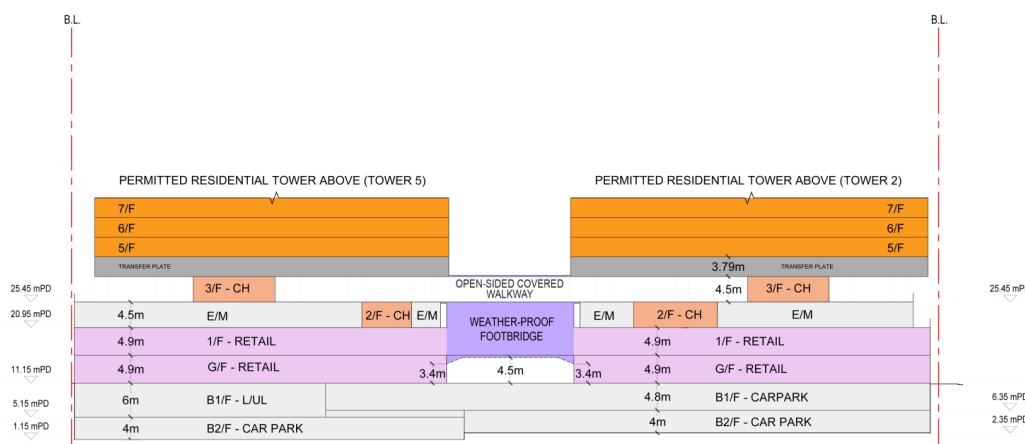


Figure 8-1 Section of the Proposed Footbridge Connections

## 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, **part of the** prevailing ENE wind at low-level would collide at the Proposed footbridge and a wake zone would be created on the immediate leeward side of the Proposed Footbridge Connections. However, **since the Proposed Footbridge Connections are erected that leaving a clearance of around 3.4m to 4.5m from the ground** and the top level of the **weather-proof 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 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 **to downwind areas**.
- 9.1.4. In addition, **both sides of the open-sided walkway above the weather-proof footbridge will be equipped with a 1100mm high non-perforated glass fence wall, leaving a 3.4m open perforation at the top, which poses minimal** obstruction to the incoming wind and would not induce significant obstruction to the downwind areas.
- 9.1.5. Therefore, significant adverse impact from the Proposed Footbridge Connections to the wind performance at the downwind area is not anticipated.

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 Application Site (i.e. open space). Eventually, cross winds in N-S direction would flow across the site through the NBA.
- 9.1.8. Under the Scheme with Proposed Footbridge Connections, similar to the baseline scheme, the prevailing wind would reach the Application Site through the two air paths, i.e. Road L2 and Ma Sik Road. Given that the Proposed Footbridge Connections are erected that leaving a clearance of around 3.4m to 4.5m from the ground, where the low-level cross winds could flow through. Hence, it is anticipated that the ventilation impact induced by the provision of Proposed Footbridge Connections is minimal.
- 9.1.9. Therefore, it is anticipated that the provision of Proposed Footbridge Connections would not cause significant ventilation impact under E, SE and ESE 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**. High-level incoming wind **would** 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, **due to the large existing obstruction to the incoming SSW and SSE wind at the high-rise buildings at the immediate southwest of Application Site, only incoming wind at high level could skim over the high-rise building at southwest and reach the Application Site. In this connection, it is anticipated that the Proposed Weather-proof Footbridge Connections topping at around 25mPD would have minimal obstruction to the high-level wind. In addition, both sides of the open-sided walkway on the above will be equipped with a 1100mm high non-perforated glass fence wall, leaving a 3.4m open perforation at the top, which poses minimal obstruction to the incoming high-level wind and would not induce significant obstruction to the downwind areas.**
- 9.1.13. **Nevertheless, the Proposed Footbridge Connections are erected leaving a clearance of around 3.4m to 4.5m from the ground, it is expected that the prevailing wind could penetrate through the clearance at the pedestrian level.**
- 9.1.14. **Hence,** the adverse impact on downwind areas of Application Site will be minimal due to the relatively small structure of Proposed Footbridge Connections.

## 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. Only Cross winds in N-S direction would flow across the site through the NBA. On the other hand, the third prevailing ENE wind could penetrate the Application Site through the NBA and reach the downwind areas. In general, it is expected that the adverse impact on downwind areas will be minimal due to the relatively small structure of Proposed Footbridge Connections comparing to baseline scheme. Also it is anticipated that the incoming wind at low level could penetrate through the Proposed Footbridge Connections and will not be significantly affect the wind environment at pedestrian level.
- 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 under baseline scheme. Under the Scheme with Proposed Footbridge Connections, as only incoming wind at high level could skim over the high-rise building at southwest and reach the Application Site. In this connection, it is anticipated that the relatively small Proposed Weather-proof Footbridge Connections would have minimal obstruction to the high-level wind.
- 10.1.4. To reduce any ventilation impact, the Proposed Footbridge Connections are erected that leaving a clearance of around 3.4m to 4.5m from the ground. Since the top level of the weather-proof 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 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.