Kai Tak Development
Urban Design Guidelines and Manual
for the Runway Precinct

TABLE OF CONTENTS

TABLE OF CONTENTS

1.0

INTRODUCTION

1.0 INTRODUCTION

1.1 Background and Objectives

Background

The latest approved Kai Tak Outline Zoning Plan (OZP) No. S/K22/6 covers a land area of approximately 323 hectares. The plan incorporated a number of urban design parameters which reflect the planning vision and the planning theme adopted for the Kai Tak Development (KTD). The preceding, in combination with current planning intentions, intend to facilitate the transformation of the KTD into the "Heritage, Green, Sports and Tourism Hub of Hong Kong".

Objectives

The overall objective of the Kai Tak Development Urban Design Guidelines and Manuals (UDGMs) is to set out a design framework and approach that will circumscribe the broad form, arrangement, massing and appearance of development within the KTD. This will be represented in five separate manuals that separately outline recommended urban design parameters for the following categories of development:

- **Grid Neighbourhood (GN)**
- **Domestic Sites (other than GN and RP)**
- **Private Non-Domestic Sites (other than GN and RP)**
- **Government, Institution or Community (GIC) Sites**
- **The Runway Precinct (RP)**

Figure 1.1 Kai Tak Development Landscape Master Plan

1.0 INTRODUCTION

1.2 Overall Planning Vision

"A distinguished, vibrant, attractive and people-oriented Kai Tak by Victoria Harbour."

Throughout the years, Kai Tak has undergone many transformations. Its original and most memorable function was as one of the world's busiest international airports. Following the move of the airport to Chek Lap Kok, Kai Tak has since been subject to several detailed planning exercises that have sought to achieve its redevelopment into a centre point for living, work, leisure and transport.

1.3 Overall Urban Design Framework for Kai Tak

The KTD is formed of six identified sub-districts (or Precincts) which are planned to be interlinked by a distinctive open space and connectivity system. The principal Precincts consist of Grid Neighbourhood, Kai Tak Sports Park, Metro Park, Runway Precinct, Tourism and Leisure Hub and South Apron Corner. The following key urban design and landscape principles have been identified and adopted under the proposed Kai Tak Urban Design Framework:

- **Connecting Neighbourhoods**
- **Creating Nodes**
- **Activating the Harbour-front**
- **Creating a Pedestrian Friendly Environment**
- **Creating a Dynamic Skyline**
- **Celebrating Views**
- **Celebrating Gateways**
- **Creating "A Green Web for Sustainable Development"**

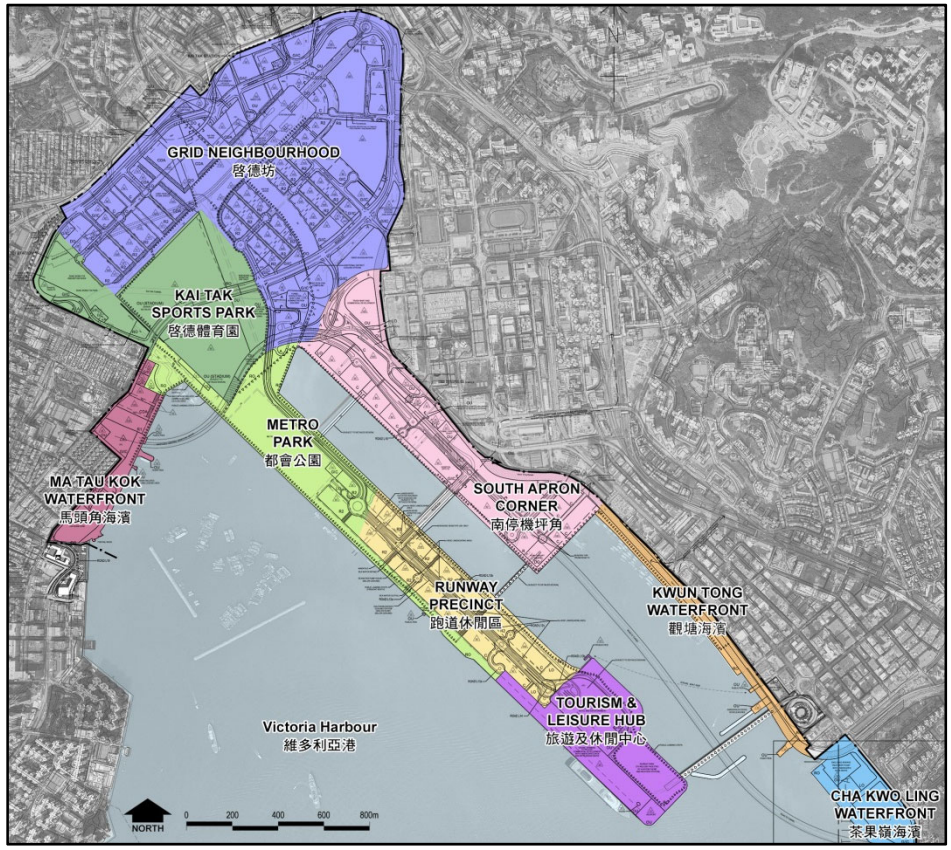


Figure 1.2 Kai Tak Development Sub-Areas Plan

1.0 INTRODUCTION

As various projects take form within the KTD the intention is to gradually instil vibrancy and energy within new development precincts located adjacent to the iconic Victoria Harbour. Given that the implementation of the KTD will span over many years, it is important to adopt a holistic design and implementation approach that enshrines emphasis on sustainability and quality urban design which correspondingly encapsulate the vision of the KTD under a focused brand.

The urban design framework emphasises the creation of a "continuous" open space system that not only links neighbourhoods within the six character zones mentioned earlier but also ensures connectivity from each neighbourhood to focal points, destinations and important gateways within the KTD. This will facilitate achieving ease of mobility and ready access to waterfront areas.

1.4 Relation with the Kai Tak Outline Zoning Plan

The latest approved Kai Tak OZP No. S/K22/6 has already incorporated a number of design parameters that are geared at realising the prevailing planning vision and theme. These in turn act as a tool through which the KTD can be realised as a unique area that is more pleasant and environmentally friendly in comparison with many existing districts within Hong Kong.

In this respect, it is considered that there is room for the introduction of more strategic and comprehensive mechanisms to steer and guide the urban design and landscape design of the KTD to achieve coherent and consistent high quality sustainable design. The UDGMs have been prepared with this intention in mind.

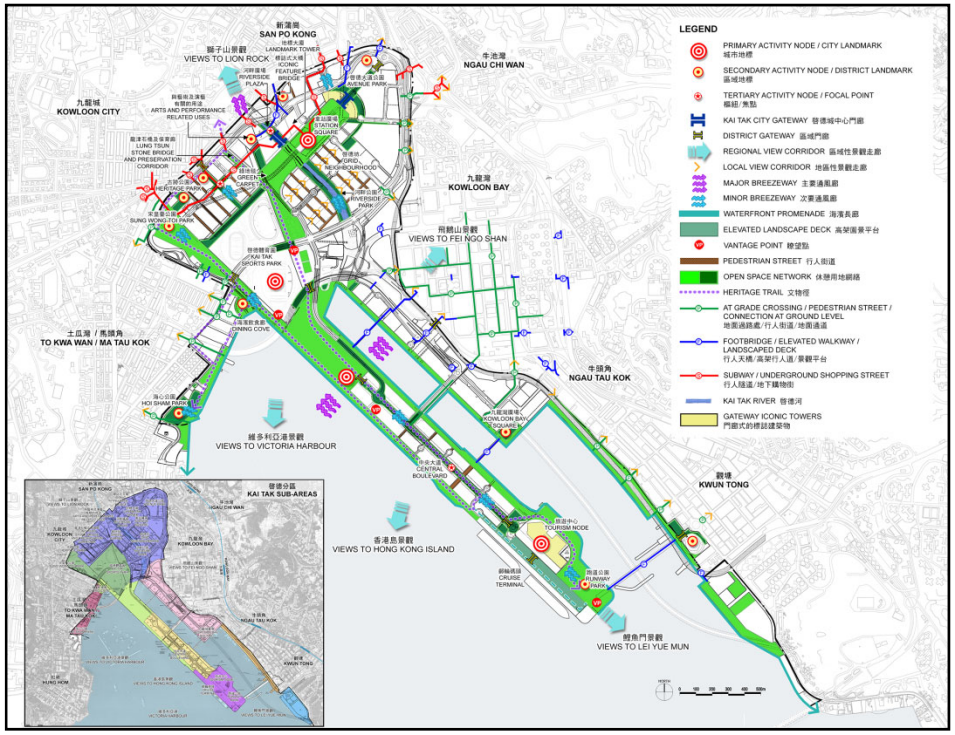


Figure 1.3 Overall Urban Design Framework for Kai Tak

1.0 INTRODUCTION

1.5 Purpose of the Urban Design Guidelines and Manuals for the Kai Tak Development

Who are these documents for and how are they to be used

The urban design requirements and development control parameters outlined in the individual UDGM are intended to assist architects and relevant professionals and practitioners to understand and realise the design and development vision for the KTD. The design parameters circumscribe a set of control parameters and design approaches that specify a proposed range and quality of treatments that should be applied to realise the design vision and quality to be achieved within the KTD.

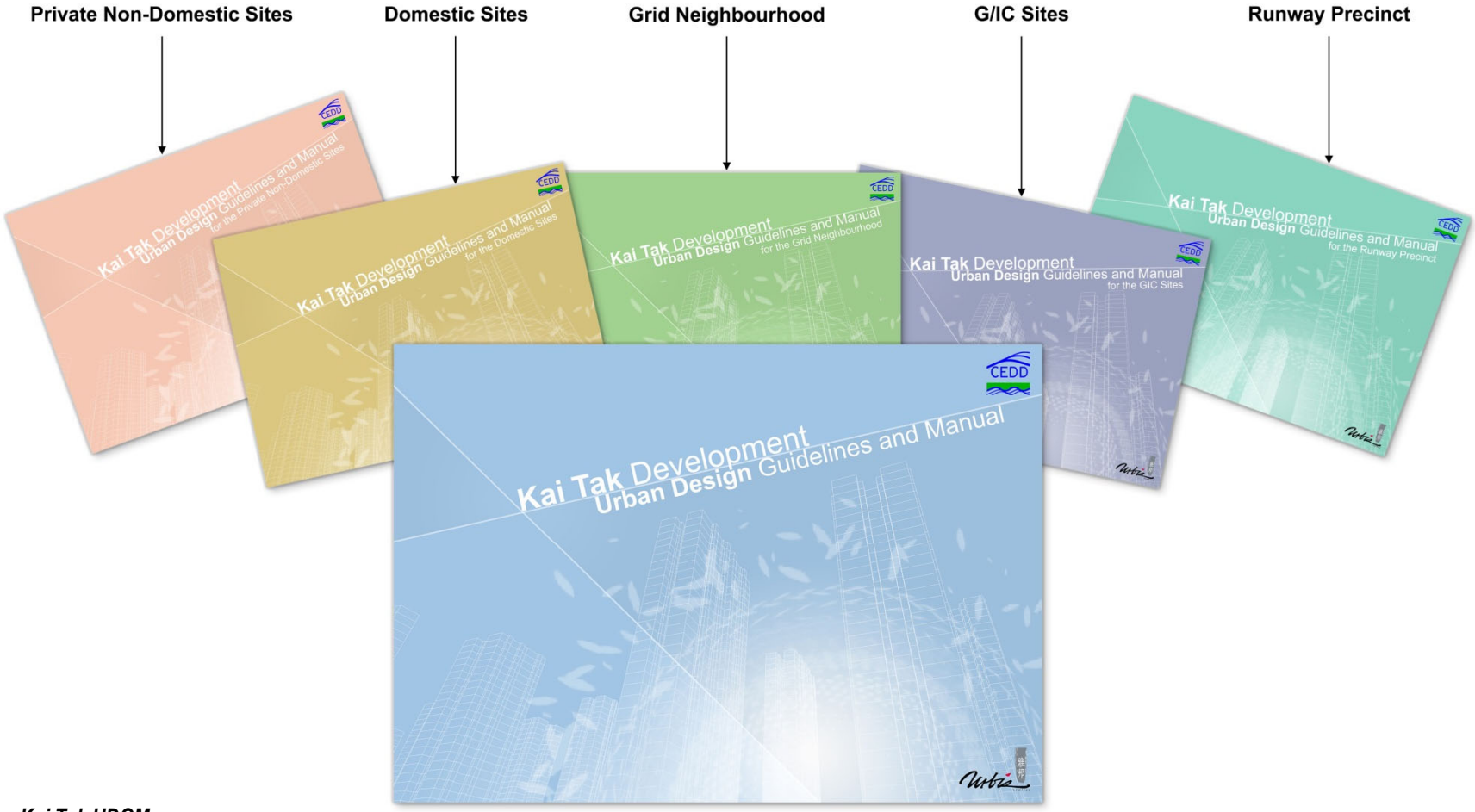


Figure 1.4 Kai Tak UDGMs

1.0 INTRODUCTION

1.6 Principal Function of the Urban Design Guidelines and Manuals

The principal function of each of the UDGMs is to achieve a coherent overall design of high quality. Worked examples are provided to illustrate the application of guidelines with the aim of ensuring consistency in the visual expression of all types of urban development within the KTD. The specific purposes of each manual are as follows:

1. Grid Neighbourhood Manual: outlines a range of proposed urban design control parameters that are specifically applicable to the developments at the Grid Neighbourhood, including provision relating to proposed residential low blocks, high blocks, and a retail belt fronting the Station Square.

2. Domestic Sites Manual: outlines a range of proposed lease conditions and urban design control parameters that are specifically applicable to the domestic developments other than the Grid Neighbourhood and the Runway Precinct, including provisions relating to all residential developments and the retail belt fronting the Station Square and the Kai Tak Sports Park.

3. Private Non-Domestic Sites Manual: outlines a range of proposed urban design control parameters that are specifically applicable to the private non-domestic developments, including provisions relating to all private non-domestic developments fronting Prince Edward Road East (PERE).

4. Government, Institution or Community (G/IC) Sites Manual: outlines a range of proposed urban design control parameters relating to all Government developments and the relationship and interface with the surrounding developments.

5. Runway Precinct Sites Manual: outlines a range of proposed urban design parameters relating to all residential and commercial developments along the Runway and the relationship and interface with the prominent waterfront promenade.

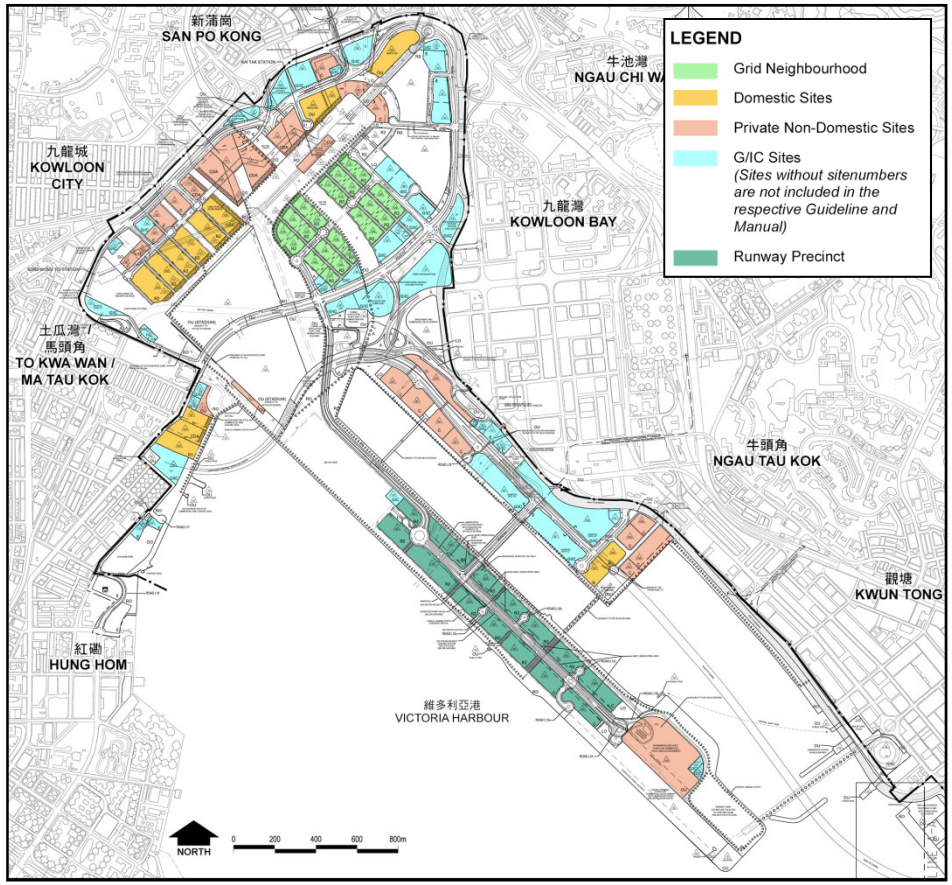
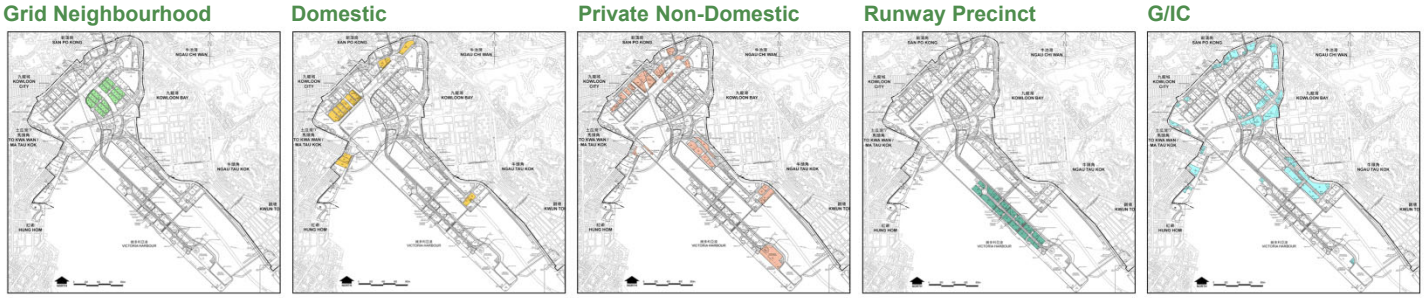


Figure 1.4 Development sites addressed by the UDGMs

1.0 INTRODUCTION

The individual UDGM prepared for the Grid Neighbourhood, Domestic Sites, Private Non-Domestic Sites, G/IC Sites and Runway Precinct outline recommended urban design and control parameters. These have had regard to various design studies that have been undertaken for the KTD and have made specific reference to those undertaken for each category of development or location.

The following chapters specifically address the design parameters that are specifically applicable to the Runway Precinct in the KTD.



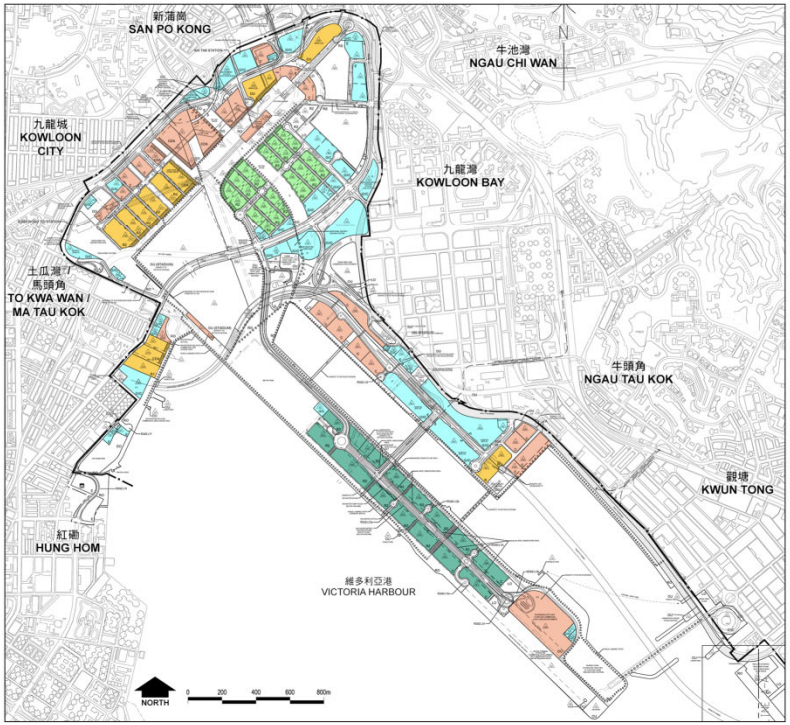


Figure 1.5 Site Reference Plan indicating Development Sites addressed by each UDGM

2.0

OVERALL URBAN DESIGN FRAMEWORK FOR THE RUNWAY PRECINCT

2.0 OVERALL URBAN DESIGN FRAMEWORK FOR THE RUNWAY PRECINCT

2.1 Introduction

The UDGMs for the Runway Precinct has been prepared to reflect and outline urban design control parameters and recommendations that have arisen from various studies on the KTD inclusive of sites specifically allocated to domestic and private non-domestic development.

2.2 Vision and Identity for the Runway Precinct

The overall objective of the UDGMs has been to formulate design principles and guidelines for each thematic area in the KTD to ensure that a qualitatively consistent approach is applied to the design and treatment of development in the public and private realm.

The urban design parameters and recommendations under this manual comprise key design elements and treatments that are specifically applicable to the KTD Runway Precinct. As noted earlier it is intended that the guidelines will provide architects and developers with a clear indication of the quality, form, treatment and massing that are expected to be realised in relation to development within the Runway Precinct.

The key identity for the Runway Precinct will in part be informed by the character and nature of abutting development areas. These include the Kai Tak Sports Park and Metro Park to the north and landmark developments within the Kai Tak Cruise Terminal cum Tourism Node area to the south.

Figure 2.1 Runway Precinct UDGM – Location and Unique Setting

2.0 OVERALL URBAN DESIGN FRAMEWORK FOR THE RUNWAY PRECINCT

The unique setting and the prominent location of the Runway Precinct has strategic importance from a land use and design perspective. In particular the Runway Precinct has a important role in interlinking and "bridging the gap" between the two key anchor nodes cited above (i.e. The Metro Park and the Tourism Node). Passage from one node to another is activated via a series of commercial and residential developments within the Precinct. These will also engender interest and diversity which make transit a varied and stimulating experience.

Provision is also made for the inclusion of key strategic pedestrian connections from a landscaped deck located over Road D3 and what is intended to be an active and vibrant waterfront promenade located at the northern edge of Victoria Harbour.

2.3 Runway Precinct Urban Design Guidelines and Manuals - Intention and Function

The overall intention is to transform the former runway and its adjoining areas into a world-class tourism destination that also incorporates quality residential, retail, hospitality and recreational provision.

The Runway Precinct UDGM specifically provides design guidelines (with accompanying diagrams) that reflect proposed control requirements and development parameters in a readily consumable and coherent manner to ensure that the design vision for the KTD is applied in equal measure within the Runway Precinct.

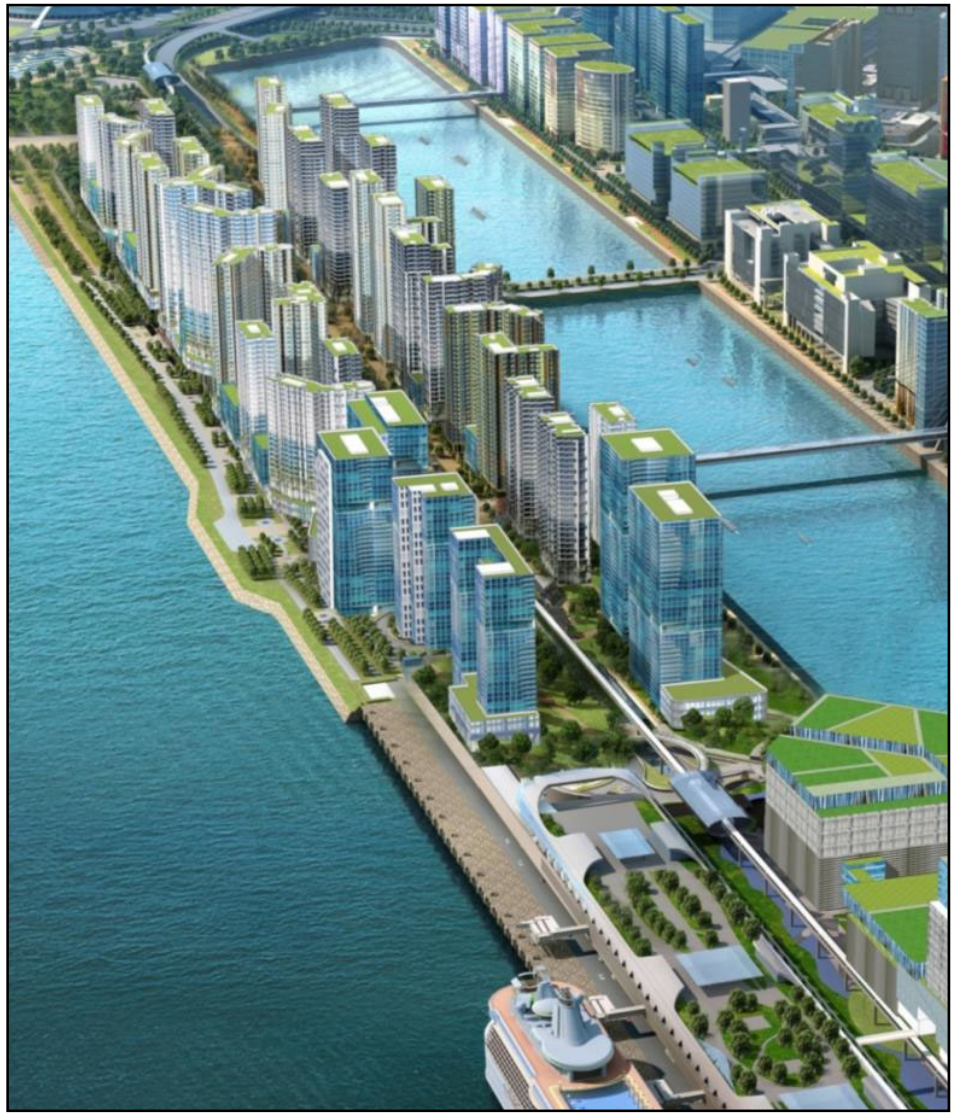


Figure 2.2 Illustration of the proposed Runway Precinct UDGM development arrangement

2.0 OVERALL URBAN DESIGN FRAMEWORK FOR THE RUNWAY PRECINCT

2.4 Urban Design Guidelines and Manual for Development Sites on the Runway Precinct

The UDGM for the Runway Precinct specifically addresses eleven domestic sites and three private non-domestic sites. Development within the Tourism Node is not addressed as specific development guidelines will be prepared as a separate exercise.

To facilitate an understanding of design intentions the guidelines include worked examples to indicate how the guidelines are to be applied. This is intended assist users in interpreting the guidelines and to ensure that consistent design approached are applied to development within the KTD.

The guidelines include provisions and requirements related to the recommended building disposition and arrangement of proposed high and low blocks and the manner in which this is to create visual interest and diversity whilst also avoiding the creation of a monotonous wall of development.

The Runway Precinct UDGM also proposes setbacks and non-building areas (NBAs) at strategic locations which are intended to facilitate the creation of a sense of arrival and to ensuring coherently designed sites at the edge of the harbour.

The UDGM also specifies parameters that are to be applied to the design of universal access pedestrian connections to and from the landscaped deck (over Distributor Road D3) and Victoria Harbour waterfront promenade to the south.

Figure 2.3 Runway Precinct UDGM – Runway Precinct (UDGM Coverage) development context

2.0 OVERALL URBAN DESIGN FRAMEWORK FOR THE RUNWAY PRECINCT

2.5 Recommended Design Objectives

Six Recommended Design Objectives have been devised to guide the realisation, form and design of development within the Runway Precinct. These comprise the following :

1. **To promote the sensible disposition and massing of building blocks;**

2. **To create a rhythmic arrangement of high and low buildings and a stepped height building profile with a view to creating a visually varied dynamic skyline;**

3. **To generate an arrangement of development that facilitates visual permeability and air ventilation;**

4. **To promote efficient physical linkage and connectivity;**

5. **To include specific uses and development within a number of designated urban nodes that will contribute to the activation of the waterfront promenade adjacent to Victoria Harbour; and**

6. **To ensure the optimisation of greening and sustainable development.**

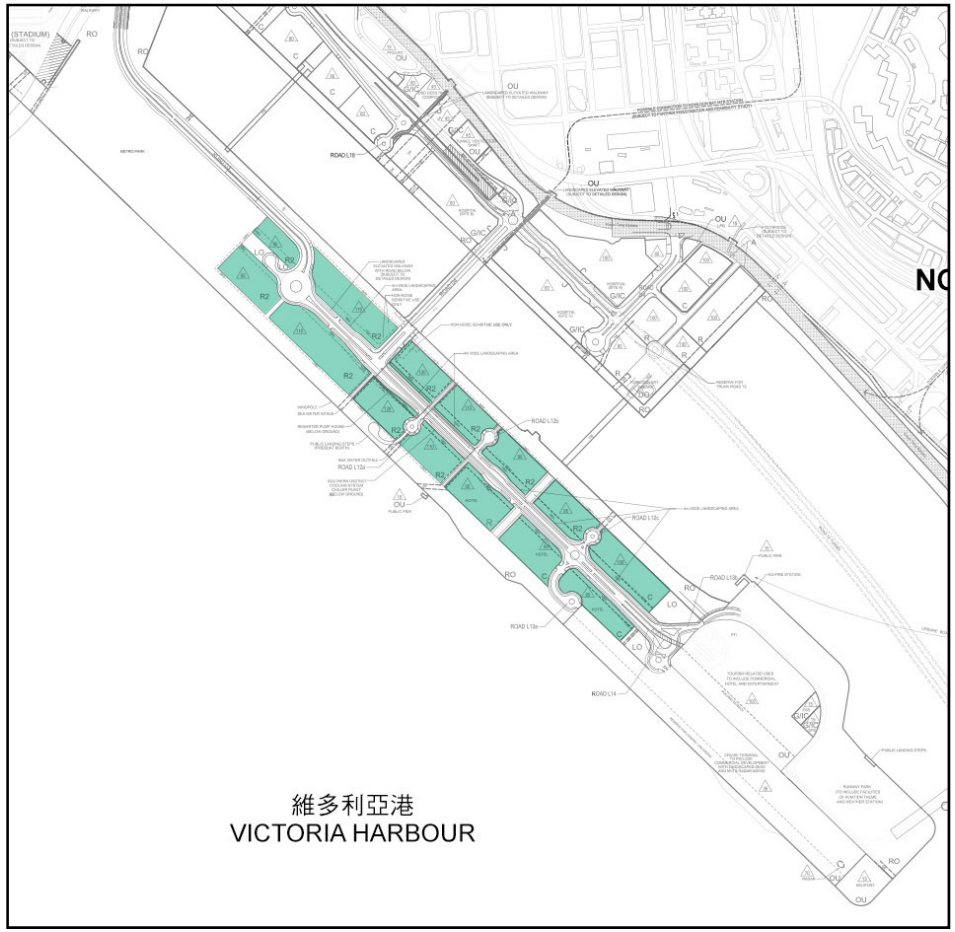


Figure 2.4 Development sites specifically addressed by the Runway Precinct UDGM Recommendations and Guidelines

URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

3.0

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

3.1 Introduction

This chapter outlines a range of core urban design concepts and recommendations that are specifically applicable to the developments at the Runway Precinct in order to achieve the overall goals and visions set out for the runway. It is important to note that each development site on the runway has its own responsibilities and contribution towards the creation of an attractive destination for tourism and improving the quality of life of the local residents and creating a sense of belonging.

In view of the prominent location of the Runway Precinct, design approaches are categorised under the UDGM according to whether they are "**Recommended**", "**Acceptable**" or are "**To Be Avoided**". These examples aim to provide guidance for development sites on how to achieve the overall vision and goals for the Runway Precinct in a holistic manner rather than standalone "piecemeal remedial measures".

Figure 3.1 The Runway Precinct development and adjacent development nodes

Disclaimer: Layouts are indicative only. Subject to further review and approval at detail design stage.

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

3.2 Recommended Design Objective 1: Promoting Sensible Disposition and Massing of Building Blocks

The arrangement and disposition of developments should enable the creation of a vibrant and exciting world-class harbourfront. Each development site should similarly posses a unique and distinctive character whilst demonstrating a strong interactive relationship with the promenade and the public realm. The disposition and arrangement of developments should be carefully designed to create enclosure for each individual site to generate viable interesting spaces along the Runway. Even though the OZP has prescribed the maximum BH restriction for each development site, it is recommended that height variations within each development are adopted lot to create physical diversity strengthen the overall visual interest.

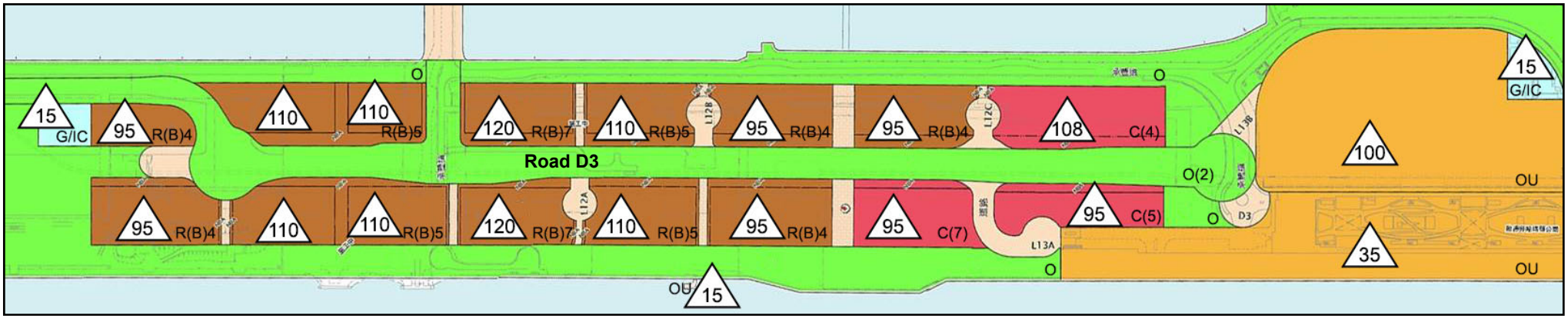


Figure 3.2 The permitted maximum BH prescribed in the relevant OZP for development sites on Runway Precinct

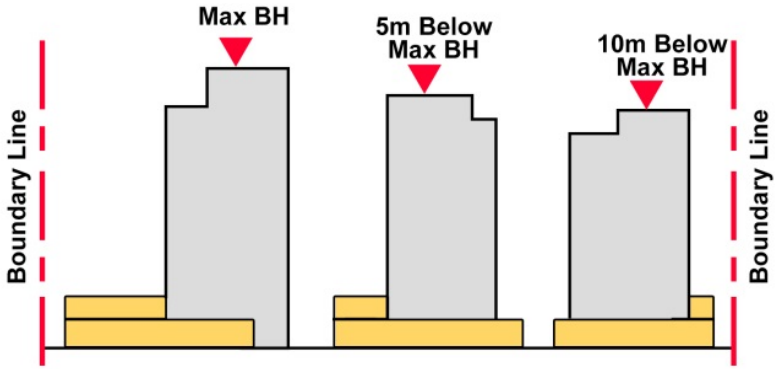


Figure 3.3 Example of adopting BH variety within the site through varied height profiles within individual towers

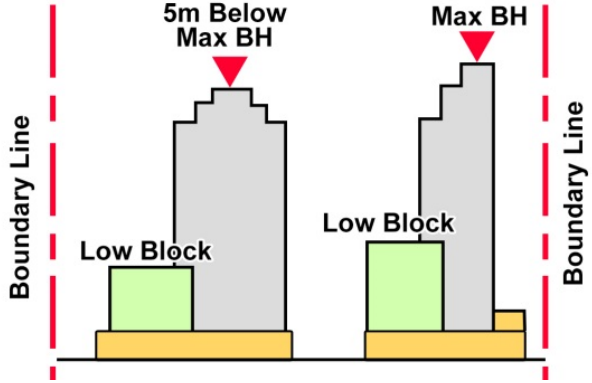


Figure 3.4 Example of adopting BH variety within the site utilising high and low blocks

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Figure 3.5 Proposed BH variation to promote a rhythmic variation in BH and to engender a sense of visual and physical diversity

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

RECOMMENDED

- Provision of BH variation within each development site with a height variation of at least 5 metres to promote visual interest;
- Ensure that ground floor uses are active and pedestrian-oriented within commercial and mixed-use areas. Uses that have low propensity for walk-in traffic should be discouraged at streetfront locations;
- As far as can be practically achieved orientate and angle high rise building block(s) away from the waterfront to minimise a monotonous wall effect along the promenade.

Figure 3.6 Mixture of high and low blocks with significant BH variation within development sites

ACCEPTABLE

- Adopt a stepped height profile within each development site as far as possible with at least 3 metres in height variation to promote visual interest;
- Promote the use of varying and articulate building massing within development site to enhance visual interest; and
- Relate the bulk of new buildings to the prevailing scale of development on the runway to avoid an overwhelming or dominating appearance.

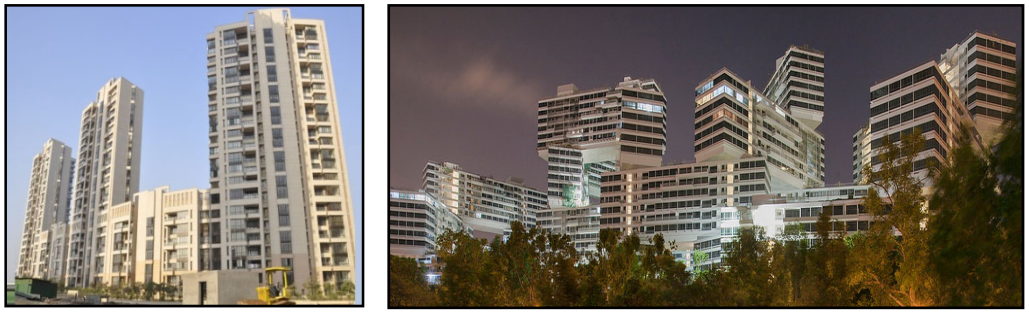


Figure 3.7 Mixture of high and low blocks with minor BH variation within development sites

TO BE AVOIDED

- Identical BH and building massing for all development blocks;
- High blocks with extremely large footprints;
- No provision for low block development;
- The creation of a wall of development along the promenade; and
- Low blocks not being able to be seen from the public realm.

Figure 3.8 Walls of development with no BH variation within development sites

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

3.3 Recommended Design Objective 2: Creation of a Rhythmic Arrangement of High and Low Buildings and a Stepped Height Building Profile for a Dynamic Skyline

The design and arrangement of the built form within the Runway Precinct is intended to be configured to optimise visual porosity and to avoid creating the appearance of a wall of development. A dynamic skyline when viewed from both sides of the Runway Precinct is to be created through the utilisation of a diverse BH profile characterised by a variety of building scales, types and heights, punctuated by selective signature towers.

It is recommended that all residential sites are to have at least one low-rise residential block to be erected on the lot boundary with the main façade facing the waterfront promenade along Victoria Harbour and Kai Tak Approach Channel. This is to generate a rhythm of high-low building blocks along the waterfront promenades. It is recommended that each development site should pay respect to the neighbouring development sites to echo or mirror its development pattern in order to achieve a holistic rhythmic arrangement of high and low buildings along the Runway Precinct.

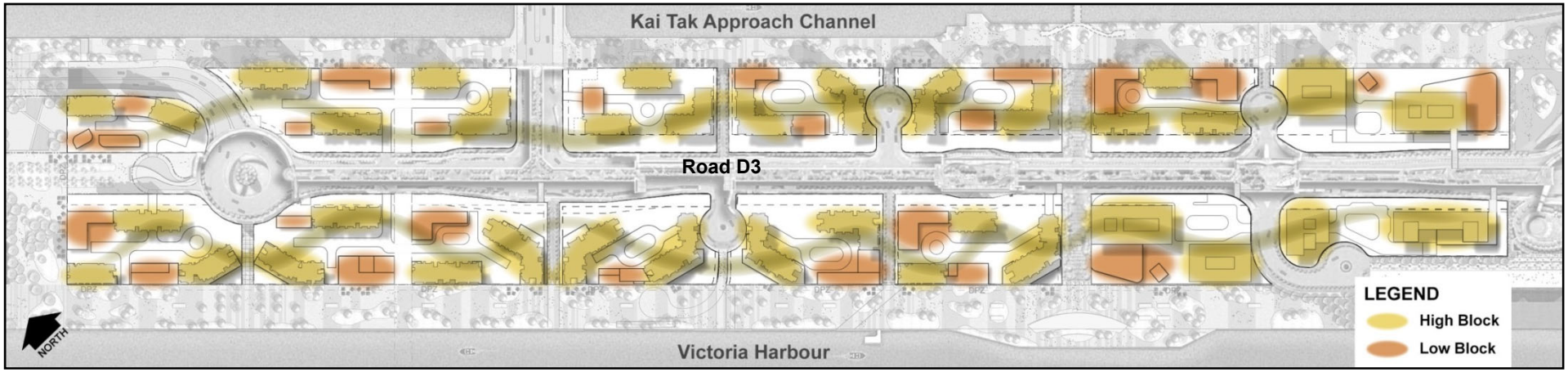


Figure 3.9 Indicative rhythmic arrangement of high and low building blocks for a dynamic skyline

Disclaimer: Layouts are indicative only. Subject to further review and approval at detail design stage.

Figure 3.10 Desirable stepped height profile

Figure 3.11 High and low blocks along waterfront promenade / road

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

A “Stepped Height” profile design with a high and low blocks design principle along the waterfront will help to avoid linear development within the Runway Precinct. Low residential blocks and retail are recommended to be located along the waterfront promenade to promote visual interest taking into account the local area context, the local wind environment, and the need to maintain visually compatible building massing.

Figure 3.12 Stepped height profile to conceptually mimic wave movement along the Runway Precinct with high and low block arrangement

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

RECOMMENDED

- Inclusion of low blocks with 6 to 8 storeys in height to create visual interest and to avoid repetitious high rise blocks of uniform height;
- Provision of at least two to four low block(s) facing the waterfront promenade;
- Adoption of high and low blocks on both waterfront edges and adjacent to Road D3; and
- Provision of low blocks facing high blocks in neighbouring sites to create the recommended rhythmic arrangement along the runway.

Figure 3.13 Building blocks arrangement with significant use of low block(s) to create a dynamic skyline

ACCEPTABLE

- Provision of one low block(s) with 6 to 8 storeys in height to create visual interest; and
- Provision of at least one low block abutting and facing the waterfront promenade to enrich the pedestrian walking experience; and
- The design of a coherent layout that echoes the development arrangement of neighbouring sites.

Figure 3.14 Building blocks arrangement with minor BH variation and combination of low block(s) along the waterfront in Dubai

TO BE AVOIDED

- No provision of low block(s);
- No visual interest with wall of development facing the waterfront promenade; and
- Only having high blocks abutting the waterfront promenade.

Figure 3.15 Walls of development with no BH variation by the waterfront in Hong Kong

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

3.4 Recommended Design Objective 3: Facilitating Visual Permeability and Air Ventilation

A combination of high and low rise blocks is recommended to create visual permeability. This will also contribute to providing visual and air ventilation corridors across the Runway Precinct in north to south and east to west directions. This urban design objective is intended to create spaces between high and low buildings that provide view corridors and visual connections between developments on both sides of the Runway Precinct.

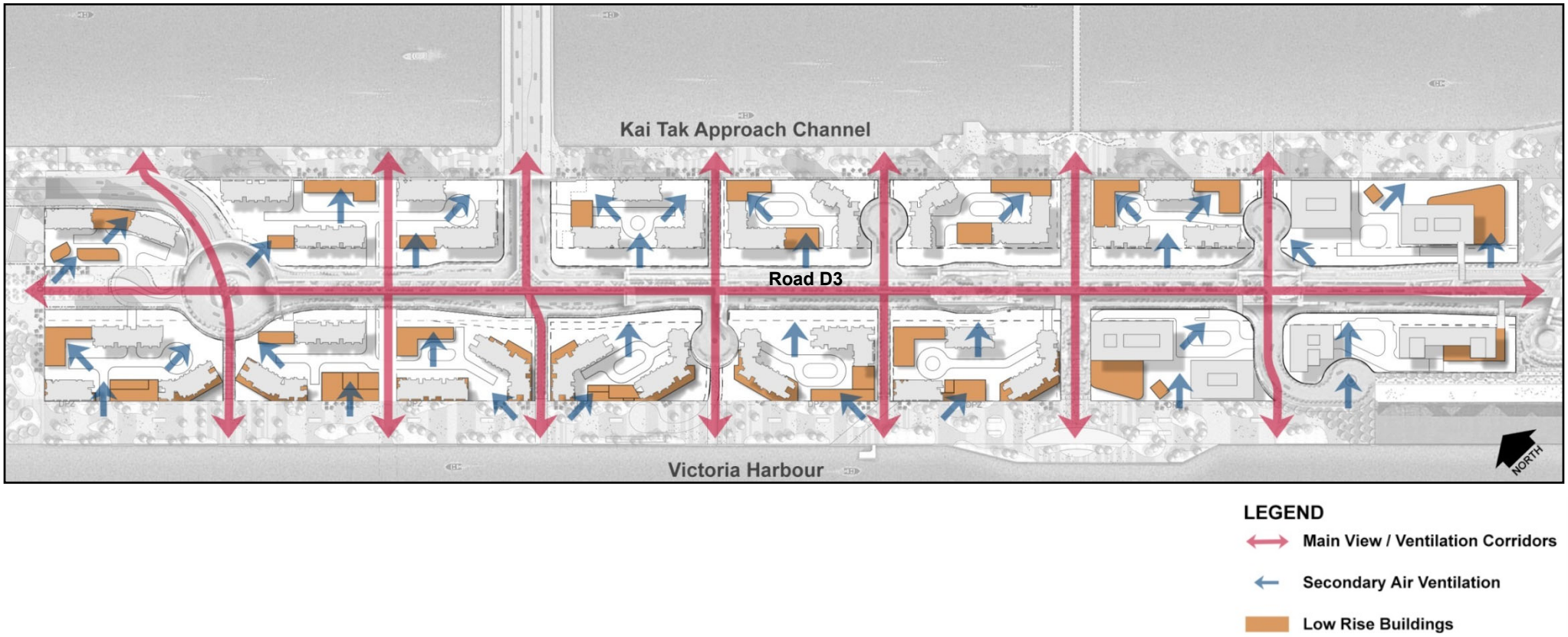


Figure 3.16 Illustration of a possible high and low blocks arrangement to enable visual and air ventilation permeability within the Runway Precinct

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

RECOMMENDED

- Provision of building separation of over 10 metres within development sites to allow visual permeability and air circulation;
- Provision of continuous visual and air ventilation corridors with consideration given to neighbouring sites;
- The architectural treatment and form of buildings and their treatment should create a sense of visual variety within the site; and
- Façade treatments should be light in texture to engender a sense of transparency.

Figure 3.17 Building blocks arrangement with wide building separation within development site

ACCEPTABLE

- Provision of building separation of a range of 5 to 10 metres within the sites to allow visual permeability and air circulation;
- Provision of visual and air ventilation corridors within each development site; and
- Uniform buildings with identical building façade treatments and built forms.

Figure 3.18 Building blocks arrangement with minor building separation within development site

TO BE AVOIDED

- Building gap separation of less than 5 metres between development blocks;
- Extensive linear blocks that have no visual and air permeability; and
- The creation of a wall of development along the promenade.

Figure 3.19 Curtain wall of development with no building separation within development site

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

3.5 Recommended Design Objective 4: Promoting Efficient Physical Linkage and Connectivity

The prominent locations of development sites in the Runway Precinct have a strategic role to provide comprehensive connections to the key nodes in Kai Tak and to link the Kai Tak City Centre, Kai Tak Sports Hub, the Metro Park, the South Apron Corner, the landscaped deck, waterfront promenade and the Tourism Node. Development sites in the Runway Precinct are recommended to provide more direct linkage from the landscaped deck over Distributor Road D3 to the waterfront promenade with provision of lift(s) and escalator(s) for the convenience of the public. These recommended interconnections aim to help cement the developments within the Runway Precinct into a cohesive neighbourhood with a range of pedestrian connection options offered to the public from the landscaped deck over Road D3 to developments on either side of the runway. These connections will be augmented by a series of at-grade pedestrian connections that will provide cross connections below the landscaped deck.

Figure 3.20 Strategic role of the Runway Precinct to provide comprehensive connections to the key nodes in Kai Tak

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

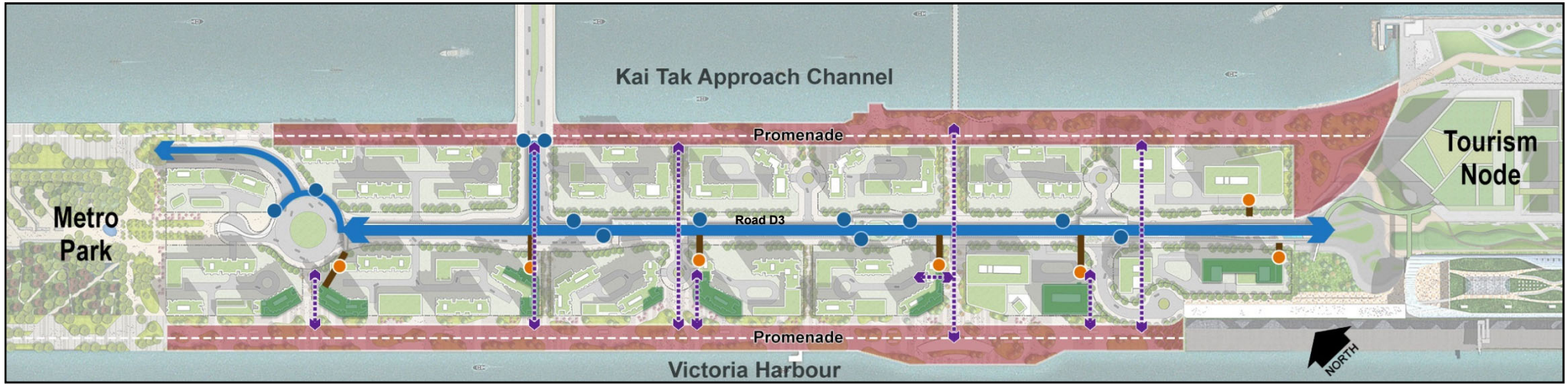


Figure 3.21 Improving and expanding pedestrian connectivity by providing seven direct linkage(s) in development sites enabling pedestrian connectivity from the level of the landscaped deck to the waterfront promenade. Lifts and escalators will be provided to enhance connectivity and to ensure universal access.

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

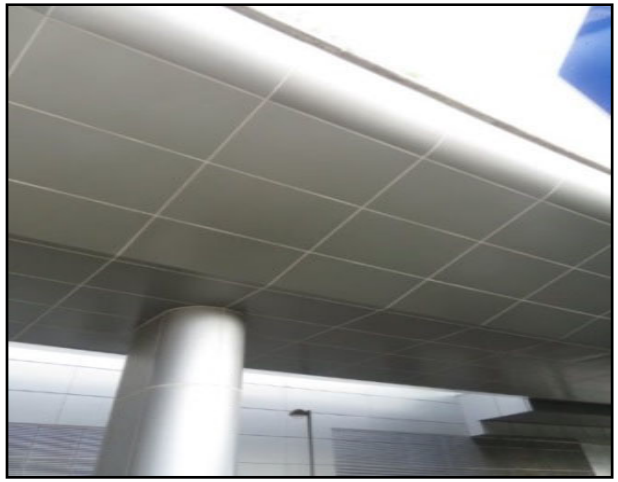


Figure 3.22 Underbelly of the recommended elevated connection should be clad in aluminium to match the underbelly cladding of the landscaped deck

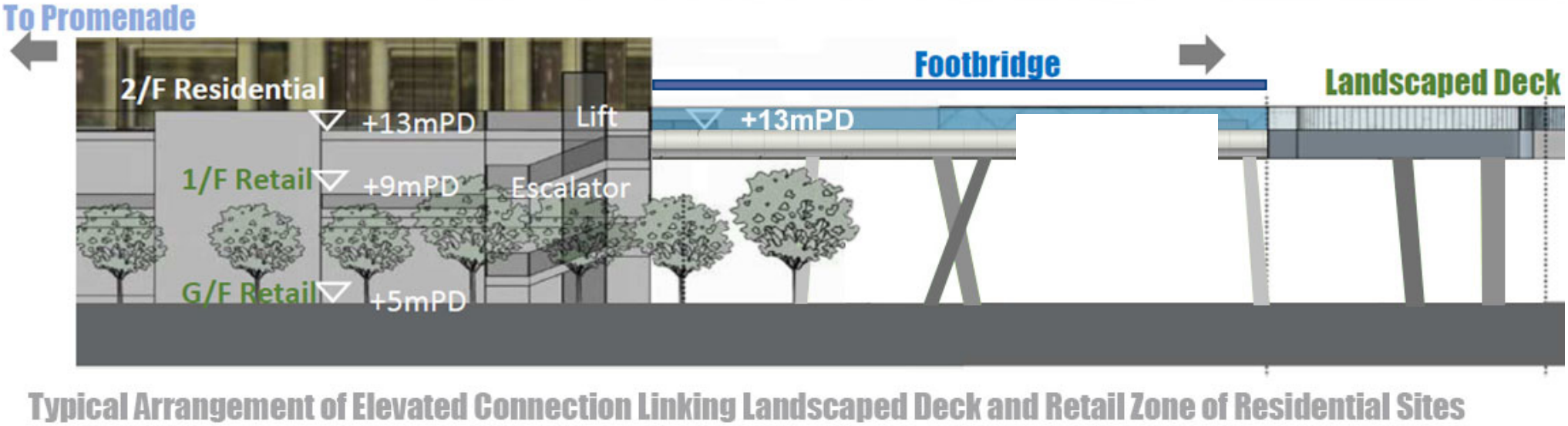


Figure 3.23 Recommended footbridge connection from landscaped deck cross section - Developers of individual sites are recommended to provide direct footbridge connections for linkage to the landscaped deck with provision of lifts and escalators for convenient pedestrian circulation.

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

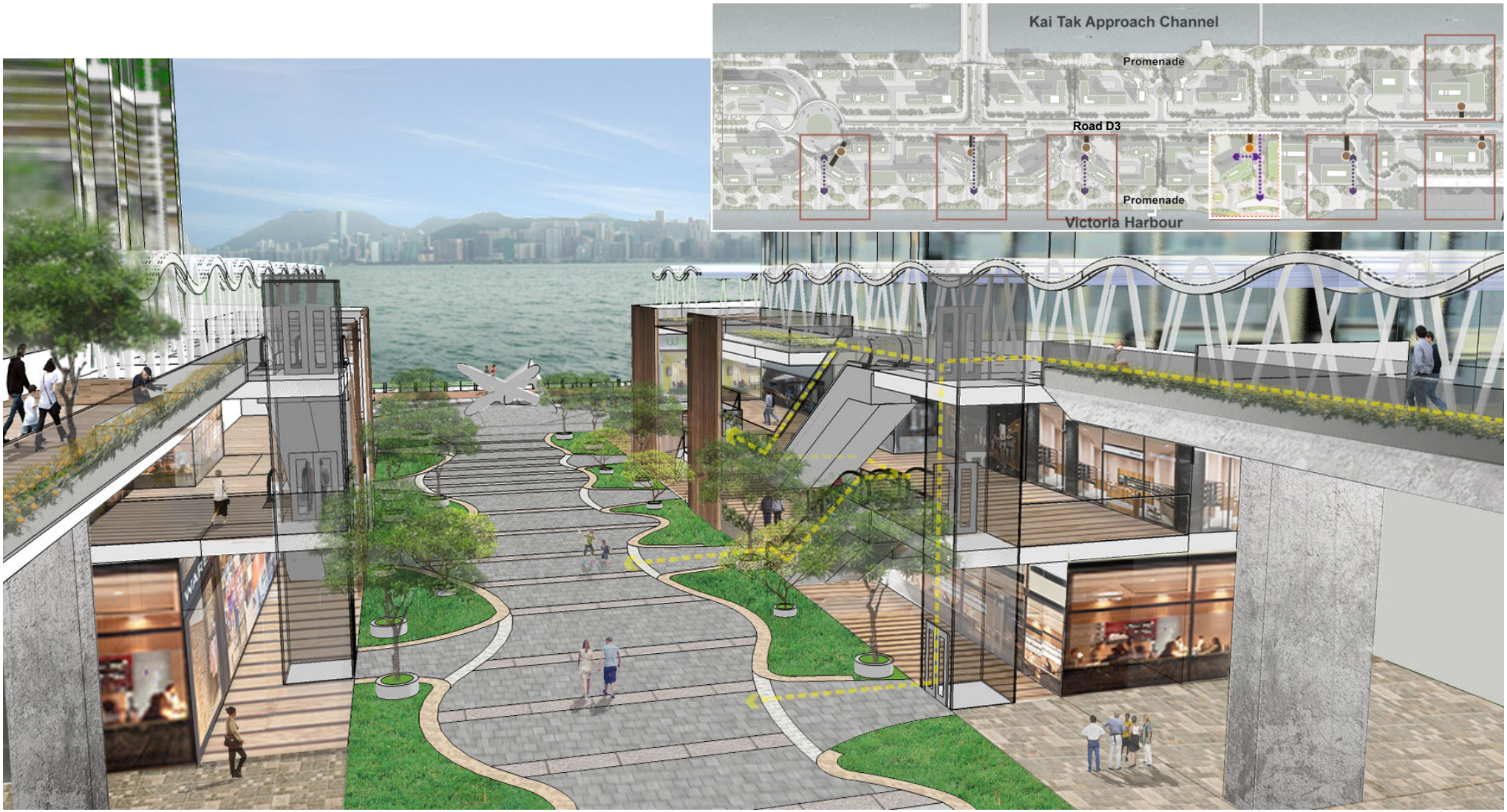


Figure 3.24 Illustration of recommended footbridge connection with two-way escalators and lift for easy public access to provide direct linkage from the landscaped deck to harbourfront promenade

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

RECOMMENDED

- Adoption of a similar architectural design and use of materials as the landscaped deck to ensure a holistic design;
- Provision of a 4 metres wide minimum internal clearance for the footbridge;
- Provision of planting area of a minimum of 0.5 metre in width on both internal sides of the footbridge;
- Provision of lift(s), escalator(s) and staircase(s) connections to provide easy public access to and from the waterfront promenade and landscaped deck over Road D3; and
- Subtle feature lighting should also be considered with reference to the design of the promenade and footbridges.

Figure 3.25 Examples of a possible covered footbridge with generous width for pedestrian circulation with lift and planter(s)

ACCEPTABLE

- Provision of a 5 metres wide covered public footbridge connecting the landscaped deck and the retail block within the development;
- Minimum of a 3 metres wide internal clearance for each footbridge connection;
- Provision of planting area on both internal edges of the footbridges;
- Provision of lift(s) and two-way escalator(s) connecting to street level to provide easy public access to and from the waterfront promenade and the landscaped deck over Road D3; and
- Subtle feature lighting treatments are recommended with the object of avoiding glare and over conspicuous illumination.

Figure 3.26 Examples of a possible covered footbridge with provision of edges planting(s)

TO BE AVOIDED

- Usage of non-transparent balustrade(s);
- No footbridge connection to and from the landscaped deck over Road D3;
- No provision of lift(s) and escalator(s) for public use; and
- A fully enclosed footbridge with no provision of planting areas.

Figure 3.27 Examples of a fully enclosed footbridges are to be avoided

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Recommended Indicative Footbridge Linkage Design for Reference:

Possible Footbridge Linkage from Landscaped Deck

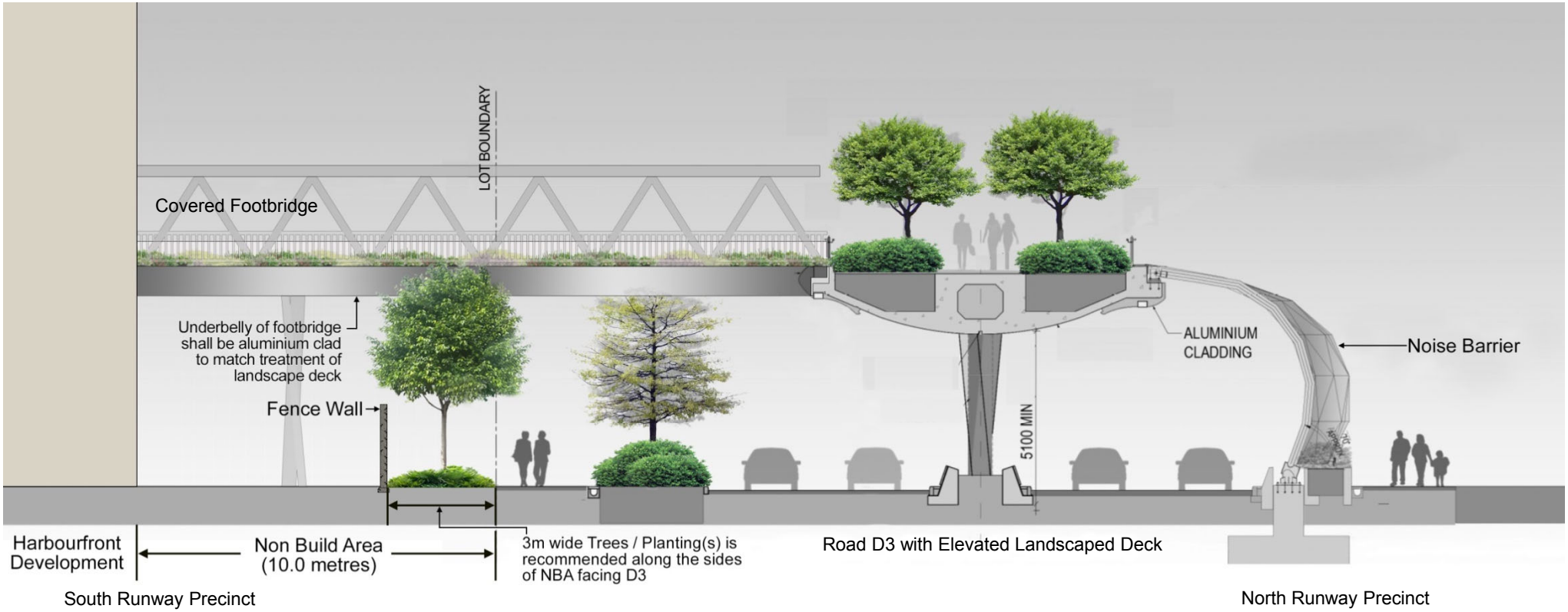


Figure 3.28 Arrangement of footbridge connection from harbourfront development to landscaped deck

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Recommended Design Reference for Footbridge(s):

Footbridge

IFC to Pier 3 footbridge incorporates a light structural arrangement and fritted glass. Although installed in 2003 the glass balustrades and steel work are in good conditions.

Figure 3.29 Fritted glass canopy and balustrade combined to create a sense of "lightness" and provide visual porosity

Figure 3.30 Fritted glass and supporting structure detail

Figure 3.31 Fritted glass canopy walkway at Tiu Keng Leng Sports Centre

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Recommended Design Reference for Lifts and Escalators:

Escalators

Single-rider widths are between 41cm and 61cm. Airport and metro escalator widths are between 79cm and 99cm and accommodate a passenger with shopping bags or two passengers side-by-side. The Runway Precinct will require the latter and should also have stairs in case of breakdown.

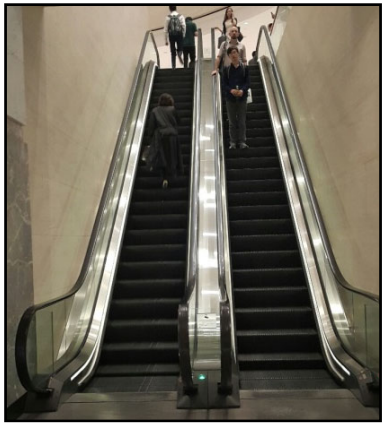


Figure 3.32 Acceptable standard escalators with glazed edges

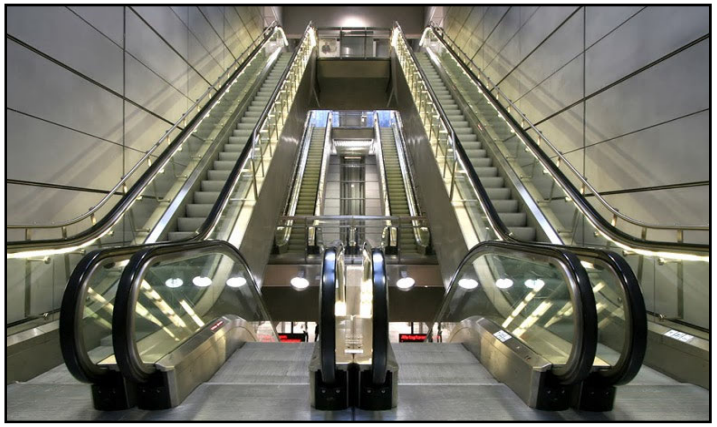


Figure 3.33 Glazed edges enhance quality of light penetration

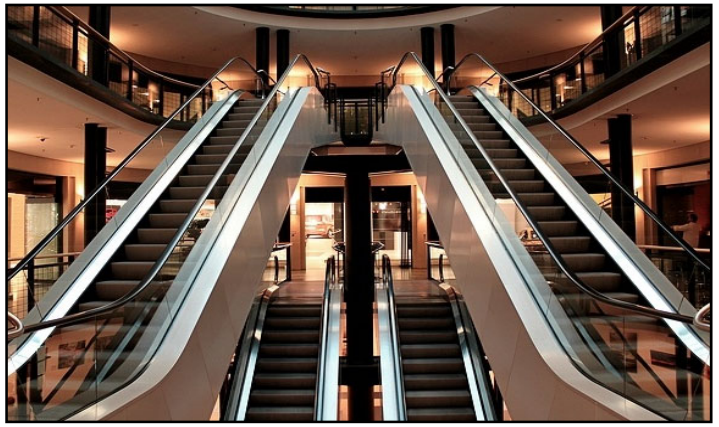


Figure 3.34 Juxtaposition of escalators to separate floors need to be carefully considered to make economic use of space

Figure 3.35 Escalator with clear canopy

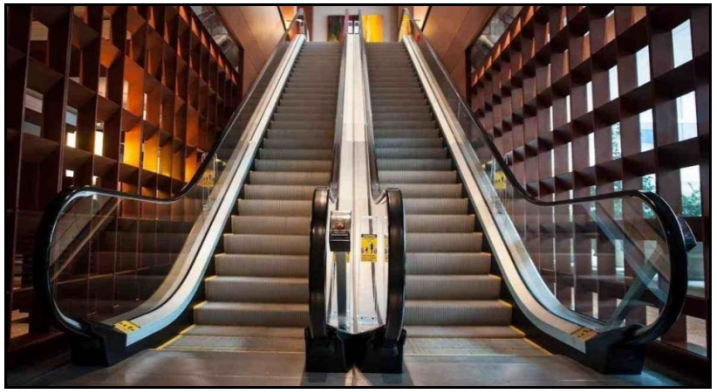


Figure 3.36 Quality and illumination of escalator areas should create spaces of good environmental quality

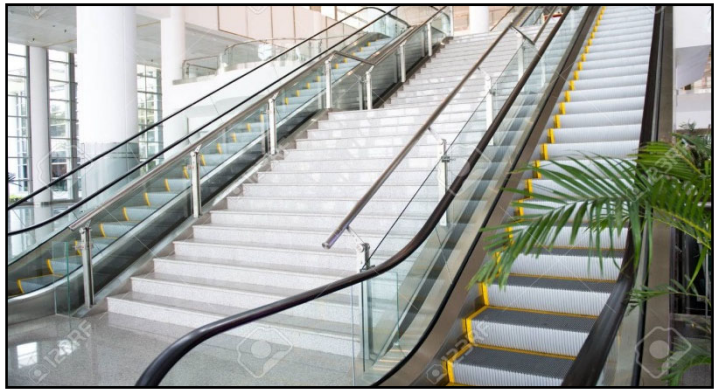


Figure 3.37 Escalators need to be supplemented with stairs in case of breakdown

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Recommended Design Reference for Lifts and Escalators

Figure 3.38 Lift and escalator systems need to be clearly perceptible and located in an efficient arrangement

Figure 3.39 In conditions where escalators located in external spaces, fritted glass canopies should be employed to provide all weather protection and ensure good illumination.

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

3.6 Recommended Design Objective 5: Activation of the Waterfront Promenade and Designated Activity Nodes

The waterfront promenade facing Victoria Harbour will provide a conduit that will interlink the Metro Park Node with the Tourism Node. The physical arrangement and disposition of the retail frontage within the relevant development site(s) within the Runway Precinct will have a significant role in defining the character for each section of the promenade. Retail provision will also have a role in promoting vibrancy. The proposed integrated Planning and Urban Design recommendations for each development site are intended to generate an interplay of land uses that engender conditions that will promote a vibrant harbourfront. To promote continuity and legibility, a series of defined **Activity Nodes** with linear retail facades will be established along the about 1 km stretch of promenade at the edge of Victoria Harbour. The retail facades along the southern edge of the promenade shall play a major role in delineating the southern perimeter of the Runway. To ensure that a continuous, vibrant promenade is created, the following are recommended:

- **Creating Nodes along the Promenade** - It is critical to create strong regional and local nodes along the Runway Precinct to revitalize the waterfront promenade and strengthen the connection between large scale anchors of regional significance including the Sports Park, Kai Tak Cruise Terminal, Metro Park and commercial / office centres. Pedestrian-oriented design in a secure vehicle-free environment can ensure universal assess for public.

- **Activating the Harbourfront** - To bring life and vibrancy to the waterfront, it is necessary to introduce a variety of activities ranging from the provision of casual strolling spaces along the waterfront park, and a highly active commercial and retail-orientated waterfront lined with restaurants, cafes and bars.

Figure 3.40 Commercial and retail-oriented activities

Figure 3.41 Casual strolling spaces and sitting areas

Figure 3.42 Casual strolling spaces with activity area

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Pedestrian-Friendly Environment with Activity Nodes

Pedestrian promenades along Victoria Harbour will, as outlined in the previous sections, be punctuated and activated by **"Activity Nodes"**. These will accommodate activity areas and food & beverage (F&B) outlets with retail development at the perimeter of each node. Activity nodes at the landscaped deck level, urban nodes recommended for the waterfront promenade and activity nodes recommended under this UDGM on at-grade levels are recommended to work in a holistic manner to ensure the vibrancy of the Runway Precinct. Comprehensive connections will also be provided to link each edge of the Runway Precinct. The combination of these elements will contribute to the activation of the plaza and the waterfront promenade with an aim to connect the Metro Park and the Tourism Node.

The **Five Urban Nodes** numbered below have been proposed at various locations to connect with four of the key north-south pedestrian streets across the Runway Precinct and the Landscaped Deck over Road D3. These **"Urban Nodes"** have different functions while Nodes 2, 4 and 5 are serve as **"Functional Nodes"** that consist of 200 sq.m corner splays at the pedestrian streets' edges adjacent to the promenade to improve sight-lines and to enhance the vibrancy through providing outdoor space for various activities which echo the themes recommended under the waterfront promenade study. Nodes 1 and 3 are recommended to serve as **"Transition Nodes"** to provide sense of direction and transition space into the Runway Precinct from the adjacent Metro Park and from the South Apron respectively.

Within the Runway Precinct, pedestrian movement will largely occur along the proposed pedestrian streets between the development blocks. A series of vertical connections will enable access to the landscaped deck over Road D3. This will serve to foster interaction between the individual developments within the Runway Precinct and help to create a sense of community.

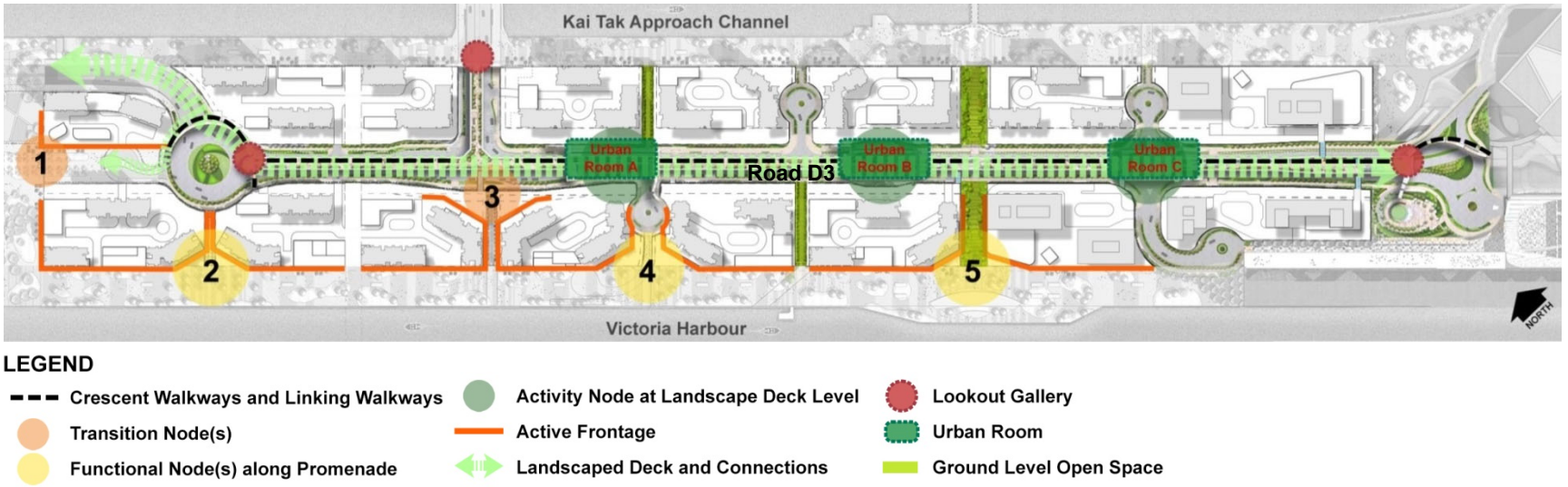


Figure 3.43 Creating Activity Nodes within the development sites at strategic location(s) that are echoing the design / theme(s) proposed for the waterfront promenade and the landscaped deck for cohesive effect

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Purposes of Each Node

Node 1: "Transition Node" namely "Entrance from Metro Park" provides clearly marked transitional zones with some retail and commercial elements to welcome visitors to the Runway Precinct and to let them recognize that they are transitioning from public to private realm. Transition space that expresses the beginning of the journey of the Runway Precinct.

Node 2: "Functional Node" namely "Playscape" is intended to signify the entrance into the Runway Precinct through the provision of a well connected retail activated node that cohere the "Playscape Node" urban Node of the promenade to provide a family-friendly zone as an attractor to visitors.

Node 3: "Transition Node" namely "Culturescape" is intended to echo the "Culturescape" urban nodes proposed on the landscaped deck and promenade marking the art and exhibition vibe that compromise the "Look Out Gallery" and the Urban Node plaza on the deck with welcoming art and cultural elements. This node also aims to provide visual linkage to direct pedestrians to the waterfront promenade. Retail elements are recommended to be employed to act as supporting features to strengthen the Art and Culture theme for this node.

Node 4: "Functional Node" namely "Retreat" - This node will specifically be designed to create a "sense of place" that will provide a relaxing area for public enjoyment. This node is proposed to combine the Urban Room on landscaped deck and the tranquil "Retreat Node" proposed for the waterfront promenade.

Node 5: "Functional Node" namely "Conduit to Entertainment" - This route will provide transitional space followed by a clearly delineated route that will extend from residential with F&B and retail towards large volume commercial hotel / office site to the south east with large scale retail and F&B elements. This node will also help to direct visitors back to the landscaped deck towards Tourism Node. The transitional retail node at the end of the Runway Precinct can serve to provide an important physical and visual conduit to the Tourism and Entrainment Node. This node should also make reference to the node of Waterscape at the waterfront promenade to enhance the vibrancy of this node.

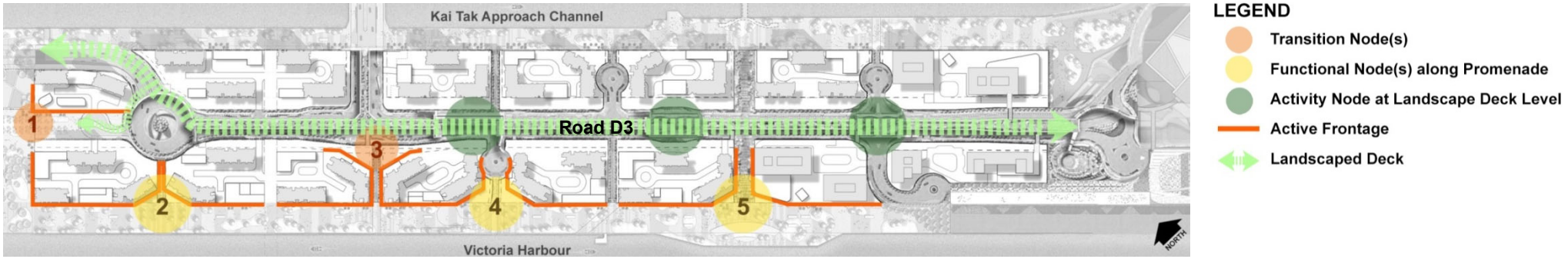
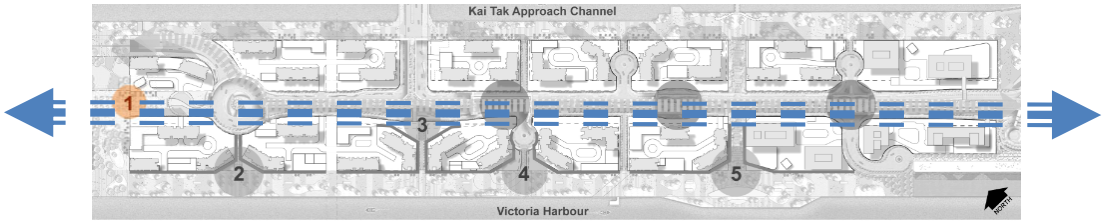


Figure 3.44 Recommended Activity Nodes for Development Site(s)

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Node 1: "Transition Node" from Metro Park

Provide a transitional zone between the Metro Park and the residential sites with some commercial elements to welcome the visitors and denote the visitors' arrival from the park to the residential - commercial area. This Transition Node is proposed to indicate the northwest end of the Runway Precinct as well as to provide sense of direction to and from Metro Park and the runway tip via the featured bespoke designed landscaped deck. An iconic landscape element such as a large sculpture shall be proposed as a landmark which will help to strengthen the function of the area as a node. The provision of retail elements and F&B facilities will also play an important role in enhancing the vibrancy of the node.



Figures 3.45 The distinctiveness of treatments provided within the transitional node signals transition from a tranquil park to residential developments and clusters of retail and commercial uses

Figure 3.46 Figure provides an illustration of the transitional space provided by open space treatments at the eastern edge of the Metro Park

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

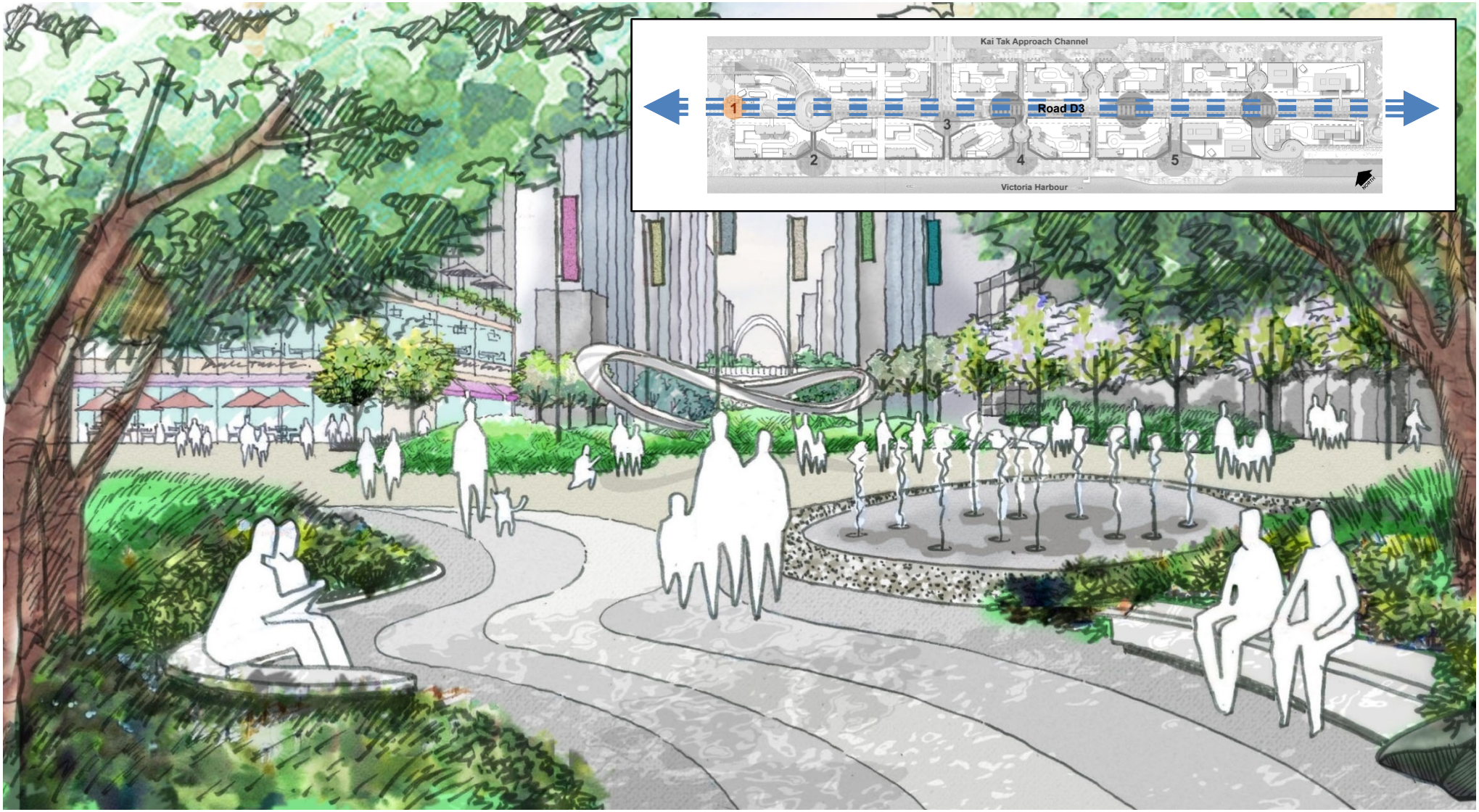


Figure 3.47 Illustration of the Transition Node between the edge of the Metro Park and development at the western edge of the Runway Precinct. (Design of the Metro Park is indicative only subject to detailed design)

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Node 2: "The Playscape Node"

This functional node will play an important role in promoting inclusive urban design as it will create a place that is family-oriented and child-friendly. The proposed play areas will provide seamless transition of activities between the Metro Park and the promenade with supporting retail elements that are family and child-friendly echoing the "The Playscape Node" recommended under the "Design Guidelines for Kai Tak Promenade".

It is recommended that retail elements be established on both sides of the pedestrian street and along the waterfront promenade with family-friendly design elements. 200 sq.m corner splays are recommended to improve sight-lines and to strengthen the edges of the nodes. Family-friendly commercial activities are also proposed at the corner areas.

The recommended setting is similar to that of the retail belt in Repulse Bay and Science Park in Hong Kong where children playing in the play area can be supervised by parents from the retail areas and shops which are mainly family-oriented.

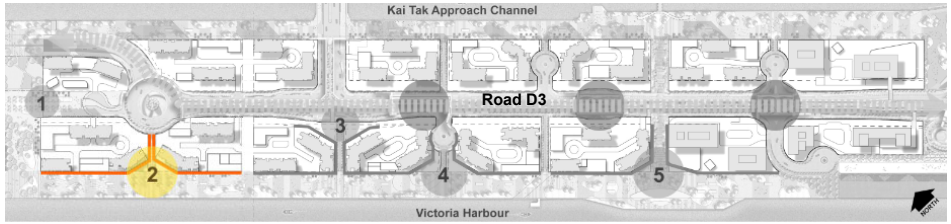


Figure 3.48 Restaurant abutting a children's play area along the riverfront at the Hong Kong Science Park

Figure 3.49 Children's playing area with casual strolling and sitting areas at the Hong Kong Science Park

Figure 3.50 The retail belt in Repulse Bay offers open air dinning overlooking children's play area along the beach

The above Figures illustrate instances where there is a positive interplay of children's play area provision and dining and passive seating

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Figures 3.51 Illustration depicting the proposed 200 sq.m corner splays, the dedicated pedestrian street and the edge of the waterfront promenade within the Node 2 development

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Reference images depicting the typical character that is sought to be achieved within "The Playscape Node" Promenade and Pedestrian Streets

Figure 3.52 Family friendly activities are to be encouraged within the "Playscape" Node

Figure 3.53 A family friendly waterfront promenade with retail frontages is advocated

Figure 3.54 Perspective of the "Playscape" Node at the edge of Victoria Harbour

Figure 3.55 Retail provision will provide colour and diversity at the base of residential towers

Figure 3.56 Family friendly promenade with retail frontages will serve to activate the waterfront

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Node 3: "Culturescape Node"

"Culturescape Node" is intended to echo the Lookout Gallery, the Urban Node proposed on the landscaped deck and the "Culturescape Node" which are incorporated under the "Design Guidelines for Kai Tak Promenade". The "Culturescape Node" is aimed to amalgamate varies nodes and culture elements to form an Art & Exhibition route from North Apron to the waterfront promenade similarly to the art and exhibition spaces offers in K11 and Time Square in Hong Kong.

The node will, moreover, also serve as a transitional node that aims to direct visitors from Kai Tak Bridge to the waterfront promenade via the deck through the development site's footbridge connection. Provide a transitional zone between the Kai Tak Bridge and the residential sites with some commercial elements to welcome the visitors. The 200 sq.m corner splays recommended at-grade level for art and exhibition purposes to provide a sense of continuity for visitors leading towards the "Culturescape Node" of the waterfront promenade as the end of the route.

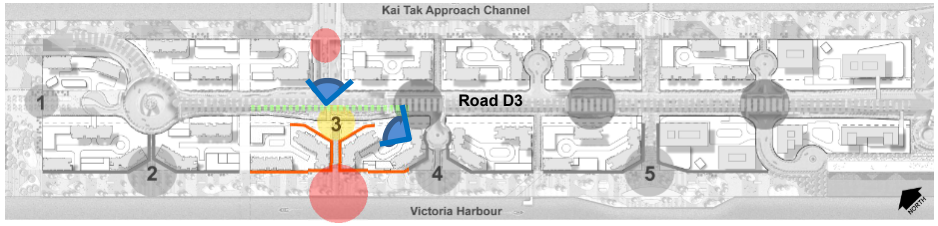


Figure 3.57 View towards the D4A Lookout Gallery

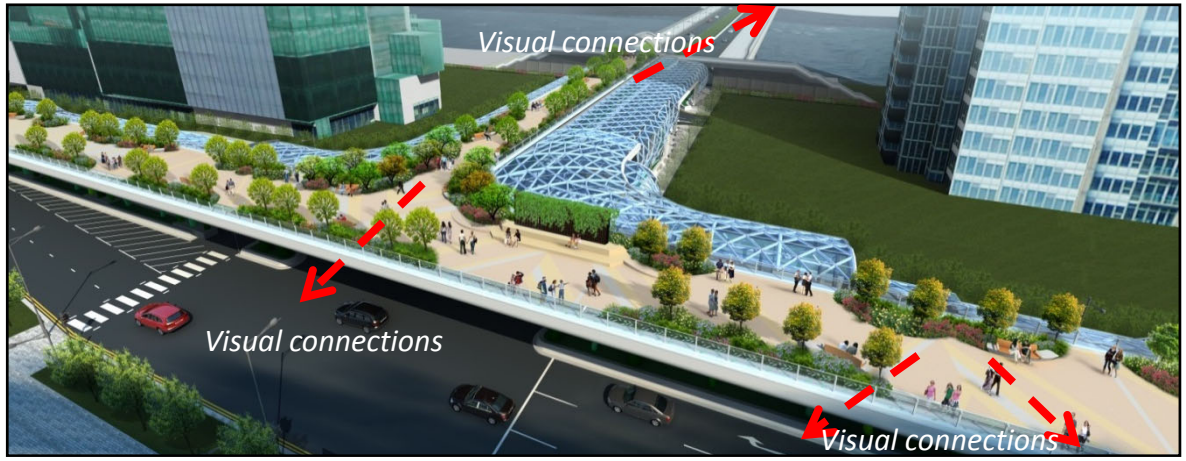


Figure 3.58 Urban Node Plaza and Lookout Point located on the landscaped deck. These will respectively provide viewpoints to Victoria Harbour.

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Providing venues for possible art and exhibition display can be held at the "Culturescape Node"

Figure 3.59 Various examples of art and cultural exhibitions held at the open plaza at shopping mall K11 in Hong Kong

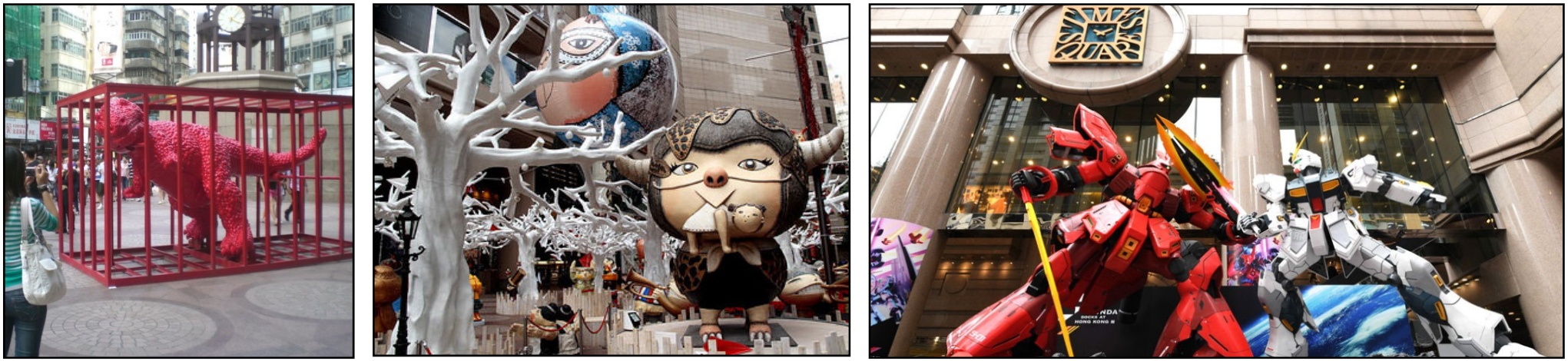


Figure 3.60 Time Square's open plaza in Hong Kong has developed as a venue for exhibitions and promotions

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

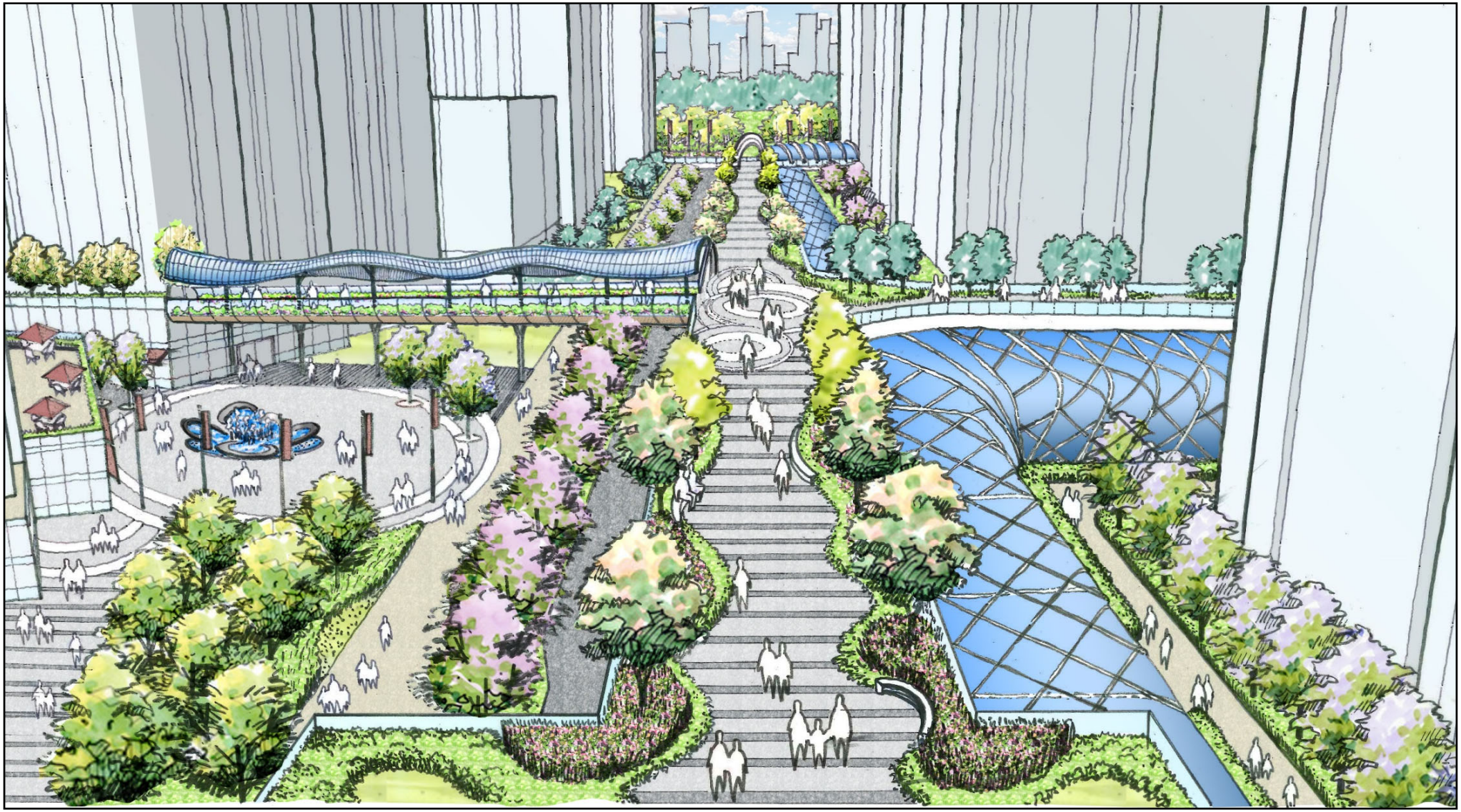


Figure 3.61 Culturescape Node provides a welcoming transition space from the South Apron to developments in the Runway Precinct

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Node 4: "Retreat Node"

This functional node with "Soft" edges that provide comfortable spaces are intended to be provided around buildings to enable visitors to linger with commercial elements. These will contrast with active ground floors to energise and provide life in and immediately in front for the buildings to provide point of interaction. This interaction is deeply dependent on visual and physical permeability. The proposed high and low block arrangement at the edge of Victoria Harbour is intended to encompass a variety of building textures with irregular forms that are deliberately intended with a view to creating spaces with a distinctive identity and character.

Subtle retail elements are recommended to be provided along the waterfront promenade to promote the "art and culture" of Hong Kong and to encompass elegant al fresco dining located at the splay corners of the node to echo and complement the landscape design at the waterfront promenade.

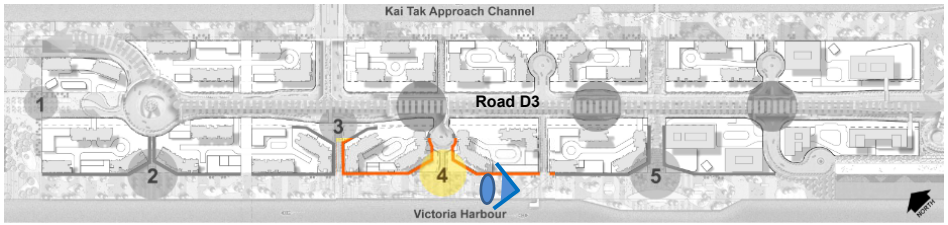


Figure 3.62 Restaurants and outdoor terraces located at the edge of Victoria Harbour will help to activate the waterfront edge

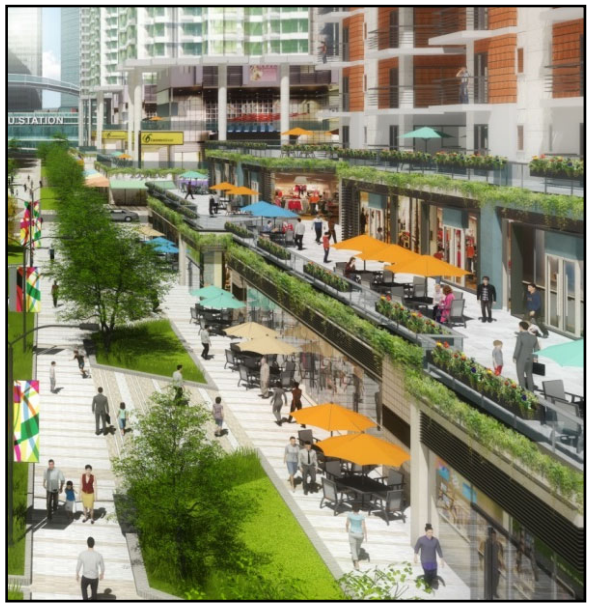


Figure 3.63 Typical retail frontage arrangements that are recommended to be replicated at the edge of the promenade

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

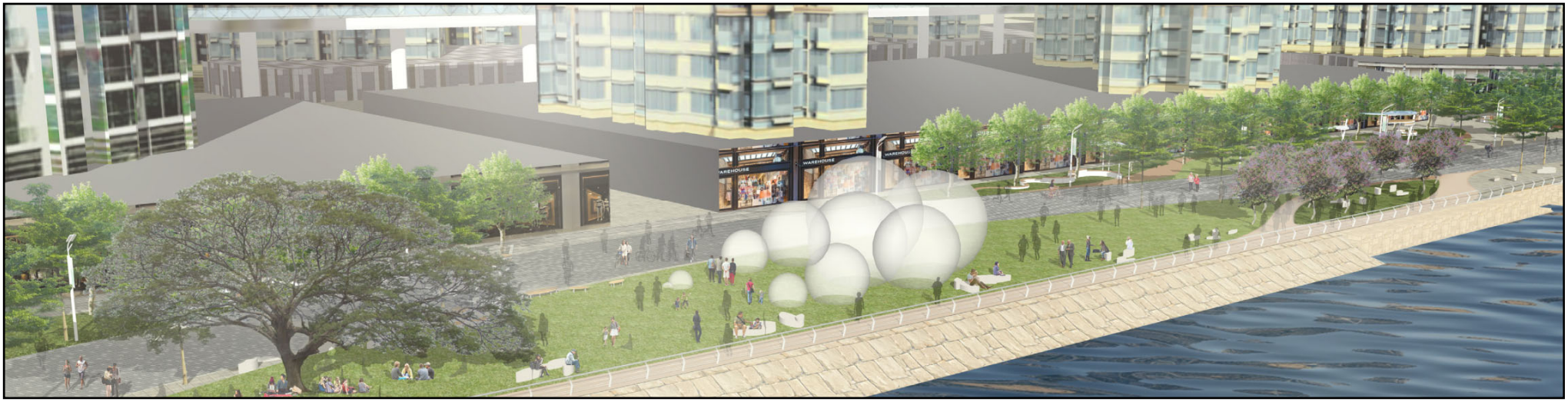


Figure 3.64 Sophisticated promenade treatments will create quality spaces that will assist in generating footfall

Figure 3.65 Retail provision will provide colour and diversity at the base of residential towers

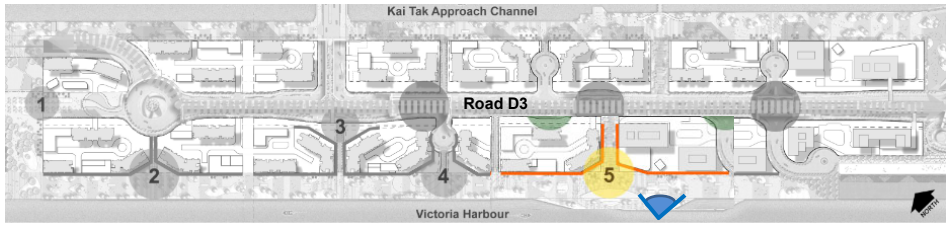
Figure 3.66 Promenades should provide space for multiple passive and active activities

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Node 5: "Conduit to Entertainment"

This node is the only node that is between a residential and a commercial site. It is recommended to adopt a coherent design with vibrant commercial activities and to provide a smooth transitional space for visitors to realise the transitioning from family orientated residential vibe to active tourist orientated commercial vibe.

This node will also help to provide sense of direction to direct visitors back to the landscaped deck towards Tourism Node from the waterfront promenade. The transitional retail node at the end of the Runway Precinct can serve to provide an important physical and visual conduit to the Tourism and Entrainment Node.



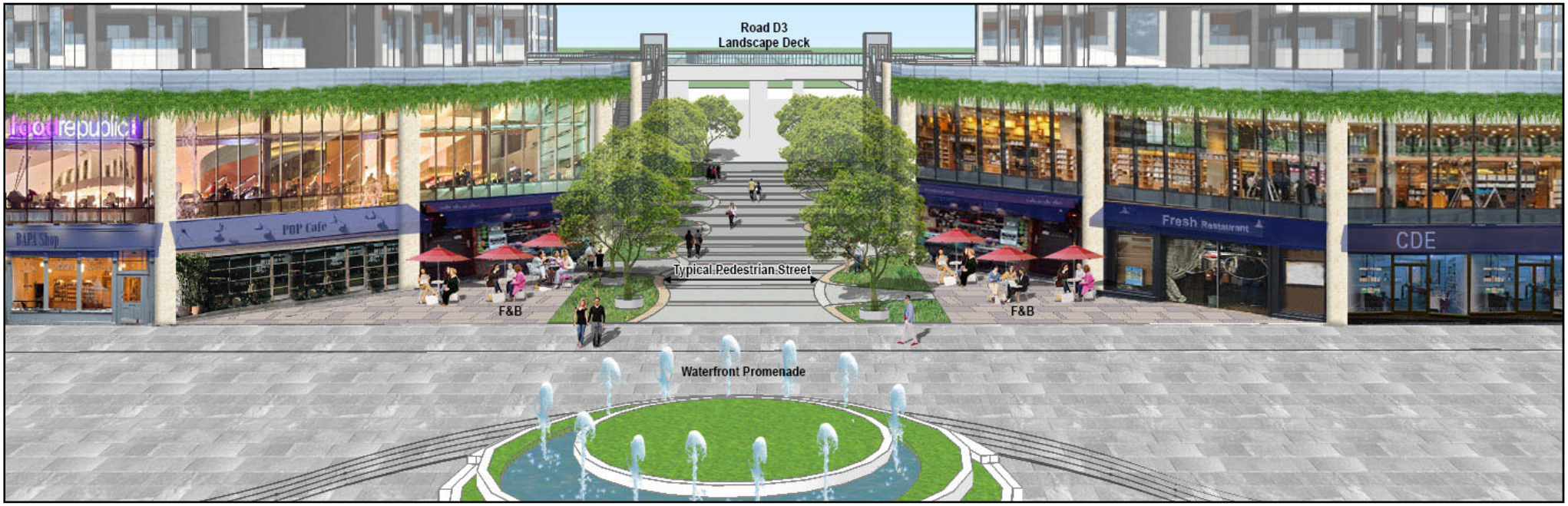


Figure 3.67 Illustration of overall arrangement of shade structures devices to provide all weather proof connections between the landscaped deck and the waterfront promenade

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Ranges of Typical Retail / Al Fresco Dining that could be utilised along the Promenade and Pedestrian Streets

Figure 3.68 Retail frontage along promenade should be dynamic and diverse

Figure 3.69 Al fresco dining along pedestrian street (awning / shading devices will be permitted outside shopfronts facing pedestrian streets and NBA's within delineated urban nodes)

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

Illustrations of Urban Nodes and Retail Belt Fronting Promenade

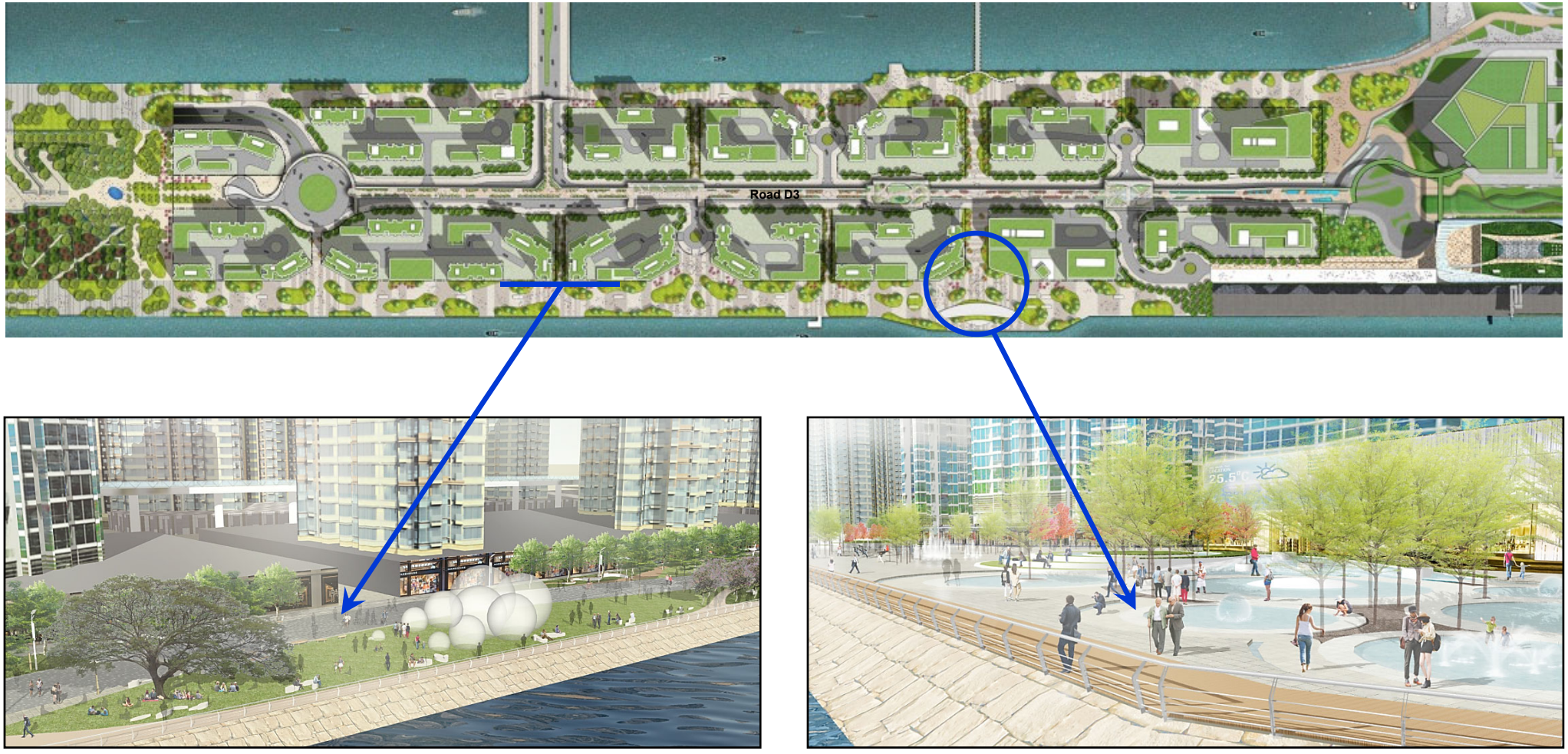


Figure 3.70 Retail edge within the "Culturescape Node" at Runway Promenade

Figure 3.71 Retail within the "Waterscape Node" at the Runway Promenade will assist in activating waterfront edges

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

3.7 Recommended Design Objective 6: To Ensure the Optimisation of Greening and Sustainable Development

A 30% greening ratio is proposed for all development sites on the Runway Precinct. The requirement can be met by a combination of at-grade and upper level greening. Deck levels within hotel developments will also be treated with extensive and intensive greening treatments (a minimum of 20% of all roof spaces shall be greened). Greening of accessible deck levels will be regarded as contributing to the total greening requirement.

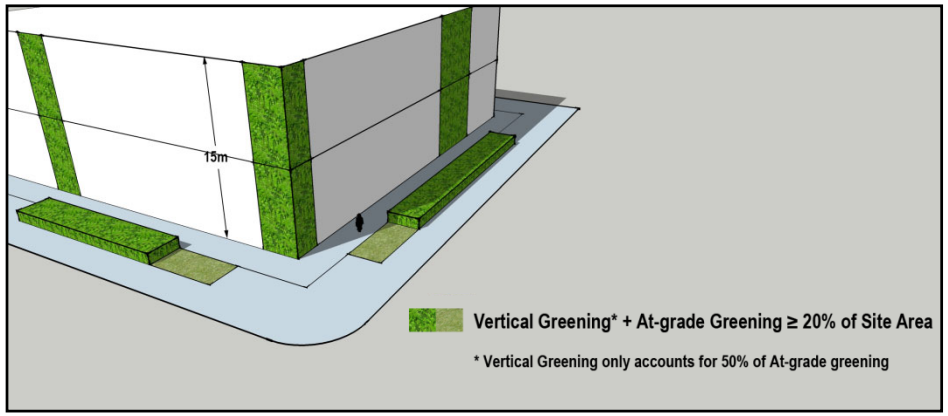


Figure 3.72 Vertical and at-grade greening provision

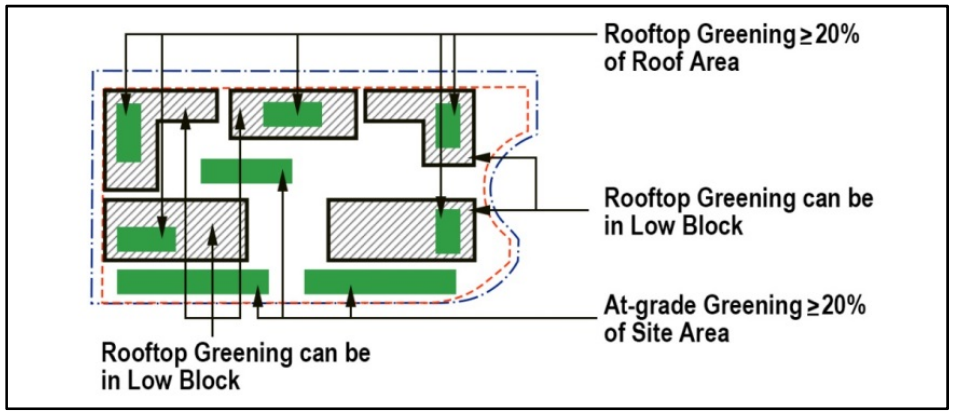


Figure 3.73 Roof top greening provision

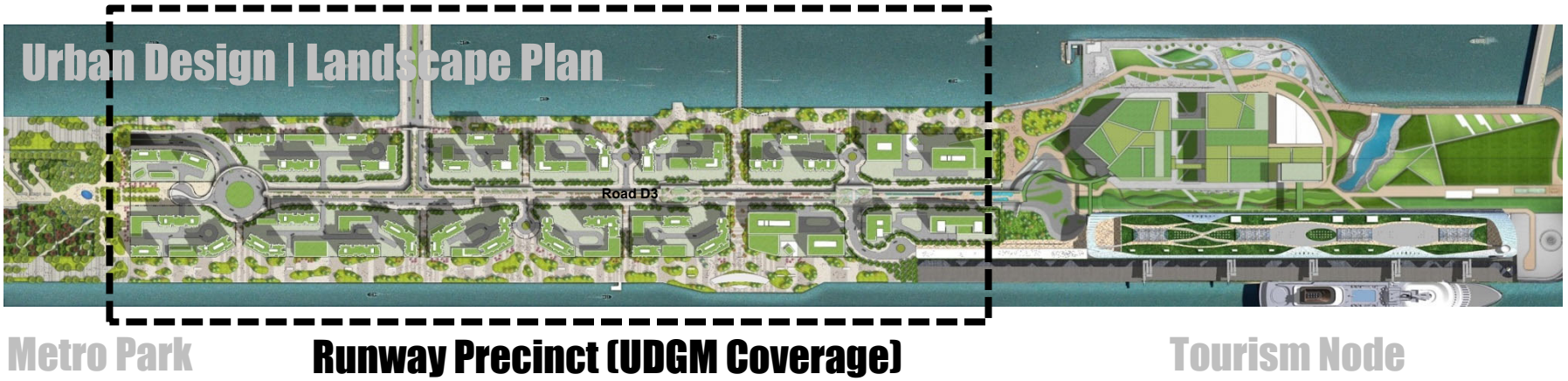


Figure 3.74 Urban Design and Landscape Plan

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

RECOMMENDED

- Provision of vertical greening, sky gardens, roof top greening, terrace planting on all levels as far as technically feasible;
- Provision of more than 30% overall greening ratio if this can be achieved;
- Sustainable urban greening for an enhanced living environment;
- Automatic sprinkler / drip irrigation system or water points for all the green areas;
- Sky terraces and gardens with planters facing the waterfront promenade;
- Use of vertical planting to shield off visually obtrusive mechanical, transformer and electrical plant rooms local at-grade level to improve the quality of public realm;
- 3 metres wide planting with trees and along the sides of NBA facing Road D3;
- A minimum of 50% vertical greening for fence / boundary wall;
- Fence / boundary wall setback by 3 metres from the site boundary to reinforce the visual corridor for public realm; and
- Echoing planting spaces recommended under the Design Guidelines for Kai Tak Promenade.

Figure 3.75 Examples of optimal greening at different levels

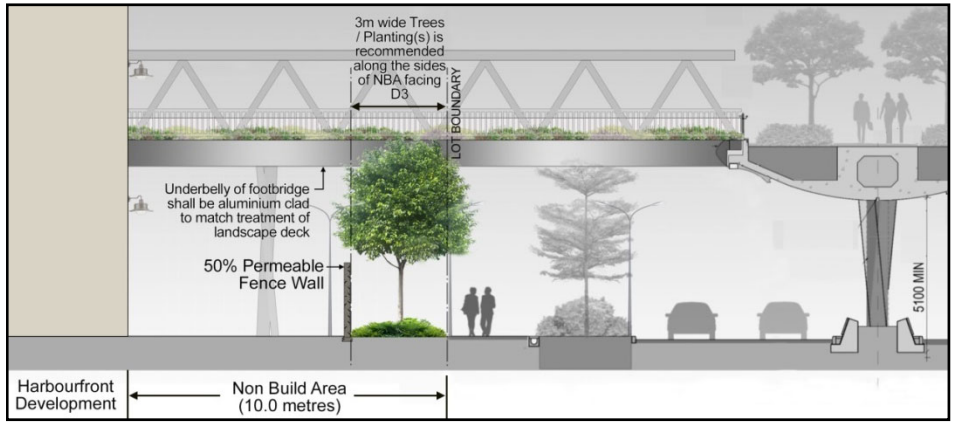


Figure 3.76 Example of recommended standard planting and fence wall arrangement for NBA abutting Road D3

Figure 3.77 Examples of recommended vertical planting and fence wall design

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

ACCEPTABLE

- Provision of roof top and at-grade greening;
- Provision of tree planting within the development sites;
- Provision of a minimum of 30% overall greening ratio;
- Provision of garden(s) / landscaped area(s) within the development site for resident enjoyment;
- A minimum of 30% vertical greening for fence / boundary wall;
- 3 metres wide planting with trees and along the sides of NBA facing Road D3 with fence wall abutting on boundary line; and
- Usage of native planting and tree species.

Figure 3.78 Examples of possible greening on roof and at-grade level

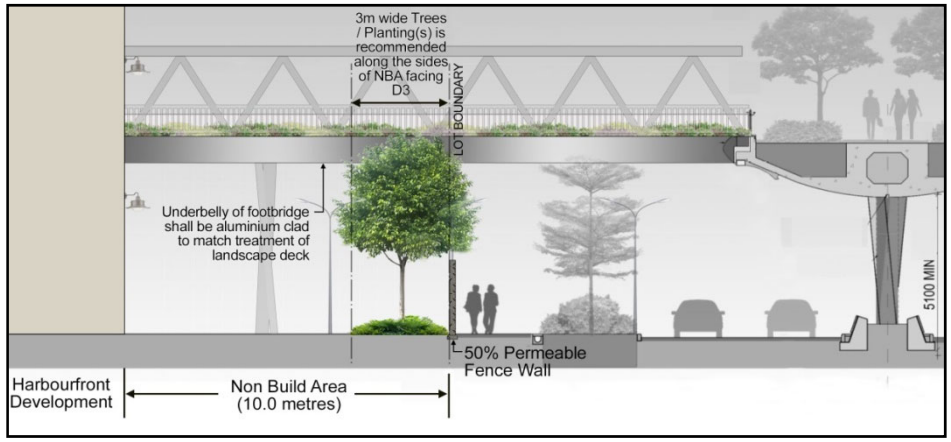


Figure 3.79 Example of acceptable standard planting and fence wall arrangement for NBA abutting Road D3

Figure 3.80 Examples of recommended vertical planting and fence wall design

3.0 URBAN DESIGN RECOMMENDATIONS FOR THE RUNWAY PRECINCT

TO BE AVOIDED

- No provision for tree planting and / or roof top greening;
- Minimum greening features with less then 30% of total greening coverage;
- Boundary / fence wall with zero permeability;
- No provision of greening or solid fence / boundary for the NBA abutting Road D3;
- Artificial tree(s), planter(s) and synthetic turf; and
- Aggressive and non-native planting specie(s).

Figure 3.81 Use of artificial planting is to be avoided

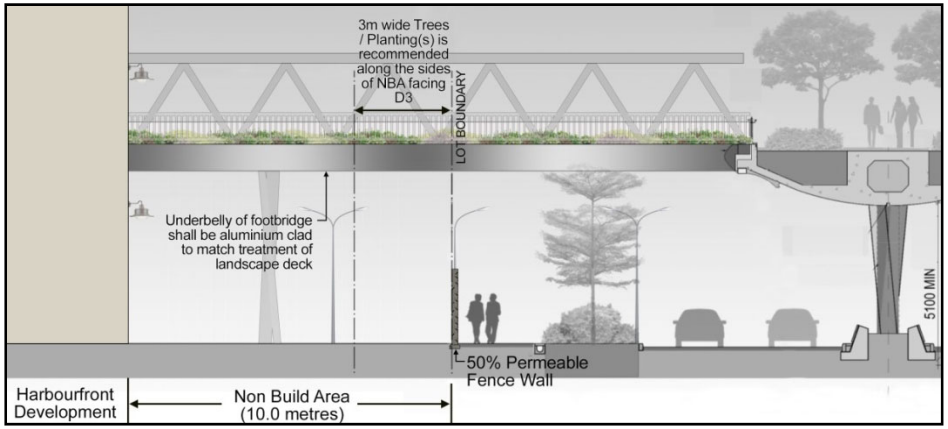


Figure 3.82 The development of areas with no planting and solid fence wall within NBAs abutting Road D3 are to be avoided

Figure 3.83 Examples of zero permeable boundary wall which are not encouraged.

4.0

OTHER RECOMMENDATIONS

4.0 OTHER RECOMMENDATIONS

4.1 Introduction of Chromatic Treatments, Lighting and Approaches to Landscape Design and Planting

This chapter recommends colour palettes for all domestic and private non-domestic sites in Kai Tak with an aim to achieve a comprehensive harmonious colour tone to create a pleasing, lively and comfortable environment throughout the whole KTD. Separate colour palettes are intended to be applied within specific area with specific land uses. The application of area by area treatments is specifically geared to promoting diversity and identity.

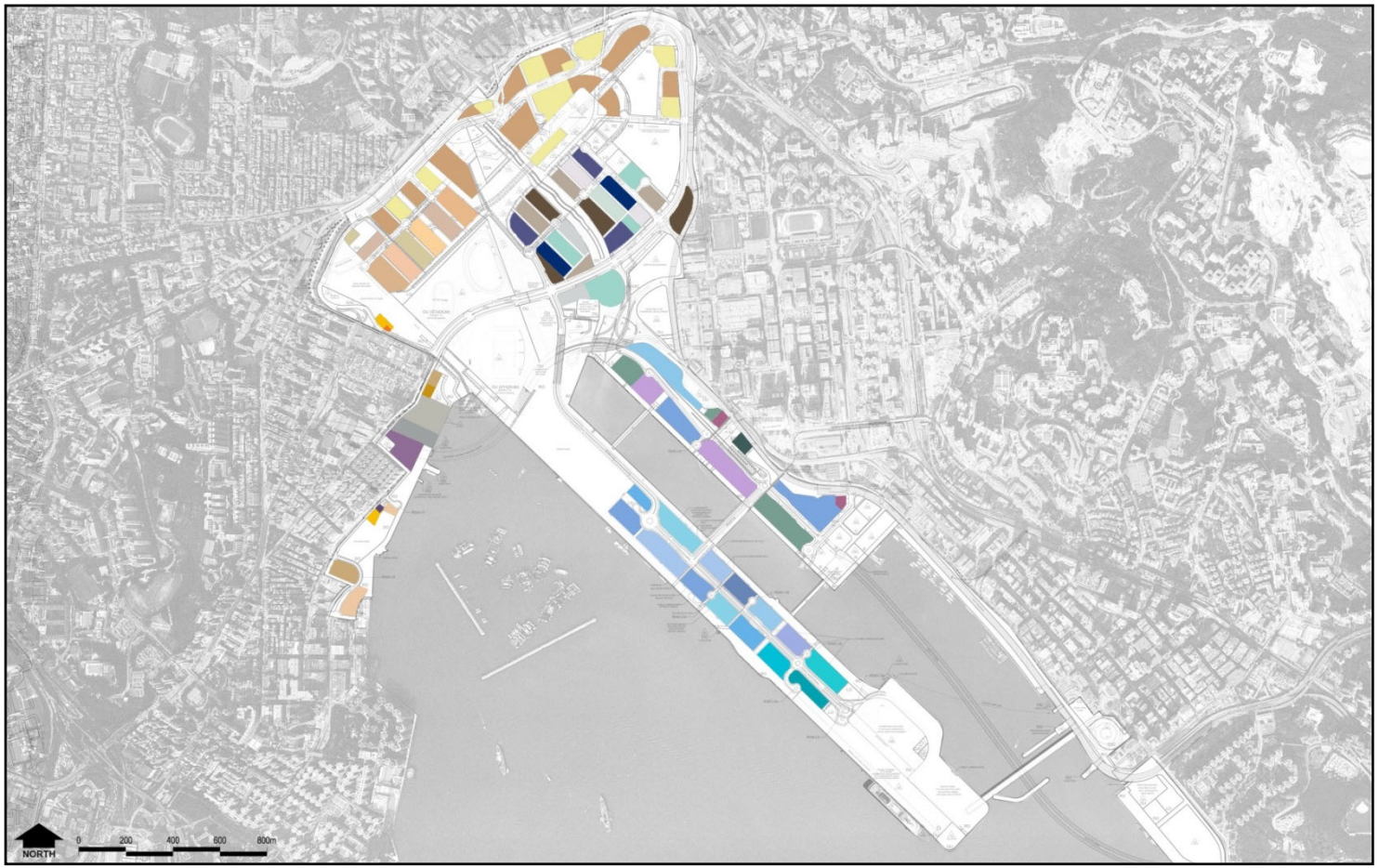


Figure 4.1 Recommended Overall Colour Palette for Development Sites in the KTD

4.0 OTHER RECOMMENDATIONS

4.2 Ambient Tone and Colour for Residential Development on the Runway Precinct

This section outlines the urban design parameters in terms of colour and tone for the domestic sites at the Runway.

OBJECTIVE

Ensure the tone and colour selected relates in a responsive way with the public realm in terms of strong visual recognition.

RECOMMENDED

- Building colours should harmonize with the context and character of the runway and its skylines. For residential buildings, sky and sea tones that the mellowness of each of the tones works in harmony for each site to create a soothing colour is preferred.

ACCEPTABLE

- Glass and steel coloured balconies set against wood and glass elements to allow appropriate subtle colour contrasts to be realised in developments and to ensure that monotonous building façade design is avoided.

TO BE AVOIDED

- The use of abrupt contrasts and garish colours, are to be avoided.

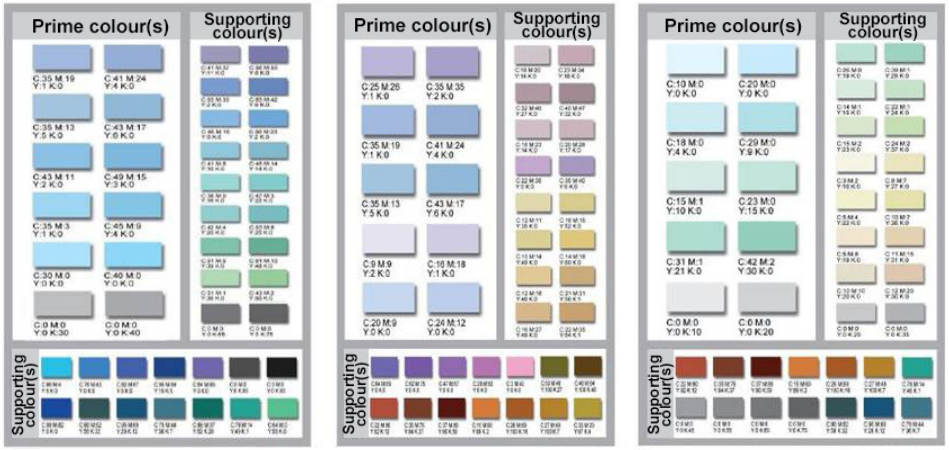


Figure 4.2 Proposed Colour Palettes

Figure 4.3 Possible colours that could be applied to residential developments

4.0 OTHER RECOMMENDATIONS

4.2 Ambient Tone and Colour for Residential Development on the Runway Precinct (Con't)

Figure 4.4 Chromatic Treatments should be soft in tone. Use of numerous colours on individual facades should be avoided to avoid creating "loud " visually negative developments that lack aesthetic quality and longevity.

4.0 OTHER RECOMMENDATIONS

4.3 Ambient Tone and Colour for Private Non-Domestic Sites

Private Non-domestic Sites at the Runway Precinct

This section outlines the urban design parameters in terms of colour and tone for the Runway Precinct, with particular reference to Commercial Sites.

OBJECTIVE

Ensure the tone and colour selected relates in a responsive way with the treatment of the public realm.

RECOMMENDED

- The use of subtle blue grey colours should be used to accent the chromatic treatments of façades.

ACCEPTABLE

- Where appropriate, the use of colour contrasts, if carefully conceived, can also be adopted to promote visual interest and to ensure a monotonous design is avoided. These elements will help to ensure that a degree of variety is enshrined in the development and that neighbourhoods of strong visual quality are realised.

TO BE AVOIDED

- Haphazard use of colours and tones that will erode visual containment, quality and continuity of the street.

Figure 4.5 Soft tones and façade treatments of Aqua Tower in Chicago produces a subtle visually subtle façade

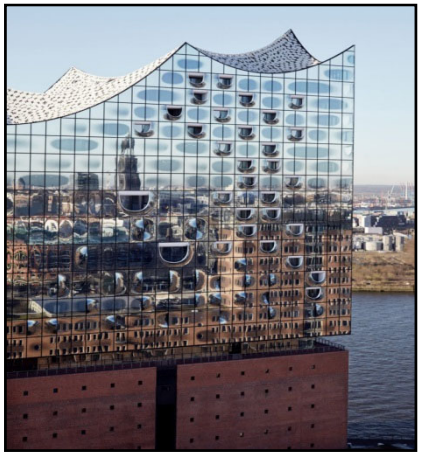


Figure 4.6 Use of contrasting tone a concert hall in Hamburg has positive impact

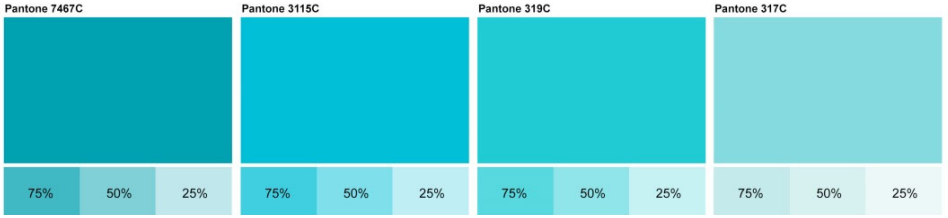


Figure 4.7 The range use and intensity of tones should err towards soft rich colours

Figure 4.8 Subtle use of tonal contrasts

4.0 OTHER RECOMMENDATIONS

4.4 External Works

External works refer to external structures that are not the main part of the building block structure. These include retaining walls, fence walls, awnings, balconies, pipes and lighting etc. Previously, the architecture of older buildings did not make provision for air conditioning units. The following provides some guidelines for external works that are to be considered for buildings facing the pedestrians streets.

OBJECTIVE

Ensure external works avoid visual clutter on the façades of buildings facing the pedestrian street and the retail belt.

RECOMMENDED

- Building materials for exterior works should be selected for their functional and aesthetic quality, and should exhibit qualities of workmanship, durability, longevity and ease of maintenance; and
- Balconies should be screened appropriately where practical to protect the privacy of neighbours. Timber lattices and other semi permeable screens can be utilised as long as their finish, form and treatment is consistent with the design of buildings.

ACCEPTABLE

- Reference should be made to the Building (Planning) Regulations and all other relevant legislation and guidelines in informing the design of screening of air conditioning units, clothes drying racks, pipes and gutters, levels of lumens etc.

TO BE AVOIDED

- Visual clutter created by external works should be avoided. The location of equipment (lights, utility infrastructure etc.) within the pedestrian zone that causes visual or physical nuisance should be avoided.

Figure 4.9 Street visual clutter should be avoided

Figure 4.10 Façades need to be designed avoid visual clutter

Figure 4.11 External air conditioning should not be exposed

Figure 4.12 Piping should not be clear to view

4.0 OTHER RECOMMENDATIONS

4.5 Fence Wall Design and Permeability

The character of street frontages in developments is often significantly affected by perimeter walls and fences. To enhance visual permeability and porosity within Kai Tak specific controls are proposed to be applied to the height of fence walls, the materials employed and the degree of transparency. These will have a role in determining the levels of visibility and outlook, the extent of informal surveillance, privacy, security and frontage activity. It is intended that the porosity of the fence wall and related requirements should be specified in lease conditions.

OBJECTIVE

In line with the OZP of Kai Tak to enhance penetration of prevailing wind within individual development sites, greater permeability of fence walls be promoted.

RECOMMENDED

- Boundary walls and fences fronting pedestrian streets or promenade shall be appropriately designed to achieve visual and physical porosity of not less than 50% of the surface area across their entire length from 1 metre from the average formation level of adjacent pedestrian street or promenade.
- Erection of boundary walls and fences shall avoid encroaching the urban nodes.

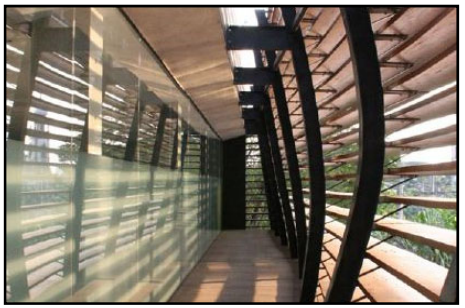


Figure 4.13 Innovative design techniques can be applied to promote visual porosity

Figure 4.14 Gates should be visually porous

Figure 4.15 Enhanced porosity provides a sense of lightness

Figure 4.16 Visually porous fence walls enhance openness and visual permeability

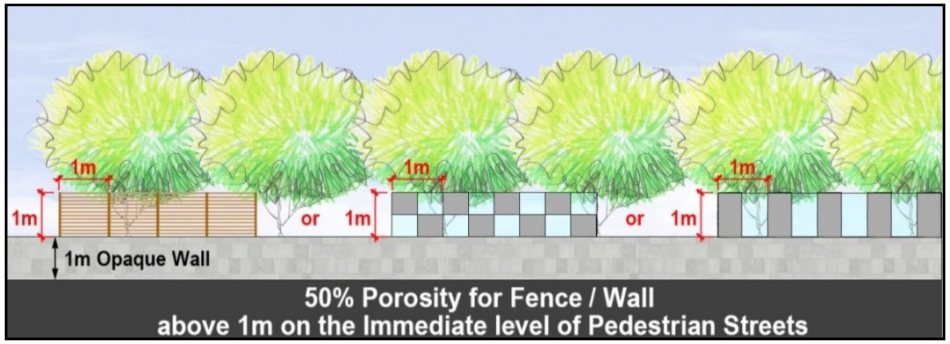


Figure 4.17 Typical fence wall setting out detail

4.0 OTHER RECOMMENDATIONS

ACCEPTABLE

- To engender an impression of openness and permeability through the application of different materials, front fences (and fences onto open space) should be highly visible and / or partially transparent;
- The materials utilised in the construction of fence walls should be consistent with and respectful of the architectural form and treatment of buildings and shall also have specific regard to hard and soft landscape treatments employed in the public realm e.g. wood; and
- The adjacent reference photos opposite illustrate the type of fence wall that is considered acceptable.

TO BE AVOIDED

- The creation of fortress like environments;
- Designs that place private open space in the front setback are generally inappropriate as residents need for privacy cannot be reconciled with the need for a visual connection to the street;
- Use of invasive plant species should be avoided to ensure plants will not become overgrown as it will reduce the porosity of the fence wall; and
- Plant material that grows to a height above 1 metre is discouraged to ensure maintaining the visual porosity of the fence wall design.

An Acceptable Fence Wall Design

Figure 4.18 Permeable fences with respectful planting area

Figure 4.19 Fences with openness at Tsing Yi Southwest Leisure Building

Figure 4.20 Non-porous design is discouraged

Figure 4.21 Over fussy design is discouraged

Figure 4.22 Lack of porosity and inappropriate material use

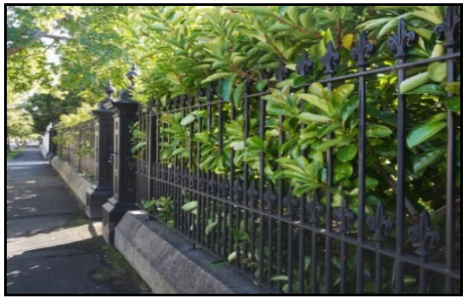


Figure 4.23 Excessive porosity also discouraged

4.0 OTHER RECOMMENDATIONS

4.6 Feature Lighting

By designing places that are well lit for pedestrians, places are made safer and unthreatening. However, care needs to be taken to avoid unnecessary light pollution. Lighting can be provided by overhead street lamps (sometimes best mounted on buildings), as well as from bollards, feature lights, building and facade lights and shop windows.

OBJECTIVE:

Activating coordinated lighting fixtures that deliver safe and comfortable lighting levels should be provided.

RECOMMENDED

- Lighting (exterior building and landscape) shall be directed away from adjacent properties and roadways, and shielded as necessary. In particular, no light shall be directed at the window of a residential unit either within or adjacent to a project;
- Provision of well-designed architectural and landscape lighting, all exterior lighting (building and landscape) is recommended. This should be integrated with the building design, create a sense of safety, encourage pedestrian activity after dark, and support nightlife within the retail belt
- For domestic security lighting the illumination provided by a 150W lamp is considered adequate for the residential developments;
- Ensure lights are correctly adjusted so that they only illuminate the surface intended and do not throw light onto neighbouring property;
- Lighting within the NBAs, setbacks and pedestrian streets should be of a pedestrian scale and should generally not exceed 5 metres in height, with close regular spacing;
- Special feature lighting should only be provided along the retail belt or open space areas;
- Landscape feature lighting should be of a character and scale that relates to the pedestrian and highlights special landscape features;
- All exterior lighting should be shielded effectively especially in residential areas to reduce sky glow, glare and eliminate light being cast into the night sky. The intrusion of bright lighting or poorly directed lights may cause serious adverse effects to neighbouring properties, which will likely affect the neighbours' amenity. A typical example would be an inconsiderately directed security light shining into a bedroom window; and
- Security lighting should be of a design similar to feature lighting.

Figure 4.24 Multi-directional lighting

Figure 4.25 Reflector lighting

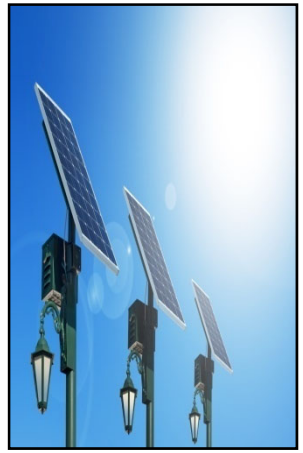


Figure 4.26 Solar powered lighting

Shielded exterior lighting and security lighting that is integrated into the architecture and landscape can help promote natural surveillance and add visual interest to the area whilst avoiding glare. This practice should be adopted throughout the Runway Precinct.

4.0 OTHER RECOMMENDATIONS

ACCEPTABLE

- The shape and colour of lights can also generate three-dimensional sculptures, transforming the perception of a place and dramatically painting its night landscape. Generally, the more light the more encouragement of night-time activities which can be applied to the retail belt area;
- To reduce street clutter, lighting units can be mounted on fence wall or buildings, although this will require easements to be secured from the property-owners;
- For domestic security lights ranging 150W to 290W are considered acceptable;
- Security lights should be correctly adjusted so that they only pick up the movement of persons in the area intended and not beyond;
- Direct light downwards in the residential area;
- Reduce the effects of glare main beam angles of all lights should be below 70 degrees; and
- For an all-night porch light a 9W lamp is more than adequate in most situations.

TO BE AVOIDED

- Lighting design that will give glare through full cut-off light fixtures and spill light over onto adjacent properties;
- Abrupt changes in light levels;
- Contributing to light pollution;
- Colour changes mid-block. The colour / tone output of street light bulbs should be coordinated on a street-by-street basis;
- Lighting obstacles – such as planters or street furniture that have to be negotiated by drivers and by people on foot;
- For domestic security lights, 300W and above is considered excessive and would create too much glare reducing security; and
- Avoid installing equipment which spreads light above the horizontal.

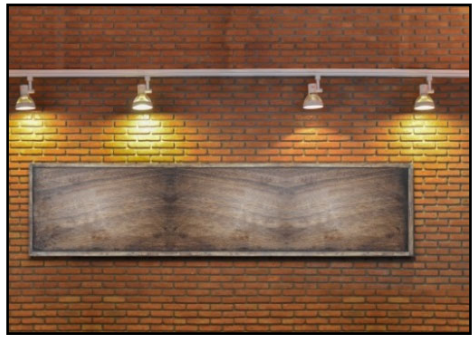


Figure 4.27 Soft down lighting

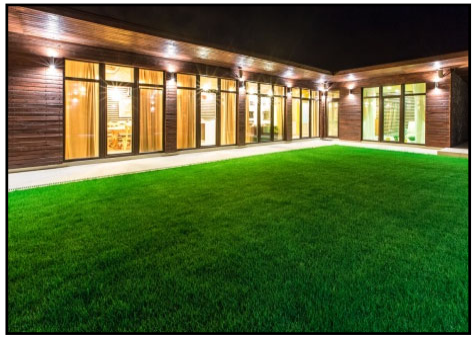


Figure 4.28 Subtle illumination of circulation space

Examples of mounted wall lighting

Figure 4.29 Fence wall illumination

Figure 4.29 Directed lighting

Figures illustrate examples of fence wall lighting that provide soft quality illumination and avoid glare

4.0 OTHER RECOMMENDATIONS

Remarks:
The ambience of the street at night is wholly dependent on the quality of the lighting, which should be appropriate to the domestic setting. Lighting levels in the Runway Precinct should be adequate to achieve good personal security at night. In accordance with the Building Environmental Assessment Method (BEAM) SA15 - Light Pollution the following suggestions apply:

Obtrusive light limitations for exterior lighting installations						
Environmental Zone	Sky Glow ULR (Max %)	Light into Windows Ev (Lux) (1)		Source Intensity I (kcd) (2)		Building Luminance Before curfew (3)
		Before curfew	After curfew	Before curfew	After curfew	Average L (cd/m²)
E1	0	2	1(4)	2.5	0.5(4)	0
E2	2.5	5	1	7.5	0.5	5
E3	5	10	2	10	1	10
E4	15	25	5	25	2.5	25

The definition of treatments for the four zones listed in the above table are as follows:

E1: Intrinsically dark areas such as national parks
E2: Low district brightness areas such as rural or small village locations
E3: Medium district brightness areas such as small town centres or urban locations
E4: High district brightness areas such as town / city centres with high levels of night-time activity
URL = Upward high ratio of the installation and is the maximum permitted percentage of luminaire flux for the total installation that goes directly into the sky.
Ev = Vertical illuminance in Lux normal to window glazing
I = Light intensity in Kilo-Candelas
L = Luminance in Candelas per square metre

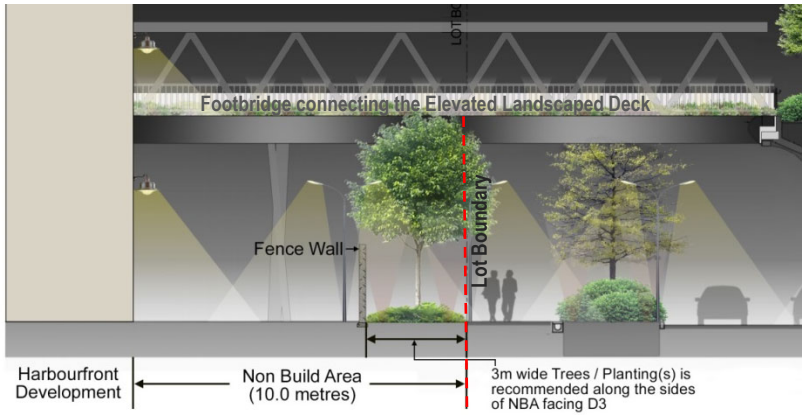


Figure 4.31 Wall-mounted lighting adequately illuminates focused areas. Residents of adjacent buildings adjacent would not be affected by excessive illumination. Focussed lighting also requires far fewer lumens to illuminated target spaces.

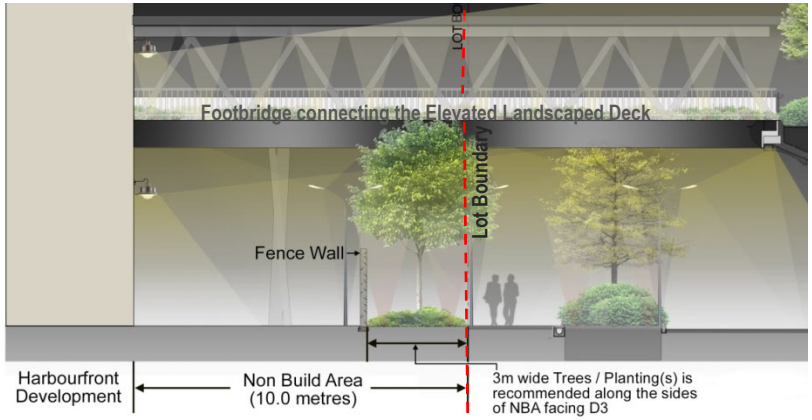


Figure 4.32 The diagram above shows the distribution of light when wide-angle lights which are not recommended are used. A considerable amount of light is wasted. Residents of buildings near the road / footpath would suffer from light trespass and must keep their curtains etc closed to tackle excessive and unneeded illumination of their windows.

4.0 OTHER RECOMMENDATIONS

Figure 4.33 The above illustration indicates that uniform focussed lighting is vital to reduce glare. The selection of lighting applications and treatments needs to focus on avoidance of glare and lighting spillage.

4.0 OTHER RECOMMENDATIONS

4.7 Greening

OBJECTIVE

Greening and landscape design for the Runway Precinct is to encompass a quality aesthetic design, a distinctive character, and to embrace innovative and creative design proposals that will make the Precinct a world class destination and a lively and attractive place to visit. Open spaces, pedestrian circulation routes, footbridges and developments shall be holistically conceived and designed to ensure overall design consistency.

RECOMMENDED

- Provide a major contribution in the site to the greening continuity within the street network;
- Incorporate a continuous tree line avenue within the development site;
- The hard landscape treatments for internal roads shall be modern and contemporary and fitted into a family of Kai Tak streetscape design styles;
- Use of recyclable landscape elements and materials with low to medium levels of maintenance should be adopted as far as possible;
- Tree planting shall be a major feature of the roadside landscape;
- Planting character shall vary in terms of layout, form, texture and colour that tally with the Kai Tak Landscape Master Plan;
- All trees shall be firmly within specialist guying systems and root barriers shall be installed when necessary;
- Planter beds should preferably be continuous with internal width as wide as practicable; and
- At grade reinforced planters are preferred to the use of individual tree pits. Soil corridors free of underground utilities should be provided along street planting areas.

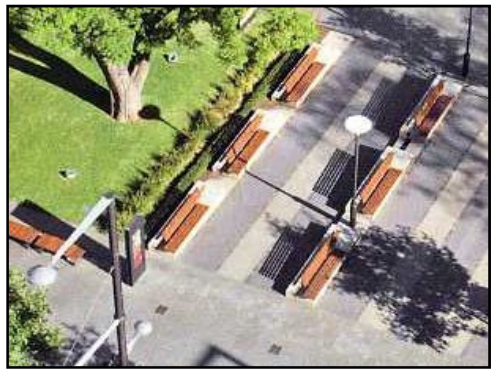


Figure 4.34 Possible planting and seating arrangements

"Root Solutions" is a strong and flexible panel with T-Grid reinforcement.

It is installed along the pavement and underground utilities to protect them against tree root penetration.

Figure 4.36 Typical root control barrier system that should be utilised to contain root systems

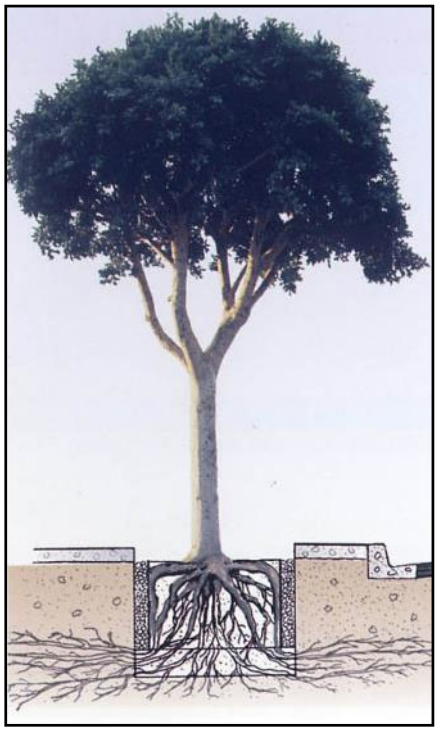


Figure 4.35 Root control barriers can effectively limit root intrusion and should be used extensively in the public realm

4.0 OTHER RECOMMENDATIONS

ACCEPTABLE

As a general guideline, at least 1.2 metres of soil depth (excluding drainage provision) should be provided at grade to enable tree planting within areas designated for greening. A minimum of 300mm soil depth is typically provided at roof areas designated for extensive greening. The actual soil depths nevertheless shall depend on the types of planting selected as well as constraints of a specific site:

- The design of landscape treatments need to fit in with the Kai Tak Landscape Master Plan and the Design Guidelines for Kai Tak Promenade. The effects of plant size and form at maturity, seasonal changes, textures and colours all need to be considered in the design;
- Plant growth rates and the length of time required for planting to reach the desired visual screening or aesthetic effect should also influence plant selection;
- The greenery areas are permissible at ground level, podium level, sky gardens, slopes, vertical walls, roof level etc. Accountable greenery areas should only consist of built landscape treatments that are permanently associated with buildings. Minimum soil depths of 1,200mm for trees, 600mm for shrubs / climbers / bamboos and 300mm for grass / groundcover should be adopted;
- Continuous planting areas instead of fragmented planted areas should be designed, where practicable. For proprietary greening systems on roofs, sky gardens, vertical greening, etc. the soil provision is subject to performance based criteria; and
- The inference of the overall greening ratio requirement is that greening can be provided at all levels (including roof level) and in the form of green walls (i.e. vertical greening). Vertical greening should not however be deductible from the minimum extent of greening that is to be provided at grade.

Figure 4.37 Possible edge planting arrangements

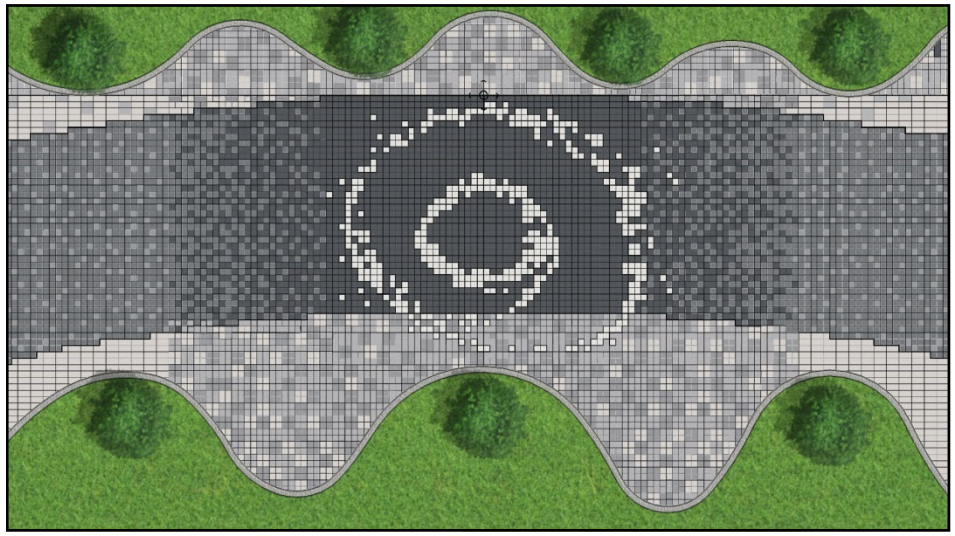


Figure 4.38 Possible tree planting and paving arrangements

4.0 OTHER RECOMMENDATIONS

TO BE AVOIDED

- Poor landscape treatments that incorporate complicated designs and systems that are expensive and difficult to maintain;
- Poor plant and soil quality; planting with low success rates; planting blocking views for drivers or pedestrians; and poor maintenance arising from poor accessibility for contractors;
- The planting of thorny species as these could lead to complaints.
- The selection of trees with root systems that could damage roads and footpaths armoured palters can be used as a means of preventing roots reaching grade), avoid plants that are thorny or spiky and that could injure pedestrians, avoid plants that grow tall enough to contact electricity and broadband cables, avoid plants that would overhang the footpath where they could interfere with pedestrians and children in strollers, avoid plants with toxic foliage, flowers, fruit or nuts;
- Planting of trees should be avoided in areas under elevated structures.
- The use of invasive species to avoid adverse environmental impacts;
- The need for benching as it can be visually negative and can create areas that are hard to maintain; and
- Cut and fill batters. If used these should be feathered into the natural landform avoiding geometric profiles avoided unless used as a deliberate design feature.

Remarks:

- *Appropriate control / enforceable requirements that have been incorporated by Lands Department through land lease and land allocation documents.*
- *Planning Department requires that the interpretation of greening ratio will be based on PNAP APP-152 and applicable to all project sites within the KTD.*
- *Planting species and themes should take reference to the Kai Tak Landscape Master Plan.*

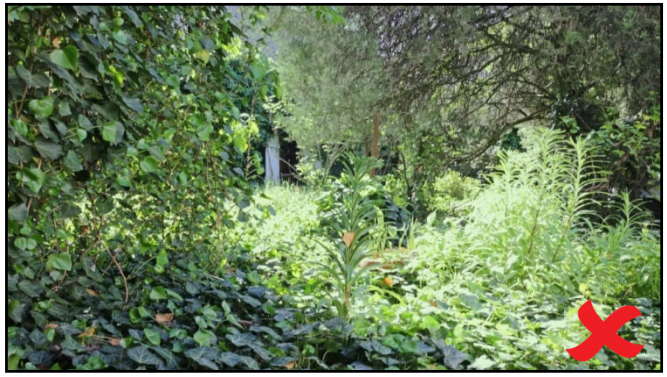


Figure 4.39 Example of planting blocking views for drivers or pedestrians; and poor maintenance.

Figure 4.40 Selection of trees with root systems that could damage roads and footpaths should be avoided

4.0 OTHER RECOMMENDATIONS

4.8 Overview

It is important to create a living environment with human scale in the KTD. Given that the Runway Precinct is an entirely man-made environment, it is important to provide recommendations for developers to design and develop the runway into a comfortable and healthy environment with proper attention to design.

The preceding guidelines and parameters have outlined recommended approaches to colour, lighting and planting that are intended to ensure the development of an urban environment that is rich in quality, uniqueness and character.

5.0

OVERVIEW

5.0 OVERVIEW

5.1 Summary of Recommendations

The preceding chapters have outlined design guidelines that are specifically advocated for the development sites within the Runway Precinct (excluding the Tourism Node). They are intended to be applied in a flexible manner. They should be regarded as points of reference and are open to a range of interpretations whereby creative design solutions can be generated.

The core aim of the Urban Design Parameters and Guidelines is to assist architects, designers and planners etc. with the information and support they need to achieve a consistently high level of urban design throughout the development and help meet the identified design recommendations to avoid non desirable design.

It is intended that the recommended design objectives can also assist in generating a built and open space environment that can be enjoyed by persons living and working within the Runway Precinct and to provide visitors with a lasting favourable impression of the area.

In summary, the UDGM for the Runway Precinct aims to raise the quality and consistency of the design of streets, spaces and development by:

- Introducing a more consistent but innovative approach to their design and appearance; and
- Improving consistency and coordination of the planning and execution of works.

It is recognised that architectural practice, public realm design, development standards etc. change over time. As such it is strongly recommended that the guidelines contained in this manual are regularly reviewed to ensure their on-going validity and application.

Remarks:
Compliance with all relevant Guidelines and Regulations is necessary. e.g. HKPSG, PNAP APP-152, Design Guidelines for Kai Tak Promenade