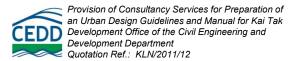


# Kai Tak Development Kai Tak Development Gor the Private Non-Domestic Sites







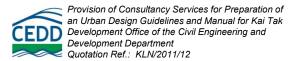
# **TABLE OF CONTENTS**

# 1. INTRODUCTION

- 1.1 Background and Objectives
- 1.2 Overall Planning Vision
- **1.3** Overall Urban Design Framework for Kai Tak
- 1.4 Purpose of the Urban Design Guidelines and Manuals for the Kai Tak Development
- **1.5** Principal Functions of the Urban Design Guidelines and Manuals

# 2. PROPOSED CONTROL PARAMETERS FOR THE PRIVATE NON-DOMESTIC SITES

- 2.1 Introduction
- 2.2 Purpose of Lease Conditions
- 2.3 Recommended Design Principles for the Private Non-domestic Development Abutting the Lung Tsuen Stone Bridge Preservation Corridor
- 2.4 Lease Conditions Pertaining to Non-building Areas
- 2.5 Overview
- 2.6 Current Outline Zoning Plan Provisions Extending to the Private Non-Domestic Sites
- 2.7 Non-building Areas, Setbacks and Pedestrian Streets
- 2.8 Overview of the Control Parameters for the Private Domestic Sites



# **TABLE OF CONTENTS**

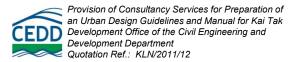
# 3. GENERAL OVERVIEW AND WAY FORWARD FOR THE PRIVATE NON-DOMESTIC SITES

- 3.1 Introduction
- 3.2 **Public Creatives Framework**
- 3.3 Streetscape Design
- 3.4 Permeability and Legibility
- 3.5 Ambient Tone and Colour
- **3.6 Façade Treatments**
- 3.7 Reflectivity, Colour and Transparency of Glazing
- 3.8 Control of Advertisement Signs and Projections
- 3.9 Guidelines on Retail Design
- 3.10 External Works
- 3.11 Fence Wall Design and Permeability
- 3.12 Feature Lighting
- 3.13 Greening
- 4. OVERVIEW
- 4.1 Conclusion

# **APPENDICES**

- Appendix A: Control Parameters for the Development Sites Abutting the Lung Tsun Stone Bridge Preservation Corridor
- **Appendix B: Definitions**
- **Appendix C: Retail Design Parameters**
- Appendix D: Colonnade Design for the Kai Tak Development by Architectural Services Department







#### **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".

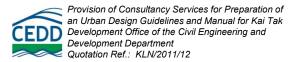
#### **Objectives**

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 (G/IC) Sites
- The Runway Precinct (RP)



Figure 1.1 Kai Tak Development Landscape Master Plan





#### **Overall Planning Vision** 1.2

"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 subject to several detailed planning exercises that have sought to achieve its redevelopment into a core development area that facilitates a living and working environment that is well supported by an efficient transport system and accessible recreational and cultural facilities.

#### **Overall Urban Design Framework for Kai Tak** 1.3

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** ۰
- Activating the Harbour-front
- **Creating a Pedestrian Friendly Environment** .
- **Creating a Dynamic Skyline**
- **Celebrating Views** •
- **Celebrating Gateways**
- Creating a "Green Web for Sustainable Development"

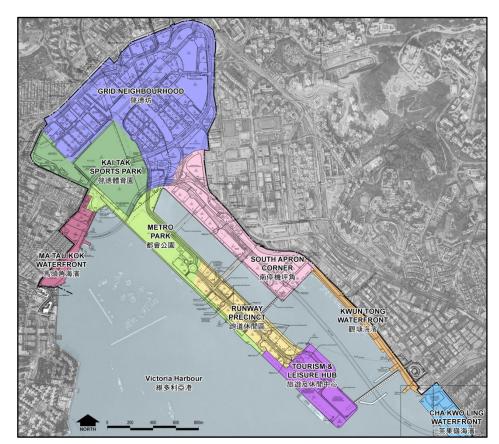


Figure 1.2 Kai Tak Development Sub-Areas Plan







# 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.



P.6

Introduction





# **1.5** Principal Functions of the Urban Design Guidelines and Manuals

The principal functions of each of the UDGM 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.

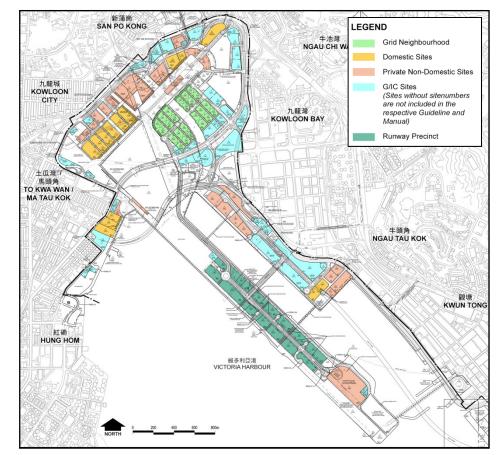
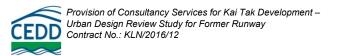


Figure 1.4 Development sites addressed by the UDGMs



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.

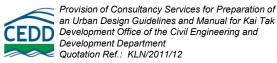
The following chapters specifically address the design parameters that are specifically applicable to the Private Non-Domestic Development sites within<br/>the KTD.Grid NeighbourhoodDomesticPrivate Non-DomesticRunway PrecinctG/IC



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

P.8

Introduction





#### 2.1 Introduction

The UDGM for private non-domestic sites has been prepared to reflect and outline the recommendations arising from urban design control parameters developed under various studies on the Kai Tak Development Area (KTDA). These parameters were then assessed against prevailing statutory requirements and guidelines including the Buildings Ordinance, the OZP, Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP), particularly PNAP APP-152, and the Hong Kong Planning Standards and Guidelines (HKPSG) to identify any potential divergence or variance.

The proposed control parameters for the private non-domestic sites in Kai Tak are extended to include provisions relating to all commercial developments and the retail belt fronting the Station Square and the Lung Tsun Stone Bridge (LTSB Note that the Chinese word is also interchangeable with that of pier. The bridge historically functioned as a pier). They aim to control maximum permitted plot ratio (PR), building height (BH), gross floor area (GFA), total site coverage, maximum façade length, fence wall and level of greening.

The following section proposes control parameters that are suitable for land lease and other land use control instruments for private nondomestic sites.

Where required, recommendations are outlined to bridge identified divergences and to enhance the robustness of proposed parameters for private non-domestic development. The following section outlines the specific purposes to which lease conditions are applied and the manner in which control parameters can legitimately be inserted into lease conditions applied to the KTDA.

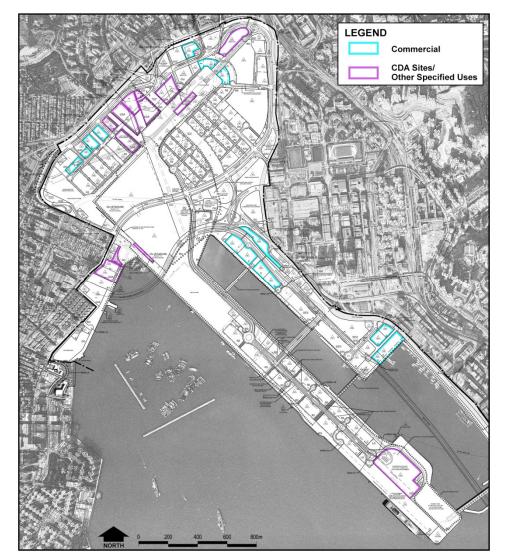


Figure 2.1 Site Reference Plan indicating Private Non-Domestic Sites within the KTDA covered by this UDGM







#### 2.2 **Purpose of Lease Conditions**

The ability to intervene in the built environment in Hong Kong is largely circumscribed by Hong Kong Land Leases, Building and Planning Ordinances which, over the years, have tended to become increasingly prescriptive. The proposed design parameters cannot intrude upon the provisions of buildings, planning and lands ordinances. As such, parameters that are devised have to be enshrined within a vehicle (e.g. lease conditions) through which design objectives can achieve realisation.

Lease conditions are intended to assist in establishing and circumscribing a specific physical and environmental context for each building type, structure and space that abut each other to ensure that the proposals applied to the pedestrian realm are appropriate, practical and are meaningful and implementable.

Lease conditions can establish the most consistent type of design and development control, comprising of a standard general form of document with General and Special Conditions dealing with land use, built form, and circulation.

The most common lease restrictions applicable to land use relate to maximum PR, BH, minimum and maximum GFA, maximum permitted site coverage, design and disposition of buildings etc.

In effect, the imposition of lease conditions is the principal means of development control where conditions more onerous than the minimum standards of the Buildings Ordinance and Regulations or OZP are to be imposed.

Land is sold to the private sector for development on leasehold terms, and lease conditions are drawn up by Lands Department after consultation with the Planning Department and other relevant Government departments. In the case of comprehensive large-scale private development, the lease conditions usually require a master layout plan to be prepared and submitted to the Government for approval. In order to encourage a self-contained project, the Government may require additional specifications on building density, G/IC uses, and access roads which should then be consolidated in modified lease covenants.

Lease conditions should be written in a clear and concise manner. The use of aspirational requirements should be avoided to ensure the meaning is clear to all who read them. Lease conditions also need to be fair, reasonable and, most importantly, practical and implementable. This report details the design parameters for those sites in the following tables.







Specifically, this chapter deals with the private non-domestic sites including:

Private Non-Domestic Sites	
Site 1D2	Site zoned as "Commercial(8)" at the North Apron
Site 1E2	Site zoned as "Commercial(6)" at the North Apron
Site 1F2	Commercial portion of the "CDA(1)" site at the North Apron
Site 1F3	Site zoned as "OU(Railway Station with Commercial
	Facilities)" at the North Apron
Site 1M1	Commercial portion of the "CDA(2)" site at the North Apron
Sites 2A1	Sites zoned as "CDA(3)" and "CDA(4)" at the North Apron
and 2A2	
Sites 2A3 to	Sites zoned as "Commercial(3)" at the North Apron
2A5(B)	
Site 2A10	Sites zoned as "Commercial(3)" at the North Apron
Site 2B1	Commercial portion of the "CDA(5)" site at the North Apron
Site 3A6	Site zoned as "Commercial(8)" at the South Apron
Sites 3B1 to	Sites zoned as "Commercial(1)" at the South Apron
3B4	
Sites 3D2	Sites zoned as "Commercial(2)" at the South Apron
to 3D4	

There are a number of private non-domestic "OU" zones that are excluded from this chapter due to the unique nature of the intended uses to be accommodated within them. It is for this reason that they should have their own unique design language to reflect the nature of these intended uses. As such these sites will not be included as part of this manual:

Private Non-Domestic Uses at Sites Zoned "Other Specified Use" (excluded)	
Site 1E1	"OU(Mixed Use)" at the North Apron
Site 1F1	"OU(Mixed Use)" at the North Apron
Site 1M2	"OU(Arts and Performance Related Use)" at the North Apron
Site 4D2	"OU(Tourism Related Uses to Include Commercial, Hotel and Entertainment)"
Site 5A3	"OU(Waterfront Related Commercial, Cultural and Leisure Uses)" at Ma Tau Kok waterfront
Site 5A4	Site zoned as "CDA" at Ma Tau Kok waterfront

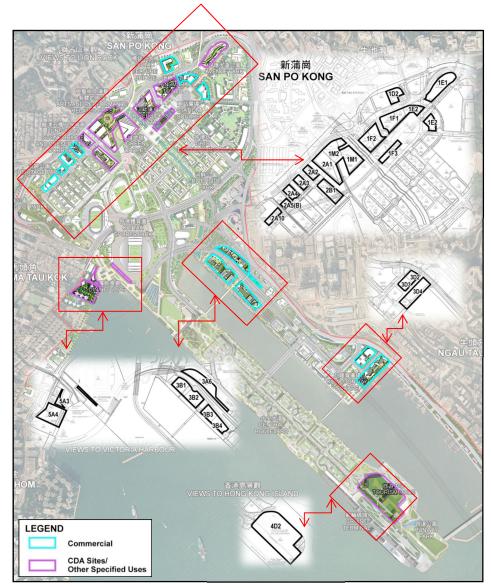
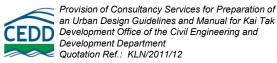


Figure 2.2 Site Reference Plan indicating Private Non-Domestic Sites within the KTDA covered by this UDGM

Proposed Control Parameters for the Private Non-Domestic Sites





#### 2.3 Recommended Design Principles for the Private Non-Domestic Development Abutting the Lung Tsuen Stone Bridge Preservation Corridor

The following design parameters have been drafted in direct relation to the design recommendations for the KTDA. Whilst the principal concern is to develop tangible and implementable guidelines for private non-domestic sites a number of other elements within the public realm are also addressed.

#### Lung Tsun Stone Bridge and Related Greening Requirements

The LTSB is an important heritage asset which the current KTDA planning framework seeks to conserve. This objective has received significant public support. The key design issue is the manner in which the bridge is to be conserved and the design of the setting in which it should sit.

The Townscape Study undertaken for the North Apron area of the KTDA outlined a series of proposals for the layout and disposition of development abutting Preservation Corridor. In essence the broad design intention was to frame the Corridor through aligning development along the edges of sites abutting the Corridor. This provided a means of providing definition and enclosure. No setbacks were envisaged within the edges of each of the sites located adjacent to the Corridor. Development abutting the edges of the Preservation Corridor was principally proposed to be committed to retail development.

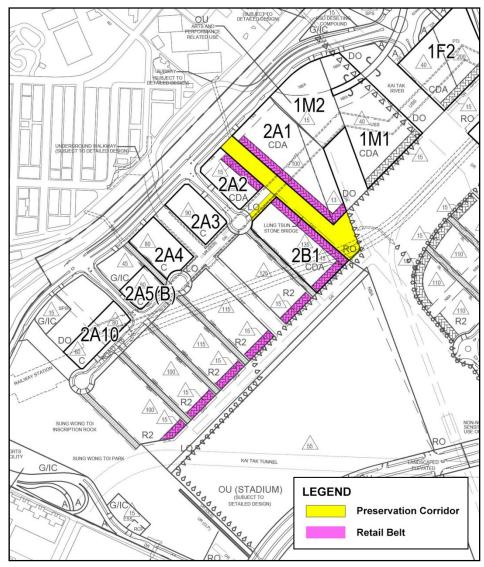


Figure 2.3 LTSB Preservation Corridor and Retail Belt







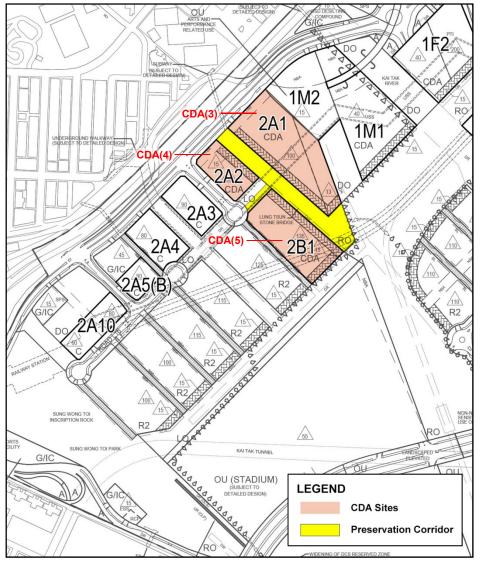


Figure 2.4 LTSB Preservation Corridor and CDA Sites

The present planning framework envisages that the remnants of the bridge (or, more correctly, the pier) should be located within a spatially defined Preservation Corridor. The OZP issued on May 2018 zoned six sites as Comprehensive Development Areas (CDAs). Three of the CDAs abut the "Preservation Corridor" ("CDA(3)", "CDA(4)" and "CDA(5)"). The Explanatory Statement (ES) to the OZP states that the disposition and design of development within each site should be conceived to create a "harmonious environment with the Preservation Corridor". The ES also states that "CDA(3)" and "CDA(4)" are intended for commercial use whilst "CDA(5)" is largely intended for residential use. All CDA sites mentioned above are subject to statutory PR and BH restrictions under the OZP.

As outlined above the principal point of reference and principal guidelines, this UDGM aims to provide responds to recommend measures that are largely consistent with the broad planning intentions for the "Preservation Corridor" outlined in the current written statement to the OZP. A guide such as this cannot achieve it by itself. It is aimed that those who read it will be inspired by the UDGMs it contains and use its many suggestions to help them in the vitally important task of improving the quality of urban design throughout the KTD to achieve the specific design aspirations for the "Preservation Corridor":

For a vibrant ambience, a seamless integration with adjacent commercial / residential developments at ground and basement levels with suitable greenery provided to demarcate the Preservation Corridor from the adjacent commercial developments at the basement level without undermining the intention to create an overall vibrant ambience; and







For a tranquil park-like ambience, interface with adjacent developments will be limited to basement and ground levels with appropriate greenery on both sides to avoid visual intrusion from adjacent developments.

To avoid confusion and legal difficulties, it is preferred that lease conditions are written in a clear and concise manner such that they can be easily interpreted. This avoids any uncertainty surrounding the required design intention and outcome. Lease conditions should be clear in their execution and the above proposed parameters are, to a degree, ambiguous and are unlikely to fulfil the desired outcome.

By way of interpretation it is assumed that the intention is to:

- Align development along the Preservation Corridor in such a way that the corridor is clearly delineated and defined;
- Ensure that the alignment of development and the delineation of the Preservation Corridor is reinforced by appropriately located and designed planting;
- Ensure that the structure and density of planting is sufficient to create a sense of enclosure, to create a semi-private park-like space; and
- Ensure a layering of development interfaces and uses at ground and sub grade levels that engenders conditions whereby vibrancy and activity could be nurtured.

As noted, a number of these intentions are aspirational. Rephrasing has therefore been suggested to allow them to be utilised as lease conditions. The following phraseology has therefore been proposed:

- A 30 metres wide Preservation Corridor shall be maintained along the extent of the excavated remnants of the LTSB. The extent of the width of the Corridor shall be measured at 15 metres either side of the centre line of the remnants of the LTSB;
- To promote definition and delineation of the perimeter of the Preservation Corridor 100% of the extent of CDA site boundaries adjacent to the Corridor shall be abutted by the façades of buildings located within each CDA; and
- Designated entrances shall physically encroach upon the delineated extent of the Preservation Corridor.

#### The Disposition and Height of Buildings

The following was proposed for the disposition of buildings:

The disposition of buildings, other than that within areas designated for retail development, shall be arranged in such a way to avoid any visual intrusion that may affect the ambience of the Preservation Corridor.

Height restrictions are stipulated under the OZP. The OZP does not, however, impose restrictions in terms of disposition and arrangement of buildings. The ES of the OZP states that the planning intention for CDA sites abutting the Preservation Corridor is "to ensure their disposition and design would be in harmony with the "Preservation Corridor" for Lung Tsun Stone Bridge". It also states that the planning brief for each CDA site should address and reflect the preceding design intention and stipulate it as a planning requirement. Given that a CDA designation will require a statutory planning application under the provision of Section 16 of the Town Planning Ordinance this in itself should be able to ensure that applicants abide by planning and urban design requirements with respect to layout and design parameters geared to promoting a harmonious relationship with the Preservation Corridor.

P.15







This being said the present notions are highly abstract and aspirational and require definition and detail if they are to be understood. This will require that factors and requirements related to disposition are clearly spelt out to ensure that applicants clearly understand how buildings are to be positioned to engender a harmonious relationship with the "Preservation Corridor". At the same time, an explanation on what sort of designs (or approach to design) are likely to achieve the objective of a harmonious relationship need to be clearly enunciated. This will be dealt with in further detail in the subsequent paper.

To some extent the visual integrity of the "Preservation Corridor" has been addressed under the preceding sections. These set out suggested controls with respect to soft landscape treatments and their role in defining the extent and character of the Preservation Corridor. These controls are both tangible and enforceable. The achievement of a form of development within CDA sites that is in harmony with the Preservation Corridor is more abstract. Accordingly it will be the role of the CDA Planning Briefs to articulate the manner in which OZP design aspirations are to be achieved. It is not, therefore, appropriate that such aspirations be enshrined in lease conditions.

#### View Corridor to Lion Rock

The OZP specifies a number of view corridors and vantage points. Section 7.2.6 of the ES of the OZP entitled "Celebrating the View" states that there should be a "strong emphasis on views to and from mountains" given that these frame the area in which the KTDA is located. One of the principal view corridors extends from the KTDA to Lion Rock (and vice versa). Within the KTDA, the vista to Lion Rock is proposed to extend from a location within the proposed harbourfront Metro Park defined by the OZP. A portion of the prescribed view corridor extends through the "CDA(3)" site that abuts the eastern perimeter of the Preservation Corridor. Within the area of the view corridor demarcated on the OZP, development heights are not permitted to extend to a height greater than 13mPD. The view corridor alignment located to the north-east of the "CDA(3)" site is designated as an area subject a maximum BH of 15mPD. The view corridor alignment to the south of the "CDA(3)" site is subject to Non-Building Area (NBA) restrictions (this is specifically applied to a portion of land at the eastern extremity of the Kai Tak Sports Park). Other areas along the alignment of the view corridor are designated as open space within which no height specifications are applied (the absence of height restrictions presuppose that high level planting will not obscure views to Lion Rock).

The Urban Design Framework under the ES of the OZP refers to a set of stipulations with respect to the view corridor to Lion Rock abutting the Preservation Corridor:

Development within the site boundary abutting on the view corridor to the Lion Rock shall not exceed 15mPD.







As will be noted from the preceding narrative the suggested condition contradicts the provisions of the OZP is by its nature limited in scope. To this extent it is proposed that a condition for incorporation into a lease should be specific to "CDA(3)" as per the ES of the OZP is specific to residential and commercial development abutting the Preservation Corridor. No other development site abutting the Preservation Corridor is affected by height conditions specified in relation to the Lion Rock View Corridor. In this respect it is proposed that the condition as per the ES of the OZP should be amended to read as follows:

Development within the "CDA(3)" site should not, as specified by the prevailing OZP, exceed a height of 15mPD to maintain vistas to Lion Rock.

The specific question in relation to this requirement and limitation relates to whether it requires being specifically included in lease conditions. The height limitations are specified under the provisions of a plan that has statutory effect, and, moreover, the Government is able to control the massing development on the site by virtue of its CDA designation. To this extent a specific lease condition may not be required.

#### **Retail Parameters**

The control parameters stipulated relating to retail provision under the ES of the OZP are as follows:

- Should retail frontage be provided along the site boundary, abutting on the "Preservation Corridor", a 3 metres setback shall be provided from the site boundary at the ground level and basement level to facilitate movement of the retail patronage. Retail development shall not exceed two storeys (excluding basement) at 15mPD; and
- To attract the attention of visitors along Road D1 and provide visual highlight of the prominence of the "Preservation Corridor" particularly the location of Pavilion of Greeting Officials, buildings in the two commercial developments sites abutting the Preservation Corridor will also be required to set back 15 metres from Road D1.

It is recommended that provisions related to retail would need to be included under quite specific lease conditions if the planning intentions advocated in the ES of the OZP are to be realised. It is accordingly recommended that the above clauses be amended to read as follows to be effective as lease conditions:

- Stand-alone retail frontage shall be provided along the perimeter of CDA Sites 3, 4 and 5 that abuts the edge of the Preservation Corridor;
- Retail development and other development within the said sites abutting the "Preservation Corridor" shall be setback 3 metres from the site boundary at ground level; and
- Developments within "CDA(3)" and "CDA(4)" sites that abut the "Preservation Corridor" shall be setback by 15 metres from the northern perimeter of each site fronting Road D1.





#### 2.4 Lease Conditions Pertaining to Non-Building Areas

No specific mention has been made in the ES of the OZP in relation to development conditions that should be applied to NBAs in private non-domestic areas in Kai Tak. This is considered to be an omission and as such it is proposed that the following be applied to the NBAs:

- Except with the prior written consent of the Director of Lands,  $\geq$ no building or structure shall be erected or constructed within the NBAs except the following:
  - Boundary walls or fences or both, provided that if the \* boundary walls or fences or both shall front onto pedestrian street, road or path, such boundary walls or fences or both shall be erected or constructed in all respects to the satisfaction of the Director of Lands to achieve visual and physical porosity of not less than 50% along the horizontal plane per linear metre from one metre above the general formation level of the adjacent pedestrian street, road or path; and landscaping features and associated facilities.

#### 2.5 Overview

The above refined lease conditions will assist in meeting with the design concepts for the private non-domestic sites in Kai Tak. It is considered that the lease conditions are written in such a way that is clear and concise to avoid misinterpretation and ensure the key features identified can be realised in development within this area. As such, they are intended to be read as appropriate control requirements that could be translated into "technical, quantifiable, tangible and enforceable conditions". A full summary of these conditions is contained within **Appendix A**.

#### 2.6 Current Outline Zoning Plan Provisions Extending to the **Private Non-Domestic Sites**

This section outlines all the private non-domestic sites within the KTDA but excluding the Grid Neighbourhood and Runway Precinct which has been separately discussed and addressed under this study. This section will summarise all requirements and conditions stipulated under the current OZP that are applicable to these areas shown in Figure 2.5.

## **Outline Zoning Plan Provisions Affecting Private Non-Domestic** Sites in Kai Tak

This section discusses the OZP parameters applicable to the private non-domestic sites. These include the followings:

- Site 1D2 Site zoned as "Commercial(8)" at the North Apron;  $\geq$
- Site 1E2 Site zoned as "Commercial(6)" at the North Apron;  $\geq$
- Site 1F2 Commercial portion of the "CDA (1)" site at the  $\geq$ North Apron is intended for commercial uses:
- Site 1F3 Site zoned as "OU (Railway Station with  $\geq$ Commercial Facilities)" at the North Apron;
- Site 1M1 Commercial portion of the "CDA(2)" site at the  $\geq$ North Apron is intended for commercial uses;
- Site 1M2 Site zoned as "OU (Art & Performance Related  $\geq$ Use)" at the North Apron;
- $\geq$ Sites 2A1 and 2A2 – Sites zoned as "CDA(3)" and "CDA(4)" at the North Apron;
- Sites 2A3 to 2A5(B) Sites zoned as "Commercial(3)" at the North Apron:
- Site 2A10 Site zoned as "Commercial(3)" at the North Apron;  $\geq$
- Site 2B1 Commercial portion of the "CDA(5)" site at the North Apron;







- Site 3A6 Site zoned as "Commercial(8)" at the South Apron;
- Sites 3B1 to 3B4 Site zoned as "Commercial(1)" at the South Apron;
- Sites 3D2 to 3D4 Site zoned as "Commercial(2)" at the South Apron;
- Site 4D2 Site zoned as "OU(Tourism Related Uses to Include Commercial, Hotel and Entertainment)";
- Site 5A3 Site zoned as "OU (Waterfront Related Commercial and Leisure Uses)" at Ma Tau Kok waterfront.
- Site 5A4 Site zoned as "CDA" at Ma Tau Kok waterfront.

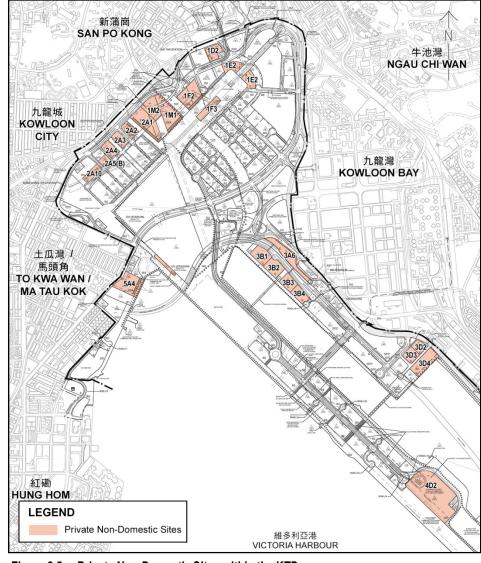


Figure 2.5 Private Non-Domestic Sites within the KTD







"Commercial (3)" at Sites 2A3, 2A4, 2A5(B) and 2A10, "Comprehensive Development Area (4)" at Site 2A2 and "Commercial (8)" at Site 1D2, "Comprehensive Development Area (1)" at Site 1F2 and "Commercial (6)" at Site 1E2 at the North Apron

Thirteen sites are zoned for commercial uses within the KTD where six of them are located at the Grid Neighbourhood, four of which are zoned "Commercial (3)", one zoned "Commercial (6)", and one zoned "Commercial (8)". Four located in the South Apron at Kowloon Bay with waterfront and three of them are located in the Runway area. Commercial sites are intended to accommodate uses such as office, shop and services, place of entertainment, eating place, and hotel, functioning in total to create a commercial hub that will operate as territorial business / financial centres and regional or district commercial / shopping centres. For these sites, the following parameters are prescribed:

- For sites zoned as "Commercial (3)", the maximum PR is 6.5  $\triangleright$ and the maximum site coverage (excluding basement(s)) is 65%.
- For sites zoned as "Commercial (6)", the maximum PR is 6.0  $\geq$ and the maximum site coverage (excluding basement(s)) is 65%.
- For sites zoned "Commercial (8)", the maximum PR is 8.0 and  $\triangleright$ the maximum site coverage (excluding basement(s)) is 65%.

In determining the maximum site coverage, any floor space intended for use solely as car park, loading / unloading bay, plant room and caretaker's office is to be included in the calculation. In determining the maximum PR however, any floor space that is constructed or intended to be used solely for car park, loading / unloading bay, plant room and caretakers office, provided that such uses are ancillary and directly related to the development or redevelopment may be disregarded.

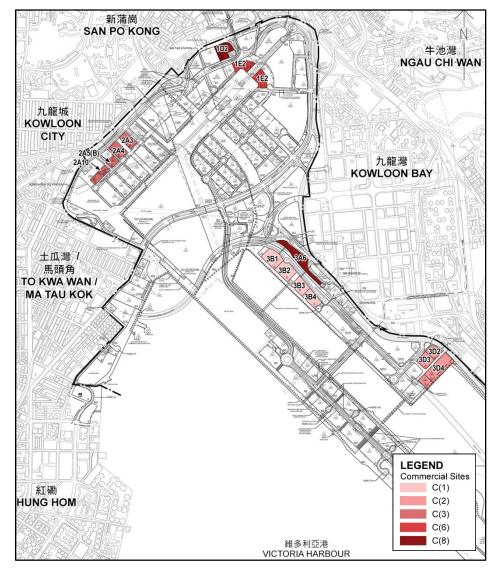


Figure 2.6 Commercial Sites in the KTD



P.20





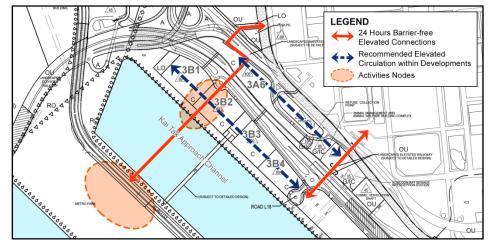
## "Commercial (1)" at Sites 3B1 to 3B4, "Commercial (2)" at Sites 3D2, 3D3 and 3D4 and "Commercial (2)" at Site 3A6

Sites 3B1 to 3B4 are located at the South Apron along the Kowloon Bay waterfront. Together with the Site 3A6 to the north-east across Central Kowloon Route, this zone is intended to provide a critical mass of office space to create synergy with the Kowloon Bay Business Area to meet the policy initiatives of Energizing Kowloon East. Developments within Site 3A6 are subject to a maximum PR of 5.8, a maximum site coverage (excluding basement(s)) of 65% and a maximum BH of 80mPD. To facilitate pedestrian connection through the site to connect with the proposed elevated walkway across Kai Tak Approach Channel (KTAC) and the Sites 3B1 to 3B4 zone to the north-east, landscaped elevated walkway will be provided in these sites and an appropriate area should be reserved on both sides of the landscaped elevated walkway to facilitate the future construction and maintenance of the walkway.

To enhance air ventilation and encourage interaction in the community, podium development within this zone is discouraged and this zone is also subject to site coverage restriction.

#### Key Recommended Proposed Elevated Walkway Across KTAC, South Apron and Metro Park

- Extension of existing footbridge spanning across South Apron Corner and Kowloon Bay Area.
- Connecting the Zero Carbon Building and Mega Box with comprehensive pedestrian connection.
- Airplane icon as design pattern to feature the footbridge for the balustrade and casting shadow of the features by natural sunlight.



Recommended proposed elevated walkway across KTAC, South Apron and Figure 2.7 Metro Park







Figure 2.8

Figure 2.10

Figure 2.9 Examples of commercial integration with elevated footbridge







Figure 2.11 Figure 2.12 Examples of featured footbridges

Figure 2.13







"Comprehensive Development Area (1)" at Site 1F2, "Commercial (6)" at Site 1E2 and "Commercial (8)" at Site 1D2 at the North Apron"

With a composition of neighbourhoods of different scales, diverse building types, varying BHs, and selective signature towers, a dynamic skyline will undoubtedly grace the face of Kai Tak. The overall building height profile starts with a landmark tower with distinctive design on the "Comprehensive Development Area(1)" ("CDA(1)") at Site 1F1 at the Kai Tak River in the Grid Neighbourhood and gradates towards the waterfront in two directions; one in the southeast along the Kai Tak River towards the South Apron area and the other in the south along the residential neighbourhoods towards the Sports Park to the Metro Park and the Ma Tau Kok waterfront area. For Site 1D2 which is at the Grid Neighbourhood with the Underground Shopping Street (USS) alignment underneath, public passageway shall be provided in the basement level for connection with the USS system.

Site 1E2 comprising two linked sites is located in the eastern side of the Grid Neighbourhood near the proposed Shatin to Central Link (SCL) Kai Tak Station. An iconic gateway twin-tower development is planned so as to anchor the vista towards the Station Square. NBAs are imposed in the eastern part of the two linked sites to create a wider pedestrian vista in the green corridor between the proposed commercial / office developments in these sites and the mixed use and public housing developments to their east. As for the western part of the northern Site 1E2, a NBA is imposed in order to maintain a breezeway from Kai Tak to San Po Kong as well as to allow a vehicular access serving the two linked sites. A vehicular access will be provided via Road L3B to serve the southern of the site. The area in between the two linked sites will remain as open space for a gateway plaza. Developments within this site are subject to a maximum PR of 6.0, a maximum site coverage (excluding basement(s)) of 65% and a maximum building height of 100mPD.

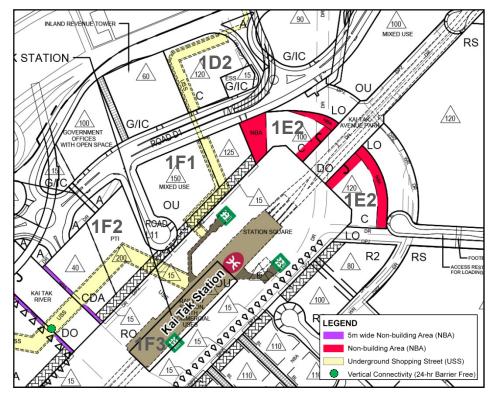


Figure 2.14 NBAs and USS







#### "OU(Railway Station with Commercial Facilities)" at Site 1F3

The proposed SCL Kai Tak Station is located adjacent to the Grid Neighbourhood is zoned as Site 1F3. Rail based public transportation will operate as the backbone of public transportation service at this site for the KTD. The SCL would provide the primary railway service to the residents / visitors of the KTD. Two railway stations will be provided within the KTD.

This site is primarily intended for the provision of railway station with commercial facilities. Provision of public passageway on the basement level in the developments in this site is required to connect to the USS system. The commercial facilities within this zone are subject to a maximum PR of 0.5 and a maximum building height of 15mPD.

The Kai Tak Station underneath Site 1F3 will connect to provide western branch of USS which will provide connections to the adjacent commercial and residential developments in Area 2 and Sung Wong Toi Station, and a provision of 20 metres to allow for shops on both sides with connection to the LTSB Preservation Corridor. The objective is to enhance integration of old and new districts within the KTDA and to enrich the pedestrian flow and attract visitors with 4.5 metres wide Dedicated Pedestrian Zones (DPZs) along both sides of developments sites of the Station Square.

USS is also designed to connect with SCL Kai Tak Station with development sites at the North Apron. The developer(s) of Sites 1F1 and 1F2 should obtain all the necessary information and arrangements of the proposed USS connections to the stations, and carry out all the works of connection at both sides of the reserved openings.



Figure 2.15 SCL Kai Tak Station

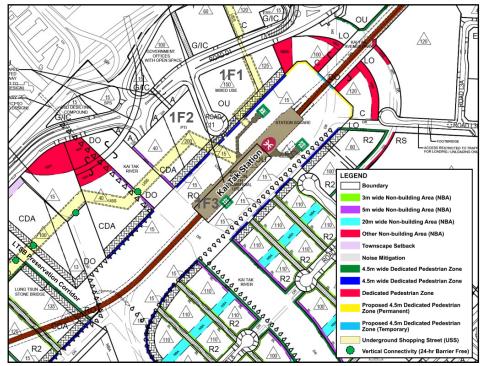


Figure 2.16 Recommended USS, setbacks and NBAs around SCL Kai Tak Station







# Commercial Portion of "OU(Mixed Use)(3)" at Site 1E1 and "OU(Mixed Use)(2)" at Site 1F1

Site 1E1 is zoned as "Other Specified Uses" annotated "Mixed Use (3)" ("OU(Mixed Use)(3)"). This site is intended to accommodate mixed non-industrial land uses. The following parameters are applied to this site:

For "OU(Mixed Use)(3)" within Site 1E1 are subject to a maximum domestic PR of 4.75, and a maximum private nondomestic PR of 2.25. The site is subject to a maximum site coverage (excluding basement(s)) of 65% and a maximum BH of 100mPD.

Site 1F1 is zoned as "Other Specified Uses" annotated "Mixed Use (2)" ("OU(Mixed Use)(2)"). This site is intended to accommodate mixed non-industrial land uses. The following parameters are applied to this site:

For "OU(Mixed Use)(2)" within Site 1F1 are subject to a maximum domestic PR of 5.0 and a private non-domestic PR of 2.0. The site is subject to a maximum site coverage (excluding basement(s)) of 65% and a maximum BH of 125mPD / 150mPD.

The following parameters are applied to these sites:

Sites 1E1 and 1F1 in the vicinity of the proposed SCL Kai Tak Station are intended primarily for mixed non-industrial land uses. Flexibility for the development / redevelopment / conversion of residential or other uses, or a combination of various types of compatible uses including commercial, residential, educational, cultural, recreational and entertainment uses, either vertically within a building or horizontally over a spatial area, is allowed to meet changing market needs. Physical segregation has to be provided between the non-residential and residential portions within a new / converted building to prevent non-residential uses from causing nuisance to the residents.

Special design proposals and setbacks requirements are incorporated for this site such that the residential element should commensurate with the commercial element in form. The residential development could accommodate high quality hotel-like service apartment with its design and appearance befitting the image of the Grid Neighbourhood and commensurate with those premier commercial / office developments to its west and east. 'Shop and Services' and 'Eating Place' in buildings not exceeding two storeys shall be provided in the retail belt abutting the Station Square to create vibrant street environment. Provision of public passageway at the basement level of the developments are required to connect to the USS system.

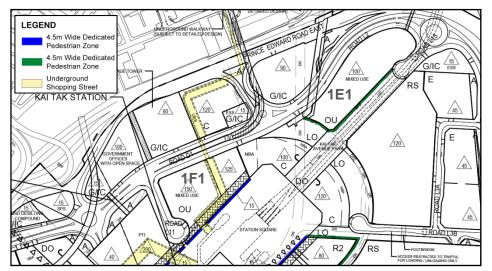


Figure 2.17 DPZs and setbacks requirements at Sites 1F1 and 1E1

P.24





#### Non-Building Areas, Setbacks and Pedestrian Streets 2.7

NBAs and setbacks of different widths are designated in various zones to serve several purposes. These include enhancement of air ventilation, improvement of visual permeability and promotion of urban design. A series of pedestrian streets are also designated throughout the KTD. The following outlines the various NBAs and setbacks throughout the KTD.

#### **Grid Neighbourhood**

In the eastern part of Grid Neighbourhood, 15 metres wide NBAs are required for the two "Commercial (6)" sites at Site 1E2 along their eastern boundary. This is intended to create a wider pedestrian vista in the green corridors between these site and the mixed use and public housing developments to the east.

NBAs of approximately 40 metres in width (max.) are proposed along the boundary abutting the "OU(Mixed Use)(2)" site to provide additional breezeways from Kai Tak to San Po Kong between Sites 1E2 and 1E1.

3 metres wide NBAs are designated within development sites along the boundary abutting 10 metres wide pedestrian streets running in SE-to-NW direction to further enhance penetration of the prevailing wind. 5 metres wide NBAs are designated within development sites along the boundary abutting the Kai Tak River to maintain a wider vista along riverside. The NBA designated in the eastern fringe of the Site 2D1 is to complement the view corridor to Lion Rock.

The NBAs designated at the "CDA(2)" and the "OU(Arts and Performance Related Uses)" zones will pronounce the curvilinear shape of the landscape elevated walkway.

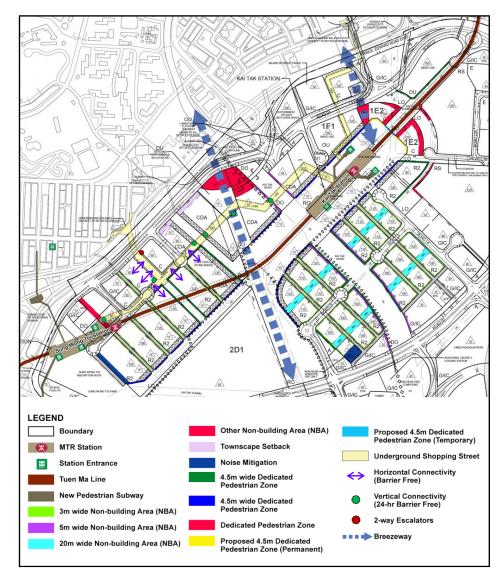


Figure 2.18 Recommended breezeways and NBAs around the Grid Neighbourhood





#### **Townscape Setback**

Apart from the NBA as stated in the OZP, various townscape setbacks are proposed with KTD. It is anticipated that the inclusion of a townscape setback will promote a coherent townscape within the KTD by ensuring that the most prominent attribute e.g. the heritage of the site and its green open spaces included within developments, urban areas and along the waterfront, are properly addressed.

Townscape setbacks of 15 metres in width are proposed to Sites 2A1 and 2A2 to respect the context and heritage significance of remnants of the LTSB including remnants of Pavilion for Greeting Officials.

The inclusion of such setbacks will ensure that development can comply with the prevailing building regulations and code of practice without compromising the development potential.

#### **Noise Mitigation Setbacks**

Private non-domestic development are non-noise sensitive in nature and do not require special mitigations or setback. Commercial sites are not noise sensitive and may serve as environmental buffers to protect residential buildings against traffic noise from major roads in Kai Tak.

A setback of 25 metres from the carriageway of Road L9 is designated in Site 2B6 for non-noise sensitive use as a noise mitigation measure. This setback is subject to a reduction by deploying additional direct noise mitigating measures such as the application of a Low Noise Road Surfacing to Road L9.

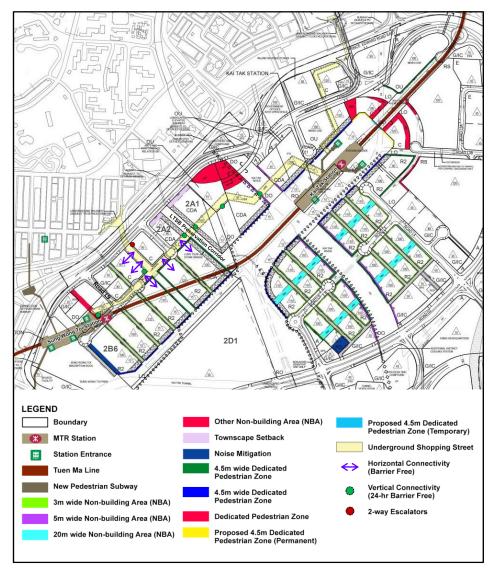
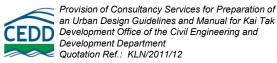


Figure 2.19 NBAs, setbacks and pedestrian streets at the North Apron





#### Pedestrian Streets

Pedestrian streets of 10 metres in width are also located through the KTD to enhance vibrancy of the adjoining open space / waterfront promenade / pedestrian streets. These are intended to enhance the public realm and improve ventilation throughout the development. NBAs are imposed on development sites abutting pedestrian streets to further enhance the public realm. They are designated for pedestrian use with provision or occasional maintenance vehicle access, to enhance the overall streetscape experiences, and to serve as Emergency Vehicle Assess (EVA) routes.

The above outlines the provisions applicable to sites which are not impacted by lease conditions, but are bound by the provisions of the OZP. This includes the various NBAs, setbacks and pedestrian streets to be imposed in the KTD. As part of the next task, recommended urban design parameters will be put forward which are intended to guide and direct the development of the sites in a positive manner, without restricting the design creativity. The intention will be to ensure that future development occurs in a holistic and comprehensive manner.

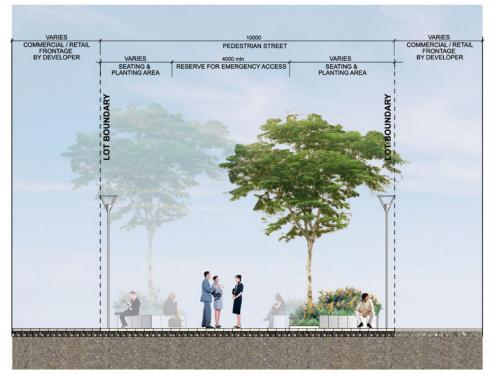


Figure 2.20 Typical section of commercial pedestrian street







#### 2.8 Overview of the Control Parameters for the Private Nondomestic Sites

This section has reiterated the recommendations contained in the ES of the OZP for the control parameters for the private nondomestic sites and from this prescribed a set of lease conditions to be applied, that are fair, reasonable and, most importantly, practical and implementable. They typically relate to maximum permitted plot ratio, building height, site coverage, and greening etc. The following sections set out proposed urban design parameters that are aimed at creating a quality built environment and identity for the KTD.



Figure 3.1 Illustration of typical public realm integration with Private Non-Domestic uses







#### 3.1 Introduction

Given the aim of developing an over-arching theme to guide the urban design of the streetscape and associate furniture in the KTD to create a visual identity that encapsulates the planning vision of turning Kai Tak into a "distinguished, vibrant, attractive and peopleoriented community by Victoria Harbour", a separate consultancy for "Study on Public Creatives" was engaged separately by CEDD before the commencement of this UDGM consultancy taken up by URBIS Limited.

The Study commenced with an examination the range of key values that might pertain to Kai Tak, followed by a consensus building workshop held on mid-January 2012 to consolidate the views of various stakeholders towards these values from different angles (such as history, expectations of what the KTD could bring; social development, cognitive connection; Kai Tak as an airport, Kai Tak as the new comprehensive urban planning project and Kai Tak in relation to neighbouring districts).

After studying the social and cultural legacies of the neighbouring areas, the planning intention of different sub-districts, the design of on-going public rental housing and public works projects, and the vision of Kai Tak, the Public Creatives Study Consultants recommended that the visual identity should focus on vigor and liveliness of the KTD and its surrounding area. The concept of a "Tree by Victoria Harbour" was proposed. The "Tree" concept intends to define the personality of Kai Tak and is to act as a creative principle upon which design development in later stages is to be built. Further to the presentation of the "Tree" concept and the street naming proposal endorsed by the Government on July 2012, the Public Creatives Study Consultants carried forward the endorsed concept of developing a set of creative principles and a design theme, namely the 'Current of Vitality'.

Utilising the design theme of 'Current of Vitality', the Public Creatives Study Consultants developed a visual identity icon, a graphic element matrix, supporting graphic elements, typography and a set of main colours and highlight colours for implementation of the design theme in possible design for the whole KTD.

Without conflicting with the master urban design principles provided by URBIS Limited, the Public Creatives Study Consultants studied the appearance of the streetscape and the public facilities within the public realm and focused primarily on the visual quality of streetscape, the interface between public and private areas within 15 metres in height at pedestrian zones (taking into account other users such as public transport passengers and motorists). The Public Creatives Study Consultants also provided suggestions on the urban design elements in guiding various parties to consider possible designs and implementations to maintain a coherent visual gesture and subtly reflect the design theme.



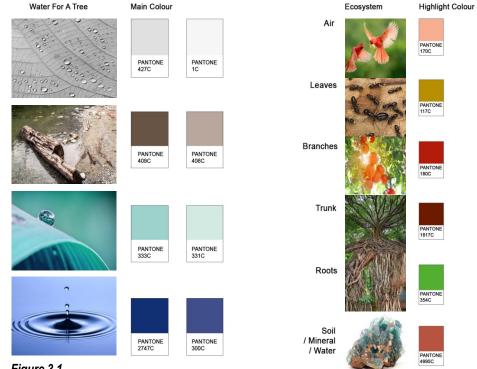




#### 3.2 **Public Creatives Framework**

#### **Colour Scheme**

The colour scheme developed by the Public Creatives Study Consultants is described and addressed below. The colour scheme features eight main colours and six highlight colours.



#### Figure 3.1

#### **Use of Colours**

The choice of colours is inspired by the core values of Kai Tak, namely Connecting, Natural / Healthy, Future-driven, Strong-rooted, Energetic and Open / Welcoming. The colours follow and recognise the roots of what Kai Tak was and what it will be in the future.

Following this line of thought, the colours are connected and displayed in harmony with the society and urban structures (architectural constructions, park and leisure environments, and business areas etc.) without being overpowering.

#### **Main Colours**

The upper four main colours (Pantone 427C, Pantone 1C, Pantone 409C and Pantone 406C are mainly to be used for 3D items. The lower four main colours (Pantone 333C, Pantone 331C, Pantone 2747C, Pantone 300C are mainly for the use on 2D items.

#### **Highlight Colours**

To enrich the colour range and bring vibrancy to the colour scheme for Kai Tak, colours from the ecosystem around a *Ficus subpisocarpa* tree have been chosen as highlight colours. The highlight colours have a variety of colour intensities which supplement the main colours. The six highlight colours (Pantone 117C, Pantone 180C, Pantone 1817C, Pantone 35C and Pantone 4995C) can be used in any combination with the main colours.

The Public Creatives Study Consultants also proposed that a sense of place could be further enhanced by simply selecting suitable colour tones for the area or development. The main colours and highlight colours of the Study on Public Creatives can be observed as accents to the ambient tone and colour of the Urban Design Control and Guidelines.





#### 3.3 Streetscape Design

This section outlines the Streetscape Design Principles for all designated NBAs, setbacks and pedestrian streets adjacent to Private Non-Domestic Sites in Kai Tak, including areas in the North Apron and the Runway Precinct.

Streetscape refers to pedestrian design, development interface and conditions as they impact street users and nearby workers / residents. Streetscape design recognises that streets are places where people engage in various activities, including but not limited to cycling, shopping, dinning and walking etc. Streetscapes are an important component of the public realm (public spaces where people interact), which help defines a community's aesthetic quality, identity, economic activity, health, social cohesion and opportunity, not just its mobility.

Streetscape can have a significant effect on how people perceive and interact with their community. If streetscapes are safe and inviting to pedestrians, people are more likely to walk which can help reduce automobile traffic, improve public health, stimulate local economic activity, and attract residents and visitors to a community.

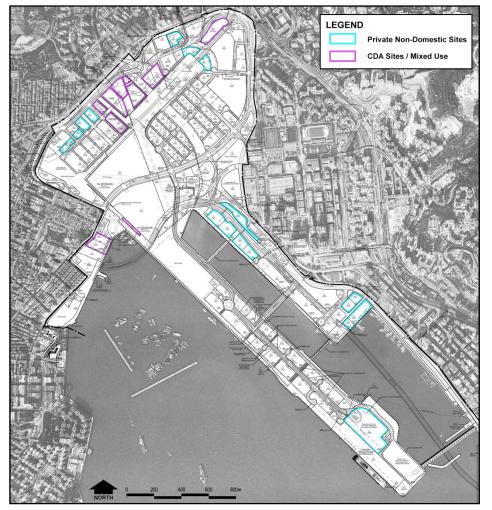


Figure 3.2 Site Reference Plan indicating Private Non-Domestic Sites within the KTDA







#### OBJECTIVE

The objective of the following streetscape design guidelines for commercial use sites is to engender an identity and ambiance consistent with business and commercial land use. It is intended that the guidelines will facilitate the preparation of designs that will promote connectivity and the creation of quality spaces.

#### Key Recommendation:

The following key recommendations are proposed:

- Incorporate frequent pedestrian nodes along commercial streets, such as seating areas or look-outs;
- Strategically locate street furniture to ensure footways are clutter free. Co-ordinate street furniture e.g. signals and signs on street light columns;
- Maximise footway width to create space for pedestrians, tree planting and co-ordinated street furniture;
- Structures such as covered walkways and rain shelters should be strategically located to provide 'weather protection' for pedestrians. Such structures should be permeable and provide a sense of lightness;
- Provide high quality pavement surfaces incorporating quality patterning and utilising tiles, brick paving, or stone;
- Encourage outdoor cafés and other similar uses that create pedestrian activity on the pavement;
- Ensure openings are free from physical barriers including street furniture and landscaping;
- Provide preconditions for creating a vibrant urban space at the interface of the local open space and the commercial sites;
- Provide shrubs and trees in the setback at the interface between commercial and CDA sites and PERE;
- Provide hard paving at the interface of the NBA and local roads at Area 2 within the North Apron; and

Provide an open attractive environment for commercial streets that enhances the retail experience and encourages shoppers to return.





Figure 3.3

Figure 3.4

Successful reference quality streetscapes - commercial pedestrian street incorporating sophisticated patterning - Central Cityscapes, Hong Kong



Figure 3.5 Water feature acts as a focal landmark and a magnet for social activity - Tung Chung, Hong Kong







#### Acceptable:

- Ensure multi-directional pedestrian circulation is provided with free open access to retail frontages;
- Ensure any seating is oriented to avoid blocking pedestrian cross flow;
- Use streetscape layout and content to improve security for commercial properties and the pedestrians using them (e.g. clear visibility, attractive security barriers, pedestrian lighting);
- Provide paved surfaces with visual interest (e.g. eliminate curbs and / or use bollards, stamped concrete, unit pavers, etc.);
- The provision of street furniture should complement the character of the area or the adjacent developments;
- > Encourage free movement along and across streets; and
- Where a NBA is adjacent to a road, a contrast in paving material should be used to indicate the change to users from one area to the next.



Figure 3.6 Copenhagen, Denmark – Illustrating paved surfaces that functions as a car free zone as well as adding visual interest in this historic square

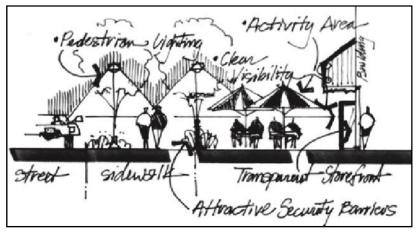


Figure 3.7 Crime prevention through environmental design – Langley, British Columbia. Clear visibility and improved pedestrian lighting are two means to improve public safety and security.

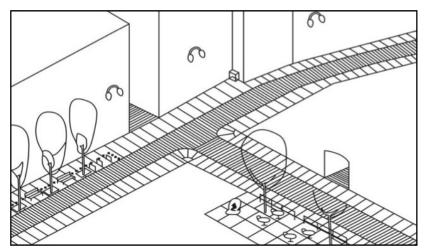
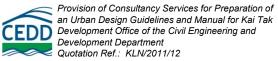


Figure 3.8 Pedestrian dominant – These streets have high pedestrian flows and restricted vehicle access and are in the heart of the city centre. Pedestrians dominate and vehicles travel slowly to give way to cyclists and those on foot.







#### To Be Avoided:

- The area where pedestrians normally choose to travel should be kept free from obstructions at all times;
- Inconsistent paving design should be avoided i.e. materials, size colours, textures and patterns; and
- Avoid long / continuous fencing along the interface of commercial site and NBAs.

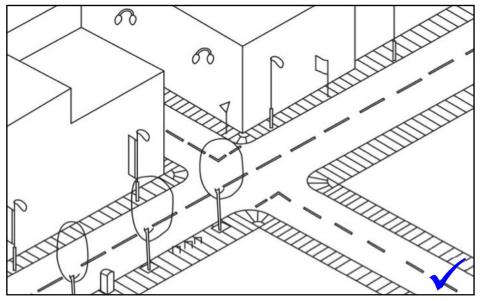


Figure 3.9 Pedestrian / vehicle streets - These streets have moderate vehicle and pedestrian flows and are outside the heart of the city centre. Neither pedestrians nor vehicles are dominant.

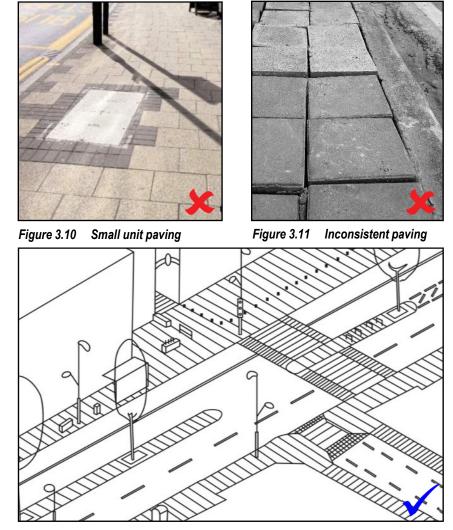


Figure 3.12 Vehicle dominant commercial street - These streets are major transport arteries that run through the city centre and providing access. They include buildings offering services to the public.







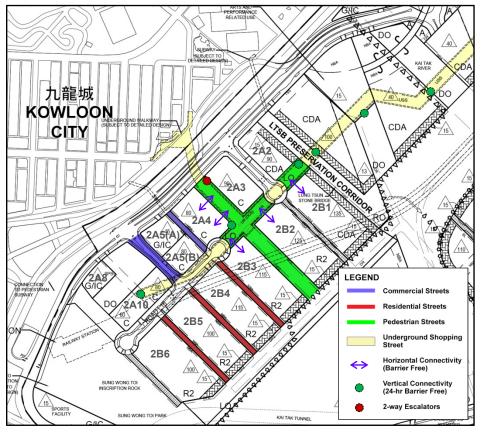


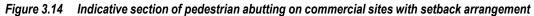
Figure 3.13 Street Typology - North Apron – Area 2











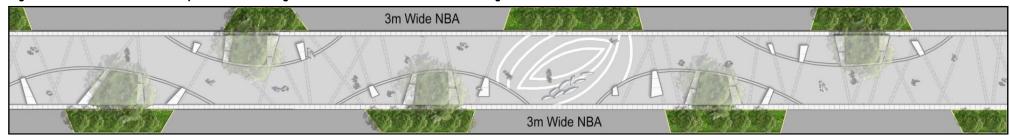
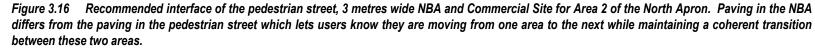


Figure 3.15 Recommended landscape treatment of pedestrian street with 3 metres wide NBA

















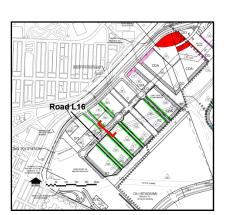


Figure 3.17 General on street interventions

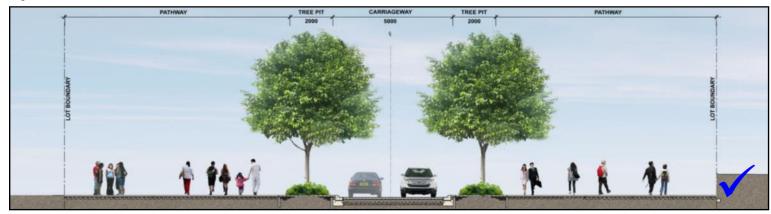


Figure 3.18 Hard paving at the interface of the 3 metres wide NBAs, Road L16 and residential lots within Area 2 of the North Apron is recommended.





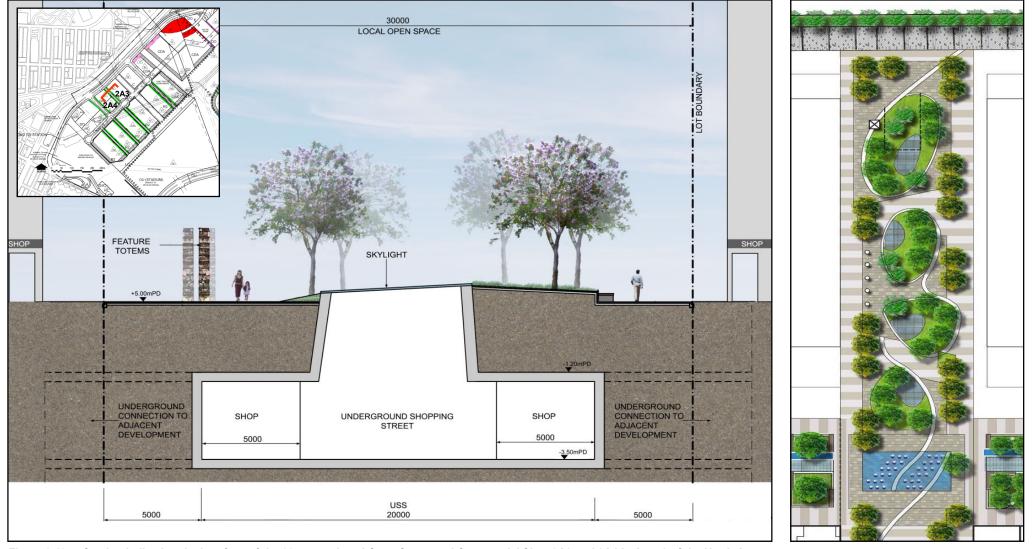


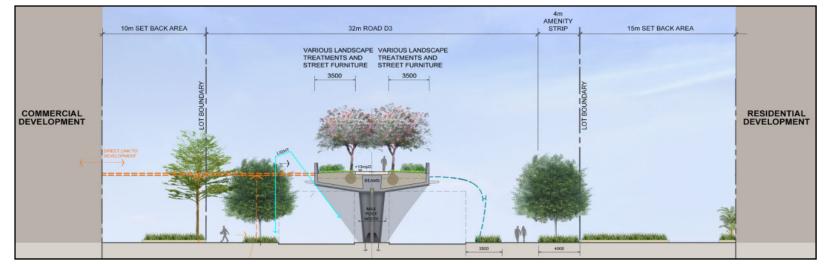
Figure 3.19 Section indicating the interface of the 30 metres Local Open Space and Commercial Sites 2A3 and 2A4 in Area 2 of the North Apron. A mix of soft and hardscape features are recommended within the open space. Hardscape paving is recommended directly abutting the commercial sites and within the building setback.

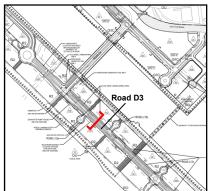
Figure 3.20 Indicative Layout Plan











#### Figure 3.21



Figure 3.22

Recommended treatments for the Runway Precinct. A possible bridge connection linking directly from the landscape deck to the commercial development is advocated. Planting of trees and shrubs is recommended within the setback of the commercial lot.



General Overview and Way Forward for the Private Non-Domestic Sites





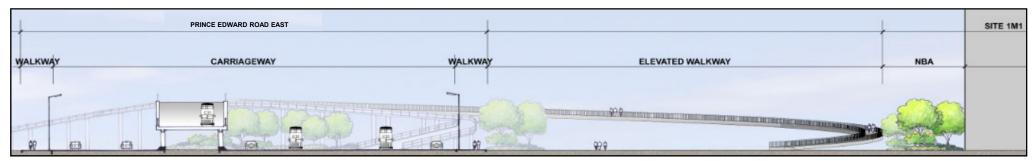


Figure 3.23 Planting is recommended within the 3 metres wide NBA adjacent to pedestrian streets within the commercial sites in the Runway Precinct









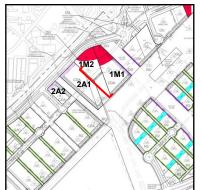


Figure 3.24 Recommended treatments at the interface of PERE, NBA and NBA within the CDA Sites 1M1 and 1M2. Maximise landscape features within the NBA which mitigate potential adverse impacts to future development caused by the road. The NBA within these sites intended to pronounce the curvilinear shape of the elevated landscape walkway.

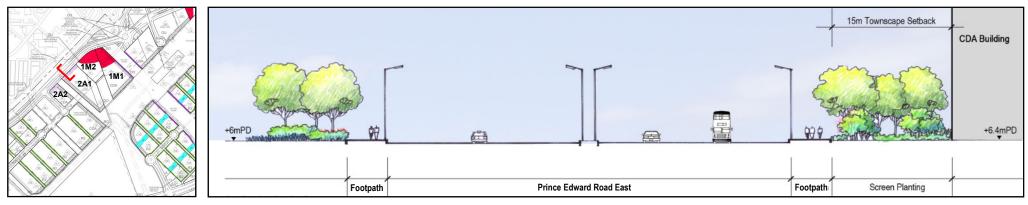


Figure 3.25 Recommended treatments at the interface of PERE, 15 metres townscape setback and CDA Sites 2A1 and 2A2. Maximise landscape features within the 15 metres setback to mitigate any potential adverse impacts to future development caused by the road.

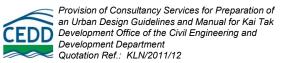
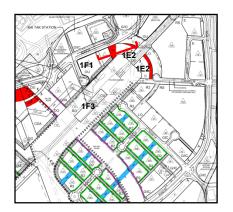






Figure 3.26 Planting is recommended within the NBA within Commercial Site 1E2. The intention of this NBA is to provide additional breezeway from Kai Tak to San Po Kong.







#### Streetscape Design for Retail Belt Facing the Station Square:

This section outlines the Streetscape Design Principles for all pedestrian streets, adjacent to the retail belt facing the Station Square. The intention is to create vibrant streets that cater for functional pedestrian movement between walking areas and the built form, while maximising user amenity and promoting pedestrian wayfinding.

#### OBJECTIVE

To design a positive streetscape that helps to create a vibrant public realm and supports connections to commercial and retail land uses by placing an emphasis on barrier free pedestrian access.

#### **Recommended:**

- Ensure a 3 metres building setback within which and a minimum clear height of 4.2 metres extending upwards from ground level shall be applied along the perimeter of each development site fronting the Station Square. It is recommended that the full retail façade frontage shall aspect to the Station Square.
- Ensure pedestrian routes are direct, continuous, active, vibrant and bright that enrich the shopping experience;
- Consider the variety of people who will use the footpath, including people with wheelchairs or prams, all of whom travel at different speeds. Minimise changes in footpath levels and avoid physical barriers to accommodate these users; and
- Encourage the use of upward lighting along access ways through utilizing catenary and other similar forms of lighting.

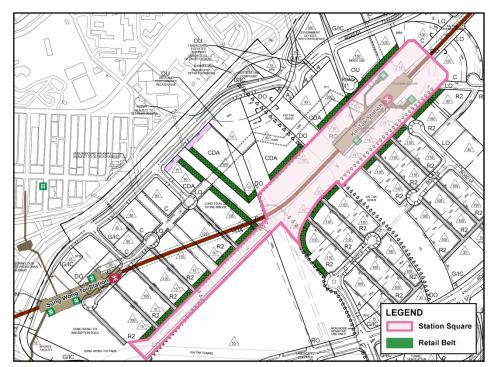


Figure 3.27 Retail Belt



Figure 3.28 Messina, Italy: The transitional landscape between pedestrian and vehicular traffic is fluid rather than restricting due to the vibrancy of the city square's streetscapes.







## Acceptable:

- Provide multi-directional pedestrian circulation with free open access to retail frontages;
- Where possible activate the streetscape with outdoor dining facilities;
- Encourage the planting of trees within planters or in tree pits to enhance the appearance of the public domain and to create shade for pedestrian; and
- Provide sufficient lighting to enhance public safety and contribute to the lively character of the Station Square.



Figure 3.29 Section of typical retail belt space with cantilever shopfront



Figure 3.30 Example of active commercial spaces with outdoor dining facilities within which trees delineate edges and provide shade and shelter









#### To Be Avoided:

- Minimise curb-cuts, and avoid service entrances facing the riverfront;
- Shopfront layouts that use excessive or gratuitous curves should be avoided, as they are less efficient, reduce legibility and make access for shoppers and visitors less direct; and
- Avoid articulation that results in blank façade walls fronting the Station Square.



Figure 3.31a Avoid articulation that results in exposed blank façade walls



Figure 3.31b Efficient design of continuous shopfront and minimising curb-cuts







#### **REFERENCE STREETSCAPES IMAGES**



Figure 3.32 A balanced mix of hard and soft landscape



Figure 3.33 This fountain in London is built out of garden hoses. The colour and fluid shape create a focal point amidst surrounding restaurants in Kensington Garden.



Figure 3.34 Chicago: The Juame Plensa's Crown Fountain stands tall as a an interactive public art that blends with the surrounding architecture.



Sparks Street, Ottawa Canada – this commercial street has a water feature Figure 3.35 at each intersection to provide a visual connection along several blocks. Seating areas are provided along the edge which encourages social interaction and adds vibrancy to the area.



Plaza Grande, Quito, Ecuador - comprises lush canopies, interesting Figure 3.36 streetlights and soothing water features.







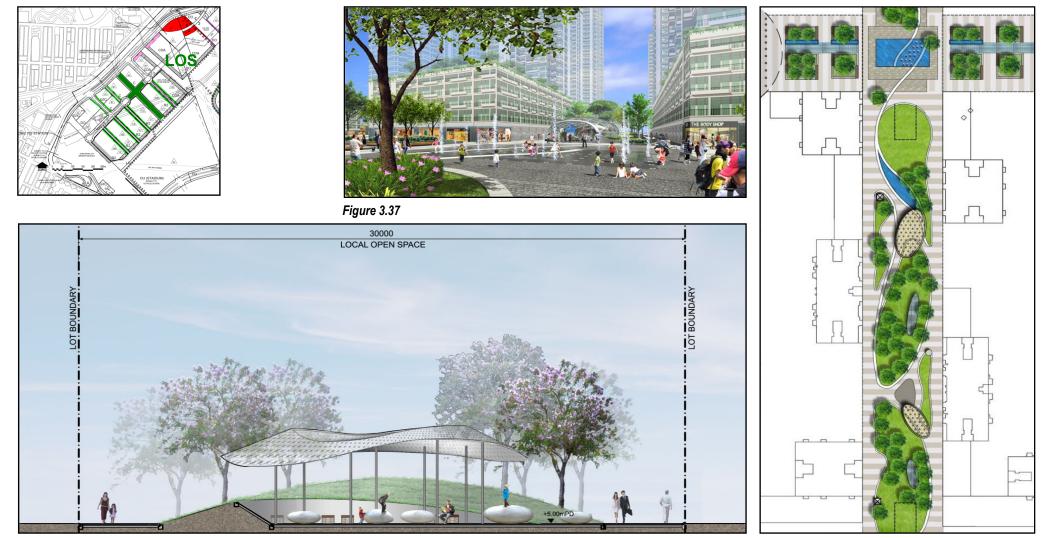


Figure 3.38

Hard paving is recommended at the interface of the Commercial Sites and Local Open Space in the North Apron Area 2

Figure 3.39 Indicative Layout Plan





# Streetscape Design for 5 metres Wide NBA Facing the Kai Tak River:

This section outlines the streetscape principles for all pedestrian streets, adjacent to retail belt facing the Kai Tak River. The Kai Tak River is an asset that should be fully exploited for its value as a passive recreational space for domestic and private non-domestic uses. It can act as a view and air corridor, and as a connection with the areas waterside and historical characteristics.

The location of the river at the heart of the site means that both banks of the river can complement each other. This will be promoted through the use of appropriate setbacks that can be treated consistently with appropriate landscape features. Parallel connections along the Kai Tak River's edge serve many different users and provide public access to the waterfront, opening up views, and re-engaging the rivers as part of the public realm.

## OBJECTIVE

To maximise the waterfront for public enjoyment.

## **Recommended:**

- Provide a 5 metres setback adjacent to the Kai Tak River for riverine edge greening;
- These setbacks should be treated consistently with appropriate landscape features that compliment the Kai Tak River;
- Promote pedestrian-oriented environments the efficiently integrate public spaces and maximize the waterfront for public enjoyment;

#### Acceptable:

- Activate the waterfront by ensuring development along the riverfront face the river to maximise waterfront riverfront views; and
- Locate light fixtures, litter bins, signage, and other necessities discretely in the landscape of the trails. Provide drinking fountains, mileage markers, maps, and informational signage, integrating them with landscape treatments.

## To Be Avoided:

- Avoid railings along the Kai Tak waterfront except for the purposes of safety measures;
- Avoid the use of invasive landscape species;
- Avoid large continuous blank façades facing the Kai Tak River; and
- > Fenced off areas should be avoided as far as practicable.

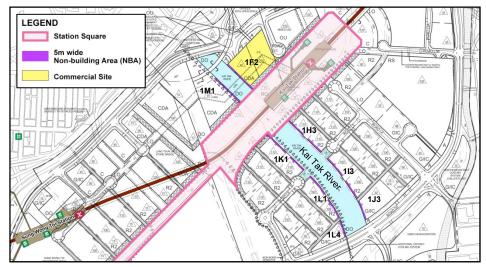


Figure 4.40 5 metres wide NBA facing the Kai Tak River





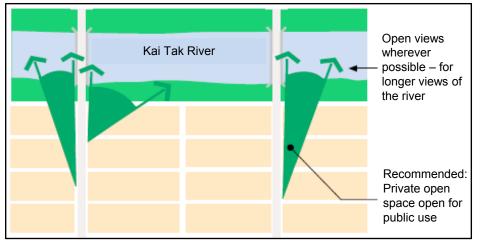


Figure 3.41 Design intention: Open up view corridors to Kai Tak River with private publicly accessible open space for public enjoyment

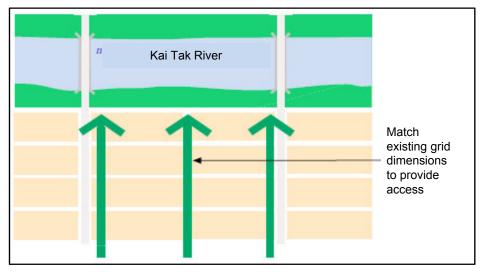


Figure 3.42 Design intention: Maintain grid dimensions with direct access to the riverfront to promote circulation to and from the waterfront promenade



Figure 3.43 Avoid continuous blank façades along the riverfront



Figure 3.44 Avoid fenced off private areas along the Kai Tak River



Figure 3.45 Avoid tree species with Figure 3.46 invasive root systems



Tree species with large root systems need to be managed as to avoid damaging paving surfaces as shown above







#### 3.4 Permeability and Legibility

Visual permeability refers to the extent of provision made within a given layout to permit through views. Conversely legibility refers to the extent to which the public can orientate themselves and navigate and understand how a place works. Legibility also infers that spaces and buildings are sufficiently distinctive and that they are capable of conveying a sense of place. The opportunity for improving legibility and permeability and their effectiveness will vary from place to place. It is assumed however, that the objective in each sub district will remain the same.

The Buildings Department PNAP APP-152 on Sustainable Building Design Guidelines was promulgated on 1 April 2011. It complements with the PNAP APP-151 on the Building Design to Foster a Quality and Sustainable Built Environment in terms of building separation / permeability, green coverage and setback. All developments within Kai Tak should comply with the requirements of the PNAP APP-152 together with the recommendations under this manual to maximise permeability and the provision of a comprehensively planned development within the KTDA.

#### **NORTH APRON**

The North Apron is characterised by a series of pedestrian streets, setbacks, NBAs and DPZ. Each of these and the adjoining sites need to be carefully treated to avoid adverse interface issues.

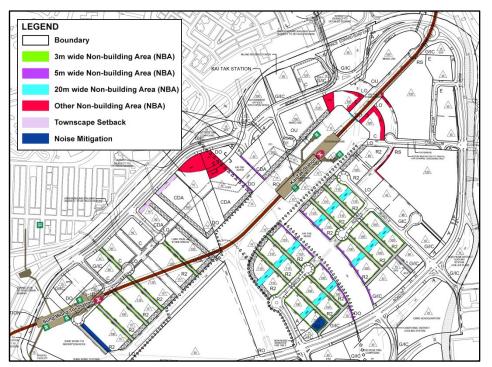


Figure 3.47 Pedestrian streets, setbacks, NBAs and DPZs







#### OBJECTIVE

The layout and design of the development should provide a readable and clear distinction between public, communal and private areas.

#### **Recommended:**

- The highest degree of visual permeability and legibility should be accomplished throughout the KTDA. This can be achieved by ensuring that no physical barriers are included in the pedestrian streets / DPZs / setbacks / NBAs. This includes gates, landscape features or fence walls;
- Design priority should be on the pedestrian experience and should seek to create inviting, human-scaled environments that function as community living spaces rather than simply transportation corridors. It is recommended that at the junctions of pedestrian streets, roads and openings a change in paving material is utilised to demarcate the interface of the public and private realm and to enhance legibility;
- Where planting is provided within the setbacks and NBAs adjacent to pedestrian streets and roads the location of trees and plants should be specifically placed and organised to delineate points and routes of access and circulation, particularly within the commercial zones; and
- Fence walls should be located at the inside of the 3 metres wide NBAs.

#### Acceptable:

- Contrast in the colour / material and / or design of paving can be used to direct access to retail outlets. As visitors approach from pedestrian streets, a difference in paving material and design can help to indicate they are moving from one area to the next;
- Contrasts in colour/material and or/design of paving can also be used to distinguish between public and private spaces, particularly at the interface of the 3 metres NBA within the private domestic lots and the adjacent public pedestrian streets.

#### To Be Avoided:

- Visual and physical access should not be hindered or blocked in any way. The use of solid and non-porous gates or boundary walls should be avoided at the openings of the pedestrian streets or along the interface of the NBA and pedestrian streets; and
- The inclusion of a fence wall along the entire length of the 3 metres wide NBA. This will restrict pedestrian movements and erode the permeability and legibility within the sites.





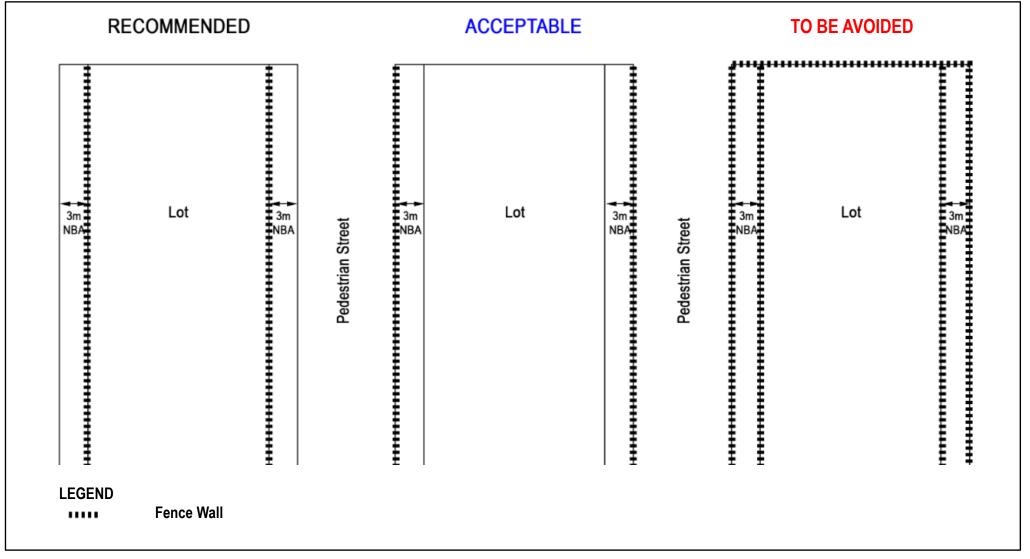


Figure 3.48 A 3 metres setback dedicated for planting is generally recommended for all the Government sites in Kai Tak. The intention of this setback is to maximise planting of trees and shrubs for the interface of the pedestrian walkway to enhance legibility and adds vibrancy to the public realm.







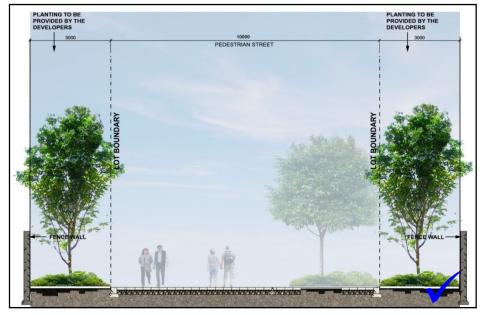
PLANTING TO BE PROVIDED BY THE DEVELOPERS

FENCE WALL

11111111111

10000 PEDESTRIAN STREET

# 3.0 GENERAL OVERVIEW AND WAY FORWARD FOR THE PRIVATE NON-DOMESTIC SITES



#### Figure 3.49



PLANTING TO BE PROVIDED BY THE DEVELOPERS

The highest degree of visual permeability and legibility should be enshrined throughout Kai Tak. To achieve this it is recommended that no physical barriers are included in the pedestrian streets / DPZs / setbacks / NBAs. This includes gates, landscape features or fence walls. Fence walls should also be located on the inside of the 3 metres wide NBA to optimise permeability. The location of fence walls at the outside of NBAs should be avoided.





#### **Ambient Tone and Colour** 3.5

The following are applicable to private non-domestic, "OU(Mixed Use)" and "CDA" sites at the North Apron and have specific application to the following sites:

- Site 1E1 Commercial portion of the site zoned as "OU  $\geq$ (Mixed Use)(3)";
- Site 1E2 Site zoned as "Commercial(6)";  $\geq$
- Site 1F2 Commercial portion of the "CDA" site; and  $\triangleright$
- Site 1F3 Site zoned as "OU(Railway Station with  $\geq$ Commercial Facilities)"
- Sites 2A1 and 2A2 "CDA" sites: and  $\geq$
- Sites 2A3 to 2A5 Sites zoned as "Commercial(3)" at the  $\geq$ North Apron

The use of tones and colours applied in a specific area can help to create a strong sense of place and make an area more visually appealing. Tone refers to the lightness or darkness of an object and is often considered as one of the most powerful design elements given the impact it can have in defining a building and / or an area.

In this regard, tone specifically refers to the colour that is applied the external facade of buildings as well as pavements etc. The use of a consistent set of chromatic treatments throughout a development can ultimately engender a sense of place. It is an important aspect of modern urban design practice, as it can improve the visual quality of a neighbourhood and its image as well as contributing to soften the visual impact of buildings.

The pedestrian level needs to be visually appealing and designed to ensure appropriate interface connection with the various elements that constitute the public realm.

Pantone 728C



Figure 3.51

Figure 3.52 The modern, sophisticated building façade and harmonized colour create a strong sense of place in Central



Figure 3.53 In Hong Kong, a city known for its glass curtainwall office towers, Jardine House stands out with repetitive circular windows that are indicative of the architectural fashion of its period of construction. Despite it's simplistic and almost brutalist design it forms a component part of the Hong Kong skyline.







#### OBJECTIVE

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

#### **Recommended:**

- Where there is a mix of land uses on a site, the use of carefully considered colour contrasts can be adopted to help identify different land uses, stimulate visual interest and ensure a monotonous design is avoided;
- Ensure the tone and colour selected throughout the development provides increased aesthetics and amenity to the non-residential site.
- The colours and tones selected should contribute to the character of the building and its surrounding area.
- The tone and colour of commercial buildings within the same area should be consistent and complement one another;
- Select colours from a particular palette, e.g. cool (grey undertones) or neutral.



Figure 3.54 Variation of facade tones with stone cladding can be selectively used as a variant to traditional glass and steel façades



Figure 3.55



Subtle changes in the façade of the main building promotes visual interest







## Acceptable:

All the elements of a building (roof / decks / stonework etc.) should complement one another.





Figure 3.58 The Messeturm. Frankfurt, Germany - Solid façade with warm tone colour / materials

Hong Kong - Two-toned glass Figure 3.59 curtain walls help emphasise the concept of the design

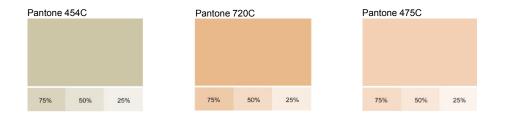


Figure 3.60 A variety of colours and physical embellishments can be applied to developments to generate a range of aesthetically subtle façades. The above illustrates examples of colour treated timber, coloured balconies, dual coloured tiled façades and steel or clear / coloured glass which can all contribute to creating a sense of place. Such materials and colour tones are recommended.

## To Be Avoided:

- Using lurid or garish colours; ≻
- $\triangleright$ Giving service entrances and main entrances the same colour scheme. This can distract from pedestrian entrances which should be the focal point of the building; and
- Highlighting vents / pipes these should be the same colour  $\geq$ as the main wall to ameliorate visibility.



Garish contrasting colours should be avoided Figure 3.61



Figure 3.62 Tangs Shopping Centre, Singapore - the main entrance is clearly distinguishable from the service entrance (not shown) due to the addition of the green and brown roof and red columns. Dramatic and thematic colour scheme facades should be avoided.







This section outlines urban design parameters applicable to private non-domestic sites in the Ma Tau Kok waterfront.

# Site 5A4 – Commercial Portion of the "CDA" Site at Ma Tau Kok Waterfront

#### OBJECTIVE

Ensure the tone and colour selected relates in a responsive way with the public realm and the public waterfront promenade to promote strong visual recognition.

## **Recommended:**

To promote visual variety, a range of grey blues tones are suggested as accents.

#### Acceptable:

Colour contrast can be used to highlight certain building features such as windows or columns.

## To Be Avoided:

- The use of garish colours that will detract from the overall visual amenity of the area and result in undue visual impacts to surrounding vistas; and
- Avoid usage of highly reflective finished such as shiny metallic polished or glossy surfaces that can cause excessive reflection and glare to the harbour.



Figure 3.63

Figure 3.64

Examples of façade colours could be used in the waterfront development zone

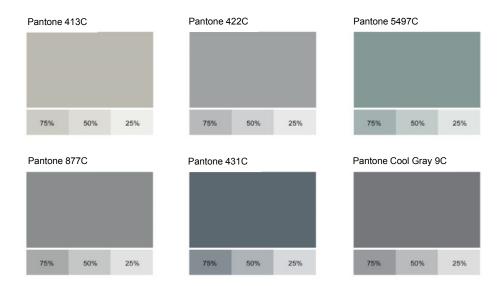


Figure 3.65 Possible colours that could be used throughout the commercial developments to produce a sense of lightness and sophistication







Figure 3.66 The use of bright colours that over accentuate buildings their presence and bulk should be avoided



Figure 3.68 An example of an office that uses a range of garish colours that compromises overall visual amenity



Figure 3.67 This architecture is emblematic of a clash of colours and materials that is likely to date quickly and that has little commonality with its environs







#### **Colour Palette Overview**

This section recommends a colour palette for all private non-domestic sites in Kai Tak with the aim of achieving a comprehensive harmonious colour tone to create a pleasing, lively and comfortable environment throughout the whole KTD. Separate colour palettes are recommended for different areas and different uses within Kai Tak to promote diversity and identity.

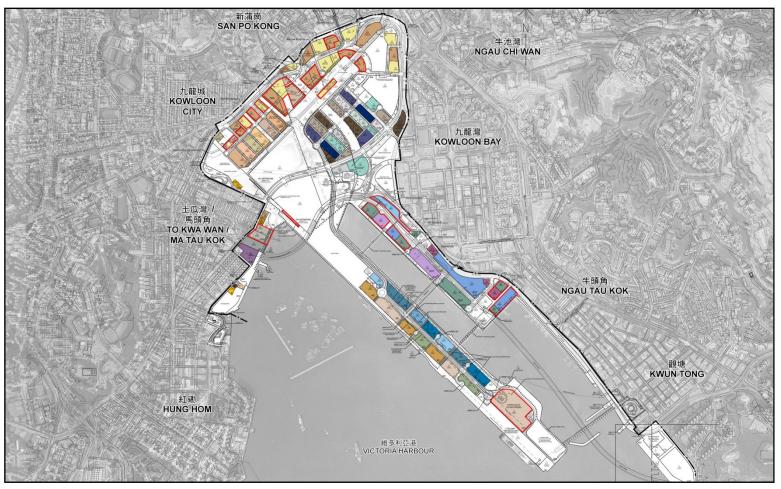


Figure 3.69







#### 3.6 Façade Treatments

The considered design of building façades and the utilisation of appropriate materials can contribute significantly to creating inviting and sophisticated environments.

A carefully conceived approach to façade design can contribute to cementing a sense of continuity and cohesion when viewed against the backdrop of a skyline, and at the level of human interaction at grade within the public and private realm.

#### OBJECTIVE

The architectural form and the treatment of façades should be carefully conceived to ensure that the chromatic treatments applied are pertinent to the location of the development site, promote visual variety and make a positive contribution to the public realm.

#### **Recommended:**

- Encourage the front or side of façades along the street frontage to provide convenient public access from building entrances to public streets;
- Provide relief to long building façades (vertical or horizontal) through vertical and horizontal elements such as entrances, window patterns or other specific building articulations. These elements should provide visual interest for pedestrians when viewed from public streets;
- Design corner façade to address both street frontages with equal importance; and
- Encourage the use of contrasting elements and colors particularly within the pedestrian realm (up to 15 metres). Elements should architecturally coordinate and not overpower the main building elevation.

Encourage architectural elements that pronounce the interaction of light and shadow on the façade such as punched/ recessed windows and screens. Incorporate well proportioned windows that provide relief detail and visual rhythm on the façades.



Figure 3.70

Figure 3.71

The examples of large size windows to break up and lighten the façade



Figure 3.72 An example of well proportioned window pattern, contrasting colour and relief treatments to mitigate the visual impact of a long building façade.







#### Acceptable:

- The exterior material should be durable and require little  $\geq$ maintenance. Wood and glass facades are light and subtle, to provide a visual contrast which is aesthetically pleasing and makes for a simple yet sophisticated working environment;
- As commercial buildings are not likely to possess balconies,  $\geq$ building façades must be enhanced in other ways, for example through the use of the "pulse" theme. Architects frequently select a symbol which embodies company functions and to turn it into an interesting visual element that improves the overall appearance of the building; and
- Encourage architecturally creative innovative materials that  $\geq$ result in interesting and expressive building facade such as curtain wall system and architectural panel system.

#### To Be Avoided:

- Avoid using material that will guickly deteriorate, stain or fade  $\geq$ and discourage material with lower quality attributes or conflicting aesthetic in public view such as concrete block, vinyl siding, plastic and mirrored glass;
- Avoid excessively long and blank façades, in order to avoid  $\geq$ monotony and ensure the environment remains engaging;
- Avoid the magnified profiled glazing panel as the sun  $\geq$ reflections may cause excessive glaring and damages to the surroundings;
- Avoid the use of glass sheets with less than a 1.5 metres  $\geq$ width in storefront display windows;
- Avoid the use of solid doors, glass block or tinted, opaque or  $\geq$ mirrored glass;
- Façade design should not be overly complicated or  $\triangleright$ monotonous and should respect the functions of the intended uses. False facades typical of "themed buildings" and movie sets are not acceptable within the KTD;

- Fluorescent, neon and backlit aluminium signs on primary fascia's should be avoided: and
- Avoid the use of false fronts or mansard roofs that cover or obscure the overall appearance of the neighbourhood.









Figure 3.74

Figure 3.75

Examples of different façade treatments to lighten the façade without using traditional curtain glass wall







#### Reflectivity, Colour and Transparency of Glazing 3.7

A quality public realm is essential to achieving an attractive and active neighbourhood experience at the human scale. There are many principles associated in generating a high quality pedestrian environment in our cities, and one involves the creation of an interesting streetscape that engages our senses. The following sections outline the preferred and acceptable parameters relating to the reflectivity, colour and transparency of glazing at the pedestrian realm, to ensure an enhanced pedestrian realm is provided. It also outlines the design feature to avoid.

There are many benefits related to the functionality of glazing on façades including:

- Enhanced sun protection and cooling load control while  $\triangleright$ improving thermal comfort and providing most of the light needed with daylighting;
- Enhanced air quality and reduced cooling loads using natural  $\triangleright$ ventilation schemes employing the façade as an active air control element;
- Reduced operating costs by minimizing lighting, cooling and  $\triangleright$ heating energy use by optimizing the daylighting-thermal tradeoffs; and
- Improved indoor environments leading to enhanced occupant  $\geq$ health, comfort and performance.

Strike a Balance: Glazing is a classic design element that requires one to balance the desire for thermal comfort, energy efficiency, and light quality (all of which require small window areas) with equally important desires for view, daylight, and connectivity with the outdoors (all of which benefit from large vision-glass areas). Less window/ curtain wall area, and higher system performance are lowcost, high performance prescription for buildings suffering from excessive glazing area. It is recommended a proper balance of glazing quantity and quality is achieved.



Figure 3.76 The Empire State Building, New York: An office building with a history that anchors itself as an icon of leadership for the world. The ground breaking energy efficient Figure 3.78 retrofitting has cut \$7.5M in energy costs over the past three years.



Figure 3.77



Technology that tints windows automatically throughout the day to control glare and solar heat into the interior space





#### **Recommended:**

- Use largely transparent façades at the lower levels and adjacent to the streetscape where ground floor retail, commercial, community or other non-residential uses occur to promote streetscape activity;
- Lobby's and other common spaces should exhibit higher transparency in their façade treatments and should provide a visual connection to the pedestrian realm;
- Ensure visibility into buildings from ground level façades facing public streets and the pedestrian realm. Walls should be highly transparent with windows and doors making up at least 50% of the façade;
- Dual-pane insulating glazing usually provides more comfort as it improves acoustic performance and offers greater flexibility in product selection. New, energy-efficient buildings should use insulating glazing;
- Vary glazing selection by façade, if possible. A lower Solar Heat Gain Co-efficient (SHGC) on the windows with a southern, eastern and western aspect will contribute to reducing the cooling load;
- High VT glazing in a neutral or soft colour helps make windows more effectively link to the outside world;
- Take any exterior shading into account when selecting appropriate glazing, as this reduces the importance of a low glazing SHGC;
- When windows will be near occupants, insulating glazing is the best choice for comfort;
- The use of reflective roof surface materials with high solar and thermal reflectivity is encouraged to help reduce urban heat island effect;

- Choose a spectrally selective glazing. For glare control, moderate VT (50-70%) is a good starting point. The larger the windows, the more critical the glare control and the lower the desirable VT; and
- Balance the conflict between glare and useful light. If glare is an anticipated problem, and an architectural solution to glare is not possible (e.g. shading systems), select a glazing VT that is a compromise between glare and natural light. A VT as low as 25% may still provide adequate daylight, depending on the function of the building.



Figure 3.79 Phoenix Central Library, Arizona - The "sails" on north facade help reduce sky glare and undesirable direct-beam solar radiation when the rising and setting sun strikes the north facade. The shading means that high-VT glazing can be used, which allows more daylight to penetrate the interior.



Figure 3.81 Three Pacific Place, Hong Kong – Building with reflective blue glazing that enable good levels of natural light.



Figure 3.80 The Terry Thomas building, Seattle – Fixed exterior tinted glass overhangs help to reduce solar heat gain while allowing daylight into the interior spaces.







#### Acceptable:

- For retail sites, the extensional glazing to the ground to avoid  $\geq$ blank walls is permitted;
- Large areas of glazing which extend from floor to ceiling are  $\geq$ recommended for office developments as this can provide excellent views and good levels of natural light; and
- Dimension stone to achieve diverse architectural and aesthetic  $\geq$ effects and varieties of finishes. Finishes include polished finishes that give the surface a strong reflection of incident light providing a smooth, satin-like ("eggshell") and a nonreflective surface. More textured finishes include bushhammered, sandblasted, and thermal.



Figure 3.82 Cyberport, Hong Kong enhanced with external solar shading finishes.

Figure 3.83 The Bank of China, Hong Kong: An example of how reflective glazing can achieve a positive visual effect in commercial areas.



Figure 3.84 One International Finance Centre, Hong Kong

Figure 3.85 International Commerce Centre, Hong Kong

The main façades are large areas of glazing that extend from floor to ceiling







#### To Be Avoided:

- Dark glazing. Many dark glazed buildings block more light than heat, and therefore, do not contribute to reducing cooling load. Additionally, dark glass can produce a gloomy internal atmosphere. Dark glass not only reduces daylight, it also increases occupant discomfort on a sunny day. The glass absorbs solar energy and heats it up, turning it into a virtual furnace for anyone sitting nearby. Solar control is now available in much clearer glazing treatments;
- Tinted glass as it erodes the quality of the streetscape by hiding what lies behind commercial buildings and simultaneously contributes to heating the urban environment by reflecting the sun back into the street and sidewalk;
- Relying only on glazing to reduce heat gain and discomfort. If direct solar beams come into the building, they still create a mechanical cooling load and discomfort for occupants in their path. Exterior shading combined with a good glazing selection is the best window strategy. Interior shading options can also help control solar heat gain; and
- Low visible transmittance glazing such as bronze, grey, or reflective-film windows were often used in office buildings of the past as they reduced solar heat gain but that problem has been overcome by modern spectrally selective (SS) windows which allow for significant daylighting and psychological benefits while avoiding overheating during sunny days.



Figure 3.86 Dark glazed buildings can produce a gloomy internal and external atmosphere





#### 3.8 Control of Advertisement Signs and Projections

The use of extravagant graphic elements and signs in the urban areas of Hong Kong is generally recognised as a cultural symbolism which contributes greatly to the townscape and totally dominates the character of certain shopping streets in the urban area. This type of information system transmits messages in as direct a form as possible with respect to restrictions, rules, activities and places.

#### OBJECTIVE

Throughout Kai Tak, several types of information must be conveyed to the public including retail signage, directional signage, street name signage and residential name signage. Whilst well-designed graphic symbols apply to certain categories particularly those concerning safety, controls should not seek to inhibit the flamboyant use of advertising signs except with regard to certain building and dimensional constraints.

#### **Retail Signage**

#### **Recommended:**

- > All signage should be clear, legible and concise.
- Signs should complement, rather than clutter, the streetscape.
- Directional signs should be provided to guide pedestrians.
- Illumination or backlighting should be visually appealing and will attract attention to signs and promotes visual vibrancy.
- Portable Signs: The use of portable signs (i.e. sandwich boards or menu boards) are permitted to enhance visual interest in retail and commercial areas. These should not exceed the dimensions of 1.5m x 1.0m.

#### Acceptable:

- Flush Wall signs should avoid covering any window or door openings, or any prominent architectural features / detailing; and
- Sign should avoid detracting from the desirable character of the setting in which they are located.

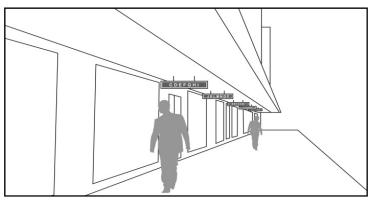






Figure 3.88 Example of standardised wall mounted signage







## To Be Avoided:

- Ground floor window signs should be discouraged as they  $\geq$ block views between the street and active interior uses:
- Placing signs where they block pedestrian passage;  $\geq$
- Large banner or advertisement boards on the building facade;  $\geq$ and
- Signs that may obstruct the drivers views or cause danger to  $\geq$ the public in anyway.

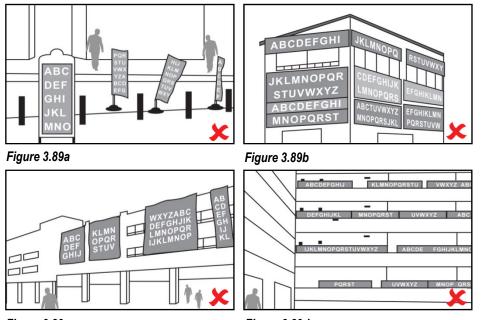


Figure 3.89c



#### **Commercial Zone**

#### **Recommended:**

Signage should be clear and concise and easily legible.

## Acceptable:

- Flush wall signs should avoid covering any window or door  $\geq$ openings, or any prominent architectural features / detailing;
- Sign should avoid detracting from the desirable character of  $\geq$ the setting in which they are located; and
- This could be in line with the Public Creatives Study.  $\geq$

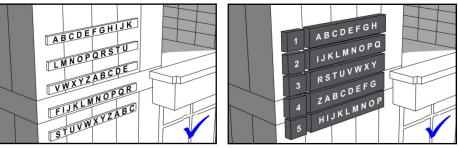


Figure 3.90a

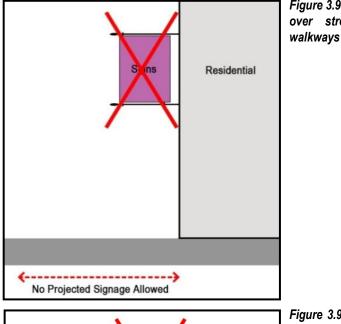
Figure 3.90b

Commercial signage should of an appropriate size and scale and easily identifiable









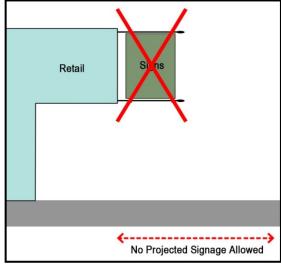


Figure 3.91 Signage projecting over streets and pedestrian walkways should be avoided

Figure 3.92 Signage projecting over streets and pedestrian walkways should be avoided

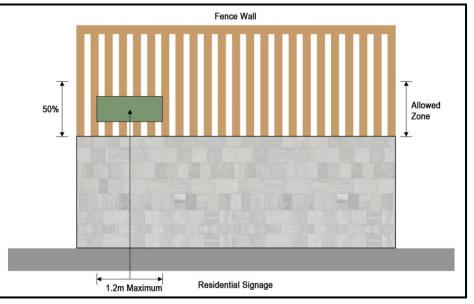
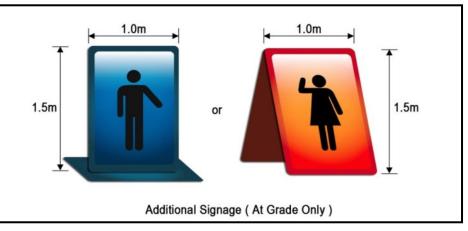
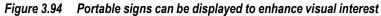
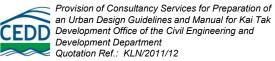


Figure 3.93 Residential signage should make reference to the Public Creatives Study's recommendations











#### Vehicle Zones Design:

#### **Recommended:**

Signage should be clear and concise and easily legible.

#### Acceptable:

Signs should fit in with the urban character of their location.

#### To Be Avoided:

- Limit the use of directional signage to minimise visual clutter;
- Signs should not flash, revolve, move or contain mechanisms that give the impression of movement;
- Signage extending over a carriageway is discouraged in line with Transport Departments advice; and
- Directional signs that are likely to obstruct the view of traffic, or likely to unduly distract the attention of road users.

#### Remarks:

Sign lettering and background shall be in line with Hong Kong Planning Standards and Guidelines, Transport Department and any other official standards.



Figure 3.95 Advertising signs in old urban area of Hong Kong are invasive and can be seen at every possible height and angle







#### Pedestrian Zone Design:

#### **Recommended:**

- Directional signage should be easy to locate and clearly identifiable;
- Should be located in a safe way without detracting the characteristics of the area; and
- Signage should be clear and concise and legible for easy navigation that would not cause confusion.

#### Acceptable:

- Directional and information signage helps to provide clear directions to appropriate destinations, services and community facilities;
- Street name signage should be of an appropriate size and scale and easily identifiable; and
- Signage that is unobtrusive and integrates with the surrounding landscape can promote visual variety and positively contribute to the built environment.

#### To Be Avoided:

- Signage should be appropriate to the streetscape in which they are located;
- Signage should not unduly dominate the visual landscape; and
- Large or freestanding billboard signs in residential areas.

#### Remarks:

Sign lettering and backgrounds shall be in line with Hong Kong Planning Standards and Guidelines, Transport Department requirements and any other official standards.

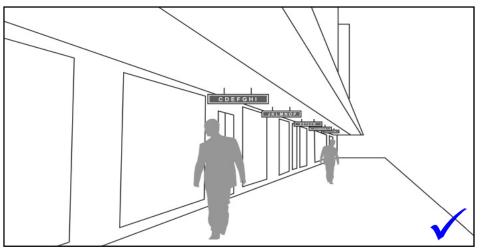


Figure 3.96a Signs can be attached to the wall of a building at 90 degrees with uniform design and sense of order



Figure 3.96b Signs can be positioned so as not to obscure architectural details but instead shall be integrated into the building design







#### **Guidelines on Retail Design** 3.9

Throughout retail history in Hong Kong, shopping has been profoundly interlinked with the evolution of urban places, place making and the city's identity. In the context of the KTDA it will also be important to ensure that the retail environment is not only consistent in guality and expression but that there is a consistent approach to design.

#### OBJECTIVE

It is essential that a high degree of comfort be achieved in the public domain. Buildings should provide shading at the ground level through design features especially in a humid city like Hong Kong. It is important to sets out broad design principles and parameters with an emphasis to establish the ground floor rhythm and proportions.



Figure 3.98d

# Examples of contemporary and modern colonnade design features in Hong Kong









Figure 3.99 Example in Hong Kong of where walls include windows and doors making up at least 50% of the façade for retail development. This helps to activate the streetscape.



Figure 3.100 Hong Kong examples of retail façades. The colour, reflectivity and transparency of glazing is selectively chosen to avoid creating an uncomfortable pedestrian environment. Promotes retail activity at grade.



Figure 3.101 Lobby of the Upper House Hotel in Hong Kong is highly transparent



Figure 3.102 Example in Hong Kong of active retail below office development. The glass façade activates the streetscape using transparent glazing. This also helps to create sense of security for pedestrians at night time.



Figure 3.103 Example of establishing a pedestrianfriendly character with corner setback that provide visual interest to pedestrians, convey a sense of scale and express a liveliness in terms of shopping.







#### OBJECTIVE

To ensure consistency, uniqueness and adherence for a comprehensive urban design language in Kai Tak, appropriate colour tones, font style, font sizes and hoarding board dimensions and design should be selected in line with those recommended by the Public Creatives Study.

Recommended (See Diagram "a" for preferred colonnade form)

- Natural Shading whereby additionally trees are used whenever possible to shade sidewalk and storefront areas;
- Canopy A horizontal canopy can be applied to façades of buildings, or supported on free-standing structures, to provide shade for pedestrians at ground level;
- Colonnade a covered, shaded space by means of a colonnade, is generally built into the ground floor along primary retail frontages;
- A continuous solar shading through the incorporation of colonnade is recommended at the ground floor of all retail frontages within KTDA, to be a minimum of 3 metres in width with a minimum clear height of 4.2 metres;
- Food and beverage at rooftop terraces to promote the vibrancy of the retail belt;
- A minimum spacing width of 6-8 metres between columns is recommended; and
- The walkway underneath the colonnade will be GFA accountable.

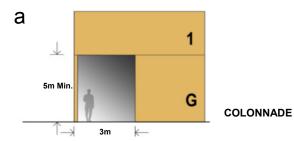




Figure 3.104 Historically, Hong Kong employed extensive use of colonnades within shop house development.







#### Acceptable:

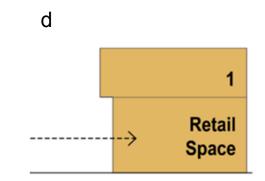
- Brise-Soleil: Sun shading may be achieved at both ground  $\geq$ and upper floor levels using a brise-soleil device cantilevered from the arcade. The recommended width of these devices shall be no more than one-third the height of the wall to which it is shading;
- The inclusion of softscape treatments to ensure a degree of  $\geq$ aesthetic amenity is achieved;
- The area underneath the canopy is regarded as conventional  $\geq$ pedestrian circulation space and will not be GFA accountable similar to covered footbridges or waterfront areas.
- The option to extend a canopy over the pedestrian streets  $\geq$ between the retail belt sites is also permissible;
- A covered walkway extending outside the colonnade to the  $\geq$ edge of the retail belt site boundary.

Diagrams "b" and "c" provide a reference as to the acceptable type of treatments that can be utilised.

#### To Be Avoided:

The colonnade should avoid overuse of columns. The structural support should be such that it allows good visual permeability through to the façade.

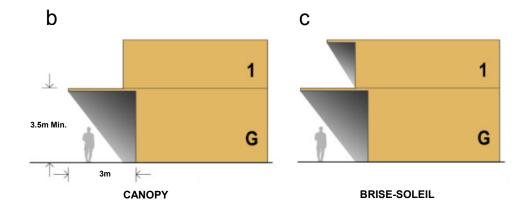
Diagram "d" provide a reference as to the type of treatments that should be avoided.





Remarks:

Low rise retail can adopt several forms and address shelter in a range of applications. In Kai Tak, colonnade development (a) is preferred to optimise shade and shelter.







#### 3.10 Ambient Tone and Colour

#### OBJECTIVE

Building projections can extend to include design feature such as cornices, eaves, sills, belt courses, shading devices, balconies, and other architectural features. These features should be designed in accordance with the standards set forth in related guidelines and ordinance. In commercial areas projections such as balconies and terraces, cornice and similar features that increase either the floor area of the building or the volume of space enclosed by the building above grade, is recommended and shall be limited as follows:

#### **Recommended:**

- Every balcony projected from an upper storey of a building shall have a clear height, upwards from the floor of such balcony, of not less than the clear height of the storey from which it projects;
- Vertical clearance shall at a maximum of 3.5 metres from the sidewalk is recommended along the perimeters of each development site fronting the Station Square and the Multipurpose Sports Complex; and
- External Shading Devices: in the tropical climates city like Hong Kong, the building design should keep the solar radiation off the opaque solid elements of the building's envelope where possible. Special care should be taken to shade the windows to reduce the incoming heat and the risk of overheating.

#### Acceptable:

- Projections may be placed within the curtilage of each site and serve to promote diversity of detail and variety on building façades; and
- The barrier provided should be so designed as to minimise the risk of people or objects falling, rolling, sliding or slipping through gaps in the barrier, or people climbing over the barrier.

#### To Be Avoided:

- No projection should overhang an NBA or a place for public circulation;
- No pipes (including water and drain pipes) or gutters, or the appurtenances of such pipes or gutters facing pedestrian street;
- No drying rack or supporting structure for an air-conditioning unit shall project over a pedestrian street of the Grid Neighbourhood;
- Avoid excessive projection of balconies, cornice and shading device projections; and
- No eaves, cornices, mouldings or architectural projections shall project over a street more than 0.5 metre or at a height of less then 2.5 metres above the level of the ground.

#### Remarks:

Projection, cornice and balcony shall be in line with Buildings Ordinance & Regulations of Hong Kong any other official standards which are applicable to the design.







The followings illustrate the types of projections that can be used. Diagrams of suitable projections - including balcony and shading device designs that can be employed.

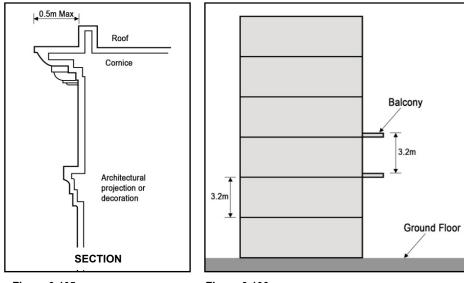
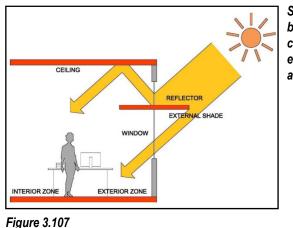


Figure 3.105

Figure 3.106



Shading device projections. balconies and other detail features can contribute significantly to enhancing visual interest, architectural texture and variety.





Figure 3.108 Price Tower Arts Center, Oklahoma, United States

Figure 3.109 Juliet Balconies, old bailey, UK



Figure 3.110 City Green Court, the building will feature glass façades interrupted by protruding vertical fins and balconies.



Figure 3.111 Office building with balconies, Tel Aviv in Israel

P.78





#### 3.11 External Works

External works refers to external structures that are not the main part of the building block structure. These include retaining walls, fence walls, awnings, balconies, pipes, lighting etc. The following bullet points provide guidelines for external works that are should ideally be applied to buildings facing the pedestrian streets.

#### **OBJECTIVE**

Ensure external works avoid visual clutter on the facades of buildings facing the pedestrian street, the retail belt and the Station Square.

#### **Recommended:**

- Building materials for exterior works should be selected for  $\geq$ 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  $\triangleright$ 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)  $\triangleright$ Regulations as well as all other relevant legislation and guidelines for acceptable parameters relating to 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 also be avoided.



Figure 3.112a

Figure 3.112b





Figure 3.112c

Figure 3.112d

Untreated service, air conditioning, pipelines and utility infrastructure can significantly undermine the architectural and visual quality of development.







#### 3.12 Fence Wall Design and Permeability

The character of street frontages in residential developments is often significantly affected by perimeter walls and fences. To enhance the visual permeability and porosity throughout Kai Tak, specific height, materials and levels of transparency of fences are recommended to enhance levels of visibility and outlook, informal surveillance, privacy, security and frontage activity. Fence walls are not usually adopted in commercial uses such as offices and retail buildings. It is, however, a general recommendation that the porosity of the fence wall and related requirements should be generally specified in lease conditions.

#### **OBJECTIVE**

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

#### **Recommended:**

All boundary walls and fences fronting pedestrian streets and  $\geq$ vehicular streets shall be appropriately designed to achieve visual and physical porosity of not less than 50% of the surface area across their entire length per linear metre from 1 metre from the average formation level of adjacent roads / footpaths or land.

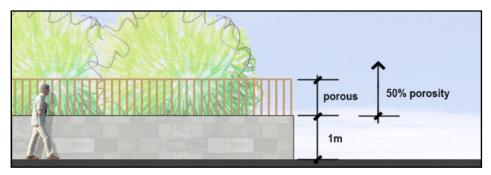


Figure 3.112 The fence wall with a minimum of 50% porosity is acceptable facing the pedestrian street





Transparent and clear Figure 3.113 material helps to increase visibility such as glass

Figure 3.114 Visually porous fence walls enhance openness and visual permeability



Figure 3.115 Railings are usually used to define the boundary and premises of commercial sites







#### Acceptable:

- To engender an impression of openness and permeability  $\geq$ through the application of different materials, front fences (and fences onto open space) should be highly visible and / or partially transparent; and
- The materials utilised in the construction of fence walls should  $\triangleright$ 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.

The following illustrates the types of fence wall that are acceptable.



Figure 3.116

Figure 3.117

An acceptable fence wall design



#### To Be Avoided:

- The creation of fortress like environments:  $\geq$
- $\triangleright$ 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:
- Avoid the use of invasive species to ensure plants will not  $\geq$ become overgrown which will reduce the porosity of the fence wall; and
- to maintain the visual porosity of the fence wall design plant  $\geq$ material that grows to a height above 1 metre is discouraged.





Figure 3.118

Figure 3.119



Figure 3.120

These three images illustrate the types of fence walls that should be avoided







### 3.13 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.

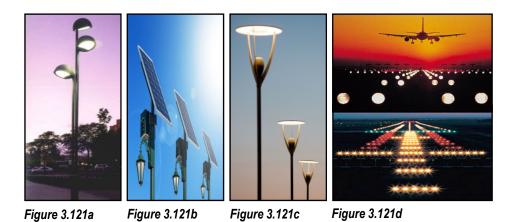
#### **OBJECTIVE:**

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

#### **Recommended:**

- Lighting (exterior building and landscape) shall be directed  $\triangleright$ away from adjacent properties and roadways, and shielded as necessary. In particular, no light shall be directed at the window of any residential unit either within or adjacent to a project;
- Recommended to provide well-designed architectural and  $\triangleright$ landscape lighting, all exterior lighting (building and landscape) should be integrated with the building design, create a sense of safety, encourage pedestrian activity after dark. and support the retail belt's nightlife;
- Ensure lights are correctly adjusted so that they only illuminate  $\triangleright$ the surface intended and do not throw light onto neighbouring property;
- Lighting within the NBAs, setbacks and pedestrian streets  $\triangleright$ should be of a pedestrian scale and should generally not exceed 5 metres in height, with close regular spacing;
- Special feature lighting be provided along the commercial  $\triangleright$ development, 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 to reduce sky glow especially for those non-domestic sites adjacent to residential areas, 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;
- Security lighting should be of a design similar to feature  $\geq$ lighting; and
- To retain some characteristics reminiscent of its aviation  $\geq$ history by installing feature lighting that preserve the historical and cultural features of Kai Tak Runway at the Runway tip.



Shielded exterior lighting, featured and security lighting that is integrated into the architecture and landscape can help promote natural surveillance, cultural interest and add visual interest to the area whilst avoiding glare.







#### Acceptable:

- The shape and colour of lights can also generate threedimensional 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 could be mounted on fence wall or buildings, although this will require easements to be secured from the property-owners;
- Security lights should be correctly adjusted so that they only pick up the movement of persons in the area intended and not beyond;
- 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:

- Design lighting to avoid glare through full cut-off light fixtures and ensure lighting does not spill 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

> The installation of equipment that which spreads light above the horizontal.



Figure 3.122

Figure 3.123

Examples of mounted wall lighting



Figure 3.124

Examples of fence wall lighting

Figure 3.125







#### 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 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 3.126 The diagram shows the distribution of light when wide-angle lights are used. A considerable amount of light is wasted. Residents of buildings near the road / footpath suffer from light trespass and must keep their curtains drawn to tackle excessive and unneeded illumination of their windows.



Figure 3.127 The wall mounted light above has better illuminated the focused area. People living in building adjacent to the outdoor light need not worry about drawing their curtains as the light is incident on the focused area and is not distributed in a very wide angle. Obviously when the light is not being used to illuminate the sky and adjacent building, far fewer lumens are needed.







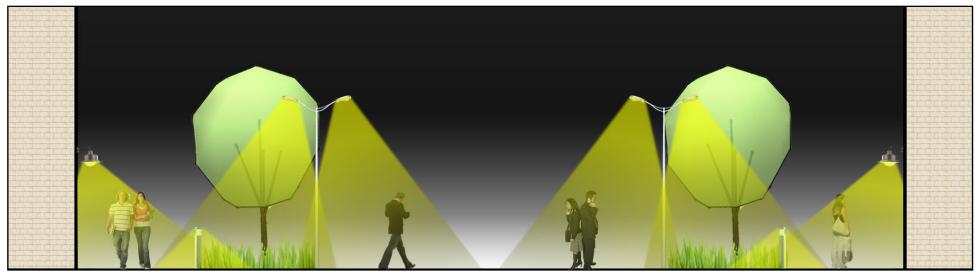


Figure 3.128 A practical example of the impact of uniformity of light, the uniformity of light distribution is vital to reduce glare. Glare control is particularly important when select the lighting applications.











#### Acceptable:

- As a general guideline, at least 1.2 meters of soil depth (excluding allowance for drainage) 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 Master Plan. 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 could be at ground level, podium level, sky gardens, slopes, vertical walls, roof of the buildings, etc. For the purpose of calculating countable greenery areas should be built in or fixed permanently to buildings with recommended minimum soil depths (excluding drainage provision) of 1,200mm for trees, 600mm for shrubs / climbers / bamboos and 300mm for grass / groundcovers.
- 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 3.130 Example of continuous planning area* 

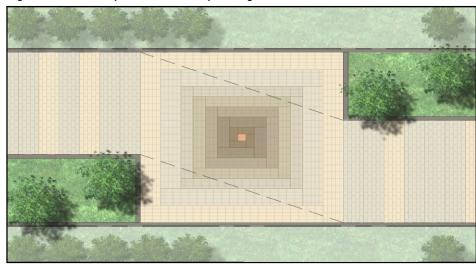


Figure 3.131 Indicative layout plan





#### 3.14 Greening

#### OBJECTIVE

Greening and landscape design within Kai Tak shall encompass aesthetic design, distinct character, innovative and creative proposals that would make the Kai Tak District a world class destination and a lively and attractive place to visit. Under this very requirement, open spaces, pedestrian ways, the Kai Tak River, railway, underground shopping street / subway system, footbridges as well residential developments shall be suitably and architecturally inter-mingled so as to create people flow and synergy.

#### **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's Landscape Master Plan;
- All trees shall be firmly within specialist guying systems and root barriers shall be installed;
- Planter beds should preferably be continuous with internal width as wide as practicable; and

- Planter beds should preferably be continuous with internal width as wide as practicable; and
- Instead of individual trees pits, planters are usually preferred. Soil corridor free of underground utilities should be provided along street planting areas.







"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 3.133

#### Examples of root control barriers

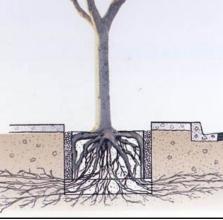
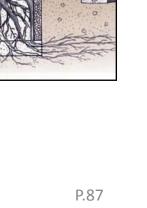


Figure 3.134







#### To Be Avoided:

- Poor landscape treatments that incorporate complicated  $\geq$ designs, are expensive and difficult to maintain;
- Avoid poor plant selection and soil quality; low success rates;  $\geq$ planting blocking views for drivers or pedestrians; and poor maintenance arising from poor accessibility for contractors;
- Avoid planting thorny species within Kai Tak these could lead  $\geq$ to complaints (e.g. roses, thorny fruit trees and cacti);
- Use of trees with root systems that could damage roads and  $\geq$ footpaths; plants that grow tall enough to contact electricity and broadband cables; and plants that may overhang footpaths where they might interfere with pedestrians and children in strollers, avoid plants with toxic foliage, flowers, fruit or nuts:
- The minimum headroom for planting areas under elevated  $\geq$ structures is limited to 2,500mm and where situated adjacent to an access path. Tree planting should be avoided in these areas.
- Avoid using invasive species to ensure adverse environmental  $\triangleright$ impacts do not occur;
- Minimise the need for benching as it can be visually jarring  $\geq$ and creates areas that are hard to maintain; and
- $\triangleright$ Cut and fill batters should be feathered into the natural landform and geometric profiles avoided unless it is a deliberate design feature.

Remarks:

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



Figure 3.135 Example of planting blocking views for drivers or pedestrians; and poor maintenance arising from poor accessibility for contractors.



Figure 3.136 Avoid selection of trees with root systems that could damage roads and footpaths









# 4.0 OVERVIEW

#### 4.1 Conclusion

The preceding sections have outlined design guidelines that are specifically advocated for the pedestrian zone within the KTD (excluding the Grid Neighbourhood and the Runway Precinct). They are intended to be applied in a flexible manner and their interpretation, and application should not be rigid but encourage creative solutions.

The core aim of the UDGM is to assist architects, designers and planners etc. by providing them specific information, control parameters and guidelines that will help them to contribute to the achievement of a consistent high level of urban design throughout the KTDA.

It is intended that they can, through the medium of the proposed guidelines and other effective controls, assist in meeting with the aspirations of the people who will live and work in Kai Tak, and serve to inform both first and last impressions for visitors.

In summary, the UDGM aims to raise the quality and consistency of the design of streets and spaces of the domestic and private nondomestic sites in Kai Tak (outside of the Grid Neighbourhood and the Runway Precinct) and widen the range and quality of the purposes they serve by:

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

Remarks:

Compliance with all relevant Guidelines and Regulations is necessary.

In conclusion 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.



Overview

# Appendices

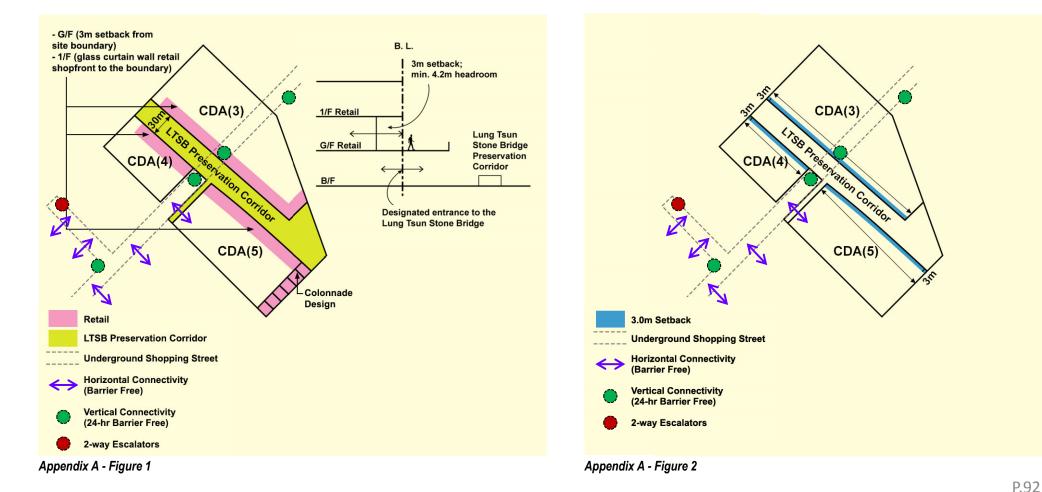




#### Greening

**LC1** - A 30 metres wide Preservation Corridor shall be maintained along the extent of the excavated remnants of the Lung Tsun Stone Bridge (LTSB). The extent of the width of the Corridor shall be measured at 15 metres either side of the centre line of the remnants of the LTSB.

**LC2** - To promote definition and delineation of the perimeter of the Preservation Corridor at least 100% of the extent of CDA site boundaries adjacent to the Corridor shall be abutted by the façades of buildings located within each CDA.



Appendix A: Control Parameters for the Development Sites abutting the LTSB Preservation Corridor



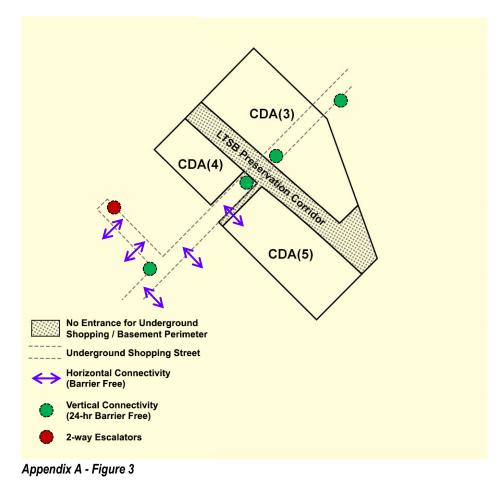


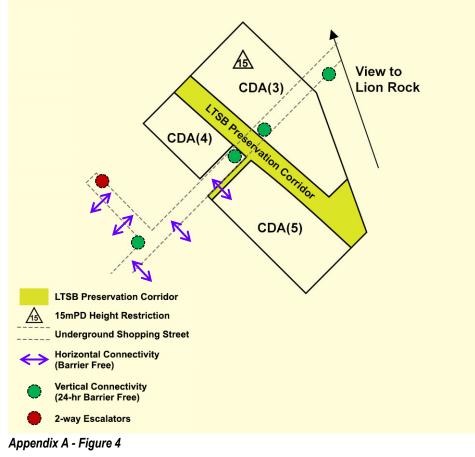
#### Greening

**LC3** - Designated underground street or basement or entrance thereto shall physically encroach upon the delineated extent of the Preservation Corridor.

#### **View Corridor to Lion Rock**

**LC4** - Development within Site "CDA(3)" should not exceed a height of 15mPD to maintain the vista to Lion Rock.





Appendix A: Control Parameters for the Development Sites abutting the LTSB Preservation Corridor

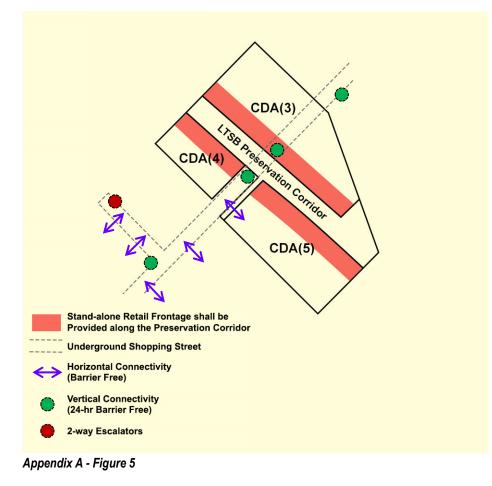


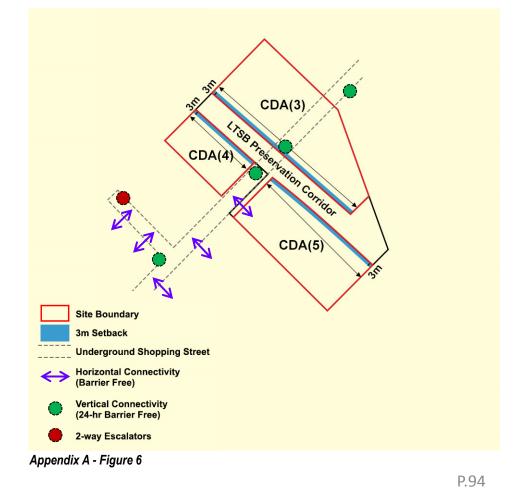


#### **Retail Parameters**

**LC5** - Stand-alone retail frontage shall be provided along the perimeter of CDA Sites 3, 4 and 5 that abuts the edge of the Preservation Corridor.

**LC6** - Retail development and other development within the said sites abutting the Preservation Corridor shall be setback 3 metres from the site boundary at ground level.

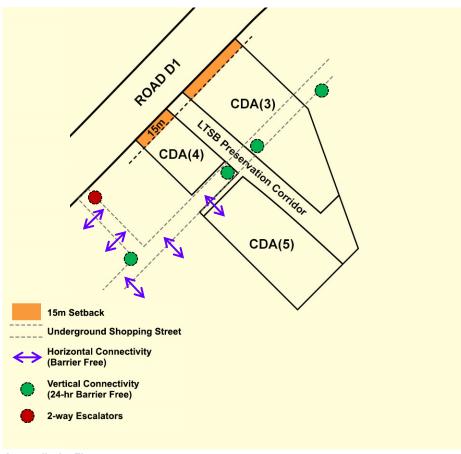




Appendix A: Control Parameters for the Development Sites abutting the LTSB Preservation Corridor



**LC7** - Development within "CDA(3)" and "CDA(4)" that abut the Preservation Corridor shall be setback by 15 metres from the northern perimeter of each site fronting Road D1.



Appendix A - Figure 7

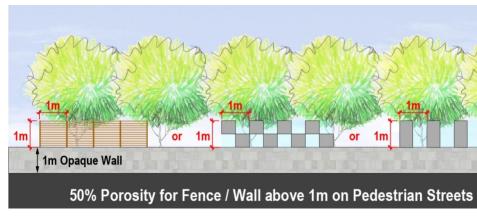
Recommended Design Principles for Domestic and Nondomestic Sites at the Runway Precinct

#### Site Coverage

**LC8** - Commercial development sites within the Runway Precinct shall be subject to maximum site coverage of 70%.

#### Fence Wall

**LC9** - All boundary walls and fences fronting pedestrian streets shall be appropriately designed to achieve visual and physical porosity of not less than 50% of the surface area across their entire length per linear metre from 1 metre from the general formation level of adjacent pedestrian streets / footpaths or land.



Appendix A - Figure 8





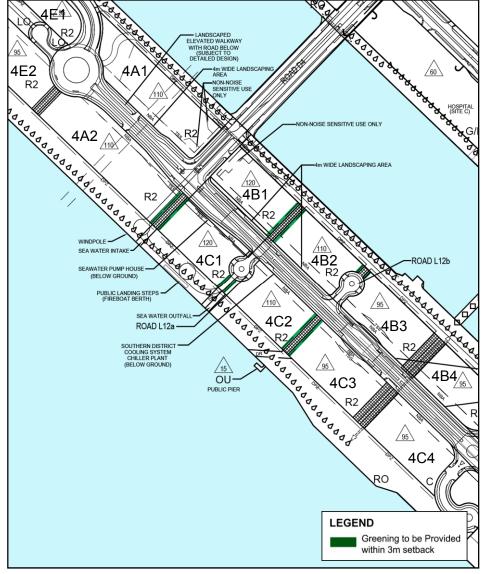


#### Greening

**LC10** - Greening shall be provided within the 3 metres building setback within each site located along pedestrian streets save for where the retail belt abuts pedestrian streets.



Appendix A - Figure 9



Appendix A - Figure 10



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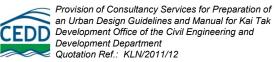


**LC11** - The overall minimum greening ratio shall be 30% of the site area. The greening ratio within the pedestrian zone shall be equivalent to 20% of the site area and the greening ratio at roof shall be equivalent to 20% of the roof area.

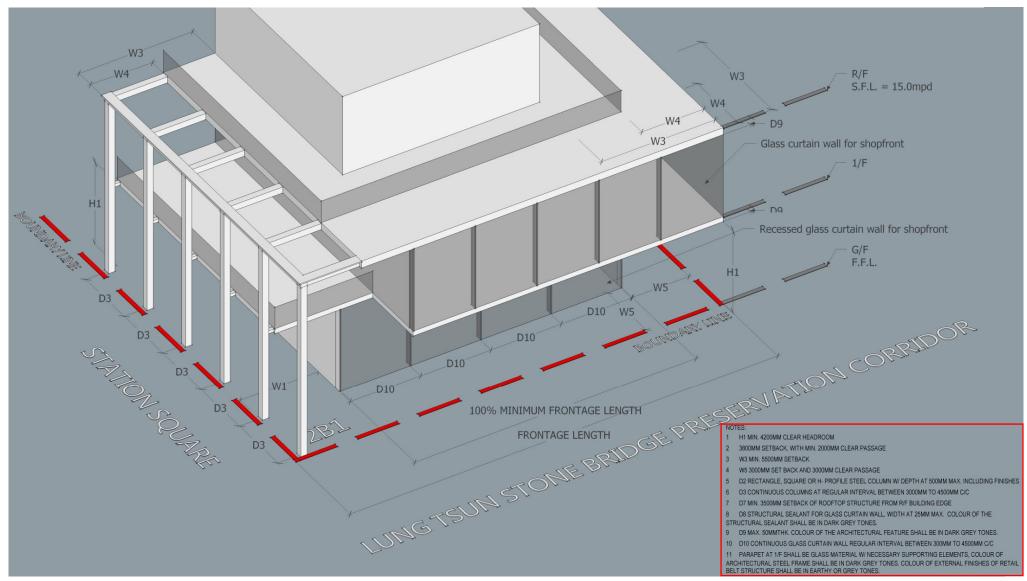
**LC12** - Except with the prior written consent of the Director of Lands, no building or structure shall be erected or constructed within the NBAs except the following:

Boundary walls or fences or both, provided that if the boundary walls or fences or both shall front onto pedestrian street, road or path, such boundary walls or fences or both shall be erected or constructed in all respects to the satisfaction of the Director of Lands to achieve visual and physical porosity of not less than 50% along the horizontal plane per linear metre from one metre above the general formation level of the adjacent pedestrian street, road or path; and landscaping features and associated facilities.







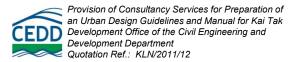


# Appendix A - Figure 11 Control Plan of the LTSB for Sites 2A1, 2A2 and 2A2

Appendix A: Control Parameters for the Development Sites abutting the LTSB Preservation Corridor

P.98

Appendices





# **Appendix B: Definitions**

**Pedestrian Zone**: Pedestrian zones are areas of a city or town reserved for pedestrian only use and in which some or all automobile traffic may be prohibited.

**Fence Wall Porosity**: It is the extent of visual and physical porosity along the horizontal plane across their entire length per linear metre from one metre from the general formation level of adjacent roads / footpaths or land. Specifications are imposed to ensure that perimeter walls do not constitutive physically dominant or visually adverse elements within the built environment and enclose spaces to the extent that visual permeability of affected.

**Greening**: can be interpreted within the broader definition of landscape, a word which originates from "painting" and generally refers to the appearance of the land cover. It includes components such as shapes, textures and colours, and their combinations to create distinctive patterns and pictures – HKPSG Ch4. Greening refers to the inclusion of soft landscape treatments at a specific given ratio on a horizontal or vertical plane within a given site and around, on, and upon a building within that site. Horizontal greening is typically applied at ground or roof level. Vertical greening refers to the vertical plane of a building (i.e. upon the façade).

#### Non-Build Areas (NBAs)

The ES to the latest approved Kai Tak OZP No. S/K22/6 and Proposed Amendments Proposed by the Town Planning Board (the Board) make reference to the use of "Non-Building Areas". The purpose of the NBAs as defined are:

"....areas...of different widths...designated in various zones to serve multi purposes including the enhancement of air ventilation, improvement of visual permeability and the promotion of urban design concepts".

Whilst the realisation of these objectives infers a presumption against development the OZP does allow that the following will be permitted within NBAs:

- Landscaped areas and street furniture;
- Underground structures; and
- Fence or boundary walls with high visual / air porosity along the boundaries of commercial / residential sites.

The OZP states clearly that only "under exceptional circumstances" would a minor relaxation related to intrusions into NBAs be considered by the Town Planning Board "on application under section 16" of the Town Planning Ordinance.

For the purposes of developing clauses for inclusion in lease conditions it is important that there should be no ambiguity with respect to the realisation of the planning intention behind NBAs. As such, and for the purposes of certainty there shall be a presumption against development within an NBA save for hard and soft landscape treatments and the construction of a physically and a visually porous fence wall, gate, or fence as specified in the lease conditions.



#### **RETAIL FRONTAGES**

Given changes to building regulations and market taste, retail frontages in Hong Kong take many forms. These range from retail incorporated into colonnaded developments, the adoption of canopies or projections or in many cases provided no weather and shade protection and retail malls with different floor to ceiling height provision.

In the context of the KTDA it will be important to ensure that the retail environment is not only consistent in quality and expression but that there is a consistent approach to design within each neighbourhood and component part of the development.

In the North Apron low rise retail development will delineate the northern perimeter of the neighbourhood with major aspects to the Station Square. The Square will constitute one of the showpiece development areas within the KTDA.

The following sections address:

- The design approaches that should be considered with respect to shopfront design.
- > The component parts that are paramount in retail design.
- The manner in which the retail units will be secured i.e. security shutters.

#### COLONNADES

As mentioned, the design vision for retail development is to incorporate colonnades at the front of each retail block. These are to be a minimum depth of 3 metres and a minimum height of 4.2 metres. Columns supporting structure over the colonnade may be located within the space allocated to pedestrian circulation beneath the colonnade.

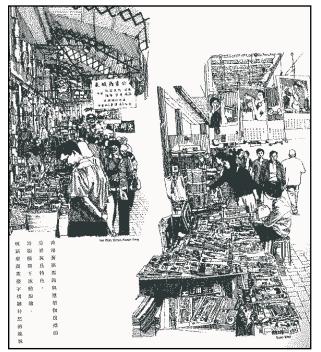
The space occupied by columns should, however, be as nominal as is practicably possible. Colonnades shall be used solely for the purposes of public circulation and shop-window viewing. Any al fresco dining shall be out with the curtilage of the colonnade and within the 3 metres hardscape front set back to each retail lot. In design terms retail colonnades should respect the scale and proportion of building elevations. Double storey colonnades have advantages for light penetration. Their provision should be considered with respect to established developments to ensure continuity of architectural rhythm. The component parts that are paramount in retail design;

- The design approaches that should be considered with respect to shopfront design; and
- > The manner in which the retail units will be serviced.

#### SIGNAGE MATERIALS

The materials used for signage in retail, shopfront and colonnade construction should be of good quality, durable and in keeping with chromatic themes and textures and the character of early phases of development that may pre-exist later developments. In general, the range, number and type of materials and colours used should be kept to a minimum.





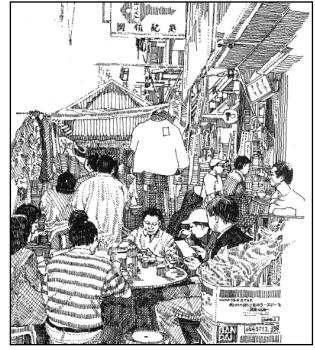
Appendix C - Figure 1a

Examples of Traditional Retail Shopfronts



Appendix C - Figure 2a Examples Contemporary Retail Shopfronts

# Appendix C: Retail Design Parameters



Appendix C - Figure 1b



Appendix C - Figure 1c



Appendix C - Figure 2b



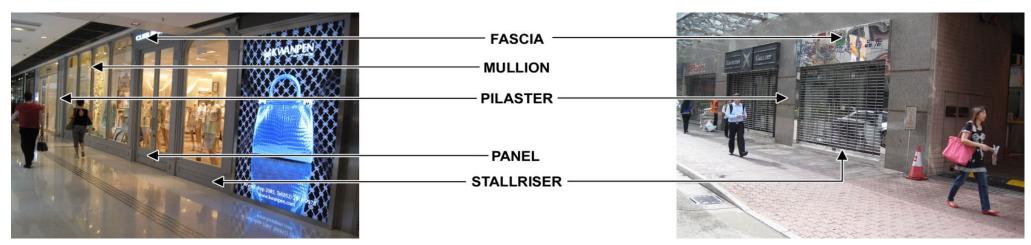
Appendix C - Figure 2c

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Appendices

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Appendix C - Figure 3

Appendix C - Figure 4



Appendix C - Figure 5

Architectural features of retail premises







# Urbie #

# **Appendix C: Retail Design Parameters**

#### COLOUR IN SIGNAGE DESIGN

The colour palette of signage design should reflect the context of the area, i.e. a modern colour palette will be acceptable in a modern shopping precinct although garish 'day-glow' colours are unlikely ever to be acceptable. Rich, dark colours with a matt finish often look very good, leaving window displays and lettering to provide accents. Whatever the context, colour schemes adopted should be subtle and blend harmoniously with the built and landscape environment.

#### **RETAIL FRONTAGE DESIGN**

In addition to the colonnades, a retail shopfront is typically made up of a number of elements which form a frame for the shop entrance and shop window. Each has their own practical and visual function (see illustrations using typical retail frontages in Hong Kong). The main components include:

- Fascia: The fascia provides the space within which the name and business of the shop is generally displayed;
- Pilasters: separate each shop from its neighbours and define the width of the shopfront;
- Stallriser: The stallriser provides protection at ground level and provides a solid base to the shop front;
- Architrave: this comprises the moulded frame around a door or window;
- Corbel: Pilaster heads often project to form a bracket or corbel. These can either be a decorative feature or a means to allow the fascia to be fixed at an angle looking down to the pavement;
- Cornice: The cornice defines the top of the shopfront and gives protection from the weather; and

Mullion: a vertical post or upright dividing a window or opening into two or more lights.

#### FASCIAS

#### OBJECTIVE

To create a distinctive and individual style through the design of fascia.

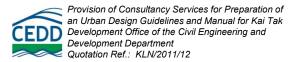
#### **Preferred:**

- Retain or reinstate cornices as the terminating element of the fascia; they should be weatherproofed;
- Restrict the width of the fascia within the pilasters and corbels, or line up with the window frame below where corbels are missing;
- Limit the content of the fascia (and other signage as outlined earlier) to contain the name and / or trade of the premises together with the street number of the premises and a telephone number if necessary; and
- Ensure the lettering is well spaced and cover a maximum of 75% of the width of the fascia. The colour scheme should complement the shop window frames. The lettering style should be simple and bold.

#### To Be Avoided:

- Avoid intermittent, flashing or moving displays; and
- Avoid glossy, highly reflective and luminous colours and materials.





# Urbie #

# **Appendix C: Retail Design Parameters**

#### WINDOW FRAME AND DOORS INCLUDING ARCHITRAVES

#### OBJECTIVE

To promote visual interest to the public realm and encourage distinctive individual shop units and promote universal design that cater for people who use wheelchairs; those who cannot walk easily, people who are deaf, people who are blind or visually impaired, the elderly, children, and people with pushchairs, prams or trolleys, etc. to access all retail premises.

#### **Preferred:**

- Use transparent glazing even in non-retail units;
- Use glass (laminated glass) to ensure public safety and as a security measure;
- Large areas of glazing should incorporate visual 'stops', (alerting people who are visually impaired to the presence of the glass) at least 50 mm high, across the width of the glazed area, at two heights: 850-1,000mm and 1,400-1,600mm above ground level, to ensure visibility against the background seen through the glass;
- Use colour, interesting shapes and proportions, quality materials and lively window displays, doors and windows can add visual interest to the public realm and produce distinctive individual shop units;
- Recess entrances to shopfronts to avoid doors opening outwards over external public circulation spaces;
- Entrance door with a width of 900mm for adequate clear opening and wheelchair access;
- Slightly recessed the plane of shop windows from the pilasters to provide depth and shadow and a variation in the plane;
- > Levelled thresholds at entrances should be level; and

Include a kicking plate and door handles that are easy to operate, positioned 1,000 mm above ground floor for safety purposes and to prevent wear and tear.

#### Acceptable:

- Mechanised ventilation units / air conditioner condensers create clutter and should be located to the rear of the property;
- Automated teller machines (ATM) are satisfactorily integrated into the shopfront as a whole and incorporate a substantial litter bin / receipt collector;
- Entrance doors should provide a minimum clear opening width of 830 mm for wheelchair access on a flat fronted shop; and
- Changes in level within the shop unit by ramps no steeper than 1:14 and a minimum of 1,200mm wide.

## To Be Avoided:

- The extensive use of opaque, frosted, reflective, mirrored or tinted glass is discouraged as they detract from the intent to promoting an active frontage;
- Solid or partly infilled frontages are not considered desirable in any circumstance;
- Deeply recessed windows or completely open frontages are not considered acceptable in visual and functional terms; and
- Ramps at entrances are discouraged.



#### SIGNAGE DESIGN

#### OBJECTIVE

To ensure that all signage achieves a high level of design quality in terms of its design and its relationship to the architectural design of buildings and the character of area. To ensure that all signage do not contribute to excessive visual clutter or visual disorder and detract the amenity and visual appearance of the area.

#### **Preferred:**

- Only one projecting sign per each retail premise or unit;
- Projecting signs installed at fascia level, at either end of the fascia panel; and
- Projecting signs that are modest in size and not exceeding dimensions 600x600x100mm.

#### Acceptable:

- Projecting signs contained within the curtilage of the retail colonnade;
- Signs that are internally illuminated and with the ability to adjust the light intensity;
- Signs that promote an active streetfront;
- Signs containing the shop name;
- Wall mounted signs that are restricted to the sides of external; columns supporting the overhanging structure of each colonnade;
- All signs should be non-illuminated and of a hanging or bracketed design. A slim sign written panel will avoid visual clutter and ensure visual separation from the main retail fascia; and

- Notices or signs may be displayed on any premises to advertise the fact that a person, partnership or company is carrying on a profession, business or trade at those premises. Such signs should avoid being garish or obtrusive.
- Seasonal special / illuminated signage for use in seasonal promotions, marketing festivities; and
- Banner signs may extend up to six inches into the public rightof-way when located eight feet or more above grade of said right-of-way. Banners may extend over public property and may extend across a public street and shall be subject to all related parties, laws and ordinances.

# To Be Avoided:

- Excessive and cluttered signage;
- Projecting signs that extend beyond the external face of the retail colonnade abutting the pedestrian realm;
- Illuminated projecting signs;
- Flashing signs;
- Signs that are externally illuminated e.g. floodlight and neon signs, etc.;
- Signs that are fixed to pilasters;
- Signs that obstruct visual access to the activities within the retail premises
- Signs that are related to specific commercial product or services;
- Fascia made of acrylic sheeting, Perspex, aluminium or plastic; and
- Wall mounted signs mounted on the external face of colonnade supporting fronting the public realm (i.e. the outward expression of each building).







#### SECURITY SHUTTERS

Solid metal shutters result in an unattractive environment out of shopping hours. They have a negative visual impact on the general quality of streetscape and are accordingly discouraged. Any security device should have a minimum effect on the architectural features and appearance of a building or the character of the streetscape.

#### Preferred:

Transparent roller shutters that permit visual access to the shopfront design out of shopping hours.

#### Acceptable:

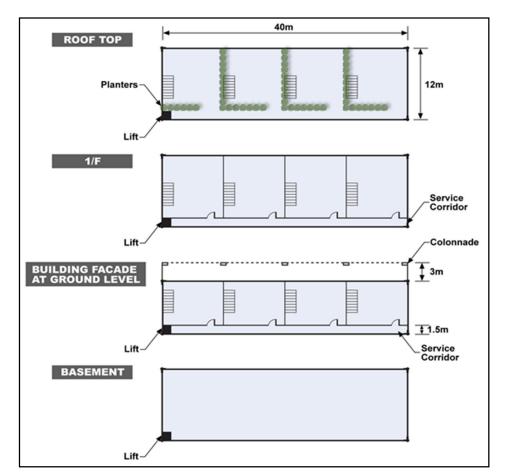
- Perforated metal roller shutters that permit visual access to the shopfront design out of shopping hours; and
- Metal roller shutters that promote visual interest e.g. applied with chromatic treatments that respond to the design character and / or context of the area.

#### To Be Avoided:

Solid metal roller shutters with no chromatic treatments or visual interest and / or obstruct visual access to the design of the shopfront.

#### **OVERVIEW**

It is intended that the above parameters will serve to circumscribe a range of design approaches and considerations that can be utilised by developers in realising retail development of the highest quality.



Appendix C - Figure 6 Indicative servicing layout of retail units





#### **RETAIL BELT PAVING**

- A range of tones and textures can be applied to paving in the retail areas. Heavily trafficked commercial retail areas might for example, adopt darker textures that could be contrasted by illuminated window displays (e.g. as paving treatments around the landmark in Central);
- Dropped kerbs should be provided for universal access at road crossings;
- The retail outlets should be appropriately setback from the boundaries adjacent to the Station Square and the pedestrian streets. This area can be paved appropriately and enable al fresco dining to be utilised in this space; and
- Firm and slip resistant tactile paving should be used. Blister paving should be constructed of durable and long-lasting materials such as concrete, steel and metal.

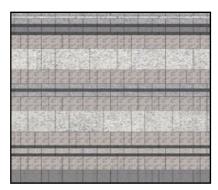
#### Acceptable:

- Colour contrast can be used to direct access to retail outlets, and to enhance pedestrian safety. As visitors approach the street crossings, a difference in colour tone can help to indicate they are moving off the footpath / walkways from one space to another; and
- The selected colour tone should enhance the physical quality of the retail environment and encourage shoppers to return.

#### To Be Avoided:

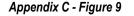
- Any paving material with a polished finish due to potential slip hazards;
- Non-durable tactile paving materials such as rubber should be avoided; and

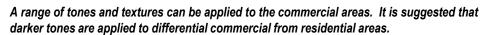
Colour contrasts should avoid creating the appearance of barriers to pedestrian movement to ensure a walking friendly environment.

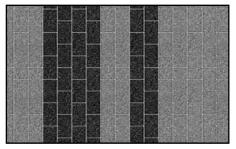


Appendix C - Figure 7









Appendix C - Figure 8



Appendix C - Figure 10



Appendix C - Figure 11







#### **PAST EXAMPLES**



Appendix D - Figure 1

Location: Central Column Size: 660x660mm Column Space: 5m c/c



Location: Cheung Sha Wan Column Size: 800x800mm Column Space: 6m to 8m c/c



Appendix D - Figure 3

Location: Central Column Size: 900 x600mm Column Space: 4.5m c/c



Appendix D - Figure 4

Appendix D - Figure 2

Location: Admiralty Column Size: 600 to 800mm Column Space: 5m c/c







ELEVATION



Appendix D - Figure 5

P.109

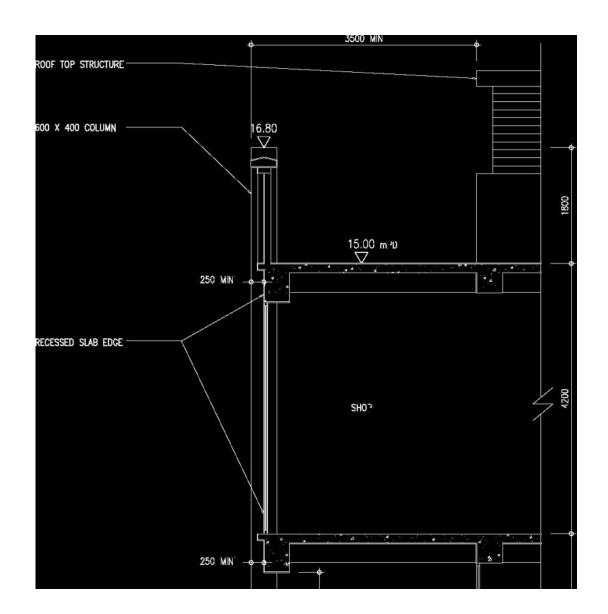
**Appendices** 

Appendix D: Colonnade Design for Kai Tak Development by Architectural Services Department





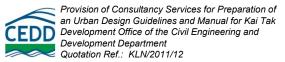
SECTION



Appendix D - Figure 6

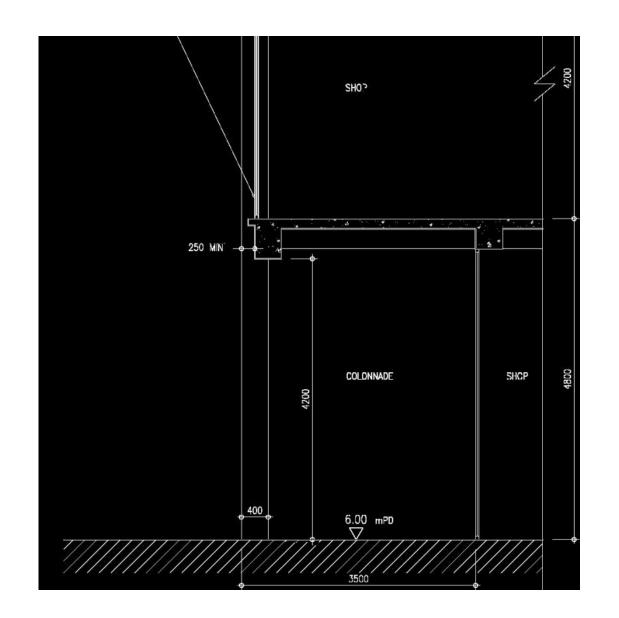


Appendix D: Colonnade Design for Kai Tak Development by Architectural Services Department





SECTION



Appendix D - Figure 7

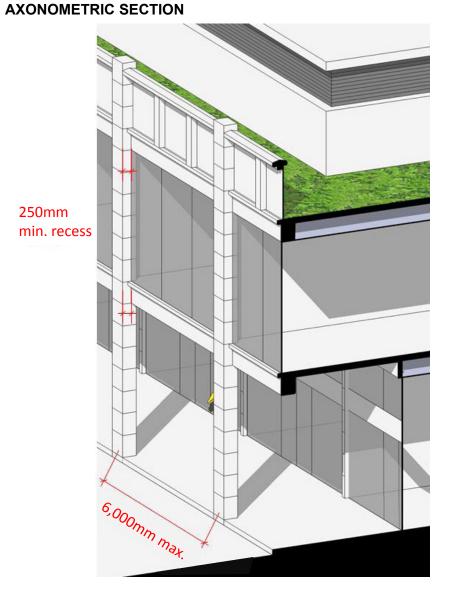
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Appendice

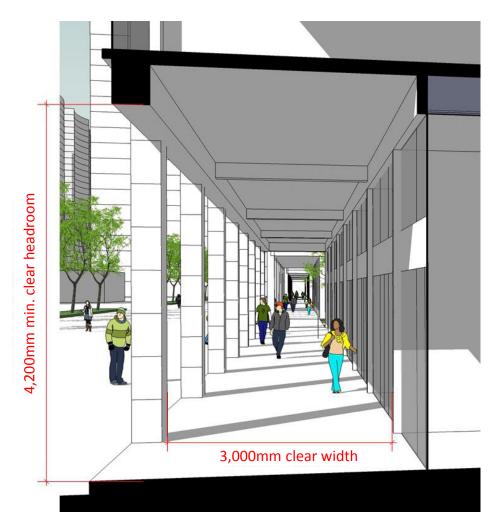


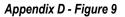




Appendix D - Figure 8

# COLONNADE PERSPECTIVE



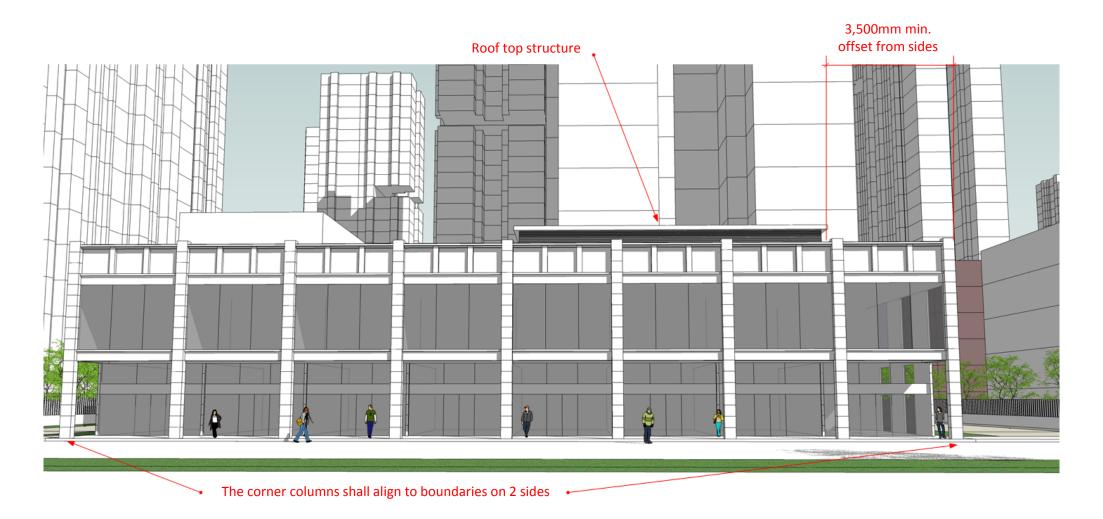


**Appendices** 





ELEVATION



Appendix D - Figure 10

P.113

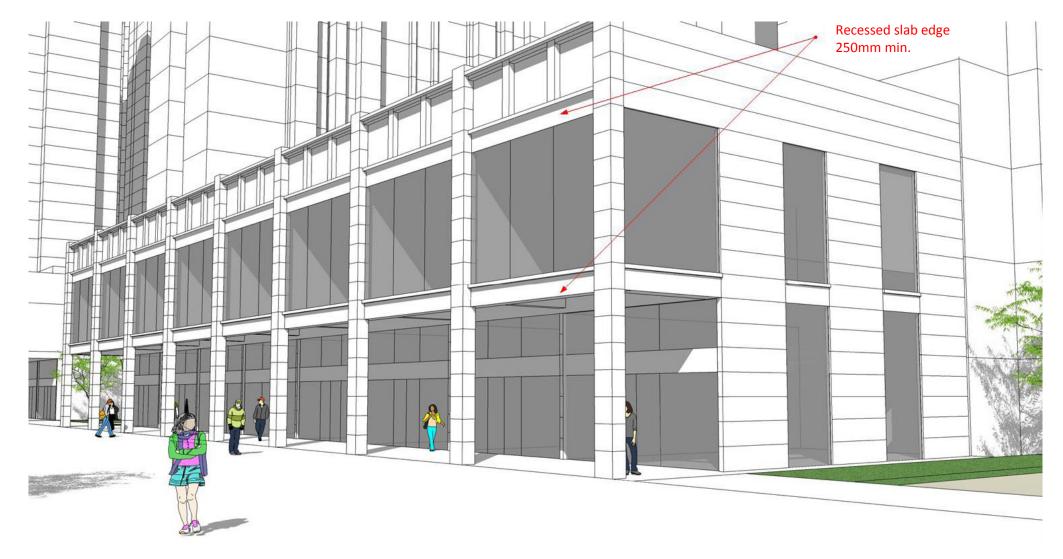
**Appendices** 

Appendix D: Colonnade Design for Kai Tak Development by Architectural Services Department





#### PERSPECTIVE



Appendix D - Figure 11

Appendix D: Colonnade Design for Kai Tak Development by Architectural Services Department

P.114

**Appendices** 





#### **COLONNADE DESIGN**

A retail building with colonnade design is proposed to be applied within the areas designated for 'Shop and Services' and 'Eating Place' uses only ('Retail Belt') in the latest approved Kai Tak OZP No. S/K22/6. A colonnade shall be a covered, unobstructed space at the ground level with supports for structure at equal spacing along the full length of the colonnade abutting the lot boundary facing the Station Square and / or the Kai Tak Sports Park, where applicable. It is assumed that building(s) shall be two-storey building(s) with non-domestic accommodation provided on 1/F directly above the colonnade on G/F.



Appendix D: Colonnade Design for Kai Tak Development by Architectural Services Department