



Development Bureau
The Government of the Hong Kong Special Administrative Region



Agreement No. WQ/056/18

TECHNICAL STUDY ON THE LAI YIP STREET SITE IN KOWLOON EAST

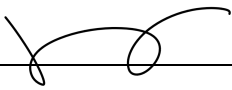
Executive Summary
January 2023

PLANNING CONSULTANCY SERVICES TECHNICAL STUDY ON THE LAI YIP STREET SITE IN KOWLOON EAST

– EXECUTIVE SUMMARY –

Client	Energizing Kowloon East Office Development Bureau
Lead / Planning Consultant, Visual Impact Specialist	Townland Consultants Limited
Architect / Authorized Person	Ho & Partners Architects Limited
Traffic Consultant	MVA Hong Kong Limited
Engineering Consultant	AIM Group Limited
Environmental Consultant	SMEC (Asia) Limited

File Reference: DB/LYS

For and on behalf of Townland Consultants Ltd.	
Approved by :	
Position :	Associate
Date :	18 January 2023

January 2023

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15	Environmental Assessment Division, Environmental Protection Department
16	District Lands Office, Lands Department
17	Planning & Development Section, Food and Environmental Hygiene Department

Reference: DB/LYS
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- EXECUTIVE SUMMARY -

1 INTRODUCTION

1.1 Background and Study Objective

- 1.1.1 Townland Consultants Limited ("**TOWNLAND**") has been commissioned by the Energizing Kowloon East Office ("**EKEO**") to carry out a technical study (the "**Study**") on the suitable land uses (including arts, cultural and creative industries ("**ACC**") uses) on a site on Lai Yip Street near the Kwun Tong Harbourfront (the "**Study Area**").
- 1.1.2 The Study is to take forward the 2017 Policy Agenda which called for a review of the future use of the Study Area. The main objective of the Study is to explore the development potential of the Study Area and determine suitable land uses which include spaces for ACC uses. The Study will also make recommendations on the suitable statutory land use zoning for the Study Area.
- 1.1.3 The study process involves examining suitable ACC uses and optimal permissible development potential, and preparing a Recommended Design for the Study Area with supporting technical assessments including Traffic and Transport Impact Assessment ("**TTIA**") and Visual Appraisal ("**VA**"). As part of the Study, a sewer diversion proposal and assessment on buffer distance for vehicular/ chimney emission will be prepared.
- 1.1.4 This Study is led by TOWNLAND as the Lead / Planning Consultant and Visual Specialist. TOWNLAND is supported by Ho & Partners Architects Engineers & Development Consultants Limited ("**HPA**") (Architectural); MVA Hong Kong Limited ("**MVA**") (Traffic/ Transport/ Pedestrian); AIM Group Limited ("**AIM**") (Engineering) and SMEC Asia Limited ("**SMEC**") (Environmental).

1.2 The Study Area

- 1.2.1 The Study Area, with an area of about 2,500m², is bounded by Wai Yip Street to the northeast, Lai Yip Street to southeast, Hoi Bun Road to southwest and NEO (a commercial development) to the northwest (**Figure 1.1** refers). The Study Area is currently occupied by a cooked food hawker bazaar ("**CFHB**"), a refuse collection point ("**RCP**"), a public toilet and a sitting out area (approx. 122m²), a planting strip and public road with a left-turn flare lane. The CFHB is intended to be closed down without reprovisioning. The RCP will be reprovisioned elsewhere. As a public toilet is available on Kwun Tong Promenade (approx. 160m from the Study Area), the existing public toilet will not be reprovisioned. There is no reprovisioning need for the Lai Yip Street Sitting-Out Area.
- 1.2.2 The Study Area falls within the "Government, Institution or Community (1)" ("**G/IC(1)**"), "Commercial (1)" ("**C(1)**"), and "Open Space ("**O**")" zones and an area shown as Road on the Approved Kwun Tong (South) Outline Zoning Plan ("**Approved OZP**") No. S/K14S/24. The "G/IC(1)" and "C(1)" zones are subject to statutory Building Height Restrictions ("**BHR**") of 15mPD and 100mPD respectively (**Figure 1.2** refers). According to the Kwun Tong (Western Part) Outline Development Plan ("**Adopted ODP**") No. D/K14A/2, the majority of the Study Area is shown as "Government" and a minor portion to the north of the Study Area is shown as "Local Open Space" (**Figure 1.3** refers). A 4m full-height building setback line ("**SBL**") is delineated along Hoi Bun Road.

- 1.2.3 The left-turn flare lane of Lai Yip Street (located within the Study Area) is proposed to be removed under separate study - Proposed Pedestrian Environment Improvement Works in Kwun Tong Business Area – Ngau Tau Kok Portion – Investigation (“**KTBA – NTK Portion Study**”) (Agreement No. CE 26/2017 (HY)), with a view to improve the pedestrian connectivity at the concerned junction, by simplifying the pedestrian crossing layout. According to the latest available information, the junction design under consideration will maintain the left-turn movement (**Figure 1.4** refers).

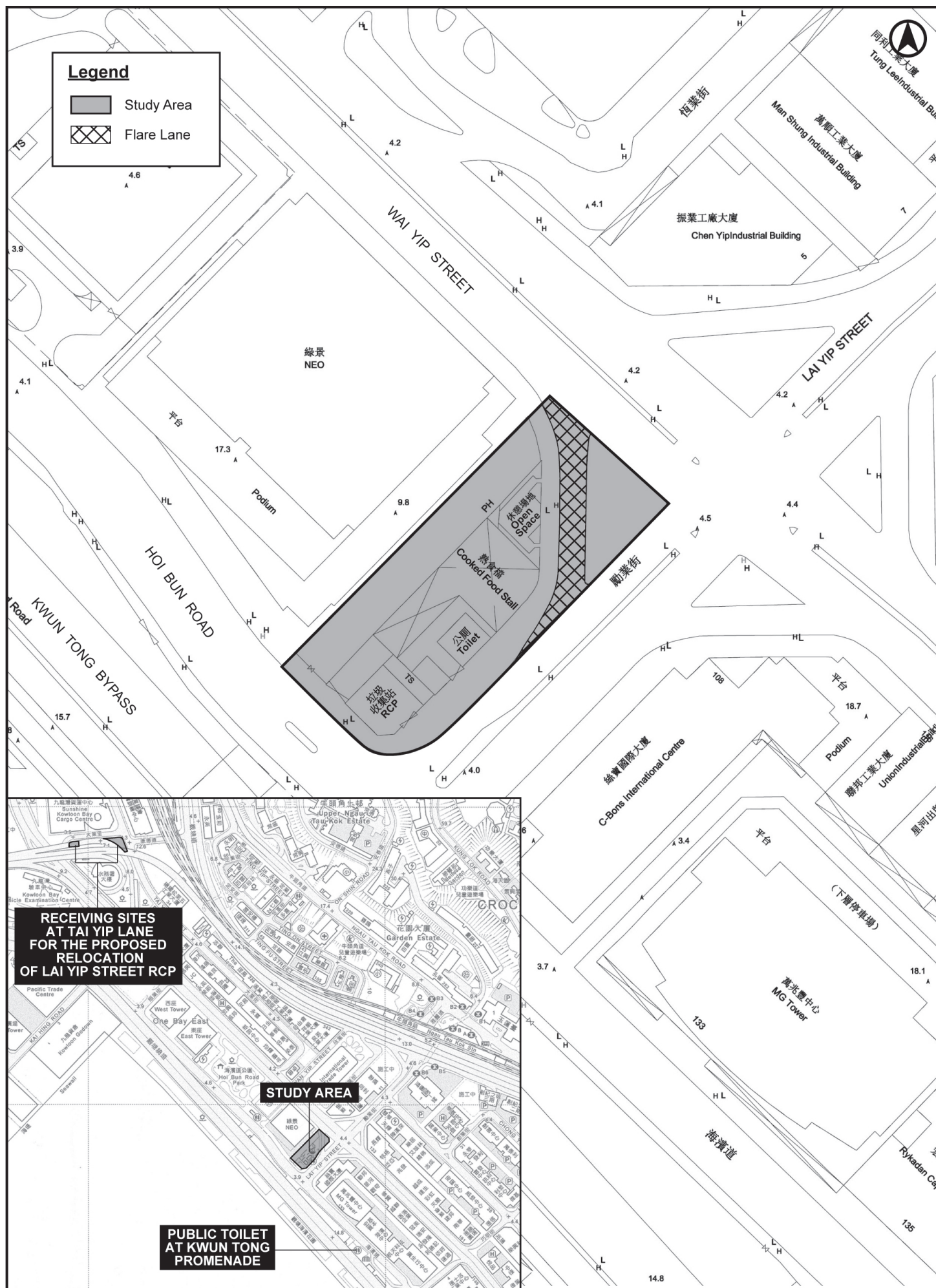
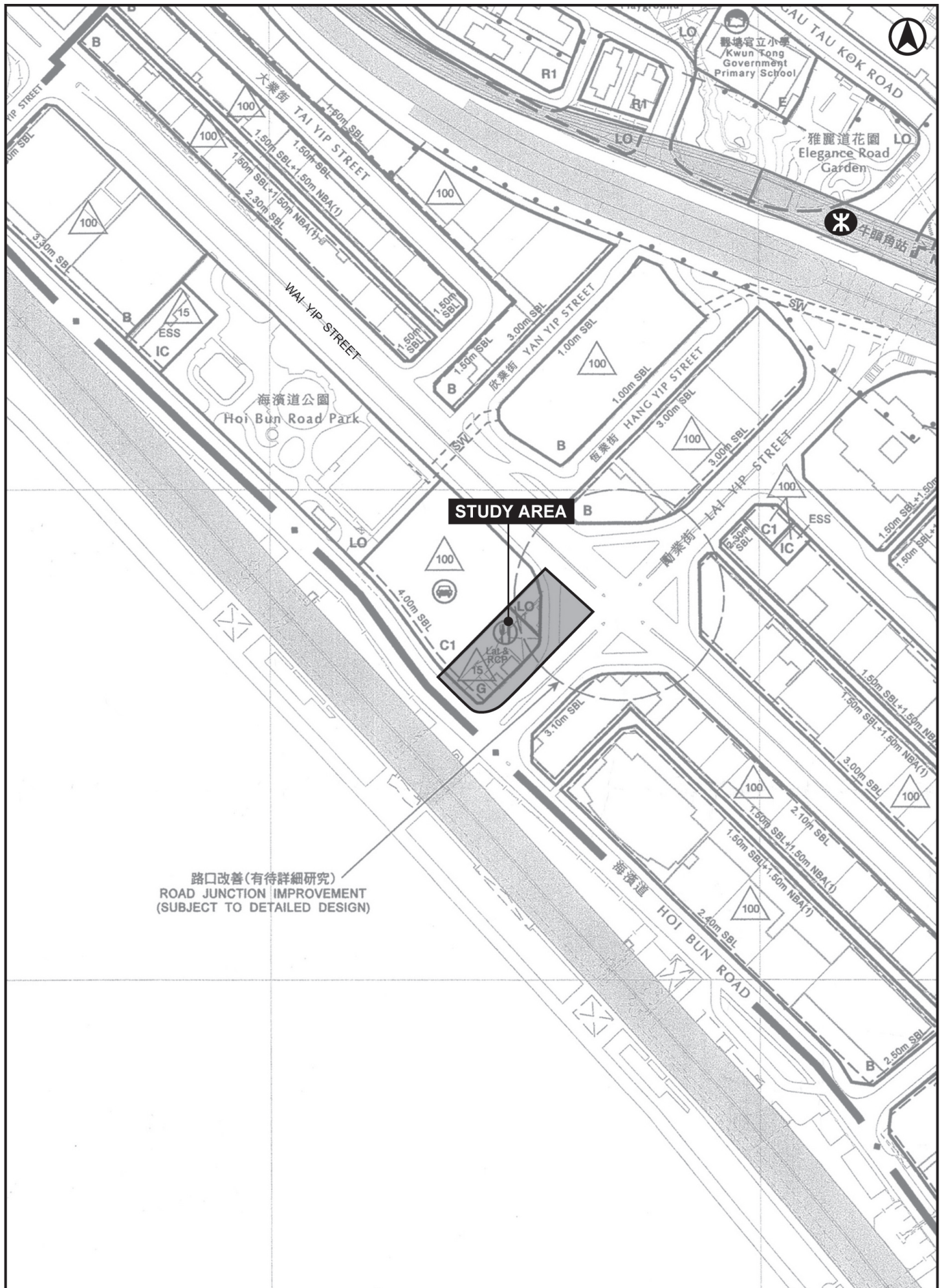




FIGURE 1.2 APPROVED KWUN TONG (SOUTH) OUTLINE ZONING
PLAN NO. S/K14S/24
SCALE 1 : 5,000





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FIGURE 1.4 JUNCTION DESIGN FOR WAI YIP STREET / LAI YIP STREET JUNCTION
(TO BE IMPLEMENTED BY OTHER PROJECT)

2 KEY CONSIDERATIONS

2.1 Planning Principles and Development Themes

CBD2 Strategy

2.1.1 Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030 (“**HK2030+**”) sets out the vision and strategy for developing Hong Kong into a liveable high-density city, embracing new economic challenges and opportunities, and creating capacity for sustainable growth. Kowloon East, comprising the former Kai Tak Airport, the Kwun Tong Business Area and the Kowloon Bay Business Area, is planned to become another premier Core Business District (“**CBD2**”) of Hong Kong to support economic growth and strengthen the city’s global competitiveness. The Energizing Kowloon East (“**EKE**”) initiative formulated under the CBD2 Strategy focuses on enhancing connectivity, branding, design and diversity.

2.1.2 Within this context, future development within the Study Area should integrate with the wider CBD2 in terms of physical connections, branding, design and diversity.

Connectivity

2.1.3 Under the EKE initiatives, proposals have been made to improve and extend the pedestrian links to and from the Ngau Tau Kok MTR Station, other transport nodes and the waterfront. Several transport and pedestrian environment improvement studies are underway in the vicinity of the Study Area. The recommendations of the improvement studies shall be taken into consideration in the development of conceptual schematic design options to allow for seamless connections between the Study Area and its surroundings, and to support comprehensive transport and pedestrian planning in CBD2.

Branding

2.1.4 Kowloon East is positioned as CBD2 and a Smart City pilot area of Hong Kong. Future development within the Study Area should support this vision through a place-making approach and implementation of smart and green initiatives.

2.1.5 In relation to the Fly-the-Flyover Sites across Hoi Bun Road which are mainly used for ACC uses, the Study Area should echo and extend these uses to enhance the identity of the hinterland in a cohesive manner.

Design

2.1.6 With its mostly unobstructed views of the waterfront and strategic positioning along a primary pedestrian corridor between the MTR and the waterfront area, future development on the Study Area will be highly visible. Thus, iconic design of the future development should be encouraged with emphasis on a high-quality street environment (i.e. ground level design, active street frontages, etc) to enhance street vibrancy and to bring people to the waterfront.

Diversity

2.1.7 Commercial uses on the Study Area are proposed to be in line with the vision of CBD2. Nonetheless, complementary uses should be provided on the Site to enhance vibrancy in the District outside normal business hours. A diversity of uses, including ACC, retail and Food & Beverage (“**F&B**”), are thus considered compatible and will help to support more balanced and sustainable lifestyles.

2.1.8 The future development should embrace arts and culture in city life and help transform Kowloon East into a place for work, business, stay and play.

Harbour Planning Guidelines for Victoria Harbour and its Harbour-front Areas

- 2.1.9 Situated in the Kowloon East Harbourfront Area, future development in the Study Area should take the Harbour Planning Guidelines for Victoria Harbour and its Harbour-front Areas (“**HPG**”) and the Harbour Planning Principles (“**HPP**”) into account. In particular, the following aspects should be considered:

Land Use Planning

- 2.1.10 To promote vibrancy and diversity and to enhance public enjoyment, a mix of various uses including commercial (retail and dining) & ACC should be included. Commercial (office) uses which provide employment opportunities to cater for the socio-economic needs of the wider area are proposed to achieve a better job-housing balance.

Urban Design and Landscaping

- 2.1.11 While the development potential should be maximized, the development intensity and BH should be compatible with the harbourfront setting and the surrounding areas. Major view corridors to and from the harbour and ridgelines should also be preserved. In addition, iconic design to promote Victoria Harbour as a landmark of Hong Kong should be considered.
- 2.1.12 At the street level, active street frontages with various activities such as shop fronts facing waterfront shall be encouraged to promote street vibrancy and also integrate with the promenade to add vitality. Greening should also be maximized where possible.

Physical Linkage

- 2.1.13 The provision of continuous pedestrian at-grade access to the waterfront should be encouraged.

Sustainable Development

- 2.1.14 The future development in the Study Area should balance economic, social and environmental considerations. In terms of building design, the schematic design options should adopt green building principles (e.g. Sustainable Building Design Guidelines (“**SBD Guidelines**”)) to improve the microclimate of the built environment in the area.

Promote Art, Cultural and Creative Uses

- 2.1.15 Taking forward the 2017 Policy Agenda to review the future use of the Study Area which includes studying the possibility of providing spaces for ACC uses, the planning and design of the schematic design options should effectively realize the vision for the Study Area and promote the ACC uses at an appropriate level.

2.2 Land Use Compatibility and Urban Design Considerations

Land Use Compatibility

- 2.2.1 The Study Area is located within the Kwun Tong Business Area (“**KTBA**”) which is also part of CBD2. Given the past industrial history of the area and its proximity to the Kowloon Bay Business Area (“**KBBA**”), it is predominantly surrounded by commercial and industrial uses. In line with the planning intention, many industrial buildings in the area are planned to be redeveloped for office use.

Urban Design Consideration

- 2.2.2 Section 6.2, Chapter 11 (“**Urban Design Guidelines**”) of the Hong Kong Planning Standards and Guidelines (“**HKPSG**”) provides general urban design criteria to guide the development of an aesthetic yet functional physical environment in both macro and micro levels. From a macro level, potential direct and indirect impacts on physical and visual quality of natural landscape, cultural or socio-economic assets shall be assessed and taken into consideration. In terms of micro level, human scale streetscape and furnishing shall be considered to enhance the overall user experience.
- 2.2.3 Regarding the Building Height (“**BH**”) profile, the Study Area is surrounded by buildings with heights ranging from 50mPD to 129.5mPD (The Nina Hotel KE) (**Figure 2.1** refers). Sites along the Kwun Tong Harbourfront are mostly subject to a BHR of 100mPD. Moreover, the major ridgelines of Kowloon are situated to the north of the Study Area and they should be preserved. The BH of the schematic design options should respect the BH profile of the surrounding context and existing ridgelines. Ultimately, the architectural design and the scale and massing of the building should harmonize with the existing urban context.



Figure 2.1 Surrounding BHs

- 2.2.4 According to the Air Ventilation Assessment – Initial Study under Kai Tak Development Engineering Study Agreement No. CE 35/2006(CE), Lai Yip Street, Hoi Bun Road and Wai Yip Street have been identified as three (3) air paths for the south-east prevailing wind and land-sea breezes to penetrate into Kwun Tong Area. To avoid any adverse impact on the air paths and allow the wind to effectively pass through, the building disposition and orientation of the future development in the Study Area should be setback from the air paths and align with the wind direction.

2.3 Key Constraints and Opportunities

2.3.1 After undertaking a baseline review of the Study Area and its surroundings, the key constraints and opportunities are identified and summarized below.

Key Constraints

Access Arrangement

2.3.2 The Study Area is bounded by Wai Yip Street, Lai Yip Street and Hoi Bun Road along the northeast, southeast and southwest respectively. Based on the review on the road design and traffic census, their classifications are as follows:

- Wai Yip Street Westbound (Section between Shun Yip Street and Lai Yip Street) – A 3-lane Primary Distributor (“PD”);
- Lai Yip Street Northbound (Section between Hoi Bun Road and Wai Yip Street) – A 2-lane District Distributor (“DD”); and
- Hoi Bun Road Eastbound (Section between Lai Yip Street and Shun Yip Street) – A 2-lane Local Distributor (“LD”).

2.3.3 Existing vehicular access to the Study Area are via Hoi Bun Road and Lai Yip Street for the existing RCP and CFHB respectively. However, both accesses are located close to the signalized junction of Hoi Bun Road / Lai Yip Street (one of which is located directly in front of the stop line on Hoi Bun Road) which is considered undesirable. Therefore, the future development cannot adopt the same existing run-in/ out location.

2.3.4 According to Vol. 2 Ch. 3.6 of Transport Planning and Design Manual (“TPDM”), the run-in/ out should not be permitted on Trunk Road, PD or DD. When the lot abuts onto more than one (1) road, the run-in should be sited on the least important roads (i.e. Hoi Bun Road in this scenario). Moreover, the run-in/ out should be sited as far as possible away from junctions, horizontal curves, bus stops, zebra or other pedestrian crossing and other similar locations.

2.3.5 Despite Hoi Bun Road being an LD, the existing stop line at the signalized junction of Hoi Bun Road/ Lai Yip Street is very close to the Study Area. In the event that the access point is located on Hoi Bun Road, the furthest distance that can be achieved from the existing stop line at the signalized junction of Hoi Bun Road/ Lai Yip Street is only approx. 7.5m. A swept path analysis (**Figure 2.2** refers) shows the egress of long vehicles (e.g. 11m long heavy goods vehicle (“HGV”)) will not be able to stop properly at the eastbound stop line. That is to say, the existing stop line would be too close to the vehicular access, if it is proposed to be at Hoi Bun Road.

Key Opportunities

Prestige Harbourfront Location

2.3.6 The Study Area, being located at a prime harbourfront location in CBD2, should capitalize on opportunities to provide high-quality commercial floor space which could support the Kowloon East to transform into another business core of Hong Kong.

Close Proximity to the Fly the Flyover Sites

2.3.7 The Fly-the-Flyover Sites across Hoi Bun Road offer an outdoor environment for a wide variety of events and activities. The Study Area could provide indoor floor space for ACC uses, such as exhibition and performance venues which may complement the Fly-the-Flyover Sites and achieve synergy.

Removal of Flare Lane

2.3.8 The removal of the left-turn flare lane in the Study Area will improve the pedestrian connectivity in the area and unleash a sizeable developable area in view of maintaining a steady land supply in Kowloon East for commercial developments.

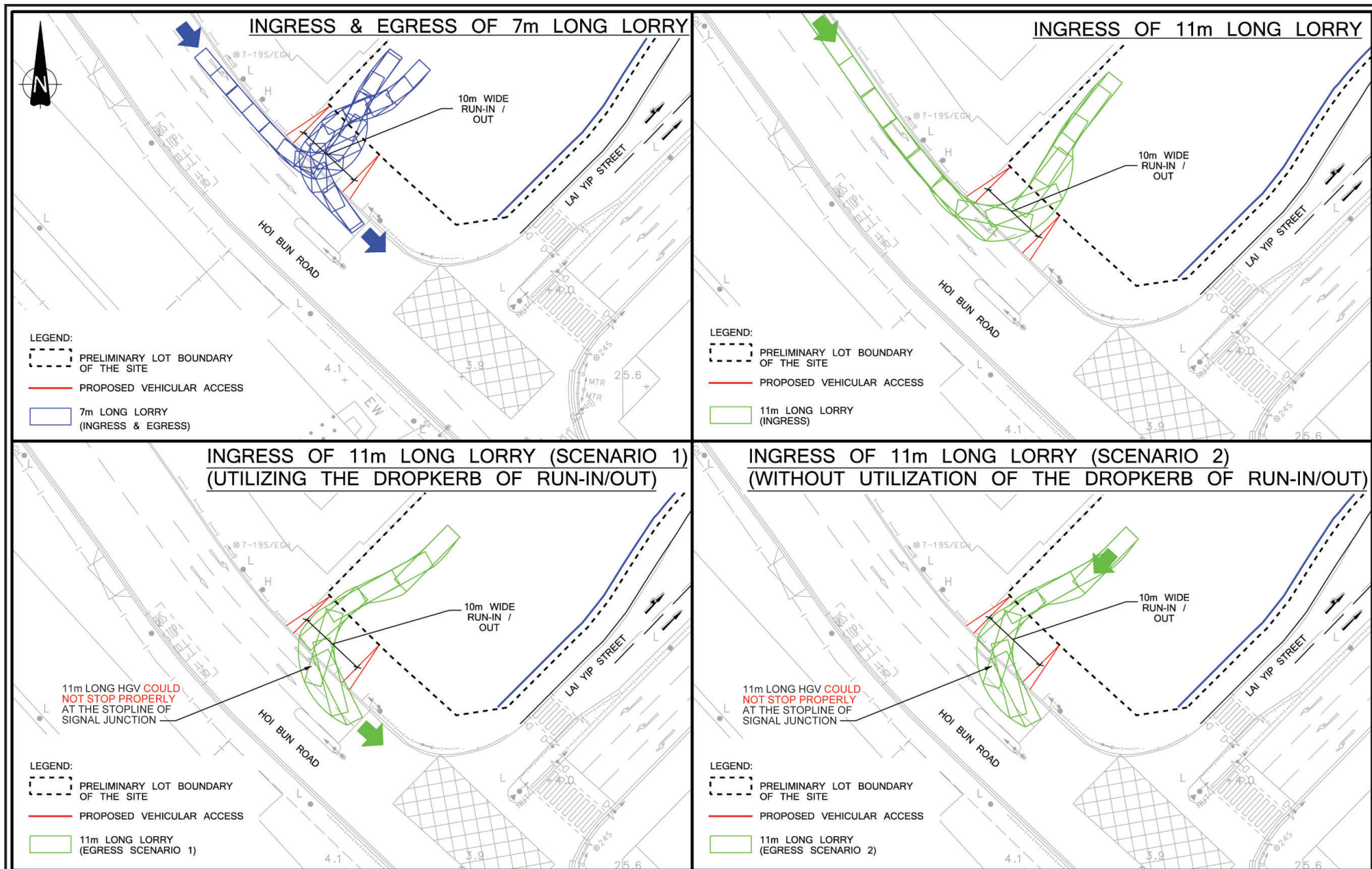


FIGURE 2.2 SWEEP PATH ANALYSIS FOR VEHICULAR ACCESS PROPOSED AT HOI BUN ROAD

Relocation of the RCP

- 2.3.9 The relocation of the RCP (i.e. removal of the existing run-in/out of the RCP) would provide an opportunity to enhance the pedestrian environment (i.e. straightening the existing staggered pedestrian crossing at the Lai Yip Street/ Hoi Bun Road junction) and walkability.

Potential Footbridge Connections

- 2.3.10 The detailed feasibility study on the Environmentally Friendly Linkage System (“EFLS”) for Kowloon East has been completed and suggested implementing a multi-modal EFLS (“MMEFLS”), which is considered more effective and desirable than a standalone infrastructure (i.e. monorail system). The proposed MMEFLS includes introducing new bus and green minibus routes in the area and developing travellers network linking up the former runway of Kai Tak, the two Action Areas in Kowloon East and the nearby MTR stations etc.
- 2.3.11 In particular, a pedestrian cum cyclist bridge with traveller will be constructed across the Kwun Tong Typhoon Shelter (“KTTS”) to provide a more direct and convenient linkage between the Kwun Tong Promenade and former Kai Tak runway on its both sides. Upon its completion, it will facilitate pedestrians to move between the former runway area and MTR Ngau Tau Kok Station via Lai Yip Street.
- 2.3.12 Moreover, an elevated walkway along and above Wai Yip Street connecting Kowloon Bay Action Area (“KBAA”) and Kwun Tong Action Area (“KTAA”) is proposed under the MMEFLS and a landing point is proposed at the Wai Yip Street/Lai Yip Street junction. The future development should capture the opportunities arising from the enhanced pedestrian connections between various focal points in Kowloon East.

2.4 Architectural Considerations

Design Intention

- 2.4.1 To take advantage of the prestigious harbourfront location, the following design criteria have been considered when formulating the Recommended Design:
- The development potential of the Study Area should be fully utilized.
 - Rooms that required prescribed windows should not be placed on the western side of the future development as it cannot fulfil the minimum setback distance with the adjacent building. Lift core and back of house (“BOH”) functions (e.g. storage rooms, toilets, art gallery space) that require no natural lighting, and studios should be placed on the western side.
 - Ground Floor shall be set back along Lai Yip Street, creating a cantilevered space to allow a wider pedestrian footpath and more comfortable pedestrian experience.
 - Provision of canopy/ weather protection along the building façade as far as practical.
 - Above-ground setback of building façade fronting Wai Yip Street shall be provided to avoid the Recommended Design from protruding the straight alignment of building lines along the southern side of Wai Yip Street.
 - Tower should be setback from Lai Yip Street as far as possible to avoid canyon effect and minimize the impact to the existing ventilation corridor at Lai Yip Street.
 - Consideration of additional headroom shall be given to the ACC uses for flexible and special exhibitions and performances.
 - SBD Guidelines should be complied with in order to achieve maximum Gross Floor Area (“GFA”) concessions on green amenity features and to harmonize with the natural environment.
 - Compliance with the greenery requirement of minimum 30% for land sale sites in Kowloon East.
 - Synergy with the Fly-the-Flyover Sites should be maximized.
 - Opening for footbridge connection to the travellers network at podium floor(s) should be reserved and convenient and barrier-free access to the G/F should be provided.

Access Arrangement

- 2.4.2 Based on the initial review from traffic and urban design perspective, Lai Yip Street (In) & Wai Yip Street (Out) option is considered the most preferable. Such access arrangement shall pose less pressure on the junction capacity at Lai Yip Street/ Wai Yip Street and would preserve the frontage near the harbourfront for retail/ F&B facilities to enhance the street vibrancy.

2.5 Developable Area

- 2.5.1 After considering the abovementioned key issues, a lot boundary is demarcated to define the developable area for the future development (**Figure 2.3** refers). The developable area, hereinafter referred as the “**Site**”, has a site area of approx. 1,919m² (subject to site survey).

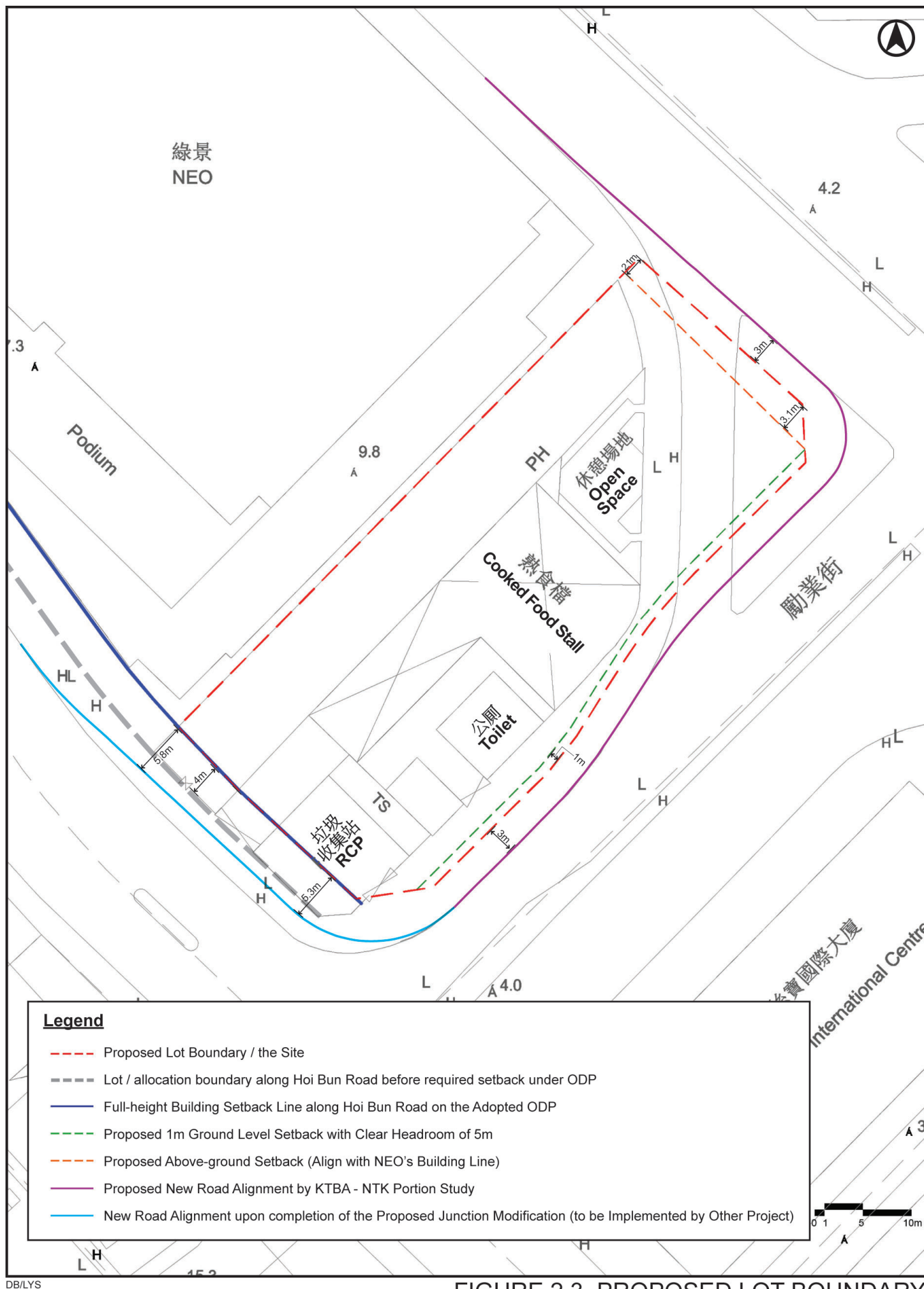


FIGURE 2.3 PROPOSED LOT BOUNDARY

3 RECOMMENDED DESIGN

3.1 Recommended Land Use Mix, Broad Land Use Budget and Major Development Parameters

Planning Intention and Land Use Mix

- 3.1.1 The Site situates amidst office developments in KTBA and at the intersection of the travellers network which connects the former Kai Tak Runway, Ngau Tau Kok Station, KBAA and KTAA. To further enhance and expedite the transformation of Kowloon East as a vibrant CBD2 and capitalise on the proximity to the strategic linkage system (i.e. MMEFLS) and waterfront, commercial use is recommended to be the most suitable use for the Site. Furthermore, to promote ACC uses in the Kowloon East Area and synergize with the Fly-the-Flyover Sites across Hoi Bun Road, retail/ F&B/ ACC uses are also recommended at the podium levels. Commercial development is also considered to be compatible with the surrounding existing/ planned office establishments.

Broad Land Use Budget

- 3.1.2 The Site Area is approx. 1,919m² (subject to site survey). The proposed plot ratio ("PR") for the Site is 12, which has made reference to the maximum PR for the "C" and "Other Specified Uses" annotated "Business" ("OU(B)") zones on the prevailing OZP. Thus, the maximum GFA for the future development will be approx. 23,028m² (equivalent to PR of 12). The broad land use budget is listed below (the actual GFA breakdown is subject to the design of future development):

ACC Uses and Retail/ F&B

- 3.1.3 The Site is situated between KBAA and KTAA for creating a key node between the Action Areas and along the Kowloon East Harbourfront. In addition, the Site would provide an opportunity to encourage/ facilitate high quality ACC spaces along the harbourfront. To further enhance the vitality of harbourfront, retail and F&B facilities should also be considered.
- 3.1.4 Having reviewed the small size of the Site, the supply of ACC floor space in the vicinity of the Site and other relevant developments, 2 storeys of ACC/retail/F&B facilities are proposed within the podium (GFA subject to the design of the podium). The nature of ACC uses may include exhibition areas, event spaces and performance venues, which will provide alternative indoor space for special exhibitions or performances complementary to the Fly-the-Flyover Sites.
- 3.1.5 By making reference to the Planning Brief for the Site Covering the "Comprehensive Development Area (2)", "Other Specified Uses" annotated "Arts and Performance Related Uses" and "Open Space" Zones in Kai Tak Development, ACC uses include arts centre, art gallery, cultural complex, venue for performances and theatrical entertainment, concert hall, city hall/ town hall, art studio, rehearsal room for art performance, craft workshop, design and media production, audio-visual recording studios, school/ training centre (related to ACC only), retail shop (related to ACC only), institutional use (related to ACC only) and facilities of appropriate scale which are directly related and ancillary to the aforementioned uses. For avoidance of doubt, cinema and movie theatre are not regarded as ACC uses.
- 3.1.6 Apart from ACC uses, some GFA are also proposed for Retail and F&B (e.g. restaurant, performance café; bookstores; art & craft shops, etc) and are assumed at G/F and the top floor. They can help enhancing street level vibrancy and activities and capitalising the prestige harbour view for public enjoyment.

Office

- 3.1.7 The remaining GFA is assumed for office use. It is estimated that the office GFA is approx. 20,000m².
- 3.1.8 Landscape gardens are proposed as an amenity area for the enjoyment of the occupants and users of the future development¹.

Building Height

¹ Standard for Provision of Open Space under Chapter 4 of HKPSG (currently 0.5m² /worker) have been referenced.

3.1.9 As mentioned in **Section 2.2**, the BHs of the surrounding developments range from 50 to 129.5mPD (The Nina Hotel KE) where the prevailing OZP has imposed a BHR of 100mPD in the immediate surroundings. To harmonize with the existing BH profile, the proposed maximum BH for the future development is also 100mPD.

3.1.10 **Table 3.1** summarizes the Broad Development Parameters proposed for the Study Area.

Table 3.1 Broad Development Parameters

Broad Development Parameters	
Development Site Area	1,919m ² (subject to site survey)
Permissible PR	12
Permissible GFA	23,028m ²
Maximum Building Height	100mPD

3.2 The Recommended Design

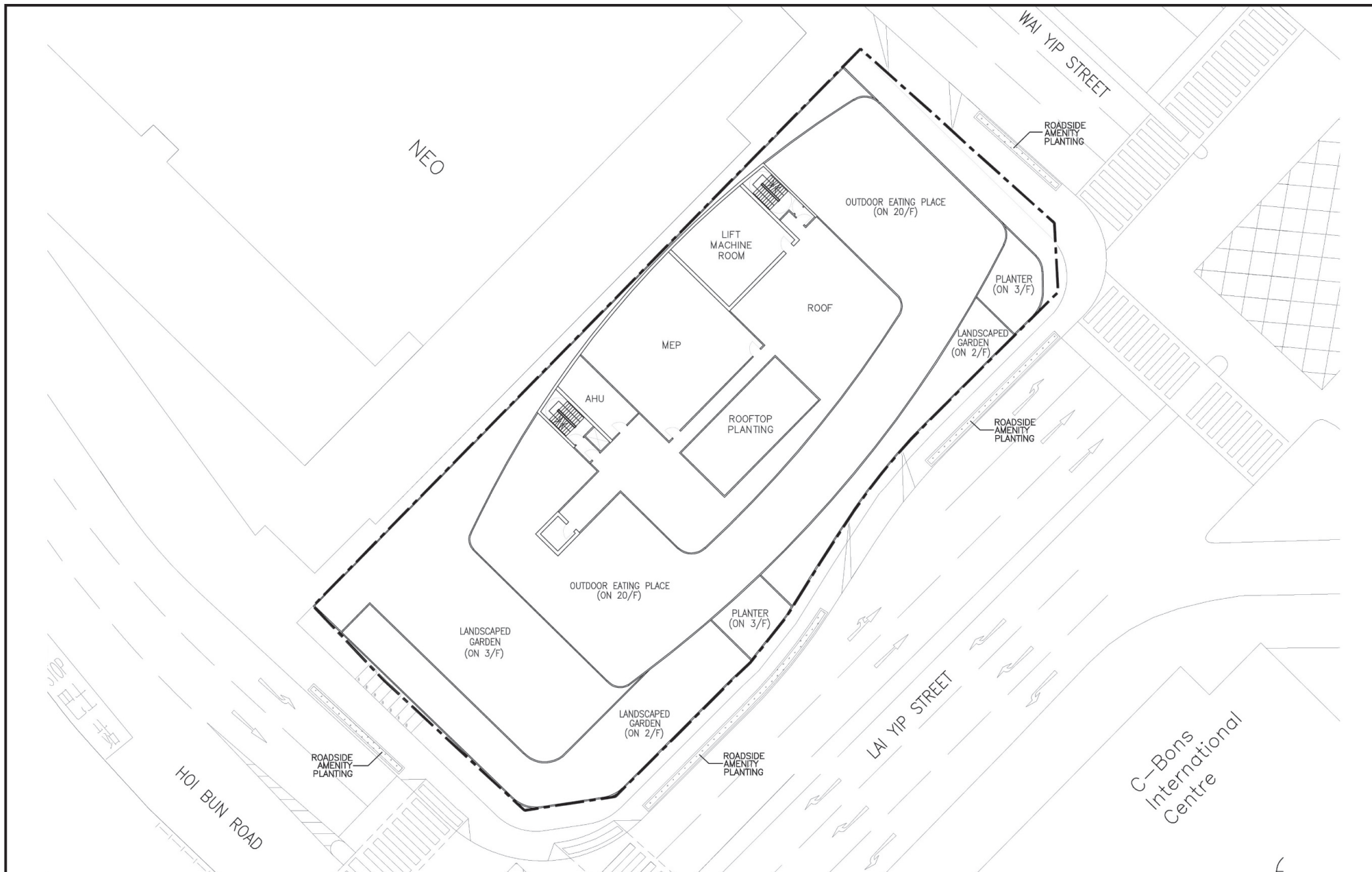
3.2.1 The Site would be developed by the private sector after land sale. For the sake of ensuring technical feasibility, a Recommended Design (indicative only) has been developed to ascertain the recommended development parameters. It is however not meant to be rigidly followed in the ultimate design of the future development.

Schematic Design

3.2.2 The Recommended Design (**Figures 3.1 to 3.4** refer) of a height of 100mPD adopts a curved curtain wall with an elliptical footprint that suggests an innovative architecture form while maintaining floor plan efficiency. Despite the drawbacks of adopting a curved curtain wall façade incurring higher cost, more complex detail design at later stages of the project and a longer construction timeframe, curved facades can bring forth a sense of waving movement that is compatible with the adjacent harbour view and waterfront theme.

3.2.3 The Recommended Design comprises a 21-storey commercial development over 2 levels of basement car park. ACC/retail/F&B facilities are proposed at 1/F and 2/F for ease of public access. The two (2) levels are designed with high floor-to-floor heights to enable uses for various arts and cultural events. Moreover, a potential double-floor void space can be provided at the northern side of the building to accommodate larger installations of artwork to be displayed. To encourage a vibrant streetscape character next to the waterfront, a series of shops (for retail or F&B) are proposed along the ground level of Hoi Bun Road and Lai Yip Street to provide an active street frontage. Two openings at the northern and southern sides of the podium at 1/F are also proposed to facilitate potential connections to the proposed traveller network in the vicinity. Detailed assessments would be carried out by a separate study to ascertain the feasibility of the potential connections.

3.2.4 In terms of amenity area, the 2/F building footprint is intentionally designed to set back from Hoi Bun Road and Lai Yip Street to allow for the provision of a landscape garden. Along with the flat roof/ landscaped garden on 3/F and the R/F, a sizeable amenity area in the form of a landscaped garden for the enjoyment of workers within the development can be provided. The 20/F building footprint is also proposed for eating place with minimised footprint to maximise the outdoor area for visitors to enjoy the panoramic harbour view.



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FIGURE 3.1 MASTER LAYOUT PLAN OF RECOMMENDED DESIGN (INDICATIVE ONLY)

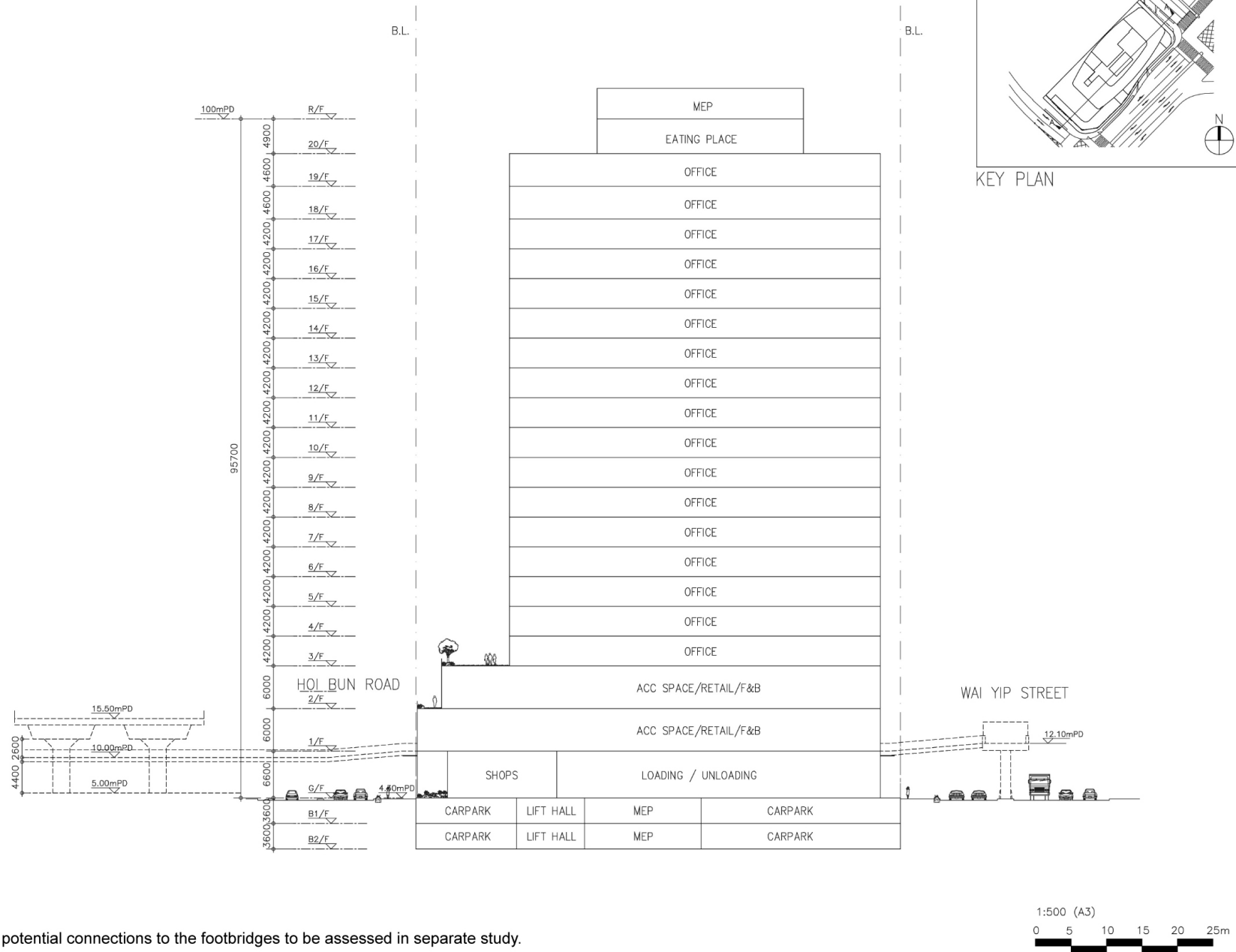


FIGURE 3.2 SECTION OF THE RECOMMENDED DESIGN (INDICATIVE ONLY)

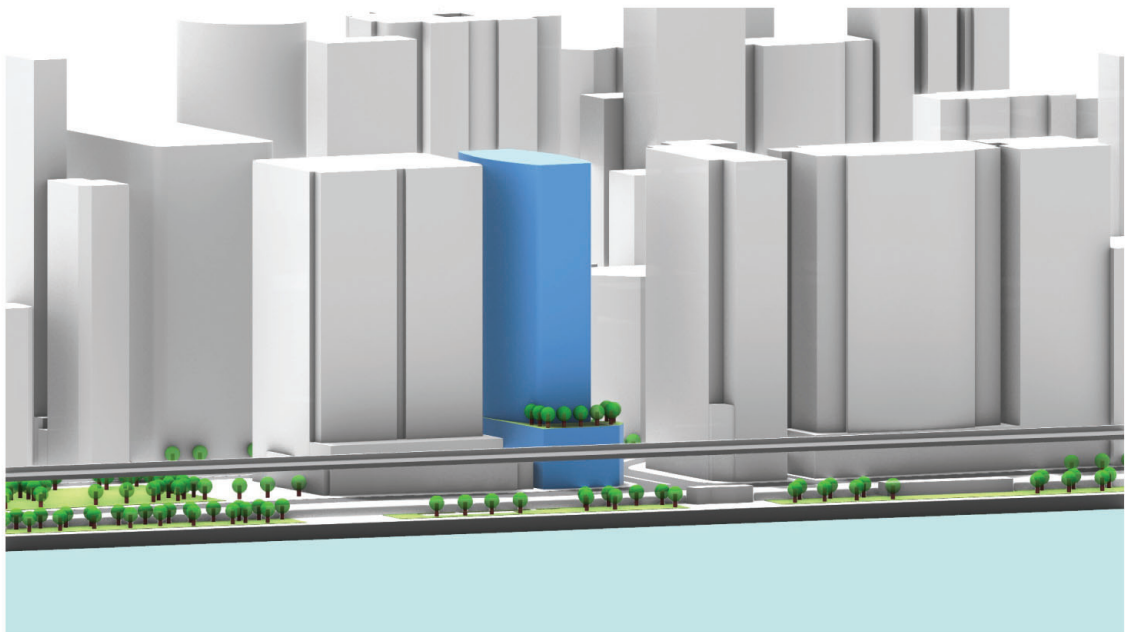
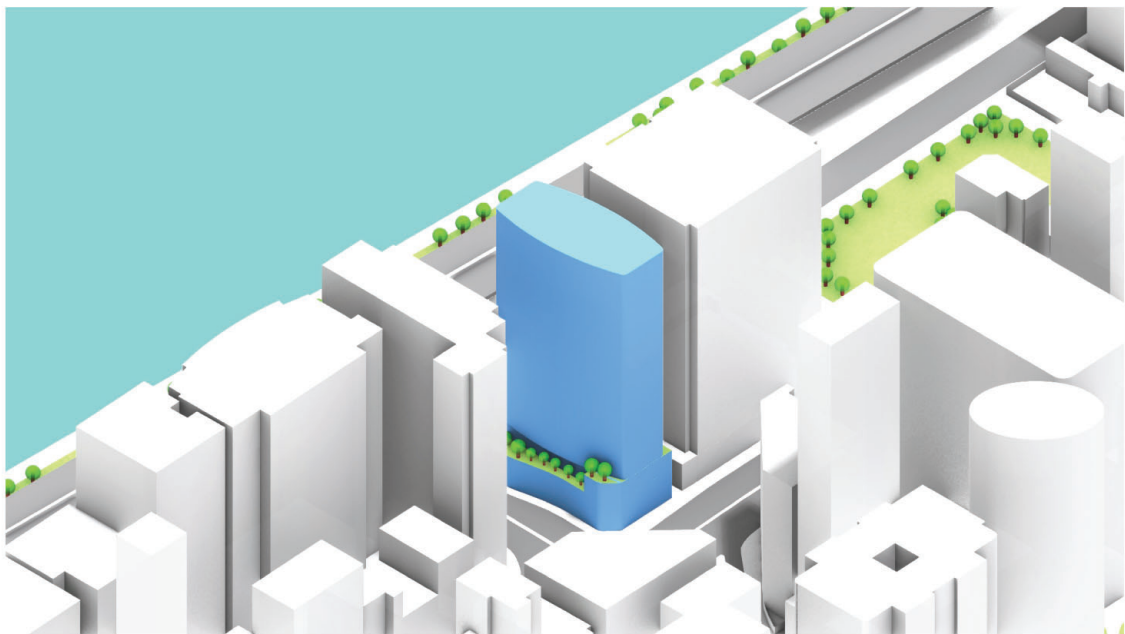
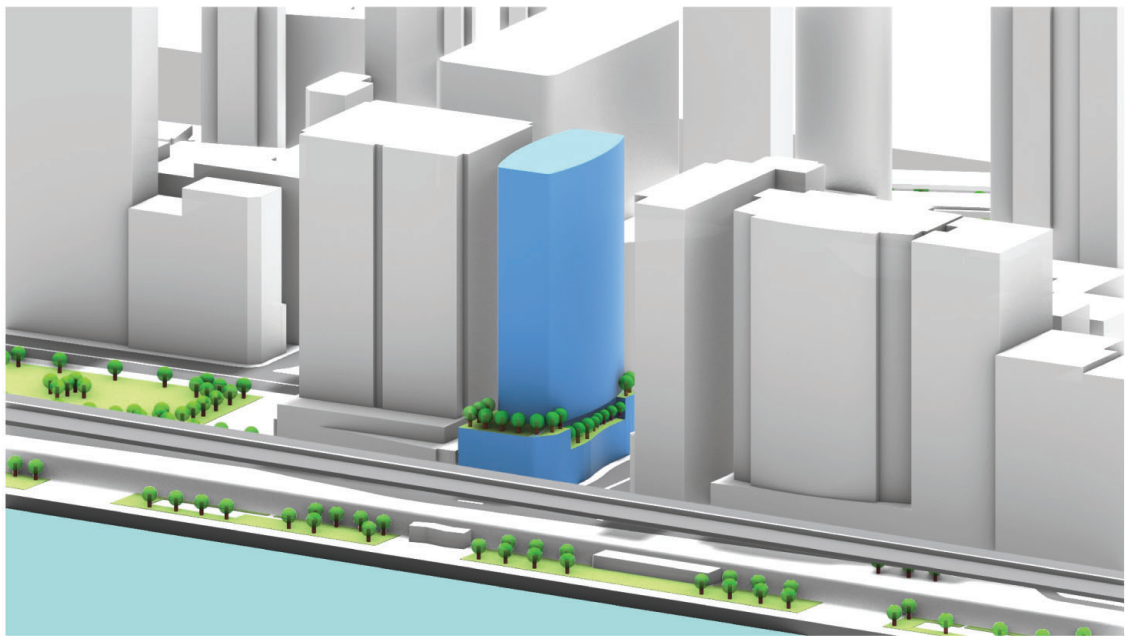


FIGURE 3.3 MODEL VIEW OF RECOMMENDED DESIGN (1)
(INDICATIVE VISUAL AIDS ONLY)

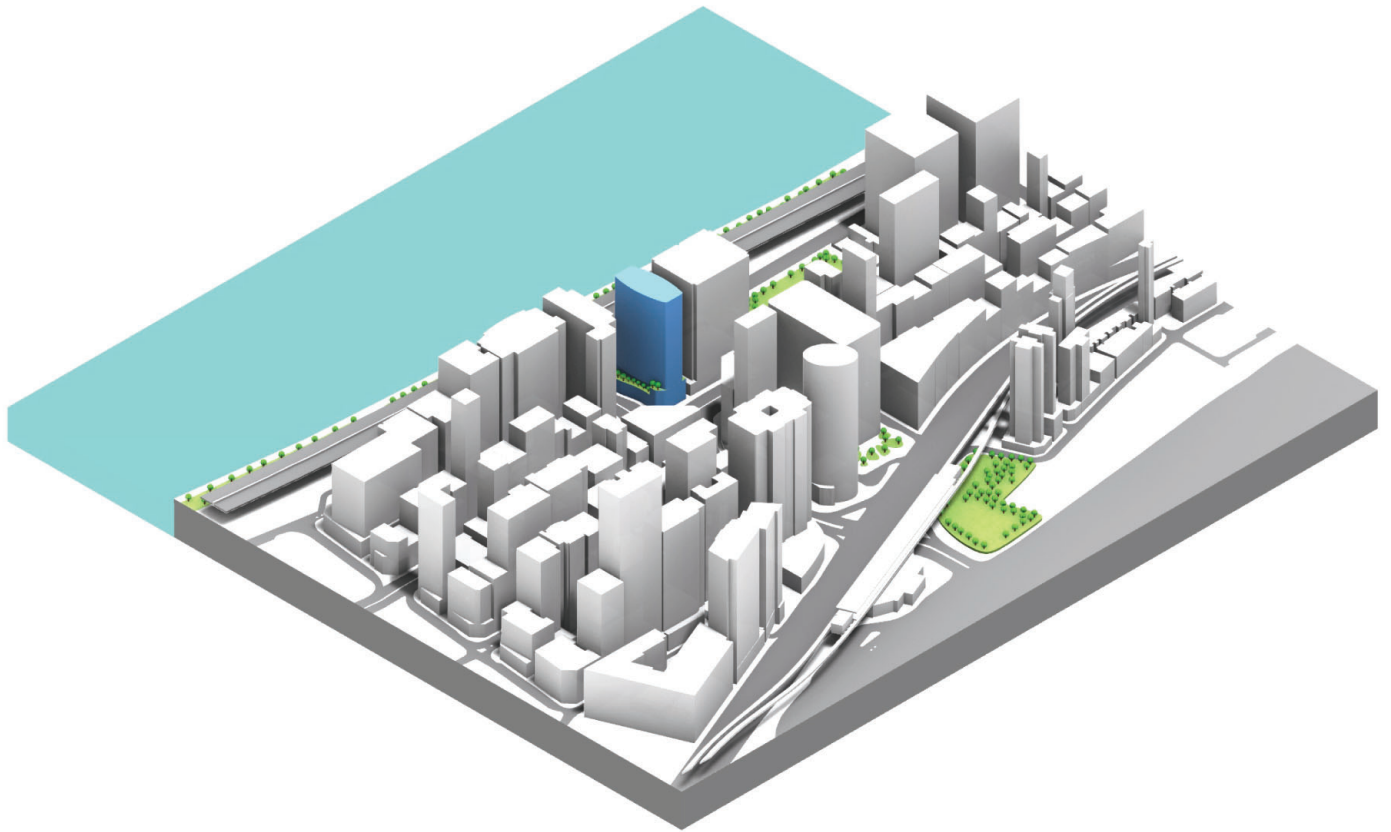


FIGURE 3.4 MODEL VIEW OF RECOMMENDED DESIGN (2)
(INDICATIVE VISUAL AIDS ONLY)

- 3.2.5 To promote walkability through provision of weather protection, canopy and sun shading device are proposed along the building façade (i.e. along Wai Yip Street, Lai Yip Street and Hoi Bun Road) at G/F.
- 3.2.6 A 2 storeys of basement is proposed to accommodate ancillary vehicle parking spaces. In addition, all loading/ unloading (“L/UL”) are proposed to be located on the G/F to avoid excavation of deeper basement (i.e. higher costs and inefficiencies of deeper basement excavation, and associated increase in means of escape) and longer ramp (i.e. less efficient use of space). The development parameters of the Recommended Design are summarized in **Table 3.2**.

Table 3.2 Proposed Development Parameters of the Recommended Design

Proposed Development Parameters	
Site Area (approx.)	1,919m ² (subject to site survey)
BH/ No. of Storeys	100mPD/ 21-storey (excl. 2 levels of basements)
Site Coverage	
– Podium	Approx. 84-95 %
– Tower	Approx. 60 %
Total GFA (approx.)	23,028m ²
GFA Distribution (approx.)	
– Office	19,428m ²
– ACC/ F&B/ Retail	3,600m ²
Parking Spaces	
– Private Car	81
– Motorcycle	8
– L/UL	10
PR	12
Amenity Area (on 2/F, 3/F and R/F)	1,050m ²

Pedestrian Environment

- 3.2.7 Lai Yip Street corridor (north-south) is one of the major pedestrian corridors connecting KTBA and Kwun Tong Promenade as identified in the Pedestrian Environment Enhancement Study for KTBA. Commuters from Ngau Tau Kok MTR Station and bus stops on Kwun Tong Road generally walk along Lai Yip Street (majority at eastern footpath) to the Kwun Tong waterfront and adjacent office/ commercial developments. The Recommended Design has incorporated a 1m setback on the G/F along Lai Yip Street to cater for pedestrian flows and enhance pedestrian environment.
- 3.2.8 On-site review of the surrounding streetscapes indicates that roadside planting can be found in the form of shrubs and trees. Roadside landscaping in the form of landscape strip is proposed to provide screening of pollutants from road traffic in order to enhance the pedestrian environment (street trees are not proposed as sufficient sightline shall be reserved near the run-in/out and junctions). Along with the proposed setbacks, the ground level will provide a desirable pedestrian environment for visitors and passers-by. **Figure 3.5** shows a perspective of the streetscape and pedestrian environment. The future developer is required to provide roadside amenity plantings at the public footpaths along Hoi Bun Road, Wai Yip Street and Lai Yip Street at its own costs and handing them over to Leisure and Cultural Services Department (“**LCSD**”) for management and maintenance.
- 3.2.9 Given the ACC uses will synergize with Fly-the-Flyover Sites and the activities along the Kwun Tong Promenade, the connectivity of the Site with the waterfront should be enhanced. It is proposed to add a new pedestrian crossing across Hoi Bun Road by capitalising the all pedestrian stage in the method of control at the signal junction. It will allow the Site to be directly connected to the harbourfront and help diverting the pedestrian flow on the eastern side of Lai Yip Street. In view of the existing staggered crossing at the Lai Yip Street/ Hoi Bun Road junction which is considered indirect, opportunity should be taken to convert the existing staggered crossing to a straight crossing to enhance the pedestrian experience. The entire modification to the Lai Yip Street/ Hoi Bun Road Junction is collectively referred as “**Proposed Junction Modification**” (**Figure 3.6** refers).

VIEW FROM HOI BUN ROAD



VIEW FROM WAI YIP STREET



Note: Feasibility of potential connections to the footbridges to be assessed in separate study.

3.3 Development Phasing and Programme

- 3.3.1 Given the Proposed Development is considered as a small-site development and only involved one tower, the Proposed Development is proposed to be constructed in one phase. However, since the formation of the Site depended on the timeline of reprovision of Lai Yip Street RCP, road works proposed in KTBA – NTK Portion Study, including removal of flare lane to be implemented by HyD, and the Proposed Junction Modification, disposal of the Site by land sale and construction of the Proposed Development can only commence after the completion of relevant works and site clearance.
- 3.3.2 The following steps/procedures are expected to be undertaken/ implemented by various parties in the subsequent stages:

Table 3.3 Tasks Recommended under the Study to be Implemented by Various Parties

Task	Responsible Party
Removal of flare lane*	HyD
Reprovisioning of RCP*	FEHD/ EKEO/ ArchSD
OZP Amendment*	PlanD
Setback of footpath on Hoi Bun Road, closure of public footpath/ demarcation of lot boundary for land sale*	LandsD
Land Sale	LandsD
Provision of additional pedestrian crossing across Hoi Bun Road and straightening of staggered pedestrian crossing at Lai Yip Street	HyD
Sewerage Diversion Works**	Future Developer

* Tasks to be completed before land sale.

** Refer to Paragraph 4.11 below.

3.4 Proposed Statutory Land Use Zoning(s) for the Site

- 3.4.1 As the Site is currently zoned “G/IC”, “C(1)” and “O”, rezoning of the Site is required to enable the future development. In considering an appropriate land use zone for the future development, reference has been made to the “C” zone on the prevailing OZP as the major planning intention for the Site is proposed to be commercial development. The statutory planning intention of the “C” zone is *“primarily for commercial developments, which may include uses such as office, shop, services, place of entertainment and eating place, functioning as territorial business/ financial centre(s) and regional or district commercial/ shopping centre(s)”*. According to the Schedule of Uses of the existing “C” zones under the prevailing OZP, most of the uses currently recommended/ considered appropriate for the future development falls within Column 1 uses (i.e. uses always permitted) under “C” zone (**Table 3.4** refers).

Table 3.4 Intended Uses for the Site and the Corresponding Definition of Terms

Intended Uses for the Site	Definition of Terms
Office (Including Audio-Visual Recording Studio; Design and Media Production Firm; Architectural and Landscape Design Firms; Web Design and Internet Application Firm; Advertising Firms; Public Relations Agencies and Market Research Companies)	‘Office’
Art Gallery, Arts Studio, Rehearsal Room for Art Performance	‘Place of Recreation, Sports or Culture’
Venue for Performances and Theatrical Entertainment	‘Place of Entertainment’
Retail, Photographic Studio and Small-scale Printing, Publishing and Allied Industries	‘Shop and Services’
School and Training Centre (related to ACC only)	‘School’/ ‘Training Centre’
Institutional Use (related to ACC only)	‘Institutional Use’
Private Club (related to ACC only)	‘Private Club’
Information Technology and Telecommunications Industries	‘Information Technology and Telecommunications Industries’
F&B	‘Eating Place’

- 3.4.2 Whilst 'Office' use is assumed in the Recommended Design (indicative only), 'Hotel' use is also considered to be a suitable and appropriate alternative commercial use for the Site and flexibility should be provided for the future developer. 'Hotel' use can support the surrounding business uses, provide visitor accommodation near the waterfront and in close proximity to the MTR station, and provide support to ACC uses (both on site and within the Fly the Flyover sites). There are numerous examples of ACC uses accompanied by 'Hotel' (or hostel) in Hong Kong. For example, Mei Ho House and West Kowloon Cultural District both provide rooms on site for the visiting artists.
- 3.4.3 A sensitivity test on the traffic impact induced by hotel development has been conducted and it is considered feasible to include 'Hotel' use in Column 1 of Schedule of Uses of the OZP.

4 TECHNICAL ASSESSMENTS ON RECOMMENDED DESIGN

- 4.1 Technical Assessments have been conducted to ascertain the technical feasibility of the Recommended Design, and to ensure that the proposals would not generate adverse impact to the environment.

Visual Appraisal

- 4.2 The Site is strategically located within the Harbour Metropolis which is being transformed into an attractive CBD2 to support economic growth and to strengthen the city's global competitiveness. The surrounding of the Site is characterized by a cluster of mid-to-high rises buildings. The Site is also located within the Waterfront Areas of Victoria Harbour.
- 4.3 From the short-range viewing points ("VP"s), the future development might induce significant visual changes when compared to the existing condition whereas the Site is only occupied by low-rise structures. In particular, the view from the Ngau Tau Kok MTR Station Exit B6 will be subject to moderately adverse visual impact since the Recommended Design partially obstructs visual openness/ sky view.
- 4.4 For the medium-to-long-range VPs, the Recommended Design is unlikely to impact on any visual resources (e.g. the open sky view and mountain backdrop) since it would blend in with the surrounding high-rise developments. The proposed BH is considered compatible and the Recommended Design harmonizes with the existing urban skyline along the Harbourfront.
- 4.5 From the strategic viewpoint at the Quarry Bay Park, the Recommended Design is hardly visible due to its scale and far distance from this viewpoint. Thus, no visual impact is expected.
- 4.6 **Table 4.1** summarized the visual impact at the selected VPs. It is concluded that the Recommended Design will unlikely have significant adverse effect to the visual character of the assessment area, which is characterized by high-rise commercial developments and mid-rise phasing out industrial developments.

Table 4.1 Summary of Visual Impact

Viewpoint	Visual Sensitivity	Visual Impact
VP1: View from the Ngau Tau Kok MTR Station Exit B6 at Lai Yip Street	High	Moderately Adverse
VP2: View from the Kwun Tong Promenade	Medium-high	Negligible
VP3: View from the Public Pier in front of the former Kai Tak Airport Fire Station	High	Negligible
VP4: View from the Hoi Bun Road Park	Medium	Negligible
VP5: View from the Landscape Deck at Kai Tak Cruise Terminal	Medium	Negligible
VP6: View from the Quarry Bay Park	Medium	Negligible

Traffic and Transport Impact Assessment

- 4.7 The future development is served by various public transport modes and is located in a walkable distance from the Ngau Tau Kok MTR Station.
- 4.8 With respect to the vehicular traffic, ten (10) major junctions in the vicinity of the future development were identified for junction capacity assessment. It is concluded that all of the assessed junctions are expected to operate within capacities under 2031 Reference and Design Scenarios. It should be highlighted that the traffic impact on the adjacent road network due to the future development after change of use in Year 2031 is expected to be minimal.
- 4.9 Regarding the pedestrian environment, 18 planned/ existing pedestrian walkways and 12 pedestrian crossings were assessed and it is concluded that all of the assessed walkways and crossings would operate with satisfactorily Level-of-Service (LOS C or above) and within capacity under 2031 Design Scenarios respectively.

Sewer Diversion Proposal

- 4.10 There is a 400mm diameter sewer at about 4m deep running through the western flare lane at the junction of Lai Yip Street and Wai Yip Street, which is within the Study Area (**Figure 4.1** refers). The sewer collects discharges from the buildings on the northern side of Wai Yip Street and runs in a southerly direction along Wai Yip Street and Lai Yip Street before discharging into a large (3,000mm wide x 2,600mm high) sewage box culvert on Hoi Bun Road. To make way for the future development, the concerned sewer will need to be relocated via a simple addition of a new manhole outside the Site on the western side of the junction of Lai Yip Street and Wai Yip Street, with 400mm diameter sewers at a constant gradient connecting to the existing upstream and downstream manholes (Manholes FMH4042674 and FMH4042675 respectively).
- 4.11 It is proposed that the future developer shall carry out the sewerage diversion works as the new manhole and the new alignment of the sewer are located within public road and it is an efficient way to conduct the diversion works along with the road re-alignment at Lai Yip Street and Wai Yip Street. However, the diversion works may be in conflict with the implementation programme of the "Travellers Network Link along Wai Yip Street" (commissioned by CEDD), the sewer diversion may need to be advanced before land disposal to minimize the possible adverse impacts due to concurrent site works at Wai Yip Street.
- 4.12 Based on a preliminary assessment, the future development would increase peak discharge by approx. 249%. It is noted that the Site is close to a steep sewer, with a significant capacity (at Manhole FMH4046278), and a large sewage box culvert immediately downstream of that sewer. Any upgrading required to cater for the increased discharge from the Site would therefore be very local. Should any upgrading works be required to accommodate the new sewage flow, it should be at the future developer's cost.



FIGURE 4.1 PROPOSED SEWER DIVERSION
NOT TO SCALE

Compliance with Buffer Distance Requirements for Vehicular/ Chimney Emissions

Vehicular Emission

- 4.13 Based on the review on the road design, traffic census and the road classification information received from TD, the types of road sections surrounding the Study Area and the associated buffer distance requirement are summarized and presented in **Table 4.2**.

Table 4.2 Required Buffer Distances from Surrounding Roads

Road Name	Section Between		Type of Road	Buffer Distance Required
Kwun Tong Bypass	Wai Yip Street	Cheung Yip Street	Expressway	>20m
Wai Yip Street	Lai Yip Street	Hoi Yuen Road	District Distributor	>10m
Wai Yip Street	Lai Yip Street	Kai Fuk Road Flyover	Primary Distributor	>20m
Lai Yip Street	Wai Yip Street	Kwun Tong Road	District Distributor	>10m
Lai Yip Street	Wai Yip Street	Hoi Bun Road	District Distributor	>10m
Hoi Bun Road	Shun Yip Street	Lai Yip Street	Local Distributor	>5m
Hoi Bun Road	Lai Yip Street	How Ming Street	Local Distributor	>5m

Chimney Emission

- 4.14 According to HKPSG, chimney located more than 200m from the Study Area is considered having sufficient buffer distance. However, if the chimney is located within 200 m from the Study Area, the buffer distance required shall depend on the height difference between the chimney exit and the fresh air intake locations of the Study Area.
- 4.15 A desktop review of the chimney records was carried out first to identify potential locations of existing chimneys within 200m from the Study Area. Subsequently, a desktop search of other online information and a site visit were undertaken in March and December 2019 to identify the locations of any existing industrial chimneys within 200m from the Site and the height of the chimney exit for any identified chimney. Three (3) industrial chimneys/ vents were identified (**Figure 4.2** refers).
- 4.16 Based on the best available information, it is assumed that the chimneys are related to fuel combustion. The required buffer distance for vehicular and chimneys emissions and the corresponding height difference for chimneys at Wing Tai Industrial Building and Rainbow Industrial Building are shown on **Figure 4.2**. Noting the future development will have a BH of not more than 100mPD, there is sufficient design flexibility for the fresh air-intake to meet the buffer distance (i.e. placing the fresh air intake outside the traffic emission buffer area in the Site (**Figure 4.2** refers) below 39.2 mPD).

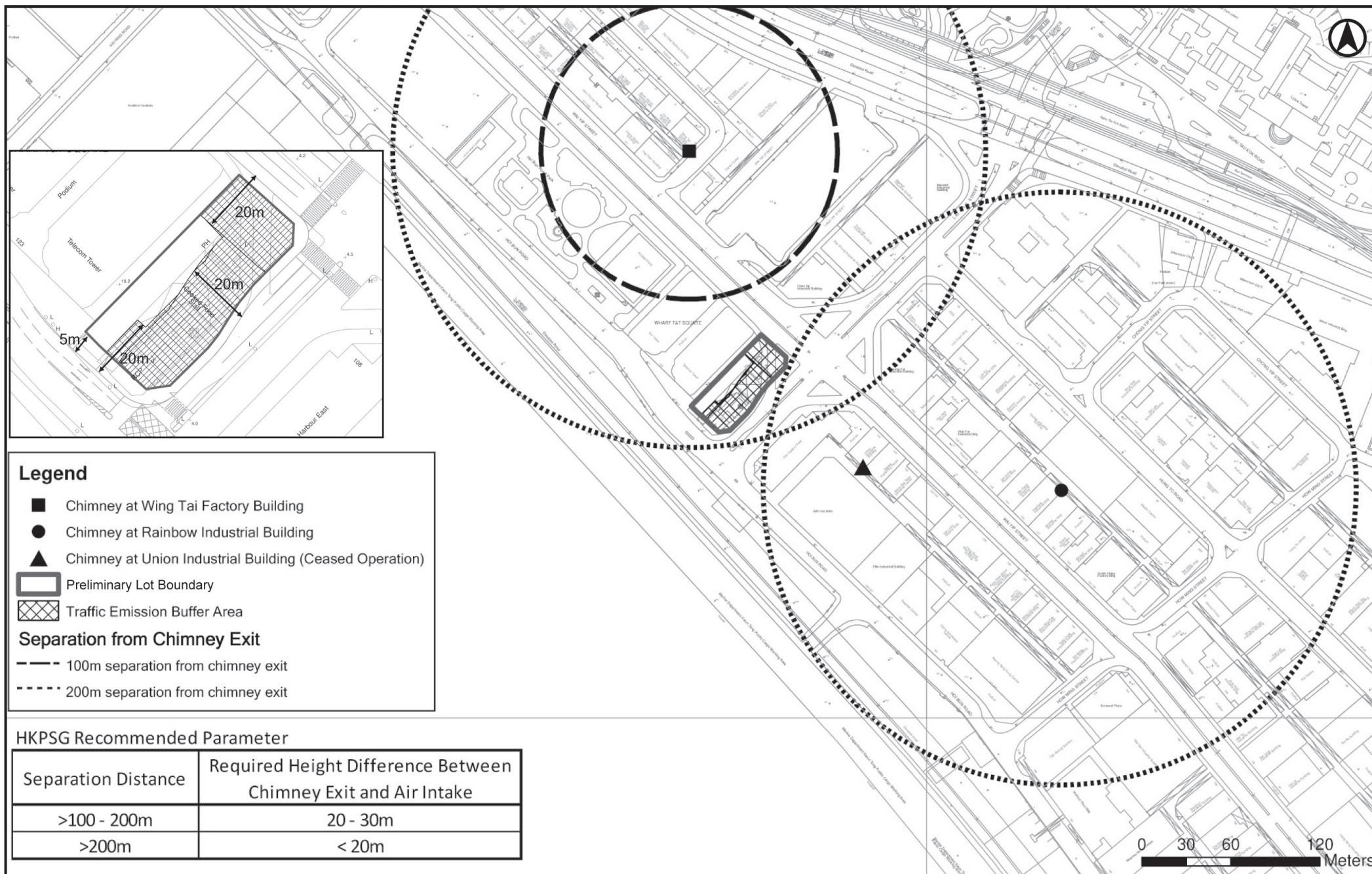


FIGURE 4.2 BUFFER DISTANCE REQUIREMENT FOR VEHICULAR / CHIMNEY EMISSIONS

5 CONCLUSION

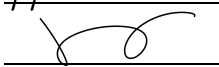
- 5.1 This Study has reviewed the development potential of the Study Area and formulated the developable area on the Site based on relevant technical assessments. A Recommended Design has been prepared with a view to optimizing the development potential and provides the flexibility to accommodate floor space for ACC and hotel uses. The Recommended Design comprises a 21-storey commercial development including ACC/Retail/F&B facilities over 2 levels of basement carpark. The BH and PR of the Recommended Design are 100mPD and 12 (approx.) respectively.
- 5.2 A VA and TTIA have been prepared to assess any potential adverse technical impact to be posed to the surrounding area and it is concluded the Recommended Design with the proposed BH and PR (i.e. 100mPD and 12 respectively) for a commercial development, with provision of hotel and ACC as optional uses, is technically feasible. Apart from the Recommended Design, the Study also proposed the junction modification at Hoi Bun Road/ Lai Yip Street to enhance the pedestrian environment and walkability of the harbourfront. The findings and recommendations of the Study serve as a reference for the amendments to the prevailing OZP and will guide the land disposal and future development of the Site.

Edited &

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