Agreement No. CE 49/2012 (TT) Kowloon Bay Business Area Pedestrian Environment Improvement– Feasibility Study

Executive Summary

AECOM ASIA LIMITED

1 STUDY BACKGROUND

- 1.1 The Kowloon Bay (KB) area used to be one of the traditional manufacturing bases in Hong Kong. Over the years, the focus of economic activities in the area has shifted from industrial/manufacturing-based to more services-based. With the various new landmark buildings (e.g. MegaBox, ZCB Zero Carbon Building) and high-grade office buildings (e.g. 18 Kowloon East, Manhattan Place, and the development on New Kowloon Inland Lot (NKIL) No. 6312 etc.) completed or under construction, it is evident that KB is undergoing a rapid transformation from its traditional industrial character towards a new emerging business/commercial hub in Kowloon East (KE) a new Core Business District (CBD2) to support Hong Kong's economic development and will serve not only local workers and residents but also business travellers from all over the world.
- 1.2 It is anticipated that the pedestrian flows in KE including the Kowloon Bay Business Area (KBBA) will increase rapidly in the transformation process. It is also the public's aspiration for the area to become a more pedestrian-friendly area.
- 1.3 KBBA faces various physical problems inherited from its industrial past, and there are still existing industrial and industrial-related activities in the area. There are frequent roadside loading/unloading activities, affecting pedestrian environment and occasionally causing conflicts between vehicular traffic and pedestrians at busy road sections. Narrow footpaths give rise to a congested and unpleasant walking environment, while there is increasing demand to improve the existing road junction capacity. All these factors pose limitations to support the rapid growth of KBBA.
- 1.4 It is therefore the Government's vision to create a pedestrian environment in KE that is "walkable", "stayable" and "sittable" for public. The walking environment should be **safe**, **comfortable**, **pleasant**, **convenient** and **healthy** for people to enjoy the walking experience, with public spaces created for people to stay, relax, meet people and enjoy various activities.
- 1.5 With the above objectives in mind, the Energizing Kowloon East Office (EKEO) of the Development Bureau (DEVB) commissioned the Kowloon Bay Business Area Pedestrian Environment Improvement Feasibility Study (the Study) to review and assess the pedestrian and traffic environment of the KBBA, to develop feasible proposals to enhance pedestrian connectivity in KB by firstly improving at-grade level pedestrian environment and vehicular traffic facilities, which can be done in short to medium term followed by the provision of pedestrian links to further improve connectivity, which can be carried out in the long term. It was aimed at linking people to and from the KB MTR Station to KBBA and towards the Kai Tak Development (KTD). The Study commenced in early 2013 and its overall vision was:

"To enhance the image of Kowloon Bay and create a Walkable CBD that weaves together work, live and play."

2 OVERALL APPROACH & KEY STRATEGIES

2.1 <u>The "WEAVE" Concept</u>

2.1.1 The concept of a "WEAVE" was inspired by the industrial tradition of KE. It symbolises the heyday of Hong Kong's manufacturing industries when textile manufacturing was one of the core components and embracing the development history of the area. With the "WEAVE" concept, the study aims to improve the connectivity and accessibility between the KBBA, the KTD, the waterfront and surrounding areas. Physically, the concept could be translated into design elements, such as streetscape and open space features that would collectively contribute to delivering a functional, vibrant, iconic, diverse and sustainable public realm.



2.2 Key Strategies

- 2.2.1 To achieve the objectives of the study, the following strategies were derived to guide the design approach and proposals:
 - (a) Enhance Walkability
 - Upgrade pedestrian facilities
 - Enhance signage and way-finding facilities
 - Develop pedestrian links
 - (b) Face-lift the Pedestrian Environment
 - Improve current design of passageways
 - Enhance greening and attractiveness
 - Upgrade public spaces

(c) Improve Road Traffic

- Demand management measures
- Traffic management measures
- Sustainable solutions

3 PEDESTRIAN AND TRAFFIC FORECAST AND ASSESSMENT

- 3.1 On the aspect of traffic environment, a pedestrian and traffic review was carried out to evaluate the existing pedestrian environment and traffic conditions within the KBBA.
- 3.2 In addition, capacity analyses were conducted for design years 2021 and 2030 to investigate the potential impact of the continuous transformation of KB on the road network and key pedestrian links within the KBBA, representing the medium and long term future conditions respectively. Two assessment scenarios (with and without Environmental Friendly Linkage System (EFLS)) were tested for design year 2030, while for design year 2021, it was assumed that the EFLS would not yet be in place.
- 3.3 The latest territorial planning dataset available at the time of the Study was the 2011based "Territorial Population and Employment Data Matrices (TPEDM)" compiled by the Planning Department in 2013. The dataset was adopted for the Study as a basis to develop the traffic forecast.
- 3.4 Based on the pedestrian assessment results, several existing pedestrian footbridges, including the footbridges at KB MTR Station Exit A and Exit B across Kwun Tong Road and the footbridge connecting between Telford Plaza Podium and Telford House across Wai Yip Street, were already overloaded under the existing (Year 2013) condition.
- 3.5 Under the future conditions (both medium and long terms), as the pedestrian flow would increase, some footbridges would become more congested, thus worsening the walking environment. In addition to the aforesaid bottlenecks at KB MTR Station Exit A and Exit B footbridges, the footbridge between Telford Plaza Podium and Telford House, the footbridge between Telford Plaza Podium and HKU School of Professional and Continuing Education (HKU SPACE) Footbridge would also become overloaded.
- 3.6 Based on the traffic forecast and assessments, the capacity of the below junctions would be reached in the future:
 - Wang Kwong Road / Kai Cheung Road (T1)
 - Wang Kwong Road/Lam Hing Street (T2)
 - Wang Chiu Road/Kai Cheung Road (T3)
 - Wang Chiu Road/Lam Hing Street (T4)
 - Wang Chiu Road/Sheung Yuet Road (T5)
 - Wang Chiu Road/Lam Fung Street (T6)
 - Wang Chiu Road/Sheung Yee Road (T7)

4 AT-GRADE PEDESTRIAN AND TRAFFIC IMPROVMENT MEASURES

- 4.1 While the problematic (with capacity issues) footbridges as identified in **Chapter 3** would require a holistic pedestrian network improvement which would be discussed in **Chapter 5**, the Study also identified some footpaths and pedestrian crossings (atgrade) which also require improvement measures to enhance the capacity, connectivity and/or safety. Most of these improvement measures for at-grade facilities would be relatively simple and could be implemented in short to medium term.
- 4.2 To tackle the junction capacity problems as identified in **Chapter 3**, junction improvement measures were recommended under the Study.
- 4.3 The following at-grade pedestrian facility improvement proposals with locations shown in **Figure 1** were considered practicable for implementation in short to medium-term. These proposals are being implemented by the Government progressively. All proposals are expected to be completed by 2017 subject to the outcome of local consultations and liaison with interfacing parties.

Pedestrian Facility Improvement Proposals

P1 - Proposed Crossing Widening at Ngau Tau Kok Road Crossing

- 4.4 The signal controlled junction at Ngau Tau Kok Road near Lee Kee Building was observed with heavy pedestrian crossing demand. Sometimes, large amount of pedestrian amass at both sides of the crossing affecting the pedestrian circulation.
- 4.5 Since the junction was bounded by existing buildings and a viaduct at its east and west respectively, , it would not be possible to widen the footpath and pedestrian waiting area without affecting the carriageway width. Consideration was therefore given to increasing the effective width of the pedestrian crossing and removing obstructions along the pedestrian footpaths.
- 4.6 Having reviewed the geometry of this road section, two modifications were proposed: (1) remove the concrete wall and planters underneath the viaduct at the west of the junction; and (2) construct a built-out at the western kerbside of Ngau Tau Kok Road. The improvement proposal would enhance the fluidity of the pedestrian movement by increasing the effective width of the pedestrian crossing and allow extra waiting area to minimise conflicts between the waiting and through pedestrian traffic.



4.7 The proposed modification of removing of concrete wall was completed in end 2014 (see photos). The result was noticeable and well received by the locals. Since the locals were of view that the improvement proposal of narrowing the carriageway would affect the vehicular traffic, the proposal would be taken forward at a later stage if necessary, with the condition at the crossing being monitored.

P2, P4, P6 and P7 - Cautionary Pedestrian Crossing Enhancement

- 4.8 Within KBBA, it was found that many of the cautionary pedestrian crossings have long crossing lengths, as the original design catered for industrial use. Improvement schemes were therefore proposed with a view to enhancing pedestrian safety and shortening the pedestrian crossing lengths at the following locations:
 - P2 Junction of Wang Hoi Road/Lam Lee Street
 - P4 Junction of Wang Hoi Road/Wang Yuen Street
 - P6 Junction of Wang Tai Road/Lam Fook Street (Works completed in May 2015)
 - P7 Junction of Wang Tai Road/Wang Yuen Street (Works completed in February 2015 (see photos))



P3 and P8 - Pedestrian Crossing Widening along Sheung Yuet Road

- 4.9 It was observed that, during the morning and afternoon commuters' peaks, the pedestrian flow along Sheung Yuet Road was high. Large crowds of pedestrians wishing to cross the roads were usually observed waiting at the sides of the signalised junctions, while sometimes the pedestrian refuges were overloaded with pedestrians forced to stand on the carriageway.
- 4.10 To deal with this high pedestrian demand along Sheung Yuet Road, it was proposed to increase the pedestrian crossing capacities of the signalised junctions by increasing the widths of the pedestrian crossings. Signalised crossings of high pedestrian demand were selected for widening, these included:
 - P3 Junction of Wang Hoi Road/Sheung Yuet Road
 - P8 Junction of Wang Chiu Road/Sheung Yuet Road

P5 – Provision of Footpath at Wang Mau Street

4.11 Currently, footpath is not available at the eastern kerbside of Wang Mau Street while the pedestrian crossings at both the northern and southern ends of Wang Mau Street have lengths of more than 10m. It was proposed to provide a continuous footpath (minimum 2.0m with 7.3m carriageway remaining) at the eastern kerbside of Wang Mau Street and modify the corner radii at the northern and southern ends of the road such that the pedestrian crossing lengths could be shortened and hence to improve the accessibility at the pedestrian crossing facilities.

P9 - Footpath Widening at Wang Kwun Road

4.12 It was observed that the frequent loading/unloading activities affected a number of pedestrian crossings along Wang Kwun Road. Though a number of pedestrian crossing points were located along both sides of Wang Kwun Road, pedestrian drop-kerbs along the eastern kerbside near Lam Lok Street were often found "hidden" behind the loading/ unloading activities making it very difficult for pedestrians to locate the proper path to cross the road. In order to improve the pedestrian environment and safety, local widening of the footpath at the crossing to shorten the crossing distance was proposed at Wang Kwun Road and Lam Lok Street.

<u>P10 - Additional Pedestrian Crossing at Junction of Lam Hing Street and Wang Chin</u> <u>Street</u>

- 4.13 At the junction of Lam Hing Street and Wang Chin Street, there was no convenient pedestrian crossing between Kowloon Bay International Trades and Exhibition Centre (KITEC) and Lam Hing Street. To use proper cautionary crossing facilities, pedestrian would be required to cross Wang Chin Street at Kai Cheung Road or at the southern end of Trademart Drive. Both routes would result in a 100m detour. Therefore, jaywalking was not uncommon in the area.
- 4.14 Since the completion and occupation of the Hong Kong Post Central Mail Centre (CMC) in recent year, the pedestrian crossing demand between the IMC and KITEC were increased.
- 4.15 It was proposed to provide an additional pedestrian crossing point between the two existing crossings at Wang Chin Street, near the western end of Lam Hing Street. As part of the works falls within an area managed by KITEC, further liaison would be required to address the interfacing issues.

Vehicular Junction Improvement Proposals

4.16 Local junction improvement schemes¹ were developed for the problematic junctions as identified in **Chapter 3** to mitigate the envisaged capacity problems. The tentative completion years for the various junctions are listed as follows:

¹ Subject to further detailed assessments, some of the proposed local junction improvements may constitute designated projects (DPs) or material changes to exempted DPs under the Environmental Impact Assessment Ordinance, which require environmental permits for their construction and operation.

Ref	Junction	Implementation Agent	Tentative Completion (on or before)
T1	Wang Kwong Road / Kai Cheung Road	Contractor of Central Kowloon Route Project	2020
T2 (Stage 1)	Wang Kwong Road /	Contractor of Central Kowloon Route Project	2020
T2 (Stage 2)	Lam Hing Street [#]	To be determined	Subject to further review on the performance of Stage 1 works
T3	Wang Chiu Road / Kai Cheung Road	Contractor of Kai Tak Development Project	2019
T4	Wang Chiu Road / Lam Hing Street	Contractor of Kai Tak Development Project	2019
T5	Wang Chiu Road / Sheung Yuet Road	To be determined	Subject to further review before 2020
T6	Wang Chiu Road / Lam Fung Street [#]	HyD's Term Contractor	2018 (subject to the final design of the proposed EWS)
T7 (Stage 1)	Wang Chiu Road /	Contractor of Kai Tak Development Project	2018
T7 (Stage 2)	Sheung Yee Road	To be determined	Subject to further review on the performance of Stage 1 works

[#] Junctions expected to be overloaded by 2030

Note: The tentative completion years were estimated based on the current information available and will be subject to the interface with other projects in the vicinity during implementation stage, the outcome of local consultations and funding being available.

5 COMPREHENSIVE PEDESTRIAN NETWORK

5.1 Overview

- 5.1.1 Through understanding the overall existing and planned development context of KBBA and surrounding areas, as well as the existing problems (including the problematic footbridges as identified in **Chapter 3**), constraints and opportunities, a comprehensive pedestrian network comprising a series of pedestrian links was also formulated, taking into consideration the existing and future pedestrian flows and activities in KBBA.
- 5.1.2 These pedestrian links were categorised into seven pedestrian links, with an aim to enhance capacity and connectivity within KBBA (between KB MTR Station and KBBA) as well as cross-district connectivity between KBBA and the KTD.
- 5.1.3 The proposed at-grade links include (1) Green Spine and (2) Green Link. Grade-separated pedestrian links were also developed with the Elevated Walkway System (EWS) proposed by private developers, including (3) Northern Kai Tak Link; (4) Southern Kai Tak Link; (5) Telford Amoy Link; (6) Siu Yip Street Link and (7) Tai Yip Street Link. Figure 2 shows the alignments for the seven proposed pedestrian links graphically.
- 5.1.4 While these were only initial proposals aimed at identifying longer term solutions to enhance local connectivity, detailed alignments and design of these links will be subject to further study, as well as facilitation with the private sector and liaisons with relevant government departments regarding future implementation and management and maintenance responsibilities.

5.2 Green Spine

5.2.1 The "Green Spine" would mainly be a "car-free" north-south pedestrian passageway with seating/resting areas, which would integrate with the various existing sitting-out areas at Kai Cheung Road, Lam Hing Street, Wang Tai Road, Lam Fook Street and Lam Wah Street to enhance the existing linear open spaces into a vibrant and attractive public area at the heart of KBBA. The existing sitting-out areas are being face-lifted in phases and the first phase at Lam Fook Street Sitting-out Area was completed in March 2016 (see photos). The "Green Spine" will not only direct the north-south pedestrian flow, but also interact with adjacent commercial areas and streets with possible future ground floor retailing to form a vibrant pedestrian network.



- 5.2.2 A portion of NKIL No. 6312 adjoining Lam Lee Street was included as a part of the "Green Spine". Requirements relating to design, construction arrangement and maintenance are incorporated into the land sale conditions, and this public open space is being developed by the private developer of NKIL No. 6312.
- 5.2.3 It was observed that at present, there is a substantial amount of pedestrians coming off from the footbridge from the podium of Telford Plaza across Wai Yip Street towards Lam Hing Street and Wang Hoi Road through the HKU SPACE courtyard area. There exists an opportunity to transform this area as a key connection node between the KB MTR Station and KBBA by providing a landing plaza with rearrangement to the existing motorcycle parking spaces and widening of the existing narrow footpath at Lam Hing Street by 1m. The improvement works are aimed at fostering a pleasant walking experience for the pedestrians.
- 5.2.4 The alignment of the "Green Spine" will also extend to the west interacting with Lam Wah Street Playground, and further to the CMC and KITEC as well as the future "Green Link"; while branching off to the existing footbridge (KF63) across Kai Cheung Road at the north via the Kowloon Motor Bus (KMB) Depot (upon its redevelopment) and extending to the south to link with Sheung Yee Road and the future Kowloon Bay Action Area (KBAA) via Wang Mau Street.
- 5.2.1 In the long term, upon redevelopment of the adjacent buildings, possibility for opening up of the ground floor space for provision of food and beverages/retail shops along the "Green Spine" should be considered to encourage interactions with these adjacent uses, as well as to complement the future development of the various vibrant streets so as to further strengthen the "vibrancy" of the future CBD.

5.3 Green Link

- 5.3.1 The "Green Link" would also form part of the network which would extend from north to south linking-up all major open spaces, major new developments/ points of interests within the KBBA (i.e. KITEC, MegaBox, future KBAA), with possibility to further extend towards the Kwun Tong waterfront and along Hoi Bun Road to provide a comfortable/green environment for pedestrian movement towards the waterfront. The "Green Link" aims to make use of the various Government, institution or Community (G/IC) sites at Wang Chin Street and Wang Kee Street by proposing appropriate set back along the sites to provide a wider and more spacious footpath for future greening and streetscape enhancement, which will guide pedestrian movements towards the south through the various open spaces at Wang Kwong Road/Kai Fuk Road and Sheung Yee Road/Kai Fuk Road. Planting and landscape treatment may also further extend southward to link up with all the key landmarks and points of attractions within KBBA such as KITEC; the triangular open space at the junction of Sheung Yee Road/Kai Fuk Road where a proposed EFLS station might be located; MegaBox and the future KBAA through Sheung Yee Road, so as to form a comprehensive green network. In particular, the triangular open space at junction of Sheung Yee Road/Kai Fuk Road may be converted to a landscaped area, which together with the proposed Kwun Tong Community Green Station would provide more green facilities in KBBA for public enjoyment. The portion of "Green Link" along Sheung Yee Road would require future setting back of the developments along the road to provide sufficient space for street-side greening and planting. This should be taken into consideration in the future site planning of the KBAA.
- 5.4 Northern Kai Tak Link
- 5.4.1 The proposed Northern Kai Tak Link would comprise of the gazetted footbridge under the Central Kowloon Route (CKR) project; the planned northern footbridge across the Kai Tak South Apron and Approach Channel under Kai Tak Outline Zoning Plan (OZP) and other extensions to form a direct, extensive cross-district pedestrian linkage between KB and Kai Tak South Apron. One option of the Northern Kai Tak Link alignment would be to follow the current initial alignment of the planned northern footbridge as shown under the Outline Zoning Plan. An alternative alignment was also considered, which would be to shift the footbridge slightly north to connect with the gazetted CKR footbridge across Kai Fuk Road (which would require provision of a future extension point). This would allow for more efficient and cohesive flow of pedestrian and better connection to the footbridge. Utilising the future development of the two G/IC sites along Kai Fuk Road due southwest of KITEC, the Northern Kai Tak Link would connect to these buildings via future connection points to be provided upon development of these sites, and would then further extend towards the waterfront to link with the shifted footbridge across to Kai Tak South Apron. This alternative alignment would allow for better integration of the various planned footbridges, and more cohesive flow of pedestrian. Future site planning and development of the two G/IC sites in Kai Tak South Apron would need to take into consideration the required interface with the proposed Northern Kai Tak Link.
- 5.5 Southern Kai Tak Link
- 5.5.1 The proposed Southern Kai Tak Link would integrate with the proposed "Green Link" to provide an elevated connection which would start from the triangular open space at

Sheung Yee Road/Kai Fuk Road and connecting with the existing footbridge (KF-64) underneath Kwun Tong Bypass to serve the planned G/IC facilities along the waterfront under the KTD as well as the potential EFLS station site at the aforementioned triangular open space.

- 5.5.2 In order to attract pedestrians for using the foresaid route with enhanced walking environment, it was proposed to facelift the footbridge KF64. Landscape enhancement in the triangular open space was also proposed to provide an enjoyable walking environment for commuting between the EFLS station and KTD. The aforesaid linkage may also be extended to KBAA and/or the adjacent MegaBox via elevated linkage. Under the proposed pedestrian link, instead of linking the footbridge (KF64) or the EFLS station with the KBAA directly via a continuous elevated walkway, pedestrians would be purposely diverted to the at-grade triangular open space to enjoy the enhanced landscape before regaining access to KBAA via a separate section of elevated link for crossing Sheung Yee Road.
- 5.6 Telford Amoy Link
- 5.6.1 In order to improve the pedestrian linkage between the KB MTR Station to the west of Kwun Tong Road and the residential area to the east of Kwun Tong Road (Amoy Garden and Tak Bo Garden, etc.), the Telford Amoy Link is proposed.
- 5.6.2 The proposed Telford Amoy Link would provide a 24-hour pedestrian route outside the future East Kowloon Cultural Centre (EKCC) connecting the residential area and KB MTR Station which aims at improving the pedestrian connection.
- 5.6.3 In order to relieve the crowded condition at the existing footbridge near KB MTR Station Exit B, an additional footbridge, linking the EKCC and KB MTR Station across Kwun Tong Road was proposed. Details on the proposal should be subject to further study as well as liaison with relevant government departments.
- 5.6.4 During the public engagement exercise of the Study, there were suggestions for providing a direct footbridge between the Amoy Plaza and EKCC across Ngau Tau Kok Road, in order to enhance the connectivity among the Amoy Garden, EKCC and KB MTR Station. A connection point has been allowed in the design of EKCC to facilitate future connection initiated by the private sector.
- 5.7 Siu Yip Street Link
- 5.7.1 The proposed Siu Yip Street Link would function as one of the major pedestrian links in the south of KBBA, with the aim to complement the future EWS by providing an alternate new route for pedestrians travelling between the KB MTR Station and the KBBA, through diverting some of the pedestrian flow to the future Siu Yip Street Link so that the heavy volume of pedestrians at the southern footbridge from the podium of Telford Plaza above Wai Yip Street could be relieved/shared.
- 5.7.2 The proposed link would provide an elevated pedestrian linkage from the existing Hang Seng Tower/MTR Headquarters Building to the cluster of new office buildings along Sheung Yee Road through Siu Yip Street, as well as a possible connection from the existing Enterprise Square III to the future KBAA across Sheung Yee Road. A connection point would need to be provided at the Hang Seng Tower/MTR Headquarters Building for the proposed Siu Yip Street Link.

- 5.7.3 There may be possibility that upon the possible relocation of the Ngau Tau Kok Police Station site, which is still uncertain at this stage, an internal connection shall be provided within the future development at the police station site as part of the Siu Yip Street Link.
- 5.7.4 While there is currently no redevelopment programme for the Yip On Factory Estates site, the desirable alignment of Siu Yip Street Link, after crossing Wai Yip Street, would be to go through the Yip On Factory Estates site, instead of along Wai Yip Street and Sheung Yee Road. With such desirable alignment, further connection can be made to Manhattan Place directly, linking with the gazetted EWS and to KBAA. Such alignment would greatly reduce the demand for the valuable public road space and should hence be considered, if the opportunity to redevelop the Yip On Factory Estates site arises in the future.
- 5.8 Tai Yip Street Link
- 5.8.1 Tai Yip Street Link would comprise facelifting the existing Sheung Yee Road Footbridge across Wai Yip Street (KF39); widening the footpaths along Tai Yip Street from Hang Seng Tower to Sheung Yee Road Footbridge, facelifting part of the Short Term Tenancy site currently occupied by Hong Kong Society for Rehabilitation (see photos), and part of Wai Yip Street/Sheung Yee Road Sitting-out Area, in order to increase the walking comfort and to divert the demand from those travelling along the congested Telford Plaza footbridge across Wai Yip Street. To improve the aesthetics of the existing footbridge, the requirement to facelift the existing Sheung Yee Road Footbridge across Wai Yip Street was included in land lease of NKIL No. 6313.



5.8.2 Noting a proportion of pedestrian demand across Telford Plaza and Wai Yip Street to KBBA at the commuting peaks was caused by the bus passengers alighting at Kwun Tong Road, it was proposed to provide a new bus stop close to the junction of Kwun Tong Road/Hong Tak Road to divert the existing bus passengers pick-up/drop-off at southward of Kwun Tong Road so that public could access to the KBBA by Hong Tak Road, Tai Yip Street and the existing Sheung Yee Road Footbridge.

5.9 Proposals by Others

- 5.9.1 The EWS was a private initiative gazetted in 2010 and authorised under the Roads (Works, Use and Compensation) Ordinance in February 2011. The implementation programme has yet to be confirmed by the private consortium. Under the current study, assumption was made that the EWS would be developed. Upon completion, the EWS would provide a network of point-to-point elevated walkways linking Telford Gardens through to various office buildings including MegaBox, One Kowloon, Manhattan Place, Exchange Tower and Enterprise Square III etc.
- 5.9.2 The gazetted alignment of the EWS was reviewed under the Study and the following enhancements were proposed:
 - omission of a section of EWS along the Green Spine between Sheung Yuet Road and Wang Yuen Road by integrating with an internal pedestrian walkway in NKIL No. 6311 as provided for under the relevant lease. The alignment of the footbridge connection between the development at NKIL No. 6311 and One Kowloon would need to be adjusted accordingly;
 - possible further extension of the EWS to connect with Nam Fung Commercial Building via Shui Hing Centre, New Bright Building and Enterprise Square; and
 - shifting the section of EWS across Lam Fung Street to the west away from Wang Chiu Road and towards the building line of MegaBox to allow sufficient space for the planned vehicular junction improvement proposal T6 at Wang Chiu Road and Lam Fung Street as mentioned in paragraph 4.14.



- 5.9.3 From an urban planning perspective, the justifications for developing a public walkway system would need to take account of, apart from forecast pedestrian flows, various walkability factors such as safety, comfort, convenience, time efficiency, etc. Furthermore, the benefits of improving the quality of pedestrian journeys in terms of comfort and convenience, or seizing opportunities for connections with private developments and destinations which could create synergy and increase the vibrancy of an area, among other intangible benefits, must be considered. The possible extensions of the EWS would be hence conceptual only and subject to the initiatives of the private developers in the vicinity and their redevelopment plans. Other alignments and connection points may also be possible. The alignment and pedestrian demand should hence be reviewed for the scheme to go further in a later stage.
- 5.10 Comprehensive Pedestrian Network
- 5.10.1 With combining the aforementioned proposed at-grade and grade separated pedestrian links, a comprehensive pedestrian linkage network, as illustrated in **Figure 3**, is expected to be formed within KBBA in the future.

6 PROPOSALS FOR BUILDING SETBACK FOR WIDER FOOTPATH

- 6.1 Apart from the above, specific areas were also identified for potential future setback of building lines from their respective lot boundaries so as to form wider footpaths for streetscape enhancement. The initial proposals are illustrated in **Figure 4**. While these proposals illustrate a long term vision of the design framework of the study, realisation of these proposals would depend on individual private lot redevelopment initiatives and should be subject to onward liaison amongst government departments, bureaux and stakeholders:
 - i. Lam Hing Street (northern section between Po Lung Centre and Kader Building): Pedestrian flow assessment indicates that with the future increase in pedestrian flow and the various planned new redevelopments nearby (e.g. NKIL No. 6312), the Level of Service (LOS) for this section of the street is expected to change from the current LOS C (under base year 2013 scenario) to LOS D (by 2030). Making reference to the existing width of this section of footpath on Lam Hing Street, an additional setback for about 1m of the future building lines from the adjacent lot boundaries upon their future redevelopment is recommended to form a wider footpath with a minimum width of 4m, so that the LOS would be within the acceptable range of level C. The section of footpath on the northern section Lam Hing Street between the Metro Centre and the Green Spine will be widened by 1m under the footpath improvement works as mentioned in paragraph 5.2.3.
 - ii. Wang Hoi Road (eastern section between Sheung Yuet Road and Wang Tai Road): Wang Hoi Road is one of the busier streets within KBBA with various commercial/local shops already clustered along both sides of the road. Pedestrian flow assessment suggested that further increase in pedestrian flow is expected, particularly for the section of Wang Hoi Road between Wang Tai Road and

Sheung Yuet Road, resulting in predicted LOS to be changed from the current LOS A (under base year 2013 scenario) to LOS E (by 2021 and also in 2030). The existing footpath width of this section of Wang Hoi Road ranges from about 3m to 3.2m. There is a need for additional setback of the building line from adjacent lot boundaries along the eastern edge of this section of Wang Hoi Road for 1.3m to 1.5m to achieve a minimum footpath width of 4.5m so as to achieve the acceptable range of LOS C.

- iii. Lam Lok Street: Taking into consideration the various private redevelopment proposals along Lam Lok Street (including YHC Tower, a newly constructed office building and an approved hotel development), as well as the proposed future upgrading of the Lam Wah Street Playground, Lam Lok Street has the potential to become a vibrant street with restaurants and retail shops on the ground floor to complement the new developments and future influx of visitors. With the existing footpath width of Lam Lok Street ranges from 2.5m to 3m, additional setback of the building line within the adjacent lots of about 2m to 2.5m at certain sections of these streets (except for YHC Tower which was recently redeveloped) is proposed to achieve the recommended footpath width of 5m to enable possible enhancement of streetscape design.
- iv. Wang Tai Road (Section between Lam Wah Street and Sheung Yuet Road): Similar to Lam Lok Street, this section of Wang Tai Road has the potential to become a vibrant street taking into account the various planned/committed redevelopments and land sale sites (e.g. NKIL No. 6311 and 6312). The existing footpath width of this section of Wang Tai Road is about 3m. Additional setback of the building line from the adjacent lot boundaries for about 2m is proposed, to achieve a footpath width of 5m to enable possible enhancement of the streetscape design. This future vibrant street would complement well with the proposed "Green Spine".
- 6.2 The implementation of the setback proposals would involve various measures under the planning and land administration mechanisms. The setback proposals (i) and (ii) above are recommended to ensure the future pedestrian demand can be met. The setback requirements as depicted in the Kowloon Bay ODP on the buildings of concerned are noted to be sufficient in meeting the setback requirements of proposals (i) and (ii).
- 6.3 It was noted that a 4-metre setback requirement to allow for future pedestrian demand on Wang Tai Road and Lam Lok Street has already been imposed in the current Kowloon Bay ODP for Lam Lok Street and Wang Tai Road. The Study envisaged that with the nearby new developments and open space enhancements, setback proposals (iii) and (iv) would further enhance the vibrancy of these streets and recommended that they should be incorporated into the Kowloon Bay ODP as an administrative measure to take forward the proposals.

7 CONCLUSIONS

- 7.1 The Study has reviewed the existing pedestrian and traffic conditions in KBBA and analysed the impact due to the development in KE up to 2030. To create a pedestrian environment in KBBA that is walkable, the Study introduced various pedestrian facilities and traffic proposals for 17 individual locations. These proposals are being taken forward progressively in liaison with relevant government departments.
- 7.2 The Study also categorised the proposals into 7 pedestrian links, representing our long-term objective in connecting different parts of KBBA by improving at-grade pedestrian facilities, enhancing landscape and streetscape, promoting greening, diverting existing heavy pedestrian flow, connecting different important nodes of attraction through at-grade connection or elevated walkways. Further to this Study, the preliminary proposals shall be further reviewed and studied in detail for relevant departments/parties' consents, prior to implementation, if necessary.
- 7.3 In order to realise the vision of developing a "Walkable KE", pilot scheme to encourage landowners to construct grade-separated pedestrian links at their own cost in accordance with the aforementioned comprehensive pedestrian network will be launched in KE. This will facilitate early provision of the proposed comprehensive pedestrian network in KBBA as well as the Kwun Tong Business Area.

FIGURES

- Figure 1 Improvement Proposals to Pedestrian Facilities and Traffic
- Figure 2 Proposed Pedestrian Links
- Figure 3 Proposed Comprehensive Pedestrian Network
- Figure 4 Building Setback Proposal



AGREEMENT NO. CE49/2012 (TT) KOWLOON BAY BUSINESS AREA PEDESTRIAN ENVIRONMENT IMPROVEMENT - FEASIBILITY STUDY









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建議的綜合行人連接網絡 PROPOSED COMPREHENSIVE PEDESTRIAN NETWORK





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建築物界線後移建議 BUILDING SET BACK PROPOSAL

