For discussion On 6 May 2022

Open Spaces near Kai Tak River, Kai Tak Development

PURPOSE

The purpose of this paper is to seek Members' comments on the conceptual design of the public open spaces (" the Open Spaces") located along Kai Tai River (OS6 and OS6a) and within Area 2 of Kai Tak Development (KTD) near Station Square (OS3a, OS3b, OS4 and OS5) prior to proceeding with detailed design.

BACKGROUND

2. To dovetail with the developments in Kai Tak, the Government has launched improvement works of Kai Tak Nullah to enhance its flood relief capacity since 2011. Taking the opportunity, a public engagement exercise was held in 2010 and 2011 to gather views from the public on the planning vision of The views collected indicated strong public the project. support for turning the nullah into an attractive green river corridor through urban areas, providing space for leisure and public activities while improving the drainage capacity in East Kowloon. In response to public aspirations, we are aiming at transforming it into a river corridor in urban areas with unique urban landscape features for public activities, creating an important brand for the Kai Tai Development Area.

3. The improvement works of Kai Tak Nullah were completed in 2018. The upstream and midstream sections were incorporated with greening and ecological elements and the water body was revitalized into an urban green river corridor that links the river closely with the local neighbourhood.

4. In the quest of design excellence and to promote public engagement in the design of open spaces along the downstream section of Kai Tak Nullah, a design idea competition was held in 2014 to collect design concepts from a wider spectrum of participants. The winning scheme 'The Living Roots' and some of the other outstanding designs would be made reference for the design of the open spaces.

5. In order to invite insights from relevant stakeholders for the design of the Open Spaces, a value management workshop was held in June 2021 with the participation of the Members of the Task Force on Kai Tak Harbourfront Development (KTTF). Members showed strong support for the project and constructive recommendations were collected for the design of the Open Spaces.

SITE CONTEXT AND CONNECTIVITY (Enclosure A)

6. The total site area of OS6 and OS6a along the lower stream of Kai Tai River is around 3.7 hectares, while the total site area of OS3a, OS3b, OS4 and OS5 is around 1.2 hectares.

7. OS6 connects Prince Edward Road East and Kai Tak Station and is abutted Square, by two sites zoned "Comprehensive Development Area" ("CDA") on the draft Kai Tak Outline Zoning Plan (OZP) No. S/K22/7 (i.e. Sites 1M1 and 1F2) with future retail frontages, one on each side of the Kai Tak River. The curvilinear elevated walkway (zoned "Other Specified Uses" annotated "Landscaped Elevated Walkway" on Kai Tak OZP) under construction under the Kai Tak Stage 5B infrastructure project will cross OS6, connecting the existing elevated walkway adjoining the Trade and Industry Tower on the east of the Kai Tak River and a "CDA" site (Site 1M1) on the west. OS6 will include an at-grade river crossing pedestrian path connecting the exits from the future Underground Shopping Street (USS) which runs within the two "CDA" sites on each side of the Kai

Tak River.

8. OS6a connects Kai Tak Station Square and Shing Kai Road, and is flanked by existing residential developments of the Grid Neighbourhood. Both OS6 and OS6a are situated on top of the existing box culverts of the Kai Tak River which was reconstructed and upgraded in 2018.

9. OS3a, OS3b, OS4 & OS5 are connected by Prince Edward Road East at its north-western side, the future Road L7 at its north-eastern side, Kai Tak Station Square at its southeastern side and the future Road L16 at its south-western side. It will be abutted by future public housing developments at Sites 2B2 and 2B3 and future residential developments at Sites 2A3 and 2A4. A continuous Dedicated Pedestrian Zone (DPZ) of at least 4.5m wide will run along the edges of OS3a, OS3b, OS4 & OS5 at the interface with the adjoining development sites.

GENERAL DESIGN APPROACH & VISION

10. The design concept of OS6 and OS6a is inspired by the winning scheme of the Kai Tak River Design Competition 2014 - 'The Living Roots' with the vision of the open space as part of a green infrastructure network and a catalyst for high-quality, sustainable future urban development. Ideas from the winning scheme such as a sinuous connection network, various types of landscape gardens, terraced seating and great lawns will be developed to suit the various site constraints, technical considerations, management and operational requirements as appropriate.

11. Along the main theme of 'Living Root', two distinctive atmospheres are proposed for OS6 and OS6a with respect to the individual site context. OS6, echoing the vibrant atmosphere of Kai Tak Station Square, is conceived to be an urban river edge with a synergy effect with the adjacent "CDA" sites. The target

user groups are envisaged to be office workers and shoppers. On the other hand, OS6a, contrasting the atmosphere of Kai Tak Station Square, is proposed to be an urban oasis complementary to the residential surroundings. The target user groups will be mainly residents and visitors. Open plazas, multi-purpose areas for fitness and children's play, sitting-out area, and cantilevered viewing decks will be provided at OS6 and OS6a to suit various needs. The open spaces with barrier-free and universal design will be friendly and accessible to people of all ages and mobility.

12. OS3a, OS3b, OS4 and OS5 will be an avenue leading people from the vibrant Kai Tak Station Square to Kowloon City and link up several entry points to the USS. These passive recreational open spaces will include thematic landscaping and sitting-out facilities for the enjoyment of local residents and visitors.

DESIGN CONCEPT OF OS6 & OS6a (Enclosure B)

13. 'Vitalizing River' is the principal theme of OS6 and OS6a. The river will bring water that nourishes life: both in the community and in nature. The basin of Kai Tak River will become an urban oasis, a place for people and nature to flourish. The Vitalizing River invites people to come close to the waterfront, maximises connection to nature, and promotes health & wellbeing.

14. The shifting river course over the decades, albeit artificial, imitates the natural properties of a tidal river, and reflects the area's history. Three natural river characteristics inspire the development of the open spaces: 'Flow', 'Sedimentation' and 'Growth'.

15. 'Flow' – The flow of water along the rivers inspire a streamlined circulatory network for pedestrians and cyclists.

The main pathway on both riverbanks connects all major sources of circulation, including railway, commercial developments, walkways, and subways. Other access points join the main pathways like tributaries merging to the main river. The language of flow directs the smooth morphology of the open spaces, which also complements the existing meandering retaining wall.

16. 'Sedimentation' – The meandering form of river leads to the accumulation of sediments. Likewise, social spaces along the river attract people to stay, and encourage social encounters and cultural celebrations. Lawns, terraces, pavilions, and seats are intimate spaces for people to come together comfortably, while larger spaces could accommodate festive celebrations and ad-hoc events. Social encounter enriches the lives of visitors and residents in the neighbourhood, and raises their sense of belonging.

17. 'Growth' – The flow of water nourishes the flora and fauna in the environment. A palette of plants is carefully selected to elevate ecological value by attracting local wildlife such as birds, fishes, and insects, as well as to acknowledge the importance of greenery for the wellbeing of inhabitants. Plants well-known in Hong Kong, including many native species, will be adopted. The unique landscape of local plants evokes the genius loci of Hong Kong, further raising people's sense of belonging to the community.

DESIGN PROPOSAL OF OS6 & OS6a (Enclosure C)

18. OS6 will be characterized as a vibrant river edge benefiting from the synergy with adjacent commercial developments, giving the open space energy and buzz throughout the day. At the arrival point from Prince Edward Road East, an entrance plaza with a magnificent view to the Kai Tak River will be the gateway to the open space. The

management office and toilets located near the entrance plaza will be easily accessible by pedestrians as well as cyclists. A shaded garden under a canopy of trees will become an ideal place to rest and have a picnic. Anticipating that tables will spill out from the cafés and restaurants in the adjacent CDA development (Site 1M1), a row of trees is designated at 5m intervals to allow a good visual permeability towards the river. A pedestrian river crossing is strategically placed to connect USS exits on both sides of the river. On the eastern side of the river, an extended deck will receive the pedestrian flow from the CDA development (Site 1F2). Provisional space for temporary booths with water and power supply will be provided on the deck and the river crossing for ad-hoc retail or food and beverage activities upon application by private bodies. It is envisaged that the ad-hoc events can further enhance the vibrancy of the river edge. Next to the river crossing, a crescent of stepped terraces and an observation deck will be coupled on both sides of the river to attract gathering of people near the river.

19. On the contrary, OS6a will bring a sense of tranquillity to the riverfront in complementary to the calmness of the residential neighbourhood. Various types of thematic landscape pockets, like a grand lawn, riverine gardens, fields of silver grass / grassy shrubs, herbs garden, wellness orchard and a canopy of trees will be included. A canopy of trees is strategically designated outside the drainage reserve area, where the growth of large trees will not be constrained by the reserve area. Several cantilevered observation decks will offer different vantage points towards the river. Celebration of festivals at the open space along the river will be a unique experience for the residents in the neighbourhood and other visitors. A plaza for moon gazing on the western side of the river is strategically placed. Pavilions designed for moon gazing and social gatherings during festivals, such as Mid-Autumn Festival, will be Making reference to the history of coastline placed there. transformation at Kai Tak, a history corner is proposed at the corner where the seawall of the first reclamation in 1920

intersects with the site. The development of the coastline and the river can be showcased by infographic panels or exhibition. Feature installation mimicking the box-culverts along the river will be placed to raise awareness of the massive underground drainage infrastructure hidden from view.

20. Groups of pavilions abstracting the image of leaves flowing on a river will be strategically placed alongside the river to provide sheltered seating. The granite finishes of the pavilion fixtures harken back to the history of granite quarries in the region. The pavilions will be decorated with feature planters and natural granite blocks.

21. Several building blocks of single-storey high will accommodate the essential facilities such as the management office, toilets, and plant rooms. The architectural style of the building blocks seeks to find coherence with the curved and streamlined form of the river, as well as the curvilinear walkway over OS6 to reflect the dynamics and vitality of the river.

22. To support future maintenance of the drainage infrastructure covering an extensive portion of OS6 and OS6a, all essential ancillary facilities including a heavy-duty maintenance access for the desilting manholes will be incorporated into the layout strategically.

23. Existing river revitalizing features, such as the planter boxes, artificial rock planters, submerged planters, fish shelters and flow deflectors, will be retained. Meanwhile, addition of plants that can better adapt the intertidal environment are proposed for the planter box along the retaining wall.

ECOLOGICAL ENHANCEMENT MEASURES

24. We will formulate potential measures to enhance the ecological value of OS6 and OS6a based on the field findings and

recommendations to be made by an ecologist. Subject to further technical study, the preliminarily proposed measures can include: i) Riverside tree groups with large and closed canopy that can attract birds to roost and give shade; ii) Enhancement of the existing planter box by removing weedy vegetation and planting shrubby coastal plants or other nectar plants to attract butterflies; iii) Wilted mangroves at some of the existing pocket planters in artificial rockworks to be replanted with suitable species of mangroves, enriching the food source for fauna around the river; and vi) Bird/bat nest boxes can be installed to provide 'house' for common and widespread birds and bats.

25. Rain garden and bio-swale, which are key elements of a "Sponge City", will be planted where stormwater runoff can be collected, for instance, around slopes and the ancillary building blocks. These features can further increase bio-diversity, and demonstrate how cities can better integrate with nature.

CYCLING ALONG THE RIVERBANK

26. A GreenWay¹ of about 640 metres long ranging from 6 to 8m wide will run through both OS6 and OS6a on the western side of the river, as part of the 13-kilometres GreenWay network linking Kai Tak Station Square, Kai Tak River, Kai Tak Sports Park, the promenades along the Kwun Tong Typhoon Shelter and the Former Runway. Cyclists and pedestrians can enjoy the view of the river under the shade of trees planted all along the Ancillary facilities such as bicycle parking and GreenWay. drinking facilities will be provided at both end of the GreenWay at OS6 and OS6a. Relevant design standards including the safety measures of the GreenWay will follow the recommendations to be formulated under the current study on

 $^{^{\}rm 1}$ The GreenWay in KTD is a network of shared-use path for both pedestrians and cyclists.

the design and implementation of the GreenWay being carried out by the Civil Engineering and Development Department.

SOFT LANDSCAPING DESIGN OF OS6 & OS6a (Enclosure D)

27. The soft landscape aims to increase biodiversity and to restore closeness with nature, enhancing the well-being of those who live and work there. A naturalistic planting style will be adopted to echo with the streamlined layout. Seasonal changes, tolerance to strong wind, biodiversity within a typical urban ecology setting are major considerations in selecting the planting palette.

The soft landscape selection for OS6 and OS6a will 28. strengthen the overall design concept and enrich visitors' experience by creating a series of thematic landscape features including thematic landscape pockets, grand lawn, riverine gardens, fields of silver grass, grassy shrubs, herbs garden, wellness orchard and canopy of trees as mentioned in paragraph Liquidambor formosana² will be adopted as the 15 above. structural trees along the GreenWay, which provide good shading effects with change of foliage colour in autumn; mass planting of feature flowering trees gives impressive pink blossom in Spring, together with a variety of shrubs with different colour, texture and scent to enrich the aforementioned thematic landscape areas. Evergreen trees with good shading effects will be allocated along the seating areas to provide sufficient shading. Indigenous species are adopted to echo with the design theme 'Vitalizing River'. Edible plants are proposed for the 'herbs Resilient planting species in natural form will be garden'. adopted for the thematic fields of silver grass / grassy landscape areas.

² All proposed species are subject to further technical feasibility study in detailed design stage.

DESIGN PROPOSAL OF OS3a, OS3b, OS4 & OS5 (Enclosure E)

29. The design concept of OS3a, OS3b, OS4 and OS5 will be a 'Space of Reflection', to echo with and carry on the concept of 'Vitalising River' at Kai Tak River. The design is inspired by the image of a river flowing through pieces of pebbles, while ripples undulate around them. Pebbles will be represented by pieces of landscape islands, whereas concentric 'ripple' floor patterns will define spaces for pedestrian flow, resting and gathering. Situated adjacent to residential developments, OS4 will mainly be a passive open space and an avenue connecting Kai Tak Station Square and Kowloon City through OS3a, OS3b and OS5. Sitting-out areas, lawns for multi-purpose activities (e.g. Tai Chi, Yoga) and sheltered spaces for gathering are proposed in OS4. At the interface with Kai Tak Station Square, an entrance fover with a ring of topiary trees will dovetail with the features of the adjoining open space, and receive visitors from the retail belt along the colonnade.

30. Approaching OS3a, OS3b and OS5, an increased circulation permeability of the layout will facilitate visitors to stroll leisurely as they browse through the retail provisions and entrances of the adjoining developments, and provide a convenient access to the USS. Various pocket spaces will be provided in OS3a, OS3b and OS5 for strollers to take rest.

31. A continuous DPZ of 4.5m wide will link up the entrances of future housing developments at Sites 2B2 and 2B3, future residential developments at Sites 2A3 and 2A4 and the retail belt at Kai Tak Station Square as well as Olympic Avenue, future Road L7 and Road L16. Two rows of avenue trees aligned with the DPZ will form the spine of OS3a, OS3b, OS4 and OS5 and provide continuous sun shading.

SOFT LANDSCAPING DESIGN OF OS3a, OS3b, OS4 & OS5

32. The goal of enhancing the biodiversity will be achieved by adopting common local indigenous species of high ecological value, which can provide flower nectar for insects, larval food plants for butterflies and seeds for wildlife. Since the locality of OS3a, OS3b, OS4 and OS5 is terrestrial, there is no limitation in the selection of plants posted by salinity like in OS6 and OS6a.

33. To reinforce the concept of a 'Space of Reflection', blue and purple will be adopted as the thematic colours of the understory planting design to nourish the calmness of the residential neighbourhood ambience. The 'ripple' floor patterns will be followed through in the planting pattern to dovetail with the paving patterns for the cohesiveness of design language.

34. Liquidambar formosa² has been chosen as the avenue trees along the DPZ of OS3a, OS3b, OS4 and OS5, while *Ficus benjamina*² will be adopted as the topiary trees at the interface with Kai Tak Station Square to echo its planting character and create a better transition.

HARBOUR PLANNING PRINCIPLES

35. We have taken into account the following Harbour Planning Principles when drawing up the design –

(a) Vibrant and Accessible Harbour

The provision of open spaces along Kai Tak River will inject vibrancy into the heart of Kai Tak Development Area. The open spaces could also facilitate people to get closer to the harbourfront from the hinterland as detailed in paragraphs 7-9. The connection to the GreenWay network is mentioned in paragraph 26. Strategies to inject vibrancy are described in paragraphs 18-19.

(b) Sustainable Development

The care for ecology, adoption of renewable energy, and energy-saving strategies contribute to the sustainability of the Open Spaces. Ecological enhancement strategies are detailed in paragraphs 24-25. The historical importance of Kai Tak River is also to be exemplified for future generations to understand the development of KTD, as demonstrated in paragraph 19.

(c) Integrated Planning

The designs of the Open Spaces seek to maximize the connection to the existing/planned infrastructure and to create synergy with neighbouring developments as detailed in paragraphs 7-9. Aspirations and planning considerations with respect to the neighbourhood are detailed in paragraphs 10-12.

(d) Public Enjoyment

The Open Spaces will be welcoming for both visitors and local residents. Opportunities for public enjoyment are outlined in paragraphs 18-34.

(e) Stakeholder Engagement

Stakeholders were engaged at early stage and on an ongoing basis in the development of the project. Please refer to paragraph 5 for details. Task Force on Kai Tak Harbourfront Development

TFKT/01/2022

CONCLUSION

36. The open spaces near Kai Tak River are envisaged to be an unprecedented riverside leisure and cultural destination in the city that attracts residents and visitors to get closer to nature, improves connectivity, and elevates the ecological values of the area. A closer relationship between the river and people will be fostered by enabling the public to appreciate the historical and infrastructural significance of the river. The unique water-land interface will be an invaluable element for the well-being of residents and visitors of the KTD.

VIEWS SOUGHT

37. Members are invited to give comments on the design of the project.

ATTACHMENTS

Enclosure A	Site context and connectivity
Enclosure B	Design concept of OS6 & OS6a
Enclosure C	Design proposal of OS6 & OS6a
Enclosure D	Soft landscaping design of OS6 & OS6a
Enclosure E	Design proposal of OS3a, OS3b, OS4 & OS5

East Development Office Civil Engineering and Development Department May 2022