For discussion
On 24 August 2021

# **Legislative Council Panel on Development**

# PWP Item No. 873TH Boardwalk underneath the Island Eastern Corridor

#### **PURPOSE**

This paper briefs Members on the proposal to upgrade **873TH** entitled "Boardwalk underneath the Island Eastern Corridor (IEC)" (the proposed Boardwalk) to Category A at an estimated cost of \$1,682.0 million in money-of-day (MOD) prices.

#### PROJECT SCOPE AND NATURE

- 2. The scope of works under **873TH** which we propose to upgrade to Category A (the proposed works) comprises
  - provision of a boardwalk together with an upgraded connecting promenade with a total length of about 2.2 kilometres (km) and width of about 10 metres (m) for a pedestrian walkway and a shared use path for different users, as well as nine access points to the hinterland, six viewing platforms and a fishing platform;
  - (b) construction of three movable bridges;
  - (c) provision of architectural features and ancillary facilities such as shelters, glass balustrades, seating, water dispensers, toilets, kiosks, as well as a management office and a function room at Hoi Yu Street;
  - (d) beautification, modification and revitalisation works of existing facilities along the proposed Boardwalk, such as the North Point Promenade, Tong Shui Road Pier, North Point Vehicular Ferry Pier, Hoi Yu Street and IEC structures:

- (e) implementation of ancillary works including associated road, drainage, sewerage, utilities, lighting facilities, electrical and mechanical (E&M), waterworks, and traffic engineering works; and
- (f) implementation of an environmental monitoring and audit (EM&A) programme for the works mentioned in item (a) to (e) above.

A general layout plan and artist impressions of the proposed works are at **Enclosure 1**.

3. Subject to funding approval of the Finance Committee (FC) of the Legislative Council, we will commence the proposed works this year for completion in phases from end of 2024. To meet the programme, we have invited tenders in parallel to enable early commencement of the proposed works. The contract will only be awarded upon obtaining FC's funding approval.

### **JUSTIFICATION**

- 4. It has long been the common aspiration of the Government, Harbourfront Commission (HC) and the community to make our harbourfront more accessible, connected and enjoyable. The Government aims to extend the total length of both sides of the harbourfront of Victoria Harbour from 24 km at present to 34 km by 2028.
- 5. The harbourfront along the northern shore of Hong Kong Island from Fortress Hill to Quarry Bay of over 2 km long is currently occupied by residential and commercial developments, public facilities, operating piers and IEC, with most parts not being accessible to the public. To overcome the existing physical constraint and realise the vision of a linked-up and easily accessible harbourfront, an innovative solution is required. After years of discussion and public engagement, it has been widely accepted by the community that building a pedestrian walkway mainly underneath the existing IEC structure along the harbourfront is the best way forward.
- 6. The proposed Boardwalk comprises two sections. The western section (approximately 0.7 km long) will run from Oil Street to Tong Shui Road, while the eastern section (approximately 1.1 km long) will run from Tin Chiu Street to Hoi Yu Street. These two sections will be connected by the existing North Point

Promenade (approximately 0.4 km long). With the proposed Boardwalk, the harbourfront of the northern shore of Hong Kong Island stretching from Shek Tong Tsui in Western District to Aldrich Bay in Shau Kei Wan will be fully connected, providing a continuous promenade of some 12 km long for public enjoyment.

- 7. The alignment of the proposed Boardwalk utilises the space underneath the IEC as far as possible, so as to reduce the construction cost by utilizing the existing foundations of IEC and to minimise the impact on the Victoria The proposed Boardwalk will maintain a width of at least 10 m to allow sufficient space for the safe and shared use among different users including pedestrians, joggers, cyclists and other user groups. Besides the four ends of the two proposed Boardwalk sections, there will be five more access points to enhance the connectivity with the hinterland<sup>1</sup>. The proposed Boardwalk will include three movable bridges to allow vessels to access the coastal waters bounded by the proposed Boardwalk when necessary. The level of the proposed Boardwalk will also be kept close to water level, so as to offer a more pleasant and waterfriendliness experience to the users. In addition, water supply, drainage, sewerage and utilities will be provided to support the provision of ancillary facilities such as toilets, water dispensers and kiosks. There will be six viewing platforms seating on the existing IEC piled dolphins, for public enjoyment of the panoramic views of Victoria Harbour. A fishing platform will also be constructed for the anglers.
- 8. A report entitled "Report on Cogent and Convincing Materials to Demonstrate Compliance with the Overriding Public Need Test" was completed and published in December 2020, which has demonstrated that the proposed works are in compliance with the Protection of the Harbour Ordinance (Cap. 531), i.e. (a) there is a compelling and present need for the proposed Boardwalk; (b) there is a need for reclamation and there is no reasonable alternative; and (c) the extent of reclamation required to meet the overriding public need is minimum.

The nine proposed access points from west to east are at or near 1) Oil Street; 2) Provident Centre; 3) Tong Shui Road Pier; 4) Pet Garden of North Point Promenade; 5) Tin Chiu Street; 6) North Point Ferry Concourse Promenade; 7) Man Hong Street; 8) Healthy Street East; and 9) Hoi Yu Street.

The report has been prepared as per the administrative requirements of Environmental, Transport and Works Bureau Technical Circular No. 1/04 for consideration of the reclamation proposals under the Protection of the Harbour Ordinance.

## FINANCIAL IMPLICATIONS

9. We estimate the capital cost of the proposed works to be \$1,682.0 million in MOD prices, broken down as follows:-

		\$ million
		(in MOD prices)
(a)	Boardwalk	755.1
(b)	Movable Bridges	142.6
(c)	Associated architectural, road, drainage, sewerage, E&M and other ancillary works	407.4
(d)	Environmental mitigation measures and EM&A programme	53.9
(e)	Consultants' fees and remuneration of resident site staff	172.0
(f)	Contingencies	151.0
	To	tal 1,682.0

## **PUBLIC CONSULTATION**

10. Since 2015, we have been engaging key stakeholders proactively in developing and refining the alignment of the proposed Boardwalk and ancillary facilities. Three rounds of community engagement exercises were held. The Legislative Council Panel on Development, Task Force on Harbourfront Developments on Hong Kong Island (TFHK) of the HC, Planning, Works and Housing Committee (PWHC) under the Eastern District Council (EDC), professional institutes<sup>3</sup>, green groups, cyclist groups as well as local residents have been consulted. We received clear support and reached general consensus on the

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The professional institutes include the Hong Kong Institute of Architects, the Hong Kong Institute of Landscape Architects, the Hong Kong Institute of Planners, the Hong Kong Institute of Urban Design and the Association of Engineering Professionals in Society Ltd.

proposed alignment, width and ancillary facilities of the Boardwalk. Many urged for early implementation.

- 11. We gazetted the proposed road works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) and the proposed sewerage works under Cap.370 as applied by section 26 of the Water Pollution Control (Sewerage) Regulation (Chapter 358AL) on 31 December 2020 and 8 January 2021 respectively. During the 60-day statutory objection lodging period, 285 objections were received. The Chief Executive-in-Council authorised the proposed works without modification on 22 June 2021. The notices of authorisation were subsequently gazetted on 9 and 16 July 2021 respectively.
- 12. We consulted the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS)<sup>4</sup> on the aesthetic design of the proposed works on 16 March 2021 and 20 April 2021. The Committee accepted the aesthetic design of the proposed works.

#### **ENVIRONMENTAL IMPLICATIONS**

- 13. The proposed works is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We have conducted a Preliminary Environmental Review for the proposed works. It concluded that the proposed works would not cause long-term adverse environmental impact, and we will implement suitable mitigation measures during construction stage to control short-term environmental impacts.
- We will implement the mitigation measures and an EM&A programme as recommended in the Preliminary Environmental Review Report. The recommended mitigation measures include the provision of wheel-washing facilitates, use of quieter construction equipment and temporary noise barriers, deployment of silt curtains during marine works, and provision of sand/silt removal facilities and implementation of proper treatment of site runoff. We have included the cost of implementing the environmental mitigation measures and EM&A programme in the overall estimate of the proposed works.

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ACABAS is responsible for vetting the design of bridges and other structures associated with the highway system, from the aesthetic and visual impact points of view. It comprises representatives of the Hong Kong Institute of Architects, Hong Kong Institution of Engineers, Hong Kong Institute of Planners, academic institutions, Architectural Services Department, Highways Department, Housing Department, and Civil Engineering and Development Department.

- 15. At the planning and design stages, we have considered all the proposed works and their construction sequence to reduce the generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated soil and rock fill) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities<sup>5</sup>. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste and the use of non-timber formwork to further reduce the generation of construction waste.
- At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.
- We estimate that the proposed works will generate in total of about 14 500 tonnes of construction waste. Of these, we will reuse about 2 600 tonnes (18%) of inert construction waste on site and deliver about 11 400 tonnes (79%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining about 500 tonnes (3%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be about \$0.9 million for the proposed works (based on an unit charge rate of \$71 per tonne for disposal at public fill reception facilities, and \$200 per tonne for disposal at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

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Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at public fill reception facilities requires a license issued by the Director of Civil Engineering and Development.

#### HERITAGE IMPLICATIONS

18. The proposed works will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

### TRAFFIC IMPLICATIONS

- 19. The proposed Boardwalk will facilitate walking and cycling for some of those who travel along the northern shore of Hong Kong, and would relieve some pressure on public transport and traffic. We have conducted a traffic impact assessment for the proposed works. The proposed works will not cause any significant impact to land traffic during construction. Notwithstanding this, temporary traffic arrangements will be implemented to facilitate the construction works which require temporary road closure. We will display publicity boards on site giving details of the temporary traffic arrangements, and the anticipated completion dates of individual section of works. In addition, we will set up a telephone hotline to respond to public enquires or complaints.
- 20. For marine traffic, we have conducted a marine traffic impact assessment which concluded that, with the implementation of risk mitigation measures, including the installation of additional marker buoys and deployment of boats to assist marine traffic control, the proposed works will not cause any significant marine traffic impact. We will also arrange interface and coordination meetings among stakeholders to ensure effective communication.

# LAND ACQUISITION

21. The proposed works requires land resumption and clearance in an area of about 871 square metres (m<sup>2</sup>) in a private land, creation of easements and other permanent rights in an area of about 193 m<sup>2</sup> in a private land, and creation of rights of temporary occupation of land in an area of about 19 m<sup>2</sup> in a private land. The land acquisition cost will be charged to **Head 701 – Land Acquisition**.

### **BACKGROUND INFORMATION**

- We upgraded **873TH** to Category B in October 2017.
- 23. In December 2019, we commissioned consultants to proceed with the detailed design of the proposed Boardwalk, cost of which is about \$21.5 million. It is funded by block allocation **Subhead 7100CX** "New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme". The detailed design of the proposed works has been substantially completed.
- Of the 63 trees within the project boundary, 19 trees will be retained, 37 trees will be transplanted elsewhere and seven trees which are not important trees will be felled. We will incorporate planting proposals as part of the proposed works, including about 11 trees and 3950 shrubs.

#### **WAY FORWARD**

25. We plan to seek funding approval from the FC after consulting the Public Works Subcommittee.

Development Bureau Civil Engineering and Development Department August 2021

<sup>&</sup>lt;sup>6</sup> "Important trees" refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

<sup>(</sup>a) trees of 100 years or above;

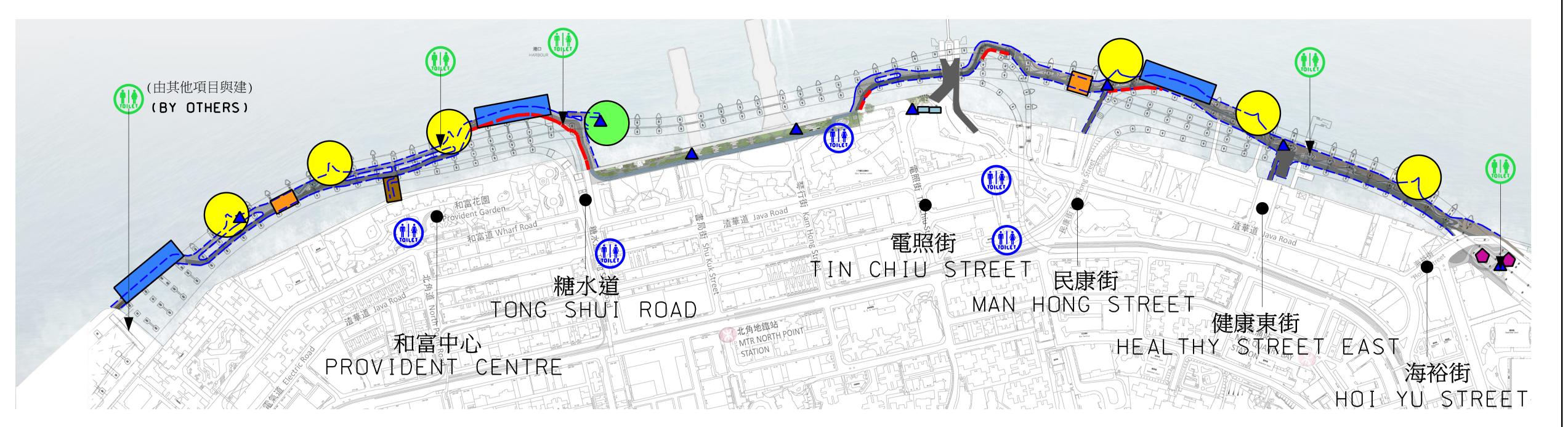
<sup>(</sup>b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument and trees in memory of important persons or events;

<sup>(</sup>c) trees of precious or rare species;

<sup>(</sup>d) trees of outstanding form (taking account of overall tree size, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or

<sup>(</sup>e) trees with trunk diameter equal or exceeding 1.0 m (measured at 1.3 m above ground level), or with height or canopy spread equal or exceeding 25 m.





擬議觀景台PROPOSED VIEWING PLATFORM



■ 擬議開合橋(平轉式) PROPOSED MOVABLE BRIDGE(SWING TYPE)



(合橋時)(CLOSED)

上 基 BROPOSED SHELTER



擬議釣魚平台PROPOSED FISHING PLATFORM



M議售物亭 PROPOSED KIOSK

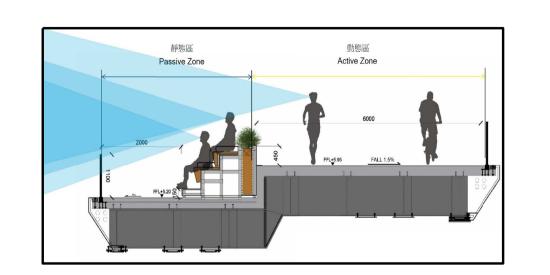


■ 擬議開合橋(豎旋式) PROPOSED MOVABLE BRIDGE(BASCULE TYPE)





**上** 擬議階梯式座位 PROPOSED CASCADE SEATING



擬議洗手間 PROPOSED TOILET



▲ 擬議飲水機 PROPOSED WATER DISPENSER



操議管理處和活動室
PROPOSED MANAGEMENT OFFICE
AND FUNCTION ROOM



圖例 LEGEND:





DE DE MERCE DE MERCE

擬議開合橋(平轉式)
PROPOSED MOVABLE BRIDGE(SWING TYPE)

擬議開合橋(豎旋式)
PROPOSED MOVABLE
BRIDGE(BASCULE TYPE)

上 上 上 上 上 三 PROPOSED SHELTER

\_\_\_ 擬議欄杆 PROPOSED BALUSTRADE

PROPOSED TOILET

**塡** 擬議洗手間

現有洗手間 EXISTING TOILET

擬議售物亭 PROPOSED KIOSK

擬議管理處和活動室
PROPOSED MANAGEMENT
OFFICE AND FUNCTION

擬議飲水機 PROPOSED WATER DISPENSER

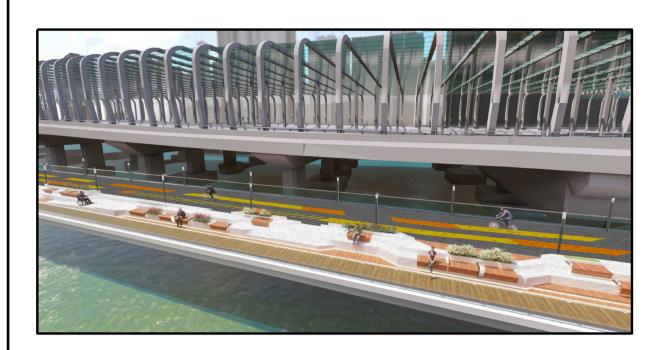


工務計劃項目第 873TH 號 東區走廊下之行人板道 PWP ITEM NO. 873TH BOARDWALK UNDERNEATH ISLAND EASTERN CORRIDOR

圖則名稱 Plan Title

設計特色 DESIGN FEATURES

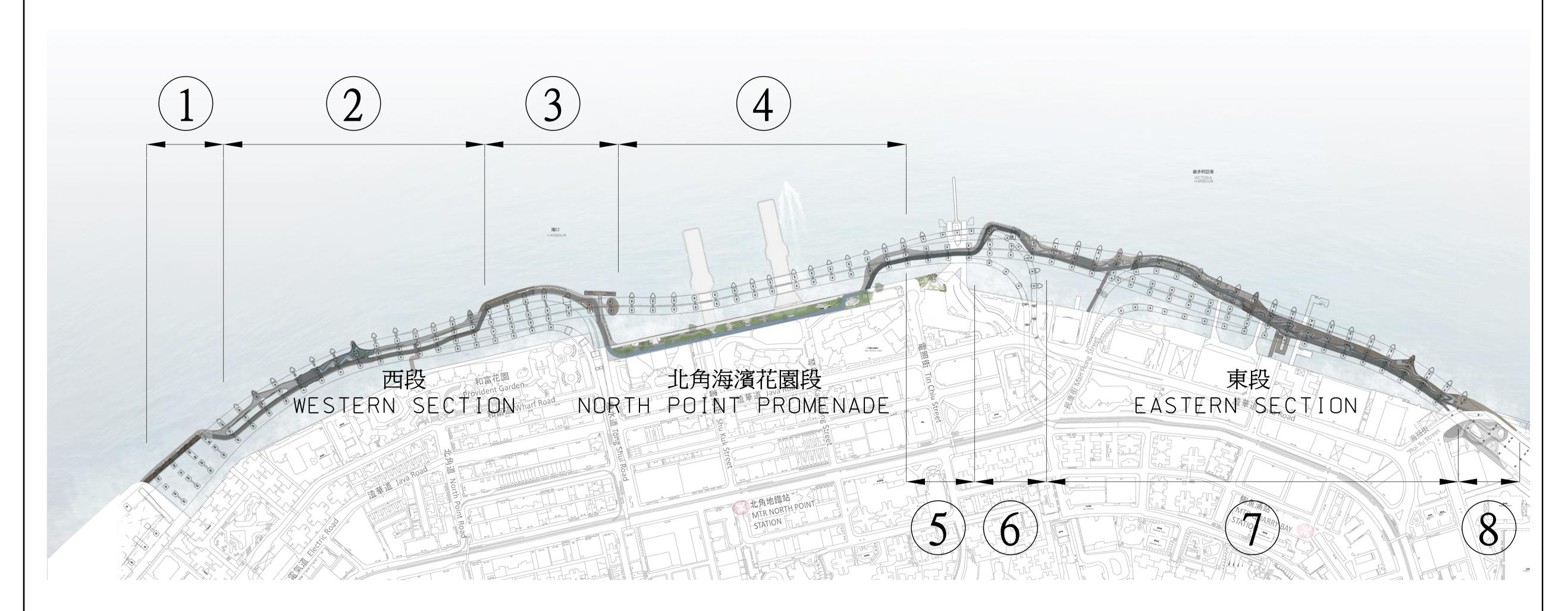
- 1 汐・日光之階 SUN WAVE
- 2 海・童夢之園 PLAY WAVE
- 3 漁・釣魚平台 FISH WAVE
- 4 雅・共融空間 GATHER WAVE











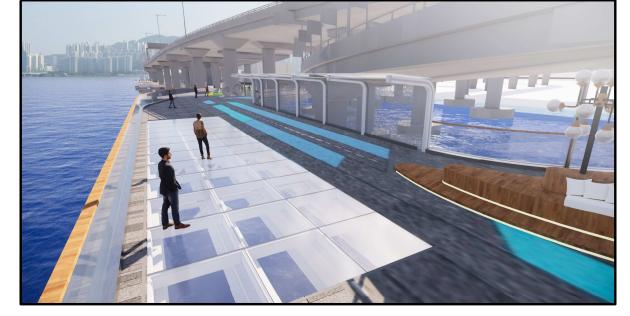
5 渡・竈物花園 PET WAVE















工程名稱 Project Title

工務計劃項目第 873TH 號 東區走廊下之行人板道 PWP ITEM NO. 873TH BOARDWALK UNDERNEATH ISLAND EASTERN CORRIDOR

圖則名稱 Plan Title

設計主題區 DESIGN THEMATIC ZONE