

## **ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE**

### **HEAD 703 – BUILDINGS**

#### **Public Safety – Fire services**

**175BF – Relocation of supporting operational facilities of Tsim Sha Tsui Fire Station Complex, Fire Services Club and other Fire Services accommodations to To Wah Road, Kowloon**

### **HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT**

#### **Civil Engineering – Land Development**

**754CL – Infrastructure Works for West Kowloon Cultural District, phase 1**

**763CL – Integrated Basement for West Kowloon Cultural District – remaining works**

Members are invited to recommend to the Finance Committee –

- (a) the upgrading of **175BF**, part of **754CL** and **763CL** to Category A at estimated costs of \$981.2 million, \$380.0 million and \$17,472.3 million in money-of-the-day prices respectively; and
- (b) the retention of the remainder of **754CL** in Category B.

**/PROBLEM .....**

## PROBLEM

We need to carry out the following projects to dovetail the phased implementation of West Kowloon Cultural District (WKCD) –

- (a) **175BF** to relocate the supporting operational facilities of Tsim Sha Tsui Fire Station Complex (TSTFSC), Fire Services Club (FS Club) and other Fire Services accommodations in order to make way for the WKCD development and the public housing development in Kowloon Bay;
- (b) Part of **754CL** to carry out the third package of the construction of public infrastructure works (PIW) to support the early phases of WKCD development especially the Artist Square Development Area; and
- (c) **763CL** to carry out the remaining works of the Integrated Basement (IB) in Zone 2 of WKCD.

## PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Home Affairs, proposes to upgrade **175BF** to Category A at an estimated cost of \$981.2 million in money-of-the-day (MOD) prices for the relocation of supporting operational facilities of TSTFSC, FS Club and other Fire Services accommodations to To Wah Road, Kowloon.

3. The Director of Civil Engineering and Development, with the support of the Secretary for Home Affairs, proposes to upgrade the following projects to Category A –

- (a) part of **754CL** at an estimated cost of \$380.0 million in MOD prices for implementing the third package of the construction of PIW in WKCD; and
- (b) **763CL** at an estimated cost of \$17,472.3 million in MOD prices for implementing the remaining works of IB in Zone 2 of WKCD.

/PROJECT .....

**PROJECT SCOPE AND NATURE**

- 4. Details of the three projects above are provided at Enclosures 1 to 3.

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Home Affairs Bureau  
March 2019

**Relocation of supporting operational facilities of Tsim Sha Tsui Fire Station Complex, Fire Services Club and other Fire Services accommodations to To Wah Road, Kowloon**

**PROJECT SCOPE AND NATURE**

The proposed relocation site at To Wah Road is a Government, Institution or Community site bounded by To Wah Road to the south and west leading from Jordan Road. A former temporary To Wah Road Bus Terminus is adjacent to the site on the east. The site area is about 5 210 square metres (m<sup>2</sup>) with about 2 400 m<sup>2</sup> non-building area that comprises a drainage reserve, a waterworks reserve and the MTR protection zone.

2. The scope of the project includes demolition of the workshop blocks at the existing Tsim Sha Tsui Fire Station Complex (TSTFSC), construction of a new fence wall for the TSTFSC and construction of a new building at To Wah Road for –

- (a) reprovisioning of the following supporting operational facilities in the existing TSTFSC –
  - (i) Fire Protection Regional Office;
  - (ii) Fire Services (FS) Workshop;
  - (iii) Physical Training Establishment Office;
  - (iv) dangerous goods (DG) stores; and
  - (v) ancillary facilities.
- (b) reprovisioning of the Fire Services Club (FS Club) of the Fire Services Department (FSD); and
- (c) reprovisioning of the following FS accommodations –
  - (i) office and plan room of the New Projects Division;
  - (ii) offices of the Ventilation Division and Building Improvement Division 1; and
  - (iii) departmental uniform store.

3. To accommodate the non-building area of the site, the new 12-storey building at To Wah Road will be constructed on a triangular footprint, 3-storey which accommodates the FS Workshop for the maintenance of fire appliances and equipment as well as storage of general goods and DG; and 9-storey which houses offices, departmental uniform store, office of the Physical Training Establishment and the FS Club.

4. The site and location plan, floor plans, sectional drawing, an artist's impression and a barrier-free access plan for the project are at Annexes 1 to 8 to Enclosure 1. Subject to the funding approval of the Finance Committee, we plan to commence construction in the third quarter of 2019 for completion in the third quarter of 2022.

## JUSTIFICATION

### *WKCD Development*

5. The existing TSTFSC at Canton Road is within the site boundary of the West Kowloon Cultural District (WKCD). Under the WKCD Development Plan, which was prepared on the basis of Foster + Partners' "City Park" conceptual plan, there will be a vehicle-free tree-lined Avenue stretching west from Canton Road above the integrated basement, linking up with Xiqu Square, Central Square and Artist Square. Along the Avenue, there will be arts, cultural, retail, dining and entertainment facilities to create a vibrant atmosphere. The entrance of the Avenue at Canton Road just adjacent to Xiqu Centre together with the Xiqu Square will form an important eastern gateway to WKCD.

6. The site for the eastern entrance of the Avenue was occupied by the workshop blocks of the existing TSTFSC. The workshop blocks will be demolished as part of the project by mid-2020 to release the site for the development of the eastern entrance of the Avenue.

### *Reprovisioning of the FS Club*

7. FSD is the second largest disciplinary force in the Government with more than 10 000 staff. The FS Club at Wang Chiu Road, Kowloon Bay is the Department's only staff club and has been in use since 1978. For decades, it has been serving not only as a club with an array of sports and recreational facilities for FSD staff and their families, but also a popular venue for holding ceremonies and gatherings for serving and retired FSD staff. The FS Club plays a pivotal role in maintaining staff morale and building rapport among FSD staff.

8. The existing site of the FS Club, which occupies an area of 5 620 m<sup>2</sup>, will form part of a larger site identified for public housing development and school development in Kowloon Bay. To meet the public housing production targets, the FS Club will need to be vacated from the existing site for public housing development. Timely relocation of the FS Club will enable early site vacation for the public housing phase 2 development, thus achieving optimal utilisation of scarce land resources.

*Reprovisioning of other Fire Services accommodations*

9. To optimise utilisation of the site at To Wah Road, FSD will relocate some of its offices, including the departmental uniform store and offices of the New Projects Division, Building Improvement Division 1 and Ventilation Division, to relieve the current overcrowded situation in these offices.

## FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the project to be \$981.2 million in money-of-the day (MOD) prices, broken down as follows –

	<b>\$ million</b> <b>(in MOD prices)</b>
(a) Site works	46.4
(b) Piling	98.6
(c) Building <sup>1</sup>	401.0
(d) Building services <sup>2</sup>	186.7
(e) Drainage	12.1
(f) External works	16.2
(g) Works at existing site at Canton Road, including demolition of the existing workshop blocks	31.1

/(h) .....

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<sup>1</sup> Building works cover construction of substructure and superstructure of the building.

<sup>2</sup> Building services works cover electrical installation, air-conditioning and mechanical ventilation installation, fire services installation and other specialist installations.

		<b>\$ million</b> <b>(in MOD prices)</b>
(h)	Additional energy conservation, green and recycled features	7.9
(i)	Furniture and equipment <sup>3</sup>	44.0
(j)	Consultants' fees for	20.3
	(i) contract administration	18.3
	(ii) management of resident site staff (RSS)	2.0
(k)	Remuneration of RSS	27.7
(l)	Contingencies	89.2
Total		981.2

11. We propose to engage consultants to undertake contract administration and site supervision for the project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at Annex 9 to Enclosure 1. The construction floor area (CFA) of this project is about 20 110 m<sup>2</sup>. The estimated construction unit cost, represented by the building and building services costs, is \$29,224 per m<sup>2</sup> of CFA in MOD prices. We consider this unit cost comparable to that of similar projects built by the Government.

12. Subject to funding approval, we plan to phase the expenditure as follows –

<b>Year</b>	<b>\$ million</b> <b>(in MOD prices)</b>
2019 – 2020	35.6
2020 – 2021	112.2
2021– 2022	203.3
2022– 2023	398.9

**/Year .....**

<sup>3</sup>

The estimated cost is based on an indicative list of furniture and equipment required.

<b>Year</b>	<b>\$ million (in MOD prices)</b>
2023– 2024	98.0
2024– 2025	83.9
2025– 2026	49.3
	<hr/>
	981.2
	<hr/>

13. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period 2019 to 2026. We will deliver the construction works through a lump-sum contract as the scope of the works can be clearly defined in advance. The contract will provide for price adjustment.

14. We estimate that the annual recurrent expenditure arising from this project is \$58.2 million.

## **PUBLIC CONSULTATION**

15. We consulted the Harbourfront Commission's Task Force on Harbourfront Developments in Kowloon, Tsuen Wan and Kwai Tsing as well as Yau Tsim Mong District Council on 10 November 2017 and 25 January 2018 respectively. Members generally supported the project.

16. We consulted the Legislative Council Panel on Development and Panel on Home Affairs Joint Subcommittee to Monitor the Implementation of the WKCD Projects on 11 June 2018. Members of the Subcommittee generally supported the project.

## **ENVIRONMENTAL IMPLICATIONS**

17. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We completed a Preliminary Environmental Review for the project in May 2018 and the Director of Environmental Protection agreed with the findings that the project would not cause long-term adverse environmental impacts. We have included in the project the estimated cost to implement the recommended environmental mitigation measures.

18. For short-term environmental impacts during construction and demolition, we will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the relevant contract. These include the use of quieter powered mechanical equipment, mufflers, acoustic lining or shields and the building of barrier wall for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

19. At the planning and design stages, we have considered measures to reduce the generation of construction waste where possible (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste (e.g. use of excavated materials for filling within the site) 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>4</sup>. We will encourage the contractor to maximise the use of recycled/recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

20. 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 and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

21. We estimate that the project will generate in total about 21 110 tonnes of construction waste. Of these, we will reuse about 5 020 tonnes (23.8%) of inert construction waste on site and deliver 12 730 tonnes (60.3%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 3 360 tonnes (15.9%) 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 \$1.6 million for this project (based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap.354N)).

**/HERITAGE .....**

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<sup>4</sup> 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 in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

## **HERITAGE IMPLICATIONS**

22. This project 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.

## **LAND ACQUISITION**

23. The project does not require any private land acquisition.

## **ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES**

24. This project will adopt various forms of energy efficient features and renewable energy technologies, in particular -

- (a) variable speed drive for chillers;
- (b) demand control of supply air;
- (c) heat energy reclaim of exhaust air;
- (d) building energy management system; and
- (e) photovoltaic system.

25. For greening features, we will provide landscaping, vertical greening, green roofs as well as planting areas for environmental and amenity benefits.

26. The total estimated additional cost for adoption of the above energy conservation measures is around \$7.9 million (including \$5.2 million for energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 10.9% energy savings in the annual energy consumption with a payback period of about eight years.

**/BACKGROUND .....**

## BACKGROUND INFORMATION

27. We upgraded **175BF** to Category B in September 2013. We engaged consultants to undertake various services, including planning consultancy services, in June 2014, ground investigation in September 2014, other environmental investigations in April 2014 and quantity surveying services in July 2015, at a total cost of about \$23.5 million. The services and works by the consultants were funded under block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fees for items in Category D of the Public Works Programme”. The planning consultancy services, ground investigation and quantity surveying services have been completed.

28. Of the two trees in To Wah Road site and three trees in Canton Road site, one tree will be preserved in Canton Road site. The proposed works involve the felling of the remaining four trees. All trees to be felled are not important trees<sup>5</sup>. We will incorporate planting proposals as part of the project, including the planting of about 14 trees, 10 000 shrubs, 11 000 groundcovers and 390 climbers.

29. We estimate that the proposed works will create about 395 jobs (350 for labourers and 45 for professional/technical staff), providing a total employment of 5 600 man-months.

30. We invited tenders for the proposed works in July 2018. After assessing the returned tender prices for the contract, we have updated the project estimate. We consider that the latest estimate, which is 18.2% less than our earlier estimate as stated in Panel paper (LC Paper No. CB(1)1066/17-18(01)), has reflected the prevailing market situation and the latest estimate should be adequate to deliver the proposed works.

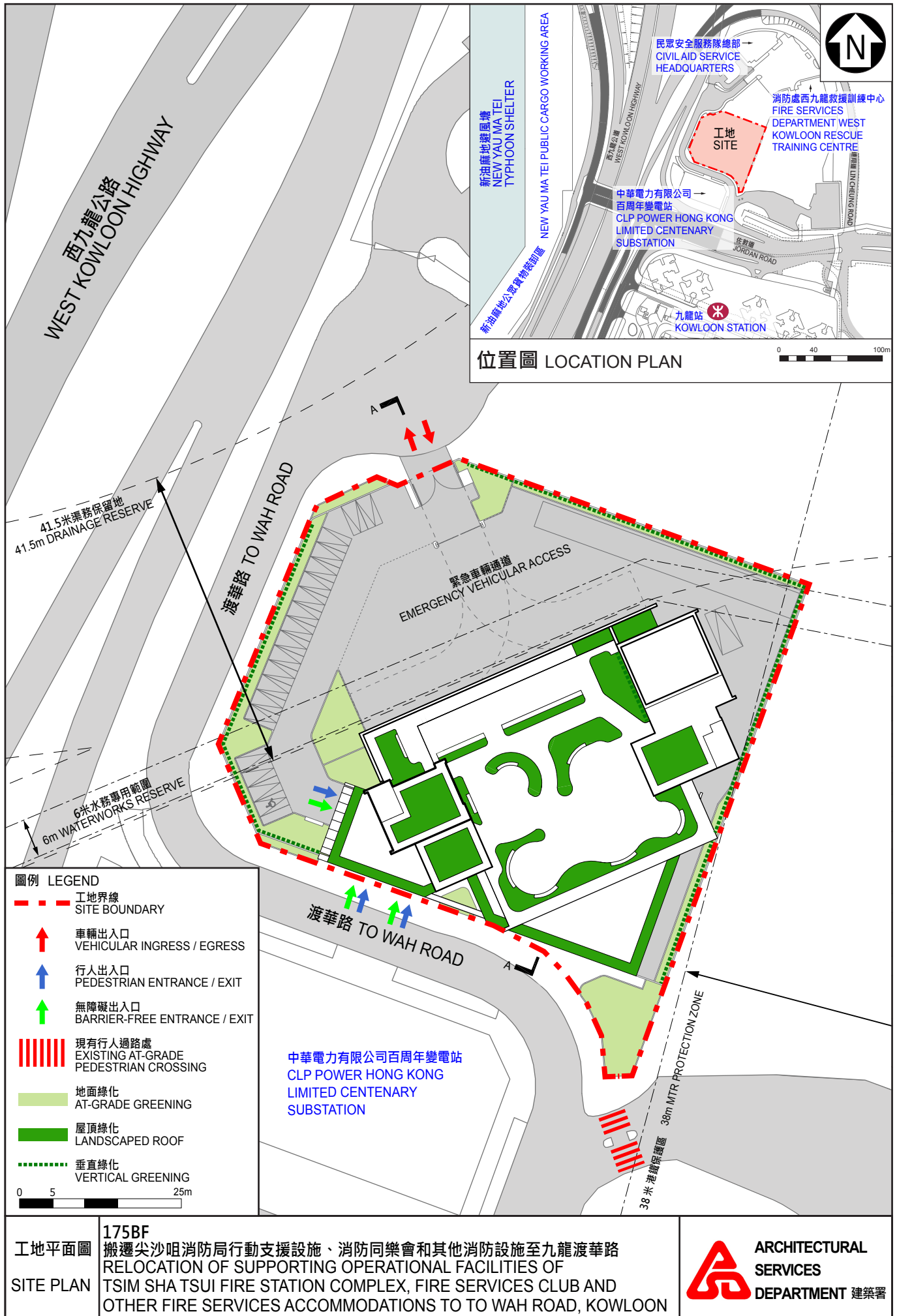
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Home Affairs Bureau  
March 2019

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<sup>5</sup> “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.



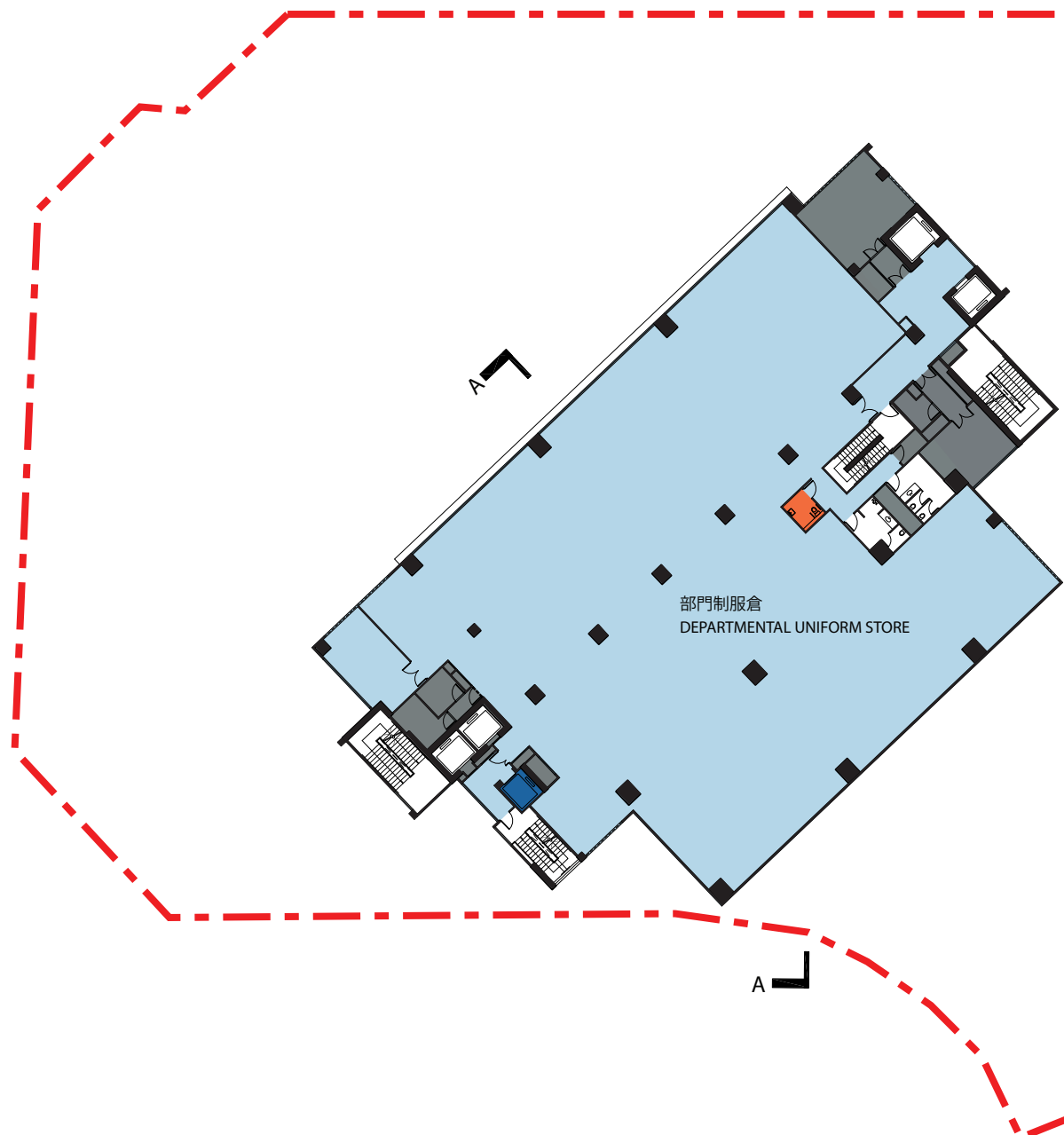


地下平面圖  
G/F FLOOR PLAN

175BF  
搬遷尖沙咀消防局行動支援設施、消防同樂會和其他消防設施至九龍渡華路  
RELOCATION OF SUPPORTING OPERATIONAL FACILITIES OF TSIM SHA TSUI FIRE STATION COMPLEX, FIRE SERVICES CLUB AND OTHER FIRE SERVICES ACCOMMODATIONS TO TO WAH ROAD, KOWLOON



ARCHITECTURAL  
SERVICES  
DEPARTMENT 建築署



## 圖例 LEGEND

- - - 工地界線  
SITE BOUNDARY
- 辦公室 / 輔助空間  
OFFICE / ANCILLARY AREA
- 機電房  
PLANT ROOM
- 暢通易達升降機  
ACCESSIBLE LIFT
- 暢通易達洗手間  
ACCESSIBLE TOILET



四樓平面圖  
4/F FLOOR PLAN

175BF

搬遷尖沙咀消防局行動支援設施、消防同樂會和其他消防設施至九龍渡華路

RELOCATION OF SUPPORTING OPERATIONAL FACILITIES OF TSIM SHA TSUI FIRE STATION COMPLEX, FIRE SERVICES CLUB AND OTHER FIRE SERVICES ACCOMMODATIONS TO TO WAH ROAD, KOWLOON



**ARCHITECTURAL  
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## 圖例 LEGEND

- - - 工地界線  
SITE BOUNDARY
- 辦公室 / 輔助空間  
OFFICE / ANCILLARY AREA
- 機電房  
PLANT ROOM
- 暢通易達升降機  
ACCESSIBLE LIFT
- 暢通易達洗手間  
ACCESSIBLE TOILET

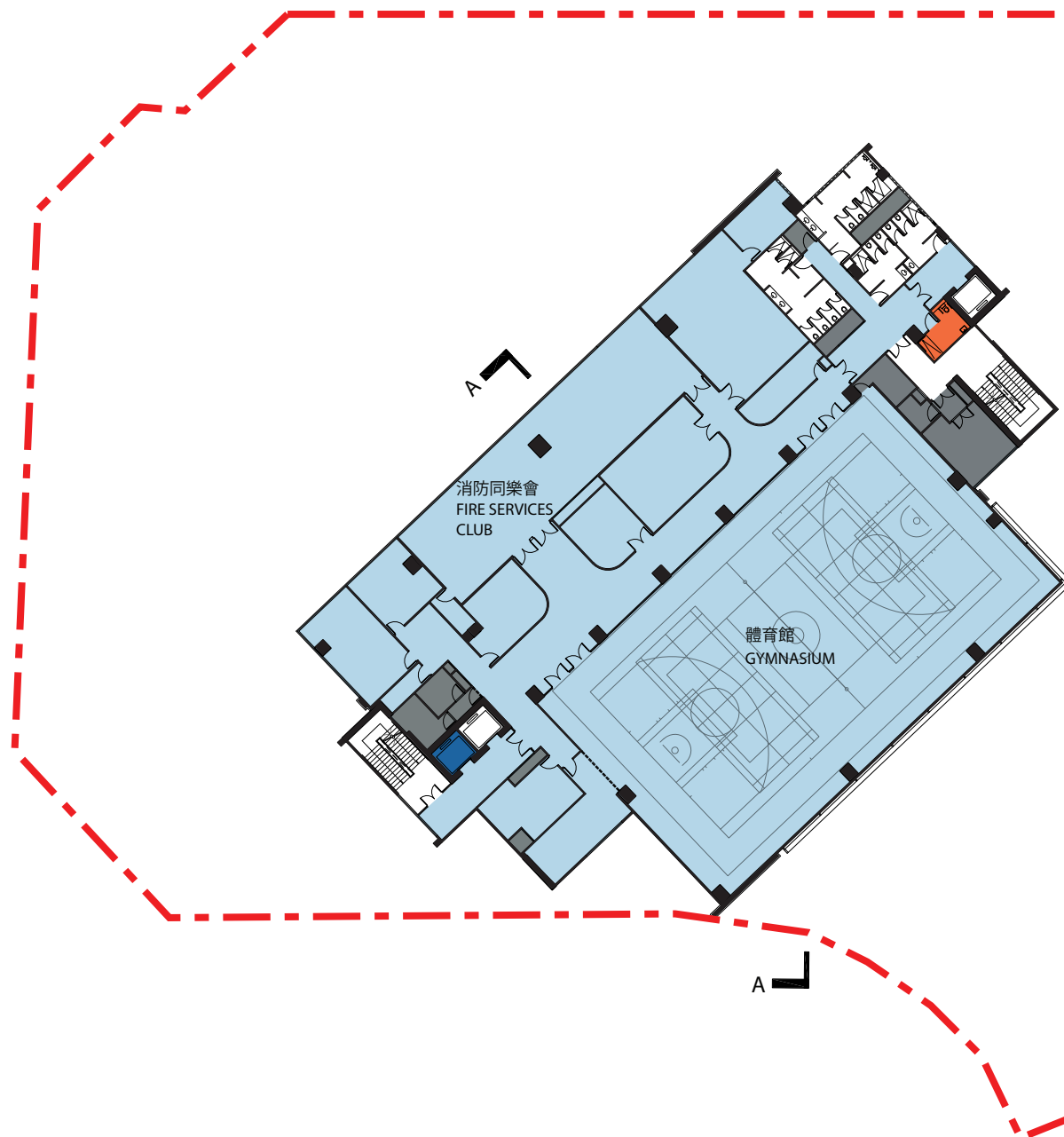
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七樓平面圖  
7/F FLOOR PLAN

175BF  
搬遷尖沙咀消防局行動支援設施、消防同樂會和其他消防設施至九龍渡華路  
RELOCATION OF SUPPORTING OPERATIONAL FACILITIES OF TSIM SHA TSUI FIRE STATION COMPLEX, FIRE SERVICES CLUB AND OTHER FIRE SERVICES ACCOMMODATIONS TO TO WAH ROAD, KOWLOON



ARCHITECTURAL  
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DEPARTMENT 建築署



## 圖例 LEGEND

- - - 工地界線  
SITE BOUNDARY
- 辦公室 / 輔助空間  
OFFICE / ANCILLARY AREA
- 機電房  
PLANT ROOM
- 暢通易達升降機  
ACCESSIBLE LIFT
- 暢通易達洗手間  
ACCESSIBLE TOILET

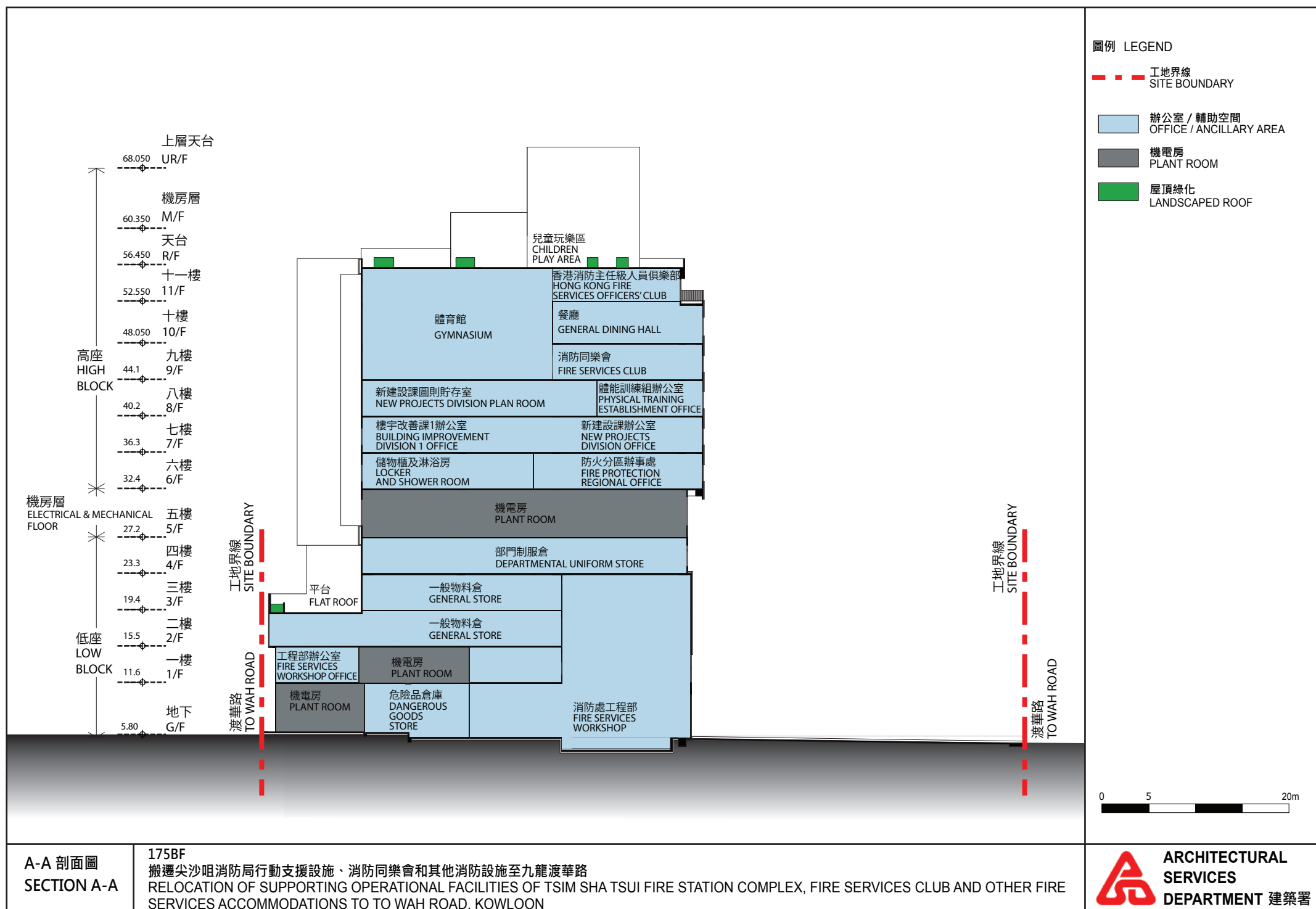
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九樓平面圖  
9/F FLOOR PLAN

175BF  
搬遷尖沙咀消防局行動支援設施、消防同樂會和其他消防設施至九龍渡華路  
RELOCATION OF SUPPORTING OPERATIONAL FACILITIES OF TSIM SHA TSUI FIRE STATION COMPLEX, FIRE SERVICES CLUB AND OTHER FIRE SERVICES ACCOMMODATIONS TO TO WAH ROAD, KOWLOON



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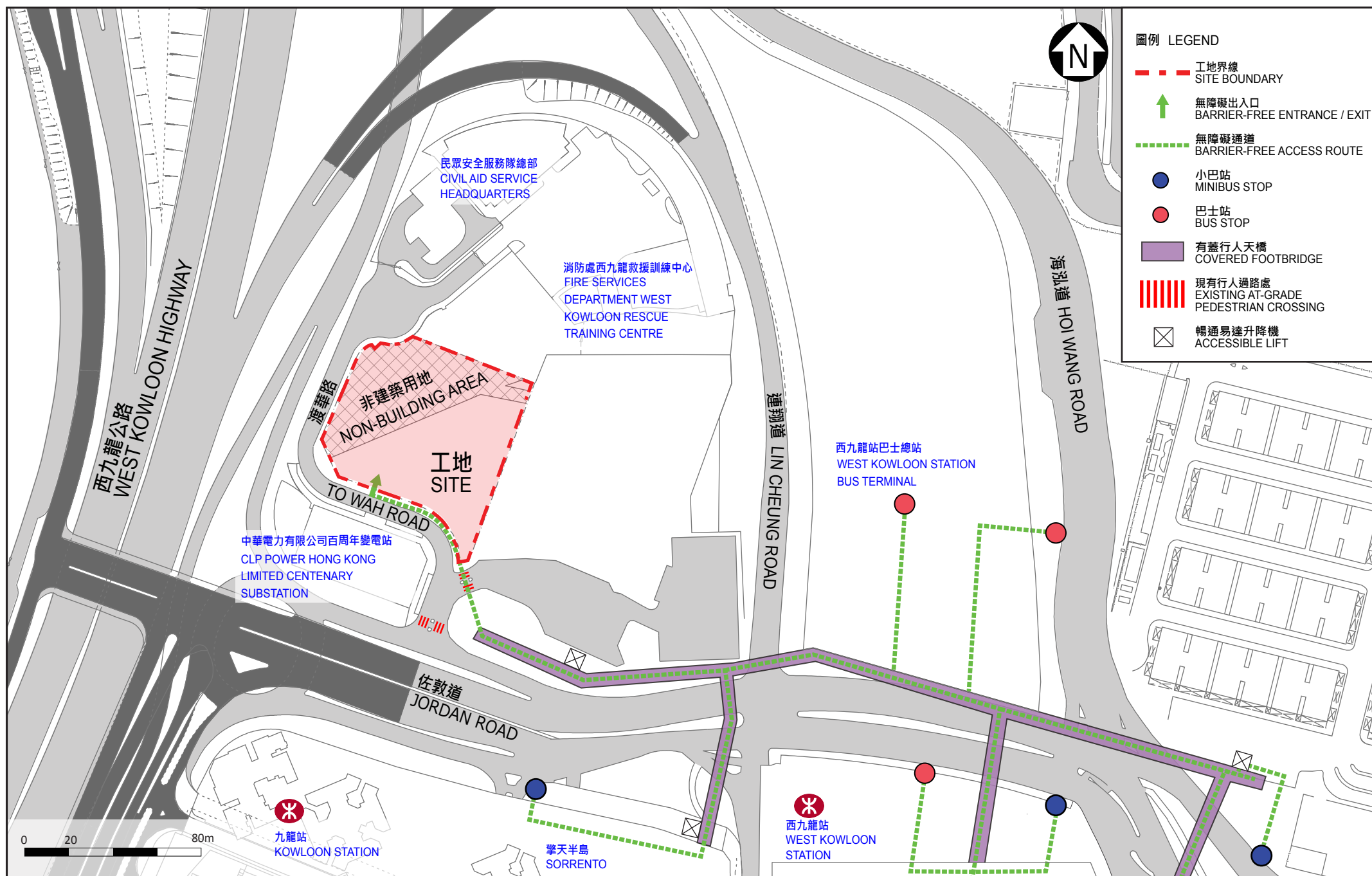




從北面望向擬建新建築物的構思透視圖

PERSPECTIVE VIEW FROM NORTH DIRECTION (ARTIST'S IMPRESSION)

<p>構思圖</p> <p>ARTIST'S IMPRESSION</p>	<p>175BF</p> <p>搬遷尖沙咀消防局行動支援設施、消防同樂會和其他消防設施至九龍渡華路</p> <p>RELOCATION OF SUPPORTING OPERATIONAL FACILITIES OF</p> <p>TSIM SHA TSUI FIRE STATION COMPLEX, FIRE SERVICES CLUB AND</p> <p>OTHER FIRE SERVICES ACCOMMODATIONS AT TO WAH ROAD, KOWLOON</p>	 <p>ARCHITECTURAL SERVICES DEPARTMENT 建築署</p>
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無障礙通道平面圖  
PLAN OF  
BARRIER-FREE ACCESS

175BF

搬遷尖沙咀消防局行動支援設施、消防同樂會和其他消防設施至九龍渡華路

RELOCATION OF SUPPORTING OPERATIONAL FACILITIES OF TSIM SHA TSUI FIRE STATION COMPLEX, FIRE SERVICES CLUB AND OTHER FIRE SERVICES ACCOMMODATIONS TO TO WAH ROAD, KOWLOON



**ARCHITECTURAL  
SERVICES  
DEPARTMENT 建築署**

**175BF – Relocation of supporting operational facilities of Tsim Sha Tsui Fire Station Complex, Fire Services Club and other Fire Services accommodations to To Wah Road, Kowloon**

**Breakdown of the estimates for consultants' fees and resident site staff costs  
(in September 2018 prices)**

		<b>Estimated man- months</b>	<b>Average MPS* salary point</b>	<b>Multiplier (Note 1)</b>	<b>Estimated fee (\$ million)</b>
(a) Consultants' fees for contract administration (Note 2)	Professional	—	—	—	12.4
	Technical	—	—	—	2.7
				Sub-total	<u>15.1 #</u>
(b) Resident site staff (RSS) costs (Note 3)	Professional	58	38	1.6	7.6
	Technical	366	14	1.6	16.8
				Sub-total	<u>24.4 #</u>
Comprising -					
(i) Consultants' fees for management of RSS				1.6#	
(ii) Remuneration of RSS				22.8#	
				<u><b>Total</b></u>	<u><b>39.5</b></u>

\* MPS = Master Pay Scale

**Notes**

1. A multiplier of 1.6 applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants. (as at now, MPS salary point 38 = \$81,975 per month and MPS salary point 14 = \$28,725 per month).
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for provision of contract administration and site supervision of **175BF**.
3. The consultants' staff cost for site supervision is based on the estimate prepared by the Director of Architectural Services. We will only know the actual man-months and actual costs after completion of the construction works.

**Remarks**

The cost figures in this Annex are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 10 of Enclosure 1.

**Infrastructure Works for West Kowloon Cultural District, phase 1**

**PROJECT SCOPE AND NATURE**

The part of **754CL** which we propose to upgrade to Category A (the proposed works) comprises –

- (a) a covered footbridge, namely the Artist Square Bridge (the proposed footbridge), of about 94 metres long and a clear width of about 7 metres, including two lifts, two escalators and two staircases across Austin Road West linking the Artist Square in West Kowloon Cultural District (WKCD), southern footpath of Austin Road West and the existing developments above MTR Kowloon Station;
- (b) associated road works, ancillary works (including drainage, utilities, electrical and mechanical) and landscaping works; and
- (c) necessary environmental mitigation measures, as well as related monitoring and auditing works.

—— Site plans and artist impressions of the proposed works are at Annexes 1 and 2 to Enclosure 2.

2. Subject to funding approval of the Finance Committee (FC), we plan to entrust the proposed works as mentioned in paragraph 1 above to West Kowloon Cultural District Authority (WKCD) with a view to commencing the works in mid-2019 for completion around 2021/2022.

3. We will retain the remainder of **754CL** in Category B and seek funding for the works according to the phased implementation programme of WKCD. The scope of the remainder mainly comprises –

- (a) a 2-lane flyover (including approaching roads) across the toll plaza of Western Harbour Crossing;
- (b) one pedestrian linkage system linking WKCD with Kowloon Park;
- (c) berthing/landing facilities for vessels and modification of existing seawall;
- (d) remaining underground drainage, sewerage and water supply systems; and
- (e) associated footpaths, lighting, ventilation, traffic system, landscaping, as well as related engineering and ancillary works.

## JUSTIFICATION

4. In July 2008, FC approved a one-off upfront endowment for the WKCD to implement the WKCD development covering arts and cultural facilities, retail/dining/entertainment (RDE) facilities, public open space and certain transport facilities. As stated in the funding application approved by FC (vide PWSC(2008-09)31) in 2008, other communal and government facilities and related engineering works, such as roads, drainage, fire station, public pier and other ancillary facilities to support the whole WKCD (including residential, commercial and hotel developments) would be undertaken by the Government with funding approval for such works to be sought separately. The proposed footbridge is one of the public infrastructure works (PIW) projects to dovetail the phased implementation of WKCD development.

5. The area around the Artist Square, which includes M+, Lyric Theatre Complex and some hotel/office/residential (HOR) sites (referred to as Artist Square Development Area (ASDA)) presents a good opportunity for early development into a “mini-WKCD” (for layout plan see Annex 3 to Enclosure 2). The ASDA is being implemented in phases for completion around 2023 to form a precinct supported by a balanced mix of land uses including core arts and cultural facilities, offices, other arts and cultural facilities and RDE facilities. The public open spaces in ASDA, including the interfacing area with the Art Park, the Artist Square and the waterfront promenade, will be developed to create a sense of place for the general public and to bring vibrancy to the area.

6. At present, there is no grade-separated pedestrian linkage between ASDA and the MTR Kowloon Station. Public coming from MTR Kowloon Station and its topside development have to use the at-grade crossing on Nga Cheung Road and then walk southward along the western footpath, follow the footpath at the roundabout before reaching the southern footpath of Austin Road West to access ASDA. Another at-grade route is walking via Green Plaza of Hong Kong West Kowloon Station to Austin Road West and then walking westward to ASDA along the southern footpath of Austin Road West. A direct, grade-separated pedestrian linkage between the MTR Kowloon Station and ASDA is imperative to improving the accessibility and connectivity of WKCD. The proposed footbridge seeks to provide such direct pedestrian linkage (see Annex 3 to Enclosure 2).

7. The proposed footbridge will provide a direct, round-the-clock and barrier-free connection between the developments above MTR Kowloon Station and ASDA, linking the at-grade public footpath on the northern side of the Austin Road West through an existing lift inside the developments of the MTR Kowloon Station, and the at-grade public footpath on the southern side of the Austin Road West by two lifts of the proposed footbridge to be provided. Escalators will also be provided to reach the Artist Square. The design capacity of the proposed footbridge will be able to cope with the estimated peak pedestrian flow (2-way) of about 4 600 pedestrians per 30 minutes in 2031.

8. On 21 April 2017, the Government consulted the Legislative Council Panel on Development and Panel on Home Affairs Joint Subcommittee to Monitor the Implementation of the West Kowloon Cultural District Project (JSC) on the funding proposal of the originally proposed footbridge<sup>1</sup>. The original design of the proposed footbridge adopted a semi-enclosed form and an artistic design that added an element of visual delight to the identity of WKCD, thereby providing visitors with a welcoming entry. The original works was planned for two phases implementation to dovetail the implementation of Integrated Basement, with target completion by the fourth quarter of 2020. At the meeting, Members raised concerns on the design and estimated cost of the proposed footbridge and the JSC did not support the submission of the funding proposal to the Public Works Subcommittee (PWSC).

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<sup>1</sup> To upgrade part of **754CL** entitled “Infrastructure Works for West Kowloon Cultural District, phase 1” to Category A vide LC Paper No. CB(1)819/16-17(01).

9. In view of Members' concerns on the construction cost, the Government and WKCD have critically reviewed the design of the proposed footbridge through a value engineering exercise with a view to reducing the construction cost. Compared to the original design, the new design has substantially reduced the length of the proposed footbridge section to be landed at the northern side of the Artist Square so that the overall length of the proposed footbridge is reduced by about 18 metres, resulting in saving to the construction cost. In addition, as opposed to the originally proposed phased implementation approach, the proposed footbridge will be constructed in one go to reduce the number of supporting piers, leading to further reduction of the construction cost.

10. At the same time, the new design of the main deck of the proposed footbridge emphasises simplicity. The adoption of clear expression of structural form with open-sided bridge deck will be a choice of cost effectiveness. As compared to the original proposal, it is estimated that the new design of the proposed footbridge, incorporating the above-mentioned modifications, could achieve an overall cost saving of about 30%<sup>2</sup>.

11. On 11 May 2018, the Government and WKCD consulted the JSC on the funding proposal of the new design of the proposed footbridge. The JSC generally supported the funding proposal for the new design of the proposed footbridge.

12. WKCD has completed the design of the proposed footbridge with the footbridge deck directly linking the Artist Square to the existing developments above MTR Kowloon Station as shown in Annexes 1 and 2 to Enclosure 2. In view of the JSC Members' request for further improvements of the design, we have incorporated into the design enhancement measures including decorative lighting system and ancillary provisions for art installations fixing with a view to matching the theme of various WKCD events in future. With the adoption of the design enhancement measures, it will help create a fresh artistic environment and an atmosphere with vibrancy, so as to improve the sense of arrival of the public at this important gateway of WKCD.

*/Proposed .....*

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<sup>2</sup> The estimated construction cost of the new design of the proposed footbridge (about \$280 million in MOD prices) is about 70% of the estimated construction cost of the original design (about \$400 million in MOD prices).

***Proposed Funding Arrangement for the Advance Works***

13. As parts of the proposed footbridge will be situated in the northern side of the Artist Square, WKCD A considers that there would be significant benefits to advance the construction of part of the works of the proposed footbridge under the on-going basement construction contract for Zone 3B so as to reduce construction risks and to provide greater programming certainty for the subsequent construction works of the proposed footbridge. WKCD A is prepared to fund the construction of the supporting pier, lift tower and staircase structure and foundation works in advance.

14. At the JSC meeting held on 11 May 2018, Members were informed that WKCD A would provide advance funding for taking forward the Advance Works on an unconditional basis, and when applying for funding for the proposed works, the Government would seek FC's approval for reimbursing WKCD A the cost incurred in the Advance Works in recognition of the works undertaken on behalf of the Government.

***Proposed Entrustment to WKCD A***

15. In view of the high degree of integration between the proposed footbridge and WKCD A's facilities within ASDA, we propose to entrust to WKCD A the construction of the proposed footbridge. Given that the design and construction of the proposed works and ASDA are highly integrated, it will significantly increase the cost/time required for implementing the proposed works, and create serious interfacing problems for the implementation programmes of WKCD A's facilities if the works concerned are carried out by WKCD A and the Government's contractors separately. We therefore consider it necessary and cost-effective to entrust to WKCD A the construction of the proposed footbridge in conjunction with the construction of the integrated basement structure in Zone 3B, which are entrusted to WKCD A as stated in the funding application approved by FC (vide PWSC(2017-18)12) in January 2018.

16. WKCD A will be reimbursed for the actual costs incurred in relation to the management, supervision and construction of the proposed entrustment works by their consultants and contractors (i.e. third party costs), and separately for their actual in-house management cost incurred which will be capped at \$7.9 million (in MOD prices), being about 2% of the total estimated cost of the proposed footbridge, mainly based on the estimated resources to be deployed by WKCD A in relation to the proposed footbridge.

**/FINANCIAL .....**

**FINANCIAL IMPLICATIONS**

17. We estimate the cost of the proposed works to be \$380.0 million in MOD prices, broken down as follows –

		<b>\$ million (MOD price)</b>
(a)	Footbridge –	220.7
	(i) deck	162.5
	(ii) Supporting pier and foundation	58.2
(b)	Lifts, escalators and staircases	59.3
(c)	Associated road works, ancillary works (including drainage, utilities, electrical and mechanical) and landscaping works	17.0
(d)	Necessary environmental mitigation measures, and related environmental monitoring and auditing (EM&A) works for items (a) to (c) above	6.0
(e)	Consultants' fees for construction works–	5.4
	(i) contract administration	2.5
	(ii) management of resident site staff (RSS)	1.6
	(iii) EM&A programme	0.5
	(iv) monitoring and auditing on entrusted works	0.8
(f)	Remuneration of RSS	29.2
(g)	In-house management cost payable to WKCDA for the proposed entrusted works	7.9
(h)	Contingencies	34.5
	<b>Total</b>	<b>380.0</b>

A detailed breakdown of the estimates for consultants' fees and RSS costs by man-months is at Annex 4 to Enclosure 2.

/18. ....

18. Subject to funding approval, we plan to phase the expenditure as follows –

<b>Year</b>	<b>\$ million (MOD)</b>
2019 – 2020	50.0
2020 – 2021	149.3
2021 – 2022	148.0
2022 – 2023	15.5
2023 – 2024	11.5
2024 – 2025	5.7
	<hr/>
	380.0
	<hr/>

19. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output from 2019 to 2025.

20. We estimate the annual recurrent expenditure arising from the proposed works to be \$3.0 million.

## **PUBLIC CONSULTATION**

21. At various JSC meetings when the integration and connectivity of WKCD with its neighbouring districts was discussed, Members had urged the Government to enhance the connectivity as soon as possible including, for example, the provision of a grade-separated pedestrian linkage between the MTR Kowloon Station and ASDA.

22. The Government consulted the JSC on 21 April 2017 on the funding proposal for the originally proposed footbridge. At the meeting, Members raised concerns on the design and estimated cost of the proposed footbridge and the JSC did not support the submission of the funding proposal to PWSC. On 11 May 2018, the Government and WKCD consulted the JSC on the funding proposal of the new design of the proposed footbridge. The JSC generally supported the funding proposal for the new design of the proposed footbridge.

23. We consulted the Yau Tsim Mong District Council at its meeting on 24 May 2018. Members had no adverse comments on the proposed works.

24. We gazetted the proposed amendments to the proposed footbridge under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 23 November 2018. No objection was received during the statutory objection period. The authorization notice was gazetted on 15 February 2019.

25. We have consulted the Advisory Committee on the Appearance of Bridges and Associated Structures<sup>3</sup> on the revised aesthetic design of the proposed footbridge. The Committee accepted in principle the aesthetic design.

## ENVIRONMENTAL IMPLICATIONS

26. The engineering feasibility study of the WKCD development is a designated project under Schedule 3 of the Environmental Impact Assessment Ordinance (EIAO), requiring an Environmental Impact Assessment (EIA) report to be approved under the EIAO. The proposed works are not designated projects under Schedule 2 of the EIAO but form part of the WKCD development. In November 2013, the EIA report for the WKCD development (which includes the proposed works) was approved under the EIAO. The EIA report has concluded that the environmental impact of the proposed works can be controlled to within the criteria under the EIAO and the Technical Memorandum on EIA process. We shall implement the mitigation measures as recommended in the approved EIA report. The mitigation measures recommended for the construction phase mainly include adoption of quieter equipment and movable noise barriers or noise insulating fabric to minimize construction noise impact, and regular watering of the site and provision of wheel-washing facilities for dust control.

/27. ....

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<sup>3</sup> Advisory Committee on the Appearance of Bridges and Associated Structures comprises representatives of the Hong Kong Institute of Architects, Hong Kong Institute of Engineers, Hong Kong Institute of Planners, academic institutions, Architectural Services Department, Highways Department, Housing Department, and Civil Engineering and Development Department. It is responsible for vetting the design of bridges and other structures associated with the highway system, including noise barriers and enclosures, from the aesthetic and visual impact points of view.

27. At the planning and design stages, we have considered the design level and construction method of the proposed works 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 broken concrete) 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>4</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.

28. 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.

29. We estimate that the proposed works will generate in total about 8 500 tonnes of construction waste. Of these, we will reuse about 600 tonnes (7%) of inert construction waste on-site and deliver 7 400 tonnes (87%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 500 tonnes (6%) 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 \$0.6 million for this project (based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities, and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

## HERITAGE IMPLICATIONS

30. 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.

**/LAND .....**

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<sup>4</sup> 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 in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

## LAND ACQUISITION

31. The proposed works do not require any private land acquisition.

## BACKGROUND INFORMATION

32. The WKCD development is one of the ten major infrastructure projects included in the Chief Executive's 2007-08 Policy Address for promoting the long-term development of arts and culture, and supporting Hong Kong as a creative economy and Asia's World City.

33. In January 2013, FC approved the upgrading of **753CL** "Infrastructure Works for West Kowloon Cultural District, phase 1 – design and site investigation" to Category A at an estimated cost of \$478.0 million in MOD prices. We have entrusted to WKCDA the design and site investigation of part of the PIW, including among others the design and site investigation of the proposed footbridge. The entrusted design and site investigation is proceeding in stages to suit the phased implementation of WKCD.

34. We upgraded **754CL** to Category B in September 2013. In July 2015, FC approved the upgrading of part of **754CL** "Infrastructure Works for West Kowloon Cultural District, phase 1 – first construction package" to Category A at an estimated cost of \$840.5 million in MOD prices.

35. In April 2018, FC approved the upgrading of part of **754CL** "Infrastructure Works for West Kowloon Cultural District, phase 1 – second construction package" to Category A at an estimated cost of \$192.0 million in MOD prices.

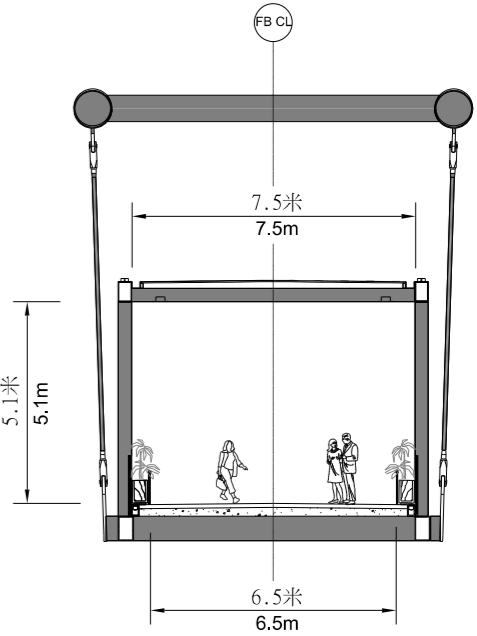
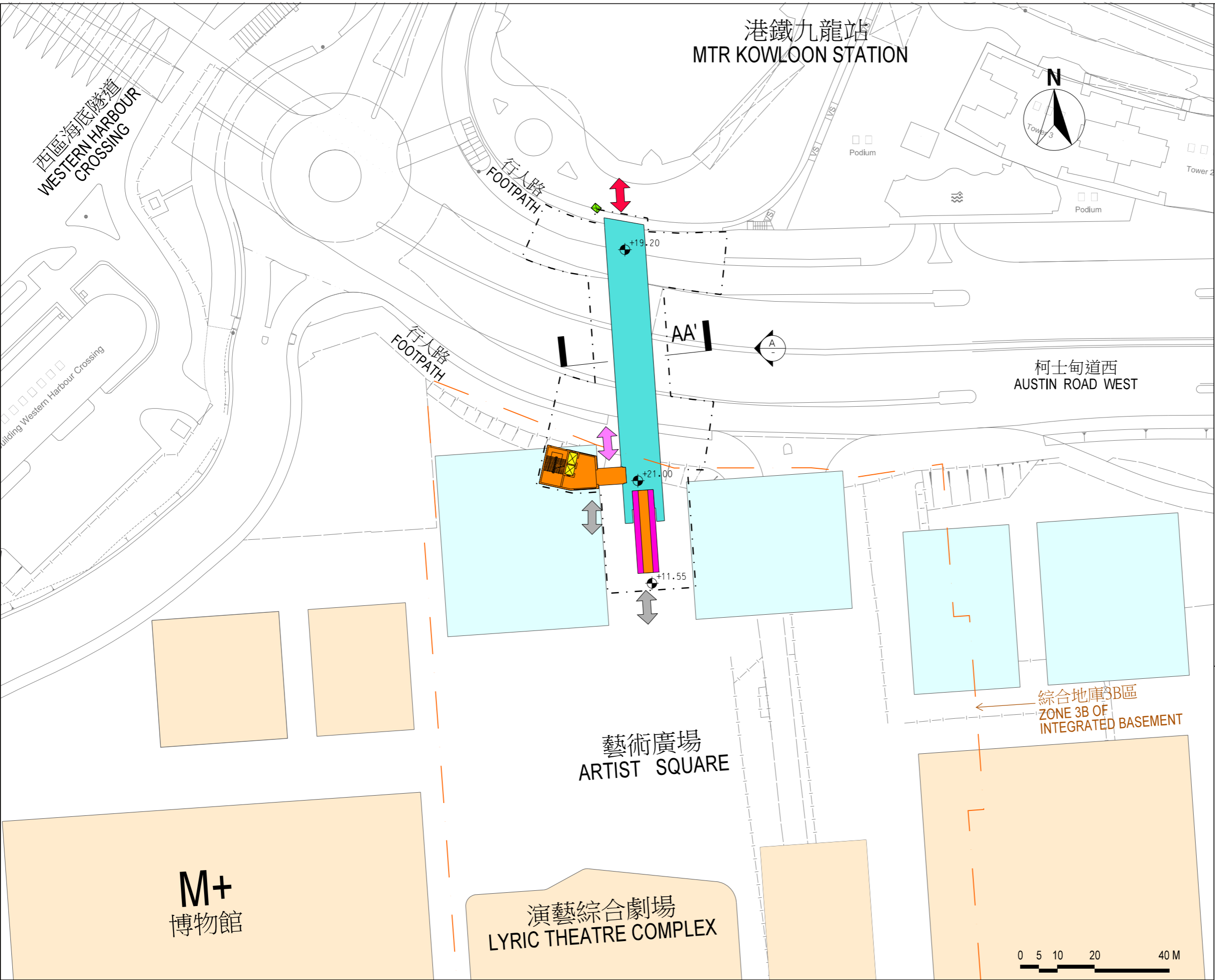
36. The proposed works will not involve any tree removal.

37. We estimate that the proposed works will create about 220 jobs (175 for labourers and 45 for professional/technical staff) providing a total employment of 4 600 man-months.

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圖例 LEGEND :

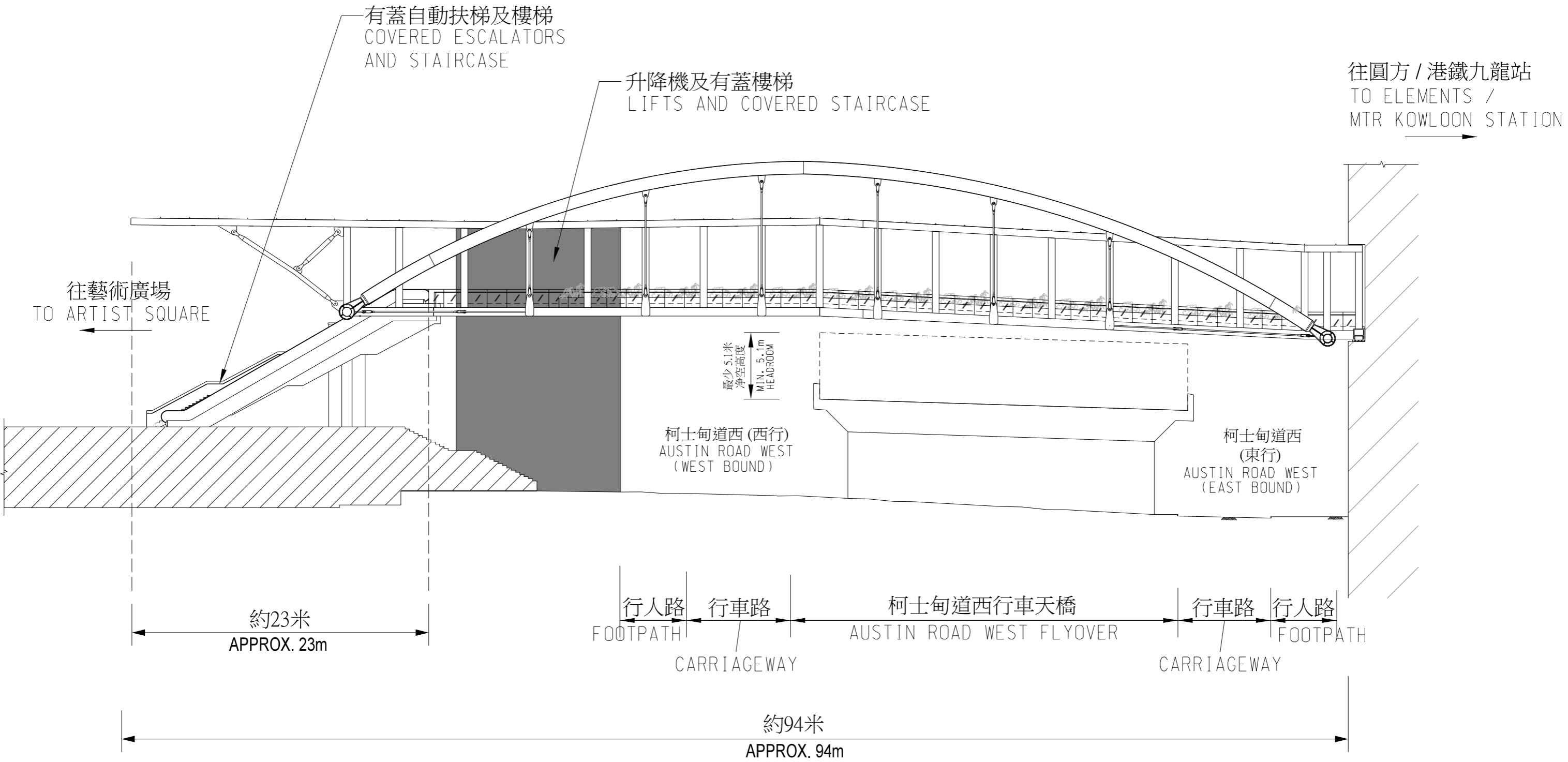
	施工區界限 LIMIT OF WORKS AREA
	酒店、辦公室及住宅發展項目 HOTEL, OFFICE AND RESIDENTIAL DEVELOPMENTS
	西九管理局設施 WKDA'S FACILITIES
	擬建有蓋行人天橋 PROPOSED COVERED FOOTBRIDGE
	擬建有蓋自動扶梯 PROPOSED COVERED ESCALATORS
	擬建有蓋樓梯 PROPOSED COVERED STAIRCASE
	擬建升降機 PROPOSED LIFT
	擬建水平 (約數) PROPOSED LEVEL (APPROXIMATE)
	現有發展項目連接 CONNECTION TO THE EXISTING DEVELOPMENT
	現有行人路連接 CONNECTION TO THE EXISTING FOOTPATH
	將來發展項目連接 CONNECTIONS TO THE FUTURE DEVELOPMENT
鄰近發展項目提供的現有 24 小時開放無障礙設施 EXISTING ROUND-THE-CLOCK BARRIER FREE FACILITY PROVIDED BY ADJOINING DEVELOPMENT	
	鄰近發展項目提供的現有升降機 EXISTING LIFT PROVIDED BY ADJOINING DEVELOPMENT



項目名稱 PROJECT TITLE  
7754CL號(部分) - 西九文化區基礎建設工程第一期 - 第三組建造工程  
7754CL(PART) - INFRASTRUCTURE WORKS FOR WEST KOWLOON CULTURAL DISTRICT,  
PHASE 1 - THIRD CONSTRUCTION PACKAGE

藝術廣場天橋  
ARTIST SQUARE BRIDGE

剖面圖 AA'  
SECTION AA'  
不按比例  
NOT TO SCALE



視角 A  
VIEW A



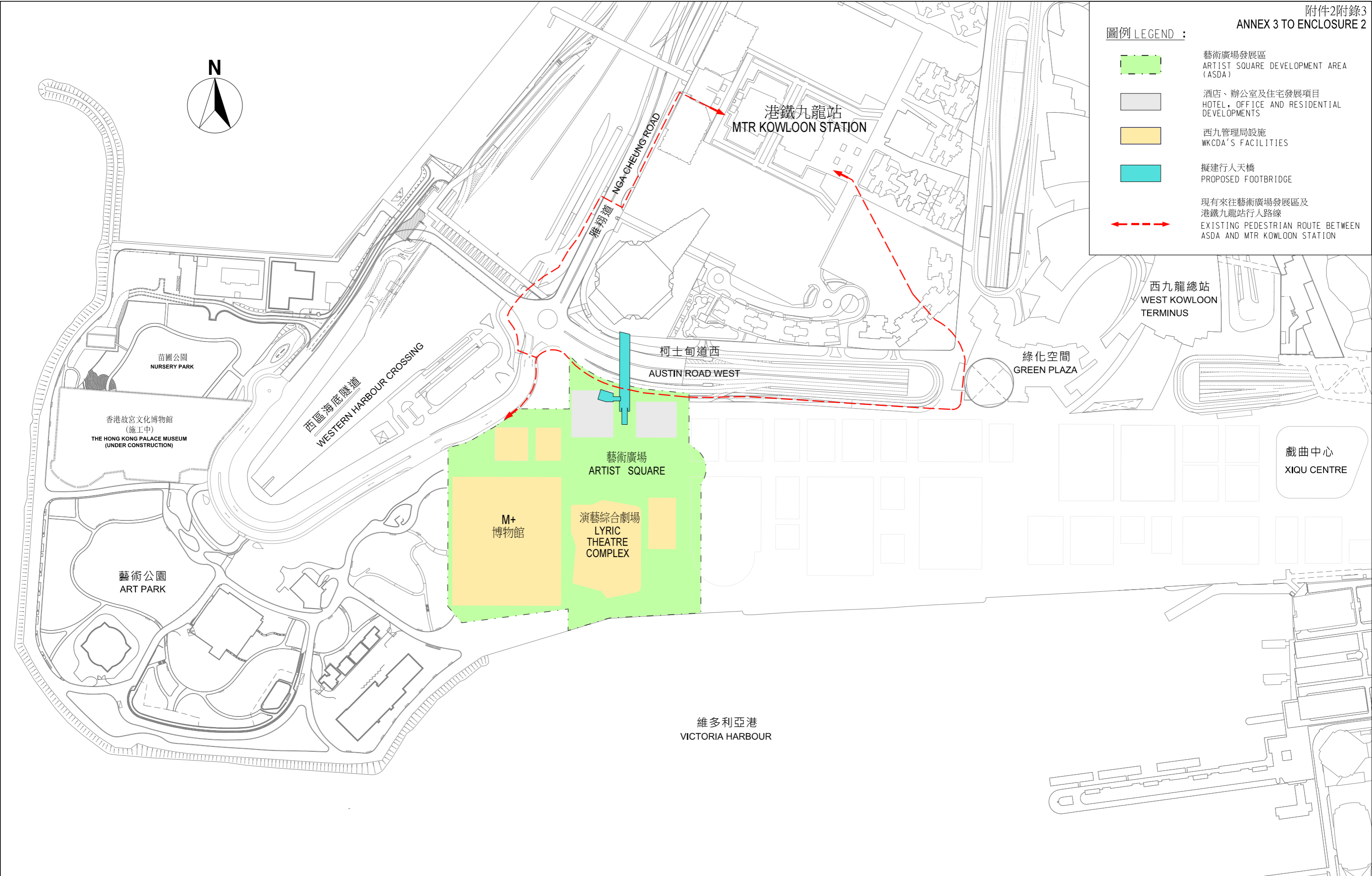
擬建行人天橋西立面構想俯瞰圖 AERIAL VIEW OF WESTERN SIDE OF PROPOSED FOOTBRIDGE



擬建行人天橋東立面構想圖 VIEW OF EASTERN SIDE OF PROPOSED FOOTBRIDGE



天橋內部構想圖VIEW FROM DECK LEVEL



<p>項目名稱 PROJECT TITLE</p> <p>7754CL號(部分) - 西九文化區基礎建設工程第一期 - 第三組建造工程</p> <p>7754CL(PART) - INFRASTRUCTURE WORKS FOR WEST KOWLOON CULTURAL DISTRICT, PHASE 1 - THIRD CONSTRUCTION PACKAGE</p>	<p>藝術廣場發展區</p> <p>ARTIST SQUARE DEVELOPMENT AREA</p>	<p>比例 SCALE</p> <p>不按比例</p> <p>Not to scale</p>
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## Annex 4 to Enclosure 2 of PWSC(2018-19)46

### 754CL (part) – Infrastructure Works for West Kowloon Cultural District, phase 1 – third construction package

#### Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2018 prices)

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	—	—	1.5
		Technical	—	—	0.8
				Sub-total	2.3#
(b)	Consultants' fees for EM&A programme (Note 2)	Professional	—	—	0.2
		Technical	—	—	0.2
				Sub-total	0.4#
(c)	Consultants' fees for monitoring and auditing on entrusted works (Note 3)	Professional	3	38	0.4
		Technical	5	14	0.3
				Sub-total	0.7#
(d)	Resident site staff (RSS) costs (Note 4)	Professional	120	38	15.7
		Technical	261	14	12.0
				Sub-total	27.7
Comprising –					
(i)	Consultants' fees for management of RSS			1.4#	
(ii)	Remuneration of RSS			26.3#	
				<b>Total</b>	<b>31.1</b>

\* MPS = Master Pay Scale

**Notes**

1. A multiplier of 2.0 is applied to the average MPS salary point to estimate the full staff cost including the consultants' overheads and profit for staff employed in the consultants' offices. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of RSS supplied by the consultants. (As at now, MPS salary point 38 = \$81,975 per month and MPS salary point 14 = \$28,725 per month.)
2. The consultants' staff cost for contract administration and EM&A programme is calculated in accordance with the existing consultancy agreement for the design and construction of **754CL**.
3. The actual man-months and fees will only be known after the consultants have been selected.
4. The actual man-months and fees will only be known after the completion of the construction works.

**Remarks**

The cost figures in this Annex are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in MOD prices in paragraph 17 of Enclosure 2.

**Integrated Basement for West Kowloon Cultural District – remaining works**

**PROJECT SCOPE AND NATURE**

The proposed scope of works under **763CL**<sup>1</sup> (the proposed works) comprises –

- (a) detailed design and site investigation of essential basement structure<sup>2</sup> and associated works for Zone 2BC of Integrated Basement (IB), including preparation of tender documents and assessment of tenders for the construction works;
- (b) construction of the foundation works for IB in Zones 2A and 2BC (IBZ2);
- (c) construction of essential basement structure and associated works for IBZ2;
- (d) construction of an underground road of about 800 metres long in IBZ2, and associated works including footpaths, pick-up/drop-off area, water supply, drainage, electrical and mechanical (E&M) works, fire services installation works, plant rooms, and means of escape/means of access for firefighting and rescue; and
- (e) necessary environmental mitigation measures, as well as related monitoring and auditing works.

—— Zoning plan of IB is at Annex 1 to Enclosure 3. Layout and section plans of the proposed works are at Annex 2 to Enclosure 3.

/2. ....

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<sup>1</sup> In view of WKCDA's latest phased implementation plan that IB in Zone 2BC will be constructed concurrently as mentioned in the following paragraphs of this Enclosure, the Administration included project scope of **763CL** the detailed design, site investigation and construction of essential basement structure in the relevant part of Zone 2BC (previously known as Zone 2C) of IB.

<sup>2</sup> Essential basement structure generally includes structural elements of IB such as walls, floor and ceiling slabs, columns and beams, as well as other associated works.

2. Subject to approval of the Finance Committee (FC), we plan to entrust the proposed works to West Kowloon Cultural District Authority (WKCDA) with a view to commencing the works progressively from mid-2019 for substantial completion in phases by around 2027.

## JUSTIFICATION

3. IB is an integral component of the Foster + Partners' Conceptual Plan forming the basis for the Development Plan for West Kowloon Cultural District (WKCD). It enables traffic to be put underground thereby freeing up the site for cultural use and public enjoyment, as well as enhancing the walking environment at grade. IBZ2 is the largest basement section in between the Xiqu Centre to the east and the Lyric Theatre Complex to the west. On top of the basement are the hotel, office and residential (HOR) developments and the remaining arts and cultural facilities (ACF) including the Music Centre, Musical Theatre, Great Theatre located in Zone 2BC and Medium Theatre I in Zone 2A.

4. With the commencement of IBZ2 design consultancy in February 2017, WKCDA has prepared a phased implementation plan which aims to identify works packaging strategy and contract arrangement for the construction of IBZ2 and the topside developments. Development parcels located on top of the Hong Kong West Kowloon Station of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) project in Zone 2A can be delivered sooner than other parcels as the sub-structure involved has already been substantially completed by the XRL project and will be handed over to WKCDA. Thus, WKCDA aims at completing the HOR development in Zone 2A starting from 2025, while the development of the topside development within Zone 2BC will begin by 2025 onward.

5. IBZ2 together with the underground road is planned to be completed to dovetail the above phased implementation plan of WKCD. The section of underground road in Zone 2A, targeting for completion in 2025, will be connected with Austin Road West Underpass and Lin Cheung Road via the underground road junction. When the remaining underground road in Zone 2BC is completed and connecting Zones 2A and 3B in about 2027, it would greatly enhance the accessibility of WKCD as a whole as well as its internal connectivity and circulation.

6. Subject to the approval of FC, WKCDA plans to commence the detailed design and site investigation for Zone 2BC of IB in the second half of 2019, as well as to commence the construction of the Zone 2A of IB including the underground road in phases from mid-2019 for completion in around 2025. The construction of Zone 2BC of IB would commence in phases from 2020 to dovetail the implementation of the topside development. The timely completion of IBZ2 is essential for the topside ACF and HOR development. Early development of HOR will assist the generation of revenue in supporting the ACF. IB is a crucial component in driving the implementation of WKCD as a world-class arts and cultural hub.

***Proposed Entrustment to WKCDA***

7. In view of the exceptionally high degree of integration amongst the various facilities in IB and the critical interfacing issues such as overlapping work sites, construction work sequences and methodologies, and major programming interdependence among the proposed works, we propose to entrust to WKCDA the proposed works to be carried out concurrently with the implementation of WKCDA's facilities in Zones 2A and 2BC. It would be impractical for WKCDA to construct the WKCDA's facilities in Zones 2A and 2BC, while the Government separately undertakes the construction of the proposed works in IB which are located and integrated within the same sites. We therefore consider it necessary and cost effective to entrust to WKCDA the implementation of the proposed IB works in conjunction with the implementation of the WKCDA's facilities in Zones 2A and 2BC in a holistic manner.

8. WKCDA will be reimbursed for the actual costs incurred in relation to the management, supervision, design and construction of the proposed works provided by their consultants and contractors (i.e. third party costs), and separately for their actual in-house management cost incurred capped at a sum of \$347.5 million (in MOD prices), being about 2% of the total estimated cost of the project, mainly based on the estimated resources to be deployed by WKCDA in relation to the proposed works.

**/FINANCIAL .....**

**FINANCIAL IMPLICATIONS**

9. We estimate the cost of the proposed works to be \$17,472.3 million in MOD prices, broken down as follows –

	<b>\$ million (in MOD prices)</b>
(a) Consultants' fees for detailed design and tender, and site investigation works for Zones 2BC of IB	150.4
(b) Foundation works for IBZ2	5,023.6
(c) Essential basement structure and associated works for IBZ2	7,381.1
(d) Underground road in IBZ2	1,599.8
(e) Necessary environmental mitigation measures, and related environmental monitoring and auditing (EM&A) works for items (a) to (d) above	105.6
(f) Consultants' fees for construction works –	188.8
(i) contract administration	100.7
(ii) management of resident site staff (RSS)	21.7
(iii) EM&A programme	9.0
(iv) monitoring and auditing on entrusted works	57.4
(g) Remuneration of RSS	1,087.1
(h) In-house management cost payable to WKCD for the entrusted works	347.5
(i) Contingency	1,588.4
Total	\$17,472.3

A detailed breakdown of the estimates for consultants' fees and RSS costs by man-months is at Annex 3 to Enclosure 3.

10. Subject to funding approval, we plan to phase the expenditure as follows –

Year	\$ million (MOD)
2019 – 2020	375.9
2020 – 2021	1,065.7
2021 – 2022	2,303.8
2022 – 2023	3,031.8
2023 – 2024	3,439.7
2024 – 2025	2,889.4
2025 – 2026	2,114.8
2026 – 2027	1,375.6
2027 – 2028	424.3
2028 – 2029	296.1
2029 – 2030	134.7
2030 – 2031	20.5
	<hr/> \$17,472.3 <hr/>

11. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output from 2019 to 2031.

12. We estimate the annual recurrent expenditure arising from the proposed works to be \$64 million.

## **PUBLIC CONSULTATION**

13. We consulted the Food, Environmental Hygiene and Public Works Committee of Yau Tsim Mong District Council on 20 September 2018 on the underground road in IBZ2. Members had no objection to the proposed underground road.

/14. ....

14. We gazetted the proposed underground road in IBZ2 under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 23 November 2018. No objection was received during the statutory objection period. The authorization notice was gazetted on 15 February 2019.

15. With an aim to commencing the proposed works as soon as possible, we circulated a consultation paper on the proposed works to the Yau Tsim Mong District Council and conducted a briefing session on 20 December 2018 at which we introduced the proposed works and responded to Members' queries. We have attended the Food, Environmental Hygiene and Public Works Committee of the Yau Tsim Mong District Council on 17 January 2019 to respond to any further queries. Members generally had no adverse comments on the proposed works.

16. We consulted the Legislative Council Panel on Development and Panel on Home Affairs Joint Subcommittee to Monitor the Implementation of the West Kowloon Cultural District Project on the proposed works on 14 January 2019. Members had no objection to submitting the funding proposal to Public Works Subcommittee for consideration.

## **ENVIRONMENTAL IMPLICATIONS**

17. The engineering feasibility study of the WKCD development is a designated project under Schedule 3 of the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO), requiring an Environmental Impact Assessment (EIA) report to be approved under the EIAO. The proposed works forming part of the WKCD development cover an underground road serving WKCD which is a designated project under Schedule 2 of the EIAO, requiring an environmental permit for its construction and operation. In November 2013, the EIA report for the WKCD development (which includes the proposed works) was approved under the EIAO, and an environmental permit was obtained for the construction and operation of the underground road. The EIA report concluded that the environmental impact of the proposed works can be controlled to within the criteria under the EIAO and the Technical Memorandum on EIA process. We will implement the necessary mitigation measures to comply with the requirements under the approved EIA report and the environmental permit. The mitigation measures recommended for the construction phase mainly include adoption of quieter equipment and movable noise barriers or noise insulating fabric to minimise construction noise impact, and regular watering of the site and provision of wheel-washing facilities for dust control. We have allowed a total of \$105.6 million (in MOD prices) in the project estimate under the items in paragraph 9(e) for implementing the necessary environmental mitigation measures, and related EM&A works.

18. At planning and design stages, we have considered the design and construction method of the proposed works to reduce generation of construction waste where possible. In addition, we will require the contractors to reuse inert construction waste (e.g. excavated soil and broken concrete) 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>3</sup>. We will encourage the contractors to maximise the use of recycled or recyclable inert construction waste and the use of non-timber formwork to further reduce generation of construction waste.

19. At the construction stage, we will require the contractors to submit plans for approval 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 plans. We will require the contractors 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 receptor project sites and landfills respectively through a trip-ticket system.

20. We estimate that the proposed works will generate in total 2.82 million tonnes of construction waste. Of these, we plan to deliver 2.79 million tonnes (99%) of inert construction waste to concurrent projects for reuse. In addition, we will dispose of the remaining 30 000 tonnes (1%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at landfill sites is estimated to be about \$6 million for this project (based on a unit charge rate of \$200 per tonne for disposal at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

21. We estimate that the proposed works will generate about 5 700 cubic metres of marine sediment. We will liaise with the Marine Fill Committee regarding the disposal of the marine sediment.

**/HERITAGE .....**

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<sup>3</sup> 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 in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

## HERITAGE IMPLICATIONS

22. 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.

## LAND ACQUISITION

23. The proposed works do not require any private land acquisition.

## BACKGROUND INFORMATION

24. The WKCD development is one of the ten major infrastructure projects included in the Chief Executive's 2007-08 Policy Address for promoting the long-term development of arts and culture, and supporting Hong Kong as a creative economy and Asia's World City.

25. In January 2013, FC approved the upgrading of **753CL**, entitled "Infrastructure Works for West Kowloon Cultural District, phase 1 – design and site investigation" to Category A at an estimated cost of \$478.0 million in MOD prices. The design and site investigation of government infrastructure works in Zones 3A and 3B of IB (related to the underground road and associated works) form part of the works entrusted to WKCDA under **753CL**, and are proceeding in stages to suit the phased implementation of IB.

26. We upgraded **763CL** to Category B on 28 June 2013.

27. In March 2014, we created a Category D item to fund the design of the advance works and site investigation works for Zone 3B of IB at an estimated cost of \$27.3 million in MOD prices under **Subhead 7100CX**, entitled "New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme". The works under this Category D item were entrusted to WKCDA and substantially completed.

28. In July 2015, FC approved the upgrading of part of **763CL** as **791CL**, entitled "Integrated Basement for West Kowloon Cultural District – first and second stages of design, site investigation and construction works" to Category A at an estimated cost of \$2,919.5 million in MOD prices. The works were entrusted to WKCDA and are currently targeted for substantial completion by end of 2019.

29. In January 2018, FC approved the upgrading of part of **763CL** as **815CL**, entitled “Integrated Basement for West Kowloon Cultural District – third stage of construction works” to Category A at an estimated cost of \$3,178.4 million in MOD prices. The works were entrusted to WKCD and are targeted for substantial completion by around 2022.

30. The proposed works will require removal of 27 trees. All trees to be removed are not important trees<sup>4</sup>. We will incorporate planting proposals as part of the proposed works, including 39 trees for compensatory planting.

31. We estimate that the proposed works will create about 2 150 jobs (1 900 for labourers and 250 for professional/technical staff) providing a total employment of 110 000 man-months.

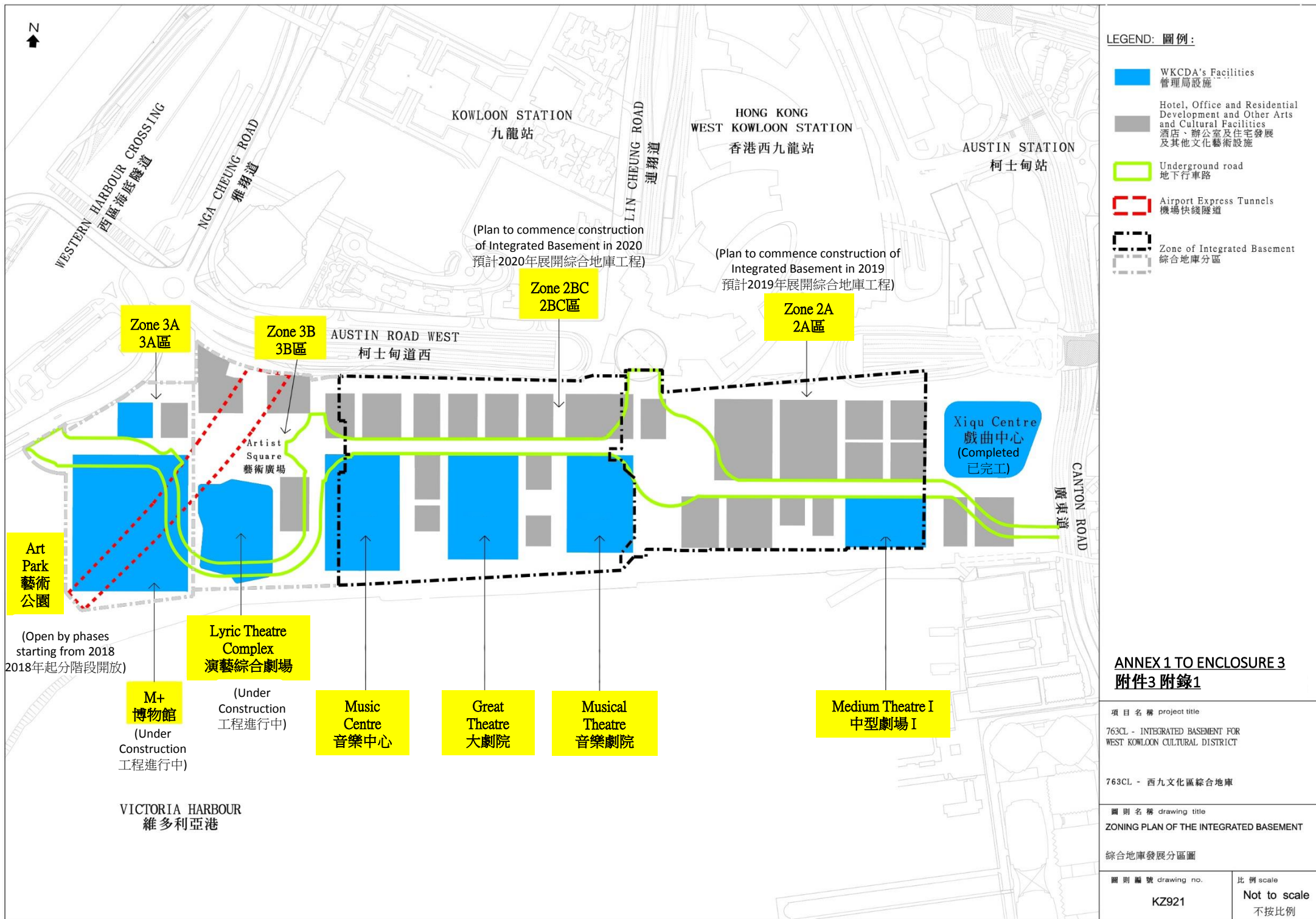
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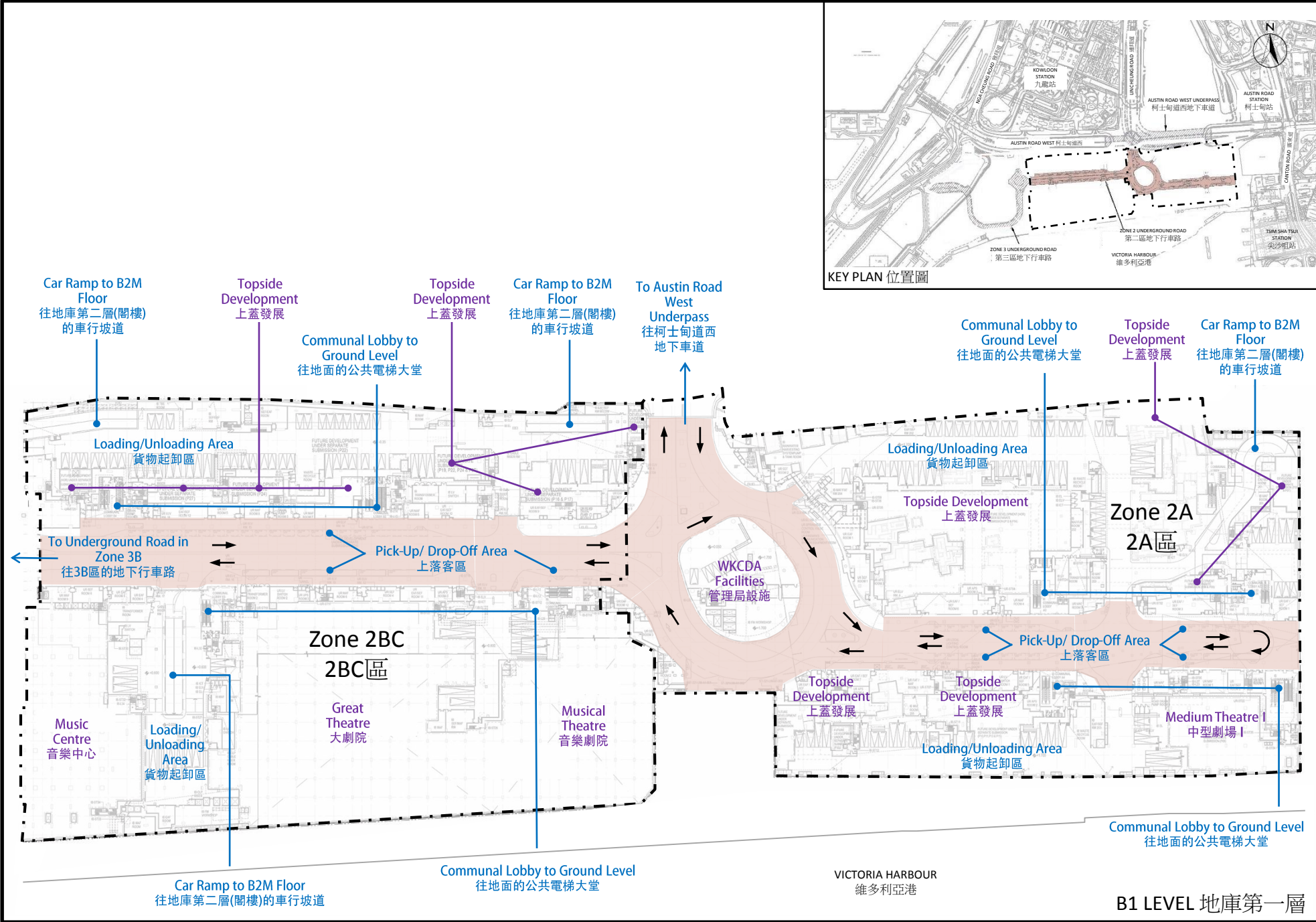
Home Affairs Bureau  
March 2019

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<sup>4</sup> “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

- (a) trees of 100 years old or above;
- (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 an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of the overall tree sizes, shape and any special features), e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with a trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with a height or canopy spread equal to or exceeding 25 m.





LEGEND: 圖例:

APPROXIMATE BOUNDARY OF ESSENTIAL BASEMENT STRUCTURE OF ZONE 2  
2區基本地庫結構的大約界線

UNDERGROUND ROAD IN ZONE 2  
2區地下車路

TRAFFIC DIRECTION  
行車方向

NOTE: 註釋:

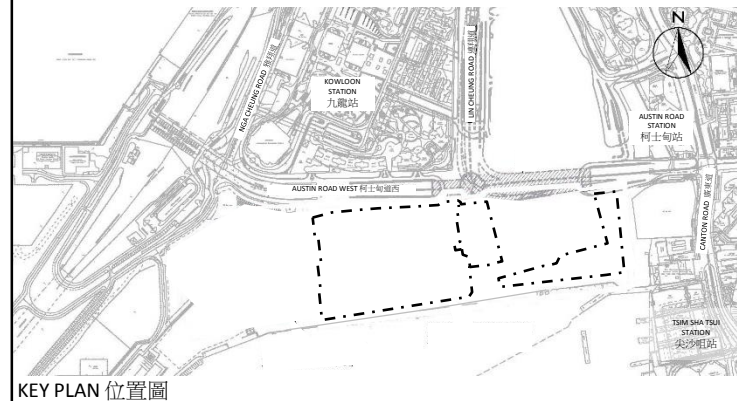
1. ANCILLARY WORKS FOR THE UNDERGROUND ROAD INCLUDING CIVIL AND STRUCTURAL ENGINEERING, MECHANICAL AND ELECTRICAL, DRAINAGE, WATER AND UTILITIES WORKS ARE NOT SHOWN ON THIS DRAWING FOR CLARITY.  
為清晰表達，地下車路的附屬工程，包括土木及結構、機電、渠務、水務和公用設施工程不在此圖則展示

ANNEX 2 TO ENCLOSURE 3 (PAGE 1 OF 4)  
附件3 附錄2 (頁 1/4)

PROJECT TITLE 項目名稱  
7763CL-B2 INTEGRATED BASEMENT FOR WEST KOWLOON CULTURAL DISTRICT – REMAINING WORKS  
7763CL-B2 西九文化區綜合地庫 – 餘下工程

DRAWING TITLE 圖則名稱  
LAYOUT PLANS OF INTEGRATED BASEMENT IN ZONE 2 (B1 LEVEL)  
綜合地庫2區平面圖(地庫第一層)

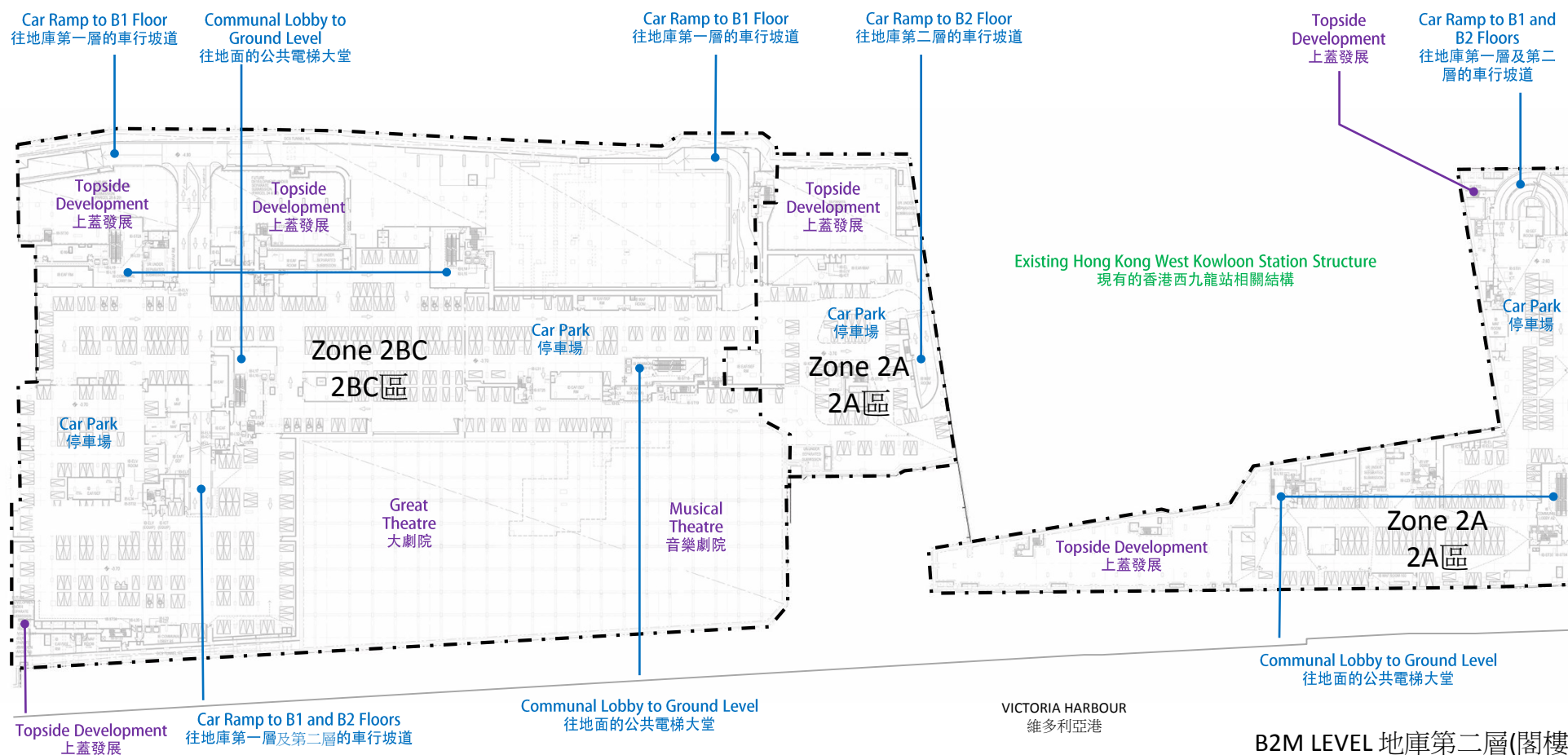
SCALE 比例  
NOT TO SCALE  
不按比例



KEY PLAN 位置圖

## LEGEND: 圖例:

- APPROXIMATE BOUNDARY OF ESSENTIAL BASEMENT STRUCTURE OF ZONE 2
- 2區基本地鐵結構的大約界線



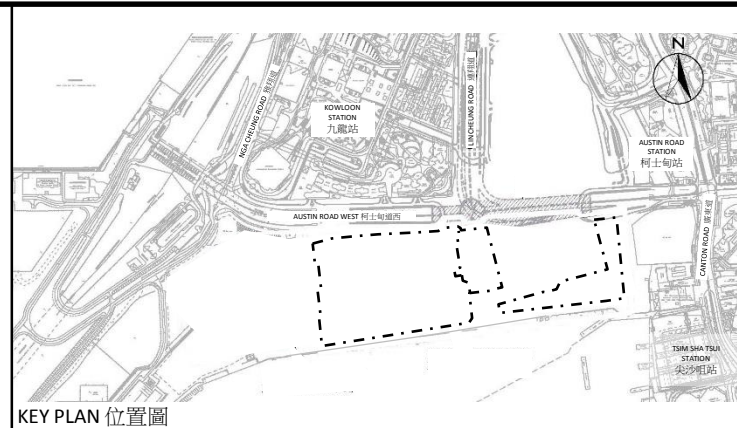
## ANNEX 2 TO ENCLOSURE 3 (PAGE 2 OF 4) 附件3 附錄2 (頁 2/4)

PROJECT TITLE 項目名稱  
7763CL-B2 INTEGRATED BASEMENT FOR WEST KOWLOON CULTURAL DISTRICT – REMAINING WORKS  
7763CL-B2 西九文化區綜合地庫 – 餘下工程

DRAWING TITLE 圖則名稱  
LAYOUT PLANS OF INTEGRATED BASEMENT IN ZONE 2 (B2M LEVEL)  
綜合地庫2區平面圖(地庫第二層(閣樓))

SCALE 比例  
NOT TO SCALE  
不按比例

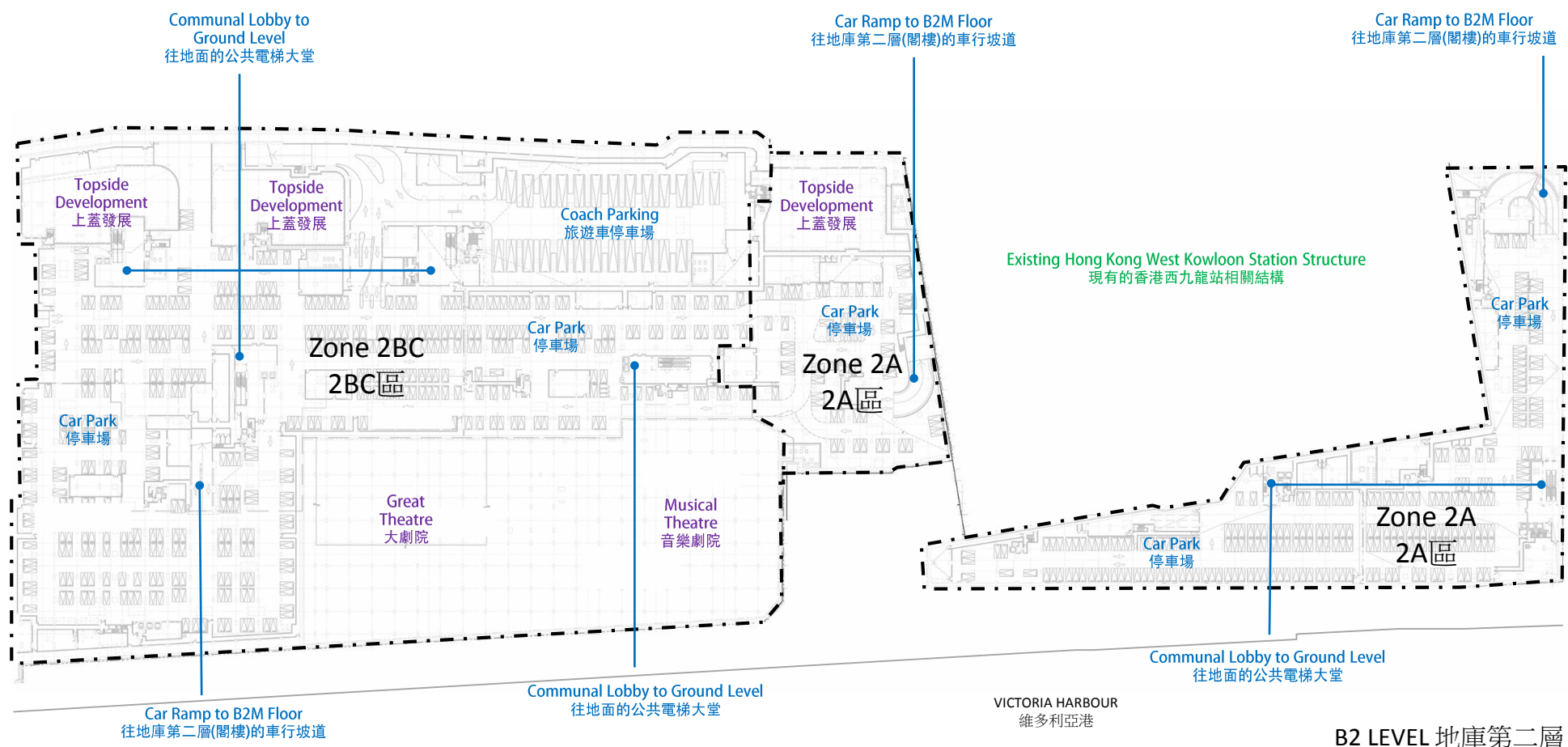
B2M LEVEL 地庫第二層(閣樓)



KEY PLAN 位置圖

## LEGEND: 圖例:

- APPROXIMATE BOUNDARY OF ESSENTIAL BASEMENT STRUCTURE OF ZONE 2
- 2區基本地鐵結構的大約界線

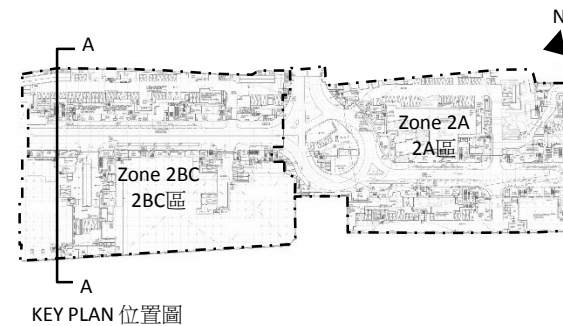


## ANNEX 2 TO ENCLOSURE 3 (PAGE 3 OF 4) 附件3 附錄2 (頁 3/4)

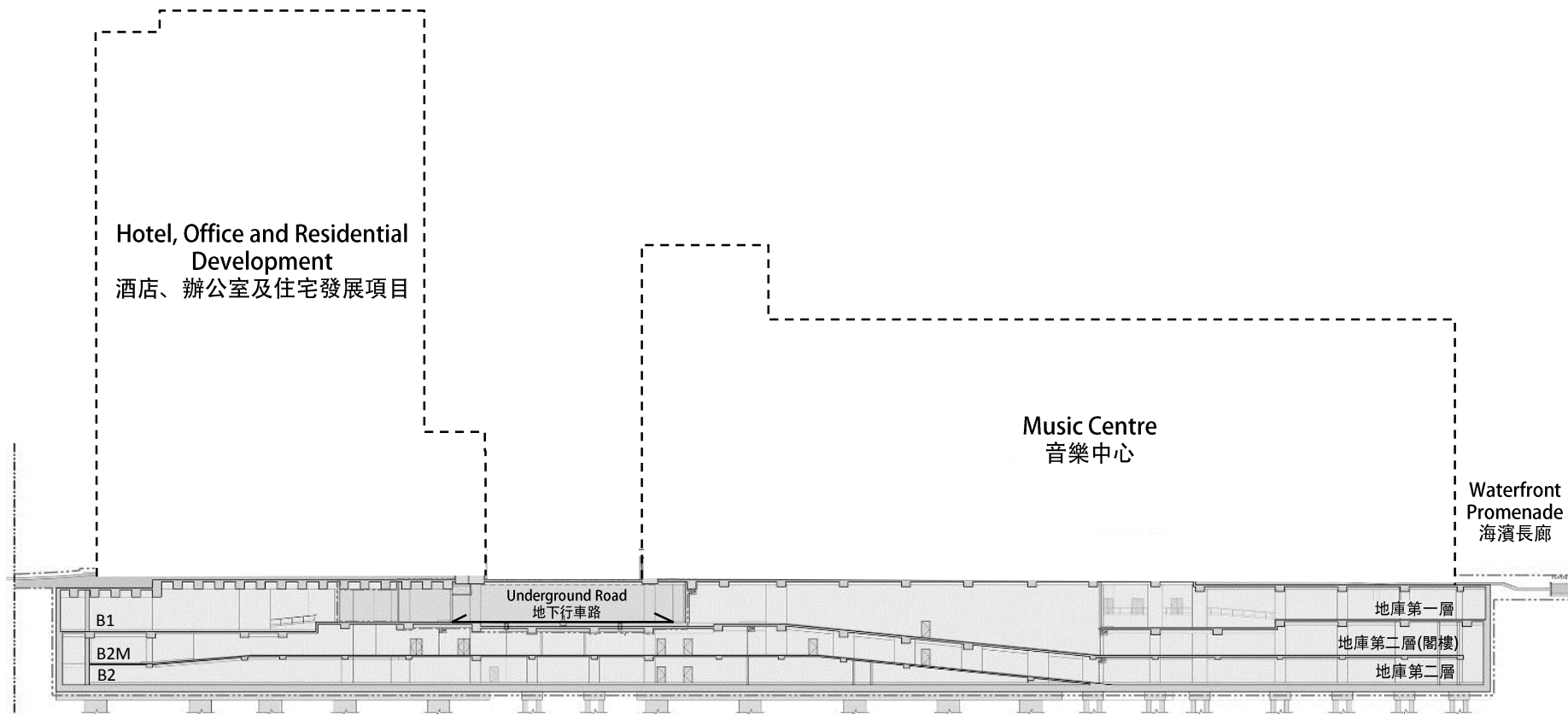
PROJECT TITLE 項目名稱  
7763CL-B2 INTEGRATED BASEMENT FOR WEST KOWLOON CULTURAL DISTRICT – REMAINING WORKS  
7763CL-B2 西九文化區綜合地庫 – 餘下工程

DRAWING TITLE 圖則名稱  
LAYOUT PLANS OF INTEGRATED BASEMENT IN ZONE 2 (B2 LEVEL)  
綜合地庫2區平面圖(地庫第二層)

SCALE 比例  
NOT TO SCALE  
不按比例



KEY PLAN 位置圖



剖面圖 A-A

**ANNEX 2 TO ENCLOSURE 3 (PAGE 4 OF 4)**

**附件3 附錄2 (頁 4/4)**

PROJECT TITLE 項目名稱  
7763CL-B2 INTEGRATED BASEMENT FOR WEST KOWLOON CULTURAL DISTRICT – REMAINING WORKS  
7763CL-B2 西九文化區綜合地庫 – 餘下工程

DRAWING TITLE 圖則名稱  
SECTION OF INTEGRATED BASEMENT IN ZONE 2  
綜合地庫2區剖面圖

SCALE 比例  
NOT TO SCALE  
不按比例

# Annex 3 to Enclosure 3 of PWSC(2018-19)46

## 763CL – Integrated Basement for West Kowloon Cultural District – remaining works

### Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2018 prices)

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Consultants' fees for detailed design and tender for Zone 2BC of integrated basement (Note 2)	Professional	470	38	2.0	77.1
	Technical	848	14	2.0	48.7
	Sub-total				125.8^
(b) Consultants' fees for contract administration (Note 3)	Professional	—	—	—	52.5
	Technical	—	—	—	27.7
	Sub-total				80.2#
(c) Consultants' fees for EM&A programme (Note 3)	Professional	—	—	—	4.5
	Technical	—	—	—	3.0
	Sub-total				7.5#
(d) Consultants' fees for monitoring and auditing on entrusted works (Note 2)	Professional	236	38	2.0	38.7
	Technical	124	14	2.0	7.1
	Sub-total				45.8#
(e) Resident site staff (RSS) costs (Note 4)	Professional	3,680	38	1.6	482.7
	Technical	8,728	14	1.6	401.1
	Sub-total				883.8
Comprising –					
(i) Consultants' fees for management of RSS				17.3#	
(ii) Remuneration of RSS				866.5#	
<b>Total</b>					<b>1,143.1</b>

\* MPS = Master Pay Scale

**Notes**

1. A multiplier of 2.0 is applied to the average MPS salary point to estimate the full staff cost including the consultants' overheads and profit for staff employed in the consultants' offices. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of RSS supplied by the consultants. (As at now, MPS salary point 38 = \$81,975 per month and MPS salary point 14 = \$28,725 per month.)
2. The actual man-months and fees will only be known after the consultants have been selected.
3. The consultants' staff cost for contract administration and EM&A programme is calculated in accordance with the existing consultancy agreement for the design and construction of **763CL**.
4. The actual man-months and fees will only be known after the completion of the construction works.

**Remarks**

The cost figures in this Annex are shown in constant prices to correlate with the MPS salary point of the same year. The figure marked with ^ is shown in part of the MOD prices in paragraph 9(a) of Enclosure 3. The figures marked with # are shown in MOD prices in paragraphs 9(f) and 9(g) of Enclosure 3.