For discussion **PWSC(2023-24)21**
on 25 October 2023

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS
Public Safety – Fire services
179BF – Reprovisioning of Kong Wan Fire Station

Members are invited to recommend to the Finance Committee the upgrading of **179BF** to Category A at an estimated cost of $1,310.3 million in money-of-the-day prices for the reprovisioning of Kong Wan Fire Station.

PROBLEM

There is a pressing need to take forward the reprovisioning of Kong Wan Fire Station (KWFS), in order to vacate the site and pave the way for the Wan Chai North Redevelopment project, providing convention and exhibition (C&E) facilities, hotel and Grade A offices.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Commerce and Economic Development, proposes to upgrade **179BF** to Category A at an estimated cost of $1,310.3 million in the money-of-the-day (MOD) prices.

PROJECT SCOPE AND NATURE

3. The project site occupies an area of about 4 160 square metres (m^2) and is located at the junction of Fenwick Pier Street and Lung Hop Street (including the site of the decommissioned Fenwick Pier Fleet Arcade (FPFA)). The scope of the proposed project includes the following –

/(a) …..

(a) demolition of existing building structures, and salvation with protective measures or record of existing Character-Defined Elements[1] (CDEs) of the decommissioned FPFA as agreed with the Antiquities and Monuments Office (AMO);

(b) construction of a standard divisional fire station-cum-ambulance depot with a 9-bay appliance room and ancillary facilities;

(c) provision of an Inter-Departmental Command Post, a High Command Post and a basement car park for official vehicles;

(d) provision of the Fire Services Department (FSD) Hong Kong Licensing Office;

(e) provision of a Community Life Support Training Centre (CLSTC); and

(f) provision of an at-grade public open space (POS).

4. A site and location plan, sectional drawing and barrier-free access plan of the proposed project are at **Enclosures 1 to 3** respectively.

5. We plan to commence the proposed works upon obtaining funding approval from the Finance Committee (FC) for target completion in around four years. To meet the project schedule, we have invited tenders in parallel to enable early commencement of the proposed works. The returned tender prices have been reflected in the estimated cost of the proposed project. The contract will only be awarded after obtaining funding approval from the FC.

BACKGROUND

6. The C&E industry is vital to Hong Kong as an international trade centre. Notwithstanding that an increasing number of exhibitions are being held in hybrid online and face-to-face mode, physical C&E activities are still indispensable, in particular those focusing on in-person experience and building business network connections. As evidenced by the stronger-than-expected rebound of the industry in the past year following the gradual removal of travel restrictions and social distancing measures, the demand for face-to-face exhibitions remains strong. There are still substantial demands for C&E facilities in the long run.

/7. …..

[1] "Character-Defining Elements" are those architectural elements and features that contribute to the unique character of a building.

7. To consolidate the competitiveness of Hong Kong's C&E industry, as well as to enhance the synergies between C&E venues and nearby facilities, the Government has been proactively exploring to increase C&E facilities at suitable locations, including the proposal to develop Wan Chai North into a C&E hub in Asia. The Government announced in the 2017 Policy Address (PA) the plan to redevelop the sites of the Wan Chai Government Offices Compound (comprising Wanchai Tower, Revenue Tower and Immigration Tower), Gloucester Road Garden and the Kong Wan Fire Station (KWFS) into C&E facilities, hotel and Grade A offices (hereafter referred to as the Wan Chai North Redevelopment project), and reaffirmed the implementation of the project in the subsequent PAs.

8. With the Legislative Council's respective funding approvals, the government departments and law court in the Wan Chai Government Offices Compound will be relocated to nine new government building projects. Among them, five projects have been completed[2], while the remaining four projects are in progress[3]. We need to take forward the remaining Reprovisioning of KWFS project as soon as possible to pave the way for the Wan Chai North Redevelopment project.

JUSTIFICATIONS

9. To pave the way for the Wan Chai North Redevelopment project, it is proposed that the KWFS be reprovisioned at the site adjoining Fenwick Pier Street and Lung Hop Street. Not only will the proposed project maintain the fire and emergency ambulance services in the district, it will also meet the needs arising from the completion of various large-scale infrastructure and development projects in Wan Chai North. The existing KWFS will continue to operate until the commissioning of the new fire station, hence the fire and emergency ambulance services in the district will not be affected during the construction works.

10. We will take the opportunity to upgrade the new fire station. Apart from the necessary facilities of a standard divisional fire station-cum-ambulance depot (including a 9-bay appliance room, divisional training facilities and a lecture hall), the new fire station will also house an Inter-departmental Command Post and a High Command Post to cope with potential large-scale emergencies as well as major incidents/events at the Hong Kong Convention and Exhibition Centre and

/nearby …..

---

[2] The five completed new government building projects are the West Kowloon Government Offices, Government Data Centre Complex, Treasury Building, Inland Revenue Centre and Immigration Headquarters.

[3] The four new government building projects being constructed are the Tsueng Kwan O Government Offices, Water Supplies Department Building and Correctional Services Headquarters Building, Drainage Services Tower, and the District Court at Caroline Hill Road.

nearby areas. The FSD Hong Kong Licensing Office will also be relocated to the new fire station, so as to optimise the use of the site, and bring convenience to license applicants who come to the office for advice on the required fire protection measures for their premises or matters in relation to licensing applications.

11. Furthermore, in order to strengthen FSD's work in promoting community safety, a CLSTC will be incorporated in the reprovisioned KWFS. The CLSTC will feature settings which simulate different scenarios for training and display unique exhibits to equip the public with a sense of emergency preparedness and enhance their capabilities in responding to disasters or emergencies.

12. The proposed project also includes an at-grade, pet-inclusive POS of not less than 800 m^2.

FINANCIAL IMPLICATIONS

13. We estimate the capital cost of the project to be $1,310.3 million in MOD prices, broken down as follows –

		$ million (in MOD prices)
(a)	Site works	12.3
(b)	Demolition	16.6
(c)	Foundation	70.2
(d)	Basement	68.8
(e)	Building[4]	553.1
(f)	Building services[5]	226.1
(g)	Energy conservation, green and recycled features	16.8
(h)	Drainage	13.8

/(i) …..

[4] Building works cover construction of substructure and superstructure of the building.

[5] Building services works cover electrical installation, ventilation and air-conditioning installation, fire services installation, lift installation, and other miscellaneous installations.

			$ million (in MOD prices)
(i)	External works		27.8
(j)	Furniture and equipment (F&E)[6]		149.7
(k)	Fitting out and associated works of divisional training facilities and CLSTC		30.9
(l)	Consultants' fee for		2.7
	(i) contract administration[7]	2.2	
	(ii) management of resident site staff (RSS)	0.5	
(m)	Remuneration of RSS		2.4
(n)	Contingencies		119.1
		Total	1,310.3

14. We propose to engage consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at **Enclosure 4**.

15. We adopt the "no-frill" design principle and apply as far as possible the concepts of standardisation, simplification and single integrated element in the design and construction arrangement, in order to develop design requirements that meet the operation needs, for example, repetitive staircases and trusses will be constructed by precast units, and adopt Modular Integrated Construction (MiC) whenever possible, thereby enhancing the construction efficiency, quality and cost-effectiveness of the project. The construction floor area (CFA) of this project is about 18 500 m^2. The estimated construction unit cost, represented by the building and building services costs, is $ 42,119 per m^2 of CFA in MOD prices. We consider the cost estimate of the project reasonable as compared with that of similar projects built by the Government (for example, **178BF** – Fire Station and Ambulance Depot with Departmental Accommodations in Lok Ma Chau Loop).

/16. …..

---

[6] The estimated cost is based on an indicative list of F&E items required.

[7] The estimated cost covers quantity surveying services.

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

Year	$ million (in MOD prices)
2023-24	40.0
2024-25	103.8
2025-26	195.2
2026-27	294.6
2027-28	390.7
2028-29	188.1
2029-30	69.8
2030-31	28.1
	1,310.3

17. 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 of 2023 to 2031. We will deliver the construction works through a design and build contract under the New Engineering Contract (NEC)[8] form. We intend to award the contract on a lump-sum basis as the scope of works can be clearly defined in advance. The contract will provide for price adjustment.

18. We estimate the annual recurrent expenditure arising from this project to be $157.95 million.

/**PUBLIC** …..

[8] NEC is a suite of contracts developed by the Institution of Civil Engineers, United Kingdom. It is a contract form that emphasises a spirit of mutual trust, cooperation and collaborative risk management between contract parties.

PUBLIC CONSULTATION

19. We have consulted the Development, Planning and Transport Committee (the Committee) under the Wan Chai District Council, and the Task Force on Harbourfront Developments on Hong Kong Island (the Task Force) under the Harbourfront Commission for the project on 13 July 2021 and 7 September 2021 respectively. The Committee and the Task Force had no objection to the project in principle.

20. We have also submitted a planning application[9] for the project to the Town Planning Board (TPB) under the Town Planning Ordinance (Cap. 131) in April 2022. The TPB has approved the application with conditions[10] on 15 July 2022. We will ensure the compliance of all the approval conditions when implementing the project.

21. We have consulted the LegCo Panel on Commerce, Industry, Innovation and Technology on 14 July 2023. Members supported the submission of the funding proposal to PWSC for consideration in general.

ENVIRONMENTAL IMPLICATIONS

22. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). Architectural Services Department (ArchSD) has completed a Preliminary Environmental Review (PER) for the project in August 2022 and concluded that the project would not cause long-term adverse environmental impacts. The Director of Environmental Protection has agreed to the conclusion. We have included in the project estimates the cost to implement the suitable environmental mitigation measures during construction to control short-term environmental impacts.

/23. …..

---

[9] The project site is partly zoned as "Open Space" ("O") and partly shown as "Road" on the Approved Central District (Extension) Outline Zoning Plan (OZP) No. S/H24/9. The proposed fire station-cum-ambulance depot is regarded as "Government Use". According to the Notes of the OZP, development for "Government Use" within the "O" zone and area shown as "Road" requires planning permission from the TPB.

[10] Including the salvation or recording of CDEs of the FPFA and provision of an at-grade POS mentioned in paragraphs 3(a) and 3(f) above respectively.

23. During construction, we will require the contractor to control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of appropriate mitigation measures in the contract. These include the use of silencers, mufflers, acoustic linings or shield, and the installation of temporary noise barrier for noisy construction activities; frequent cleaning and watering of the site, provision of wheel washing facilities to minimise dust emission; and proper treatment of site run-off to avoid illegal effluent discharge.

24. 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 generated (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 (PFRFs)[11]. 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.

25. 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 measures 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 PFRFs and landfills respectively through a trip-ticket system.

26. We estimate that the project will generate in total about 40 830 tonnes of construction and demolition waste. Of these, we will reuse about 420 tonnes (1.0%) of inert construction waste on site and deliver around 34 500 tonnes (84.5%) of inert construction waste to PFRFs for subsequent reuse. We will dispose of the remaining 5 910 tonnes (14.5%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRFs and landfill sites is estimated to be $5.16 million (based on a unit charge rate of $87 per tonne for disposal at PFRFs and $365 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

/HERITAGE …..

---

[11] PFRFs are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at PFRFs requires a license issued by the Director of Civil Engineering and Development.

HERITAGE IMPLICATIONS

27. The project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings/structures, sites of archaeological interest, all sites/buildings/structures in the new list of proposed graded items and government historic sites identified by the AMO.

28. We have submitted a Heritage Evaluation Report and suggested protective measures to the CDEs for the decommissioned FPFA as requested by AMO. Agreement with AMO has been obtained in October 2022. Part of the CDEs will be preserved and handed over to CEDB for future display at the Wan Chai North Redevelopment. Other CDEs will be recorded by ways of documentation, cartographic survey, photographic survey and 3D scanning.

LAND ACQUISITION

29. This project will be carried out within government land and does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

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

(a) energy reclaim of exhaust air;

(b) demand control of supply air;

(c) energy efficient lift system; and

(d) photovoltaic system.

31. For greening features, we will provide landscaping and greening features on ground level and various levels at appropriate areas for environmental and amenity benefits.

32. For recycled features, we will adopt a rainwater harvesting system for landscape irrigation with a view to conserving water.

/33. …..

33. The total estimated cost for adoption of the above features is around $16.8 million (including $1.7 million for energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 10% energy savings in the annual energy consumption with a payback period of about 6 years.

BACKGROUND INFORMATION

34. We engaged a term contractor to undertake ground investigation works and consultants to undertake various services, including hypothetical layout design, quantity surveying services, preliminary environmental review, and planning application etc., at a total cost of about $6.2 million. The works and services provided by the term contractor and consultants were funded under block allocations **Subhead 3100GX** "Project feasibility studies, minor investigations and consultants' fees for items in Category D of the Public Works Programme". The above works and consultancy services have facilitated in finalising project scope and cost estimate for seeking funding approval from the FC.

35. There are 12 existing trees within and adjacent to the project boundary. Two trees will be retained, including a tree of particular interest[12]. The details of the tree of particular interest are at **Enclosure 5**. Subject to the final design, the project will involve the removal of the remaining 10 trees. All trees to be removed are common trees that are not trees of particular interest. We will incorporate planting proposals as part of the project, including an estimated quantities of 10 trees and 9 000 shrubs.

/36. …..

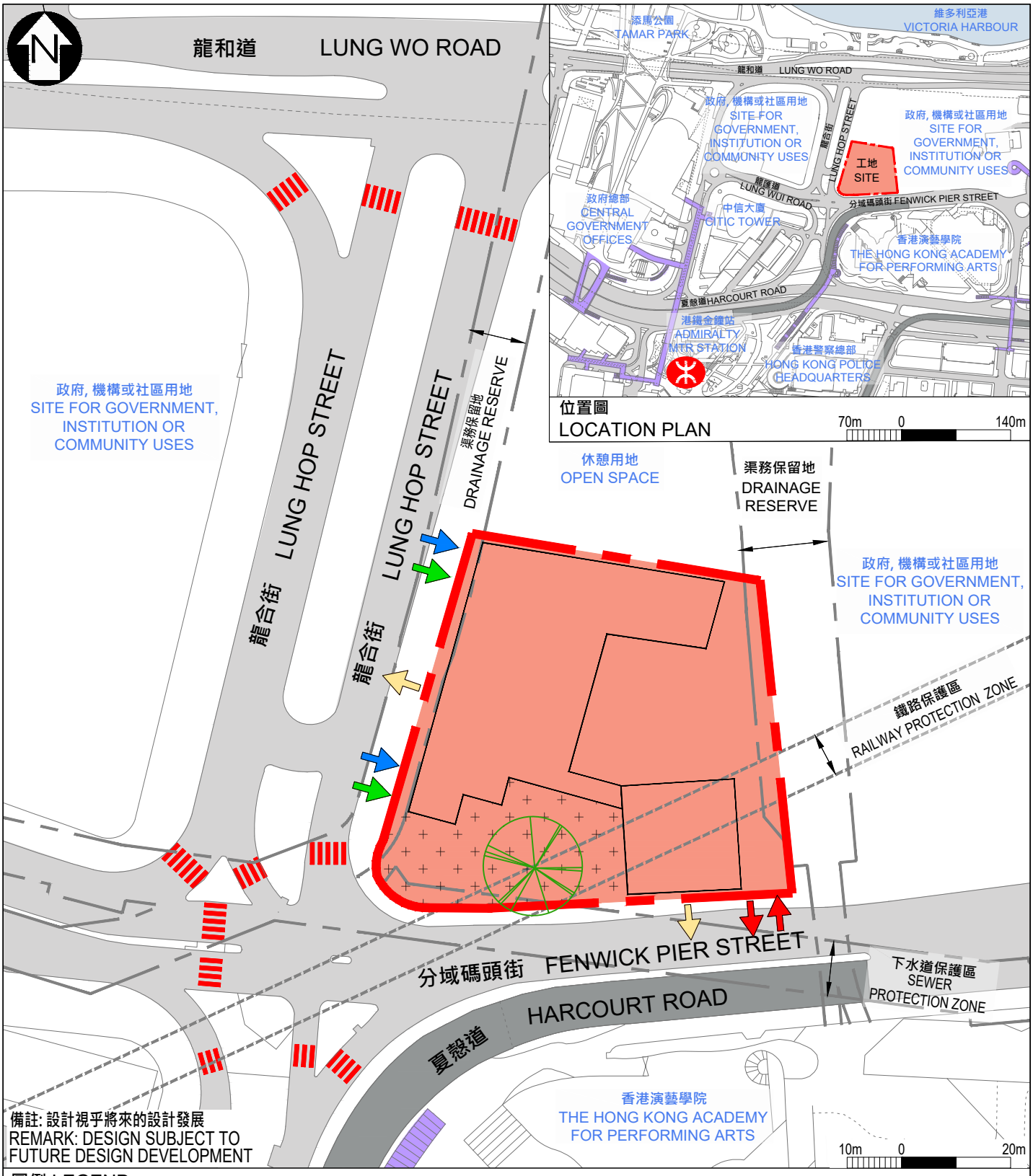
---

[12] "Trees of particular interest" are defined in paragraph 3.3 of the Guidelines for Tree Risk Assessment and Management Arrangement promulgated by the Development Bureau. Examples of trees of particular interest are listed as follows:

- Old and Valuable Trees (OVTs) and trees that are potentially registerable in the Register of OVTs;
- Trees of 100 years old or above;
- Trees with trunk diameter equal to or exceeding 1.0 metre (measured at 1.3 metres above ground level), or with height/canopy spread equal to or exceeding 25 metres;
- Stonewall trees or trees of outstanding form (taking account of overall tree sizes, shape and any special features);
- Rare tree species listed in "Rare and Precious Plants of Hong Kong" (https://www.herbarium.gov.hk/en/publications/books/book2/index.html) published by Agriculture, Fisheries and Conservation Department;
- Endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
- Tree species listed in the Forestry Regulations (Cap. 96A) under the Forests and Countryside Ordinance (Cap. 96)
- Well-known Fung Shui trees;
- Landmark trees with evidential records to support the historical or cultural significance of the trees;
- Trees which may arouse widespread public concerns; and
- Trees which may be subject to strong local objections on removal.

36. We estimate that the proposed works will create about 200 jobs (185 for labourers and 15 for professional or technical staff) providing a total employment of 8 000 man-months.

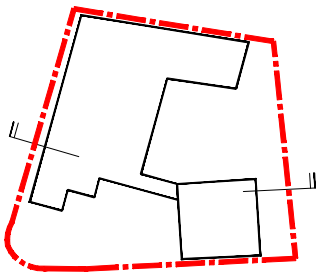
Commerce and Economic Development Bureau
October 2023



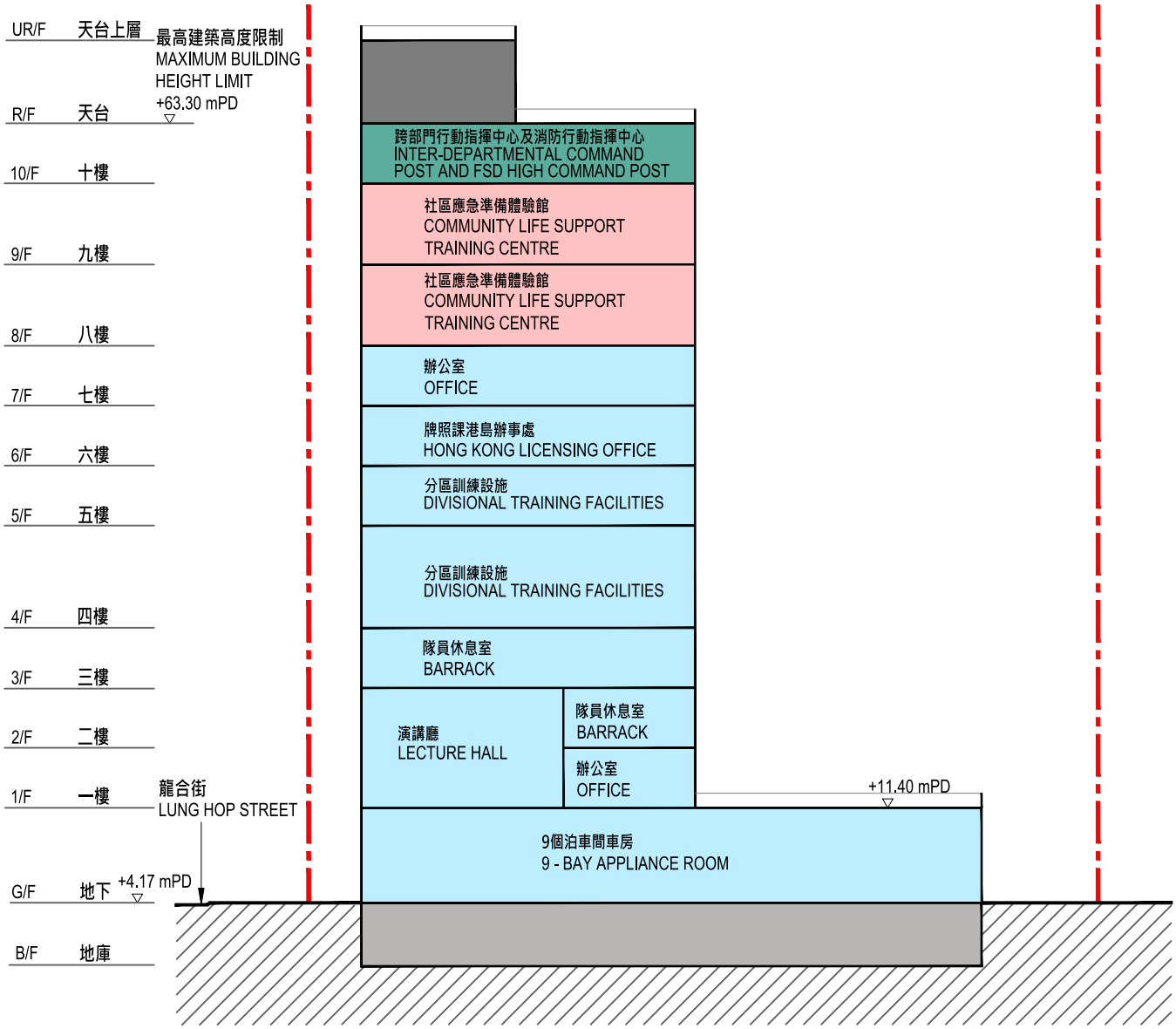
圖例 LEGEND

- 工地界線 SITE BOUNDARY
- 車輛出入口 VEHICULAR INGRESS / EGRESS
- 無障礙出入口 BARRIER-FREE ENTRANCE / EXIT
- 需保留之具特別價值樹木 TREE OF PARTICULAR INTEREST TO BE RETAINED
- 擬建公眾休憩用地 PROPOSED PUBLIC OPEN SPACE
- 現有行人天橋 EXISTING PEDESTRIAN FOOTBRIDGE
- 消防車/救護車出口 FIRE / AMBULANCE APPLIANCE EGRESS
- 行人出入口 PEDESTRIAN ENTRANCE / EXIT
- 現有行人過路處 EXISTING AT-GRADE PEDESTRIAN CROSSING

工地平面圖 SITE PLAN	179BF 重置港灣消防局 REPROVISIONING OF KONG WAN FIRE STATION	ARCHITECTURAL SERVICES DEPARTMENT 建築署



索引圖
KEY PLAN



備註: 設計視乎將來的設計發展
REMARK: DESIGN SUBJECT TO FUTURE DESIGN DEVELOPMENT

5m 0 10m

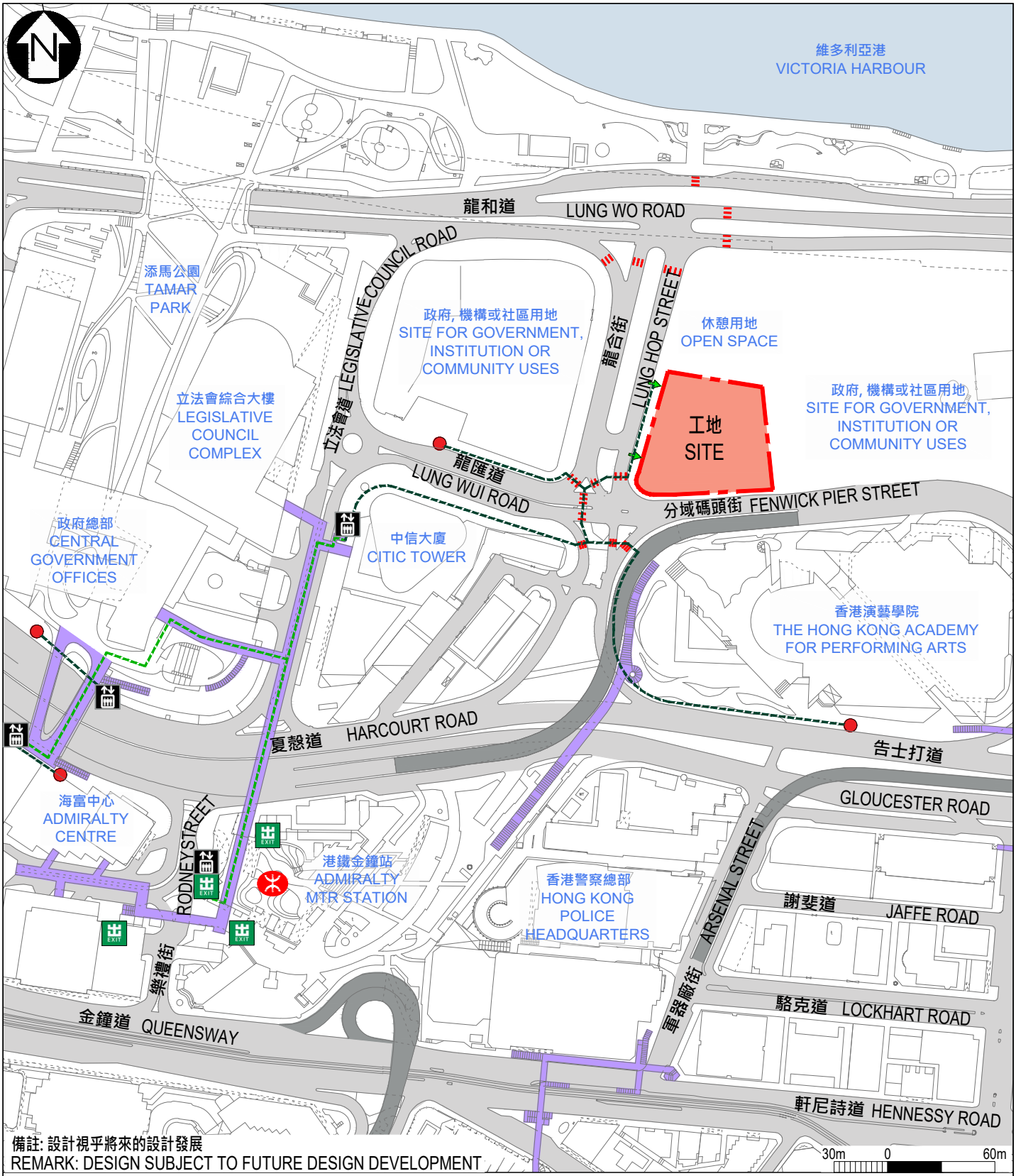
圖例 LEGEND

- 工地界線 SITE BOUNDARY
- 分區消防局暨救護站 DIVISIONAL FIRE STATION CUM AMBULANCE DEPOT
- 社區應急準備體驗館 COMMUNITY LIFE SUPPORT TRAINING CENTRE
- 跨部門行動指揮中心及消防行動指揮中心 INTER-DEPARTMENTAL COMMAND POST AND FSD HIGH COMMAND POST
- 部門停車場 DEPARTMENTAL CAR PARK
- 機房 PLANT ROOM

剖面圖
SECTION

179BF
重置港灣消防局
REPROVISIONING OF KONG WAN FIRE STATION

ARCHITECTURAL SERVICES DEPARTMENT 建築署



備註: 設計視乎將來的設計發展
REMARK: DESIGN SUBJECT TO FUTURE DESIGN DEVELOPMENT

圖例 LEGEND

- 工地界線 SITE BOUNDARY
- 無障礙出入口 BARRIER-FREE ENTRANCE / EXIT
- 無障礙通道(行人天橋水平) BARRIER-FREE ACCESS (FOOTBRIDGE LEVEL)
- 無障礙通道(街道水平) BARRIER-FREE ACCESS (STREET LEVEL)
- 現有港鐵站出入口 EXISTING MTR STATION ENTRANCE / EXIT
- 現有行人天橋 EXISTING PEDESTRIAN FOOTBRIDGE
- 現有行人過路處 EXISTING AT-GRADE PEDESTRIAN CROSSING
- 現有巴士站 EXISTING BUS STOP
- 暢通易達升降機 ACCESSIBLE LIFT

無障礙通道平面圖 BARRIER-FREE ACCESS PLAN	179BF 重置港灣消防局 REPROVISIONING OF KONG WAN FIRE STATION	ARCHITECTURAL SERVICES DEPARTMENT 建築署

179BF – Reprovisioning of Kong Wan Fire Station

Breakdown of the estimate for consultants' fees and resident site staff costs (in September 2023 prices)

			Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee ($ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	–	–	–	1.7
		Technical	–	–	–	0.2
					Sub-total	1.9 #
(b)	Resident site staff (RSS) costs (Note 3)	Professional	–	–	–	–
		Technical	46	14	1.6	2.4
					Sub-total	2.4
	Comprising –					
	(i) Consultants' fees for management of RSS					0.4 #
	(ii) Remuneration of RSS					2.0 #
					Total	**4.3**

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants (as at now, MPS salary point 14 = $32,430 per month).

2. The consultants' fees for contract administration are calculated in accordance with the existing consultancy agreement for provision of contract administration and site supervision of **179BF**. The assignment will only be executed subject to the Finance Committee's funding approval to upgrade **179BF** to Category A.

3. The consultants' fee and staff cost for site supervision are 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 the Enclosure are shown in constant prices to correlate with the MPS salary point of the same year. The cost figures marked with # are shown in money-of-day prices in paragraph 13 of the main paper.

Enclosure 5 to PWSC(2023-24)21

179BF – Reprovisioning of Kong Wan Fire Station

Summary of "Trees of Particular Interest" Affected

Tree Ref no.[1]	Species		Measurements			Amenity Value [3]	Form	Health Condition	Structural Condition	Suitability for Transplanting [4]		Conservation Status [5]	Recommendation	Maintenance department to provide comments on Tree Preservation and Removal Proposal		Additional Remarks
	Scientific Name	Chinese Name	Height (m)	DBH[2] (mm)	Crown Spread (m)	(High / Medium / Low)	(Good / Average / Poor)			(High / Medium / Low)	Remarks		(Retain / Transplant / Remove)	Before	After	
T009	*Ficus microcarpa*	細葉榕	13	2000	25	High	Good	Average	Average	Low	Mature tree, extremely large size	-	Retain	Lands Department	Leisure and Cultural Services Department	-

Notes-

1 There are no trees within site boundary in the Register of Old and Valuable Trees.

2 DBH of a tree refers to its diameter at breast height (i.e. measurement at 1.3 m above ground level).

3 Amenity value of the tree is assessed by its functional values for shade, seasonal interest, screening, reduction of pollution and noise and also its fung shui significance, and classified into the following categories.
High (H): important trees which should be retained by adjusting the design layout accordingly.
Medium (M): trees that are desirable to be retained in order to create a pleasant environment, which includes healthy specimens of lesser importance than "High" trees.
Low (L): trees that are dead, dying or potentially hazardous and should be removed.

4 Assessment has taken into account conditions of an individual tree at the time of survey (including health, structure, age and root conditions), site conditions (including topography and accessibility), and intrinsic characters of tree species (survival rate after transplanting).

5 Conservation status is based on the rarity and protection status of the species under relevant ordinances in Hong Kong, such as
RPPHK – Species included in Agriculture, Fisheries and Conservation Department publication "Rare and Precious Plants of Hong Kong (2003)";
Cap. 586 – Native plants listed in Protection of Endangered Species of Animals and Plants Ordinance, Cap. 586;
IUCN:VU – "Vulnerable" under IUCN Red List of Threatened Species.