

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

Head 711 – HOUSING

Recreation, Culture and Amenities – Mixed amenity packages

62RG – Sports centre, 5-a-side soccer pitch and public library facilities at Northwest Kowloon Reclamation Site 6, Sham Shui Po

Members are invited to recommend to the Finance Committee the upgrading of **62RG** to Category A at an estimated cost of \$1,564.6 million in money-of-the-day prices.

PROBLEM

We need to provide a sports centre, a 5-a-side soccer pitch and public library facilities at the public housing development site at Northwest Kowloon Reclamation (NWKR) Site 6, Sham Shui Po.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Transport and Housing, proposes to upgrade **62RG** to Category A at an estimated cost of \$1,564.6 million in money-of-the-day (MOD) prices for the construction of a sports centre, a 5-a-side soccer pitch and public library facilities at NWKR Site 6, Sham Shui Po.

/PROJECT

PROJECT SCOPE AND NATURE

3. The proposed scope of works includes –
- (a) construction of a sports centre comprising –
 - (i) a multi-purpose arena that can be used as two basketball courts, two volleyball courts, eight badminton courts or a handball court, with a spectator stand comprising 300 permanent seats. The arena can be flexibly adopted as a venue for community activities with a seating capacity of about 1 000 persons;
 - (ii) a table tennis room adjoining the multi-purpose arena, a fitness room, a children's play room and three multi-purpose activity rooms; and
 - (iii) ancillary facilities, including a committee room, a first aid room, a management and booking office, a stage store room, two dressing rooms, a babycare room, toilets and changing rooms and store rooms;
 - (b) reprovision of an existing 5-a-side soccer pitch at Fat Tseung Street West;
 - (c) construction of a district library comprising –
 - (i) an adult library, a children's library, a multimedia library, a quick reference section, a newspapers and periodicals section, a computer and information centre, an extension activities room and a students' study room;
 - (ii) a customer service counter, a readers' advisory desk, a coffee corner, an exhibition or display area, a public area for self-charging terminals, library catalogue terminals, internet & digital service workstations, book drops, self-service electronic lockers and photocopying facilities; and

/(iii)

- (iii) ancillary facilities including an office, an express check-in area, a babycare room, three book processing and sorting rooms, two computer equipment rooms, store rooms and toilets; and
- (d) construction of a reserve stack, for the Hong Kong Central Library (HKCL) comprising –
 - (i) space for accommodation of library materials; and
 - (ii) ancillary facilities including loading and unloading facilities for lorries, a staff office, work areas, computer equipment rooms and toilets.

A site plan, layout plans, a sectional plan, an artist's impression drawing and a barrier-free access plan are at **Enclosures 1 to 8**.

4. Subject to the funding approval of the Finance Committee, we plan to commence the construction of the proposed works in late 2016 for completion in early 2020 to tie in with the works programme of the public housing development at NWKR Site 6.

JUSTIFICATION

5. Site 6 of NWKR has been earmarked for public housing development providing about 3 310 domestic units for a population of about 9 600. We need to provide various community facilities which form an integral part of the public housing development to support the public housing development and the district at large.

Sports centre

6. Upon completion of various new public housing developments¹, the population of Sham Shui Po district is expected to grow from about 400 000 to about 460 000 by 2020. According to the Hong Kong Planning Standards and Guidelines (HKPSG), seven sports centres should be provided in the district

/by

¹ Namely NWKR Site 6, NWKR Site 1 East, Fat Tseung Street West site, Lai Chi Kok Road site and Lin Cheung Road site.

by 2020. There are five sports centres² in the district now, with average usage rates of around 80% during normal times and around 90% during peak hours. The proposed sports centre will meet the local demand for sports facilities and provide an additional activity venue for schools and community groups.

7. Special design has been adopted to allow more flexible use of the sports arena. The multi-purpose arena can be used as a venue for organising larger-scale community activities and performances, with a capacity of accommodating about 1 000 spectators, whilst the table tennis room is built at a raised level and can be turned into a stage.

5-a-side soccer pitch

8. An existing 5-a-side soccer pitch at Fat Tseung Street West will form part of the site of a new public housing development on that street, of which the works have commenced in mid-2015 for completion in mid-2020. With a view to minimising the impact to the local community (overall usage rate of soccer pitches in the district is about 80% on average), the works programme has been adjusted so that the existing 5-a-side soccer pitch will only be closed in late 2019. We will re-provision a 5-a-side soccer pitch under the proposed project by early 2020.

Library facilities

9. According to the HKPSG, there should be a district library for every 200 000 persons. While Sham Shui Po district is currently served by two district libraries³, the space provision of the two district libraries is not sufficient⁴, limiting the provision of comprehensive services to the community. In the light of the expected population growth and the limitations of the existing libraries, we propose to provide a new standard district library under the project to offer a full range of library services and facilities to address the needs of the community.

/Reserve

² Namely Shek Kip Mei Park Sports Centre, Lai Chi Kok Park Sports Centre, Cheung Sha Wan Sports Centre, Po On Road Sports Centre and Pei Ho Street Sports Centre.

³ Namely Lai Chi Kok Public Library and Po On Road Public Library. They are supplemented by two small libraries, Shek Kip Mei Public Library and Un Chau Street Public Library, and five mobile library services points at Tai Hang Tung Estate, Fortune Estate, Fu Cheong Estate, Hoi Lai Estate and Maple Street.

⁴ The Po On Road Public Library and Lai Chi Kok Public Library fall short of the prevailing floor area for a standard district library at 2 900 square metres (m²) by 41% and 20% respectively.

Reserve stack

10. At present, the HKCL has a stock of 2.2 million lending and reference books, and 1.1 million items of newspapers and periodicals. The stock of the HKCL has exceeded the storage capacity provided in the reserve stack at the HKCL, and some library materials are being stored in other library venues. The reserve stack under the project will provide storage space for HKCL stock and cater for future expansion of library materials of HKCL. Further, Sham Shui Po district is centrally located, offering convenience in retrieving the reference materials to meet the needs of the public in a timely manner.

11. The facilities to be provided under the project will form an integral part to the public housing development at NWKR Site 6. The proposed works has to be implemented in conjunction with the public housing development there. To allow better coordination and ensure timely completion of the proposed works, we plan to entrust the design and construction of the proposed works to the Hong Kong Housing Authority (HA). Upon completion of the construction of the facilities, they will be handed over to relevant government departments for management and maintenance.

FINANCIAL IMPLICATIONS

12. We estimate the capital cost of the project to be \$1,564.6 million in MOD prices (please see paragraph 14 below), broken down as follows –

	\$ million
(a) Site works	3.4
(b) Piling	81.1
(c) Basement	11.3
(d) Building ⁵	498.6
(e) Building services ⁶	246.5

/(f)

⁵ Building works cover construction of substructure and superstructure of the building.

⁶ Building service works cover the electrical installations, ventilation and air-conditioning installations, fire service installations, plumbing installations, lift and escalator and other specialist installations.

		\$ million	
(f)	Drainage	22.3	
(g)	External works	48.6	
(h)	Additional energy conservation, green and recycled features	19.2	
(i)	On-cost payable to HA ⁷	116.4	
(j)	Furniture and equipment ⁸	102.3	
(k)	Contingencies	115.0	
	Sub-total	1,264.7	(in September 2015 prices)
(l)	Provision for price adjustment	299.9	
	Total	1,564.6	(in MOD prices)

13. The construction floor area (CFA) of the project is about 24 953 square metres (m²). The estimated construction unit cost, represented by the building and building services costs, is \$29,860 per m² of CFA in September 2015 prices. We consider this comparable to that of similar projects built by the Government.

/14.

⁷ This is the estimated cost (12.5% of the construction cost) to be charged by HA for the design, administration and supervision of the project.

⁸ Furniture and equipment items include audio and visual system for stage, double mobile racks at the Reserve Stack, shelves for library, etc.

14. Subject to funding approval, we will phase the expenditure as follows –

Year	\$ million (Sept 2015)	Price adjustment factor	\$ million (MOD)
2016 – 2017	30.0	1.05775	31.7
2017 – 2018	200.0	1.12122	224.2
2018 – 2019	340.0	1.18849	404.1
2019 – 2020	420.0	1.25980	529.1
2020 – 2021	180.0	1.33539	240.4
2021 – 2022	67.0	1.40549	94.2
2022 – 2023	27.7	1.47577	40.9
	<hr/> 1,264.7 <hr/>		<hr/> 1,564.6 <hr/>

15. 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 from 2016 to 2023. Subject to funding approval, HA will deliver the proposed works under a lump sum contract. The contract will provide for price adjustments.

16. We estimate the annual recurrent expenditure arising from the proposed works to be about \$74.3 million. The capital and recurrent costs arising from the project would be taken into consideration when determining the relevant fees and charges in future.

PUBLIC CONSULTATION

17. On 5 November 2013, we consulted Sham Shui Po District Council on the development proposal of NWKR Site 6, including the proposed community facilities. Members had no objection to the proposal. On 12 March and 27 August 2015, we consulted Sham Shui Po District Council District Facilities Committee on the provision of facilities and design proposal of the project. Members supported the proposal and urged for its early implementation.

/18.

18. The site is zoned "Comprehensive Development Area" under the South West Kowloon Outline Zoning Plan No. S/K20/30. Pursuant to section 16 of the Town Planning Ordinance (Cap. 131), we submitted to the Town Planning Board (TPB) in June 2015 the Master Layout Plan showing the provision of a sports centre, a 5-a-side soccer pitch and public library facilities on the site as well as related technical studies. No objection was received during the public exhibition period. TPB approved the planning application on 7 August 2015.

19. We consulted the Legislative Council Panel on Housing on the proposed works on 7 December 2015. Members supported submitting the funding proposal to the Public Works Subcommittee for consideration. Supplementary information requested by Panel Members has been submitted to the Panel on 5 April 2016.

ENVIRONMENTAL IMPLICATIONS

20. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The project will not cause long term environmental impact. We have included in the project estimates the cost to implement suitable mitigation measures to control short term environmental impacts.

21. During construction, HA 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 silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities. We have included in the project estimate the cost for the implementation of the environmental mitigation measures.

22. HA will require the contractor to reuse inert construction waste (e.g. excavated soil) 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 facilities⁹. HA 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.

/23.

⁹ 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 license issued by the Director of Civil Engineering and Development.

23. HA 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. HA will ensure the day-to-day operations on site comply with the approved plan. HA will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. HA 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.

24. We have estimated that the project will generate in total 56 000 tonnes of construction waste. Of these, HA will reuse 19 000 tonnes (33.9%) of inert construction waste on site and deliver 31 500 tonnes (56.3%) of inert construction waste to public fill reception facilities for subsequent reuse. HA will dispose of the remaining 5 500 tonnes (9.8%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$1.5 million for this project (based on a unit charge rate of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

25. The project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

26. The project does not require any land acquisition.

/ENERGY

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

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

- (a) water cooled chillers (evaporative cooling tower using fresh-water);
- (b) automatic demand control of chilled water circulation system;
- (c) heat pump for space heating / dehumidification;
- (d) solar hot water system; and
- (e) photovoltaic system.

28. For greening features, we will provide green roof and vertical greening as appropriate. For recycled features, we will adopt rainwater harvesting system for irrigation purpose.

29. The total estimated additional cost for adoption of the above features is around \$19.2 million (including \$10.5 million for energy efficient features), which has been included in the cost estimate of the project. The energy efficient features will achieve 10.9% energy savings in the annual energy consumption with a payback period of eight years.

BACKGROUND INFORMATION

30. We upgraded **62RG** to Category B in September 2014. The detailed design for the proposed works has been completed. We engaged HA to carry out value management study and site investigation of the project at an estimated cost of \$3.4 million under the block allocation **Subhead B100HX** “Minor housing development related works, studies, and investigations for items in Category D of the Public Works Programme”.

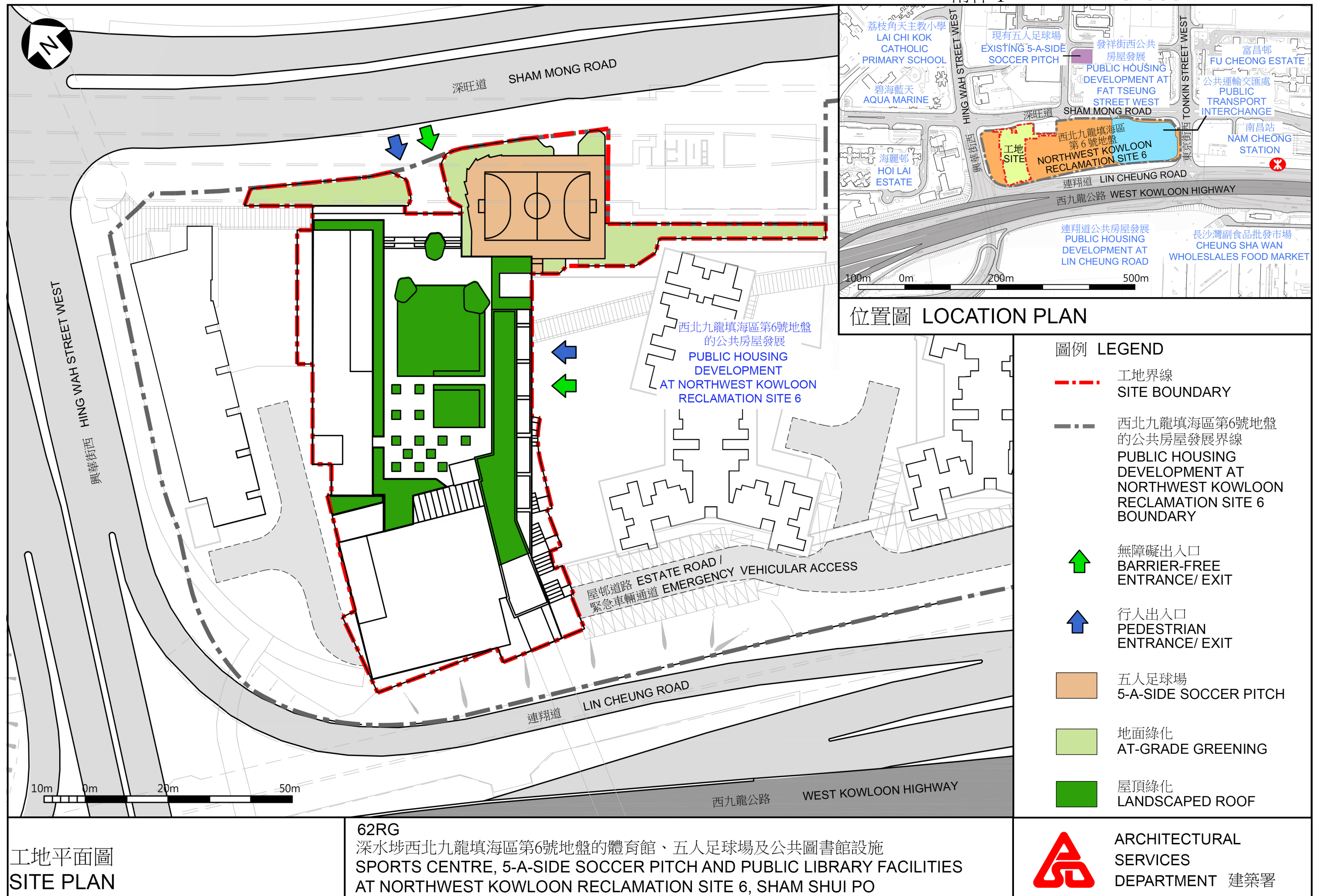
31. The proposed project will involve the removal of all ten trees within the project boundary. No transplanting of trees will be involved. All trees to be removed are not important trees¹⁰. We will incorporate planting proposals as part of the project, including the planting of 38 trees and about 1 000 m² of greenery area.

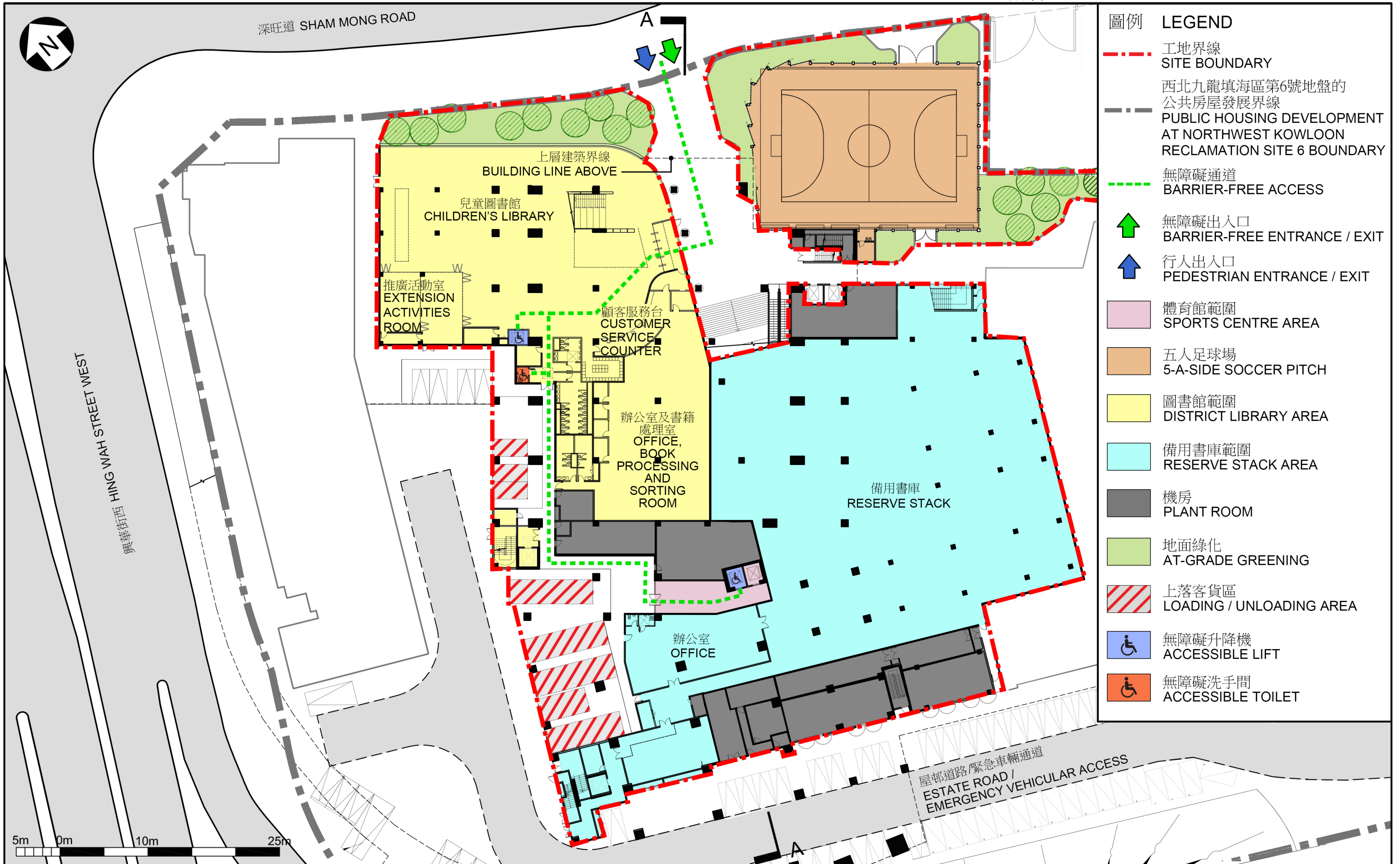
32. We estimate that the proposed works will create about 250 jobs (225 for labourers and 25 for professional or technical staff), providing a total employment of 8 900 man-months.

Transport and Housing Bureau
April 2016

¹⁰ “Important trees” refer to trees on 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 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 m (measured at 1.3m above ground level), or with height/canopy spread equal or exceeding 25m.





地下平面圖
GROUND FLOOR PLAN

62RG
深水埗西北九龍填海區第6號地盤的體育館、五人足球場及公共圖書館設施
SPORTS CENTRE, 5-A-SIDE SOCCER PITCH AND PUBLIC LIBRARY FACILITIES
AT NORTHWEST KOWLOON RECLAMATION SITE 6, SHAM SHUI PO



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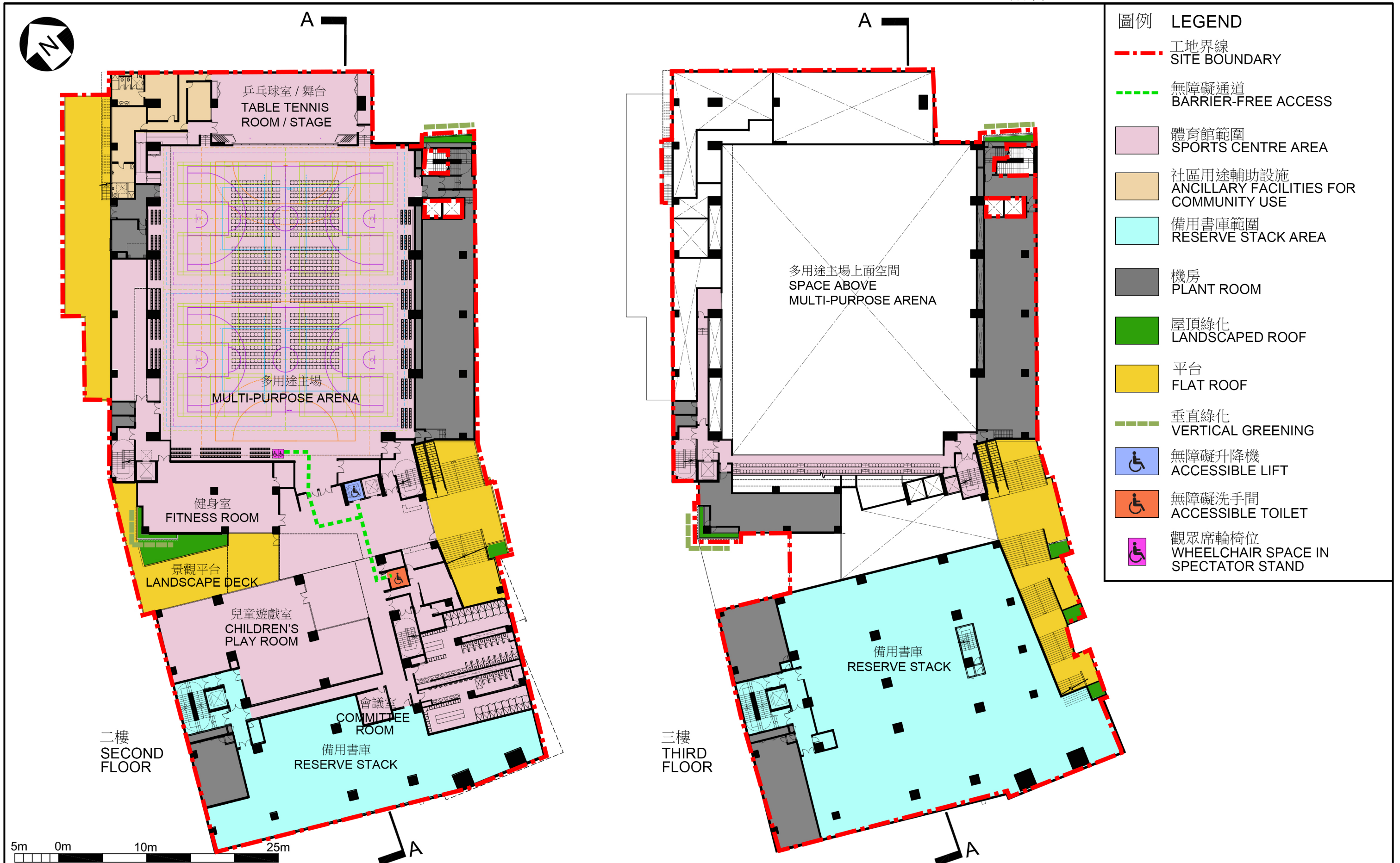


一樓平面圖
FIRST FLOOR PLAN

62RG
深水埗西北九龍填海區第6號地盤的體育館、五人足球場及公共圖書館設施
SPORTS CENTRE, 5-A-SIDE SOCCER PITCH AND PUBLIC LIBRARY FACILITIES
AT NORTHWEST KOWLOON RECLAMATION SITE 6, SHAM SHUI PO



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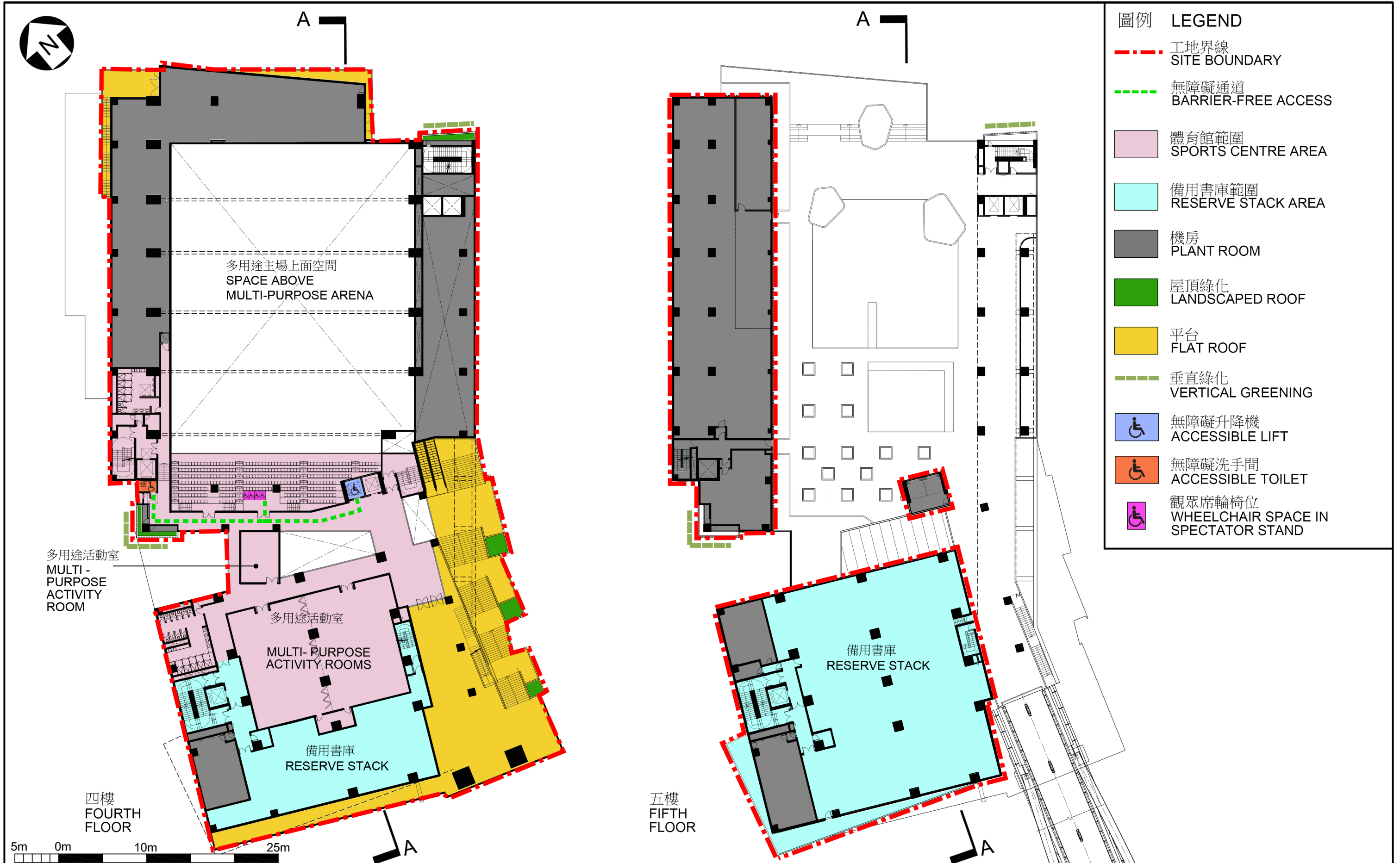


二樓及三樓平面圖
SECOND AND THIRD
FLOOR PLAN

62RG
深水埗西北九龍填海區第6號地盤的體育館、五人足球場及公共圖書館設施
SPORTS CENTRE, 5-A-SIDE SOCCER PITCH AND PUBLIC LIBRARY FACILITIES
AT NORTHWEST KOWLOON RECLAMATION SITE 6, SHAM SHUI PO



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四樓及五樓平面圖
FOURTH AND FIFTH FLOOR PLAN

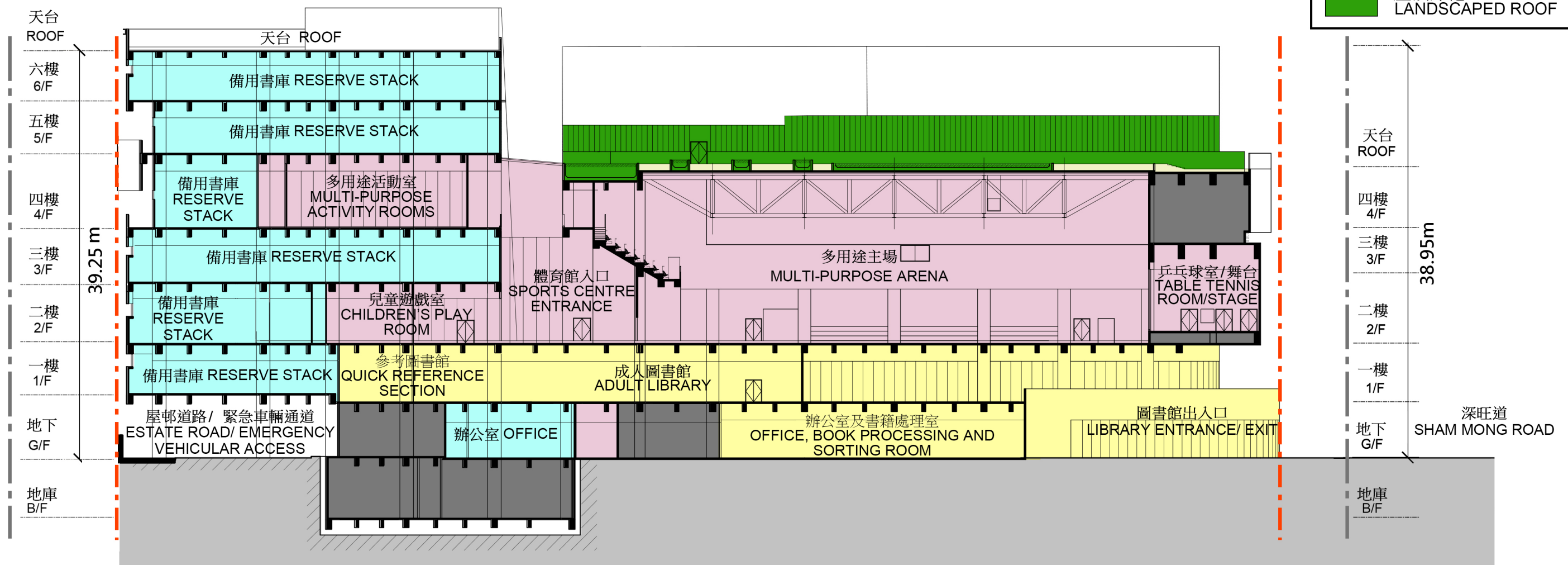
62RG
深水埗西北九龍填海區第6號地盤的體育館、五人足球場及公共圖書館設施
SPORTS CENTRE, 5-A-SIDE SOCCER PITCH AND PUBLIC LIBRARY FACILITIES
AT NORTHWEST KOWLOON RECLAMATION SITE 6, SHAM SHUI PO



ARCHITECTURAL
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DEPARTMENT 建築署

圖例 LEGEND

- 工地界線
SITE BOUNDARY
- 西北九龍填海區第6號地盤的
公共房屋發展界線
PUBLIC HOUSING DEVELOPMENT
AT NORTHWEST KOWLOON
RECLAMATION SITE 6 BOUNDARY
- 體育館範圍
SPORTS CENTRE AREA
- 圖書館範圍
DISTRICT LIBRARY AREA
- 備用書庫範圍
RESERVE STACK AREA
- 機房
PLANT ROOM
- 屋頂綠化
LANDSCAPED ROOF



剖面圖
SECTION A-A

62RG

深水埗西北九龍填海區第6號地盤的體育館、五人足球場及公共圖書館設施
SPORTS CENTRE, 5-A-SIDE SOCCER PITCH AND PUBLIC LIBRARY FACILITIES
AT NORTHWEST KOWLOON RECLAMATION SITE 6, SHAM SHUI PO



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從東北面望向大樓的構思透視圖

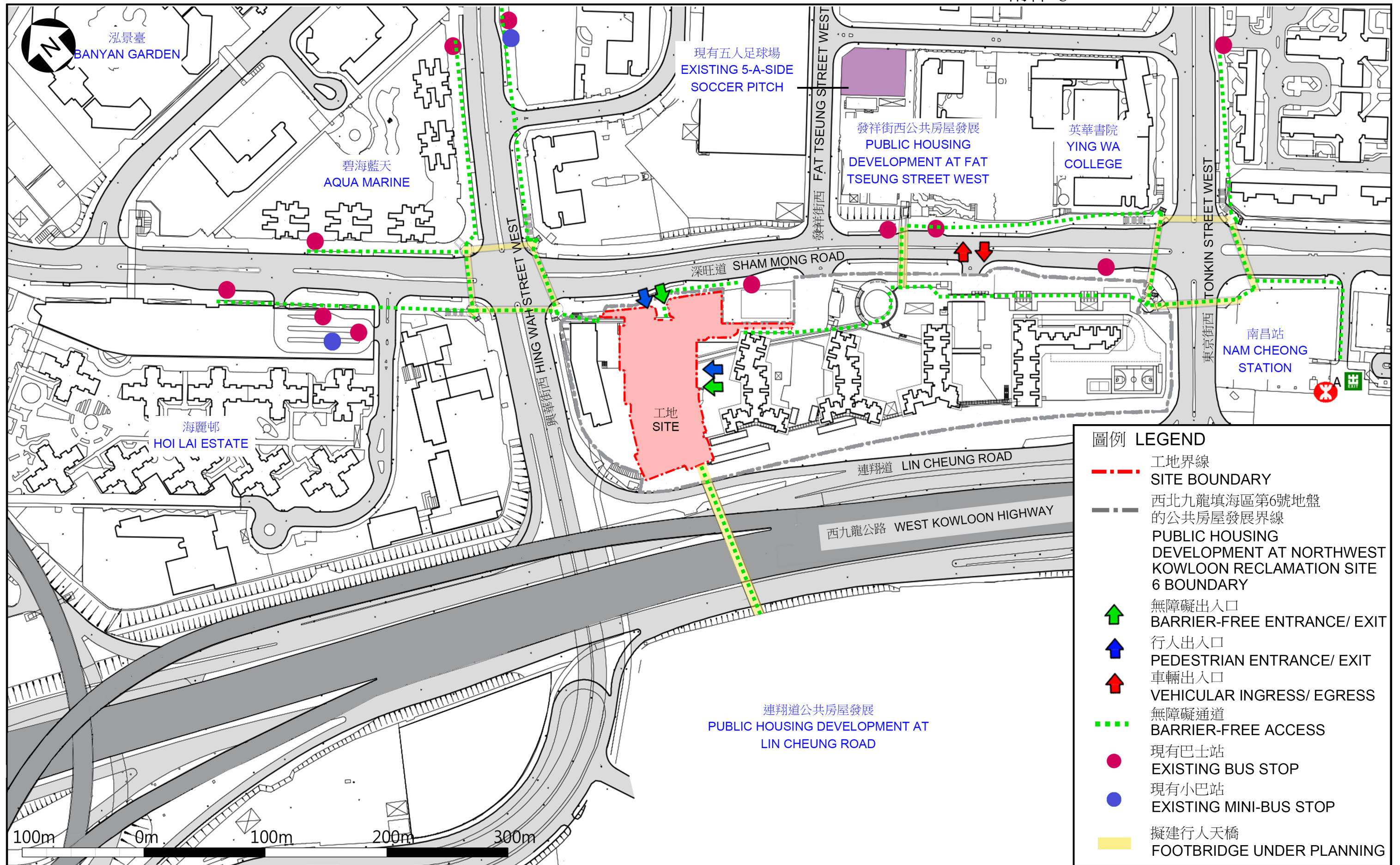
PERSPECTIVE VIEW FROM NORTH-EASTERN DIRECTION (ARTIST'S IMPRESSION)

構思圖
ARTIST'S IMPRESSION

62RG
深水埗西北九龍填海區第6號地盤的體育館、五人足球場及公共圖書館設施
SPORTS CENTRE, 5-A-SIDE SOCCER PITCH AND PUBLIC LIBRARY FACILITIES
AT NORTHWEST KOWLOON RECLAMATION SITE 6, SHAM SHUI PO



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無障礙通道平面圖
PLAN OF BARRIER-FREE ACCESS

62RG
深水埗西北九龍填海區第6號地盤的體育館、五人足球場及公共圖書館設施
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