For discussion **PWSC(2023-24)14**
7 June 2023

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Health – Hospitals
3MI – Expansion of North District Hospital
114MH – Expansion of Lai King Building in Princess Margaret Hospital

HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

Medical Subventions
13MD – Redevelopment of Kwong Wah Hospital, phase 2

Members are invited to recommend to the Finance Committee (FC) –

(a) the upgrading of **3MI** to Category A at an estimated cost of $32,508.2 million in money-of-the-day (MOD) prices;

(b) the upgrading of **114MH** to Category A at an estimated cost of $5,539.9 million in MOD prices; and

(c) the upgrading of **13MD** to Category A at an estimated cost of $8,900.4 million in MOD prices[1].

/**PROBLEM** …..

[1] The estimated total project cost is $8,996.4 million, of which $8,900.4 million will be met by government commitment and the remaining $96 million by the Tung Wah Group of Hospitals (TWGHs), the parent organisation of the hospital.

PROBLEM

We need to expand North District Hospital (NDH) and Lai King Building (LKB) in Princess Margaret Hospital (PMH) and redevelop Kwong Wah Hospital (KWH) to enhance service capacity and services in order to cope with the demand arising from the projected change in the population size and demographics.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Health, proposes to upgrade the following projects under the First Ten-year Hospital Development Plan (HDP) to Category A –

(a) **3MI** at an estimated cost of $32,508.2 million in MOD prices to carry out the main works for the expansion of NDH; and

(b) **114MH** at an estimated cost of $5,539.9 million in MOD prices to carry out the main works for the expansion of LKB in PMH; and

The Secretary for Health proposes to upgrade the following project under the First Ten-year HDP to Category A –

(a) **13MD** at an estimated cost of $8,900.4 million in MOD prices to carry out the main works for the redevelopment of KWH, phase 2.

3. The total commitment sought for the three HDP projects is $46,948.5 million. Details of the above three projects are at **Enclosures 1 to 3.**

BACKGROUND

4. In the 2016 Policy Address, the Government announced that $200 billion would be set aside for the Hospital Authority to implement the First Ten-year HDP. The First Ten-year HDP covers the redevelopment and expansion of 11 hospitals, and the construction of a new acute hospital, three community health centres and one supporting services centre. Upon completion of all the projects under the First Ten-year HDP, it will provide more than 6 000 additional bed spaces, 94 additional operating theatres and increased capacity of specialist outpatient clinics and general outpatient clinics.

/5. …..

5. To date, the Government has upgraded the following projects (involving 12 hospitals, one community health centre and one supporting services centre) under the First Ten-year HDP to Category A –

(a) 11 projects in full –
   (i) the extension of Operating Theatre Block for Tuen Mun Hospital;
   (ii) the expansion of Haven of Hope Hospital;
   (iii) the redevelopment of Queen Mary Hospital, phase 1;
   (iv) the redevelopment of Kwai Chung Hospital;
   (v) the expansion of United Christian Hospital;
   (vi) the construction of a community health centre cum social welfare facilities at Pak Wo Road, North District;
   (vii) the construction of Hospital Authority Supporting Services Centre;
   (viii) the construction of a new acute hospital at Kai Tak Development Area;
   (ix) the redevelopment of Prince of Wales Hospital, phase 2 (stage 1);
   (x) the redevelopment of Our Lady of Maryknoll Hospital;
   (xi) the redevelopment of Grantham Hospital, phase 1; and

(b) three projects in part (involving six items) –
   (i) the redevelopment of KWH, phase 1 – demolition and substructure works;
   (ii) the redevelopment of KWH, phase 1 – superstructure and associated works;
   (iii) the expansion of NDH – preparatory works;
   (iv) the expansion of NDH – site formation and foundation works;
   (v) the expansion of LKB in PMH – preparatory works; and
   (vi) the expansion of LKB in PMH – site formation and foundation works.

6. The total commitment approved for the items in paragraph 5(a) is $125,551.7 million and that for paragraph 5(b) is $13,838.8 million, totalling $139,390.5 million or 69.7% of the $200 billion. If the three proposed hospital projects in this submission are approved by the FC, the cumulative commitment approved would amount to $186,339.0 million or 93.2% of the $200 billion.

7. We consulted the Legislative Council Panel on Health Services on **3MI**, **114MH** and **13MD** on 19 April 2023. Members supported the submission of the funding proposals to the Public Works Subcommittee of the FC for consideration.

Health Bureau
May 2023

3MI - Expansion of North District Hospital

PROJECT SCOPE AND NATURE

We propose to carry out the main works of the expansion project of North District Hospital (NDH), which mainly comprise superstructure and associated works as follows –

(a) construction of a new acute block;

(b) construction of link bridges and tunnels connecting the new acute block and the existing building;

(c) associated external and landscaping works;

(d) construction of a 132 kilovolt (kV) substation for the NDH;

(e) refurbishment, alteration and addition (A&A) of the existing building; and

(f) consultancy services for contract administration and site supervision.

2. A site and location plan, floor plans, a sectional drawing and an artist's impression for the project are at **Annexes 1 to 4 to Enclosure 1**.

3. We plan to seek funding approval from the Finance Committee (FC) to upgrade the proposed project to Category A in the current legislative session. The Hospital Authority (HA) invited tenders in parallel for the proposed works in January 2023, and the returned tender prices have been reflected in the estimated cost of the project. We plan to award the contract to the successful tenderer and commence the proposed works, upon obtaining funding approval from the FC and completion of the site formation and foundation works, for target completion in about six and a half years. The refurbishment and A&A of the existing building will commence upon completion of the new acute block and decanting to match the commissioning programme. The NDH will remain functional at all times during the works period and any disruption of services, if unavoidable, will be kept to a minimum.

/JUSTIFICATION …..

JUSTIFICATION

4. Established in 1998, the NDH is an acute hospital in the New Territories East Cluster of the HA. It provides 24-hour accident and emergency (A&E) service and a wide range of secondary care services with emphasis on ambulatory care as well as community outreach services to residents in North District.

5. The combined population in the three districts of Sha Tin, Tai Po and North District is projected to increase by about 5% from 1 395 200 in 2022 to 1 470 300 in 2029. In particular, the population in the North District will increase by about 20% from 357 000 in 2022 to 426 900 in 2029. That aside, the elderly population aged 65 or above in the North District is also projected to increase by about 46% from 67 100 in 2022 to 98 200 in 2029[1].

6. Over the years, the existing facilities at the NDH have become inadequate in terms of space, capacity and design to cope with the increasing service demands and modern quality standards and developments in service delivery. Key challenges faced by the NDH include (a) the increasing demand for emergency service which has long outgrown the planned capacity of the A&E Department, with a perennial problem of overcrowding that poses risks to patient privacy, infection control and timeliness of care delivery; (b) the dire need to enhance the capability and capacity of the NDH in the management of infectious and communicable diseases through increased provision of specially designed isolation rooms and infection control facilities; (c) the urgent need for upgrading the diagnostic and treatment facilities and equipment to the prevailing standards; and (d) the requirement of convalescent and rehabilitation services in the NDH to facilitate continuity of care of patients and meet the healthcare needs of the local community.

7. The proposed expansion project is being implemented in three works stages, namely (a) preparatory works; (b) site formation and foundation works; and (c) main works (as mentioned in paragraph 1 above). Upon completion of the expansion project, we aim to provide 1 500 additional beds.

8. In view of the substantial and extensive coordination work with all departments of the hospital required to formulate the planning and logistic arrangement of hospital services, the preparatory works and the site formation and foundation works of this project were entrusted to the HA. For similar reasons, we

/plan …..

[1] According to the report of "Projections of Population Distribution 2021-2029" compiled by the Planning Department.

plan to also entrust the main works to the HA in order to expedite project implementation and achieve cost effectiveness.

FINANCIAL IMPLICATIONS

9. We estimate the capital cost of the works project to be $32,508.2 million in money-of-the-day (MOD) prices, broken down as follows –

		$ million (in MOD prices)
(a)	Basement[2]	132.9
(b)	Building[3]	7,723.9
(c)	Building services[4]	10,966.0
(d)	Drainage[5]	169.4
(e)	External works[6]	640.1
(f)	Energy conservation, green and recycled features[7]	361.8
(g)	Link bridges and tunnels connecting the new acute block and the existing building[8]	547.2

/(h) …..

[2] Basement works cover construction of basement enclosure and waterproofing works.

[3] Building works cover construction of superstructure of the new acute block.

[4] Building services works cover electrical installations, ventilation and air-conditioning installations, fire services installations, lift and escalator installations and other specialist installations.

[5] Drainage works cover underground drainage system within the site.

[6] External works cover external pavings and hard and soft landscape.

[7] Energy conservation, green and recycled features cover features stated in paragraphs 25 to 27.

[8] Works for link bridges and tunnels connecting the new acute block and the existing building cover foundation, construction of structure, external finishes, internal finishes and building services works.

			$ million (in MOD prices)
(h)	Refurbishment and A&A works of the existing building[9]		4,946.2
(i)	Construction of 132 kV substation[10]		232.5
(j)	Furniture and equipment (F&E)[11]		3,043.3
(k)	Consultants' fees for		302.2
	(i) contract administration[12]	287.1	
	(ii) management of resident site staff (RSS)	15.1	
(l)	Remuneration of RSS		487.4
(m)	Contingencies		2,955.3
	Total		32,508.2

10. The HA will engage consultants to undertake contract administration and directly employ RSS for the site supervision of the project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at **Annex 5 to Enclosure 1**.

11. 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 arrangements of the project, including the use of simple structural systems, standardised and common finishing materials, simple and

/functional …..

[9] Refurbishment and A&A works of the existing building cover demolition, structural strengthening works, internal building works and associated building services works as well as modification works for connection between the new acute block and the existing building.

[10] Construction of 132 kV substation covers foundation, construction of structure, external finishes, internal finishes and all building services works.

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

[12] The estimated fee covers quantity surveying services, site supervision, project management, management of accounts and contract administration, etc.

functional detailing, prefabrication systems, and Modular Integrated Construction, etc. The construction floor area (CFA) of the new acute block is about 370 233 square metres (m^2). The estimated construction unit cost, represented by the building and the building services costs, is $50,481 per m^2 of CFA in MOD prices. We consider this unit cost reasonable as compared with those of similar hospital projects, for example, **75MM** – Redevelopment of Prince of Wales Hospital, phase 2 (stage 1).

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

Year	$ million (in MOD prices)
2024 – 25	764.4
2025 – 26	3,261.5
2026 – 27	5,338.9
2027 – 28	8,050.3
2028 – 29	5,502.0
2029 – 30	3,383.1
2030 – 31	1,684.8
2031 – 32	1,251.2
2032 – 33	1,034.5
2033 – 34	790.6
2034 – 35	620.0
2035 – 36	476.7
2036 – 37	350.2
	32,508.2

/13. …..

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 2024 to 2037. The HA will deliver the proposed works through lump-sum contracts as the scope of the works can be clearly defined in advance. The contracts will provide for price adjustment.

14. The HA has assessed the requirements for F&E for the project, and estimates the F&E costs to be $3,043.3 million. An indicative list of major F&E items (costing $1 million or above per item) to be procured for the project is at **Annex 6 to Enclosure 1**.

15. We estimate the annual recurrent expenditure arising from the project to be $5,070.1 million, including $5,058.6 million for the HA and $11.5 million for the Department of Health.

PUBLIC CONSULTATION

16. The HA consulted the North District Council (NDC) on 11 October 2022 in respect of the NDH expansion project. Members of the NDC in general supported the proposed project.

17. We consulted the Legislative Council Panel on Health Services on 19 April 2023. Members of the Panel supported the submission of the funding proposal to the Public Works Subcommittee for consideration. In response to enquiry from Members raised at the Panel meeting, we submitted the supplementary information to the Panel on Health Services on 24 May 2023.

ENVIRONMENTAL IMPLICATIONS

18. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The HA completed a Preliminary Environmental Review (PER) for the project in March 2021. The PER concluded and the Director of Environmental Protection agreed that with the implementation of mitigation measures recommended in the PER, the project would not have any long-term adverse environmental impacts.

/19. …..

19. The HA will incorporate into the works contract mitigation measures recommended in the PER in order to ensure that the environmental impacts arising from the construction works are within the established standards and guidelines. These include the use of quality powered mechanical equipment, temporary noise barriers for noisy construction works, site drainage to control runoff, covering of stockpiled materials, frequent cleaning and watering of the site, and the provision of wheel-washing facilities. The HA has included in the project estimates the cost for the implementation of the environmental mitigation measures.

20. At the planning and design stages, the HA has 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, the HA 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 (PFRFs)[13]. The HA 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.

21. At the construction stage, the 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. The HA will ensure that the day-to-day operations on site comply with the approved plan. The HA will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. The HA will control the disposal of inert construction waste and non-inert construction waste at PFRFs and landfills respectively through a trip-ticket system.

22. The HA estimates that the project will generate in total 178 700 tonnes of construction waste. Of these, the HA will reuse 7 570 tonnes (4.2%) of inert construction waste on site and deliver 115 630 tonnes (64.7%) of inert construction waste to PFRFs for subsequent reuse. The HA will dispose of the remaining 55 500 tonnes (31.1%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRFs and landfills is estimated to be $19.3 million for this project (based on a unit charge rate of $71 per tonne for disposal of at PFRFs 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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[13] 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 licence issued by the Director of Civil Engineering and Development.

HERITAGE IMPLICATIONS

23. 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 grading items; and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

24. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

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

(a) high efficiency chiller;

(b) heat pump;

(c) demand control of supply air;

(d) building energy management system;

(e) energy efficient lift system;

(f) photovoltaic system; and

(g) solar hot water system.

26. For greening features, the HA will provide green roofs, multi-purpose lawns and outdoor sitting areas for environmental and amenity benefits.

27. For recycled features, the HA will adopt rainwater harvesting system for irrigation purpose.

28. The total estimated cost for adoption of the above features is around $361.8 million in MOD prices (including $165.2 million in MOD prices for energy efficient features) which has been included in the cost estimate of the project. The energy efficient features will achieve 10% energy savings in the annual energy consumption with a payback period of about six years.

/BACKGROUND …..

BACKGROUND INFORMATION

29. The expansion of NDH (**3MI**) is one of the projects covered by the First Ten-year Hospital Development Plan. On 22 November 2019, the FC approved upgrading the first part of **3MI** as **4MI** "Expansion of North District Hospital – preparatory works" to Category A at an estimated cost of $481.3 million in MOD prices. The scope mainly covered (a) site investigations and minor studies; (b) demolition, reprovision and associated minor alteration works of existing buildings and facilities in the NDH; and (c) consultancy services for outline sketch design, detailed design, tender documentation and assessment for the whole project as well as contract administration, management of RSS and remuneration of RSS for demolition and reprovisioning works. The preparatory works commenced in December 2019. On 11 June 2021, the FC approved upgrading the second part of **3MI** as **5MI** "Expansion of North District Hospital – site formation and foundation works" to Category A at an estimated cost of $2,141.0 million in MOD prices. The scope mainly covered (a) site formation works, foundation works, basement excavation and lateral support works, and pile cap and basement slab construction works for the new acute block; (b) associated utilities diversion; (c) related access and road works in the NDH; and (d) consultancy services for contract administration and site supervision. The works commenced in July 2021 and are in progress.

30. Of the 1 912 trees within the project boundary, 1 450 trees were removed during the site formation and foundation works. Of the remaining 462 trees within the main works project boundary, 374 trees will be retained and 88 trees will be felled. All trees to be removed are common trees that are not trees of particular interest[14]. The HA will incorporate planting proposals in the main works,

/including …..

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[14] Trees of particular interest are defined in paragraph 2.6.1 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 –

(a) Old and Valuable Trees (OVTs) and trees that are potentially registerable in the Register of OVTs;
(b) Trees of 100 years old or above;
(c) Trees with trunk diameter equal to or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal to or exceeding 25 m;
(d) Stonewall trees or trees of outstanding form (taking account of overall tree sizes, shape and any special features);
(e) 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;
(f) Endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
(g) Tree species listed in the Forestry Regulations (Cap.96A) under the Forests and Countryside Ordinance (Cap. 96);
(h) Well-known Fung Shui trees;
(i) Landmark trees with evidential records to support the historical or cultural significance of the trees;
(j) Trees which may arouse widespread public concerns; and
(k) Trees which may be subject to strong local objections on removal.

including estimated quantities of 1 058 trees, 88 000 shrubs and 500 m^2 of grassed area within project boundary.

31. There are 16 trees adjacent to the project boundary at Po Kin Road being affected by the proposed works and will be removed. 16 trees will be planted at other public amenity planting areas within the North District for compensation.

32. We estimate that the proposed works will create about 2 550 jobs (2 240 for labourers and 310 for professional/technical staff) providing a total employment of 171 810 man-months.

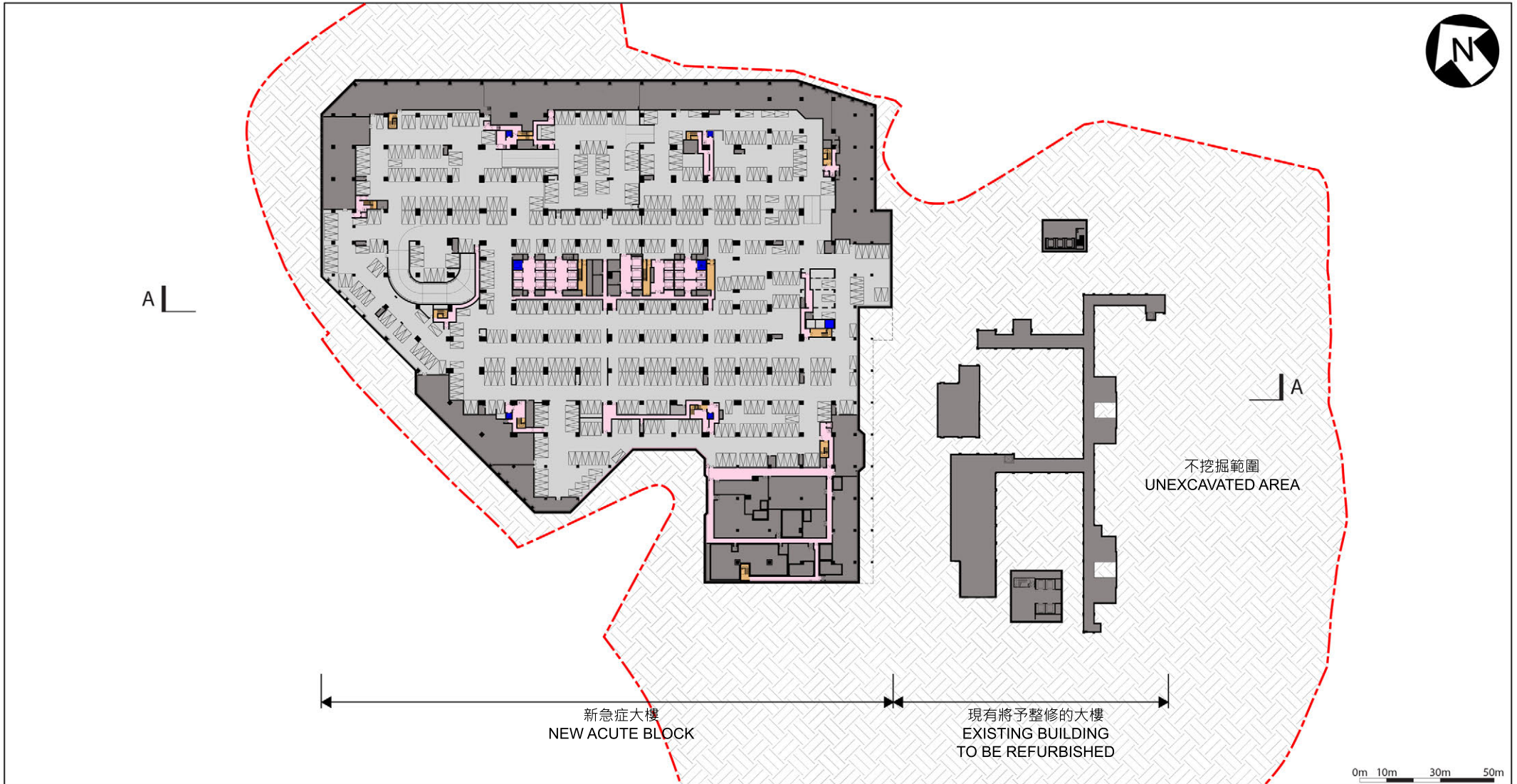
位置圖 LOCATION PLAN

圖例 LEGEND

醫院及工地界線 HOSPITAL AND SITE BOUNDARY	現有巴士站 EXISTING BUS STOP	現有無障礙出入口 EXISTING BARRIER-FREE ENTRANCE / EXIT
現有將予整修的大樓 EXISTING BUILDING TO BE REFURBISHED	現有小巴站 EXISTING MINIBUS STOP	擬建無障礙出入口 PROPOSED BARRIER-FREE ENTRANCE / EXIT
擬建新大樓 PROPOSED NEW BUILDING	擬建小巴站 PROPOSED MINIBUS STOP	現有車輛出入口 EXISTING VEHICULAR INGRESS / EGRESS
擬建地面綠化 PROPOSED AT-GRADE GREENING	現有行人過路處 EXISTING AT-GRADE PEDESTRIAN CROSSING	擬建車輛出入口 PROPOSED VEHICULAR INGRESS / EGRESS
擬建綠化範圍/天台綠化 PROPOSED LANDSCAPED AREA / LANDSCAPED ROOF	擬建行人過路處 PROPOSED AT-GRADE PEDESTRIAN CROSSING	救護車出入口 AMBULANCE INGRESS / EGRESS
擬建連接橋 PROPOSED LINK BRIDGE	無障礙通道 BARRIER-FREE ACCESS	現有行人出入口 EXISTING PEDESTRIAN ENTRANCE / EXIT
擬建有蓋行人道 PROPOSED COVERED WALKWAY	擬建太陽能光伏板 PROPOSED PHOTOVOLTAIC PANEL	擬建行人出入口 PROPOSED PEDESTRIAN ENTRANCE / EXIT

工地平面圖
SITE PLAN

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL

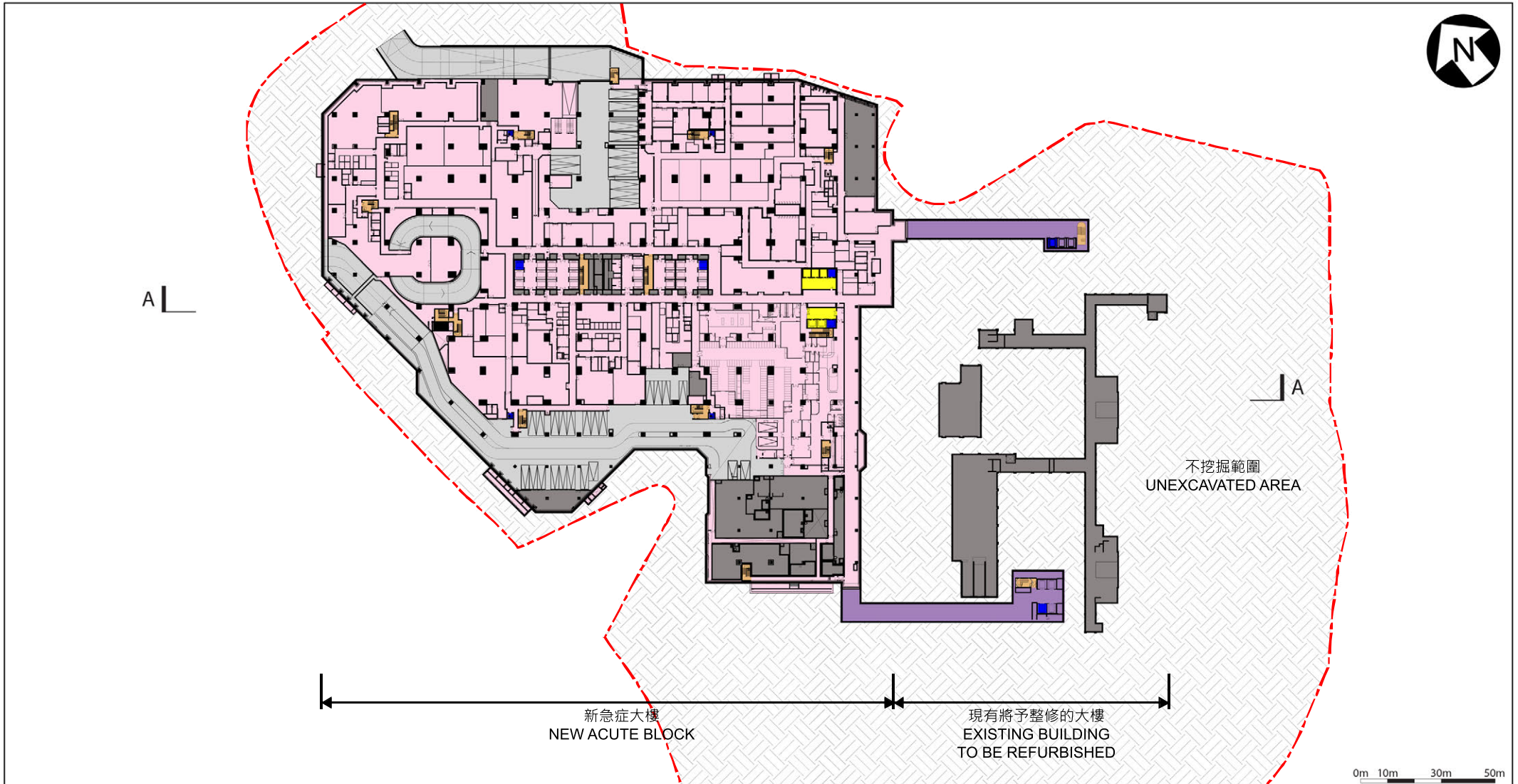


圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT
- 停車場 CAR PARKING AREA

地下二樓平面圖
BASEMENT SECOND FLOOR PLAN

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL

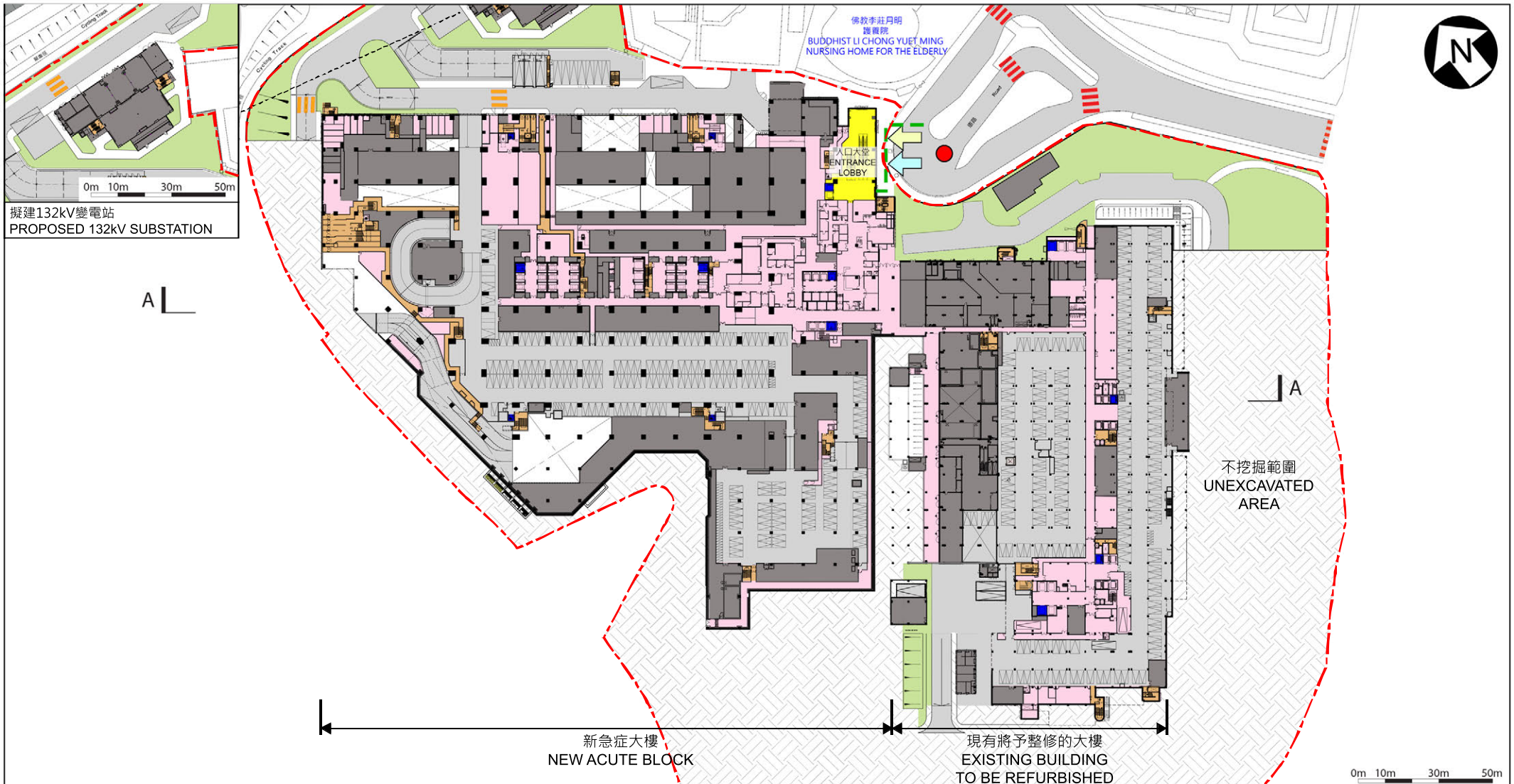


圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT
- 停車場 CAR PARKING AREA
- 隧道 TUNNEL

地下一樓平面圖
BASEMENT FIRST FLOOR PLAN

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL

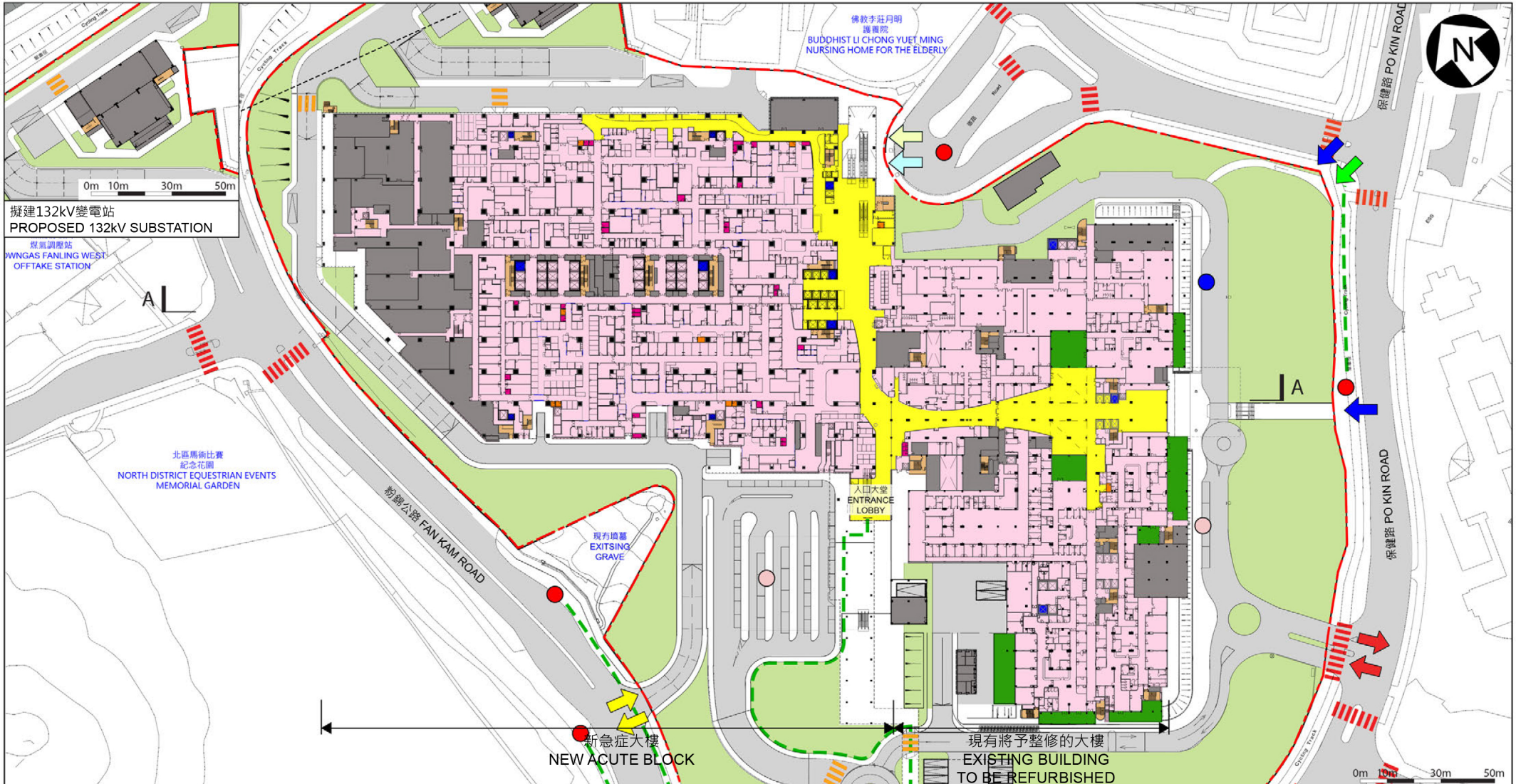


圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 現有行人過路處 EXISTING AT-GRADE PEDESTRIAN CROSSING
- 擬建行人過路處 PROPOSED AT-GRADE PEDESTRIAN CROSSING
- 無障礙通道 BARRIER-FREE ACCESS
- 地面綠化 AT-GRADE GREENING
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT
- 車輛區域 VEHICULAR AREA
- 擬建無障礙出入口 PROPOSED BARRIER-FREE ENTRANCE / EXIT
- 擬建行人出入口 PROPOSED PEDESTRIAN ENTRANCE / EXIT
- 現有巴士站 EXISTING BUS STOP

地下低層平面圖
LOWER GROUND FLOOR PLAN

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL

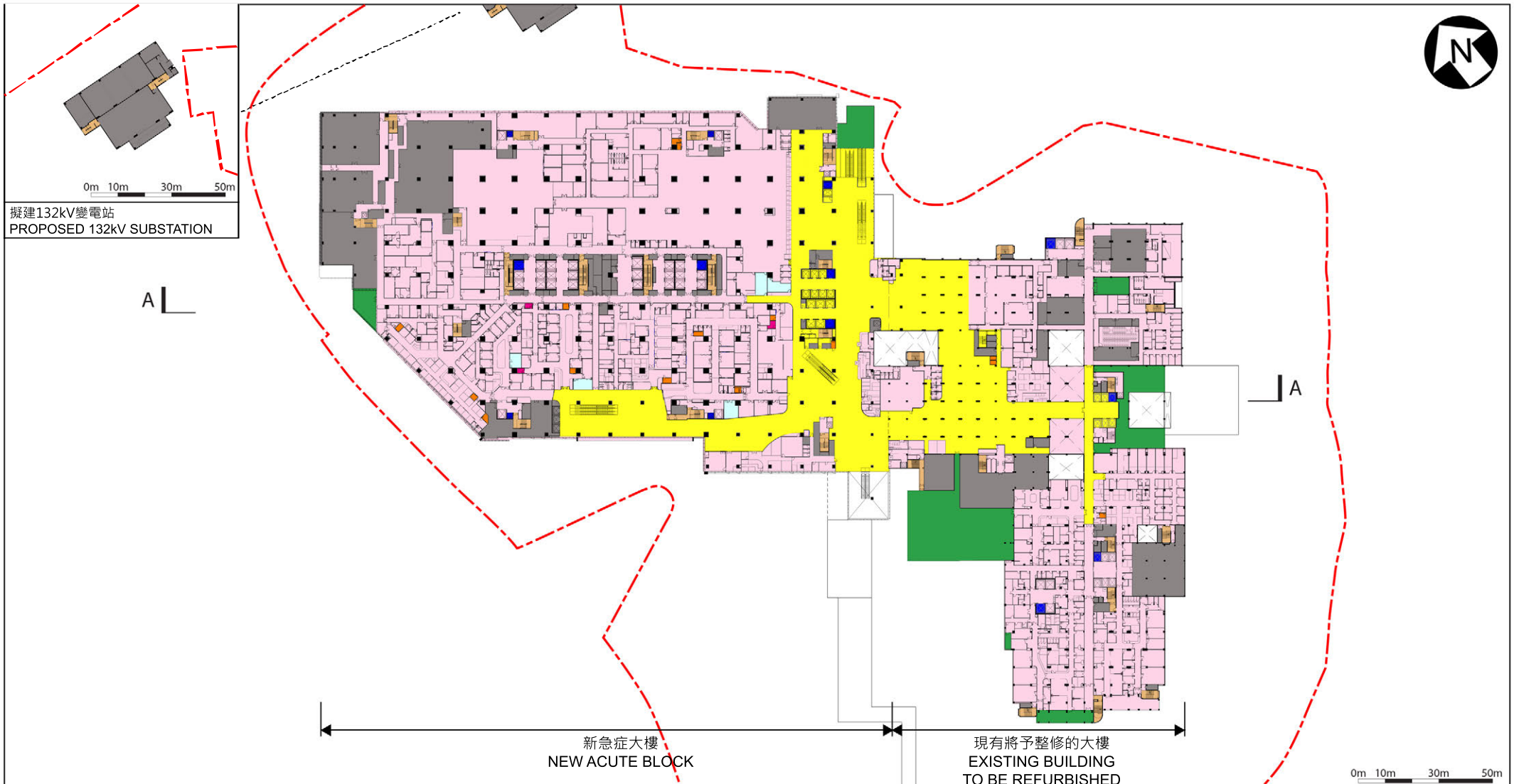


圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 現有行人過路處 EXISTING AT-GRADE PEDESTRIAN CROSSING
- 擬建行人過路處 PROPOSED AT-GRADE PEDESTRIAN CROSSING
- 無障礙通道 BARRIER-FREE ACCESS
- 地面綠化 AT-GRADE GREENING
- 綠化範圍 / 天台綠化 LANDSCAPED AREA / LANDSCAPED ROOF
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 暢通易達洗手間 ACCESSIBLE TOILET
- 通用洗手間 UNIVERSAL TOILET
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT
- 車輛區域 VEHICULAR AREA
- 現有無障礙出入口 EXISTING BARRIER-FREE ENTRANCE / EXIT
- 擬建無障礙出入口 PROPOSED BARRIER-FREE ENTRANCE / EXIT
- 現有行人出入口 EXISTING PEDESTRIAN ENTRANCE / EXIT
- 現有車輛出入口 EXISTING VEHICULAR INGRESS / EGRESS
- 現有車輛及救護車出入口 EXISTING VEHICULAR AND AMBULANCE INGRESS / EGRESS
- 擬建行人出入口 PROPOSED PEDESTRIAN ENTRANCE / EXIT
- 現有巴士站 EXISTING BUS STOP
- 現有小巴站 EXISTING MINIBUS STOP
- 擬建小巴站 PROPOSED MINIBUS STOP

地下平面圖
GROUND FLOOR PLAN

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL



圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 暢通易達洗手間 ACCESSIBLE TOILET
- 通用洗手間 UNIVERSAL TOILET
- 教學範圍 TEACHING AREA
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT

一樓平面圖
FIRST FLOOR PLAN

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL

圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 暢通易達洗手間 ACCESSIBLE TOILET
- 通用洗手間 UNIVERSAL TOILET
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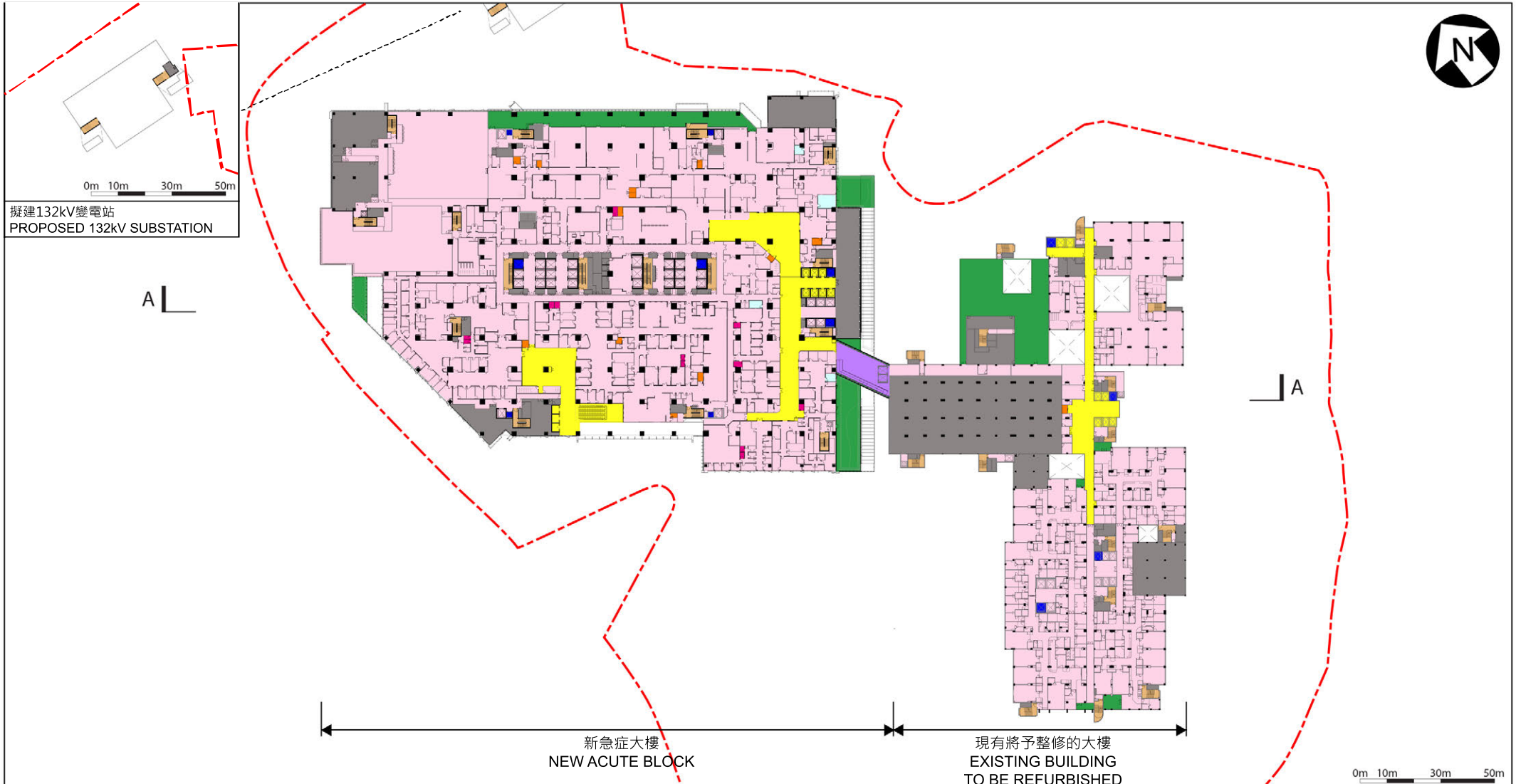
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT

二樓平面圖
SECOND FLOOR PLAN

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL

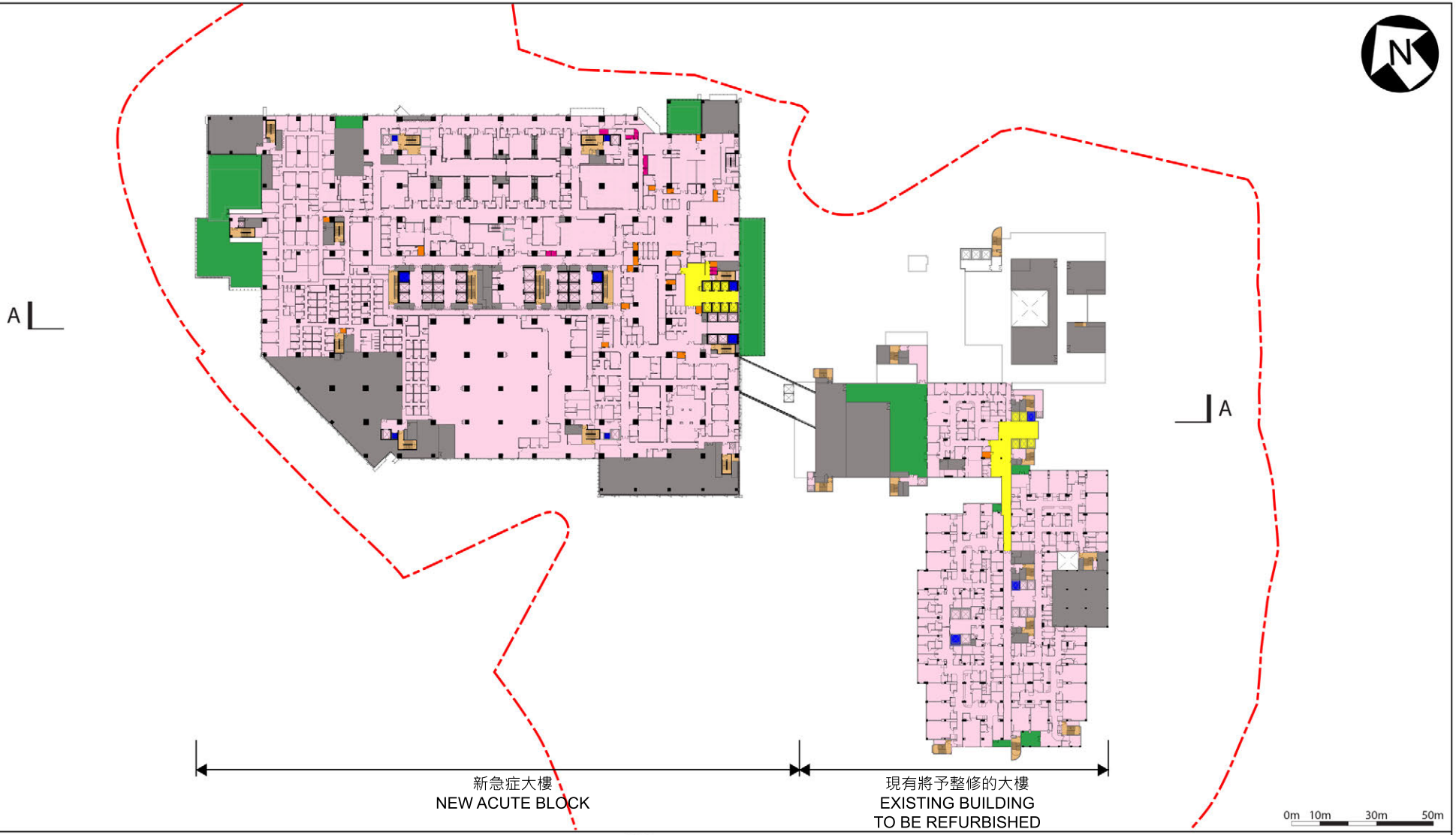


圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 暢通易達洗手間 ACCESSIBLE TOILET
- 通用洗手間 UNIVERSAL TOILET
- 教學範圍 TEACHING AREA
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT
- 連接橋 LINK BRIDGE

三樓平面圖
THIRD FLOOR PLAN

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL



圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
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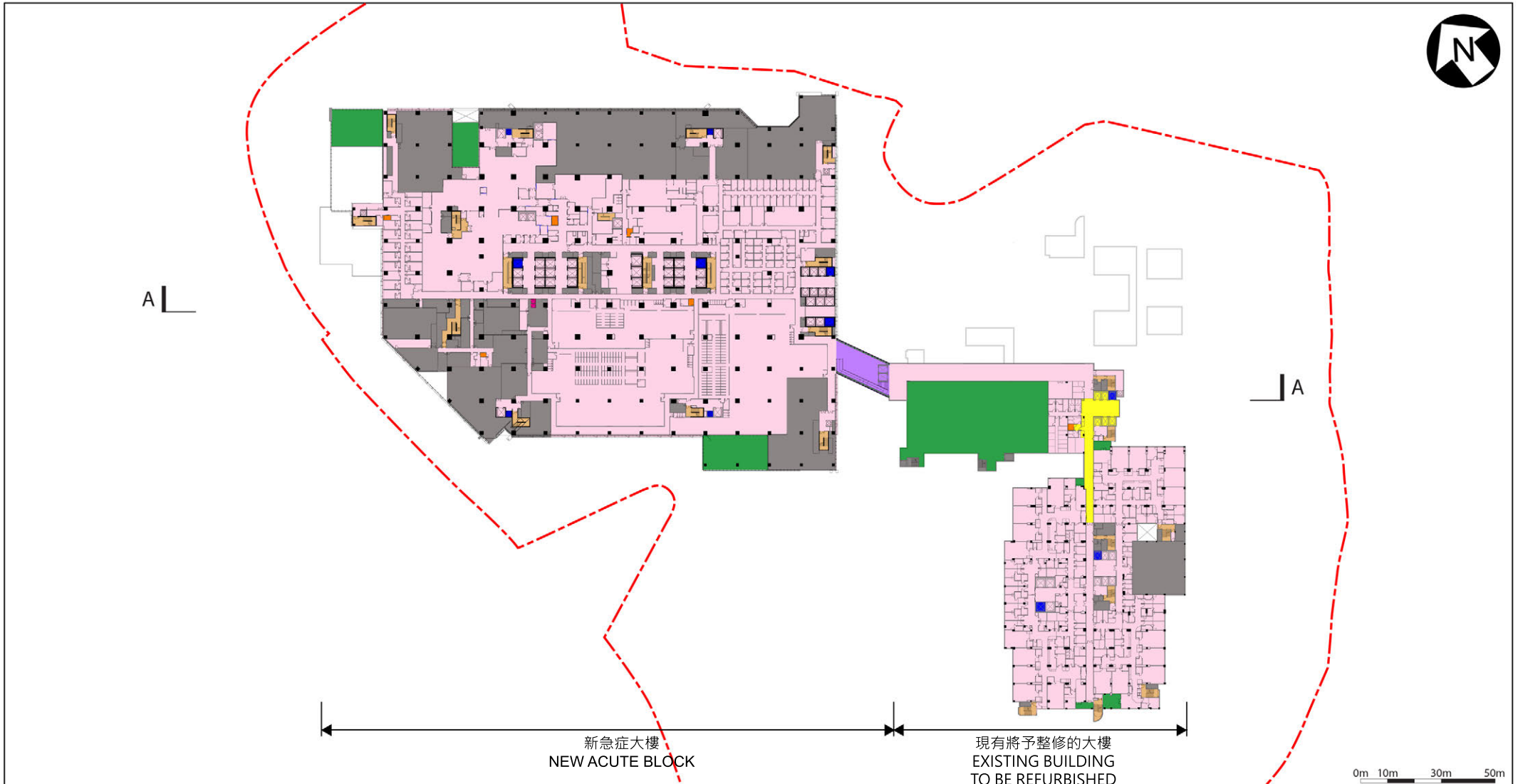
- 通用洗手間 UNIVERSAL TOILET
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT

四樓平面圖
FOURTH FLOOR PLAN

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL



圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
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- 通用洗手間 UNIVERSAL TOILET
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT
- 連接橋 LINK BRIDGE

五樓平面圖
FIFTH FLOOR PLAN

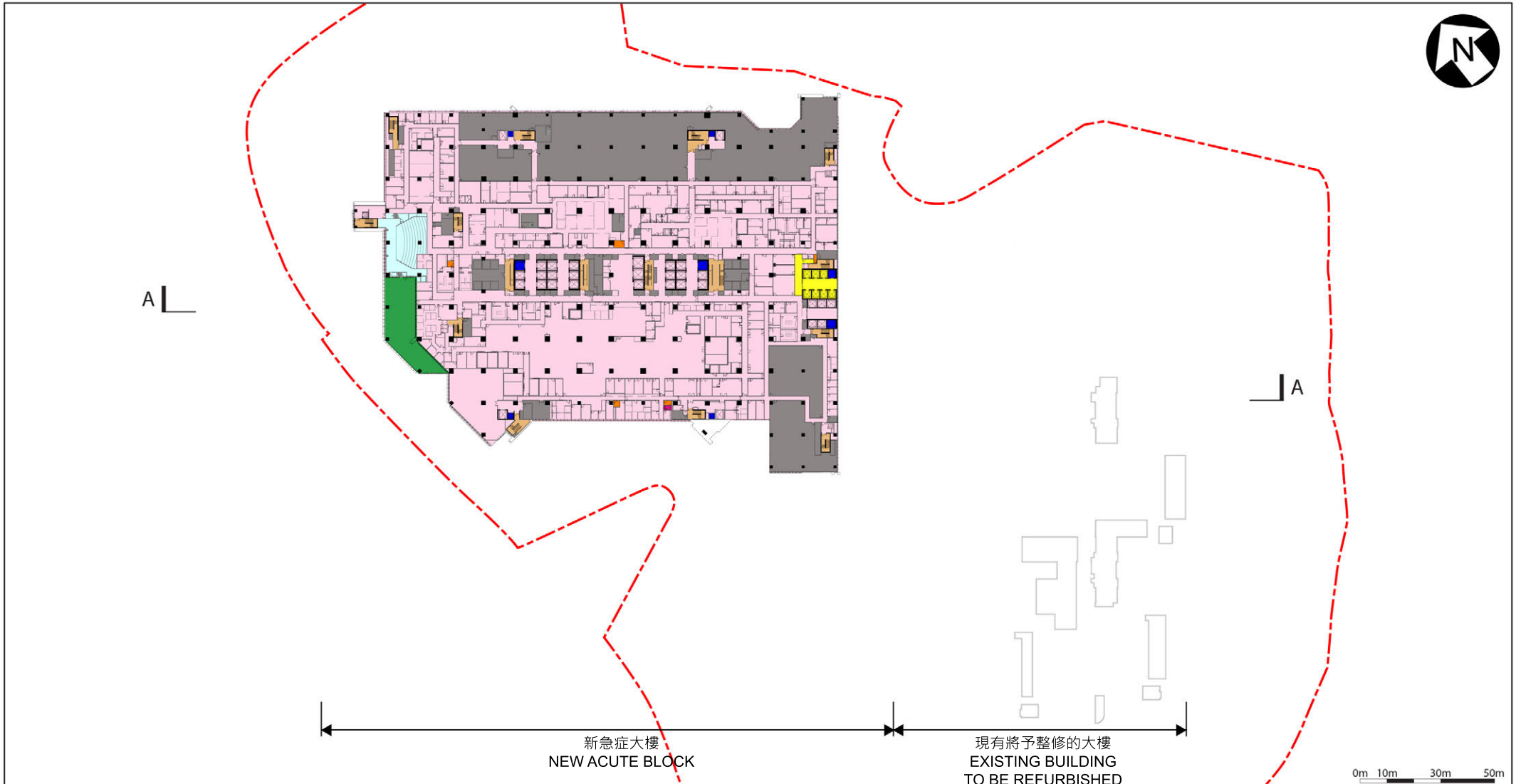
3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL

圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 暢通易達洗手間 ACCESSIBLE TOILET
- 通用洗手間 UNIVERSAL TOILET
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT

六樓平面圖
SIXTH FLOOR PLAN

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL

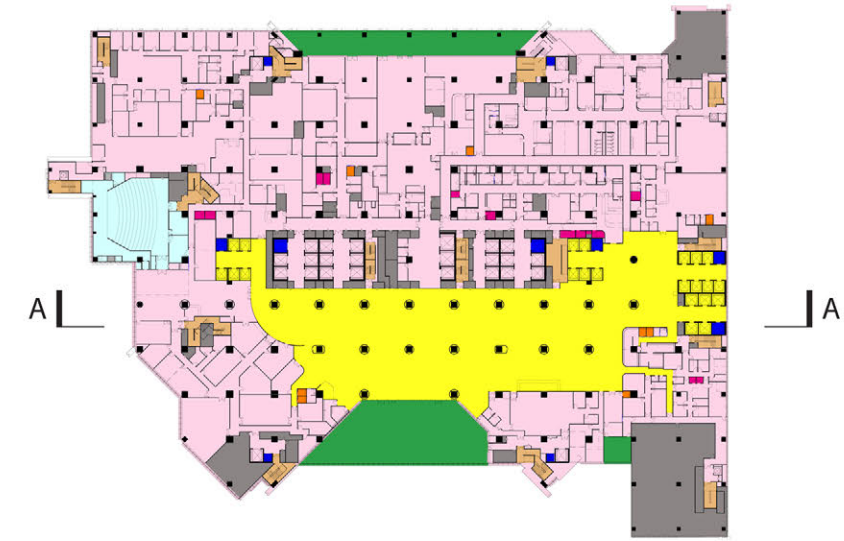


圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 暢通易達洗手間 ACCESSIBLE TOILET
- 通用洗手間 UNIVERSAL TOILET
- 教學範圍 TEACHING AREA
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT

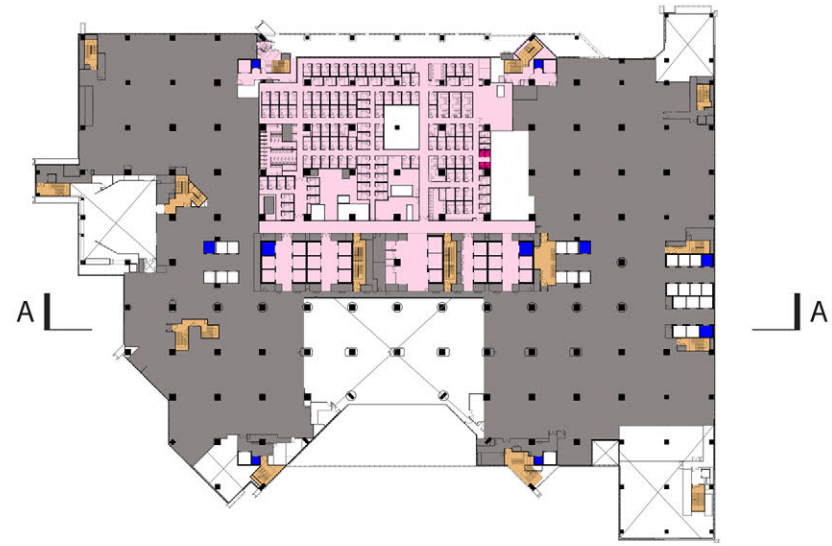
七樓平面圖
SEVENTH FLOOR PLAN

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL



新急症大樓
NEW ACUTE BLOCK

八樓平面圖
EIGHTH FLOOR PLAN



新急症大樓
NEW ACUTE BLOCK

八樓夾層平面圖
EIGHTH MEZZANINE FLOOR PLAN

0m 10m 30m 50m

圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 暢通易達洗手間 ACCESSIBLE TOILET
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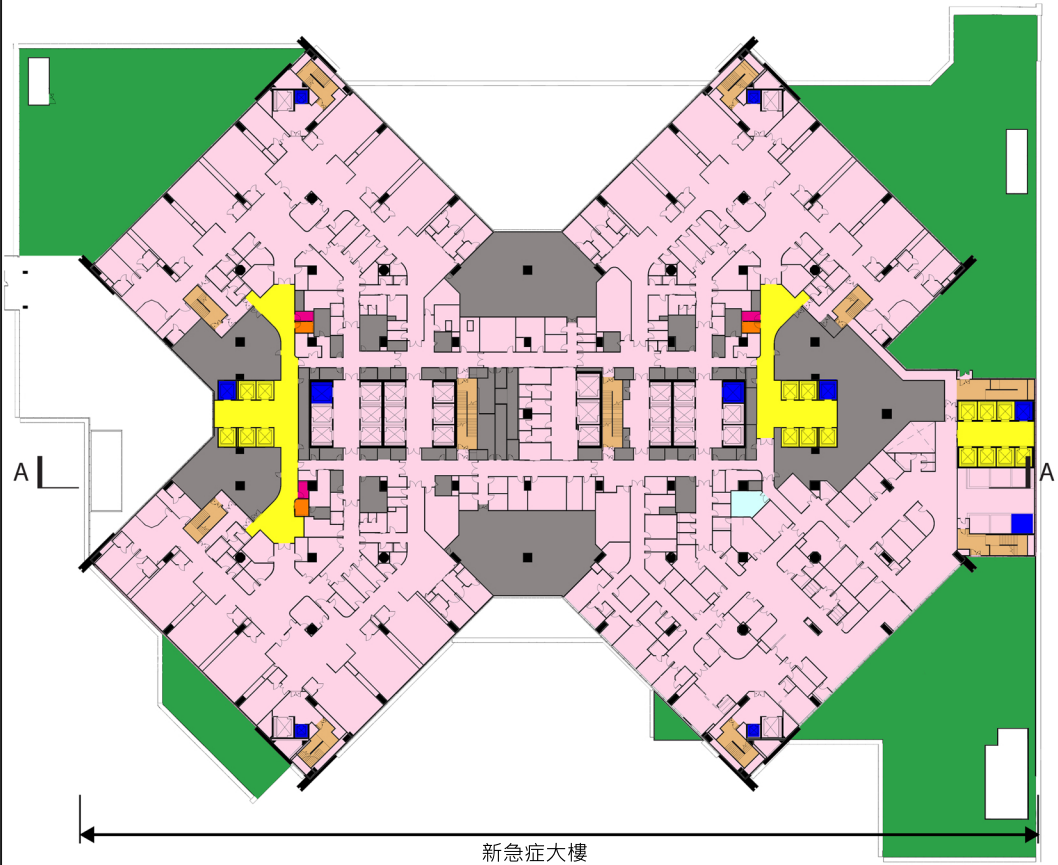
- 教學範圍 TEACHING AREA
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT

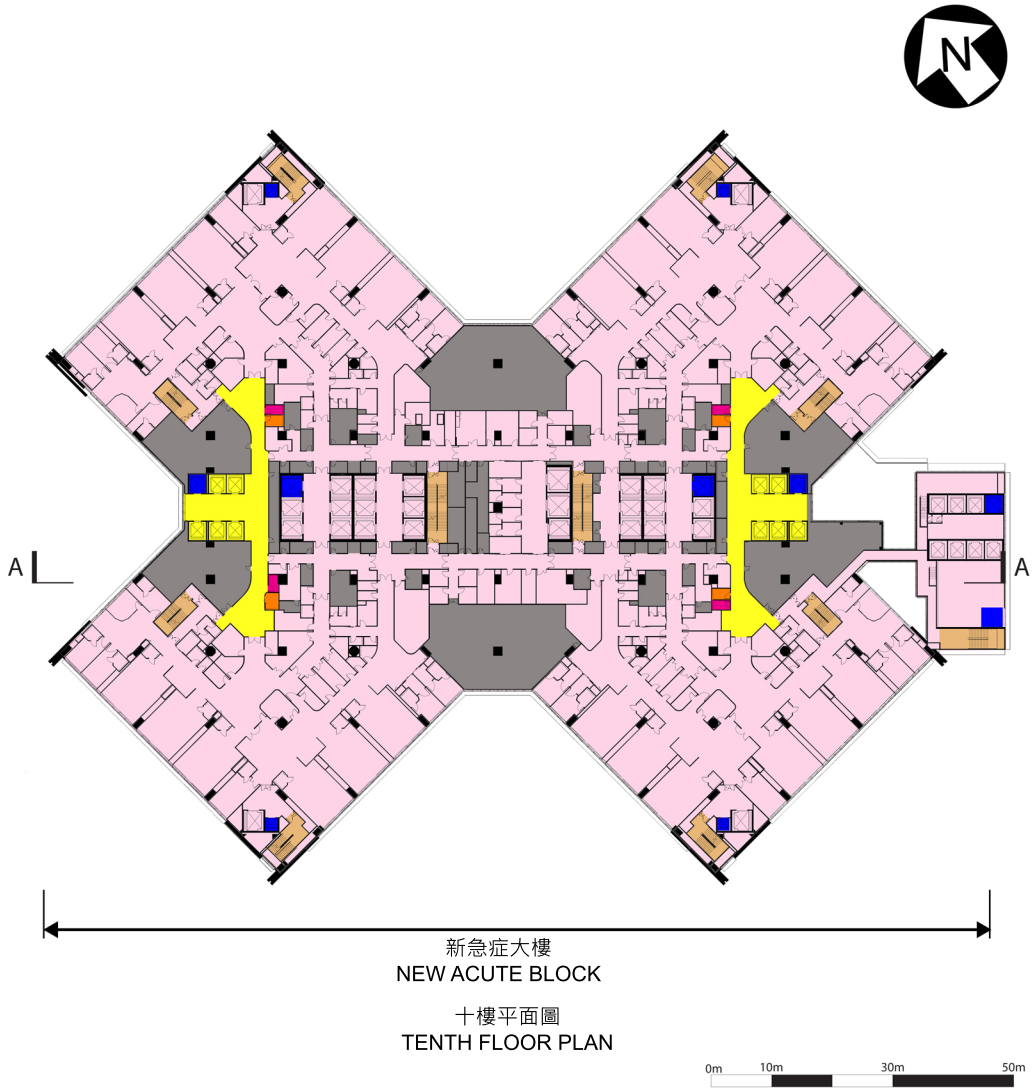
八樓及八樓夾層平面圖
EIGHTH AND EIGHTH MEZZANINE FLOOR PLANS

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL



新急症大樓
NEW ACUTE BLOCK

九樓平面圖
NINTH FLOOR PLAN



新急症大樓
NEW ACUTE BLOCK

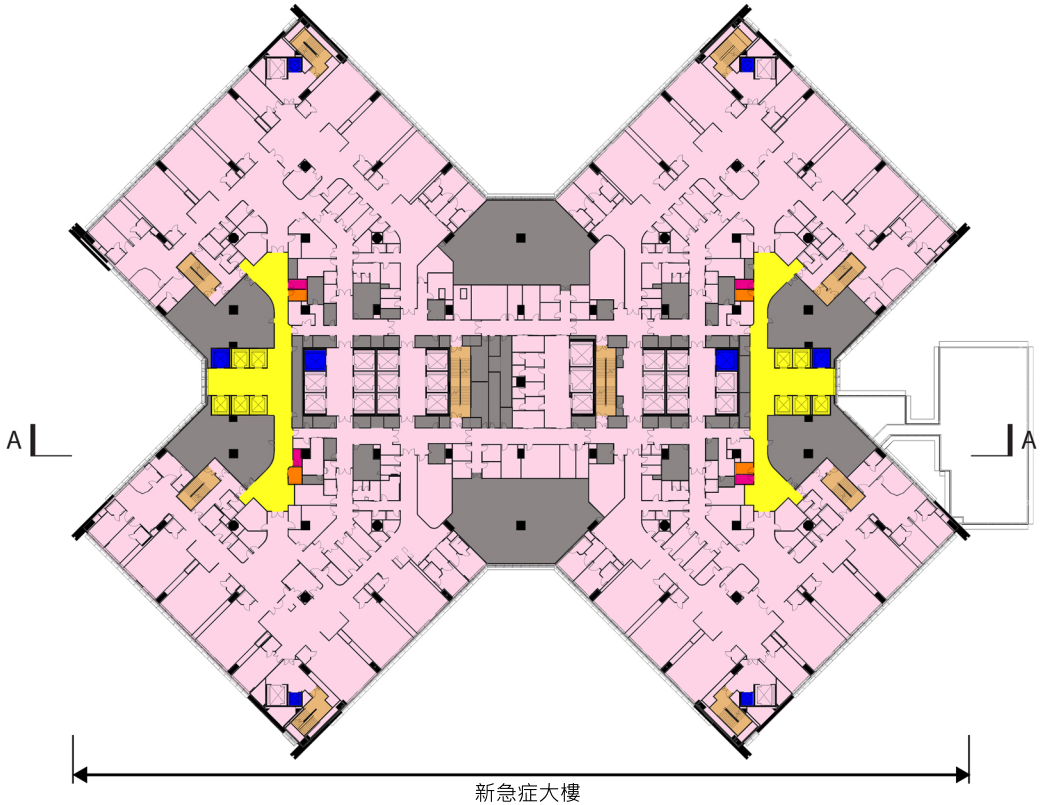
十樓平面圖
TENTH FLOOR PLAN

圖例 LEGEND

- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 暢通易達洗手間 ACCESSIBLE TOILET
- 通用洗手間 UNIVERSAL TOILET
- 教學範圍 TEACHING AREA
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT

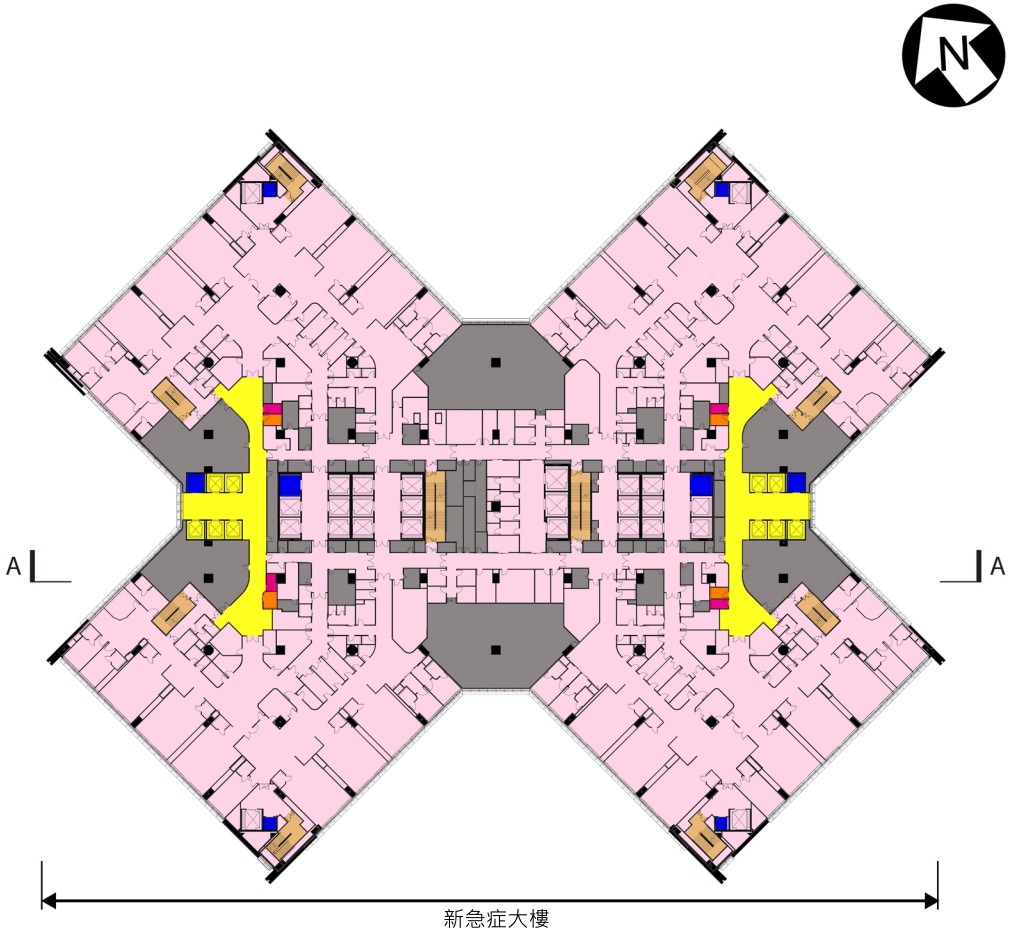
九樓及十樓平面圖
NINTH AND TENTH FLOOR PLANS

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL



新急症大樓
NEW ACUTE BLOCK

十一樓平面圖
ELEVENTH FLOOR PLAN



新急症大樓
NEW ACUTE BLOCK

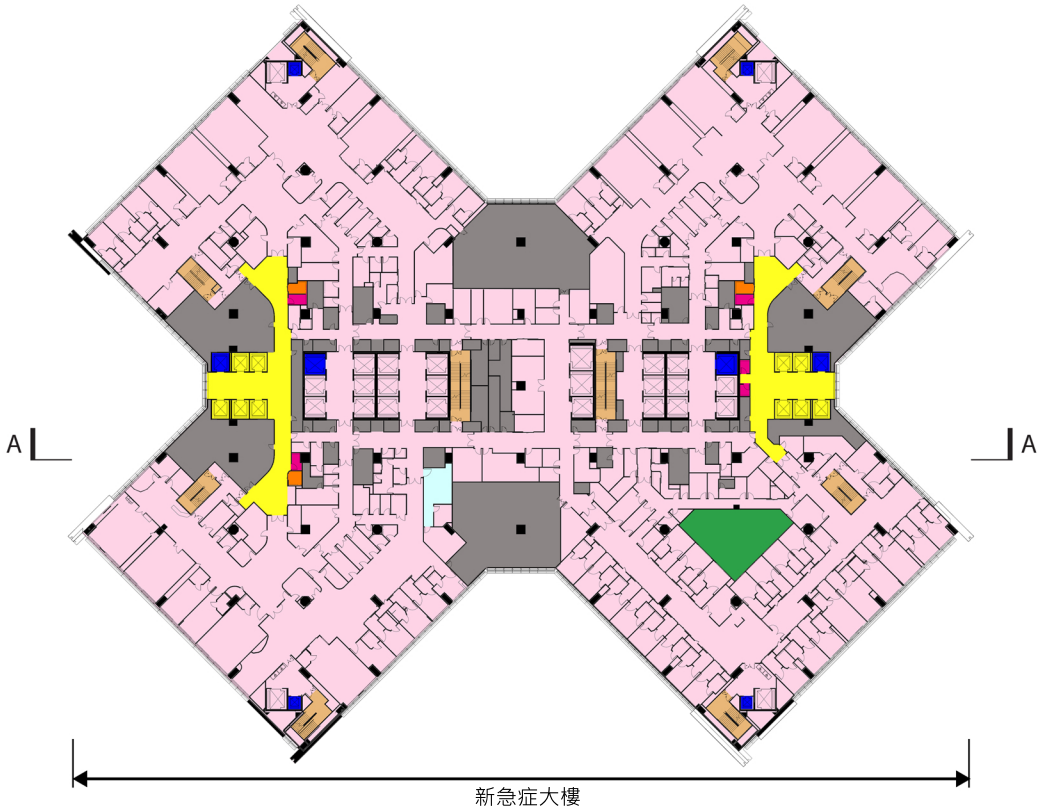
十二至十四樓平面圖
TWELFTH TO FOURTEENTH FLOOR PLANS

圖例 LEGEND

- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 暢通易達洗手間 ACCESSIBLE TOILET
- 通用洗手間 UNIVERSAL TOILET
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT

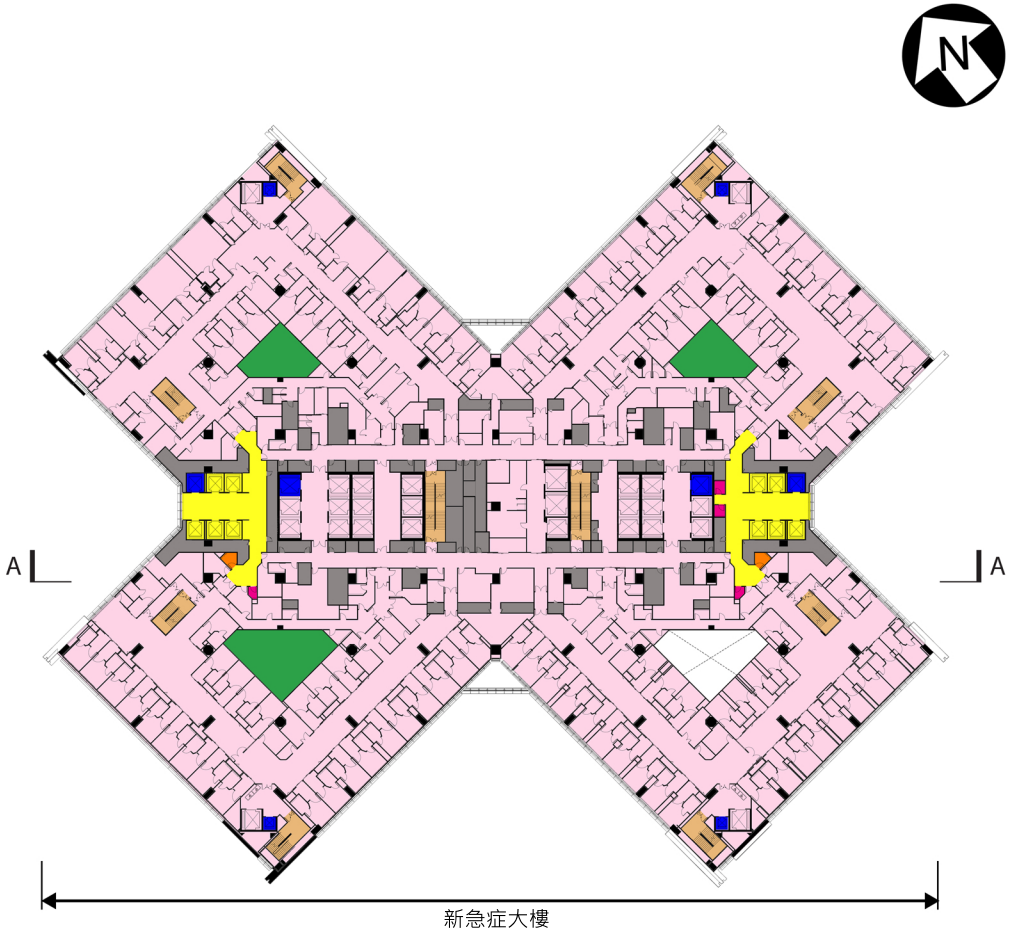
十一樓至十四樓平面圖
ELEVENTH TO FOURTEENTH FLOOR PLANS

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL



新急症大樓
NEW ACUTE BLOCK

十五樓平面圖
FIFTEENTH FLOOR PLAN



新急症大樓
NEW ACUTE BLOCK

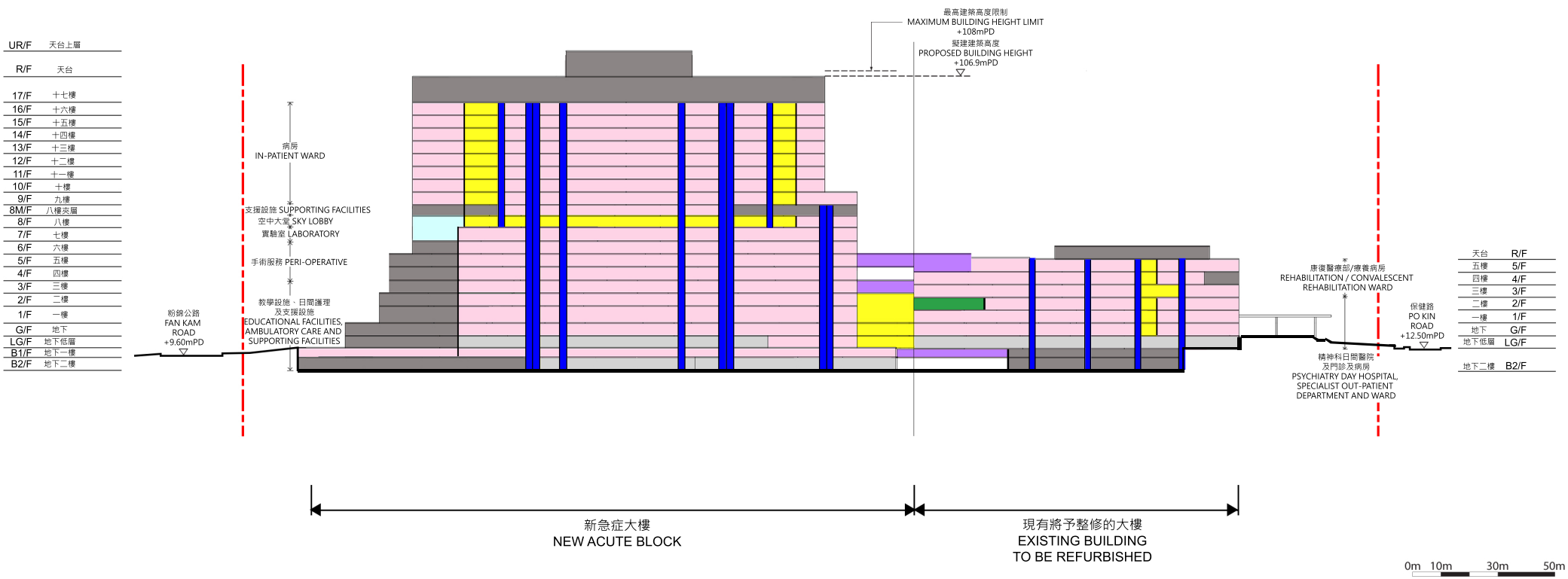
十六樓平面圖
SIXTEENTH FLOOR PLAN

圖例 LEGEND

- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 暢通易達洗手間 ACCESSIBLE TOILET
- 通用洗手間 UNIVERSAL TOILET
- 教學範圍 TEACHING AREA
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達升降機 ACCESSIBLE LIFT

十五樓及十六樓平面圖
FIFTEENTH AND SIXTEENTH FLOOR PLANS

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL



圖例 LEGEND

- 醫院及工地範圍 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 公眾區域 PUBLIC AREA
- 教學設施 TEACHING AREA
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 連接橋/ 隧道 LINK BRIDGE/ TUNNEL
- 停車場 CAR PARKING AREA

剖面圖 A-A
SECTION A-A

3MI
北區醫院擴建計劃
EXPANSION OF NORTH DISTRICT HOSPITAL

從西面望向新急症大樓的構思透視圖
PERSPECTIVE VIEW OF NEW ACUTE BLOCK FROM WEST DIRECTION

構思圖 ARTIST'S IMPRESSION	3MI **北區醫院擴建計劃** EXPANSION OF NORTH DISTRICT HOSPITAL

3MI – Expansion of North District Hospital

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2022 prices)

			Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee ($ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	–	–	–	178.5
		Technical	–	–	–	44.6
					Sub-total	223.1#
(b)	Resident site staff (RSS) costs (Note 3)	Professional	1 080	38	1.6	152.1
		Technical	4 808	14	1.6	238.4
					Sub-total	390.5
	Comprising -					
	(i) consultants' fees for management of RSS			11.7 #		
	(ii) remuneration of RSS			378.8 #		
					Total	**613.6**

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS (as at now, MPS salary point 38 = $88,015 per month and MPS salary point 14 = $30,990 per month).

2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the provision of contract administration and site supervision relating to the project. The assignment will only be executed subject to the Finance Committee's approval to upgrade **3MI** to Category A.

3. The consultants' fees and RSS cost for site supervision are based on the estimate prepared by the Hospital Authority. 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 9 of Enclosure 1.

3MI – Expansion of North District Hospital

Indicative list of furniture and equipment items with unit cost of $1 million or above

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Hospital Authority			
Access Control System for Staff Lockers	1	11.7	11.7
Access Control System for Carpark	1	5.2	5.2
Accessory, Conveyors for Sterile Supplies Department	1	2.6	2.6
Anaesthesia Units for Radiology	2	1.0	2.0
Analysers, Laboratory, Blood, Glycated Haemoglobin	2	2.2	4.4
Analysers, Laboratory, Clinical Chemistry/ Immunoassay for Therapeutic Drug Monitoring	2	1.3	2.6
Analysers, Laboratory, Clinical Chemistry/ Immunoassay for Urgent Toxicology Screening	2	1.9	3.8
Analysers, Laboratory, Clinical Chemistry/ Immunoassay, Chemiluminescent for Special Hormone Investigation	2	2.0	4.0
Analysers, Laboratory, Clinical Chemistry/ Immunoassay, Laboratory Automation System	1	39.4	39.4
Analysers, Laboratory, Haematology, Blood Grouping, Automated	1	2.7	2.7
Analysers, Laboratory, Haematology, Cell Counting, Automated	2	4.0	8.0
Analysers, Laboratory, Haematology,	1	3.9	3.9

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Coagulation, Automated			
Analysers, Laboratory, Immunoassay, Chemiluminescent	1	2.3	2.3
Analysers, Laboratory, Mass Spectrometry, Microorganism Identification	2	3.2	6.4
Analysers, Laboratory, Microbiology	1	1.7	1.7
Analysers, Laboratory, Molecular Assay	1	3.3	3.3
Analysers, Laboratory, Molecular Assay, Infectious Microorganism	1	4.1	4.1
Analysers, Laboratory, Molecular Assay, Infectious Microorganism for Tuberculosis Detection	1	1.7	1.7
Analysers, Laboratory, Molecular Assay, Infectious Microorganism, for Multiple Pathogen Targets	1	2.8	2.8
Analysers, Physiologic, Neuromuscular Function	1	2.4	2.4
Analysers, Physiologic, Neuromuscular Function, Gait for In-patient Orthopaedics Rehabilitation and Day Rehabilitation Centre	1	1.1	1.1
Analysers, Physiologic, Peristaltic Motility, Esophageal	1	1.1	1.1
Audio Video System for Auditorium and Related Conference Facilities	1	6.1	6.1
Automated Urine Microscopy Analyser	1	1.7	1.7
Automatic Assembling and Sorting System	2	3.2	6.4

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Automatic Mobile Robot, Shelving System Storage and Display, Mobile for Pharmacy	1	3.3	3.3
Automatic Systems, Medication Dispensing, Box	3	5.0	15.0
Automatic Systems, Medication Unit Dose Picking System, All Dosage Forms	2	34.0	68.0
Automation Systems, Laboratory	1	18.5	18.5
Automation Systems, Medication Dispensing, Unit Dose Packaging System, Tablets	2	2.0	4.0
Automation Systems, Medication Dispensing, Vial	1	2.2	2.2
Autonomous Mobile Robot for Smart Warehouse	1	4.4	4.4
Autonomous Mobile Robot for Linen	2	4.7	9.4
Autonomous Mobile Robot for Logistic	1	15.0	15.0
Autonomous Mobile Robot for Material Transportation	2	2.8	5.6
Autonomous Mobile Robot for Operating Theatre and Sterile Supplies Department	8	1.1	8.8
Autonomous Mobile Robot for Procurement and Materials Management	2	1.1	2.2
Blast Chiller	3	3.9	11.7
Chromatography Systems, Liquid, Packed Column, High-Pressure	1	4.5	4.5
Closed Circuit Television System	1	1.1	1.1

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Conveyor Belt	1	3.8	3.8
Cook/ Chill Horizontal Agitator Tilting Mixer Kettle	2	3.2	6.4
Cook/ Chill Tumble Chiller	4	1.8	7.2
Cryotherapy Systems, Tissue Ablation, Cardiac	1	1.5	1.5
Densitometers, Bone, X-ray, Dual-energy Absorptiometry	2	1.3	2.6
Digital Slide Scanning System	1	3.3	3.3
Dishwashing Machine	3	1.6	4.8
Disinfectors, Liquid Germicide, Flexible Endoscope	2	1.2	2.4
Duplex Vacuum Insulated Evaporator Tanks	1	17.9	17.9
Dynamometer Exercise Systems, Computerised, Upper Limb	2	1.0	2.0
Dynamometer Exercise Systems, Computerised, Whole Body	2	1.1	2.2
Endoscopes, Gastrointestinal Tract, Upper Tract, Double Balloon and Video Systems	1	2.2	2.2
Endoscopes, Gastrointestinal Tract, Upper Tract, Video/ Ultrasound	4	1.2	4.8
Electronic Vehicle Charging System	1	6.5	6.5
Exercisers, Computer-aided Training, Gait for In-patient Orthopaedics Rehabilitation	1	1.0	1.0
Exercisers, Computer-Aided Training,	1	5.8	5.8

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Gait for Neurological and Cardiac Rehabilitation Exercisers, Computer-aided Training, Upper Limb, Wrist, Hand	1	1.3	1.3
Exhaust Hood for Cook/ Chill Horizontal Agitator Tilting Mixer Kettle	1	2.8	2.8
Exhaust Hood, for Mixer Kettle, Tilting	1	2.1	2.1
Exhaust Hood, for Universal Machine	1	1.7	1.7
Generator, Clean Steam, Standalone	6	1.0	6.0
Ice Builder	2	9.2	18.4
Image Processors, Video, Endoscopy for Endoscopy Centre	1	1.7	1.7
Image Processors, Video, Endoscopy for Orthopaedic Operation, Anaesthesia	11	1.8	19.8
Image Processors, Video, Endoscopy for Surgery, Urology and Gynaecology Operation	17	2.6	44.2
Information Systems, Data Management, Anaesthesia & Monitors, Physiologic, Multipurpose, Bedside for Operating Theatre	1	36.6	36.6
Information Systems, Data Management, Anaesthesia for Endoscopy Centre	1	1.7	1.7
Information Systems, Data Management, Bedside and Monitors, Physiologic, Multipurpose	1	55.6	55.6
Information Systems, Data Management, Bedside and Monitors, Physiologic, Multipurpose for Cardiac Care Unit	1	9.9	9.9

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Information Systems, Data Management, Cardiology	1	5.0	5.0
Integrated Telecommunication System	1	137.9	137.9
Intercom System for Accident & Emergency Department	1	1.2	1.2
Intercom System for Endoscopy and Operating Theatre Day Ward	1	1.1	1.1
Intercom System for Endoscopy Centre	1	1.3	1.3
Intercom System for Mortuary	1	1.0	1.0
Intercom System for Pathology Laboratory	1	1.4	1.4
Intercom System for Radiology	1	3.4	3.4
Intercom system for Sterile Supplies Department and Operating Theatre	1	4.3	4.3
Laboratory Management System	1	1.4	1.4
Laser Machine (Gastrointestinal Procedure) for Endoscopy Centre	1	2.0	2.0
Laser Machine (Respiratory Procedure) for Endoscopy Centre	1	1.9	1.9
Lasers, Thulium-yttrium Aluminium Garnet, Surgical	3	3.6	10.8
Metasystems Tuberculosis Automation	1	1.5	1.5
Microscopes, Light, Operating	3	4.0	12.0
Mixing Kettle	2	1.0	2.0
Monitoring Systems, Physiologic, Cardiac Electrophysiology	1	1.7	1.7

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Monitors, Laboratory, Temperature	1	1.6	1.6
Monitors, Physiologic, Central Station, Vital Sign Monitoring for Endoscopy Centre	1	3.3	3.3
Nucleic Acid Processors, Purification	2	1.4	2.8
Nucleic Acid Processors, Replication, Thermal Cycle, Real-time Quantification	2	1.2	2.4
Nucleic Acid Processors, Sequencing	1	2.0	2.0
Orthoses, Lower Limb, Total, Gait, Powered, Autonomous	1	1.9	1.9
Radio Console System	2	1.3	2.6
Radio Frequency Identification Specimen Tracing System for Operating Theatre	1	1.9	1.9
Radiographic Systems, Digital	9	3.0	27.0
Radiographic Systems, Digital, Mammographic	2	7.5	15.0
Radiographic Units, Mobile	1	1.0	1.0
Radiographic/ Fluoroscopic Systems, Angiography/ Interventional	1	7.0	7.0
Radiographic/ Fluoroscopic Systems, Angiography/ Interventional, Biplane Digital Subtraction Angiography	1	20.0	20.0
Radiographic/ Fluoroscopic Systems, Angiography/ Interventional, Biplane Digital Subtraction Angiography for Cardiac Catheterisation Laboratory	1	25.0	25.0

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Radiographic/ Fluoroscopic Systems, General-Purpose for Endoscopy Centre	2	8.6	17.2
Radiographic/ Fluoroscopic Units, Mobile for Endoscopy Centre	1	2.4	2.4
Radiographic/ Fluoroscopic Units, Mobile for Intensive Care Unit	1	1.5	1.5
Radiographic/ Fluoroscopic Units, Mobile for Orthopaedics and Traumatology	1	2.4	2.4
Radiographic/ Fluoroscopic Units, Mobile, Extremity, Trauma for Operating Theatre	1	1.1	1.1
Radiographic/ Fluoroscopic Units, Mobile, Spine for Operating Theatre	2	4.4	8.8
Radiographic/ Fluoroscopic units, Mobile, Trauma for Operating Theatre	4	2.5	10.0
Radiographic/ Fluoroscopic Units, Mobile, Urology, for Operating Theatre	2	3.3	6.6
Radiographic/ Fluoroscopic Units, Single Plane Digital Subtraction Angiography, Cardiac Catheterisation Laboratory	1	19.8	19.8
Real Time Location Tracking System on Equipment for Operating Theatre	1	2.4	2.4
Robotic Intravenous Compounding System	1	10.4	10.4
Robotic System, Trauma	1	14.8	14.8
Samplers, Laboratory, Automated	1	3.8	3.8
Scanning Systems, Computed Tomography, Spiral	3	21.0	63.0

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Scanning Systems, Computed Tomography/ Single Photon Computed Tomography	2	9.5	19.0
Scanning Systems, Laser, Optical, Coherence, Tomography, Intravascular	2	1.5	3.0
Scanning Systems, Magnetic Resonance Imaging, Full-body	1	25.0	25.0
Scanning Systems, Magnetic Resonance Imaging, Full-body, Diagnostic & Interventional	1	30.0	30.0
Scanning Systems, Ultrasonic with Transesophageal Echocardiogram	1	1.8	1.8
Scanning Systems, Ultrasonic with Transesophageal Echocardiography and Intracardiac Echocardiography	1	3.5	3.5
Scanning Systems, Ultrasonic, Abdominal, Liver Stiffness	1	1.1	1.1
Scanning Systems, Ultrasonic, Cardiac	1	4.0	4.0
Scanning Systems, Ultrasonic, Endoscopic for Endoscopy Centre	4	3.2	12.8
Scanning Systems, Ultrasonic, for Anaesthetic	2	1.2	2.4
Scanning Systems, Ultrasonic, General-Purpose	2	4.6	9.2
Scanning Systems, Ultrasonic, General-purpose for Breast Centre	2	1.6	3.2
Scanning Systems, Ultrasonic, General-purpose for Radiology	4	1.2	4.8
Scanning Systems, Ultrasonic, Prostatic, Magnetic Resonance Imaging Fusion, Biopsy	1	3.2	3.2

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Shelving System, Storage & Display, Mobile for Health Information & Records Department	1	14.8	14.8
Shelving System, Storage & Display, Mobile for Procurement and Materials Management	2	3.4	6.8
Slide Stainers, Immunohistochemistry	7	1.2	8.4
Smart Conveyor Belt System, Pharmacy	1	22.8	22.8
Smart Toilet Management System	1	22.3	22.3
Smokeless Joss Paper Furnace	1	2.0	2.0
Soiled Linen Handling System for Existing Block	1	13.8	13.8
Soiled Linen Handling System for New Block	1	23.9	23.9
Spectrometers, Mass	1	6.3	6.3
Stereotactic Systems, Biopsy, Mammographic	1	3.3	3.3
Stereotactic Systems, Image-Guided, Cardiac Mapping/ Ablation	1	2.5	2.5
Stereotactic Systems, Image-Guided, Surgical and Bronchoscopes, Flexible, Video/ Ultrasound	1	2.6	2.6
Stereotactic Systems, Image-Guided, Surgical for Spine Surgery	1	2.2	2.2
Stereotactic Systems, Orthopaedic Surgery	1	4.0	4.0
Sterilising Units, Germicidal Gas, Hydrogen Peroxide	3	1.8	5.4

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Sterilising Units, Steam for Microbiology Laboratory	1	2.1	2.1
Sterilising Units, Steam for Sterile Supplies Department	8	3.1	24.8
Sterilising Units, Steam, Bulk	1	1.5	1.5
Surgical Instrument Set, Discoscope	2	1.5	3.0
Surgical Instrument Set, Posterior Spinal Fusion	1	2.0	2.0
Tables, Operating for Orthopaedics, Traumatology & Neurosurgery	2	2.0	4.0
Tables, Operating for Special Theatre	1	2.3	2.3
Tables, Operating, Orthopaedic, Spinal	2	3.3	6.6
Tables, Operating, Orthopaedic, Spinal, Trauma Case Accessories	1	1.2	1.2
Tank, Cook Chill	2	2.9	5.8
Tilting Mixer Kettle	2	2.7	5.4
Trolley Washer	3	4.1	12.3
Uninterruptible Power Supply	2	4.3	8.6
Universal Machine	2	5.2	10.4
Utility Distribution System for Combi Steamer and Tank, Cook Chill	1	1.9	1.9
Utility Distribution System for Combi Steamer, Mixer Kettle and Electric cooker	1	2.4	2.4
Utility Distribution System for Mixer Kettle	1	1.6	1.6

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Utility Distribution System for Universal Machine	1	1.4	1.4
Vacuum Packing System, Cook Chill	2	1.6	3.2
Vertical Pouch Packaging Filler	2	1.9	3.8
Video Conferencing System	1	3.2	3.2
Video Monitor for Endoscopy Centre	2	1.1	2.2
Video Systems, Endoscopic for Endoscopy Centre	10	1.3	13.0
Video Systems, Endoscopic for Minimally Invasive Surgery Theatres	2	17.4	34.8
Video Systems, Operating Room	4	1.3	5.2
Video Systems, Operating Room for General Theatre, Orthopaedic	4	5.8	23.2
Video Systems, Operating Room, for Special Theatre	1	5.8	5.8
Washer/ Decontamination Units, Cart Washer for Sterile Supplies Department	2	3.5	7.0
Washer/ Decontamination Units, Surgical Instrument, Single Chamber	4	1.4	5.6
Washer/ Decontamination Units, Tunnel Washer for Sterile Supplies Department	3	4.8	14.4
Washer/ Sterilising Units	5	2.5	12.5
Washers, Labware/ Surgical Instrument, Ultrasonic, Pressure Ultrasonic Flushing	1	1.0	1.0
Washers, Labware/ Surgical Instrument, Ultrasonic, Pro, Laparoscopic Instrument	1	1.8	1.8

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Waste-disposal Units	3	2.2	6.6
Water Purification Systems, Reverse Osmosis for Renal Centre	1	9.4	9.4
Water Purification Systems, Reverse Osmosis for Sterile Supplies Department	1	5.0	5.0
Water Purification Systems, Reverse Osmosis, Automated Endoscope Reprocessor for Sterile Supplies Department and Operating Theatre	3	1.6	4.8
Water Purification Systems, Reverse Osmosis, Haemodialysis, for Endoscopy Reprocessing Unit	1	4.4	4.4
Water Purification Systems, Reverse Osmosis, Haemodialysis, for Intensive Care Unit	1	3.9	3.9
Workstations, Haemodialysis	1	2.1	2.1
Workstations, Multiple Modality, Three-dimensional Image	1	2.7	2.7
Workstations, Multiple Modality, Three-dimensional Image for Gastrointestinal Programme Floor	1	1.7	1.7
X-ray Detector	3	2.1	6.3
<u>Department of Health / Oral Maxillofacial Surgery & Dental Clinic</u>			
Dental and Oral Maxillofacial Surgery Instruments	1	4.1	4.1
Endoscopic Camera System	1	1.5	1.5
Navigation System and Planning Software for Craniofacial and Maxillofacial Surgeries	1	2.4	2.4

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Oral Maxillofacial Cone Beam Computed Tomography System	1	1.6	1.6
Surgical Instruments	1	1.7	1.7

114MH - Expansion of Lai King Building in Princess Margaret Hospital

PROJECT SCOPE AND NATURE

We propose to carry out the main works of the expansion project of Lai King Building (LKB) in Princess Margaret Hospital (PMH), which mainly comprise superstructure and associated works as follows –

(a) construction of a new extension block;

(b) construction of a link bridge connecting the new extension block and the existing building;

(c) associated external and landscaping works;

(d) refurbishment, alteration and addition (A&A) of the existing building; and

(e) consultancy services for contract administration and site supervision.

2. A site and location plan, floor plans, a sectional drawing and an artist's impression for the project are at **Annexes 1 to 4 to Enclosure 2**.

3. We plan to seek funding approval from the Finance Committee (FC) to upgrade the proposed project to Category A in the current legislative session. The Hospital Authority (HA) invited tenders in parallel for the proposed works in January 2023, and the returned tender prices have been reflected in the estimated cost of the project. We plan to award the contract to the successful tenderer and commence the proposed works, upon obtaining funding approval from the FC and completion of the site formation and foundation works, for target completion in about four years. The refurbishment and A&A of the existing building will commence upon completion of the new extension block and decanting to match the commissioning programme. The LKB will remain functional at all times during the works period and any disruption of services, if unavoidable, will be kept to a minimum.

/JUSTIFICATION …..

JUSTIFICATION

4. Established in 1975, the PMH is an acute hospital in the Kowloon West Cluster (KWC) of the HA. It provides a comprehensive range of acute, specialist and ambulatory services, including 24-hour accident and emergency service. Apart from being a tertiary referral centre for infectious diseases, nephrology and urology, the PMH is also a cluster referral centre for oncology, trauma, renal transplant and dialysis, lithotripsy, pulmonary medicine and tuberculosis, high risk obstetrics care as well as paediatric and neonatal intensive care. The LKB, established in 2001, is an off-site facility of PMH providing convalescent, rehabilitation and infirmary in-patient services.

5. Over the years, the population in the KWC has been growing considerably. The combined population in Sham Shui Po, Kwai Tsing, Tsuen Wan and Lantau Island areas or districts is projected to increase by about 6% from 1 437 800 in 2022 to 1 525 800 in 2029, whereas the elderly population aged 65 or above will surge from 282 500 in 2022 to 383 700 in 2029, representing a significant increase of about 36%[1]. The ageing population contributed to the increasing demand for comprehensive medical care, especially convalescent and infirmary support.

6. The design of the PMH, which has a history of over 40 years, has become outdated and lagged behind the service requirements and workflow logistics of a modern tertiary acute hospital. The floor plates in clinical blocks are very small by current standards, rendering the advancement in medical technology difficult; while the physical conditions and structural capacity of the buildings are exacerbated by heavy utilisation for decades, hindering the upgrading of building services systems to meet increasing operational needs. As a result of piecemeal development in the past, there are more than ten building blocks packed in PMH compound and clinical blocks are scattered over the hospital site which impede the provision of co-ordinated services and efficient workflow logistics conducive to optimal clinical outcomes. The unsatisfactory geographical location and connectivity among the buildings have also undermined the development of the PMH.

7. Underpinned by the master development plan for the redevelopment of PMH, the hospital will be renewed to modernise its facilities to cope with the growing clinical service demand. To make available the redevelopment site, additional space and floor areas are required for decanting the existing services and supporting accommodation. In addition to facilitating the decanting of existing services in the PMH, the proposed expansion of the LKB aims to enhance its

/ambulatory …..

[1] According to the report of "Projections of Population Distribution 2021-2029" compiled by the Planning Department.

ambulatory care services to reduce unnecessary hospitalisation and to ensure that its facilities comply with the infection control and service standards in modern healthcare settings.

8. The proposed expansion project is being implemented in three works stages, namely (a) preparatory works; (b) site formation and foundation works; and (c) main works (as mentioned in paragraph 1 above). Upon completion of the expansion project, we aim to provide 572 additional beds.

9. In view of the substantial and extensive coordination work with all departments of the hospital required to formulate the planning and logistic arrangement of hospital services, the preparatory works and the site formation and foundation works of this project were entrusted to the HA. For similar reasons, we plan to also entrust the main works to the HA in order to expedite project implementation and achieve cost effectiveness.

FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the works project to be $5,539.9 million in money-of-the-day (MOD) prices, broken down as follows –

		$ million (in MOD prices)
(a)	Basement	74.4
(b)	Building[2]	1,394.1
(c)	Building services[3]	2,026.5
(d)	Drainage	35.4
(e)	External works	65.4
(f)	Energy conservation, green and recycled features	64.1

/(g) …..

[2] Building works cover construction of superstructure of the new extension block.

[3] Building services works cover electrical installations, ventilation and air-conditioning installations, fire services installations, lift installations and other specialist installations.

			$ million (in MOD prices)
(g)	Link bridge connecting the new extension block and the existing building		11.0
(h)	Refurbishment and A&A works of the existing building[4]		502.7
(i)	Furniture and equipment (F&E)[5]		663.0
(j)	Consultants' fees for		118.0
	(i) contract administration[6]	115.4	
	(ii) management of resident site staff (RSS)	2.6	
(k)	Remuneration of RSS		81.7
(l)	Contingencies		503.6
	Total		5,539.9

11. The HA will engage consultants to undertake contract administration and directly employ RSS for the site supervision of the project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at **Annex 5 to Enclosure 2**.

12. 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 arrangements of the project, including the use of simple structural systems, standardised and common finishing materials, simple and functional detailing, prefabrication systems, and Modular Integrated Construction, etc. The construction floor area (CFA) of the new extension block is about 85 765 square metres (m^2). The estimated construction unit cost, represented by the building and the building services costs, is $39,883 per m^2 of CFA in MOD prices.

/We …..

[4] Refurbishment and A&A works of the existing building cover demolition, structural strengthening works, internal building works and associated building services works as well as modification works for connection between new extension block and the existing building.

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

[6] The estimated fee covers quantity surveying services, site supervision, project management, management of accounts and contract administration, etc.

We consider this unit cost reasonable as compared with those of similar hospital projects, for example, **75MM** – Redevelopment of Prince of Wales Hospital, phase 2 (stage 1).

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

Year	$ million (in MOD prices)
2023 – 24	52.3
2024 – 25	709.8
2025 – 26	2,532.3
2026 – 27	883.7
2027 – 28	613.1
2028 – 29	371.1
2029 – 30	175.6
2030 – 31	111.9
2031 – 32	57.2
2032 – 33	23.0
2033 – 34	9.9
	5,539.9

14. 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 2023 to 2034. The HA will deliver the proposed works through lump-sum contracts as the scope of the works can be clearly defined in advance. The contracts will provide for price adjustment.

/15. …..

15. The HA has assessed the requirements for F&E for the project, and estimates the F&E costs to be $663.0 million. An indicative list of major F&E items (costing $1 million or above per item) to be procured for the project is at **Annex 6 to Enclosure 2**.

16. We estimate the annual recurrent expenditure arising from the project to be $781.2 million.

PUBLIC CONSULTATION

17. The HA consulted the Kwai Tsing District Council (K&TDC) on 8 November 2022 in respect of the LKB expansion project. Members of the K&TDC in general supported the proposed project.

18. We consulted the Legislative Council Panel on Health Services on 19 April 2023. Members of the Panel supported the submission of the funding proposal to the Public Works Subcommittee for consideration. In response to enquiry from Members raised at the Panel meeting, we submitted the supplementary information to the Panel on Health Services on 24 May 2023.

ENVIRONMENTAL IMPLICATIONS

19. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The HA completed a Preliminary Environmental Review (PER) for the project in June 2021. The PER concluded and the Director of Environmental Protection agreed that with the implementation of mitigation measures recommended in the PER, the project would not have any long-term adverse environmental impacts.

20. The HA will incorporate into the works contract mitigation measures recommended in the PER in order to ensure that the environmental impacts arising from the construction works are within the established standards and guidelines. These include the use of quality powered mechanical equipment, temporary noise barriers for noisy construction works, site drainage to control runoff, covering of stockpiled materials, frequent cleaning and watering of the site, and the provision of wheel-washing facilities. The HA has included in the project estimates the cost for the implementation of the environmental mitigation measures.

21. At the planning and design stages, the HA has 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, the HA 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 (PFRFs)[7]. The HA 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.

22. At the construction stage, the 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. The HA will ensure that the day-to-day operations on site comply with the approved plan. The HA will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. The HA will control the disposal of inert construction waste and non-inert construction waste at PFRFs and landfills respectively through a trip-ticket system.

23. The HA estimates that the project will generate in total 17 990 tonnes of construction waste. Of these, the HA will reuse 20 tonnes (0.1%) of inert construction waste on site and deliver 6 800 tonnes (37.8%) of inert construction waste to PFRFs for subsequent reuse. The HA will dispose of the remaining 11 170 tonnes (62.1%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRFs and landfills is estimated to be $2.7 million for this project (based on a unit charge rate of $71 per tonne for disposal at PFRFs and $200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

24. 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 grading items and government historic sites identified by the Antiquities and Monuments Office.

/LAND …..

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[7] 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 licence issued by the Director of Civil Engineering and Development.

LAND ACQUISITION

25. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

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

(a) high efficiency chiller;

(b) heat pump;

(c) demand control of supply air;

(d) building energy management system;

(e) energy efficient lift system; and

(f) photovoltaic system.

27. For greening features, the HA will provide green roofs, rehabilitation garden, slope greening, outdoor fitness area, outdoor sitting area, and outdoor landscape area for environmental and amenity benefits.

28. For recycled features, the HA will adopt rainwater harvesting system for irrigation purpose.

29. The total estimated cost for adoption of the above features is around $64.1 million in MOD prices (including $29.5 million in MOD prices for energy efficient features) which has been included in the cost estimate of the project. The energy efficient features will achieve 10% energy savings in the annual energy consumption with a payback period of about six years.

BACKGROUND INFORMATION

30. The expansion of LKB in PMH (**114MH**) is one of the projects covered by the First Ten-year Hospital Development Plan. On 22 November 2019, the FC approved upgrading the first part of **114MH** as **115MH** "Expansion of Lai King Building in Princess Margaret Hospital – preparatory works" to Category A

at an estimated cost of $104.0 million in MOD prices. The scope mainly covered site investigations, minor studies and associated service diversion and minor alteration works in the LKB, and consultancy services for outline sketch design, detailed design as well as tender documentation and assessment for the whole project. The preparatory works commenced in December 2019. On 11 June 2021, the FC approved upgrading the second part of **114MH** as **117MH** "Expansion of Lai King Building in Princess Margaret Hospital – site formation and foundation works" to Category A at an estimated cost of $408.4 million in MOD prices. The scope mainly covered site formation works; foundation works for the new extension block; enabling works for basement; diversion of underground utilities, installation of new sewer pipe along Lai Kong Street, provision of temporary transformer and generator set, and reprovision of the vacuum insulated evaporator tank; and consultancy services for contract administration and site supervision. The works commenced in August 2021 and are in progress.

31. Of the 231 trees within the project boundary, 24 trees are preserved. 205 trees were felled and two trees were transplanted within the project site under site formation and foundation works. The two trees transplanted are trees of particular interest[8]. A summary of the trees of particular interest affected is provided at **Annex 7 to Enclosure 2**. The HA will incorporate planting proposals in this part (main works) of the project, including estimated quantities of 174 trees (164 trees to be planted within the project site and 10 trees to be planted off-site at Leisure and Cultural Services Department sites), 22 303 shrubs, 77 169 groundcovers and 1 449 m^2 of grassed area within project boundary.

/32. …..

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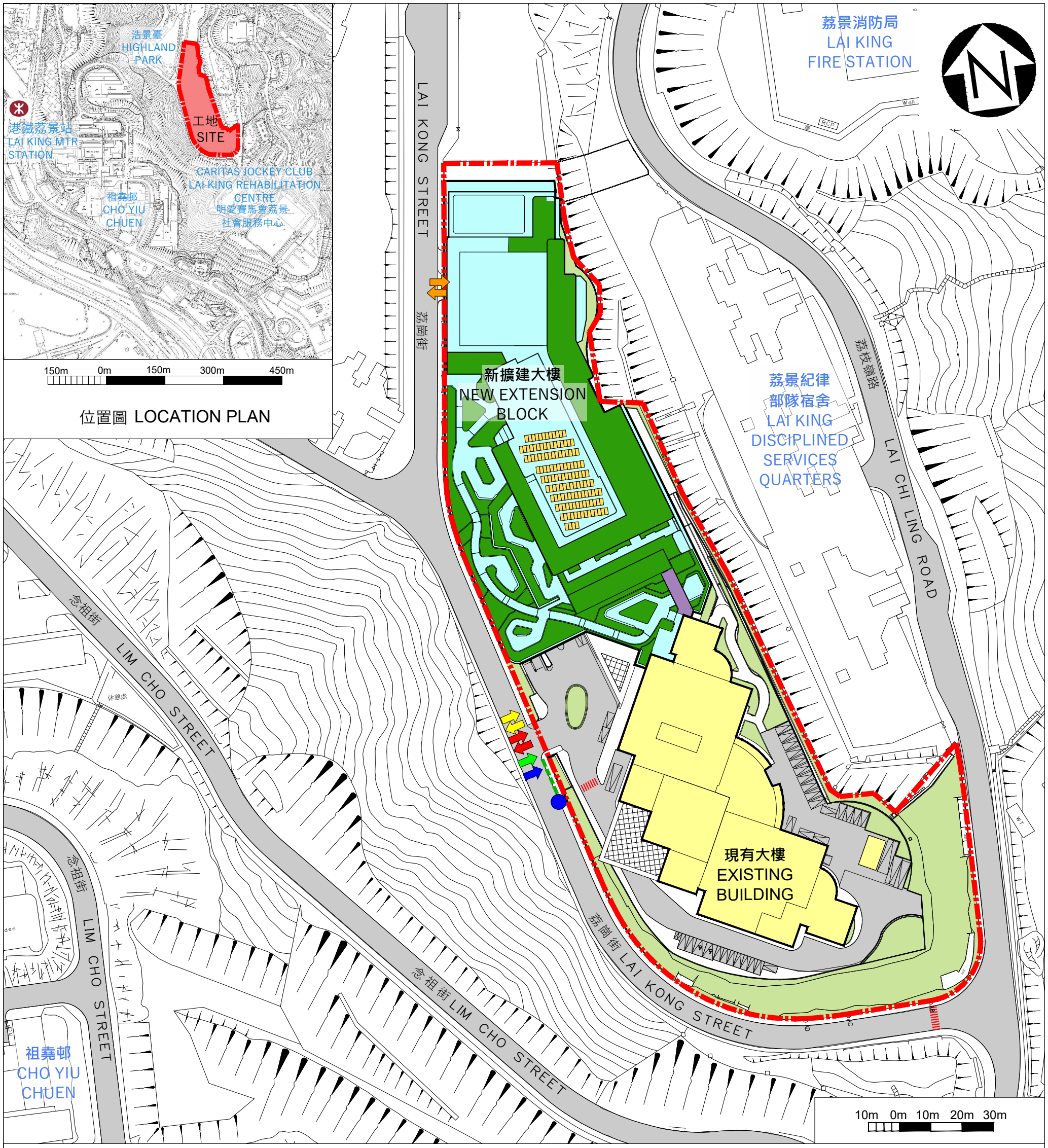
[8] Trees of particular interest are defined in paragraph 2.6.1 of the Guidelines for Tree Risk Assessment and Management Arrangement promulgated by the Development Bureau. Examples of trees of particular interest are listed as follows –

(a) Old and Valuable Trees (OVTs) and trees that are potentially registerable in the Register of OVTs;
(b) Trees of 100 years old or above;
(c) Trees with trunk diameter equal to or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal to or exceeding 25 m;
(d) Stonewall trees or trees of outstanding form (taking account of overall tree sizes, shape and any special features);
(e) 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;
(f) Endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
(g) Tree species listed in the Forestry Regulations (Cap.96A) under the Forests and Countryside Ordinance (Cap. 96);
(h) Well-known Fung Shui trees;
(i) Landmark trees with evidential records to support the historical or cultural significance of the trees;
(j) Trees which may arouse widespread public concerns; and
(k) Trees which may be subject to strong local objections on removal.

32. We estimate that the proposed works will create about 780 jobs (670 for labourers and 110 for professional/technical staff) providing a total employment of 29 250 man-months.

位置圖 LOCATION PLAN

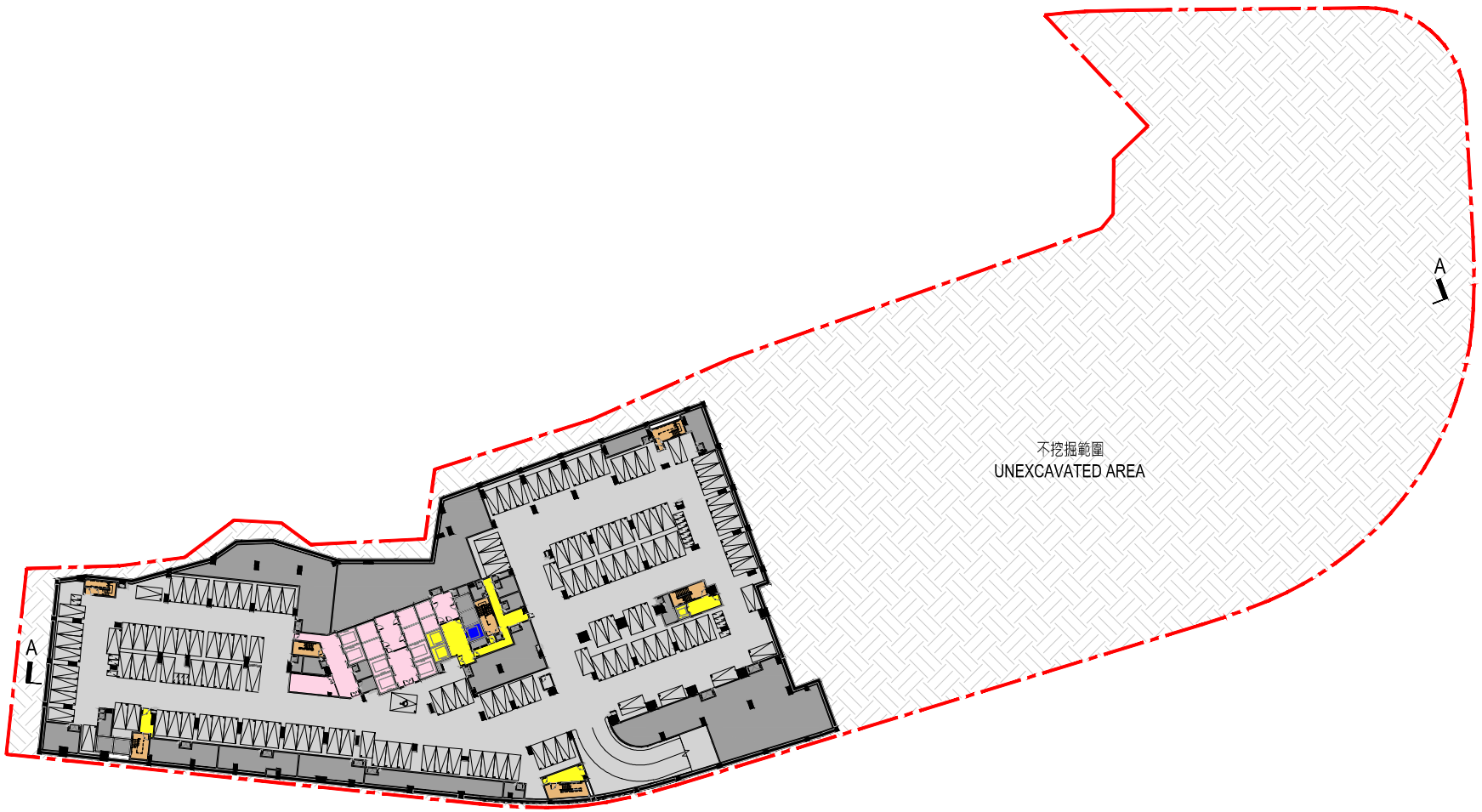


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 現有將予整修的大樓 EXISTING BUILDING TO BE REFURBISHED
- 擬建新大樓 PROPOSED NEW BUILDING
- 擬建地面綠化 PROPOSED AT-GRADE GREENING
- 擬建綠化範圍 / 天台綠化 PROPOSED LANDSCAPED AREA / LANDSCAPED ROOF
- 擬建連接橋 PROPOSED LINK BRIDGE
- 現有小巴站 EXISTING MINIBUS STOP
- 現有行人過路處 EXISTING AT-GRADE PEDESTRIAN CROSSING
- 無障礙通道 BARRIER-FREE ACCESS
- 擬建太陽能光伏板 PROPOSED PHOTOVOLTAIC PANEL
- 現有無障礙出入口 EXISTING BARRIER-FREE ENTRANCE / EXIT
- 現有車輛出入口 EXISTING VEHICULAR INGRESS / EGRESS
- 擬建車輛出入口 PROPOSED VEHICULAR INGRESS / EGRESS
- 救護車出入口 AMBULANCE INGRESS / EGRESS
- 現有行人出入口 EXISTING PEDESTRIAN ENTRANCE / EXIT

工地平面圖 SITE PLAN

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

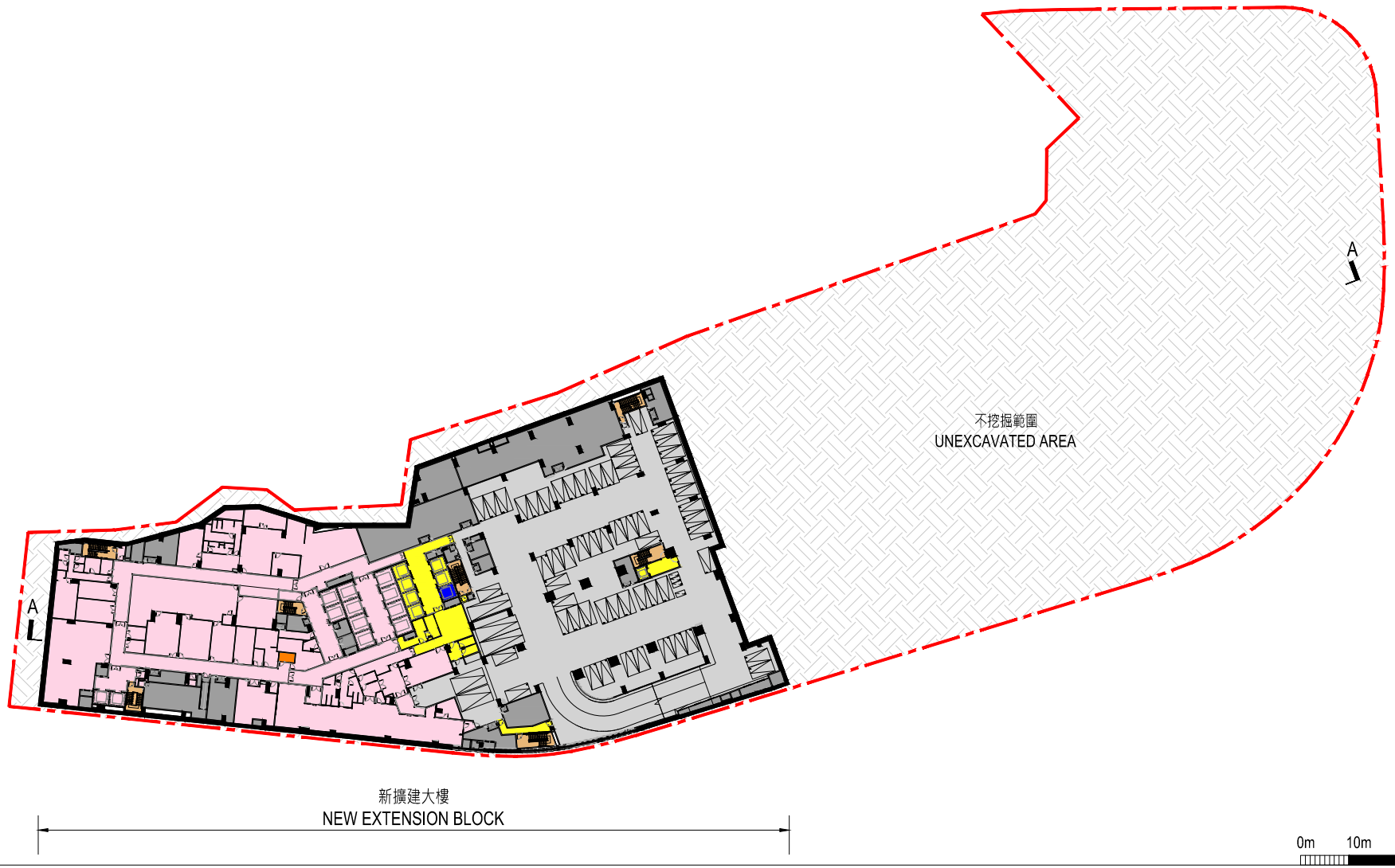


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 停車場 CAR PARKING AREA
- 暢通易達停車位 ACCESSIBLE PARKING

地下二樓平面圖
BASEMENT SECOND FLOOR PLAN

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

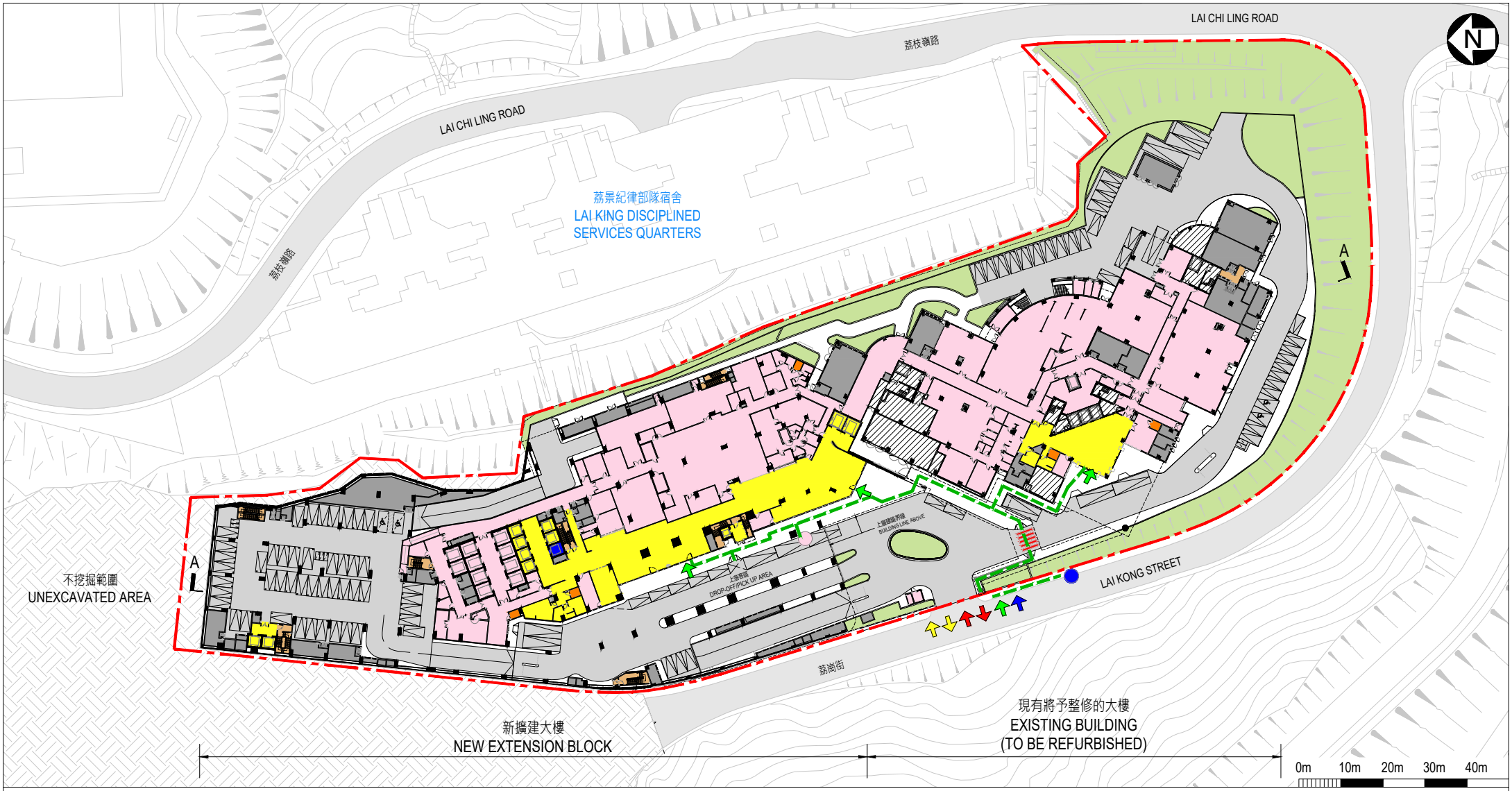


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 停車場 CAR PARKING AREA

地下一樓平面圖
BASEMENT FIRST FLOOR PLAN

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

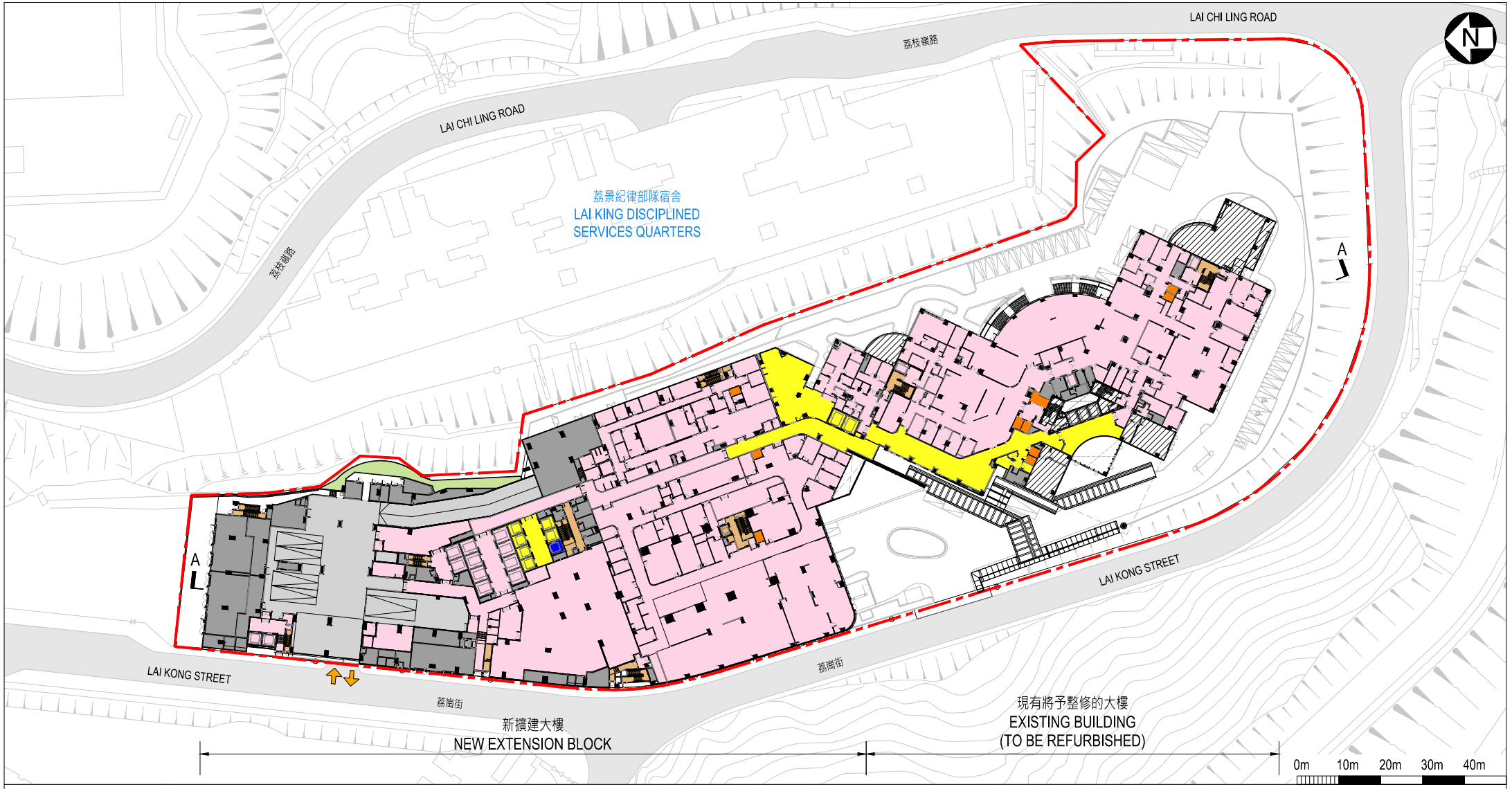


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 地面綠化 AT-GRADE GREENING
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 暢通易達洗手間 ACCESSIBLE TOILET
- 暢通易達升降機 ACCESSIBLE LIFT
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 車輛區域 VEHICULAR AREA
- 非整修範圍 NON-REFURBISHED AREA
- 暢通易達停車位 ACCESSIBLE PARKING
- 現有行人過路處 EXISTING AT-GRADE PEDESTRIAN CROSSING
- 無障礙通道 BARRIER-FREE ACCESS
- 現有小巴站 EXISTING MINIBUS STOP
- 擬建小巴站 PROPOSED MINIBUS STOP
- 現有無障礙出入口 EXISTING BARRIER-FREE ENTRANCE / EXIT
- 現有行人出入口 EXISTING PEDESTRIAN ENTRANCE / EXIT
- 現有車輛出入口 EXISTING VEHICULAR INGRESS / EGRESS
- 救護車出入口 AMBULANCE INGRESS / EGRESS

地下平面圖
GROUND FLOOR PLAN

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

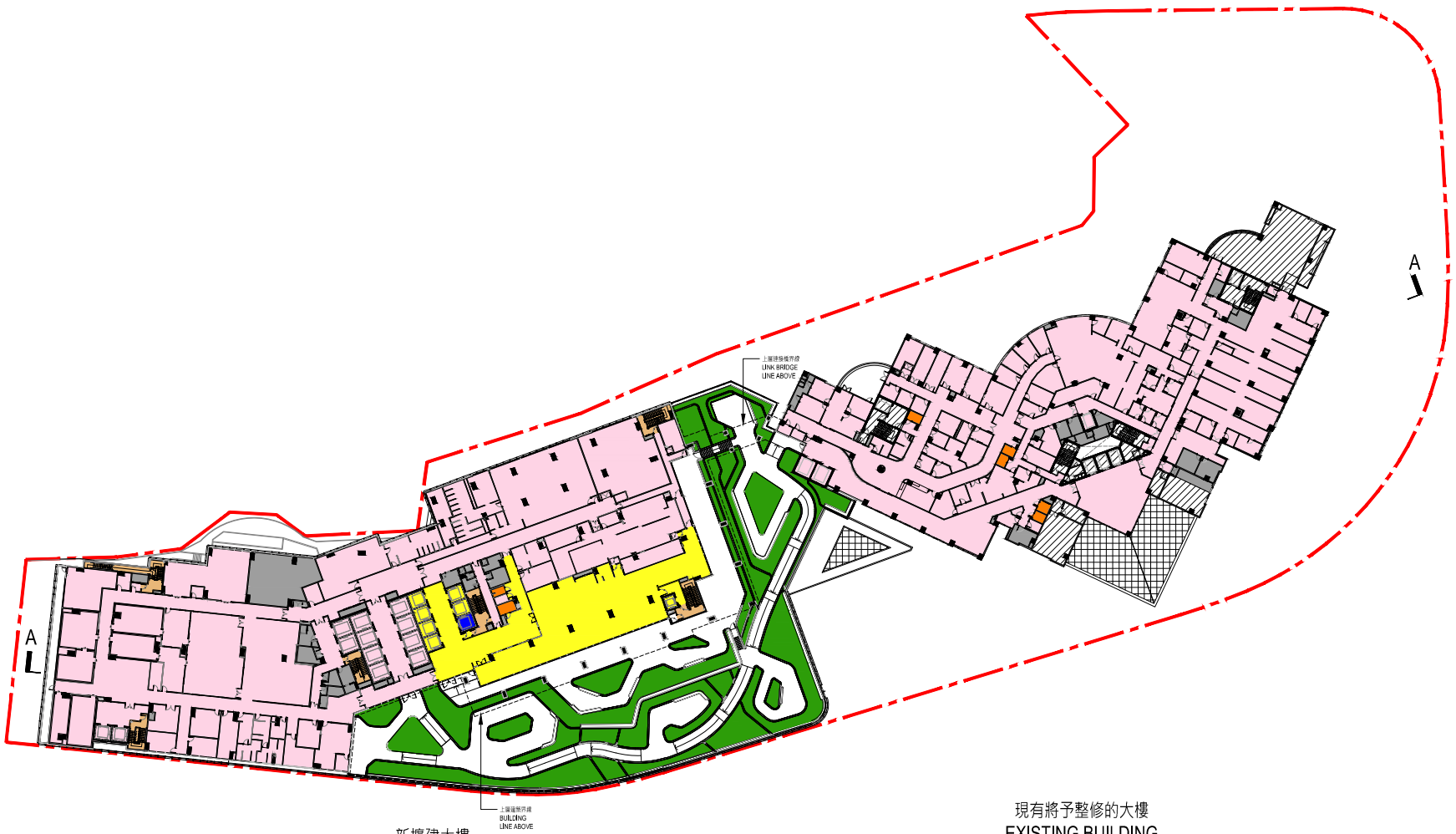


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 車輛區域 VEHICULAR AREA
- 地面綠化 AT-GRADE GREENING
- 非整修範圍 NON-REFURBISHED AREA
- 擬建車輛出入口 PROPOSED VEHICULAR INGRESS / EGRESS

一樓平面圖
FIRST FLOOR PLAN

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

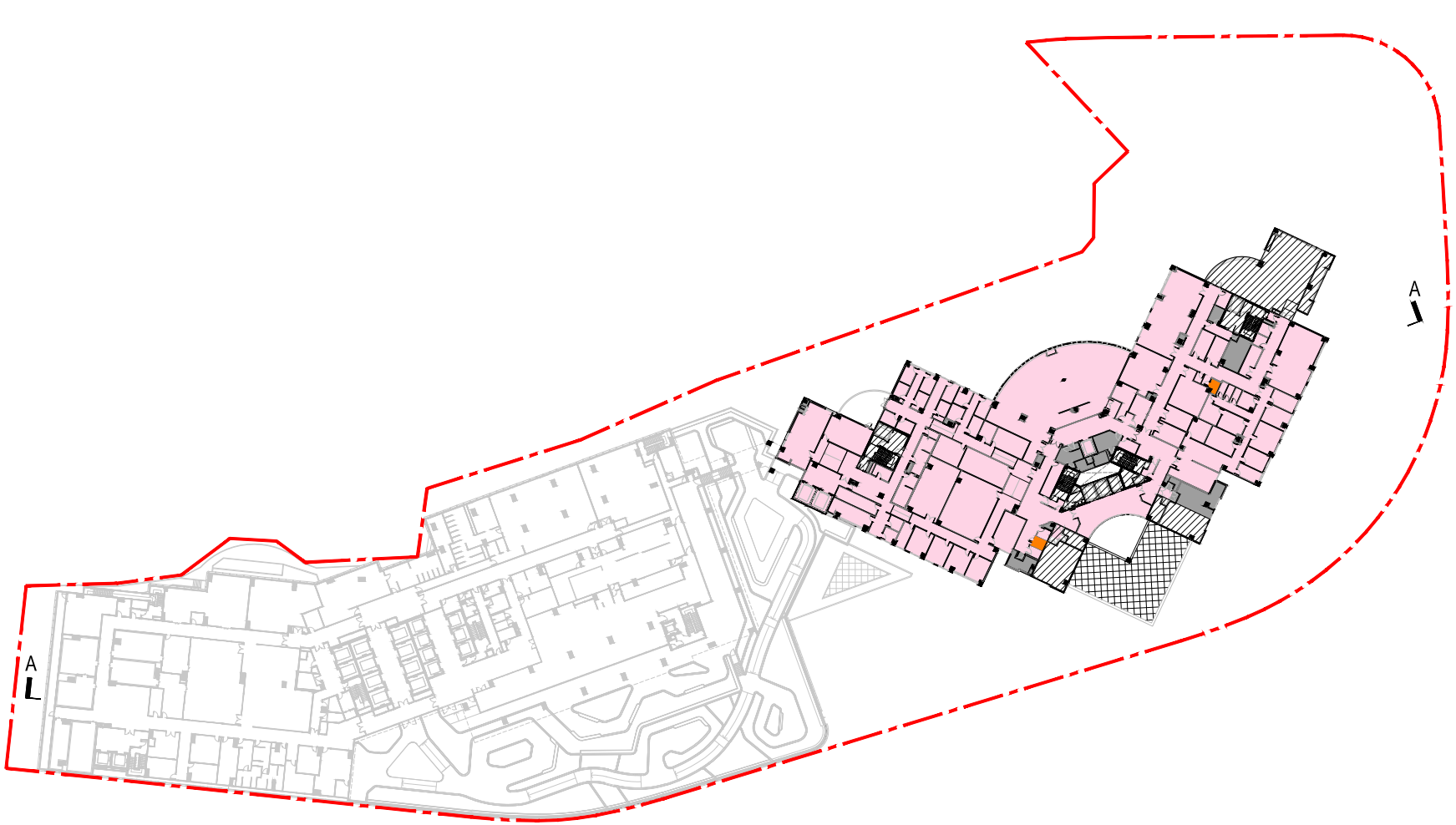


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 天台綠化 LANDSCAPED ROOF
- 非整修範圍 NON-REFURBISHED AREA

二樓平面圖
SECOND FLOOR PLAN

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

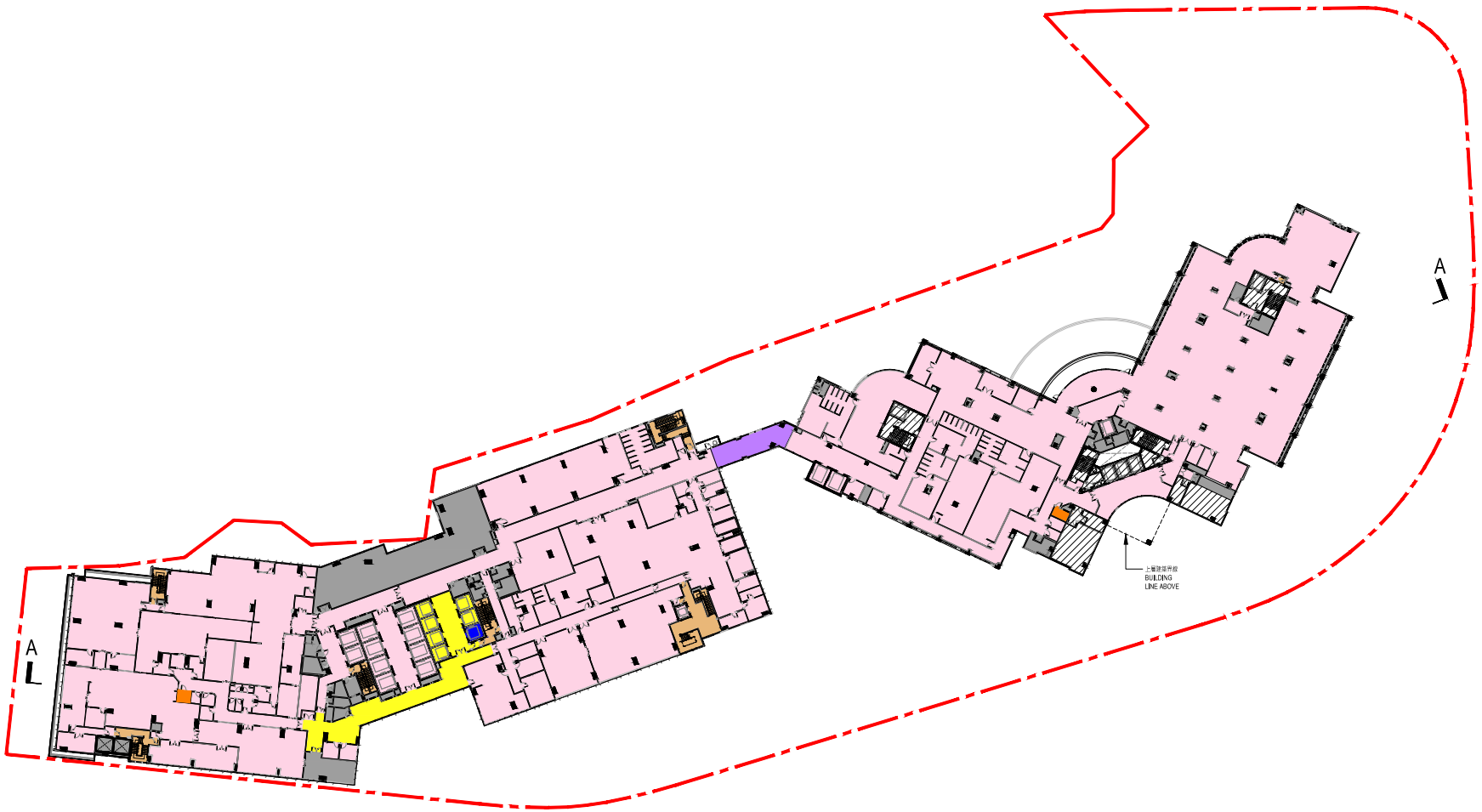


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 暢通易達洗手間 ACCESSIBLE TOILET
- 機房 PLANT ROOM
- 非整修範圍 NON-REFURBISHED AREA

三樓平面圖 (現有大樓)
THIRD FLOOR PLAN (EXISTING BUILDING)

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

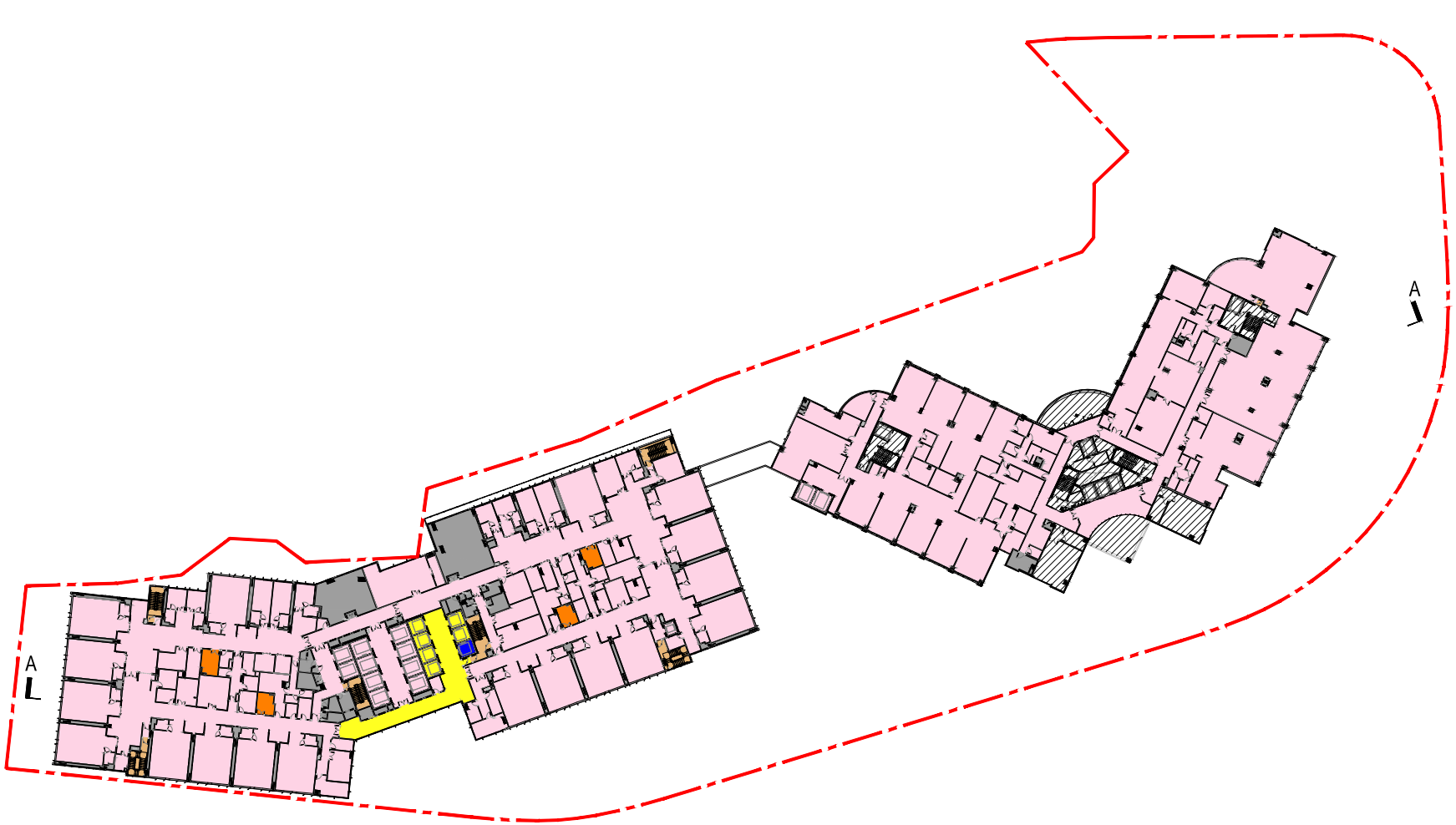


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 擬建連接橋 PROPOSED LINK BRIDGE
- 非整修範圍 NON-REFURBISHED AREA

三樓平面圖 (新擴建大樓) / 四樓平面圖 (現有大樓)
THIRD FLOOR PLAN (NEW EXTENSION BLOCK) /
FOURTH FLOOR PLAN (EXISTING BUILDING)

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

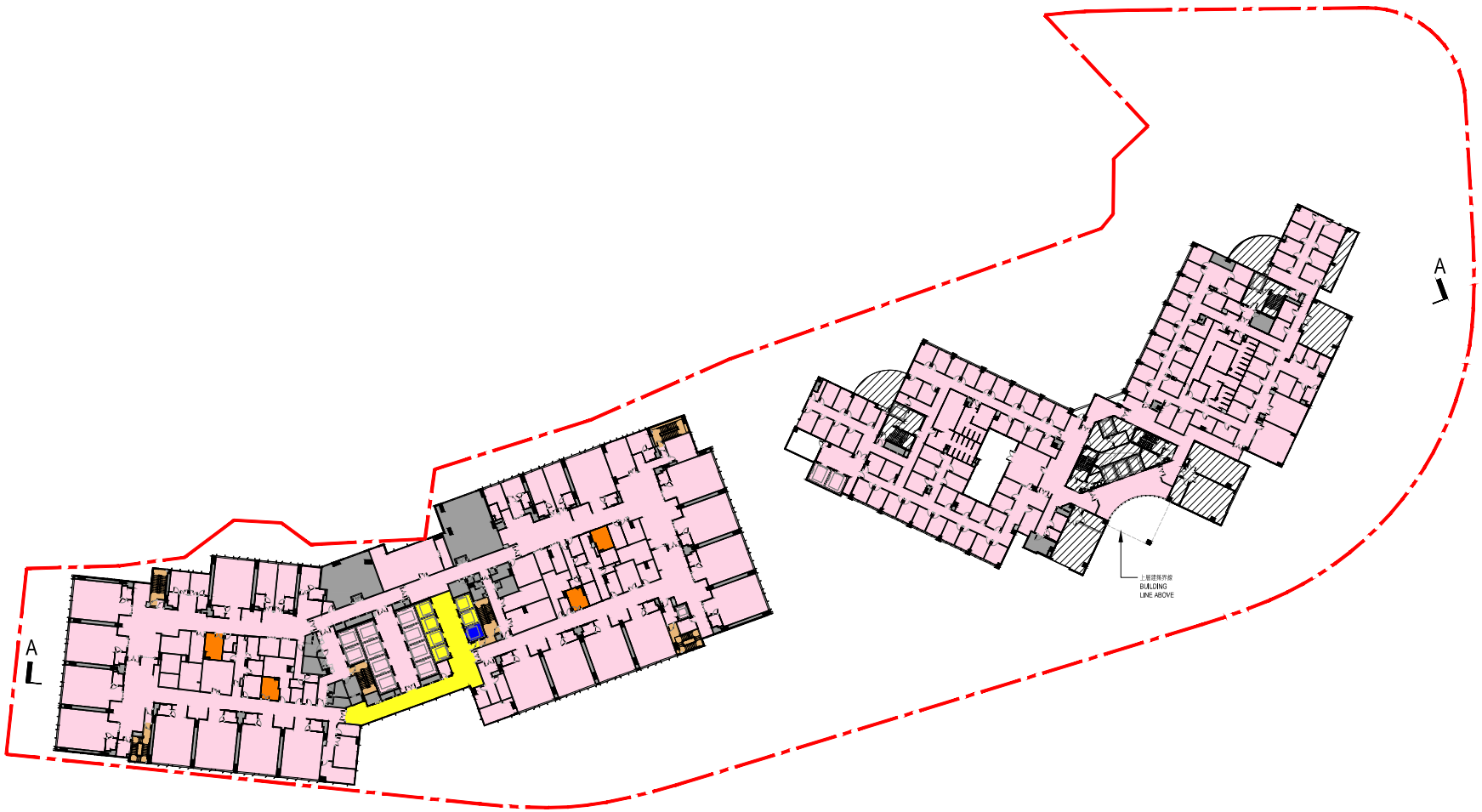


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非整修範圍 NON-REFURBISHED AREA

四樓平面圖 (新擴建大樓) / 五樓平面圖 (現有大樓)
FOURTH FLOOR PLAN (NEW EXTENSION BLOCK) /
FIFTH FLOOR PLAN (EXISTING BUILDING)

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

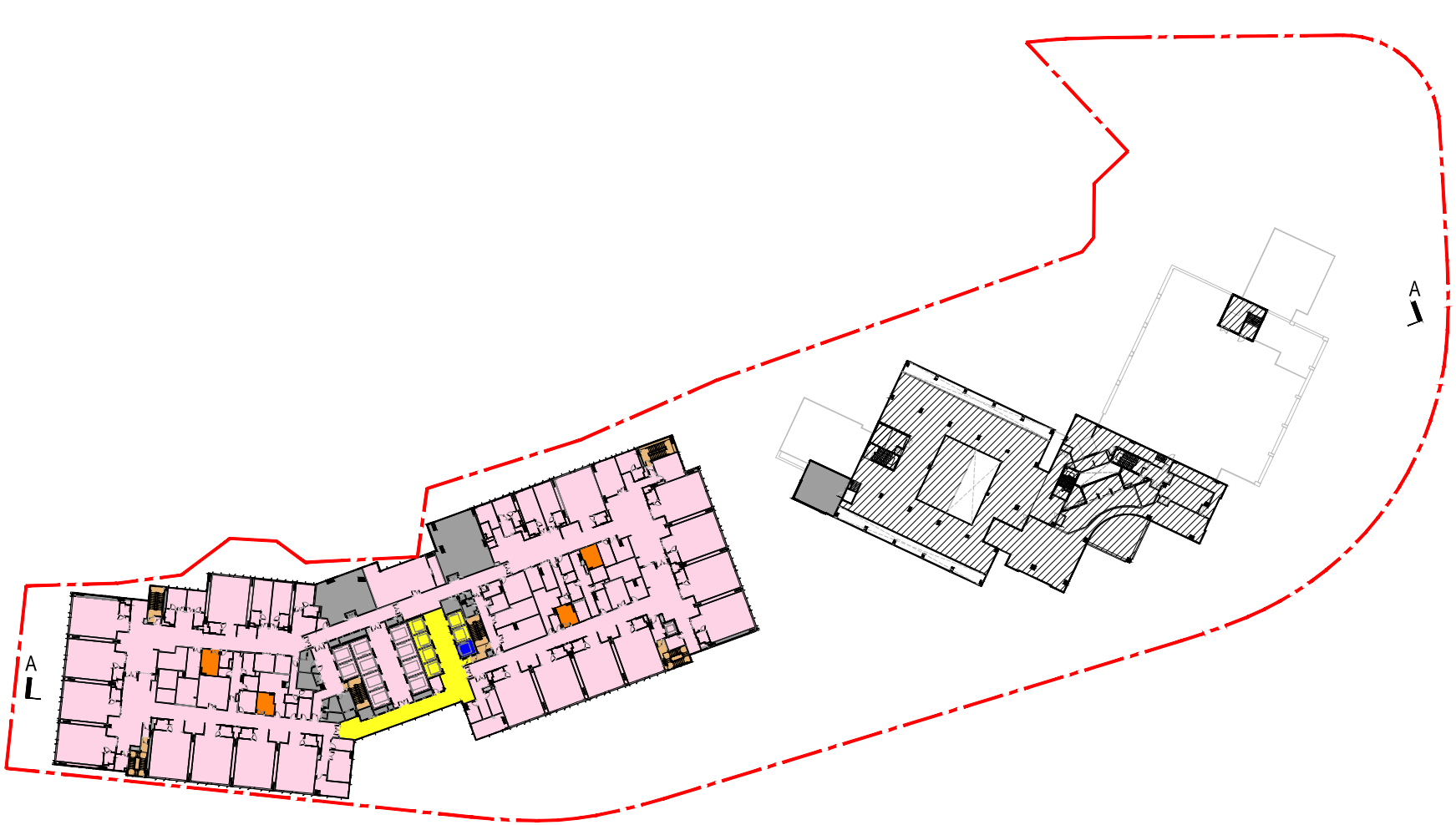


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非整修範圍 NON-REFURBISHED AREA

五樓平面圖 (新擴建大樓) / 六樓平面圖 (現有大樓)
FIFTH FLOOR PLAN (NEW EXTENSION BLOCK) /
SIXTH FLOOR PLAN (EXISTING BUILDING)

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

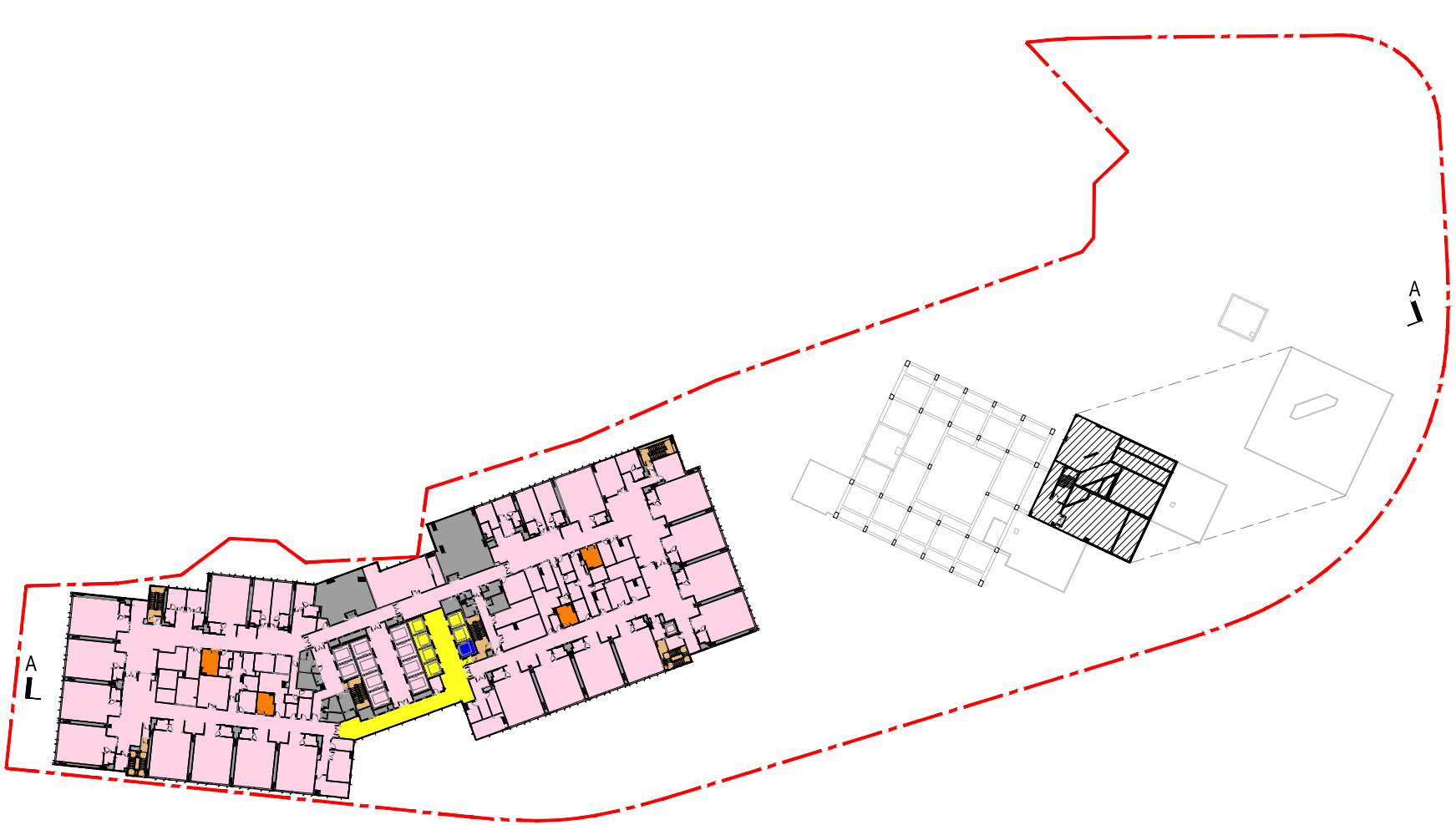


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非整修範圍 NON-REFURBISHED AREA

六樓平面圖 (新擴建大樓) / 天台平面圖 (現有大樓)
SIXTH FLOOR PLAN (NEW EXTENSION BLOCK) /
ROOF FLOOR PLAN (EXISTING BUILDING)

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

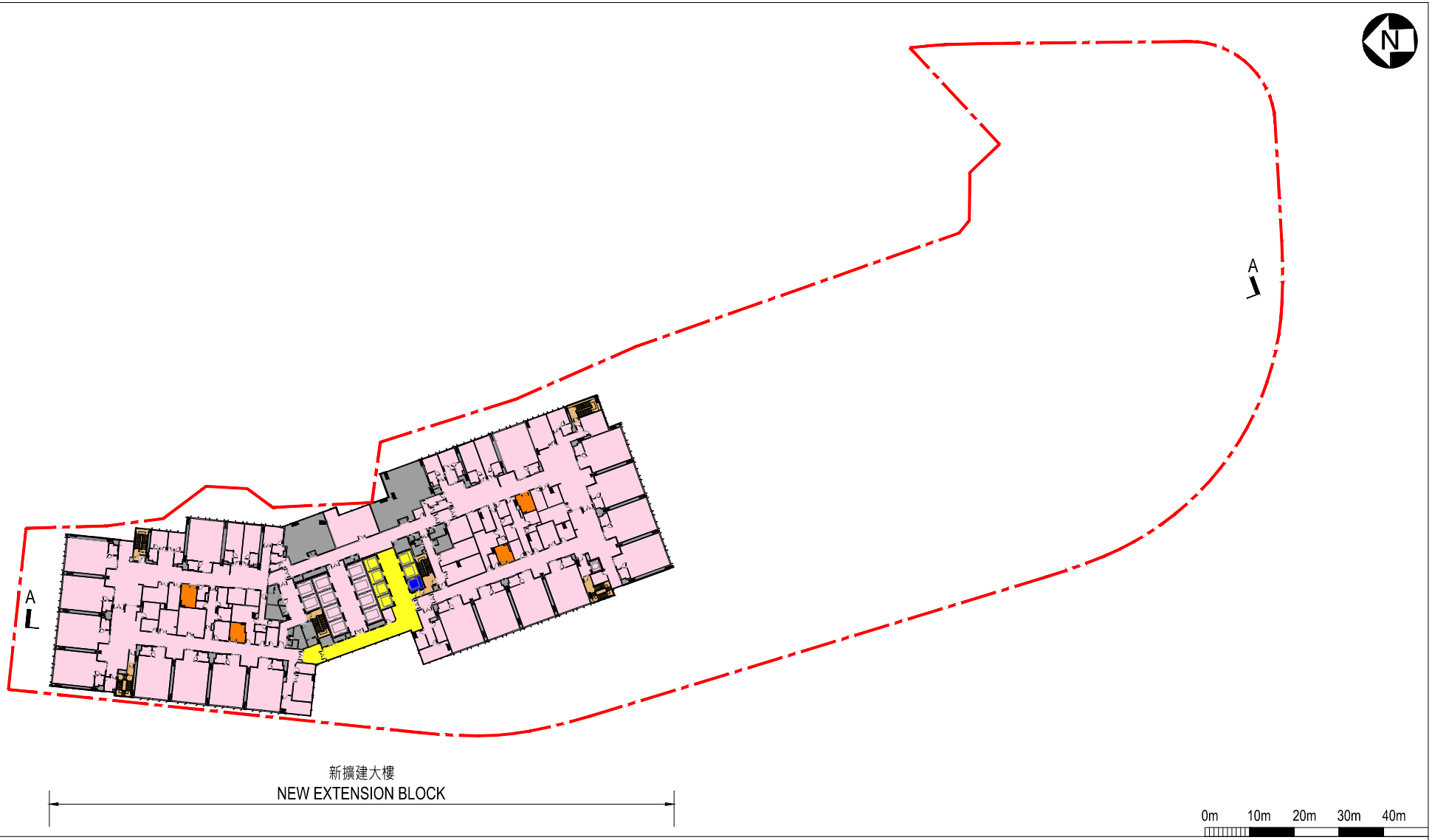


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非整修範圍 NON-REFURBISHED AREA

七樓至九樓平面圖 (新擴建大樓) / 天台上層平面圖 (現有大樓)
SEVENTH TO NINTH FLOOR PLAN (NEW EXTENSION BLOCK) / UPPER ROOF FLOOR PLAN (EXISTING BUILDING)

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

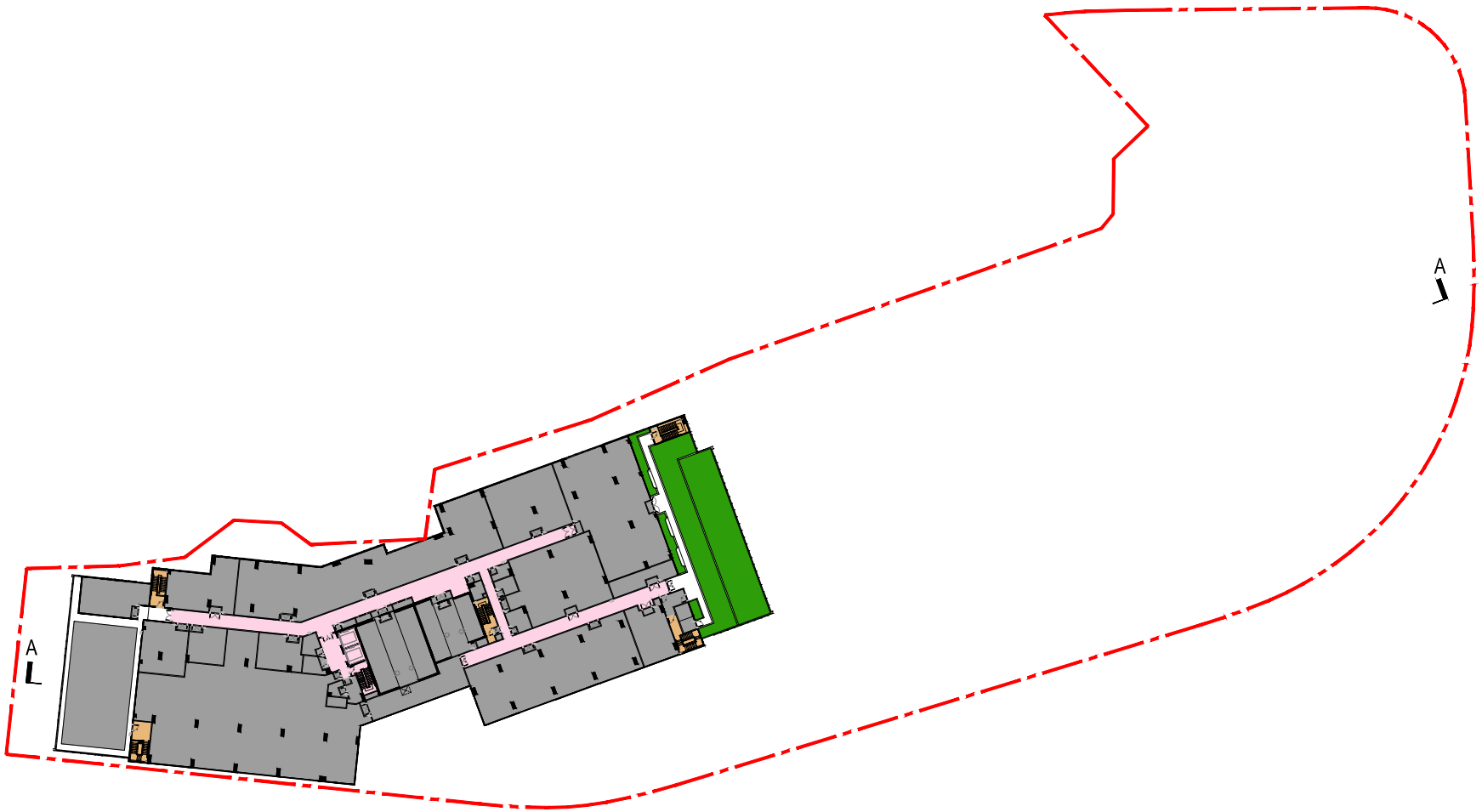


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 機房 PLANT ROOM
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET

十樓平面圖
TENTH FLOOR PLAN

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

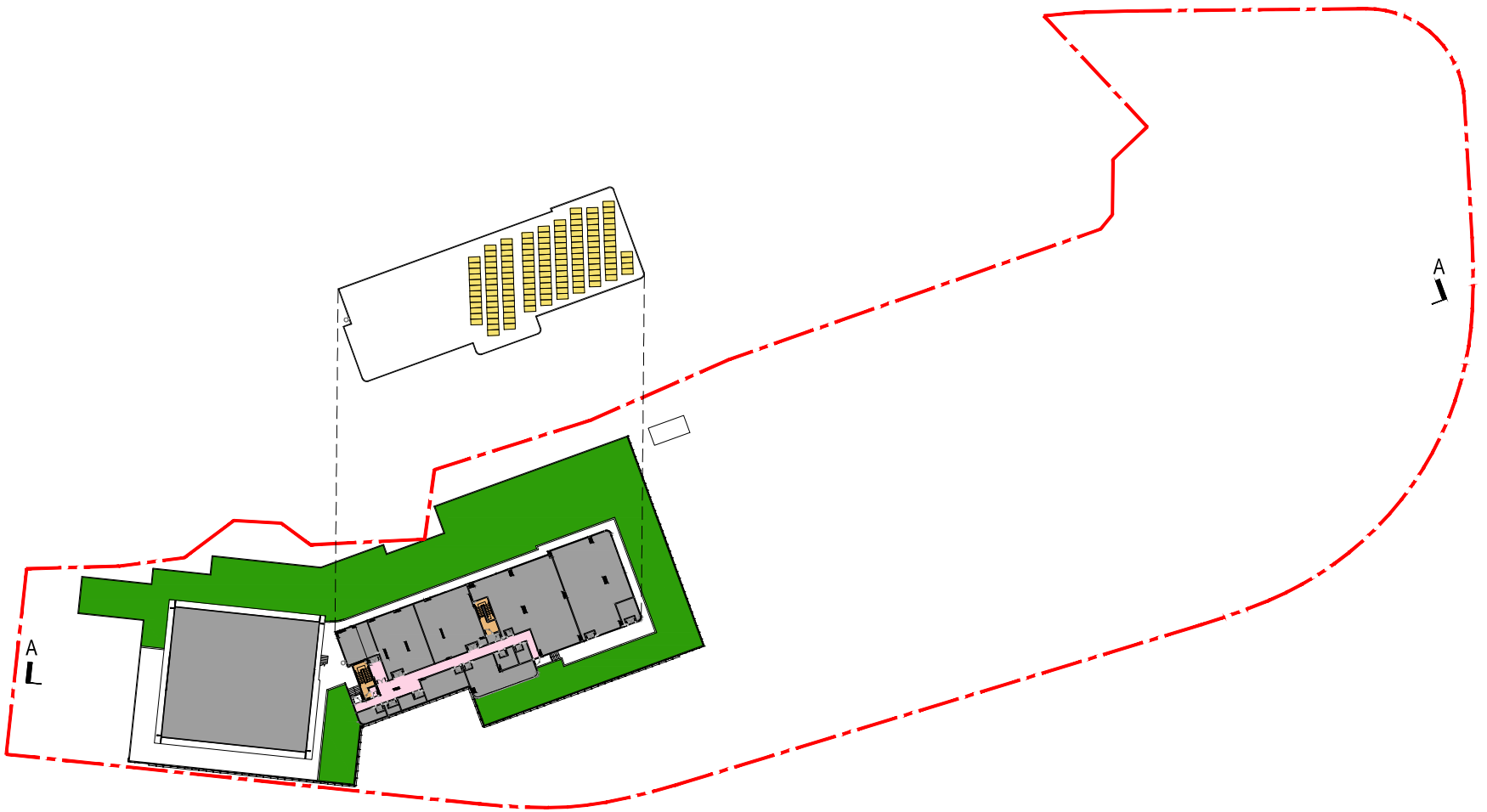


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 天台綠化 LANDSCAPED ROOF
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE

十一樓平面圖
ELEVENTH FLOOR PLAN

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

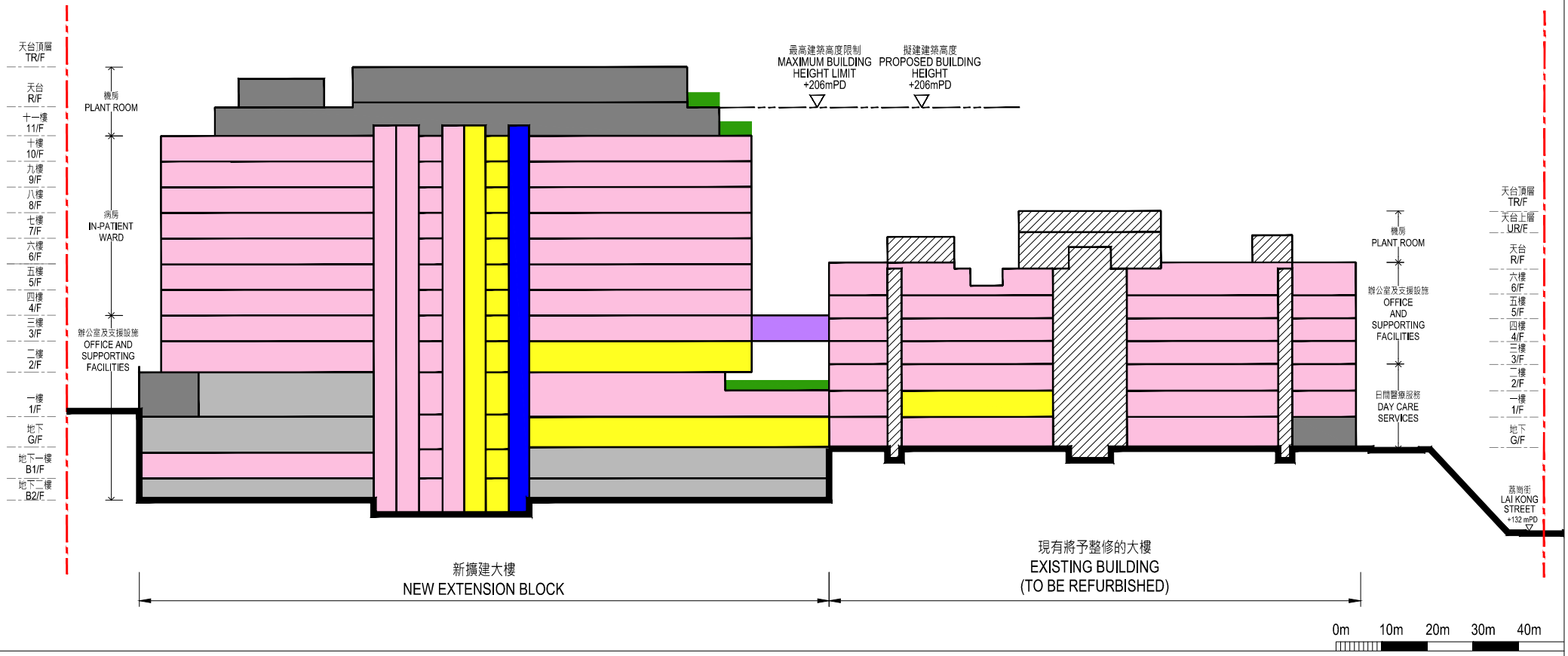


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 天台綠化 LANDSCAPED ROOF
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 擬建太陽能光伏板 PROPOSED PHOTOVOLTAIC PANEL

天台及天台頂層平面圖
ROOF AND TOP ROOF FLOOR PLANS

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL



圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 停車場 / 車輛區域 CAR PARKING AREA / VEHICULAR AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 擬建連接橋 PROPOSED LINK BRIDGE
- 天台綠化 LANDSCAPED ROOF
- 非整修範圍 NON-REFURBISHED AREA

剖面圖 A-A
SECTION A-A

114MH
瑪嘉烈醫院荔景大樓擴建計劃
EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

從西南面荔崗街望向新擴建大樓的透視圖
PERSPECTIVE VIEW OF NEW BLOCK FROM SOUTHWEST DIRECTION AT LAI KONG STREET

構思圖 ARTIST'S IMPRESSION	114MH 瑪嘉烈醫院荔景大樓擴建計劃 EXPANSION OF LAI KING BUILDING IN PRINCESS MARGARET HOSPITAL

Annex 5 to Enclosure 2

114MH - Expansion of Lai King Building in Princess Margaret Hospital

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2022 prices)

			Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee ($ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	–	–	–	78.4
		Technical	–	–	–	19.6
					Sub-total	98.0 #
(b)	Resident site staff (RSS) costs (Note 3)	Professional	165	38	1.6	23.2
		Technical	976	14	1.6	48.4
					Sub-total	71.6
	Comprising -					
	(i) consultants' fees for management of RSS			2.2 #		
	(ii) remuneration of RSS			69.4 #		
					Total	**169.6**

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS (as at now, MPS salary point 38 = $88,015 per month and MPS salary point 14 = $30,990 per month).

2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the provision of contract administration and site supervision relating to the project. The assignment will only be executed subject to the Finance Committee's approval to upgrade **114MH** to Category A.

3. The consultants' fees and RSS cost for site supervision are based on the estimate prepared by the Hospital Authority. 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 2.

114MH – Expansion of Lai King Building in Princess Margaret Hospital

Indicative list of furniture and equipment items with unit cost of $1 million or above

Item description	Quantity	Unit cost ($ million)	Total cost ($ million)
Analysers, Laboratory, Clinical Chemistry / Immunoassay	2	4.0	8.0
Analysers, Laboratory, Haematology, Blood Grouping, Automated	1	2.1	2.1
Analysers, Laboratory, Haematology, Cell Counting, Automated	1	4.3	4.3
Analysers, Laboratory, Haematology, Coagulation, Automated	2	1.3	2.6
Analysers, Laboratory, Immunoassay, Chemiluminescent	3	1.2	3.6
Analysers, Physiologic, Neuromuscular Function, Posturographic	1	2.1	2.1
Audio-visual System	1	2.0	2.0
Automation Systems, Medication Dispensing	1	1.5	1.5
Autonomous Mobile Robot	1	7.7	7.7
Dishwashing Machine, Commercial (with Electric Soak Sink)	1	1.5	1.5
Dishwashing Machine, Commercial (with Stainless Steel Sorting Table)	1	1.5	1.5
Exercisers, Computer-aided Training, Gait	1	4.7	4.7
Immersive Mixed Reality Cave System	1	1.4	1.4
Information Systems, Picture Archiving and Communication, Radiology	1	3.4	3.4

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Integrated Telecommunication System	1	55.8	55.8
Mobile Communication System, Digital / Security	1	1.1	1.1
Radiographic Systems, Digital	1	2.7	2.7
Samplers, Laboratory, Automated	1	12.1	12.1
Scanning Systems, Computed Tomography, Spiral	1	16.0	16.0
Scanning Systems, Ultrasonic, General Purpose	1	2.0	2.0
Shelving System, Storage and Display, Mobile (270 Bays)	1	1.4	1.4
Shelving System, Storage and Display, Mobile (682 Bays)	1	3.6	3.6
Smart Warehouse System	1	2.1	2.1
Smart Warehouse System with Pick-to-light System	1	2.4	2.4
Smokeless Joss Paper Furnace	1	1.7	1.7
Soiled Linen Collection System	1	3.5	3.5
Sterilising Units, Plasma	2	1.0	2.0
Sterilising Units, Steam, Bulk	4	1.9	7.6
Stimulators, Electromagnetic, High Intensity, Brain / Spinal Cord	1	1.1	1.1
Washer / Decontamination Units	2	2.5	5.0
Washer / Decontamination Units, Surgical Instrument (Multi-chamber)	2	4.0	8.0
Washer / Decontamination Units, Surgical Instrument (Single-chamber)	2	1.0	2.0

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Washer / Decontamination Units, Surgical Instrument (Vacuum)	2	1.4	2.8
Water Purification Systems, Reverse Osmosis	1	3.8	3.8
Working Clothes Dispensing Machines System	1	3.9	3.9

114MH – Expansion of Lai King Building in Princess Margaret Hospital
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 TPRP		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	
A44A	*Yulania* spp.	玉蘭	4.0	108	2.5	Medium	Average	Average	Average	Low	Tree transplanting is proposed in view of the conservation status, tree condition, low tree risk rating and the relatively small tree size that is technically feasible for transplanting.	Cap.96	Transplant (within site)	Hospital Authority (GLTMS to provide arboricultural advice)		-
T369A	*Yulania* spp.	玉蘭	4.0	110	2.0	Low	Poor	Average	Average	Low	Tree transplanting is proposed in view of the conservation status, tree condition, low tree risk rating and the relatively small tree size that is technically feasible for transplanting.	Cap.96	Transplant (within site)	Hospital Authority (GLTMS to provide arboricultural advice)		Parasitic plant on crown

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;
Cap. 96 – Species Scheduled under Forests and Countryside Ordinance, Cap 96;
IUCN:VU – "Vulnerable" under IUCN Red List of Threatened Species.

13MD - Redevelopment of Kwong Wah Hospital, phase 2

PROJECT SCOPE AND NATURE

We propose to carry out the main works of the redevelopment project of Kwong Wah Hospital (KWH), phase 2, which mainly comprise demolition, foundation, superstructure and associated works as follows –

(a) demolition of all the existing hospital buildings except Tung Wah Group of Hospitals (TWGHs) Tsui Tsin Tong Outpatient Building (TTT OPB) and Tung Wah Museum (TWM);

(b) construction of phase 2 of the new hospital complex;

(c) protection works for TWM;

(d) landscaping and road works;

(e) alteration and addition (A&A) of TTT OPB and phase 1 of the new hospital complex[1]; and

(f) consultancy services for contract administration and site supervision.

2. A site and location plan, floor plans, a sectional drawing and an artist's impression for the project are at **Annexes 1 to 4 to Enclosure 3**.

3. We plan to seek funding approval from the Finance Committee (FC) to upgrade the proposed project to Category A in the current legislative session. The Hospital Authority (HA) invited tenders in parallel for the proposed works in January 2023, and the returned tender prices have been reflected in the estimated cost of the project. We plan to award the contract to the successful tenderer and commence the proposed works, upon obtaining funding approval from the FC and completion of the move-in to phase 1 of the new hospital complex, for target completion in about six and a half years. The A&A works of TTT OPB and phase 1 of the new hospital complex will commence upon completion of the new building and decanting to match the commissioning programme. The KWH will remain functional at all times during the works period and any disruption of services, if unavoidable, will be kept to a minimum.

/JUSTIFICATION …..

[1] To ensure uninterrupted hospital services during the construction of phase 2 of the new hospital complex, part of the essential services will be maintained in operation in phase 1 of the new hospital complex via interim provision. A&A works to the affected areas of phase 1 of the new hospital complex will therefore be required after completion of phase 2 of the new hospital complex.

JUSTIFICATION

4. Established in 1911 by the TWGHs, the KWH is an acute hospital offering a comprehensive range of acute care services in the Kowloon Central Cluster (KCC) of the HA.

5. The majority of the KWH buildings were built over 50 years ago, with outdated building services installations, deteriorating structural conditions and inadequate space provision for meeting present-day service demand. In 2021-22, there were around 81 800 in-patient and day in-patient discharges and deaths, and around 331 960 specialist outpatient (clinical) attendances at the KWH, accounting for 4.7% and 4.2% respectively of that for all HA hospitals. The extremely heavy utilisation has accelerated deterioration of its facilities. The combined population of Kowloon City, Yau Tsim Mong (YTM) and Wong Tai Sin districts is projected to increase from 1 174 900 in 2022 to 1 185 200 in 2029, among which elderly of 65 years old or above will rise from 244 200 in 2022 to 331 700 in 2029, representing an increase of 36%[2].

6. To ensure the development of an appropriately balanced healthcare system, HA proposes to redevelop the KWH for meeting modern modes of healthcare service delivery, improving space standards and layout of the hospital and upgrading building facilities. Such improvements will enhance the operational efficiency of the hospital and provide a comfortable, patient-oriented environment with adequate capacity and capability to deliver holistic and seamless services to the general public.

7. According to the Clinical Services Plan for the KCC formulated in 2016, the KWH will provide acute medical services and specialist care for the community, especially for residents in YTM District. Hospitals and institutions in the KCC will adopt a collaborative approach to ensure comprehensive care and enhance service linkage for patients from various districts in the Cluster. Under the service network arrangement, acute services for the KCC will be provided by the New Acute Hospital (NAH) at Kai Tak Development Area and by the KWH. The acute hospitals in the KCC will be supported by the extended care hospitals nearby to enhance the continuity of care for patients within the respective catchment districts. In particular, Our Lady of Maryknoll Hospital, TWGHs Wong Tai Sin Hospital and Hong Kong Buddhist Hospital will form a service network with the NAH while Kowloon Hospital will provide convalescent and rehabilitation services for patients transferred from the KWH.

/8. …..

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[2] According to the report of "Projections of Population Distribution 2021-2029" compiled by the Planning Department.

8. A comprehensive redevelopment of the KWH can augment the role of the KWH as an acute hospital providing a full range of in-patient and ambulatory care services. The redevelopment project is planned to embrace the philosophy of ambulatory care as a new model of service delivery. Ambulatory care services will be delivered among different clinical specialties in a patient oriented setting with a view to reducing the need for hospitalisation. New medical oncology services including front-line management, consultation services and chemotherapy programmes will be provided in the ambulatory care centre. Other services including clinical pathology, allied health, business support and staff facilities will also be enhanced and expanded. The redeveloped KWH will also accommodate the reprovisioned facilities of Chinese Medicine services and preventive care services currently run by the TWGHs, including its integrated Chinese and western medicine in-patient accommodation with over 50 self-financed beds.

9. The proposed redevelopment project is being implemented in four works stages, namely (a) preparatory works; (b) demolition and substructure works for phase 1; (c) superstructure and associated works for phase 1; and (d) main works for phase 2 (as mentioned in paragraph 1 above). Upon completion of the redevelopment project, we aim to provide 520 additional beds (including six haemodialysis day beds) and ten additional operating theatres. The annual capacity for specialist outpatient clinic attendances will also be increased by 255 600.

FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the works project to be $8,996.4 million in money-of-the-day (MOD) prices (including the contribution of $96.0 million from the TWGHs) (please see paragraph 13 below), broken down as follows –

		$ million (in MOD prices)
(a)	Site works	18.7
(b)	Demolition	46.7
(c)	Foundation[3]	142.4

/(d) …..

[3] Foundation works cover the construction of piles and footings and all related tests and monitoring.

			$ million (in MOD prices)
(d)	Basement[4]		460.9
(e)	Building[5]		2,354.1
(f)	Building services[6]		2,933.5
(g)	Drainage		8.1
(h)	External works		52.6
(i)	Energy conservation, green and recycled features[7]		109.9
(j)	A&A works of TTT OPB[8]		358.9
(k)	A&A works of phase 1 of the new hospital complex and Tung Po Court[9]		337.4
(l)	Furniture and equipment (F&E)[10]		1,096.8
(m)	Consultants' fees for		99.9
	(i) contract administration[11]	96.5	
	(ii) management of resident site staff (RSS)	3.4	

/(n) …..

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[4] Basement works cover construction of basement enclosure, waterproofing and excavation works.

[5] Building works cover construction of the substructure and superstructure of phase 2 of the new hospital complex.

[6] Building services works cover electrical installations, ventilation and air-conditioning installations, fire services installations, lift and escalator installations and other specialist installations.

[7] Energy conservation, green and recycled features cover features stated in paragraphs 27 to 29.

[8] A&A works of TTT OPB cover demolition, structural strengthening works, internal building works and associated building service works.

[9] A&A works of phase 1 of the new hospital complex and Tung Po Court cover demolition, structural strengthening works, internal building works, associated building service works and reinstatement works at Tung Po Court.

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

[11] The estimated fee covers quantity surveying services, site supervision, project management, management of accounts and contract administration, etc.

		$ million (in MOD prices)
(n)	Remuneration of RSS	158.7
(o)	Contingencies	817.8
	Total	8,996.4

11. The HA will engage consultants to undertake contract administration and directly employ RSS for the site supervision of the project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at **Annex 5 to Enclosure 3**.

12. 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 arrangements of the project, including the use of simple structural systems, standardised and common finishing materials, simple and functional detailing, prefabrication systems, and Modular Integrated Construction, etc. The construction floor area (CFA) of the phase 2 of the new hospital complex is about 130 818 square metres (m^2). The estimated construction unit cost, represented by the building and the building services costs, is $40,420 per m^2 of CFA in MOD prices. We consider this unit cost reasonable as compared with those of similar hospital projects, for example, **75MM** – Redevelopment of Prince of Wales Hospital, phase 2 (stage 1).

13. The TWGHs, the parent organisation of the KWH, has undertaken to contribute $96.0 million in MOD prices towards the capital cost of the proposed main works under this funding application. The Government will fund the remaining commitment of $8,900.4 million in MOD prices for the proposed works, calculated as follows –

		$ million (in MOD prices)
(a)	Capital cost to be funded by the Government	8,900.4
(b)	Contribution from the TWGHs	96.0
	Total	8,996.4

/14. …..

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

Year	$ million (MOD)	
	Funded under 13MD	**Total construction cost**
2023 – 24	147.9	159.9
2024 – 25	489.2	501.2
2025 – 26	1,152.0	1,164.0
2026 – 27	2,109.5	2,121.5
2027 – 28	1,788.7	1,800.7
2028 – 29	1,179.8	1,179.8
2029 – 30	922.0	958.0
2030 – 31	520.0	520.0
2031 – 32	224.0	224.0
2032 – 33	167.1	167.1
2033 – 34	98.8	98.8
2034 – 35	59.7	59.7
2035 – 36	41.7	41.7
	8,900.4	8,996.4

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 2023 to 2036. The HA will deliver the proposed works through lump-sum contracts as the scope of the works can be clearly defined in advance. The contracts will provide for price adjustment.

/16. …..

16. The HA has assessed the requirements for F&E for the project, and estimates the F&E costs to be $1,096.8 million. An indicative list of major F&E items (costing $1 million or above per item) to be procured for the project is at **Annex 6 to Enclosure 3**.

17. We estimate the annual recurrent expenditure arising from the whole redevelopment project to be $1,658.0 million.

PUBLIC CONSULTATION

18. The HA consulted the Yau Tsim Mong District Council (YTMDC) on 31 January 2023 in respect of the KWH phase 2 redevelopment project. Members of the YTMDC in general supported the proposed project.

19. We consulted the Legislative Council Panel on Health Services on 19 April 2023. Members of the Panel supported the submission of the funding proposal to the Public Works Subcommittee for consideration. In response to enquiry from Members raised at the Panel meeting, we submitted the supplementary information to the Panel on Health Services on 24 May 2023.

ENVIRONMENTAL IMPLICATIONS

20. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The HA completed a Preliminary Environmental Review (PER) for the project, which covers the proposed demolition, foundation, superstructure and associated works as stated in paragraph 1 above, in December 2015. The PER concluded and the Director of Environmental Protection agreed that with the implementation of mitigation measures recommended in the PER, the project would not have long-term adverse environmental impacts.

21. The HA will incorporate into the works contract mitigation measures recommended in the PER in order to ensure that the environmental impacts arising from the demolition and construction works are within established standards and guidelines. These include the use of quality powered mechanical equipment and temporary noise barriers or screens for noisy demolition and construction activities, the use of scaffolding mounted acoustics mat to minimise noise impacts generated during building demolition, avoidance of noisy construction activities during examination periods of the nearby educational institutions, frequent cleaning and watering of the site, and the provision of wheel-washing facilities. Provisions have also been included in the contract to require the contractor to implement necessary

/measures …..

measures to prevent causing disturbance and nuisance to the nearby sensitive receivers including educational institutions. The HA has included in the project estimates the cost for the implementation of the environmental mitigation measures.

22. At the planning and design stages, the HA has 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, the HA 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 (PFRFs)[12]. The HA 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.

23. At the construction stage, the 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. The HA will ensure that the day-to-day operations on site comply with the approved plan. The HA will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. The HA will control the disposal of inert construction waste and non-inert construction waste at PFRFs and landfills respectively through a trip-ticket system.

24. The HA estimates that the project will generate in total 353 000 tonnes of construction waste. Of these, the HA will reuse 3 530 tonnes (1%) of inert construction waste on site and deliver 324 760 tonnes (92%) of inert construction waste to PFRFs for subsequent reuse. The HA will dispose of the remaining 24 710 tonnes (7%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRFs and landfills is estimated to be $28.0 million for this project (based on a unit charge rate of $71 per tonne for disposal at PFRFs 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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[12] 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 licence issued by the Director of Civil Engineering and Development.

HERITAGE IMPLICATIONS

25. The Tung Wah Museum is a Declared Monument (DM) which is within the project site boundary. The HA completed in May 2015 a Heritage Impact Assessment (HIA) to assess the effect of the redevelopment project on the DM and devised measures to mitigate the impacts concerned. The Antiquities Advisory Board was consulted on the HIA report at its meeting held on 4 June 2015 and members were generally supportive of the findings of the HIA; and the Antiquities and Monuments Office (AMO) has no objection in principle to the HIA report. The HA will ensure that the mitigation measures, recommendations and requirements stipulated in the HIA report are properly implemented throughout the construction works and future maintenance. In case of any amendments to the mitigation measures, recommendations and requirements stipulated in the HIA report, the HA will further consult the AMO as necessary to formulate additional mitigation measures to ensure that any possible impact on the heritage site is acceptable from the conservation perspective.

LAND ACQUISITION

26. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

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

(a) high efficiency chiller;

(b) heat pump;

(c) demand control of supply air;

(d) building energy management system;

(e) energy efficient lift system;

(f) photovoltaic system; and

(g) solar hot water system.

28. For greening features, the HA will provide green roofs, multi-purpose gardens, and rehabilitation garden (including outdoor fitness area and outdoor sitting area) for environmental and amenity benefits.

/29. …..

29. For recycled features, the HA will adopt rainwater harvesting system for irrigation purpose.

30. The total estimated cost for adoption of the above features is around $109.9 million in MOD prices (including $53.8 million in MOD prices for energy efficient features) which has been included in the cost estimate of the project. The energy efficient features will achieve 10% energy savings in the annual energy consumption with a payback period of about six years.

BACKGROUND INFORMATION

31. The redevelopment of KWH (main works for phase 1 and 2) is one of the projects covered by the First Ten-year Hospital Development Plan. On 8 February 2013, the FC approved upgrading the first part of **13MD** as **14MD** "Redevelopment of Kwong Wah Hospital – preparatory works" to Category A at an estimated cost of $552.7 million in MOD prices covering site investigation, building survey, decanting works as well as consultancy services for outline sketch design, detailed design, tender documentation and tender assessment for the main works. The preparatory works commenced in March 2013.

32. On 29 April 2016, the FC approved upgrading the second part of **13MD** as **15MD** "Redevelopment of Kwong Wah Hospital – main works (demolition and substructure works for phase 1)" to Category A at an estimated cost of $654.8 million in MOD prices. The scope mainly covered demolition, foundation works, and excavation and lateral support works for phase 1. The works commenced in June 2016 and was completed in May 2019. On 18 May 2018, the FC approved upgrading the third part of **13MD** as **16MD** "Redevelopment of Kwong Wah Hospital – main works (superstructure and associated works for phase 1)" to Category A at an estimated cost of $10,049.3 million in MOD prices. The scope mainly covered construction of the first phase of a new hospital complex, provision of associated external and landscaping works, and consultancy services for contract administration and site supervision. The works commenced in May 2019 and was completed in December 2022.

33. With a view to improving pedestrian connectivity to public hospitals, the Government will continue to take forward the proposed pedestrian connectivity project from the Yau Ma Tei MTR station to the KWH.

/34. …..

34. Of the 59 trees surveyed in April 2013 within the project boundary, 12 trees will be retained. The proposed project involves removal of 47 trees, including 45 trees felled in phase 1 and two trees to be transplanted elsewhere. All trees to be removed are common trees that are not trees of particular interest[13]. The HA will incorporate planting proposals in the main works for phase 2 of the project, including estimated quantities of 47 trees (including compensation for two hazardous trees felled by the KWH in 2010 and 2011 before the tree survey), 34 330 shrubs, 72 860 groundcovers and 516 m^2 of grassed area.

35. We estimate that the proposed works will create about 670 jobs (587 for labourers and 83 for professional/technical staff) providing a total employment of 46 884 man-months.

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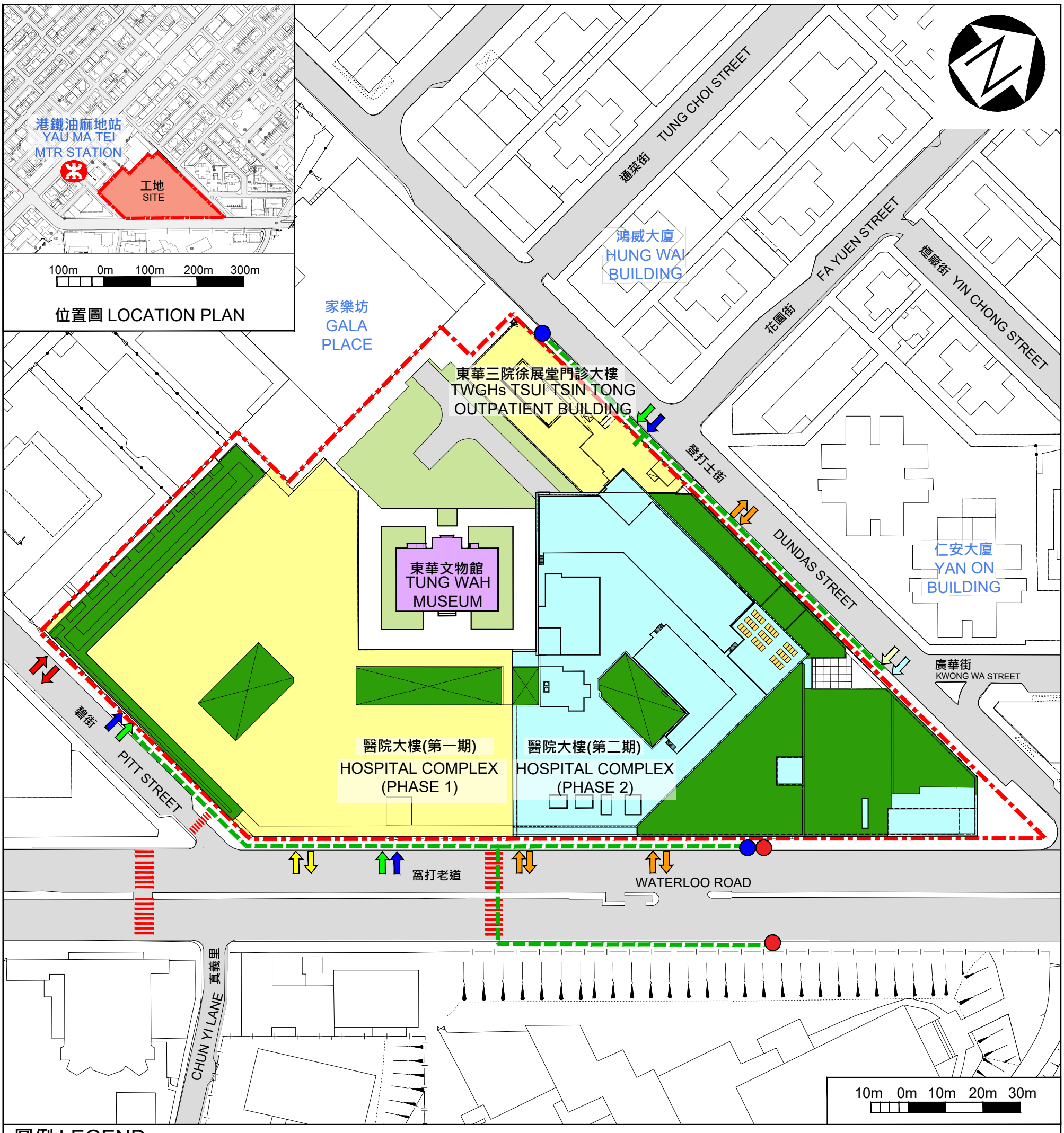
[13] Trees of particular interest are defined in paragraph 2.6.1 of the Guidelines for Tree Risk Assessment and Management Arrangement promulgated by the Development Bureau. Examples of trees of particular interest are listed as follows –

(a) Old and Valuable Trees (OVTs) and trees that are potentially registerable in the Register of OVTs;
(b) Trees of 100 years old or above;
(c) Trees with trunk diameter equal to or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal to or exceeding 25 m;
(d) Stonewall trees or trees of outstanding form (taking account of overall tree sizes, shape and any special features);
(e) 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;
(f) Endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
(g) Tree species listed in the Forestry Regulations (Cap.96A) under the Forests and Countryside Ordinance (Cap. 96);
(h) Well-known Fung Shui trees;
(i) Landmark trees with evidential records to support the historical or cultural significance of the trees;
(j) Trees which may arouse widespread public concerns; and
(k) Trees which may be subject to strong local objections on removal.



圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 現有將予整修的大樓 EXISTING BUILDING TO BE REFURBISHED
- 現有將予保護的大樓 EXISTING BUILDING TO BE PROTECTED
- 擬建新大樓 PROPOSED NEW BUILDING
- 擬建地面綠化 PROPOSED AT-GRADE GREENING
- 擬建綠化範圍 / 天台綠化 PROPOSED LANDSCAPED AREA / LANDSCAPED ROOF
- 現有巴士站 EXISTING BUS STOP
- 現有小巴站 EXISTING MINIBUS STOP
- 現有行人過路處 EXTISTING AT-GRADE PEDESTRIAN CROSSING
- 無障礙通道 BARRIER-FREE ACCESS
- 現有無障礙出入口 EXISTING BARRIER-FREE ENTRANCE / EXIT
- 擬建無障礙出入口 PROPOSED BARRIER-FREE ENTRANCE / EXIT
- 現有車輛出入口 EXISTING VEHICULAR INGRESS / EGRESS
- 擬建車輛出入口 PROPOSED VEHICULAR INGRESS / EGRESS
- 救護車出入口 AMBULANCE INGRESS / EGRESS
- 現有行人出入口 EXISTING PEDESTRIAN ENTRANCE / EXIT
- 擬建行人出入口 PROPOSED PEDESTRIAN ENTRANCE / EXIT
- 擬建太陽能光伏板 PROPOSED PHOTOVOLTAIC PANEL

工地平面圖 SITE PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 停車場 CAR PARKING AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 非修繕範圍 NON-REFURBISHED AREA
- 不挖掘範圍 UNEXCAVATED AREA
- 暢通易達停車位 ACCESSIBLE PARKING

地下二樓平面圖
BASEMENT SECOND FLOOR PLAN

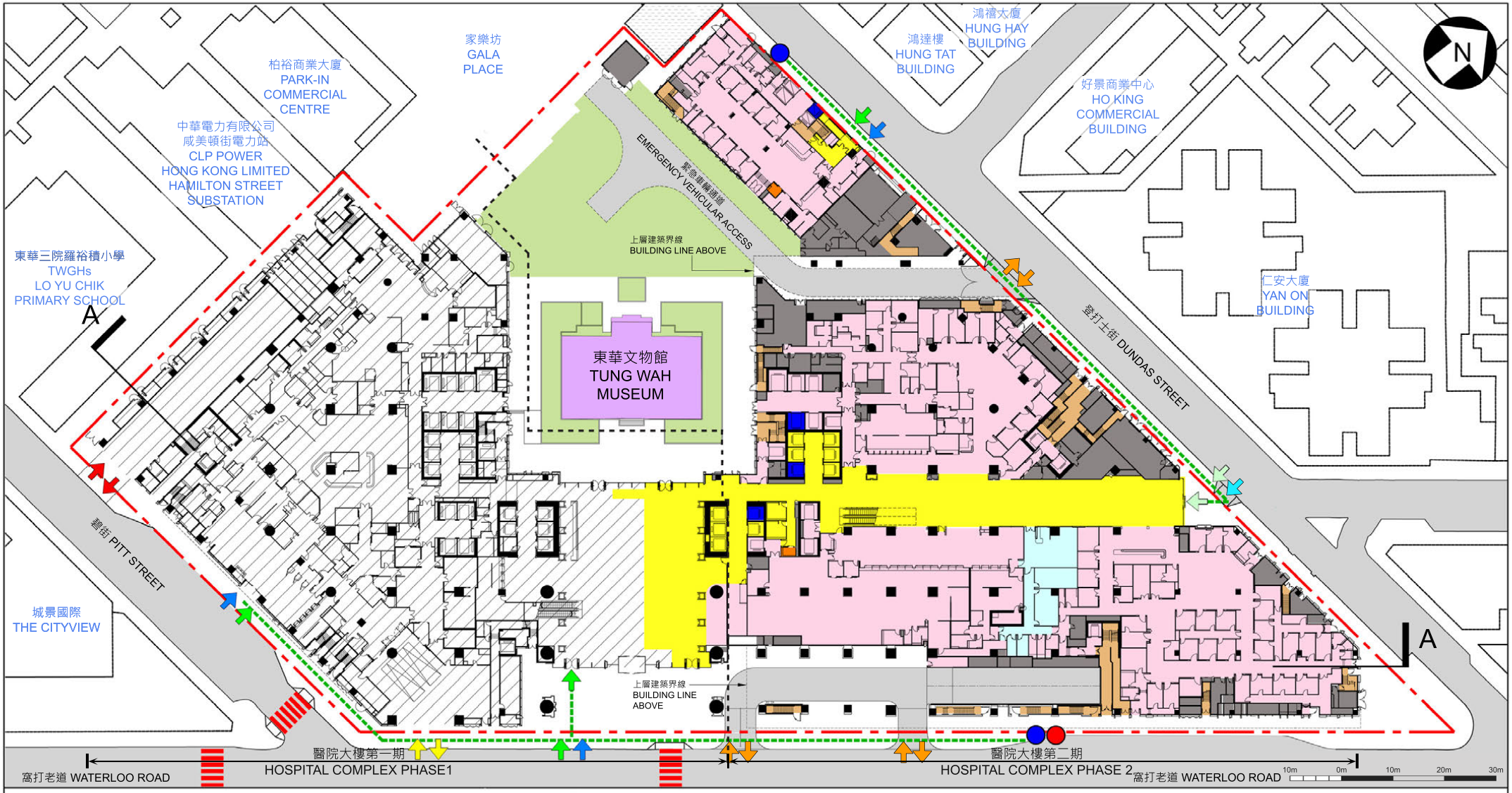
13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 停車場 CAR PARKING AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 非修繕範圍 NON-REFURBISHED AREA
- 不挖掘範圍 UNEXCAVATED AREA
- 暢通易達停車位 ACCESSIBLE PARKING

地下一樓平面圖
BASEMENT FIRST FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

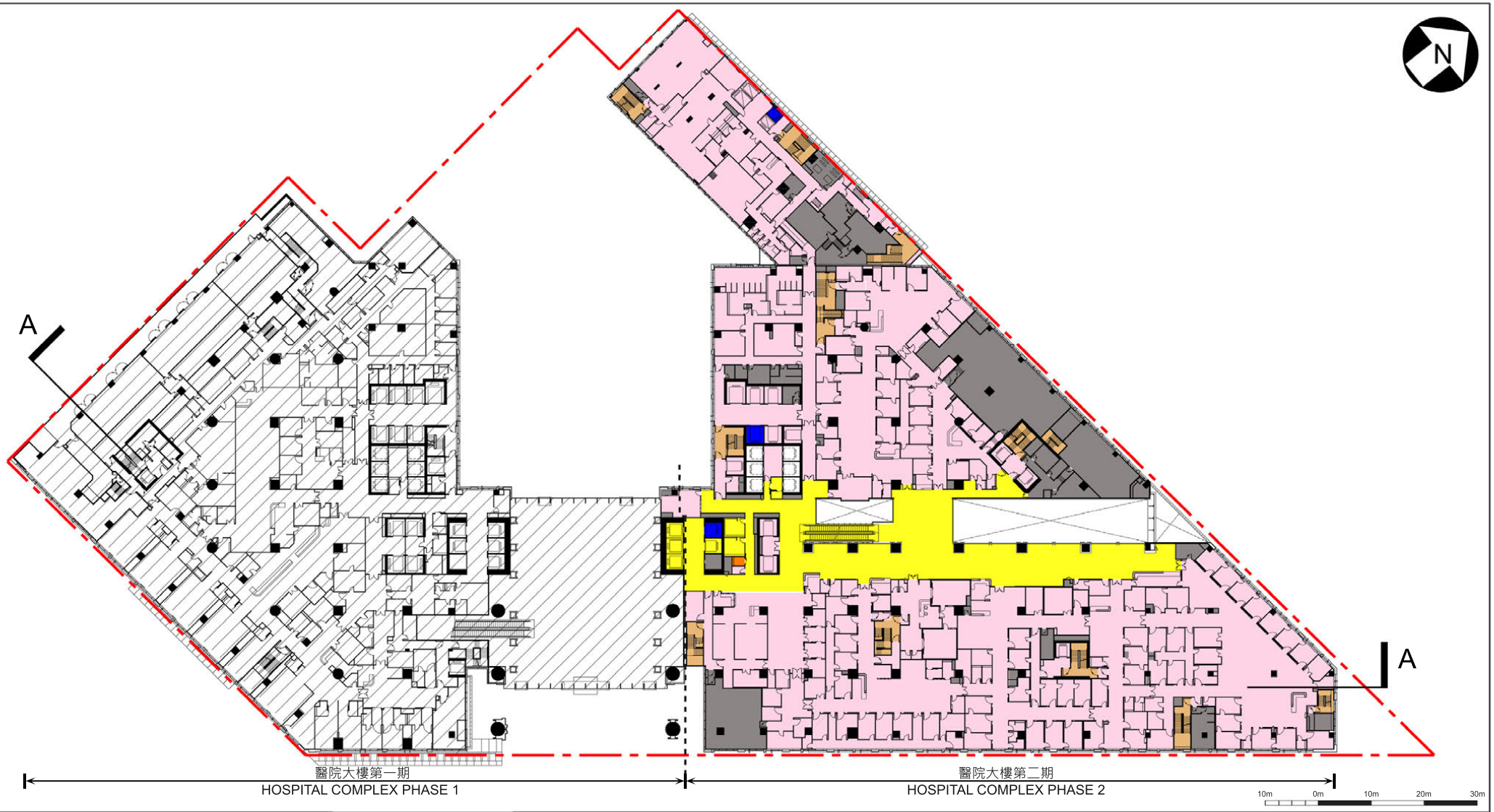


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 現有行人過路處 EXISTING AT-GRADE PEDESTRIAN CROSSING
- 無障礙通道 BARRIER-FREE ACCESS
- 地面綠化 AT-GRADE GREENING
- 現有將予保護的大樓 EXISTING BUILDING TO BE PROTECTED
- 公眾區域 PUBLIC AREA
- 教學設施 EDUCATIONAL FACILITIES
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 車輛區域 VEHICULAR AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA
- 現有巴士站 EXISTING BUS STOP
- 現有小巴站 EXISTING MINIBUS STOP
- 救護車出入口 AMBULANCE INGRESS / EGRESS
- 擬建無障礙出入口 PROPOSED BARRIER-FREE ENTRANCE / EXIT
- 擬建行人出入口 PROPOSED PEDESTRIAN ENTRANCE / EXIT
- 擬建車輛出入口 PROPOSED VEHICULAR INGRESS / EGRESS
- 現有無障礙出入口 EXISTING BARRIER-FREE ENTRANCE / EXIT
- 現有行人出入口 EXISTING PEDESTRIAN ENTRANCE / EXIT
- 現有車輛出入口 EXISTING VEHICULAR INGRESS / EGRESS

地下平面圖
GROUND FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2



圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 機房 PLANT ROOM
- 暢通易達洗手間 ACCESSIBLE TOILET
- 公眾區域 PUBLIC AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 非修繕範圍 NON-REFURBISHED AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE

一樓平面圖
FIRST FLOOR PLAN

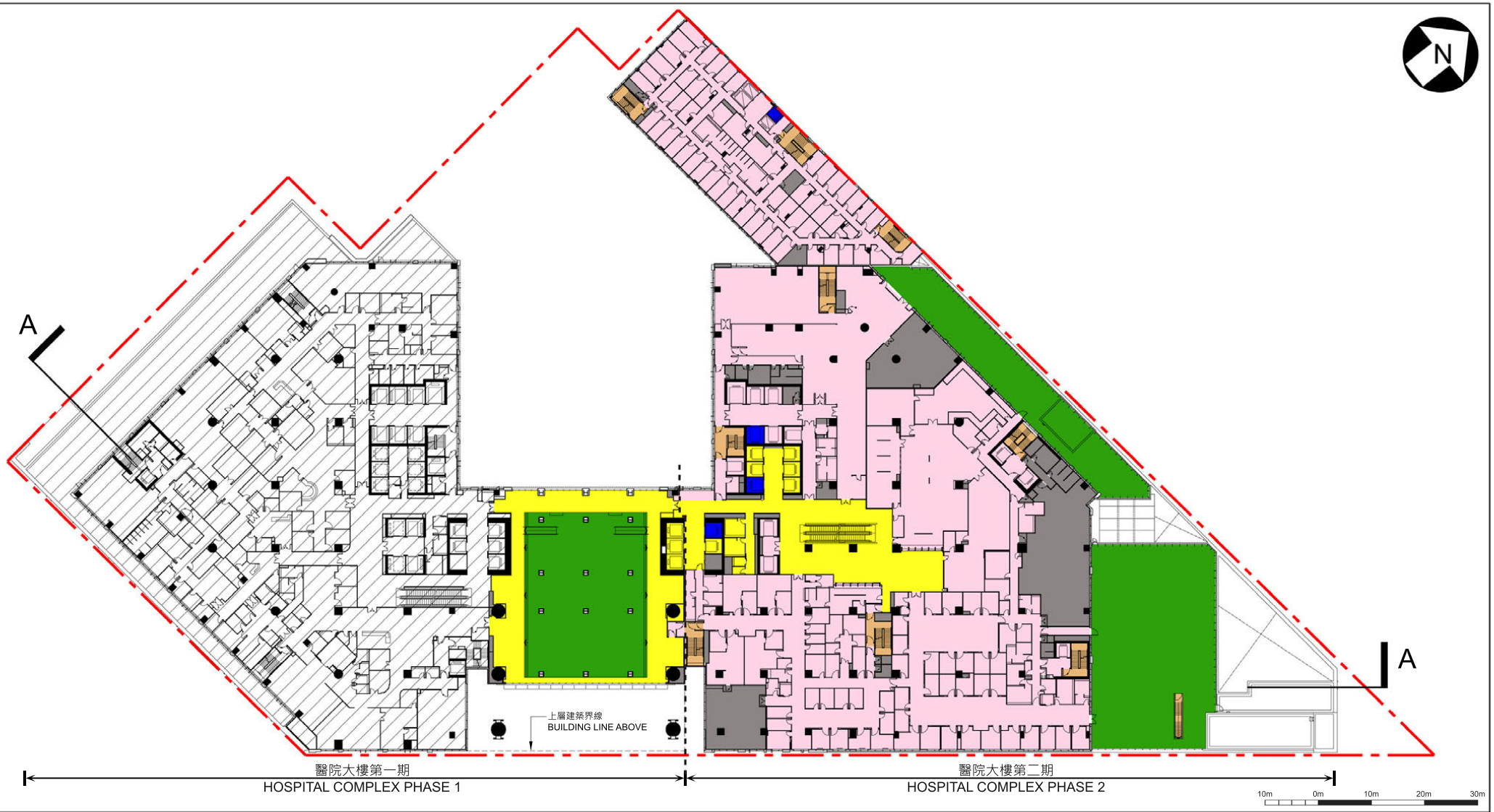
13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 暢通易達洗手間 ACCESSIBLE TOILET
- 公眾區域 PUBLIC AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 非修繕範圍 NON-REFURBISHED AREA

二樓平面圖
SECOND FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

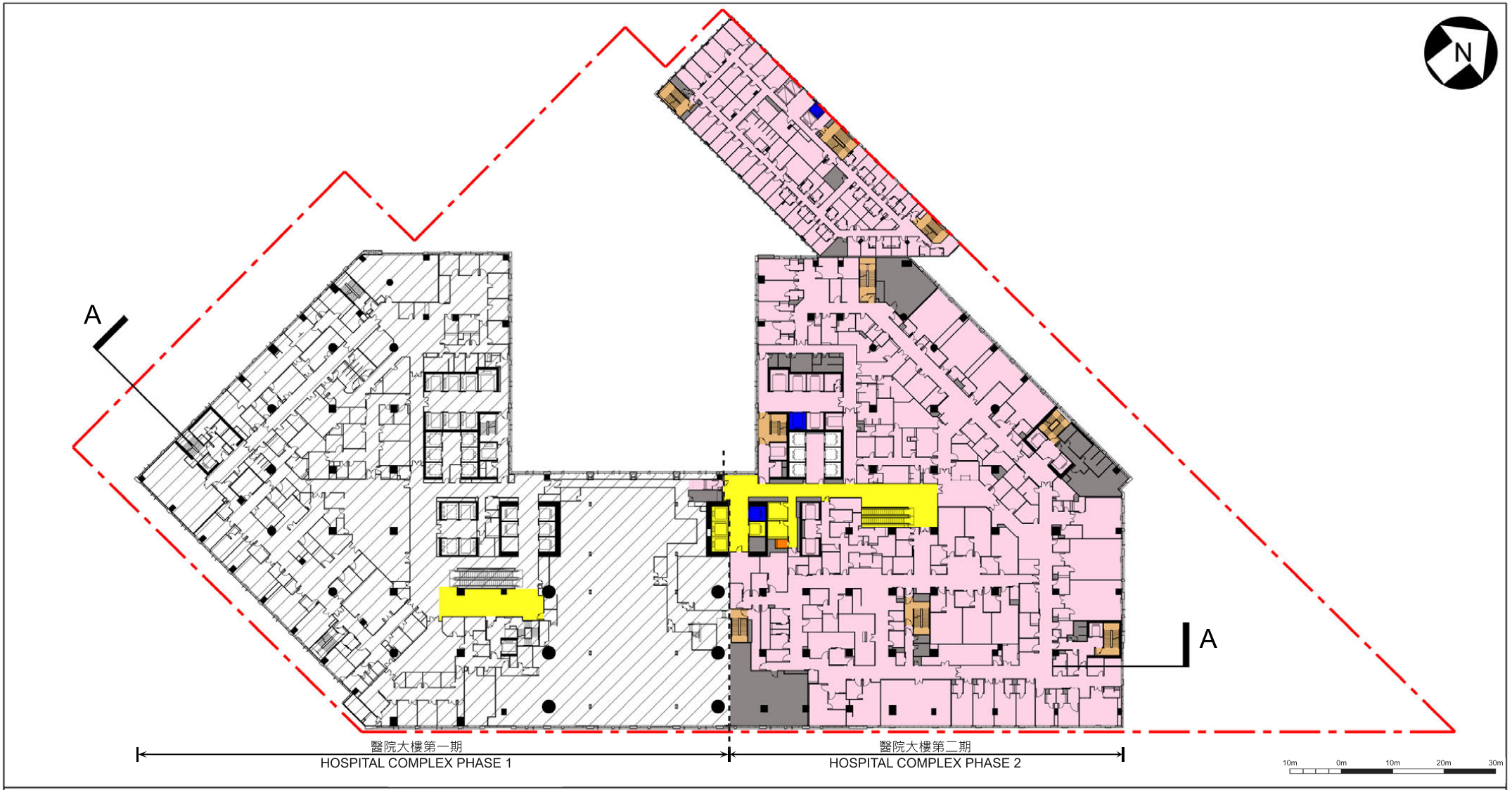


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 綠化範圍 LANDSCAPED AREA
- 機房 PLANT ROOM
- 非修繕範圍 NON-REFURBISHED AREA
- 公眾區域 PUBLIC AREA
- 暢通易達升降機 ACCESSIBLE LIFT

三樓平面圖
THIRD FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

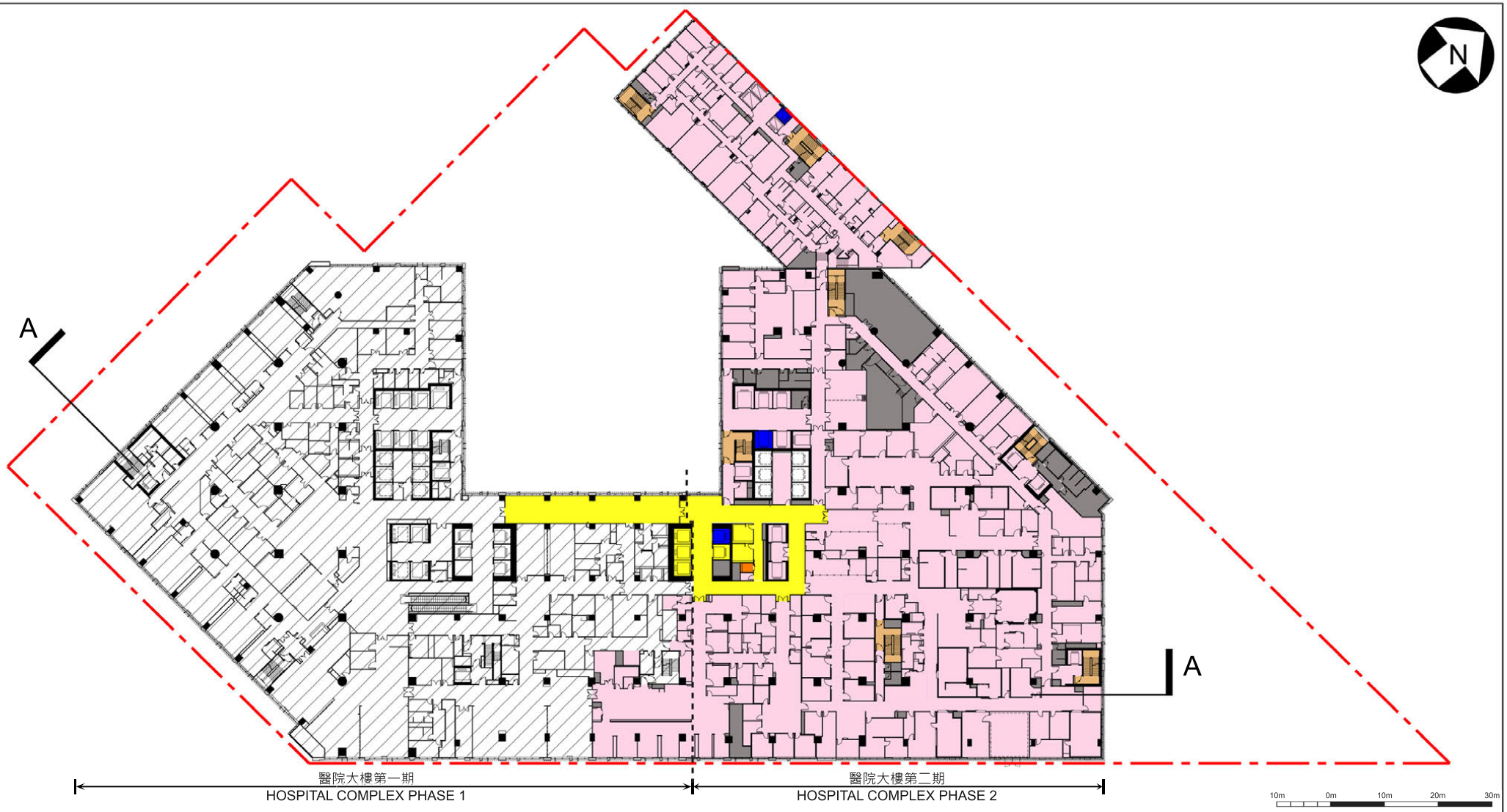


圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 機房 PLANT ROOM
- 暢通易達洗手間 ACCESSIBLE TOILET
- 公眾區域 PUBLIC AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 非修繕範圍 NON-REFURBISHED AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE

四樓平面圖
FOURTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2



圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 機房 PLANT ROOM
- 暢通易達洗手間 ACCESSIBLE TOILET
- 公眾區域 PUBLIC AREA
- 暢通易達升降機 ACCESSIBLE LIFT
- 非修繕範圍 NON-REFURBISHED AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE

五樓平面圖
FIFTH FLOOR PLAN

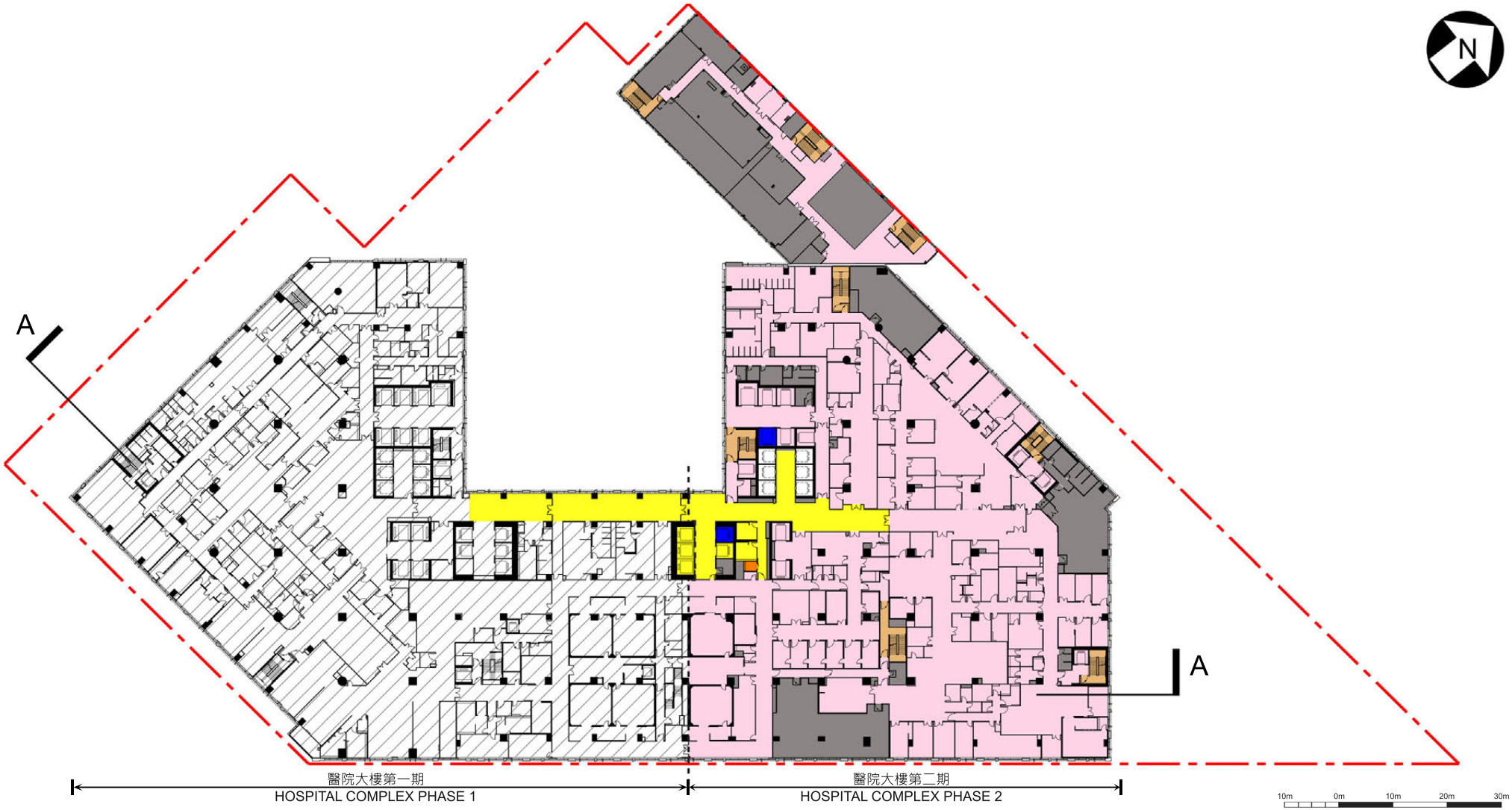
13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA

六樓平面圖
SIXTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2



圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA

七樓平面圖
SEVENTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA

八樓平面圖
EIGHTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA

九樓平面圖
NINTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 非修繕範圍 NON-REFURBISHED AREA

九樓閣樓平面圖
MEZZANINE NINTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 綠化範圍 LANDSCAPED AREA
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA

十樓平面圖
TENTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 綠化範圍 LANDSCAPED AREA
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 教學設施 EDUCATIONAL FACILITIES
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA

十一樓平面圖
ELEVENTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 綠化範圍 LANDSCAPED AREA
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA

十二樓平面圖
TWELFTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA

十三樓平面圖
THIRTEENTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA

十四樓平面圖
FOURTEENTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA

十五樓平面圖
FIFTEENTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA

十六樓平面圖
SIXTEENTH FLOOR PLAN

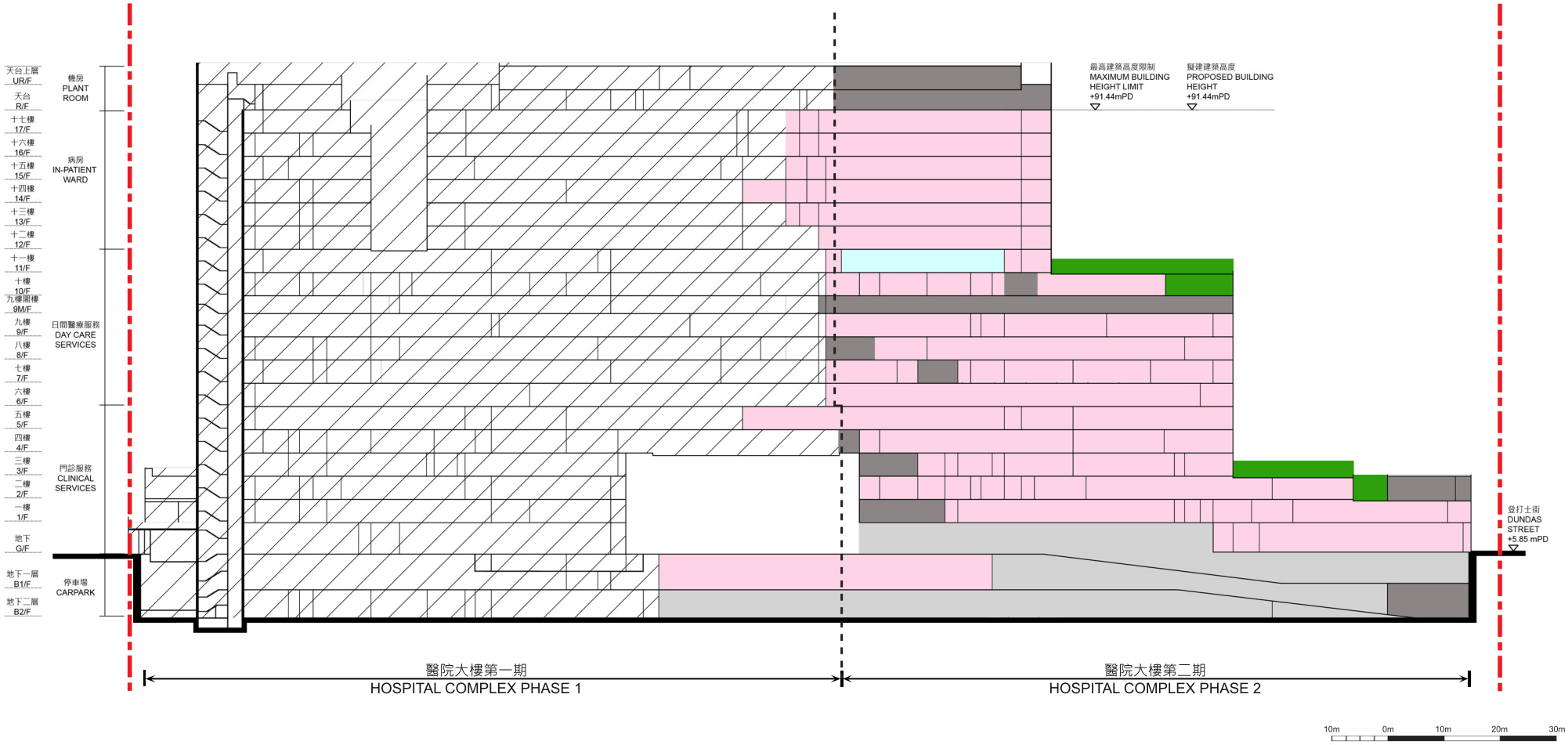
13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 公眾區域 PUBLIC AREA
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 暢通易達升降機 ACCESSIBLE LIFT
- 疏散樓梯 MEANS OF ESCAPE STAIRCASE
- 暢通易達洗手間 ACCESSIBLE TOILET
- 非修繕範圍 NON-REFURBISHED AREA

十七樓平面圖
SEVENTEENTH FLOOR PLAN

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2



圖例 LEGEND

- 醫院及工地界線 HOSPITAL AND SITE BOUNDARY
- 員工及醫療區域 STAFF AND CLINICAL AREA
- 機房 PLANT ROOM
- 停車場 CAR PARKING AREA
- 教學設施 EDUCATIONAL FACILITIES
- 綠化範圍 LANDSCAPED AREA
- 非修繕範圍 NON-REFURBISHED AREA

剖面圖 A-A
SECTION A-A

13MD
廣華醫院重建計劃第二期
REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

從窩打老道望向廣華醫院的構思透視圖
PERSPECTIVE VIEW OF KWONG WAH HOSPITAL FROM WATERLOO ROAD

構思圖 ARTIST'S IMPRESSION	13MD **廣華醫院重建計劃第二期** REDEVELOPMENT OF KWONG WAH HOSPITAL, PHASE 2

13MD - Redevelopment of Kwong Wah Hospital, phase 2

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2022 prices)

			Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee ($ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	–	–	–	61.9
		Technical	–	–	–	15.5
					Sub-total	77.4#
(b)	Resident site staff (RSS) costs (Note 3)	Professional	398	38	1.6	56.0
		Technical	1 492	14	1.6	74.0
					Sub-total	130.0
	Comprising -					
	(i) consultants' fees for management of RSS			2.7#		
	(ii) remuneration of RSS			127.3#		
					Total	**207.4**

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS (as at now, MPS salary point 38 = $88,015 per month and MPS salary point 14 = $30,990 per month).

2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the provision of contract administration and site supervision relating to the project. The assignment will only be executed subject to the Finance Committee's approval to upgrade **13MD** to Category A.

3. The consultants' fees and RSS cost for site supervision are based on the estimate prepared by the Hospital Authority. 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 3.

13MD – Redevelopment of Kwong Wah Hospital, phase 2

Indicative list of furniture and equipment items with unit cost of $1 million or above

Item description	Quantity	Unit cost ($ million)	Total cost ($ million)
Access Control System	1	3.7	3.7
Analysers, Laboratory, Microbiology, Automated Microbiology Specimen Processor	1	3.8	3.8
Analysers, Laboratory, Microbiology, Smart Incubator with Automated Culture Plate Reader	1	7.5	7.5
Analysers, Laboratory, Molecular Assay	1	1.2	1.2
Analysers, Physiologic, Neuromuscular Function, Posturographic	1	2.5	2.5
Audio and Visual Equipment for Lecture Theatre	1	2.1	2.1
Automated Storage and Retrieval System	1	6.9	6.9
Automation System with Surgical Light	2	2.5	5.0
Automation System, Medication Dispensing, Blister Dispensing Machine for Outpatient Pharmacy	2	3.4	6.8
Automation System, Medication Dispensing, Box, Outpatient Pharmacy	1	2.6	2.6
Automation System, Medication Dispensing, Loose Tablet, Outpatient Pharmacy	1	2.2	2.2
Autonomous Mobile Robot	1	32.2	32.2
Closed Circuit Television System	1	7.0	7.0

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Computer-aided Detection Systems, Pathology Slide	1	1.7	1.7
Densitometers, Bone, X-ray, Dual-energy Absorptiometry	1	1.6	1.6
Dispensing Shelving System for Oncology Pharmacy	1	1.3	1.3
Dispensing Shelving System for Outpatient Department Pharmacy	1	1.3	1.3
Dynamometer Exercise Systems, Computerised	1	1.3	1.3
Electrosurgical Units, Monopolar/Bipolar, Argon-enhanced Coagulation (Waterjet and Argon)	1	1.5	1.5
General Purpose Scanner	4	1.1	4.4
Glove Boxes, Isolation for Oncology Pharmacy	3	1.1	3.3
Hydrotherapy Pool	1	7.3	7.3
Identification/Tracking/Security Systems, Person	1	2.7	2.7
Image Processors, Video, Endoscopy	1	1.9	1.9
Information Systems, Data Management, Anaesthesia	1	8.1	8.1
Information Systems, Data Management, Cardiology	1	3.5	3.5
Integrated Telecommunication System	1	86.5	86.5
Intercom System	1	2.2	2.2
Lasers, Dye/Nd-Yag, Dermatologic	1	1.0	1.0
Medication Automatic Assembling and	1	4.5	4.5

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Sorting System			
Mobile Shelving System with 5 Storage Levels for Administration Services Department	1	5.4	5.4
Mobile Shelving System with 7 Storage Levels for Administration Services Department	1	11.6	11.6
Mobile Shelving System for Theatre Sterile Supply Unit	1	2.7	2.7
Monitoring Systems, Physiologic, Acute Care for Acute Stroke Unit	1	2.6	2.6
Monitoring Systems, Physiologic, Acute Care for Cardiac Care Unit	1	8.2	8.2
Monitoring Systems, Physiologic, Acute Care for Inpatient Ward	3	1.3	3.9
Monitors, Physiologic, Multipurpose, Bedside	1	3.0	3.0
Outpatient Automation System, Medication Dispensing, Box/Stripe Dispensing Machine for Oncology Pharmacy	1	2.6	2.6
Outpatient Automation System, Medication Dispensing, Loose Tablet Machine Full Automated for Oncology Pharmacy	1	2.0	2.0
Parking Guidance System	1	1.6	1.6
Patient Monitoring System with Clinical Information System for Paediatric Department	1	9.7	9.7
Public Address System	1	6.0	6.0

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Radiographic/Fluoroscopic Units, Mobile, Anaesthesiology and Operating Theatre Services	1	2.0	2.0
Radiographic/Fluoroscopic Units, Mobile, Extremity	1	1.0	1.0
Radiographic/Fluoroscopic Units, Mobile, Extremity, 360 Degree	1	3.6	3.6
Radiographic/Fluoroscopic Units, Mobile, Surgery	1	3.4	3.4
Radiographic Systems, Digital	2	4.5	9.0
Real Time Location System for Movable Asset Tracking	1	2.4	2.4
Robotic Intravenous Compounding System	1	11.0	11.0
Scanning System, Ultrasonic, General-purpose, Anaesthesiology and Operating Theatre Services	2	1.1	2.2
Scanning System, Ultrasonic, General-purpose, Outpatient Department (Obstetrics & Gynaecology)	3	1.8	5.4
Scanning System, Ultrasonic, General-purpose, Surgery	2	4.9	9.8
Seating System in Lecture Theatre	1	2.3	2.3
Smart Conveyor Belt System	1	28.4	28.4
Smart Warehouse System	1	6.6	6.6
Stereotactic Systems, Image-guided, Surgical, Spinal	1	4.5	4.5
Vacuum Insulated Evaporator Tank	1	6.8	6.8
Video System, Endoscopic	4	6.5	26.0

Item description	**Quantity**	**Unit cost** ($ million)	**Total cost** ($ million)
Video System, Endoscopic (Urology)	1	2.0	2.0
Video System, Endoscopic (with Broadcast)	1	9.8	9.8