

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

Head 711 – HOUSING

Health – Clinics

75MC – Community health centre-cum-residential care home for the elderly at Tuen Mun Area 29 West

Members are invited to recommend to the Finance Committee the upgrading of **75MC** to Category A at an estimated cost of \$1,046.4 million in money-of-the-day prices.

PROBLEM

We need to provide a community health centre-cum-residential care home for the elderly (CHC-cum-RCHE) at the public housing development at Tuen Mun Area 29 West to address the needs for healthcare services and residential care services for elderly persons arising from the local community in Tuen Mun district.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Transport and Housing, proposes to upgrade **75MC** to Category A at an estimated cost of \$1,046.4 million in money-of-the-day (MOD) prices for the construction of a CHC-cum-RCHE at Tuen Mun Area 29 West.

/ PROJECT

PROJECT SCOPE AND NATURE

3. The proposed scope of works comprises the construction of the following CHC-cum-RCHE, which occupies around 7 500 square metres (m²), ancillary facilities and ancillary works –

- (a) a fully furnished CHC providing the following facilities –
 - (i) rooms and facilities for medical consultation;
 - (ii) rooms and facilities for multi-disciplinary healthcare services, and patient empowerment activities;
 - (iii) a pharmacy; and
 - (iv) other ancillary facilities to support the service operation;
- (b) a RCHE with 100 places¹;
- (c) ancillary facilities including electrical and mechanical rooms, lifts and lobbies, service rooms, and parking and loading/unloading spaces, etc.; and
- (d) ancillary works including associated drainage works, sewerage works, road works, slope upgrading works and modification works to the carpark area of Tuen Mun North West Swimming Pool.

4. A location and site plan, floor plans, sectional plans, an artist's impression and a barrier-free access plan of the project are at Enclosures 1 to 10.

/5.

¹ Bare shell premises will be constructed for the RCHE, of which the construction costs will be sought from the Lotteries Fund (LF) in accordance with the established mechanism. Funding for the RCHE's internal fitting-out works and purchase of furniture and equipment will also be sought from the LF separately in accordance with the established mechanism. Pursuant to the Government Lotteries Ordinance (Cap. 334), the Financial Secretary may appropriate from the LF moneys to finance and support the development of social welfare services as the Chief Executive, after consultation with the Social Welfare Advisory Committee, may approve. The Director of Social Welfare, as Controlling Officer of the LF, will ensure that the applications fall within the approved ambit of the LF. Grants can be made to meet non-recurrent commitments for construction, fitting-out and purchase of furniture and equipment, etc. for premises occupied by non-government organisations providing welfare services.

5. Subject to the funding approval of the Finance Committee, we plan to commence construction of the proposed works in the second quarter of 2019 for completion in 2024 in order to tie in with the programme of the public housing development at Tuen Mun Area 29 West.

JUSTIFICATION

6. The Hospital Authority currently operates three general outpatient clinics in the Tuen Mun District (GOPCs), namely, Tuen Mun Clinic, Yan Oi General Outpatient Clinic and Tuen Mun Wu Hong Clinic. Having regard to the ageing population, the locations of the existing GOPCs, the demographic profile, and the increasing demand for healthcare services due to population growth in Tuen Mun District, the Government plans to establish a CHC at Tuen Mun Area 29 West, which will provide medical consultation, multi-disciplinary healthcare services and patient empowerment services, which will form part of the public housing project to be developed by the Hong Kong Housing Authority at Tuen Mun Area 29 West. This will facilitate the provision of services to the major users in the community, such as residents of public housing in the northern part of Tuen Mun.

7. It is the Government's policy to promote "ageing in place as the core, institutional care as back-up". The Social Welfare Department (SWD) provides a variety of subsidised community care services to help elderly persons age in place. While most elderly persons would like to age in the community, some frail elderly persons need institutional care for health or family reasons. In view of the ageing population and the high demand for subsidised residential care service places, we propose to provide a RCHE at Tuen Mun Area 29 West to meet the policy initiative.

8. Due to site constraints, the proposed CHC-cum-RCHE has to be implemented in an integrated² design with the public housing development at Tuen Mun Area 29 West. The key development parameters are at Enclosure 11. To facilitate better design coordination and construction interface, and ensure timely commencement and completion of the proposed works, we plan to entrust the design and construction of the proposed works to the Hong Kong Housing Authority (HA). Upon completion of the works, the CHC will be handed over to the Hospital Authority for management and maintenance, whereas the SWD will select a suitable non-governmental organisation or private operator through tendering to handle the operation, management and maintenance of the proposed RCHE.

/ FINANCIAL

² Standalone design for the community health centre-cum-residential care home for the elderly and standalone public housing block is not feasible due to the small size of the site.

FINANCIAL IMPLICATIONS

9. We estimate the capital cost of the proposed works to be \$1,046.4 million in MOD prices, broken down as follows –

	\$ million (in MOD prices)
(a) Site works	42.0
(b) Piling	20.7
(c) Building ³	457.2
(d) Building services ⁴	202.3
(e) Drainage	5.5
(f) External works	19.4
(g) Additional energy conservation, green and recycled features	7.1
(h) On-cost payable to HA ⁵	94.3
(i) Furniture and equipment (F&E) ⁶	102.8
(j) Contingencies	95.1
Total	1,046.4

10. Of the estimated \$1,046.4 million total capital cost, about \$76.7 million is the apportioned construction cost for the RCHE which would first be funded by the Capital Works Reserve Fund under **75MC** and then be reimbursed from LF after project completion. Funding approval for LF will be separately sought under the established mechanism.

/11.

³ Building works cover construction of substructure and superstructure of the building.

⁴ Building services works cover electrical installations, ventilation and air conditioning installations, fire services installations, lifts and escalators installations and other specialist installations.

⁵ This is the estimated cost (12.5% of the construction cost) payable to HA for the design, administration and supervision of the project.

⁶ The estimated cost is based on an indicative list of furniture and equipment required. Some major items are listed at Enclosure 12.

11. The construction floor area (CFA) of **75MC** is about 14 431 m². The estimated construction unit cost, represented by the building works and building services costs, is \$45,700 per m² of CFA in MOD prices. We consider this comparable to that of similar projects built by the Government.

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

Year	\$ million (MOD)
2019 – 2020	16.8
2020 – 2021	66.0
2021 – 2022	103.9
2022 – 2023	151.6
2023 – 2024	222.8
2024 – 2025	214.5
2025 – 2026	128.1
2026 – 2027	74.2
2027 – 2028	37.9
2028 – 2029	30.6
	<hr/> 1,046.4 <hr/>

13. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2019 to 2029. Subject to funding approval, HA will deliver the proposed works through a lump sum contract because they can clearly define the scope of the works in advance. The contract will provide contractual terms for price adjustments.

14. The Hospital Authority has assessed the requirements for F&E for the project and estimates the F&E costs to be about \$102.8 million. The proposed F&E provision represents 15% of the construction cost of the CHC portion. An indicative list of major F&E items (costing \$1 million or above per item) to be procured for the project is at Enclosure 12.

15. We estimate the annual recurrent expenditure arising from this project to be about \$261.9 million, including the \$261.8 million for the CHC⁷.

PUBLIC CONSULTATION

16. We have consulted the Tuen Mun District Council (TMDC), its Environment, Hygiene and District Development Committee (EHDDC) and the Tuen Mun Northwest Area Committee (TMNWAC) about the proposed development at Tuen Mun Area 29 West, which includes the public housing and the proposed CHC-cum-RCHE⁸. Members have no objection to the construction of the proposed CHC-cum-RCHE.

17. We consulted the Legislative Council Panel on Housing on 5 November 2018. Members of the Panel supported submitting the funding proposal to the Public Works Subcommittee (PWSC) for consideration. Supplementary information requested by Members will be submitted to the Panel prior to the PWSC meeting.

ENVIRONMENTAL IMPLICATIONS

18. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). HA has completed the preliminary Environmental Review (PER) for the project which covers the proposed works as stated in paragraph 3 above. The PER has concluded and the Director of Environmental Protection agreed that the project would not have long-term adverse environmental impacts with the implementation of suitable mitigation measures. HA has included in the project estimates the cost to implement suitable mitigation measures to control short-term environmental impacts.

19. During construction, HA will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the relevant contract. These include sound reduction installations such as the use of silencers, mufflers, acoustic lining or shields, etc. for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

/20.

⁷ Regarding the annual recurrent expenditure in respect of the proposed RCHE, SWD will arrange to secure the recurrent expenditure under the established practice.

⁸ We consulted the TMDC in November 2016; the EHDDC in November 2012, May 2017 and July 2018; and the TMNWAC in February 2014, August 2017 and June 2018.

20. At the planning and design stages, 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, HA will require the contractor to reuse inert construction waste (e.g. use of excavated material 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 facilities⁹. 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, HA will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. HA will ensure that the day-to-day operations on site comply with the approved plan. HA will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. HA will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

22. We estimate that the project will generate in total about 50 070 tonnes of construction waste. Of these, HA will reuse about 6 340 tonnes (12.7%) of inert construction waste on site and deliver 40 830 tonnes (81.5%) of inert construction waste to public fill reception facilities for subsequent reuse. HA will dispose of the remaining 2 900 tonnes (5.8%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be about \$3.5 million for this project (based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

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

/ LAND

⁹ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

LAND ACQUISITION

24. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

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

- (a) high efficiency air-cooled chillers with variable speed drive;
- (b) demand control of supply air;
- (c) energy management system; and
- (d) solar powered light fittings.

26. For greening features, we will provide vertical greening as well as planting areas for environmental and amenity benefits.

27. The total estimated additional cost for adoption of the above features is about \$7.1 million (including \$2.9 million for energy efficient features), which has been included in the cost estimate of the project. The energy efficient features will achieve 5.1% energy savings in the annual energy consumption with a payback period of about nine years.

BACKGROUND INFORMATION

28. We upgraded **75MC** to Category B in September 2017. The detailed design for the proposed works has been completed. We engaged HA to carry out ground investigation of the project at a total cost of about \$0.8 million under the block allocation **Subhead B100HX** “Minor housing development related works, studies, and investigations for items in Category D of the Public Works Programme”.

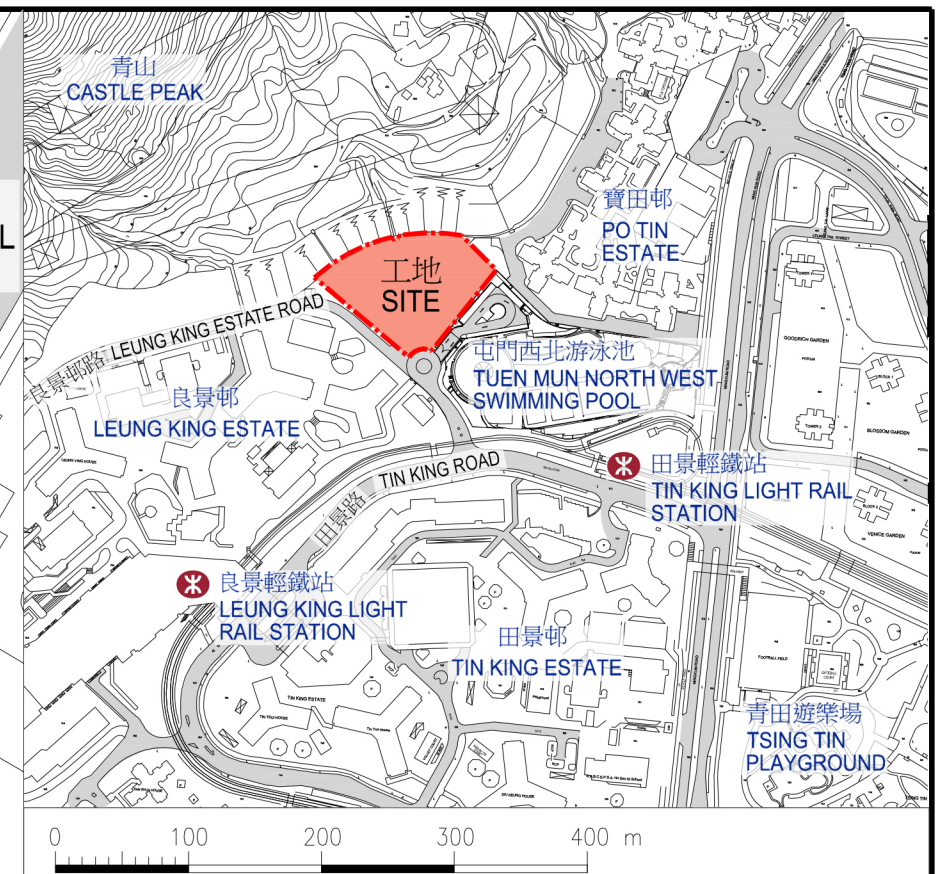
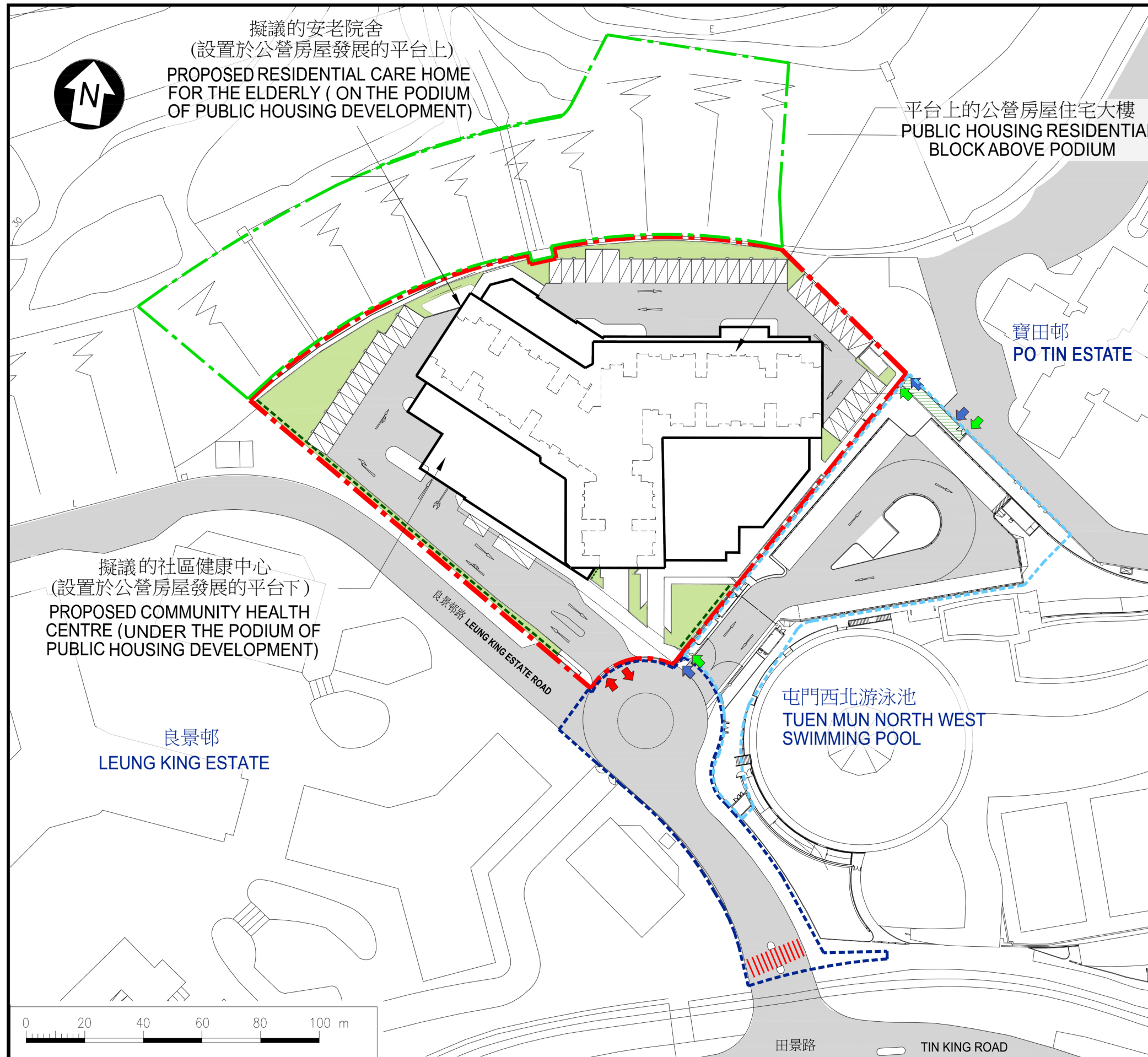
29. The proposed works will involve removal of 161 trees, including 159 trees to be felled and two trees to be transplanted. All trees to be removed are not important trees¹⁰. HA will incorporate planting proposal as part of the project including the planting of about 187 trees, and about 13 000 number of shrubs/ground covers/climbers.

30. We estimate that the proposed works will create about 170 jobs (150 for labourers and another 20 for professional or technical staff), providing a total employment of 8 600 man-months.

Transport and Housing Bureau
November 2018

¹⁰ “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

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



位置圖 LOCATION PLAN

圖例	LEGEND
	工地界線 SITE BOUNDARY
	無障礙出入口 BARRIER-FREE ENTRANCE/ EXIT
	行人出入口 PEDESTRIAN ENTRANCE/ EXIT
	車輛出入口 VEHICULAR INGRESS/ EGRESS
	垂直綠化 VERTICAL GREENING
	地面綠化 AT-GRADE GREENING
	工地 SITE
	行人通道 PEDESTRIAN PASSAGE
	屯門西北游泳池停車場改建工程 MODIFICATION WORKS TO CARPARK AREA OF TUEN MUN NORTH WEST SWIMMING POOL
	斜坡鞏固工程 SLOPE UPGRADING WORKS
	道路提升工程及排污工程 ROAD UPGRADING WORKS AND SEWERAGE CONNECTION WORKS
	輕鐵站 LIGHT RAIL STATION
	現有行人過路處 EXISTING AT-GRADE PEDESTRIAN CROSSING

工地平面圖
SITE PLAN

75MC
屯門第29區西社區健康中心暨安老院舍
COMMUNITY HEALTH CENTRE CUM RESIDENTIAL CARE HOME FOR THE ELDERLY AT TUEN MUN AREA 29 WEST

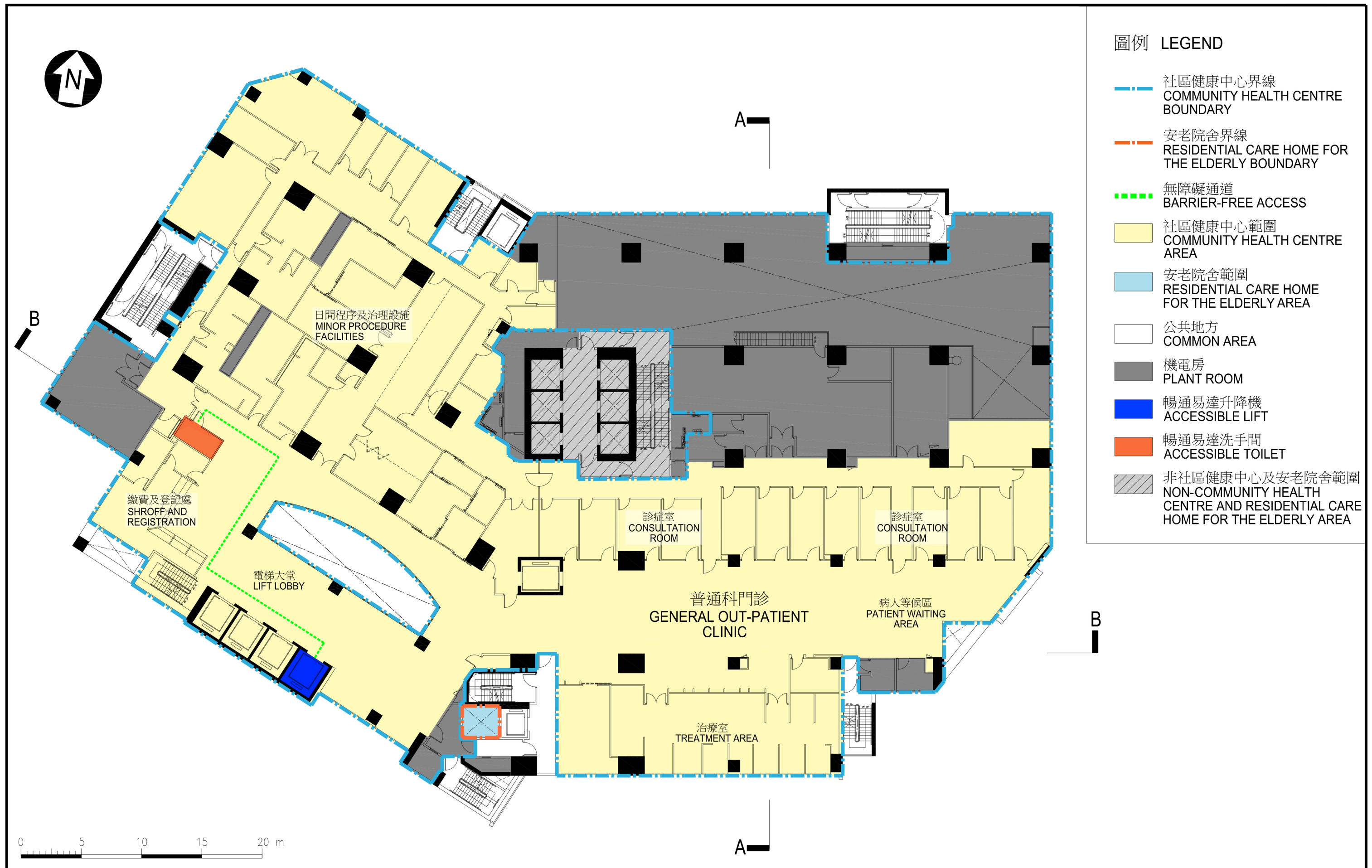


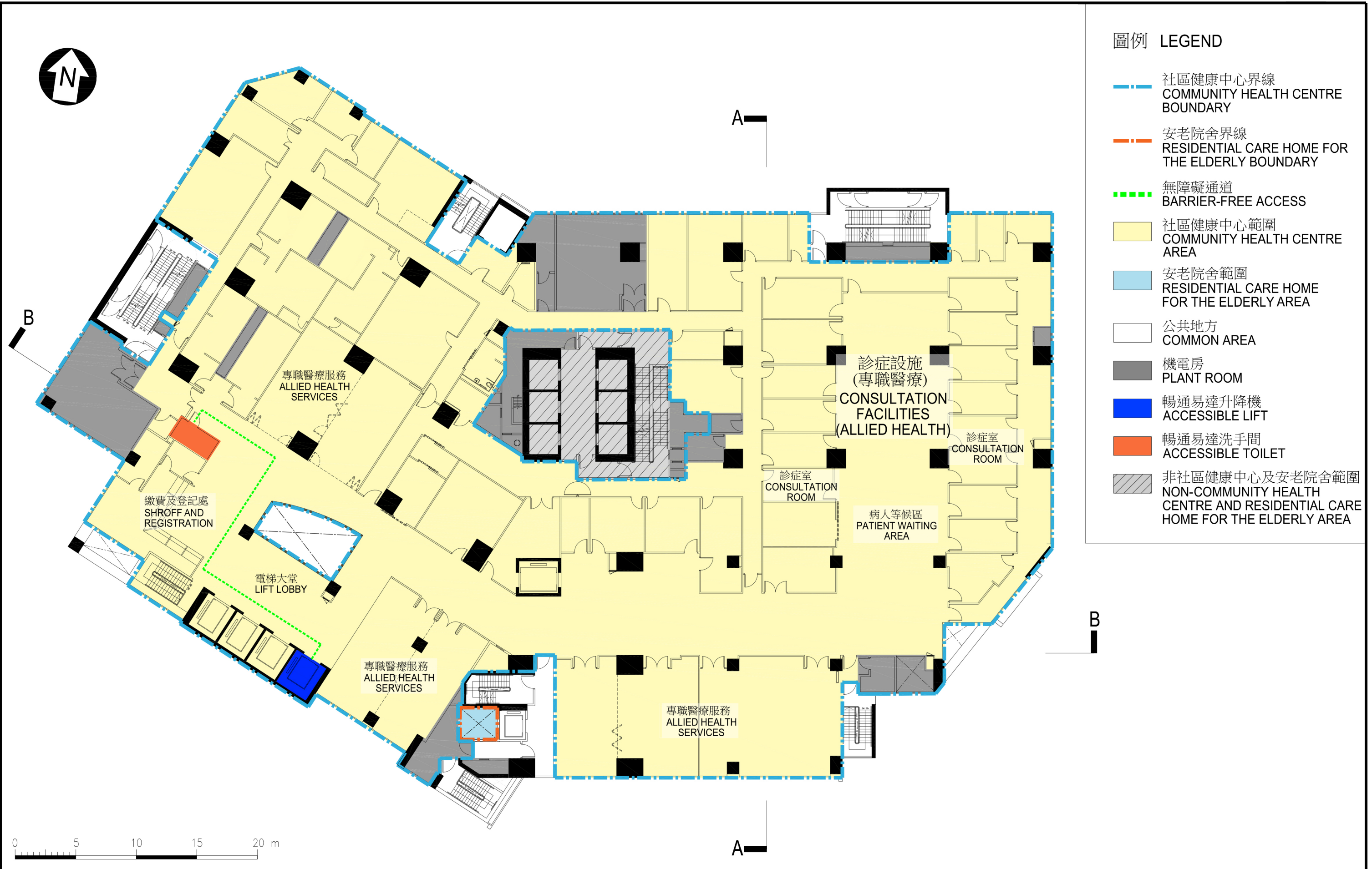
地下平面圖
GROUND FLOOR PLAN

75MC
屯門第29區西社區健康中心暨安老院舍
COMMUNITY HEALTH CENTRE CUM RESIDENTIAL CARE HOME FOR THE ELDERLY AT TUEN MUN AREA 29 WEST



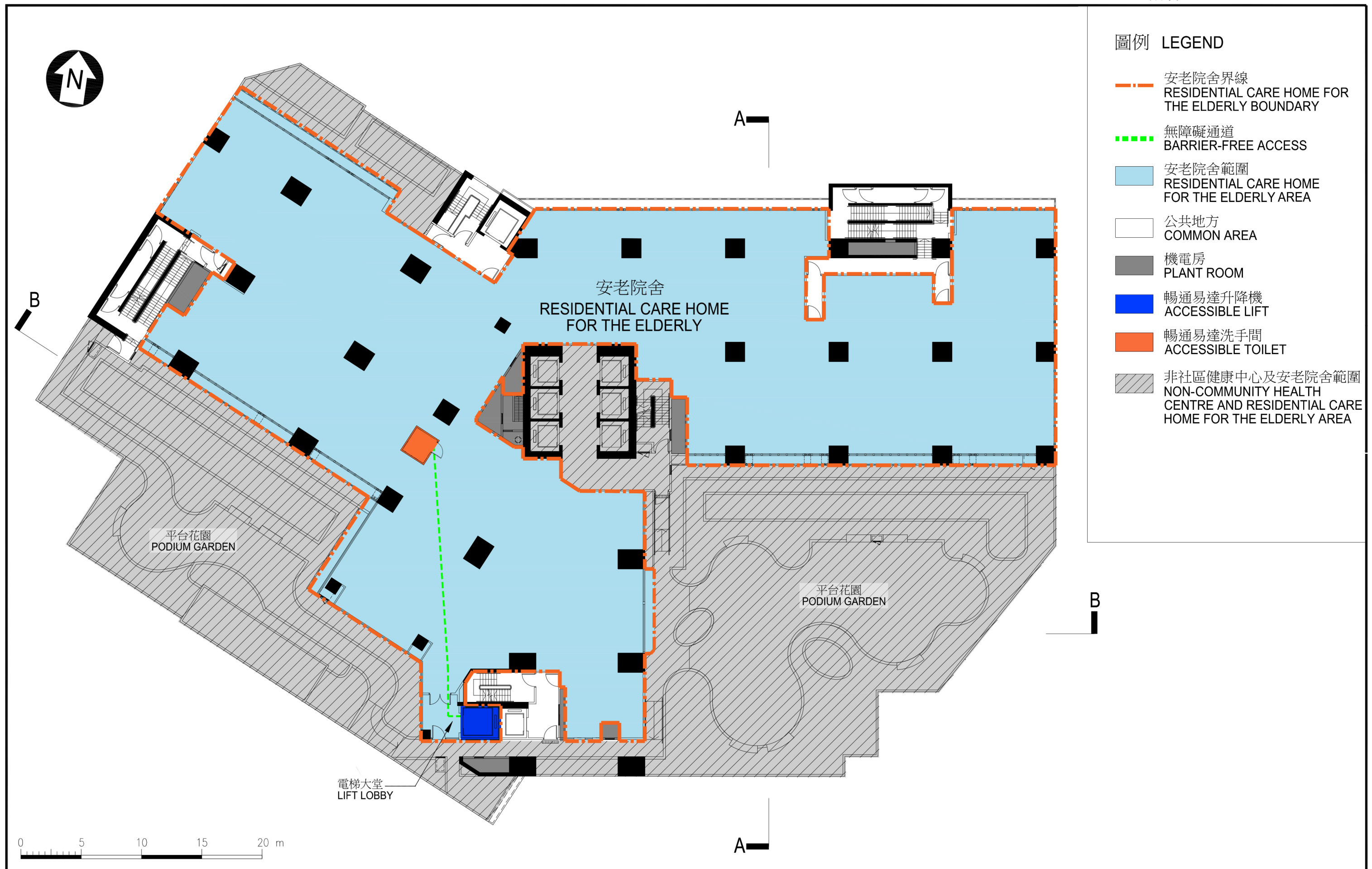


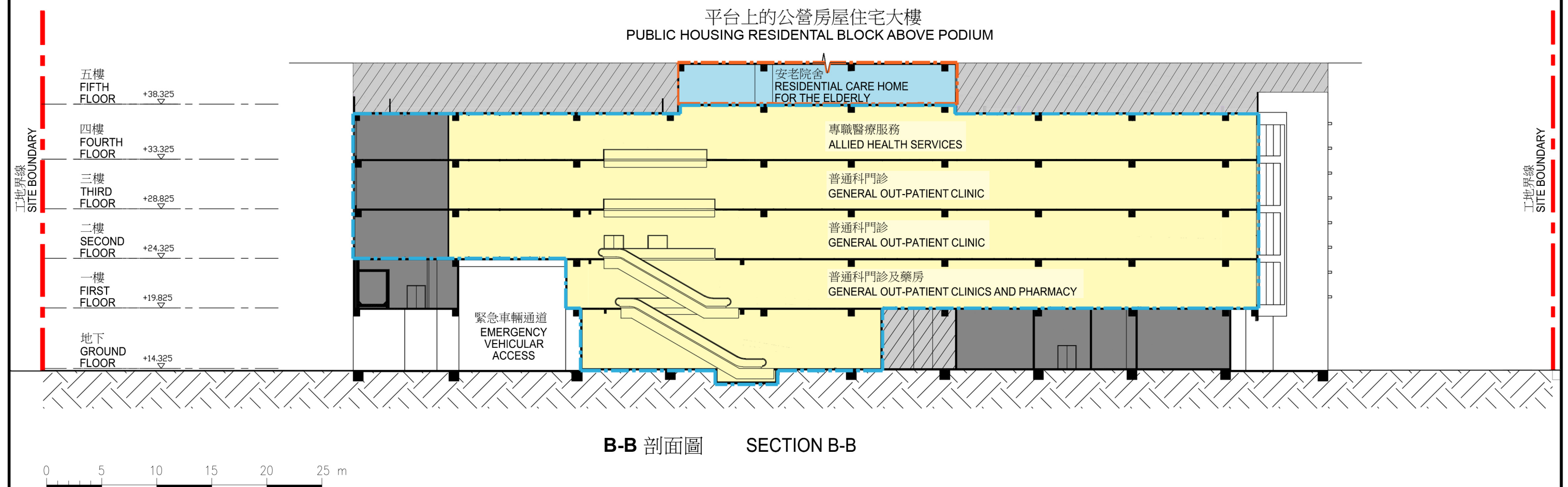
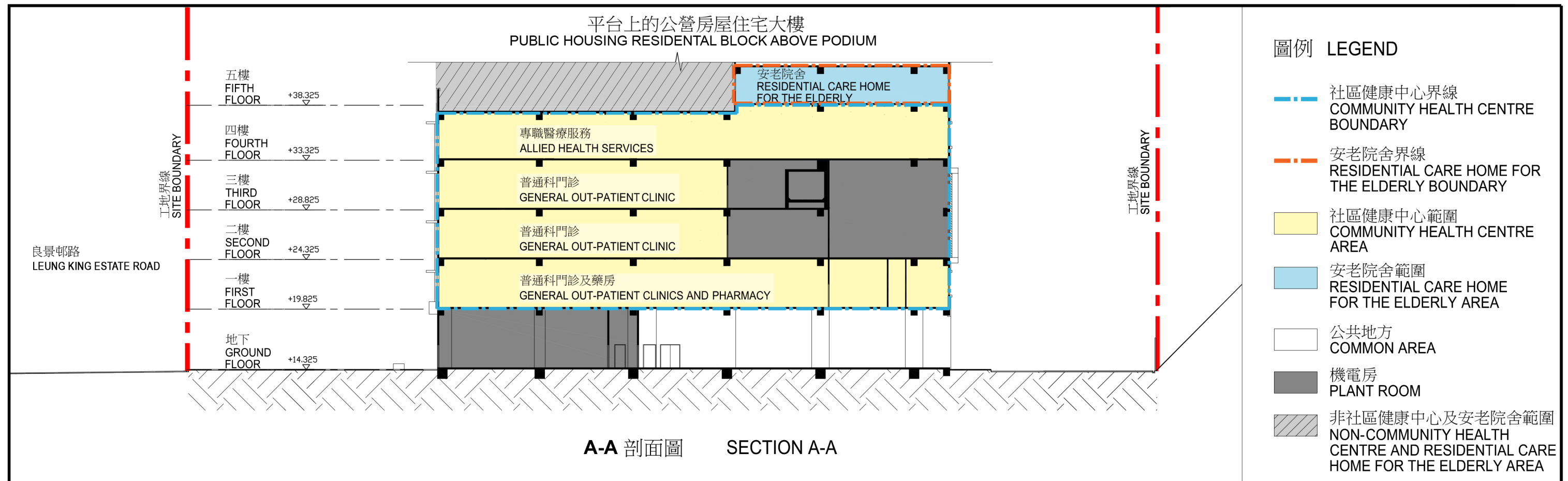




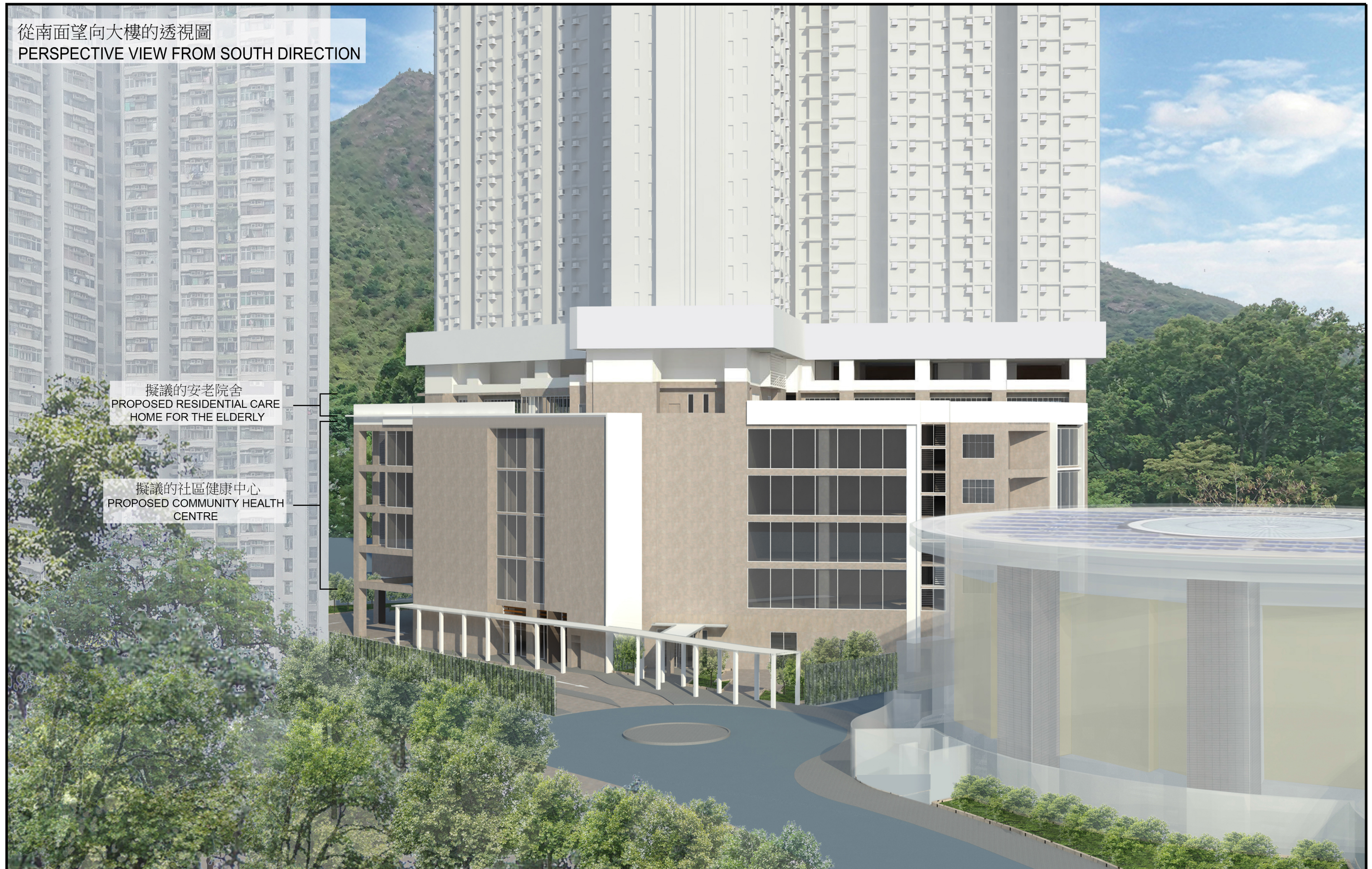
四樓平面圖
FOURTH FLOOR PLAN

75MC
屯門第29區西社區健康中心暨安老院舍
COMMUNITY HEALTH CENTRE CUM RESIDENTIAL CARE HOME FOR THE ELDERLY AT TUEN MUN AREA 29 WEST





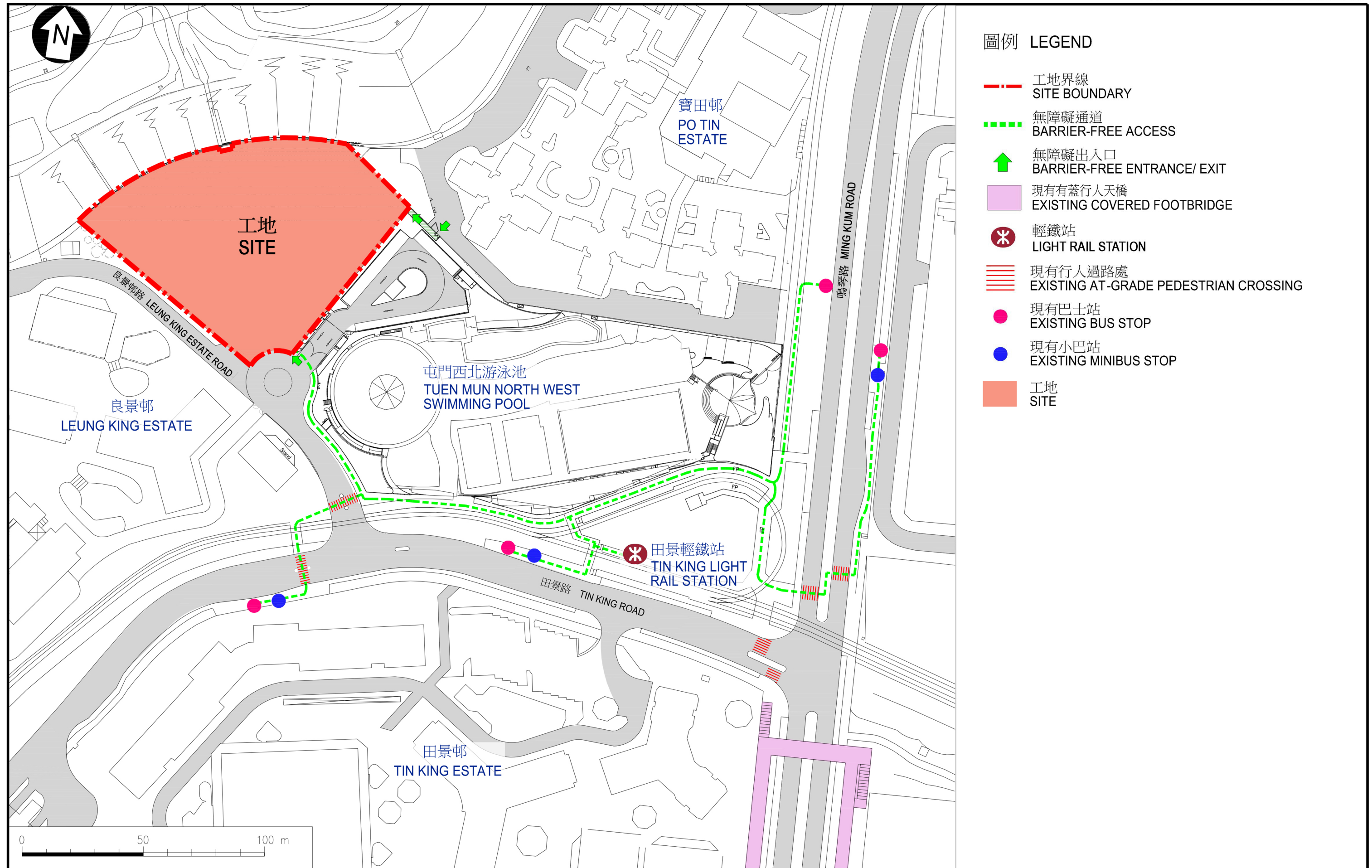
從南面望向大樓的透視圖
PERSPECTIVE VIEW FROM SOUTH DIRECTION



構思圖
ARTIST'S IMPRESSION
DRAWING

B075MC
屯門第29區西社區健康中心暨安老院舍
COMMUNITY HEALTH CENTRE CUM RESIDENTIAL CARE HOME FOR THE ELDERLY AT TUEN MUN AREA 29 WEST

 ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



無障礙通道平面圖
PLAN OF
BARRIER-FREE ACCESS

75MC
屯門第29區西社區健康中心暨安老院舍
COMMUNITY HEALTH CENTRE CUM RESIDENTIAL CARE HOME FOR THE ELDERLY AT TUEN MUN AREA 29 WEST

Enclosure 11 to PWSC(2018-19)33

Key development parameters of the public housing development and the community health centre-cum-residential care home for the elderly at Tuen Mun Area 29 West

	Tuen Mun Area 29 West
Site area	About 0.75 hectares
Gross floor area	Non-Domestic: About 15 000 square metres Domestic: About 45 000 square metres
Allowable building height	140 metres above principal datum
No. of domestic block	1
Flat number	About 990
Anticipated population	About 2 800
Commencement date	Q2 2019
Completion date	2024
Ancillary facilities	Community health centre, residential care home for the elderly, car park, cycle parking area, children's play area, open spaces, etc.

**75MC - Community health centre-cum-residential care home for the elderly
at Tuen Mun Area 29 West**

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

Item description	Quantity	Unit cost (\$ million)	Total cost (\$ million)
Advantage Plus Pass-Thru, Endoscope Reprocessing System	2	1.6	3.2
Automatic Medication Dispensing System	1	2.6	2.6
Dispensing Shelving System	1	1.1	1.1
Emergency Call Bell System	1	1.0	1.0
Integrated Public Address System	1	1.5	1.5
Integrated Security Systems: Access Control System	1	2.0	2.0
Integrated Security Systems: Closed Circuit Television System	1	2.0	2.0
Intruder Detection System	1	1.0	1.0
Nurse Call / Paging System	1	1.0	1.0
Private Automatic Branch Exchange (PABX) System	1	1.2	1.2
Panic Alarm System	1	1.0	1.0
Queue Display and Management System	1	3.0	3.0

Item description	Quantity	Unit cost (\$ million)	Total cost (\$ million)
Staff Call System	1	1.0	1.0
Telecommunication System	1	2.0	2.0
Video-processor, Light source, LCD Monitor, Workstation, Electrosurgical Unit, CO2 Regulation Unit & Flushing Pump	2	1.1	2.2
Video-recording System for training purpose	1	1.2	1.2