

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Recreation, Culture and Amenities – Mixed amenity packages

56RG – Government Complex in Area 14 (Siu Lun), Tuen Mun

Members are invited to recommend to the Finance Committee the upgrading of 56RG to Category A at an estimated cost of \$1,250.7 million in money-of-the-day prices.

PROBLEM

There are insufficient sports and community facilities in Tuen Mun to meet the needs of the local community.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Home Affairs, proposes to upgrade **56RG** to Category A at an estimated cost of \$1,250.7 million in money-of-the-day (MOD) prices for the construction of a government complex in Area 14 (Siu Lun), Tuen Mun.

/ **PROJECT**

PROJECT SCOPE AND NATURE

3. The project site occupies an area of about 5 400 square metres (m²) at Siu Lun Street near Castle Peak Road, in Area 14, Tuen Mun. The proposed scope of works under 56RG includes –

Sports Centre for Leisure and Cultural Services Department

- (a) a multi-purpose arena with seating capacity for up to 500 people (comprising 300 permanent and 200 retractable seats) which can be used as two basketball courts, two volleyball courts or eight badminton courts;
- (b) two multi-purpose activity rooms which can be combined into one larger activity room;
- (c) a table-tennis room;
- (d) a children's play room;
- (e) an outdoor climbing wall; and
- (f) ancillary facilities, including baby-care rooms, toilets, changing rooms, a first aid room, a management and booking office, a control room, a conference room and an equipment store room;

Community Hall for Home Affairs Department

- (g) a multi-purpose hall with seating capacity for 450 people and a stage which can be converted into two smaller venues divided by full-height partitions;
- (h) a stage store room;
- (i) a multi-purpose stage meeting room;
- (j) male and female dressing rooms;
- (k) a multi-purpose conference room; and

- (l) ancillary facilities including a management office with a store room, toilets, and mechanical and electrical plant rooms;

Tuen Mun Delivery Office cum Speedpost Centre for Post Office (PO)

- (m) Mail Delivery Office, including mail sorting office section, office accommodation, registered letter enclosure, enclosure for surcharged and redirected mail handling, records & stationery offices, server room and circulation area;
- (n) Speedpost Section, including Speedpost processing areas, two enclosures for overnight storage of call-for / pending delivery / undeliverable mail items, and record & stationery offices; and
- (o) ancillary facilities, including a rest room, a meeting/interview room, changing rooms, a cleaner's store, a pantry, toilets and shower facilities;

Tuen Mun Regional Office for Immigration Department (ImmD)

- (p) Joint Immigration/Registration of Persons Office, including office accommodation, public waiting area, public facilities such as babycare room, electronic service facilities; and
- (q) Births Registry and Marriage Registry, including office accommodation, public waiting area, and public facilities such as babycare room in the Births Registry, marriage hall, bride room and photo-taking corner in the Marriage Registry;

Butterfly Social Security Field Unit for Social Welfare Department (SWD)

- (r) office accommodation;
- (s) reception area;

/ (t)

- (t) counter/interviewing booths;
- (u) public waiting area; and
- (v) ancillary facilities, including pantry, server rooms and interview rooms;

Ancillary facilities for shared-use by departments

- (w) loading and unloading areas; and
- (x) parking spaces.

_____ A location plan and a site plan of the proposed government complex are at
_____ Enclosures 1 and 2. The floor plans, a section plan, a barrier-free access plan, and an artist's impressions for the proposed government complex are at Enclosures 3 to 14. Subject to funding approval of the Finance Committee, we plan to commence construction in May 2015 for completion in November 2018.

JUSTIFICATION

Sports Centre

4. Tuen Mun District has a population of about 497 700, which we expect to increase to about 528 400 by 2021. Whilst the Hong Kong Planning Standards and Guidelines suggest a provision of eight sports centres for Tuen Mun District by 2021, there are only four sports centres in the district¹ at present. The average usage rate of these centres was about 80% in the past three years, with usage rates at peak time in the evenings and at weekends averaging about 92%. The proposed sports centre will help cater for local demand for sports facilities for training, competition and causal use by schools, sports associations and general public. With four housing estates (Sam Shing Estate, On Ting Estate, Siu Lun Court and Chi Lok Fa Yuen), six secondary schools and six primary schools nearby, we believe that the proposed sports centre will be well-utilised by local residents and students in particular.

/ Community

¹ The four existing sports centres are Leung Tin Sports Centre, Tai Hing Sports Centre, The Jockey Club Tuen Mun Butterfly Beach Sports Centre and Yau Oi Sports Centre.

Community Hall

5. Currently, there is no community hall facility in the vicinity of the proposed government complex. Residents in the south-eastern part of Tuen Mun District need to make use of the On Ting/Yau Oi Community Centre and the Tuen Mun Town Centre Community Hall, both are two Light Rail Stations or about 20 minutes' walk away. Moreover, these two community hall facilities are already heavily utilised with an average utilisation rate of about 75% and 86% in 2013 respectively. The proposed community hall can meet the strong demand for community hall facilities arising from the increasing aspirations and needs of the population in the vicinity. Local residents will be benefited after its completion.

Other Government Facilities

6. The current Tuen Mun Delivery Office cum Speedpost Centre of the PO is located in an existing commercial premise at San Hui, Tuen Mun. Relocation of the PO facilities to the site will ensure the provision of a stable mail delivery service to Tuen Mun District as it may be difficult to find an alternative site in case the existing tenancy is not being renewed.

7. ImmD's Regional Office in Tuen Mun will replace the Tuen Mun District Births Registry and Tuen Mun Marriage Registry to provide "one-stop shop" services to the local community. This new office will provide registration of persons, travel document applications, extension of stay applications, as well as births and marriage registration services. Members of the public may make use of the diversified immigration services in a single visit, instead of having to go to various places for different services.

8. The reprovisioning of SWD's Butterfly Social Security Field Unit from the existing commercial premises at Hoi Wing Road, Tuen Mun to the site will provide a steady and permanent office for serving the public. The new office will provide an operationally better environment for the provision of social welfare services to the public. Moreover, the enhanced services will strengthen the support for the future development of the south-eastern part of Tuen Mun District.

FINANCIAL IMPLICATIONS

9. We estimate the capital cost of the project to be \$1,250.7 million in MOD prices (please see paragraph 10 below), broken down as follows –

	\$ million	
(a) Site works	5.0	
(b) Piling	103.3	
(c) Building ²	512.0	
(d) Building services ³	195.7	
(e) Drainage	11.5	
(f) External works	25.0	
(g) Additional energy conservation measures	17.5	
(h) Furniture and equipment ⁴	29.6	
(i) Consultants' fees	2.1	
(j) Contingencies	90.1	
	<hr/>	
Sub-total	991.8	(in September 2014 prices)
(k) Provision for price adjustment	258.9	
	<hr/>	
Total	1,250.7	(in MOD prices)

The design and contract administration of the project will be undertaken by in house resources. We propose to engage consultants to undertake contract administration for the environmental works of the project. A detailed breakdown of the estimate for consultants' fees is at Enclosure 15. The construction floor area (CFA) of the project is about 23 800 m². The estimated construction unit cost, represented by the building and building services costs, is \$29,735 per m² of CFA in September 2014 prices. We consider this comparable to that of similar projects built by the Government.

/ 10.

² Building works cover construction of substructure and superstructure of the building.

³ Building service works cover the electrical installations, ventilation and air-conditioning installations, fire service installations, lift and escalator and other specialist installations.

⁴ The estimated cost is based on an indicative list of furniture and equipment.

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

Year	\$ million (Sept 2014)	Price adjustment factor	\$ million (MOD)
2015 – 16	20.0	1.06000	21.2
2016 – 17	60.0	1.12360	67.4
2017 – 18	200.0	1.19102	238.2
2018 – 19	510.0	1.26248	643.9
2019 – 20	100.0	1.32876	132.9
2020 – 21	50.0	1.39519	69.8
2021 – 22	30.0	1.46495	43.9
2022 – 23	21.8	1.53271	33.4
	991.8		1,250.7

11. 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 2015 to 2023. Subject to funding approval, we will deliver the construction works through a lump sum contract because we can clearly define the scope of works in advance. The contract will provide for price adjustments.

12. We estimate the annual recurrent expenditure arising from this project to be about \$54.8 million. The capital and recurrent costs arising from the project would be taken into consideration when determining the affected fees and charges as appropriate in future.

PUBLIC CONSULTATION

13. We consulted the Environment, Hygiene and District Development Committee (EHDDC) of the Tuen Mun District Council on the conceptual layout of the project on 23 March 2012. A progress report was made to EHDDC on 19 July 2013 and a report on the latest development and layout was made to EHDDC on 21 March 2014. Members supported the project and requested its early implementation.

14. We consulted the Legislative Council Panel on Home Affairs on 11 April 2014. Members supported submitting the funding proposal to the Public Works Subcommittee for consideration.

/ ENVIRONMENTAL

ENVIRONMENTAL IMPLICATIONS

15. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). In February 2013, we carried out a Preliminary Environmental Review (PER) for the project and agreed the findings with the Director of Environmental Protection. It was concluded that with proper building layout and design measures, the project would not have long-term environmental impacts. We will implement the mitigation measures recommended in the PER.

16. During construction, we will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the relevant contract. These include the use of silencers, mufflers, acoustic linings or shields and the building of barrier walls for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

17. At the planning and design stages, we have considered measures to reduce the generation of construction waste where possible (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste (e.g. use of excavated materials for filling within the site) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities⁵. We will encourage the contractor to maximise the use of recycled/recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

18. At the construction stage, we will also require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

/19.

⁵ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

19. We estimate that the project will generate in total about 24 900 tonnes of construction waste. Of these, we will reuse about 5 300 tonnes (21.3%) of inert construction waste on site and deliver 15 800 tonnes (63.4%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 3 800 tonnes (15.3%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$0.9 million for this project (based on a unit charge rate of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation).

HERITAGE IMPLICATIONS

20. This project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

21. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

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

- (a) water-cooled chiller (evaporative cooling tower using fresh water);
- (b) variable speed drive for chillers;
- (c) automatic demand control of chilled water circulation system;
- (d) demand control of fresh air supply with carbon dioxide sensors;
- (e) heat pipes for heat energy reclaim of exhaust air;
- (f) heat pump for domestic hot water;
- (g) automatic demand control of supply air;
- (h) LED type light fittings;

/ (i)

- (i) solar hot water system; and
- (j) photovoltaic system.

23. For greening features, we will provide greening on appropriate area of the rooftops and facades of the building for environmental and amenity benefits.

24. For recycled features, we will adopt rainwater recycling system for landscape irrigation.

25. The total estimated additional cost for adoption of the above features is around \$17.5 million (including \$4.0 million for energy efficient features), which has been included in the cost estimate of the project. The energy efficient features will achieve 10.6% energy savings in the annual energy consumption with a payback period of about 4.6 years.

BACKGROUND INFORMATION

26. We upgraded **56RG** to Category B in September 2010. We engaged consultants to undertake various services, including topographical survey in February 2011, ground investigation in May 2011, Preliminary Environmental Review in November 2011 and Traffic Impact Assessment in January 2011, at a total cost of about \$1.2 million. The services provided by the consultants, which have been completed, are funded under block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fees for items in Category D of the Public Works Programme”.

27. To make available space for the development of the project, the 14 existing trees within the project boundary have to be removed from the site, including 11 trees to be felled, one trees to be transplanted within the project site and two trees to be transplanted outside the site. All trees to be removed are not important trees⁶. We will incorporate planting proposals as part of the project, including the planting of 30 trees, 3 000 shrubs, 35 000 groundcovers, and 250m² of grassed area.

/ 28.

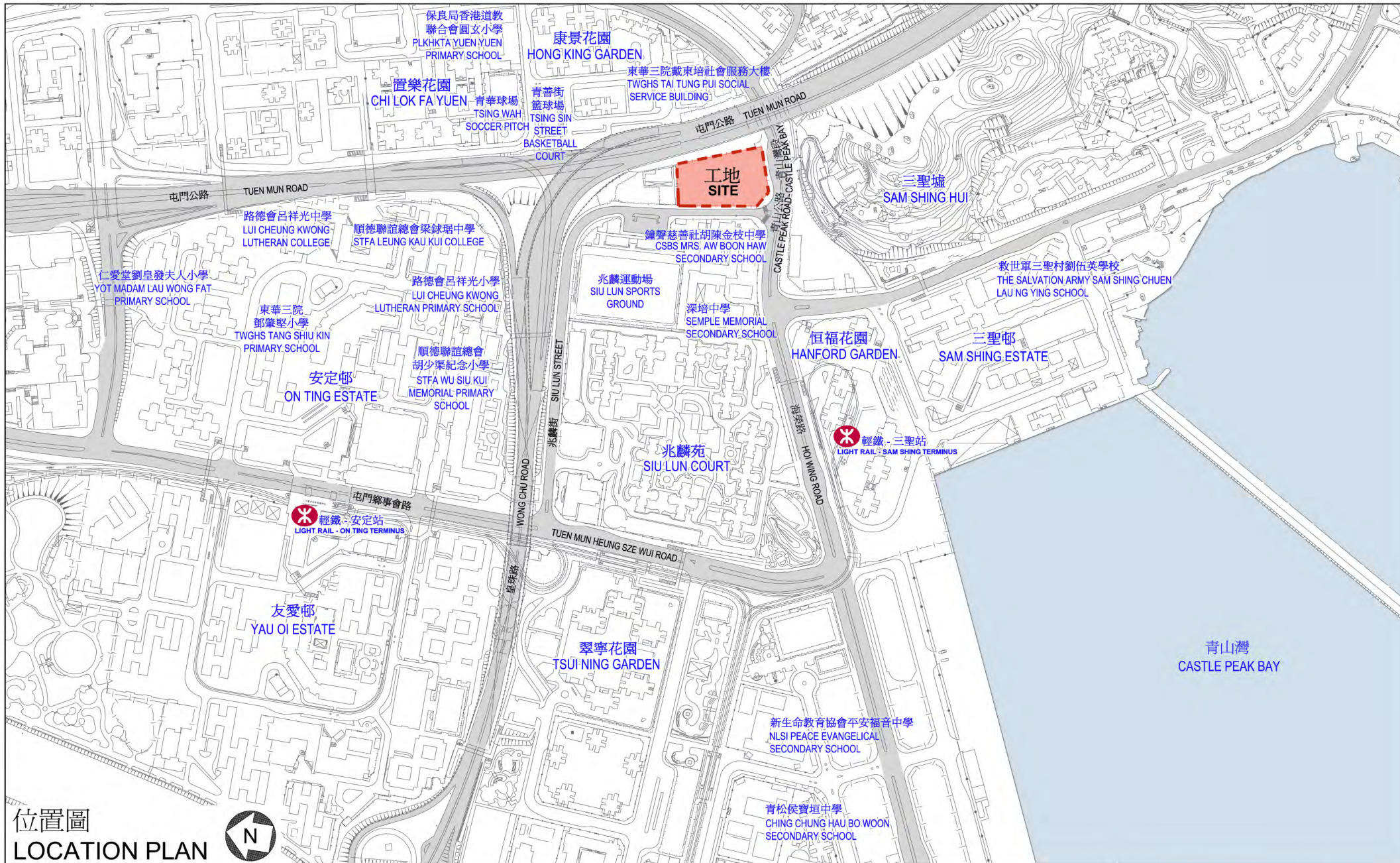
⁶ “Important trees” refer to trees in the Register of Old and Valuable trees, or any trees that meet one or more of the following criteria –

- (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 curtail like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 metre (m) (measured at 1.3m above ground level), or with height/canopy spread equal or exceeding 25m.

28. We estimate that the proposed works will create about 368 jobs (340 for labourers and 28 for professional/technical staff) providing a total employment of 8 470 man-months.

29. This paper supersedes PWSC(2014-15)18 which was not discussed by the PWSC during the 2013-14 legislative session. The programme, phasing of expenditure and estimated cost of the project have been updated due to the lapse of time.

Home Affairs Bureau
October 2014

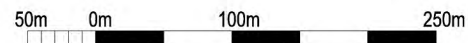


位置圖
LOCATION PLAN

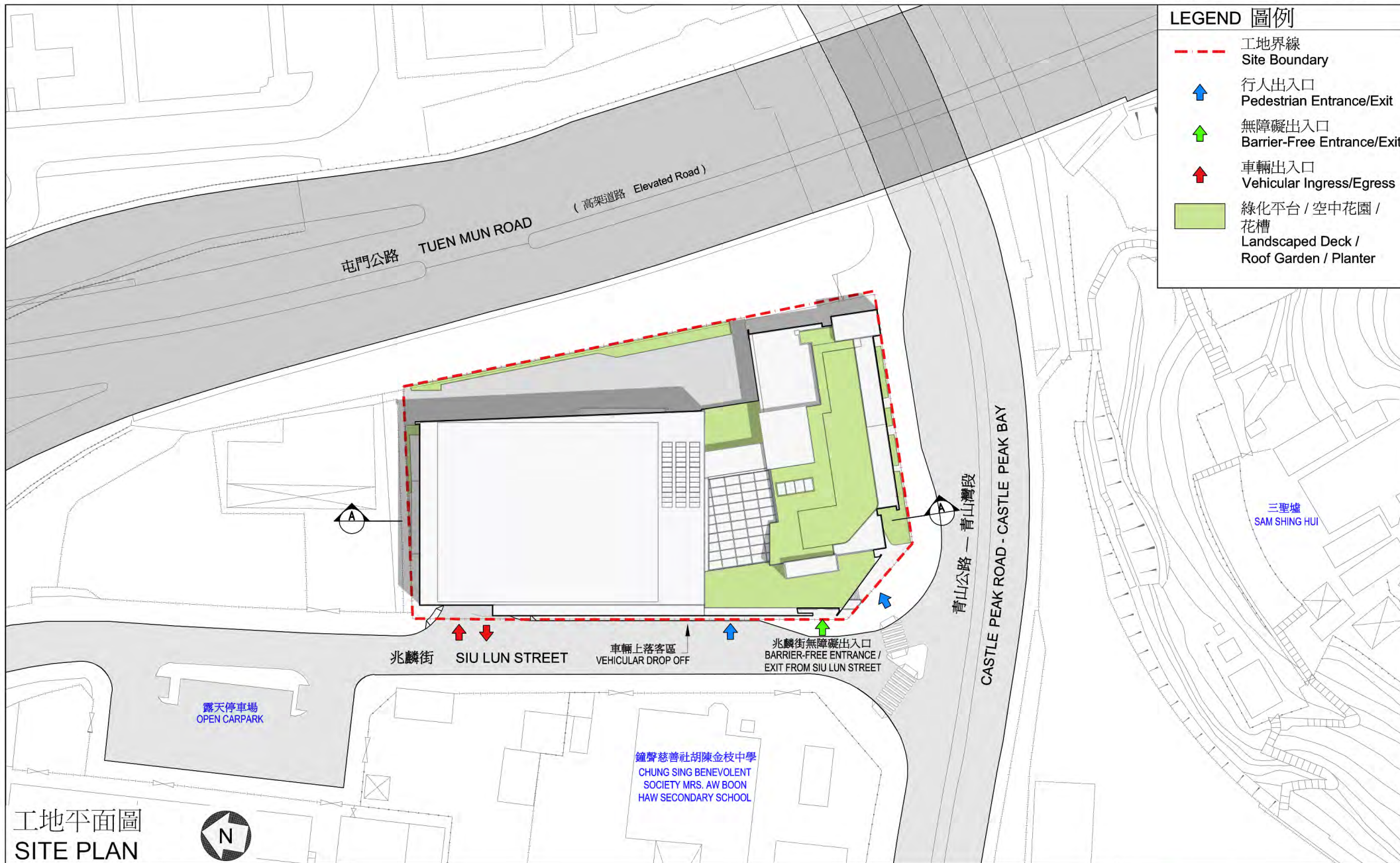


Project Title 項目名稱

56RG
屯門第14區 (兆麟) 政府綜合大樓
GOVERNMENT COMPLEX IN AREA 14 (SI LUN), TUEN MUN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



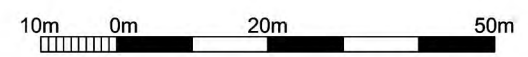
LEGEND 圖例

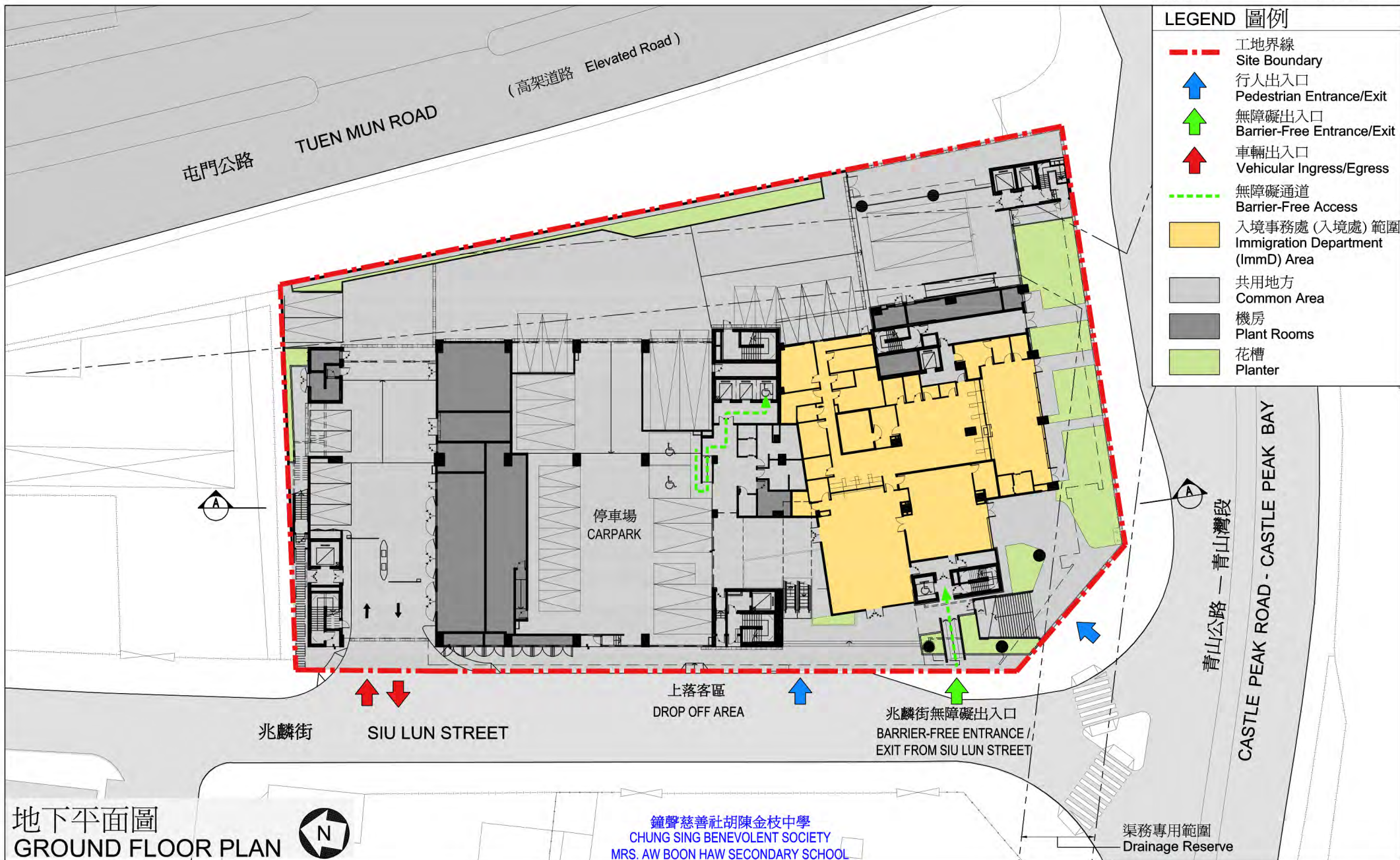
- - - 工地界線
Site Boundary
- ↑ 行人出入口
Pedestrian Entrance/Exit
- ↑ 無障礙出入口
Barrier-Free Entrance/Exit
- ↑ 車輛出入口
Vehicular Ingress/Egress
- 綠化平台 / 空中花園 / 花槽
Landscaped Deck / Roof Garden / Planter

工地平面圖
SITE PLAN



Project Title 項目名稱
56RG
 屯門第14區 (兆麟) 政府綜合大樓
 GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN





Project Title 項目名稱

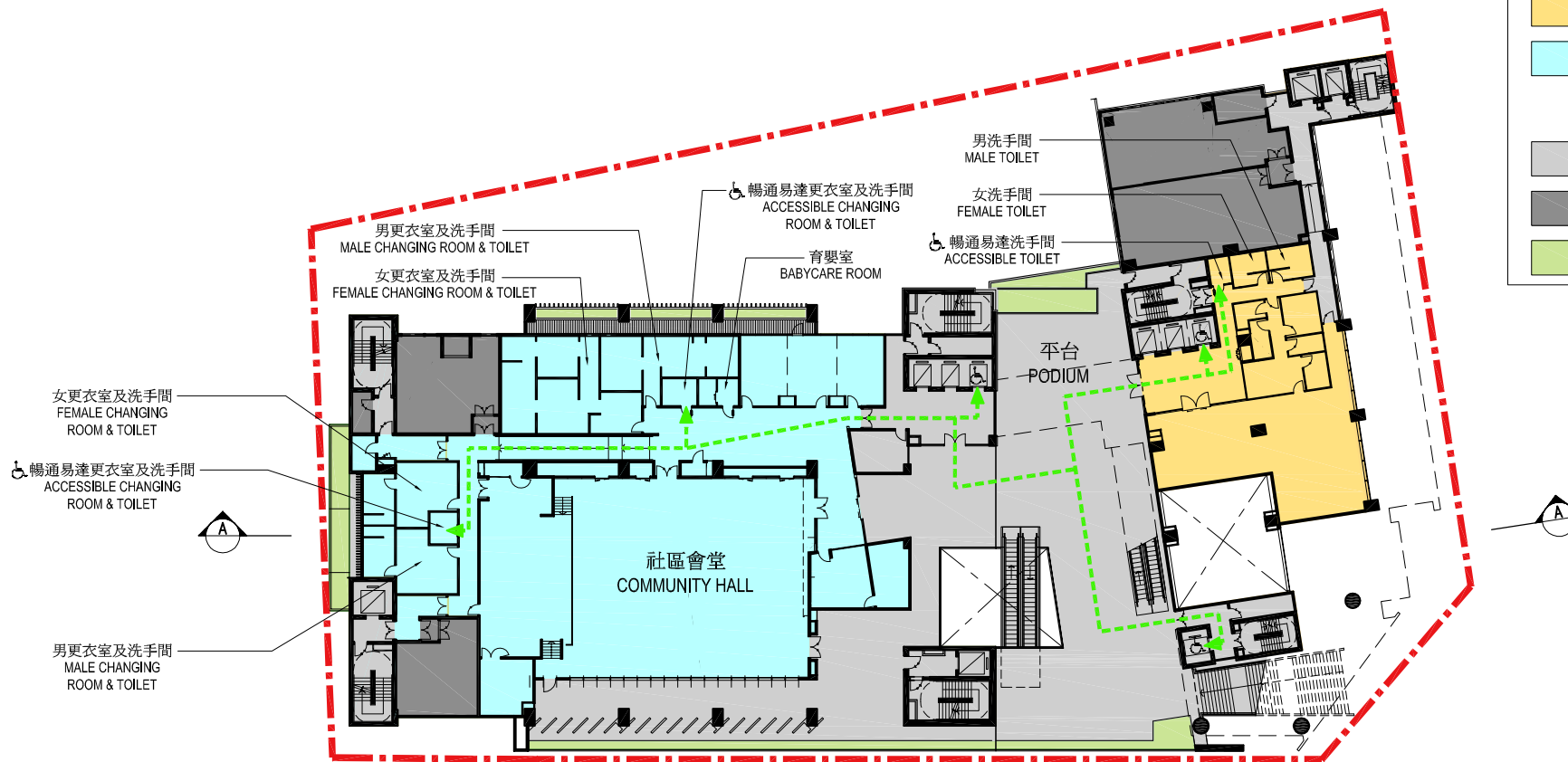
56RG
屯門第14區 (兆麟) 政府綜合大樓
GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN



ARCHITECTURAL SERVICES DEPARTMENT 建築署

LEGEND 圖例

- - - 工地界線
Site Boundary
- - - 無障礙通道
Barrier-Free Access
- 入境處範圍
ImmD Area
- 民政事務總署 (民政署)
範圍
Home Affairs Department (HAD) Area
- 共用地方
Common Area
- 機房
Plant Rooms
- 花槽
Planter



一樓平面圖
FIRST FLOOR PLAN



Project Title 項目名稱

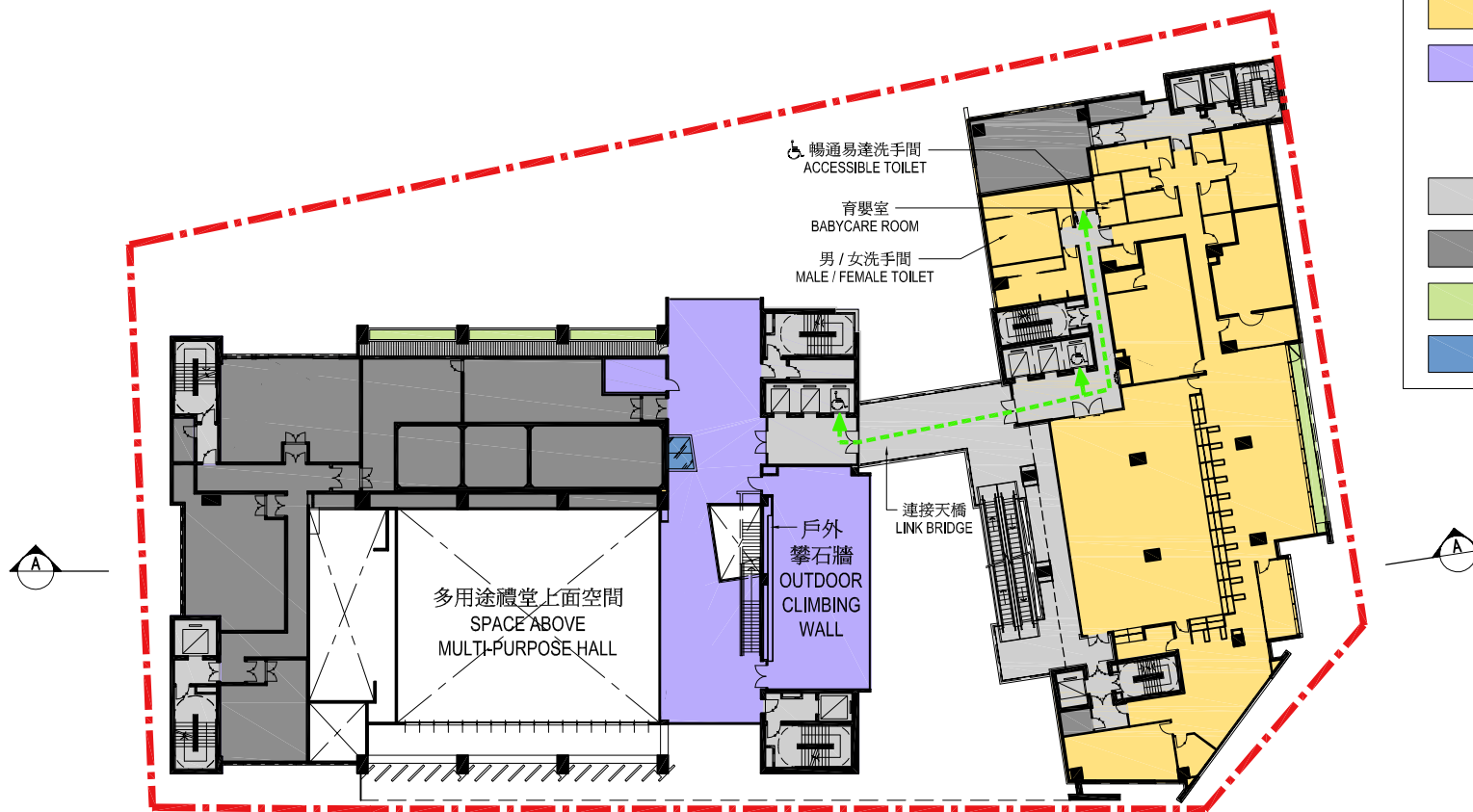
56RG
屯門第14區 (兆麟) 政府綜合大樓
GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

LEGEND 圖例

- - - 工地界線
Site Boundary
- - - 無障礙通道
Barrier-Free Access
- 入境處範圍
ImmD Area
- 康樂及文化事務署
(康文署) 範圍
Leisure and Cultural
Services Department
(LCSD) Area
- 共用地方
Common Area
- 機房
Plant Rooms
- 花槽
Planter
- 天窗
Skylight



二樓平面圖
SECOND FLOOR PLAN



Project Title 項目名稱

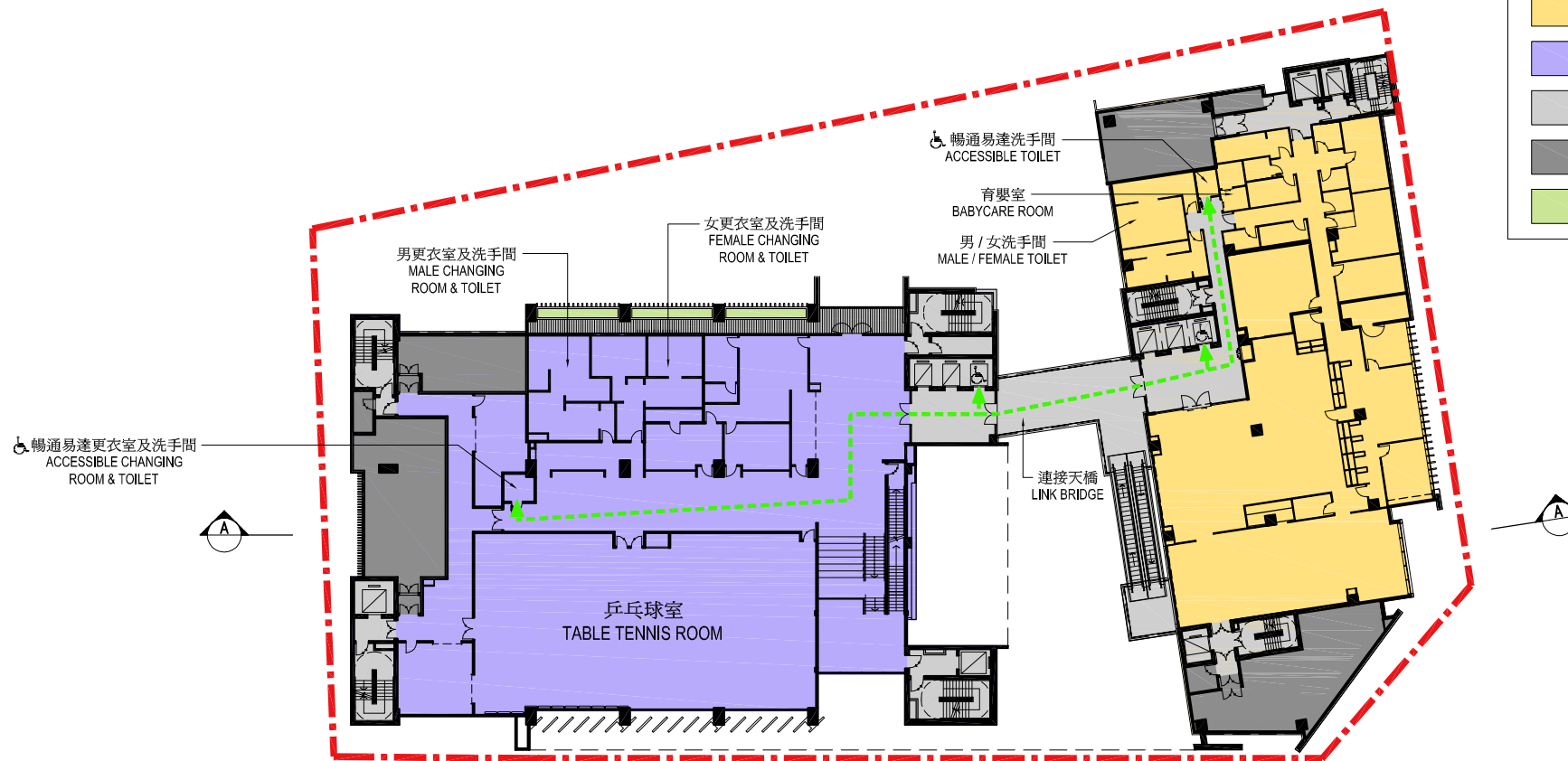
56RG
屯門第14區 (兆麟) 政府綜合大樓
GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

LEGEND 圖例

- - - 工地界線
Site Boundary
- - - 無障礙通道
Barrier-Free Access
- 入境處範圍
ImmD Area
- 康文署範圍
LCSD Area
- 共用地方
Common Area
- 機房
Plant Rooms
- 花槽
Planter



三樓平面圖
THIRD FLOOR PLAN










Project Title 項目名稱

56RG
屯門第14區（兆麟）政府綜合大樓
GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

LEGEND 圖例	
	工地界線 Site Boundary
	無障礙通道 Barrier-Free Access
	郵政署範圍 Post Office (PO) Area
	康文署範圍 LCSD Area
	共用地方 Common Area
	機房 Plant Rooms
	玻璃簷篷 Glass Canopy



四樓平面圖
FOURTH FLOOR PLAN







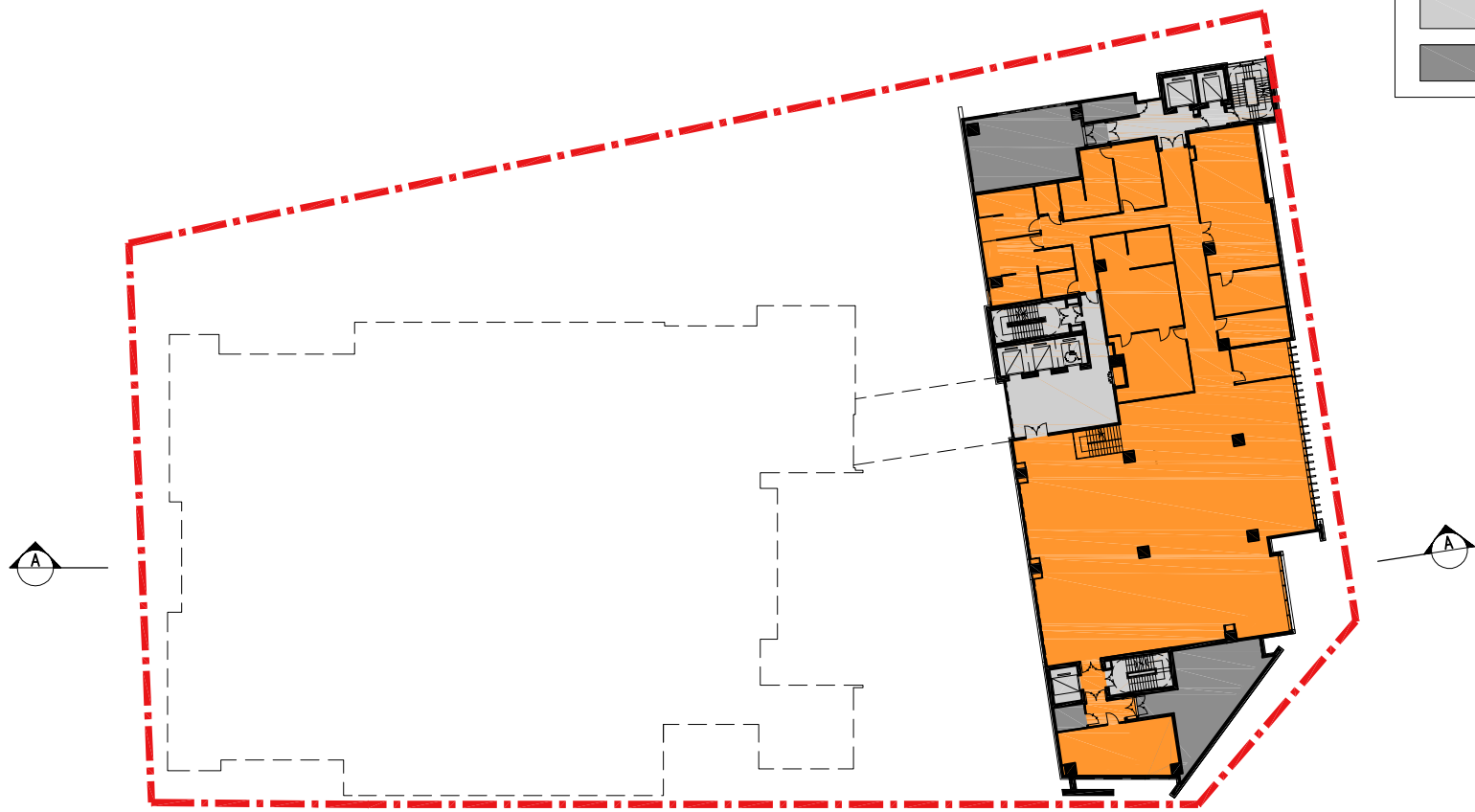
Project Title 項目名稱

56RG
屯門第14區 (兆麟) 政府綜合大樓
GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

LEGEND 圖例	
	工地界線 Site Boundary
	郵政署範圍 PO Area
	共用地方 Common Area
	機房 Plant Rooms



四樓夾層平面圖
FOURTH (MEZZANINE) FLOOR PLAN



Project Title 項目名稱

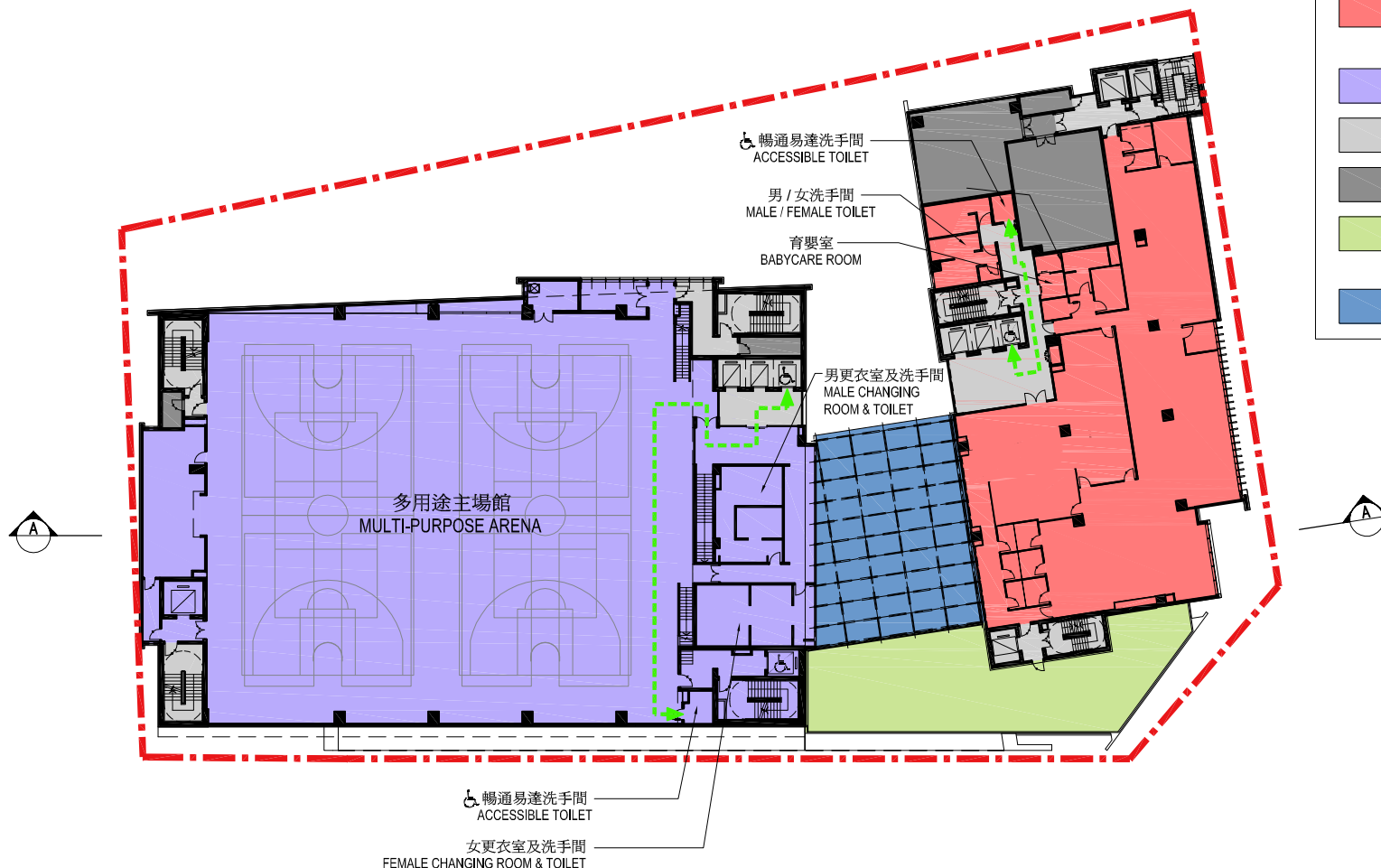
56RG
屯門第14區（兆麟）政府綜合大樓
GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

LEGEND 圖例

- - - 工地界線
Site Boundary
- - - 無障礙通道
Barrier-Free Access
- 社會福利署 (社署) 範圍
Social Welfare Department (SWD) Area
- 康文署範圍
LCSD Area
- 共用地方
Common Area
- 機房
Plant Rooms
- 綠化平台 / 空中花園
Landscaped Deck / Roof Garden
- 天窗
Skylight



五樓平面圖
FIFTH FLOOR PLAN



Project Title 項目名稱

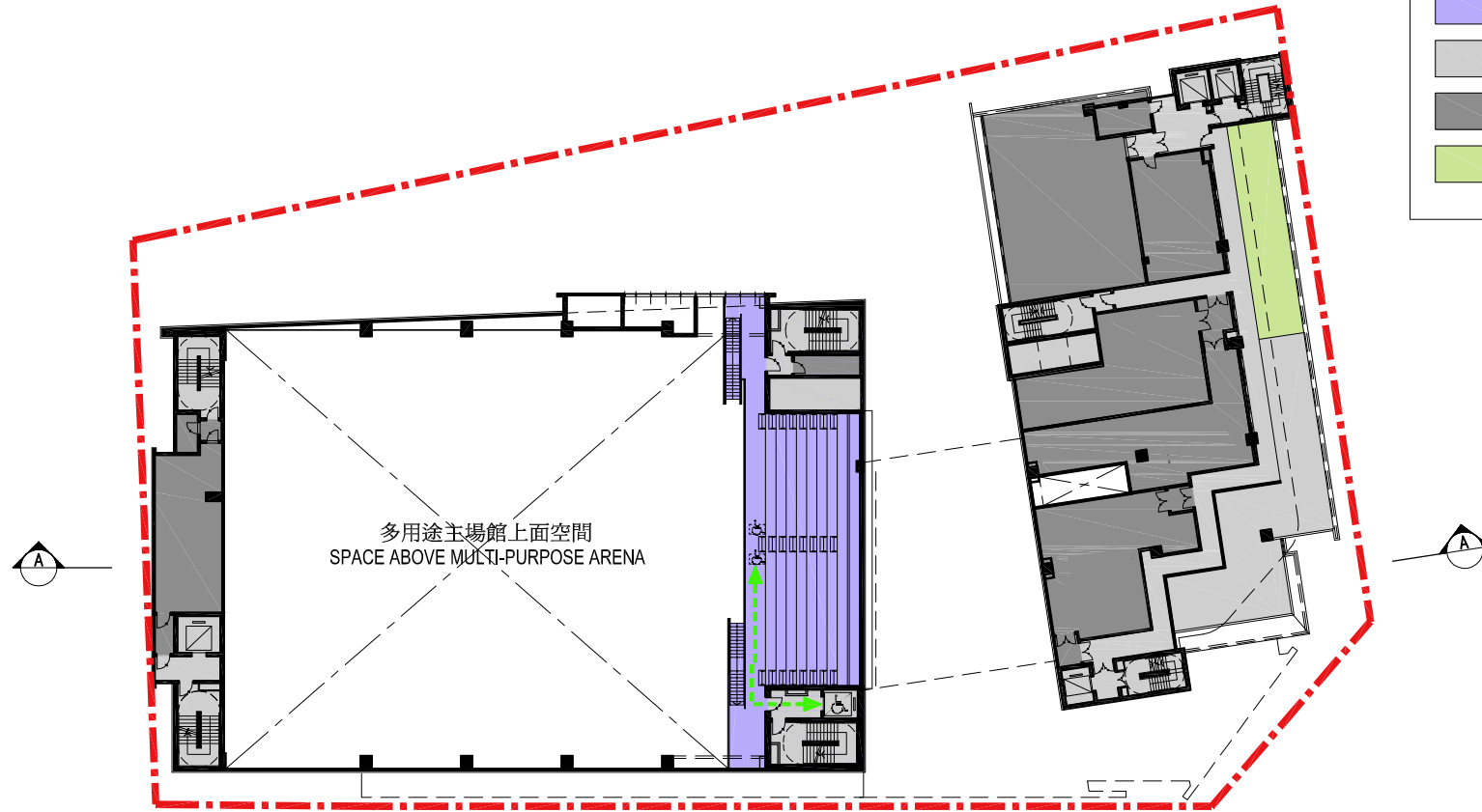
56RG
屯門第14區 (兆麟) 政府綜合大樓
GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

LEGEND 圖例

- - - 工地界線
Site Boundary
- - - 無障礙通道
Barrier-Free Access
- 康文署範圍
LCSD Area
- 共用地方
Common Area
- 機房
Plant Rooms
- 綠化平台 / 空中花園
Landscaped Deck / Roof Garden



六樓平面圖
SIXTH FLOOR PLAN



Project Title 項目名稱

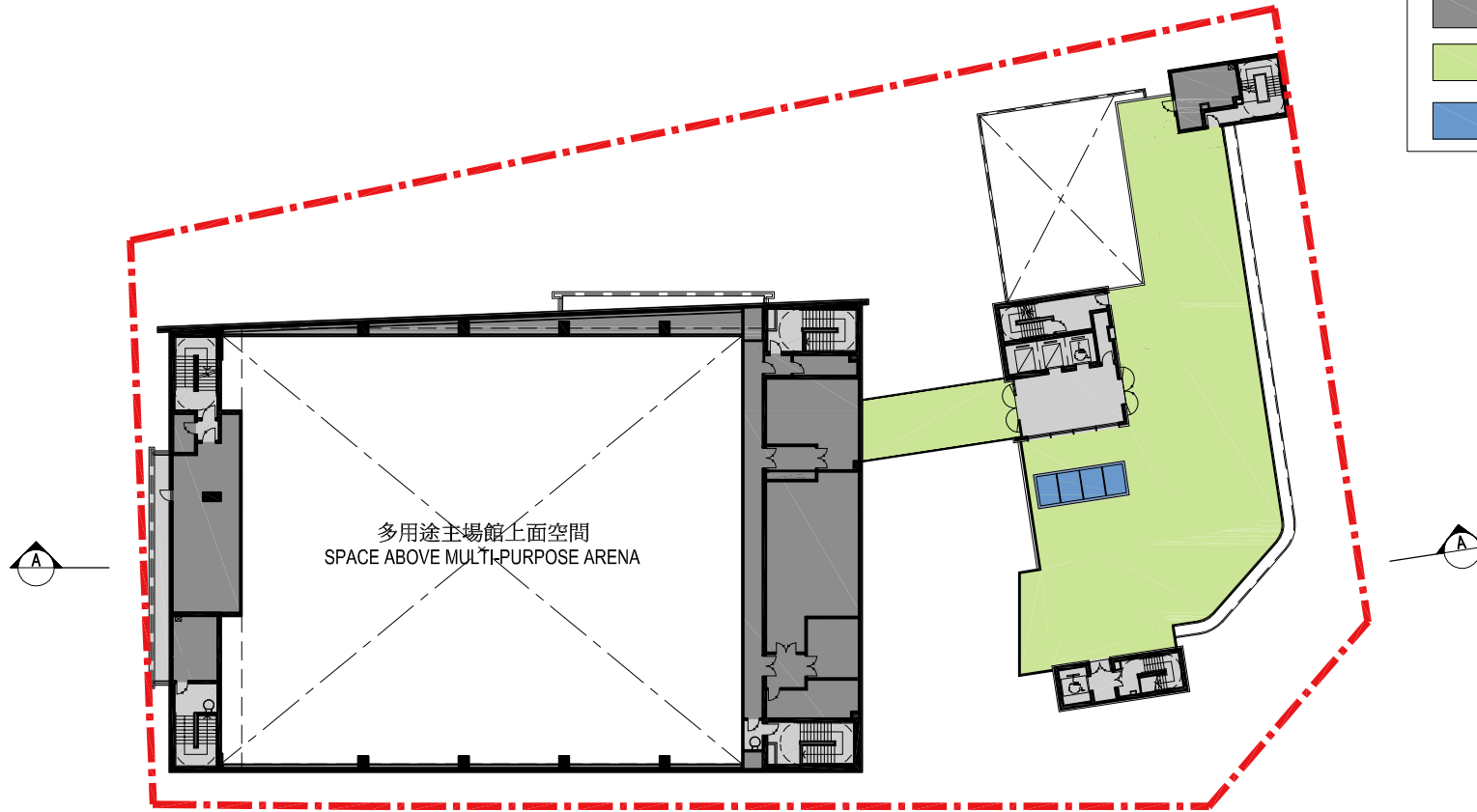
56RG
屯門第14區（兆麟）政府綜合大樓
GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

LEGEND 圖例

- - - 工地界線
Site Boundary
- 共用地方
Common Area
- 機房
Plant Rooms
- 空中花園
Roof Garden
- 天窗
Skylight



七樓平面圖
SEVENTH FLOOR PLAN



Project Title 項目名稱

56RG

屯門第14區（兆麟）政府綜合大樓

GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN



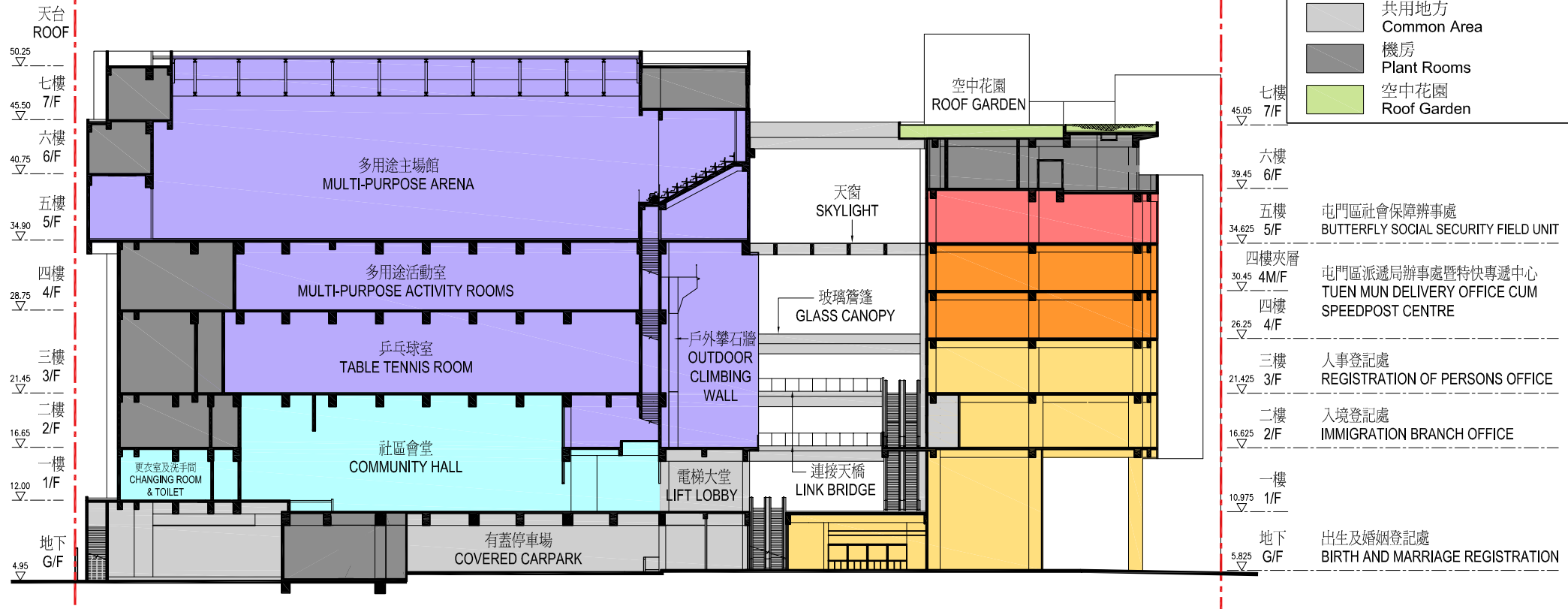
ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

LEGEND 圖例

- 工地界線
Site Boundary
- 入境處範圍
ImmD Area
- 郵政署範圍
PO Area
- 社署範圍
SWD Area
- 民政署範圍
HAD Area
- 康文署範圍
LCSD Area
- 共用地方
Common Area
- 機房
Plant Rooms
- 空中花園
Roof Garden

工地界線
SITE BOUNDARY

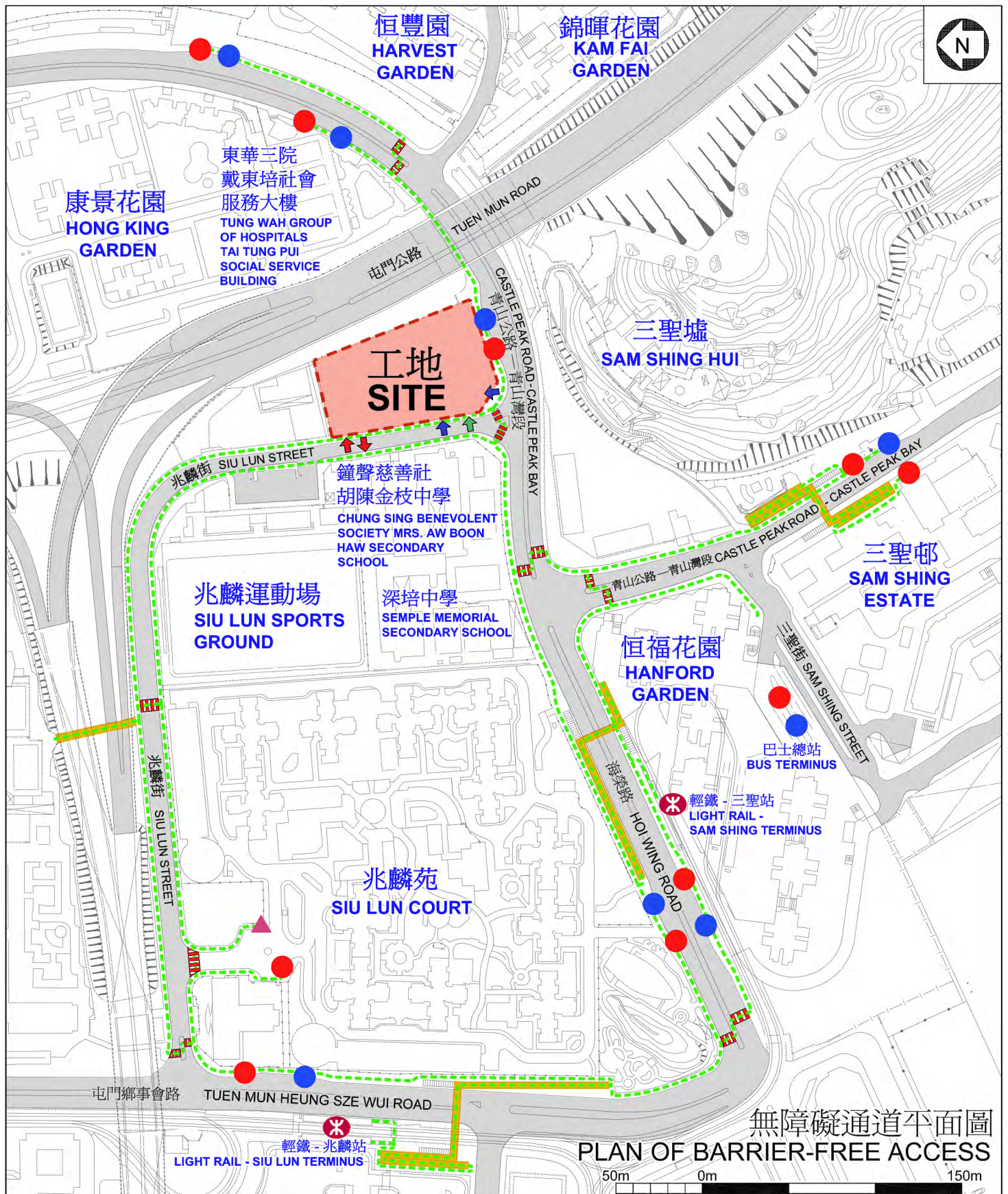
工地界線
SITE BOUNDARY



A-A 剖面圖
SECTION A-A

Project Title 項目名稱
56RG
屯門第14區（兆麟）政府綜合大樓
GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN





無障礙通道平面圖
PLAN OF BARRIER-FREE ACCESS

LEGEND 圖例

- | | | | | | | | |
|--|-----------------------------------|--|--------------------------------------------------|--|--------------------------------------------------------------------------------------|--|------------------------------|
| | 車輛出入口
Vehicular Ingress/Egress | | 行人出入口
Pedestrian Entrance/Exit | | 無障礙出入口
Barrier-Free Entrance/Exit | | 無障礙通道
Barrier-Free Access |
| | 現有巴士站
Existing Bus Stop | | 現有小巴站
Existing Minibus Stop | | 現有輕鐵站
Existing Light Rail Terminus | | 現有的士站
Existing Taxi Stand |
| | 工地界線
Site Boundary | | 現有行人過路處
Existing At-grade Pedestrian Crossing | | 現有有蓋行人天橋 / 隧道 (設有無障礙斜道)
Existing Covered Footbridge / Tunnel with Accessible Ramp | | |

Project Title 項目名稱
56RG
屯門第14區 (兆麟) 政府綜合大樓
GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN





從東面望向大樓的構思圖

PERSPECTIVE VIEW FROM EASTERN DIRECTION (ARTIST'S IMPRESSION)

Project Title 項目名稱

56RG

屯門第14區（兆麟）政府綜合大樓

GOVERNMENT COMPLEX IN AREA 14 (SIU LUN), TUEN MUN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

Enclosure 15 to PWSC(2014-15)41

56RG – Government Complex in Area 14 (Siu Lun), Tuen Mun

Breakdown of the estimates for consultants' fees (in September 2014 prices)

		Estimated man- months	Average MPS ¹ salary point	Multiplier	Estimated fee (\$ million)
(a)	Consultants' fees for contract	–	–	–	1.5
	administration of environmental works (Note 1)	–	–	–	0.6
					—————
				Sub-total	2.1

Notes

1. The consultants' fees for contract administration of environmental works is calculated in accordance with the existing environmental works consultancy agreement for **56RG**. The assignment will only be executed subject to Finance Committee's funding approval to upgrade **56RG** to Category A.