

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Environmental Hygiene – Burial grounds, columbaria and crematoria

24NB – Provision of columbarium, Garden of Remembrance and related works at On Hing Lane, Shek Mun, Sha Tin

28NB – Provision of columbarium and Garden of Remembrance at Sandy Ridge Cemetery (Phase 1 development)

HEAD 705 – CIVIL

Transport – Footbridges and pedestrian tunnels

193TB – Construction of subway in support of the provision of columbarium at On Hing Lane, Shek Mun, Sha Tin

Members are invited to recommend to the Finance Committee the upgrading of **24NB, 28NB and 193TB** to Category A at estimated costs of \$859.5 million, \$1,240.5 million and \$227.4 million in money-of-the-day prices respectively.

PROBLEM

We need to provide additional columbaria in Shek Mun, Shatin and at Sandy Ridge Cemetery to meet rising public demand. We also need to construct a pedestrian subway underneath and across Tate's Cairn Highway to support the provision of the planned columbarium in Shek Mun.

/PROPOSAL.....

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Food and Health, proposes to upgrade the following projects to Category A –

- (a) **24NB** at an estimated cost of \$859.5 million in money-of-the-day (MOD) prices for the provision of columbarium, Garden of Remembrance (GoR) and related works at On Hing Lane, Shek Mun, Sha Tin; and
- (b) **28NB** at an estimated cost of \$1,240.5 million in MOD prices for the provision of columbarium and GoR at Sandy Ridge Cemetery (Phase 1 development).

3. The Director of Civil Engineering and Development, also with the support of the Secretary for Food and Health, proposes to upgrade **193TB** to Category A at an estimated cost of \$227.4 million in MOD prices for the construction of subway in support of the provision of columbarium at On Hing Lane, Shek Mun.

4. Details of **24NB** (Shek Mun columbarium), **193TB** (Shek Mun subway) and **28NB** (Sandy Ridge columbarium) above are at Enclosures 1 to 3 respectively.

Food and Health Bureau
May 2019

24NB – Provision of columbarium, Garden of Remembrance and related works at On Hing Lane, Shek Mun, Sha Tin

PROJECT SCOPE AND NATURE

The columbarium site is located at On Hing Lane, Shek Mun in Sha Tin with an area of about 24 000 square metres (m²). The scope of works includes –

- (a) construction of a three-storey columbarium block (plus a rooftop) to provide about 40 000 niches;
- (b) construction of a Garden of Remembrance (GoR) with a spacious lawn for scattering of cremains and designated walls for mounting of plaques as well as provision of electronic kiosks in the garden for paying tribute to the deceased;
- (c) provision of facilities for keeping of abortuses and/or scattering of their ashes;
- (d) modification of the existing On Hing Lane, including reprovisioning of a roundabout outside the site boundary; and
- (e) provision of ancillary facilities such as office, a multi-purpose room, storerooms, public toilets, a first aid room, a baby care room, passenger lifts, a control room for closed-circuit television and public address system as well as computer kiosks (for introducing columbaria facilities, promoting green burials and searching for niches of the deceased).

2. A location plan, a site plan, floor plans, a sectional drawing, an artist's impression and a barrier-free access plan for the project are at Annexes 1 to 8 to Enclosure 1. Subject to the funding approval of the Finance Committee, we plan to commence construction in the second quarter of 2020 for completion in the third quarter of 2023.

/JUSTIFICATION

JUSTIFICATION

3. With a growing and ageing population in Hong Kong, the number of deaths and cremations has been rising gradually. According to the projection based on the latest demographic data, the cumulative number of cremations would be around 1.2 million in the coming 20 years (from 2019 to 2038). The death toll was over 47 000 in 2018 and it is estimated to increase to 73 900 in 2038. Public demand for niches in columbarium is growing.

4. To increase the supply of public niches in response to the public demand, the Government has been promoting the district-based columbarium development scheme and introducing more sustainable ways to utilise these facilities¹.

5. The site at On Hing Lane, Shek Mun, adjacent to the Sha Tin Refuse Transfer Station, is one of the sites identified under the district-based columbarium development scheme. We propose to develop a columbarium block to provide about 40 000 niches. Construction of a subway underneath and across Tate's Cairn Highway connecting On Muk Street and the columbarium site to enhance the accessibility is also required for the proposed columbarium development as a whole. This subway would be provided under another public works project (193TB).

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be \$859.5 million in money-of-the-day (MOD) prices, broken down as follows –

	\$ million (in MOD prices)
(a) Site works	16.8
(b) Foundation	25.0

/\$ million

¹ In parallel, the Government is stepping up promotion of green burial, including increasing the number of GoRs, establishing a central register for green burial, and working with various community sectors to boost its popularity.

		\$ million (in MOD prices)
(c)	Geotechnical works ²	177.4
(d)	Building ³	218.4
(e)	Building services	91.4
(f)	Drainage	29.2
(g)	External works ⁴	163.7
(h)	Additional energy conservation, green and recycled features	11.3
(i)	Furniture and equipment ⁵	0.4
(j)	Consultants' fees for	23.2
	(i) contract administration	21.6
	(ii) management of resident site staff (RSS)	1.6
(k)	Remuneration of RSS	24.6
(l)	Contingencies	78.1
Total		<hr/> 859.5 <hr/>

/7.

² Geotechnical works comprise site formation, construction of retaining structure and slope works.

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

⁴ External works comprise construction works such as GoR and landscape works.

⁵ The estimated cost is based on an indicative list of furniture and equipment required.

7. We propose to engage consultants to undertake contract administration and site supervision for the project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at Annex 9 to Enclosure 1. The construction floor area (CFA) of this project is about 9 220 m². The estimated construction unit cost, represented by the building and building services costs, is \$33,601 per m² of CFA in MOD prices. We consider this unit cost comparable to that of similar projects built by the Government.

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

Year	\$ million (in MOD prices)
2020 – 2021	50.6
2021 – 2022	134.0
2022– 2023	220.7
2023– 2024	264.8
2024– 2025	123.9
2025– 2026	41.8
2026– 2027	23.7
	<hr/> 859.5 <hr/>

9. 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 2020 to 2027. We will deliver the construction works through a lump-sum contract as the scope of the works can be clearly defined in advance. The contract will provide for price adjustment.

10. We estimate the annual recurrent expenditure arising from this project to be \$11.6 million. The Government charges a uniform set of fees and charges for columbarium services, irrespective of the location of the columbarium and niches. When setting and reviewing the level of fees and charges for columbarium services, the Government would take into account, among other factors, the construction cost of the columbarium buildings and related costs, as well as the recurrent costs arising from the allocation, operation and maintenance of the niches.

PUBLIC CONSULTATION

11. The Health and Environment Committee (HEC) of the Sha Tin District Council was consulted on the proposed columbarium development including the Traffic Impact Assessment (TIA) findings on 12 May 2016. HEC supported the proposed development. The conceptual and schematic designs for the columbarium block and the subway were later presented to HEC on 13 September 2018. While HEC members had no objection to the design for the abovementioned projects, they requested the Government to implement measures to enhance the accessibility to the columbarium and encourage visitors to use mass transportation.

12. We consulted the Legislative Council Panel on Food Safety and Environmental Hygiene on 16 April 2019. Members of the Panel had no objection to the Government submitting the funding proposal to the Public Works Subcommittee.

ENVIRONMENTAL IMPLICATIONS

13. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). A Preliminary Environmental Review (PER) for the project was completed, and the findings were agreed by the Director of Environmental Protection in March 2019. As mentioned in our report to the Panel in November 2016, the columbarium would be totally smoke-free and therefore would not cause long-term adverse environmental impacts. To control short-term environmental impacts caused by construction noise, dust and site run-off nuisances, we have included in the project estimate the cost to implement suitable mitigation measures in compliance with the established standards and guidelines. These measures include frequent water spraying and dust suppression, use of quiet construction plant, erection of purpose-built temporary noise barrier etc.

14. 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 facilities⁶. 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.

15. At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation 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 and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

16. We estimate that the project will generate in total about 135 860 tonnes of construction waste. Of these, we will reuse about 39 550 tonnes (29.1%) of inert construction waste on site and deliver 89 520 tonnes (65.9%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 6 790 tonnes (5.0%) 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 \$7.7 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

⁶ 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.

HERITAGE IMPLICATIONS

17. 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

18. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

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

- (a) solar powered light fittings; and
- (b) photovoltaic system.

20. For greening features, we will provide greening on rooftop and suitably incorporate vertical greening on the retaining wall as well as other landscape features and slope greening in appropriate areas of the site for environmental and amenity benefits.

21. The total estimated additional cost for adoption of the above energy conservation and greening features is around \$11.3 million (including \$0.4 million for energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 5.0% energy savings in the annual energy consumption with a payback period of about eight years.

/TRAFFIC

TRAFFIC IMPACT ASSESSMENT

22. We completed the TIA Study and the TIA Review Study in 2012 and 2017 respectively. According to the study, the additional traffic and pedestrian volume arising from the columbarium during the Ching Ming and Chung Yeung festive periods should be manageable with the implementation of improvement measures as mentioned in paragraph 1(d) above and the construction of a subway connecting On Muk Street and the columbarium site (**193TB**).

23. After the proposed columbarium is commissioned, the Food and Environmental Hygiene Department will work closely with the Hong Kong Police Force and other relevant departments to ensure that effective traffic and crowd control measures are implemented during the grave sweeping seasons.

BACKGROUND INFORMATION

24. We upgraded **24NB** to Category B in September 2013. We engaged consultants to undertake various services, including design services, TIA review, topographical survey, ground investigation and PER, at a total cost of about \$29.1 million. The services and works by the consultants were funded under block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fees for items in Category D of the Public Works Programme”. The TIA review, topographical survey, ground investigation and PER have been completed.

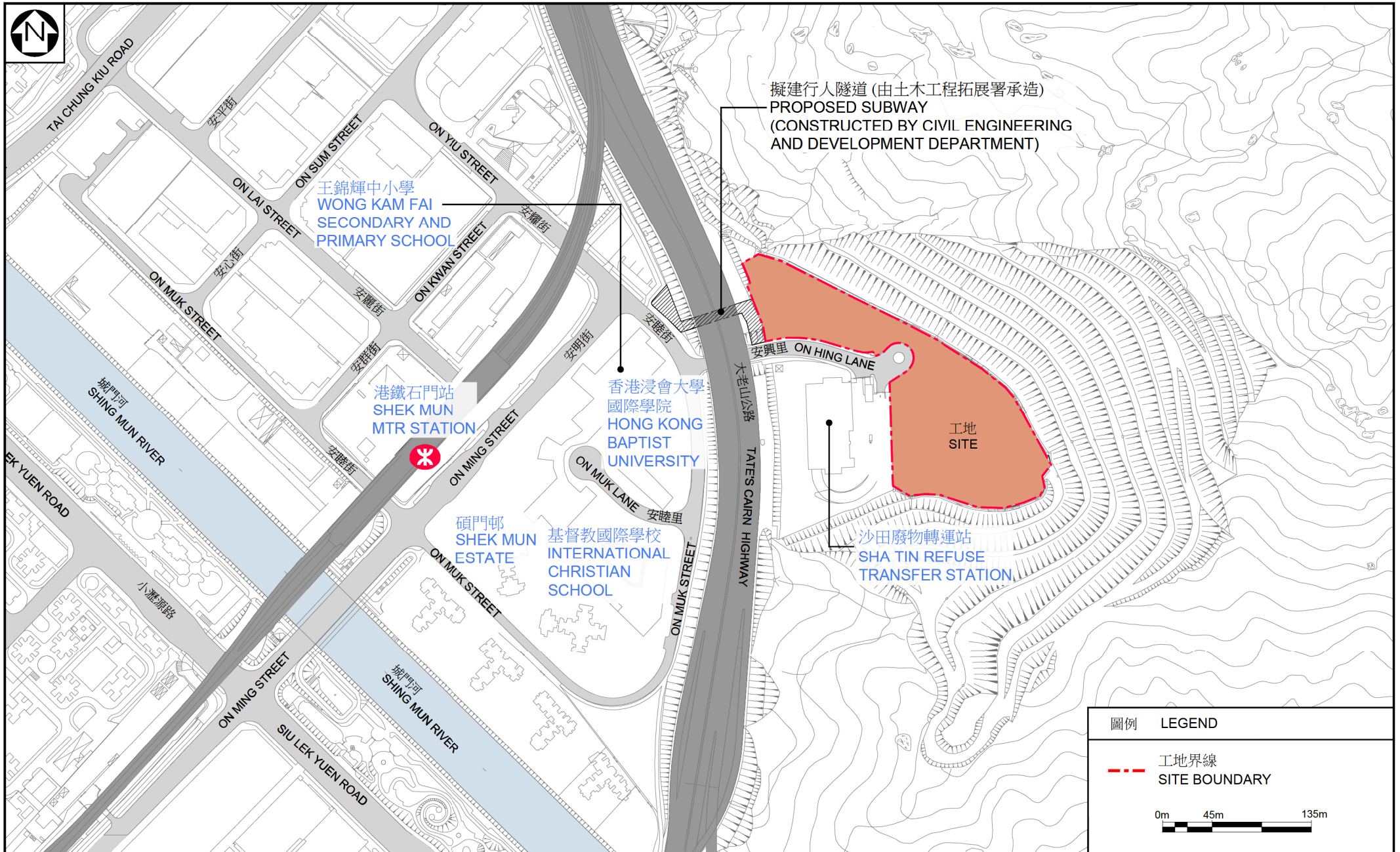
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25. All of the 516 trees within the project boundary will have to be felled. All trees to be felled are not important trees⁷. We will incorporate planting proposals as part of the project, including the planting of about 526 trees, 80 bamboos, 30 000 shrubs, 50 000 groundcovers, and 0.05 hectares of grassed area.

26. We estimate that the proposed works will create about 155 jobs (135 for labourers and 20 for professional or technical staff) providing a total employment of 4 950 man-months.

⁷ “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 –

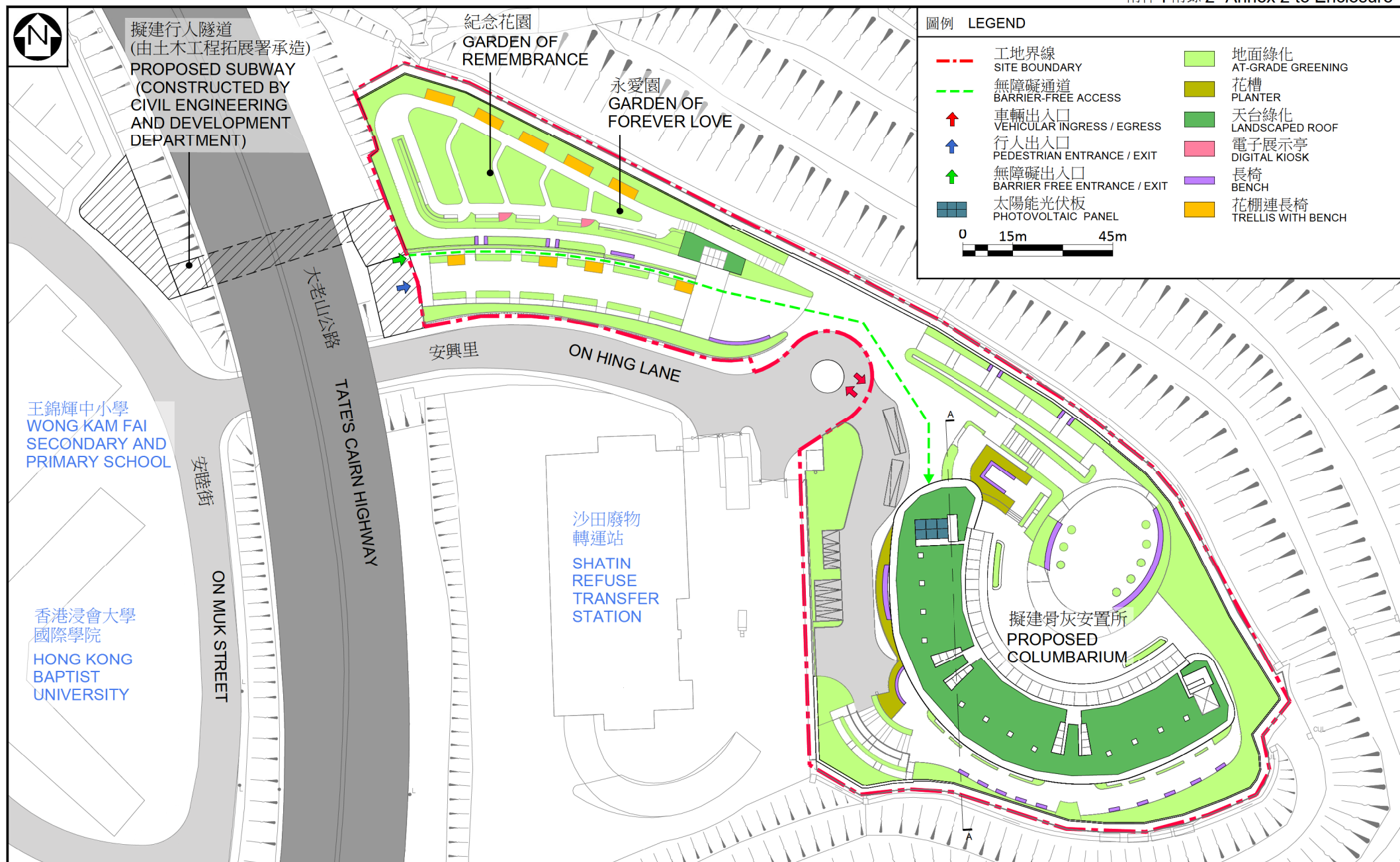
- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking 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 or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.



位置圖
LOCATION PLAN

24NB
 在沙田石門安興里興建骨灰安置所、紀念花園設施和相關工程
 PROVISION OF COLUMBARIUM, GARDEN OF REMEMBRANCE AND RELATED WORKS
 AT ON HING LANE, SHEK MUN, SHA TIN





工地平面圖
SITE PLAN

24NB

在沙田石門安興里興建骨灰安置所、紀念花園設施和相關工程

PROVISION OF COLUMBARIUM, GARDEN OF REMEMBRANCE AND RELATED WORKS

AT ON HING LANE, SHEK MUN, SHA TIN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



圖例	LEGEND
---	工地界線 SITE BOUNDARY
---	無障礙通道 BARRIER-FREE ACCESS
---	上方建築線 BUILDING LINE ABOVE
↑	車輛出入口 VEHICULAR INGRESS / EGRESS
	骨灰安置所範圍 COLUMBARIUM AREA
	地面綠化 AT-GRADE GREENING
	機電房 PLANT ROOM
	職員範圍 STAFF AREA
	暢通易達升降機 ACCESSIBLE LIFT
	暢通易達洗手間 ACCESSIBLE TOILET



骨灰安置所
地下平面圖
COLUMBARIUM
GROUND FLOOR PLAN

24NB
在沙田石門安興里興建骨灰安置所、紀念花園設施和相關工程
PROVISION OF COLUMBARIUM, GARDEN OF REMEMBRANCE AND RELATED WORKS
AT ON HING LANE, SHEK MUN, SHA TIN

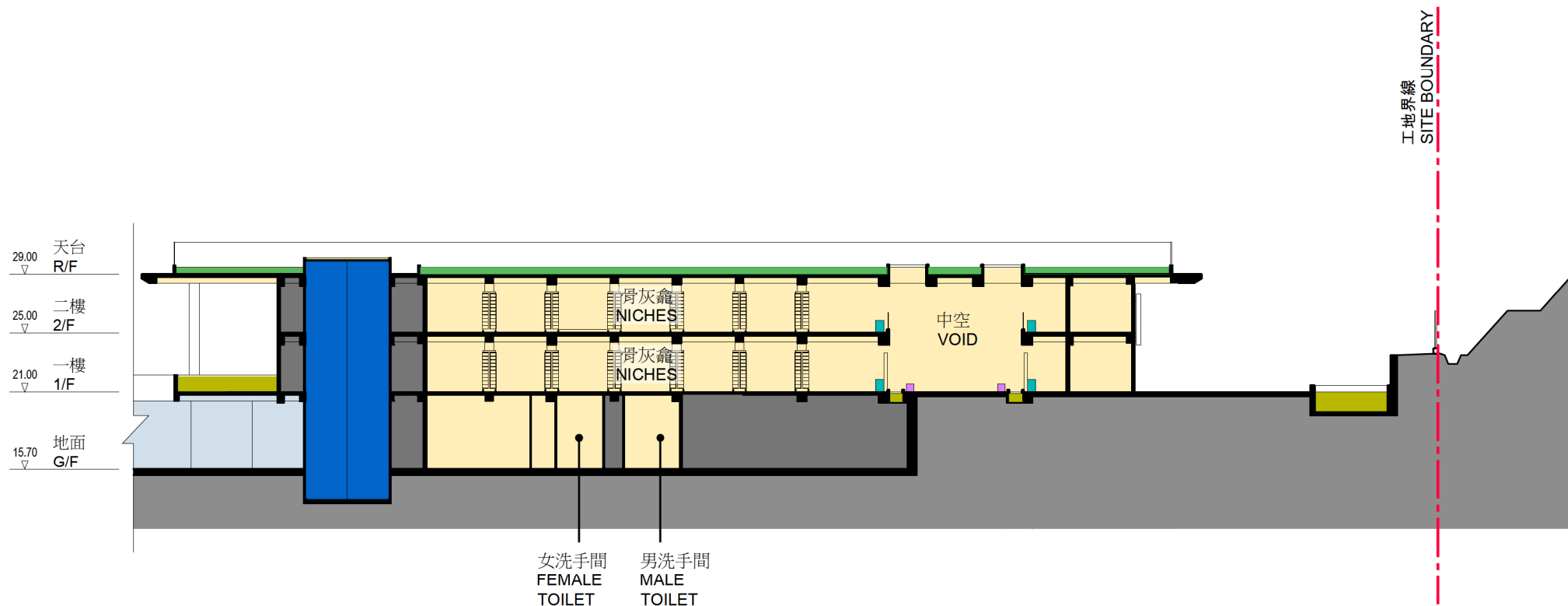


圖例	LEGEND
---	工地界線 SITE BOUNDARY
---	上方建築線 BUILDING LINE ABOVE
■	地面綠化 AT-GRADE GREENING
■	花槽 PLANTER
■	骨灰安置所範圍 COLUMBARIUM AREA
■	機電房 PLANT ROOM
■	暢通易達升降機 ACCESSIBLE LIFT
■	職員範圍 STAFF AREA
■	長椅 BENCH
■	洗手盆 WASH BASIN











骨灰安置所
一樓平面圖
COLUMBARIUM
FIRST FLOOR PLAN

24NB
在沙田石門安興里興建骨灰安置所、紀念花園設施和相關工程
PROVISION OF COLUMBARIUM, GARDEN OF REMEMBRANCE AND RELATED WORKS
AT ON HING LANE, SHEK MUN, SHA TIN



圖例 LEGEND

- | | |
|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|  骨灰安置所範圍
COLUMBARIUM AREA |  長椅
BENCH |
|  機電房
PLANT ROOM |  花槽
PLANTER |
|  暢通易達升降機
ACCESSIBLE LIFT |  天台綠化
LANDSCAPED ROOF |
|  洗手盆
WASH BASIN |  職員範圍
STAFF AREA |

0m 4m 12m

骨灰安置所
A-A 剖面圖
COLUMBARIUM
SECTION A-A

24NB
在沙田石門安興里興建骨灰安置所、紀念花園設施和相關工程
PROVISION OF COLUMBARIUM, GARDEN OF REMEMBRANCE AND RELATED WORKS
AT ON HING LANE, SHEK MUN, SHA TIN



從西南面望向骨灰安置所、紀念花園設施和相關工程的構思透視圖

PERSPECTIVE VIEW OF COLUMBARIUM, GARDEN OF REMEMBRANCE AND RELATED WORKS FROM SOUTH WESTERN DIRECTION

構思圖
ARTIST'S
IMPRESSION

24NB
在沙田石門安興里興建骨灰安置所、紀念花園設施和相關工程
PROVISION OF COLUMBARIUM, GARDEN OF REMEMBRANCE AND RELATED WORKS
AT ON HING LANE, SHEK MUN, SHA TIN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



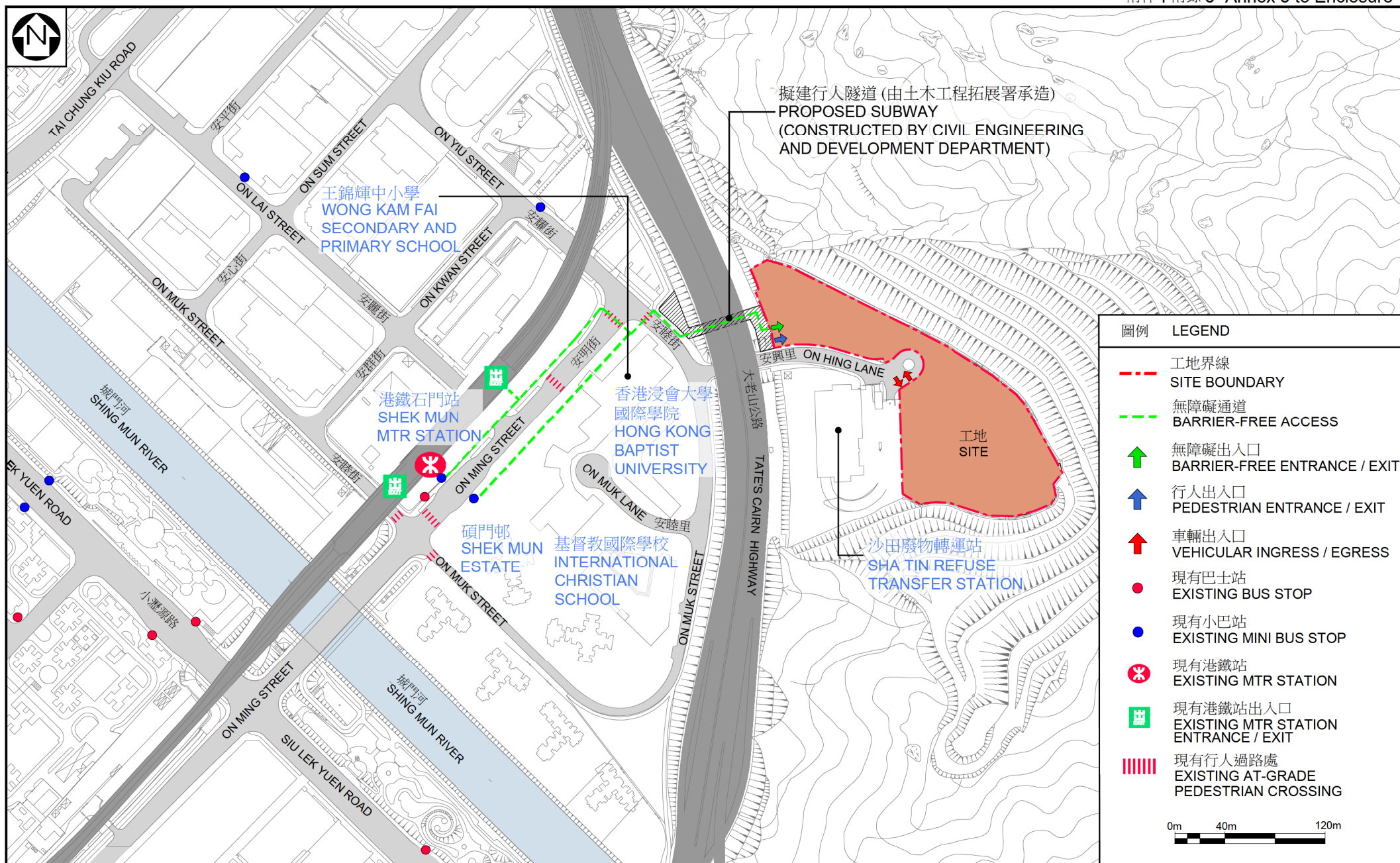
從北面望向骨灰安置所的構思透視圖
PERSPECTIVE VIEW OF COLUMBARIUM FROM NORTH DIRECTION

構思圖
ARTIST'S
IMPRESSION

24NB
在沙田石門安興里興建骨灰安置所、紀念花園設施和相關工程
PROVISION OF COLUMBARIUM, GARDEN OF REMEMBRANCE AND RELATED WORKS
AT ON HING LANE, SHEK MUN, SHA TIN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



無障礙通道平面圖
PLAN OF
BARRIER-FREE
ACCESS

24NB
在沙田石門安興里興建骨灰安置所、紀念花園設施和相關工程
PROVISION OF COLUMBARIUM, GARDEN OF REMEMBRANCE AND RELATED WORKS
AT ON HING LANE, SHEK MUN, SHA TIN

Annex 9 to Enclosure 1 to PWSC(2019-20)14

24NB - Provision of columbarium, Garden of Remembrance and related works at On Hing Lane, Shek Mun, Sha Tin

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2018 prices)

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Consultants' fees for contract administration (Note 2)	Professional	—	—	—	12.8
	Technical	—	—	—	4.6
				Sub-total	17.4#
(b) Resident site staff (RSS) costs (Note 3)	Professional	54	38	1.6	7.1
	Technical	305	14	1.6	14.0
				Sub-total	21.1
Comprising -					
(i) Consultants' fees for management of RSS			1.3#		
(ii) Remuneration of RSS			19.8#		
Total					38.5

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants (as at now, MPS salary point 38 = \$81,975 per month and MPS salary point 14 = \$28,725 per month).
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for provision of contract administration and site supervision of **24NB**. The assignment will only be executed subject to Finance Committee's funding approval to upgrade **24NB** to Category A.
3. The consultants' staff cost for site supervision is based on the estimate prepared by the Director of Architectural Services. We will only know the actual man-months and actual costs after completion of the construction works.

Remarks

The cost figures in 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 6 of Enclosure 1.

193TB - Construction of subway in support of the provision of columbarium at On Hing Lane, Shek Mun, Sha Tin

PROJECT SCOPE AND NATURE

The scope of works under the Project **193TB** includes –

- (a) construction of a subway of about 50 metres long with eight metres internal width underneath and across Tate's Cairn Highway connecting On Muk Street and the columbarium to be constructed under **24NB**;
- (b) provision of footpaths at both ends of the subway with suitable holding areas;
- (c) provision of lighting, drainage and other necessary services for the subway; and
- (d) provision of barrier-free access, landscaping works and ancillary facilities.

Plans and an artist's impression showing the proposed works are at Annex 1 to Enclosure 2.

2. Subject to funding approval by the Finance Committee, we plan to commence the proposed works in the third quarter of 2020 for completion in the second quarter of 2023.

JUSTIFICATION

3. With a growing and ageing population in Hong Kong, the number of deaths and cremations has been rising gradually. According to the projection based on the latest demographic data, the cumulative number of cremations would be around 1.2 million in the coming 20 years (from 2019 to 2038). The death toll was over 47 000 in 2018 and it is estimated to increase to 73 900 in 2038. Public demand for niches in columbarium is growing.

4. To increase the supply of public niches in response to the public demand, the Government has been promoting the district-based columbarium development scheme and introducing more sustainable ways to utilise these facilities¹.

5. The site at On Hing Lane, Shek Mun, adjacent to the Sha Tin Refuse Transfer Station, is one of the sites identified under the district-based columbarium development scheme. The details of the proposed project to develop a columbarium block providing about 40 000 niches at the site are at Enclosure 1. To cater for the anticipated increase in the number of visitors for the proposed columbarium development, we propose to construct a subway underneath and across Tate's Cairn Highway connecting On Muk Street and the columbarium site.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the Project **193TB** to be \$227.4 million in money-of-the-day (MOD) prices, broken down as follows –

		\$ million (in MOD prices)
(a)	Subway construction and geotechnical works	143.4
(b)	Modification works, landscaping works and road works	28.3
(c)	Consultancy fees for	6.1
	(i) contract administration	4.7
	(ii) management of resident site staff (RSS)	1.4
(d)	Remuneration of RSS	26.9
(e)	Contingencies	22.7
Total		<u>227.4</u>

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¹ In parallel, the Government is stepping up promotion of green burial, including increasing the number of Gardens of Remembrance, establishing a central register for green burial, and working with various sectors to boost its popularity.

7. The Civil Engineering and Development Department proposes to engage consultants to undertake contract administration and site supervision for the Project **193TB**. A breakdown of the estimated consultants' fees and RSS costs by man-months is at Annex 2 to Enclosure 2.

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

Year	\$million (MOD)
2020 – 2021	32.1
2021 – 2022	65.5
2022 – 2023	68.9
2023 – 2024	23.3
2024 – 2025	20.6
2025 – 2026	17.0
	<hr/> 227.4 <hr/>

9. 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 2020 to 2026. Subject to funding approval, we will deliver the proposed works under the New Engineering Contract (NEC) form². The contract will provide for price adjustments.

/10.

² NEC is a suite of contracts developed by the Institution of Civil Engineers, United Kingdom. It is a contract form that emphasizes cooperation, mutual trust and collaborative risk management between contracting parties.

10. We estimate the annual recurrent expenditure arising from this project is about \$0.5 million. The Government charges a uniform set of fees and charges for columbarium services, irrespective of the location of the columbarium and niches. When setting and reviewing the level of fees and charges for columbarium services, the Government would take into account, among other factors, the construction cost of the columbarium buildings and related costs, as well as the recurrent costs arising from the allocation, operation and maintenance of the niches.

PUBLIC CONSULTATION

11. We consulted the Health and Environment Committee (HEC) of the Sha Tin District Council on the proposed columbarium development including the Traffic Impact Assessment (TIA) findings on 12 May 2016. HEC supported the proposed development. The conceptual and schematic designs for the columbarium block and the subway were later presented to the HEC on 13 September 2018. While HEC members had no objection to the design for the above mentioned projects, they requested the Government to implement measures to enhance the accessibility to the columbarium and encourage visitors to use mass transportation.

12. We gazetted the scheme and the Plan of the Project **193TB** under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (“the Ordinance”) on 9 November 2018 and 16 November 2018. No objection was received. The authorisation notice was gazetted on 22 February 2019 and 1 March 2019.

13. We consulted the Legislative Council Panel on Food Safety and Environmental Hygiene (the Panel) on 16 April 2019. Members of the Panel had no objection to the Government submitting the funding proposal to the Public Works Subcommittee.

ENVIRONMENTAL IMPLICATIONS

14. The Project **193TB** is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We have completed a Preliminary Environmental Review (PER) for the project in April 2019 and the findings were agreed by the Director of Environmental Protection. To control short-term environmental impacts caused by construction, we undertake to provide the mitigation measures as recommended in the PER including water spraying and dust suppression, use of quiet construction plant, erection of purpose-built temporary noise barrier, etc. We have included in the project estimate the cost for the implementation of the mitigation measures.

15. At the planning and design stages, we have considered measures to reduce the generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated materials and rock fill) 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 facilities³. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

16. At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation 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.

/17.

³ 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.

17. We estimate that the proposed works under **193TB** will generate in total about 13 280 tonnes of construction waste. Of these, we will reuse about 3 500 tonnes (26%) of inert construction waste on site, deliver 8 450 tonnes (64%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 1 330 tonnes (10%) 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 \$0.9 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

18. The proposed works 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

19. The proposed works do not require any land acquisition.

TRAFFIC IMPLICATIONS

20. The Government completed the TIA Study and the TIA Review Study in 2012 and 2017 respectively. According to the studies, the additional traffic and pedestrian volume arising from the columbarium under **24NB** during the Ching Ming and Chung Yeung festive periods should be manageable with the implementation of improvement measures, i.e. modification of the existing On Hing Lane, including reprovisioning of a roundabout outside the columbarium site boundary (**24NB**) and the works mentioned in paragraph 1 above.

21. After the proposed columbarium under **24NB** is commissioned, the Food and Environmental Hygiene Department will work closely with the Hong Kong Police Force and relevant departments to ensure that effective traffic and crowd control measures are implemented during the grave sweeping seasons.

BACKGROUND INFORMATION

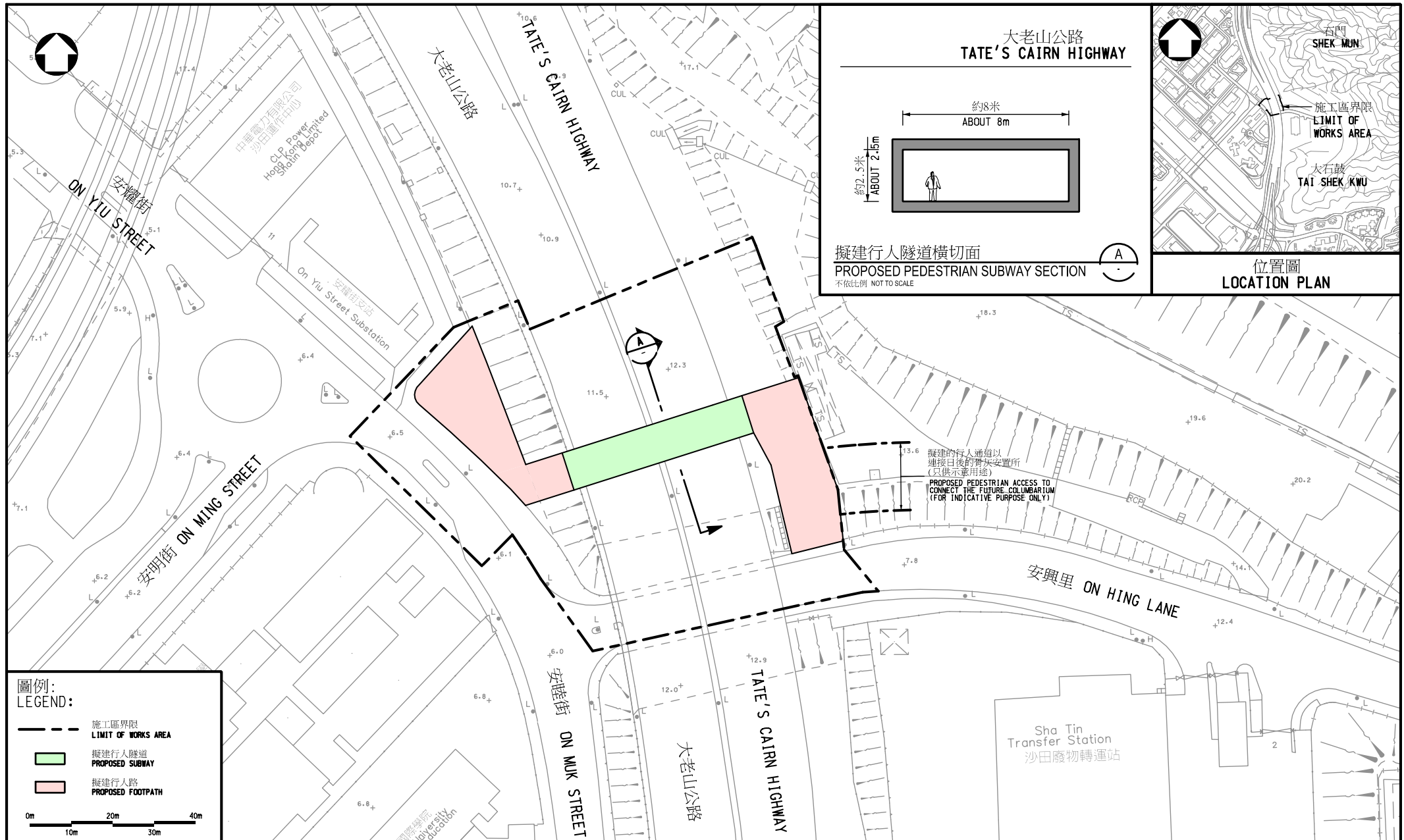
22. We upgraded **193TB** to Category B in October 2017. We engaged consultants to render design services and carry out site investigation and detailed design of the Project **193TB** at a total cost of about \$8 million. We have charged this amount to block allocation **Subhead 5101CX** “Civil engineering works, studies and investigations for items in Category D of the Public Works Programme”.

23. Of the 97 trees within the project boundary, 50 trees will be preserved. The proposed works will involve felling of 47 trees. All trees to be felled are not important trees⁴. We will incorporate planting proposals as part of the project, including 47 trees and 340 square metres of mixed shrub, groundcover and climber planting area.

24. We estimate that the proposed works will create about 70 jobs (55 for labourers and 15 for professional or technical staff) providing a total employment of 2 050 man-months.

⁴ “Important trees” refers 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 trees, trees as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of the 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 a height/canopy spread equal to or exceeding 25 m.



擬建行人隧道工地平面圖
 PROPOSED SUBWAY SITE PLAN

5193TB

興建行人隧道以配合沙田石門安興里骨灰安置所的計劃
 CONSTRUCTION OF SUBWAY IN SUPPORT OF THE PROVISION OF
 COLUMBARIUM AT ON HING LANE, SHEK MUN, SHATIN



PERSPECTIVE VIEW FROM WESTERN DIRECTION (ARTIST'S IMPRESSION)

從西面望向行人隧道入口的構思透視圖

構思圖
ARTIST'S
IMPRESSION

5193TB
CONSTRUCTION OF SUBWAY IN SUPPORT OF THE PROVISION OF
COLUMBARIUM AT ON HING LANE, SHEK MUN, SHA TIN
興建行人隧道以配合沙田石門安興里骨灰安置所計劃

**193TB - Construction of subway in support of the
provision of columbarium at On Hing Lane, Shek Mun, Sha Tin**

**Breakdown of the estimates for consultants' fees and resident site staff costs
(in September 2018 prices)**

			Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fees (\$ million)
(a)	Consultants' fees	Professional	--	--	--	3.3
	for contract	Technical	--	--	--	0.6
	administration ^(Note 2)					
					Sub-total	3.9#
(b)	Resident site staff	Professional	87	38	1.6	11.4
	(RSS) costs ^(Note 3)	Technical	263	14	1.6	12.1
					Sub-total	23.5
	Comprising -					
	(i) Consultants' fees for				1.2#	
	management of RSS					
	(ii) Remuneration of RSS				22.3#	
					Total	27.4

* 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 supplied by the consultants (as at now, MPS salary point 38 = \$81,975 per month and MPS salary point 14 = \$28,725 per month).
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **193TB**. The construction phase of the assignment will only be executed upon Finance Committee's approval to upgrade **193TB** to Category A.
3. The actual man-months and actual costs will only be known 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 6 of Enclosure 2.

28NB - Provision of Columbarium and Garden of Remembrance at Sandy Ridge Cemetery (Phase 1 development)

PROJECT SCOPE AND NATURE

The columbarium site is located at undeveloped areas within the Sandy Ridge Cemetery (SRC) with an area of about 40 600 square metres (m²). The scope of works includes –

- (a) construction of two 5-storey columbarium blocks to provide about 54 000 niches;
- (b) construction of a Garden of Remembrance (GoR) with a spacious lawn for scattering of cremains and designated walls for mounting of plaques, as well as provision of electronic kiosks in the garden for paying tribute to the deceased;
- (c) provision of facilities for keeping of abortuses and/or scattering of their ashes;
- (d) provision of ancillary facilities for the whole Sandy Ridge Columbarium development such as office, storerooms, a first aid room, a baby care room, a control room for closed-circuit television (CCTV) and public address (PA) system, as well as computer kiosks (for introducing columbaria facilities, promoting green burials and searching for niches of the deceased);
- (e) provision of ancillary facilities for Phase 1 development such as public toilets, CCTV, PA system, lifts and joss paper burners with exhaust air treatment facilities; and
- (f) provision of street furniture and shelters at a pick-up/drop-off area.

2. A location plan, a site plan, floor plans, a sectional drawing, an artist's impression and a barrier-free access plan for the project are at Annexes 1 to 9 to Enclosure 3. Subject to the funding approval of the Finance Committee (FC), we plan to commence construction in the second quarter of 2020 for completion in the first quarter of 2024.

/JUSTIFICATION

JUSTIFICATION

3. With a growing and ageing population in Hong Kong, the number of deaths and cremations has been rising gradually. According to the projection based on the latest demographic data, the cumulative number of cremations would be around 1.2 million in the coming 20 years (from 2019 to 2038). The death toll was over 47 000 in 2018 and it is estimated to increase to 73 900 in 2038. Public demand for niches in columbarium is growing.

4. To increase the supply of public niches in response to the public demand, the Government has been promoting the district-based columbarium development scheme and introducing a more sustainable way to utilise these facilities¹.

5. The undeveloped areas within SRC in the North District is one of the sites identified under the district-based columbarium development scheme. The SRC development comprises the construction of a columbarium with about 200 000 niches, a crematorium and related facilities. Given the scale of the whole Sandy Ridge Columbarium development, the Government plans to carry out the project in two phases as follows –

(a) Phase 1 (54 000 niches); and

(b) Phase 2 (146 000 niches)

Site formation works and associated infrastructural works for the whole columbarium development (Public Works Programme Item No. **5816CL**)² commenced in December 2017 and is scheduled for completion in the second quarter of 2021.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be \$1,240.5 million in money-of-the-day (MOD) prices, broken down as follows –

/\$ million

¹ In parallel, the Government is stepping up promotion of green burial including increasing the number of GoRs, establishing a central register for green burial, and working with various community sectors to boost its popularity.

² Funding for the project was approved by the FC of the Legislative Council in October 2017.

		\$ million (in MOD prices)
(a)	Site works	15.7
(b)	Piling	99.8
(c)	Geotechnical works ³	126.8
(d)	Building ⁴	378.7
(e)	Building services ⁵	136.2
(f)	Drainage	63.8
(g)	External works ⁶	227.0
(h)	Additional energy conservation, green and recycled features	14.1
(i)	Furniture and equipment ⁷	1.5
(j)	Consultants' fees for	33.1
	(i) contract administration	31.0
	(ii) management of resident site staff (RSS)	2.1
(k)	Remuneration of RSS	30.9
(l)	Contingencies	112.9
Total		<u>1,240.5</u>

/7.

³ Geotechnical works comprise site formation, construction of retaining structure and slope works.

⁴ Building works comprise construction of substructure and superstructure of the building.

⁵ Building services works comprise electrical installations, ventilation and air-conditioning installations, fire service installations, lifts and other specialist installations, etc.

⁶ External works comprise construction works such as GoR and landscape works.

⁷ The estimated cost is based on an indicative list of furniture and equipment required.

7. We propose to engage consultants to undertake contract administration and site supervision for the project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at Annex 10 to Enclosure 3. The construction floor area (CFA) of this project is about 14 295 m². The estimated construction unit cost, represented by the building and building services costs, is \$36,020 per m² of CFA in MOD prices. We consider this unit cost comparable to that of similar projects built by the Government.

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

Year	\$ million (in MOD prices)
2020 – 2021	55.0
2021 – 2022	167.5
2022 – 2023	303.2
2023 – 2024	413.8
2024 – 2025	126.6
2025 – 2026	108.6
2026 – 2027	65.8
	<hr/> 1,240.5 <hr/>

9. 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 2020 to 2027. We will deliver the construction works through a lump-sum contract as the scope of the works can be clearly defined in advance. The contract will provide for price adjustment.

10. We estimate the annual recurrent expenditure arising from this project to be \$25.1 million. The Government charges a uniform set of fees and charges for columbarium services, irrespective of the location of the columbarium and niches. When setting and reviewing the level of fees and charges for columbarium services, the Government would take into account, among other factors, the construction cost of the columbarium buildings and related costs, as well as the recurrent costs arising from the allocation, operation and maintenance of the niches.

PUBLIC CONSULTATION

11. On 9 October 2014, the Food and Environmental Hygiene Department (FEHD) and the Civil Engineering and Development Department jointly presented the columbarium development proposal as well as the findings of the Traffic Impact Assessment (TIA) to the North District Council (NDC). On 13 December 2018, NDC was further consulted on the design of Phase 1 development. NDC supported the columbarium development at SRC and the design of Phase 1 development. To address NDC Members' concern over the increased traffic and pedestrian volume brought by the columbarium development, the Government will maintain close liaison with NDC through a working group.

12. We consulted the Legislative Council Panel on Food Safety and Environmental Hygiene on 16 April 2019. Members of the Panel had no objection to the Government submitting the funding proposal to the Public Works Subcommittee.

ENVIRONMENTAL IMPLICATIONS

13. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). A Preliminary Environmental Review (PER) for the project was completed and the findings were agreed by the Director of Environmental Protection in January 2019. The PER has concluded that with the implementation of the recommended mitigation measures including water scrubber, electrostatic precipitator, etc., the project would not cause long-term adverse environmental impacts. We have included in the project estimates the cost to implement suitable mitigation measures to control the environmental impacts.

/14.

14. During construction, we will implement mitigation measures to control noise, dust and site run-off nuisances to within the established standards and guidelines. These measures include frequent watering, use of quiet construction plants, erection of temporary noise barrier, and use of drains to discharge site run-off during construction.

15. 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 facilities⁸. 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.

16. At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation 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 and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

17. We estimate that the project will generate in total about 52 210 tonnes of construction waste. Of these, we will reuse about 26 360 tonnes (50.5%) of inert construction waste on site and deliver 18 530 tonnes (35.5%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 7 320 tonnes (14.0%) 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 \$2.8 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

⁸ 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.

HERITAGE IMPLICATIONS

18. 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

19. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

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

- (a) solar powered light fittings; and
- (b) photovoltaic system.

21. For greening features, we will provide greening on rooftop and suitably incorporate vertical greening on the retaining wall as well as other landscape features and slope greening in appropriate areas of the site for environmental and amenity benefits.

22. The total estimated additional cost for adoption of the above energy conservation and greening features is around \$14.1 million (including about \$0.5 million for energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 5.0% energy savings in the annual energy consumption with a payback period of about eight years.

/TRAFFIC

TRAFFIC IMPACT ASSESSMENT

23. We completed the TIA Study in 2014. According to the study, the additional traffic and pedestrian volume arising from the columbarium during the Ching Ming and Chung Yeung festive periods should be manageable with the implementation of appropriate traffic mitigation and crowd control measures. These measures, which include the provision of direct special bus services between designated points and the Sandy Ridge Columbarium during the Ching Ming and Chung Yeung festive periods, will be implemented in three phases⁹.

24. After the proposed columbarium is commissioned, FEHD will work closely with the Hong Kong Police Force and relevant departments to ensure that effective traffic and crowd control measures are implemented during the grave sweeping seasons. Moreover, we will closely monitor the situation and conduct a detailed traffic and public transport review at an appropriate time after the commissioning of the SRC columbarium and crematorium facilities. The niche allocation plan may be adjusted as appropriate.

BACKGROUND INFORMATION

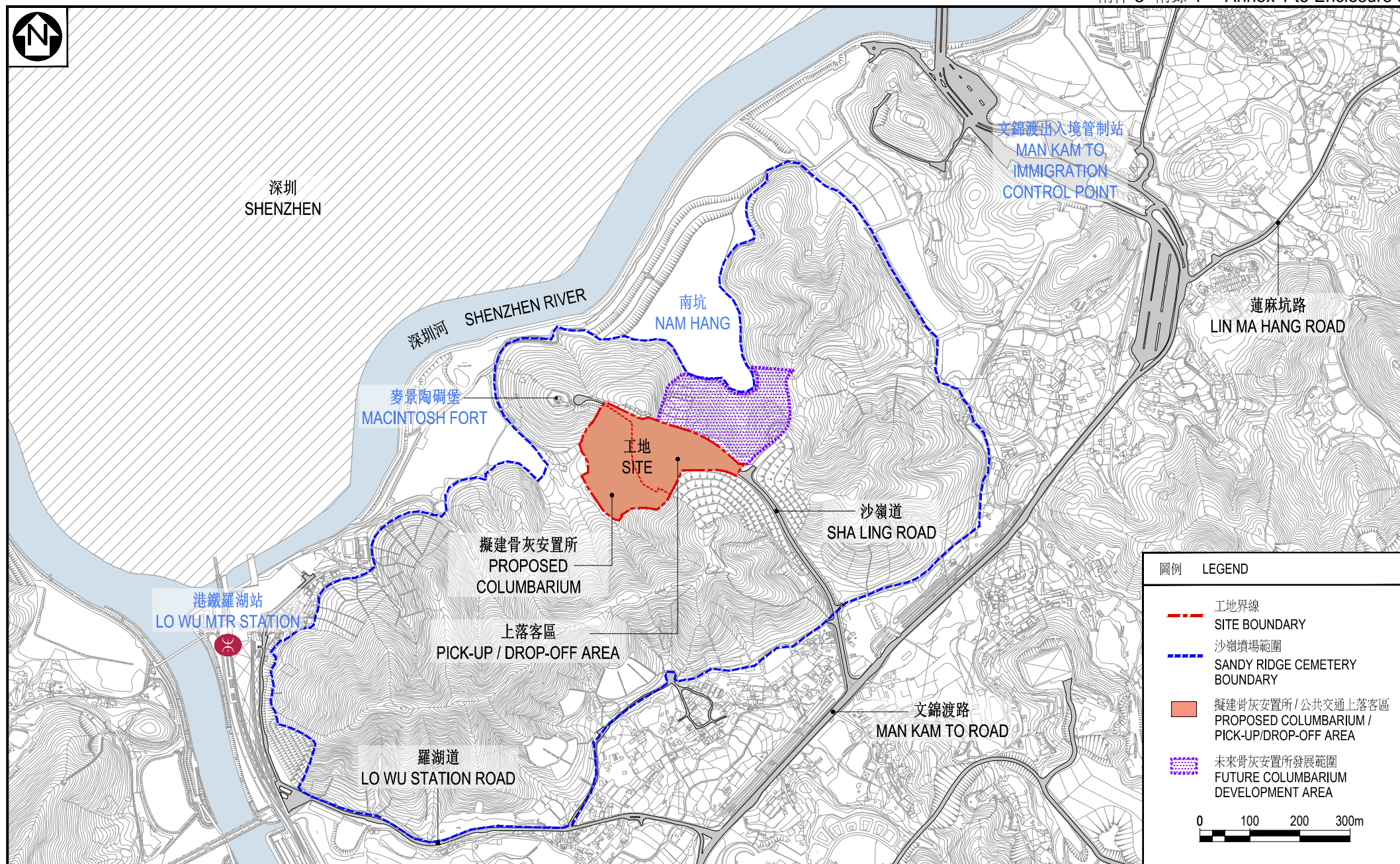
25. We upgraded **28NB** to Category B in September 2016. We carried out ground investigation and engaged consultants to undertake various services, including design services, traffic and transport review and PER, at a total cost of about \$28.5 million. The services and works were funded under block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fees for items in Category D of the Public Works Programme”. The ground investigation, traffic and transport review and PER have been completed.

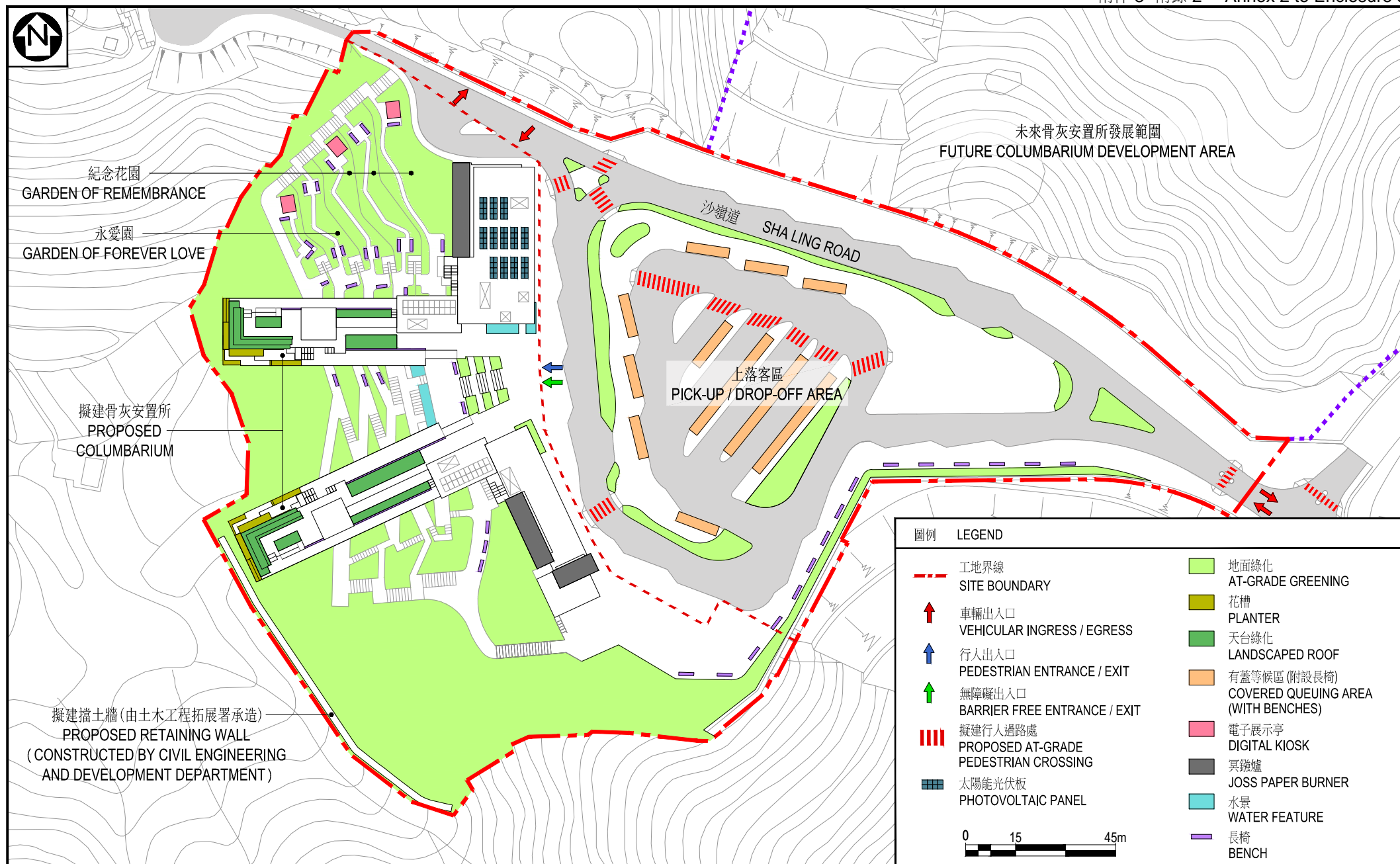
26. There are 12 trees within the project boundary and all of them will be preserved. We will incorporate planting proposals as part of the project, including the planting of about 249 trees, 5 860 bamboos, 116 530 shrubs/ornamental grass, 126 680 groundcovers/climbers, 0.05 hectares of grassed area and 4 600 whips and seedling plants.

/27.

⁹ In the first phase, we propose that special bus services be provided at Fanling Station Road and Sheung Shui Bus Terminus. To lessen the traffic impact on Fanling and Sheung Shui, special buses will carry passengers from Fanling Station Road to the Sandy Ridge Columbarium via Heung Yuen Wai Boundary Control Point Connecting Road and Lin Ma Hang Road. In the second phase, special bus services will be operated at the future Kwu Tung MTR Station. In the third phase, special bus services will be operated at Fanling South (at Pak Wo Road near Wah Ming Road). The eventual provision of special bus services will be subject to the bus resource and the passenger demand.

27. We estimate that the proposed works will create about 190 jobs (165 for labourers and 25 for professional or technical staff) providing a total employment of 7 200 man-months.

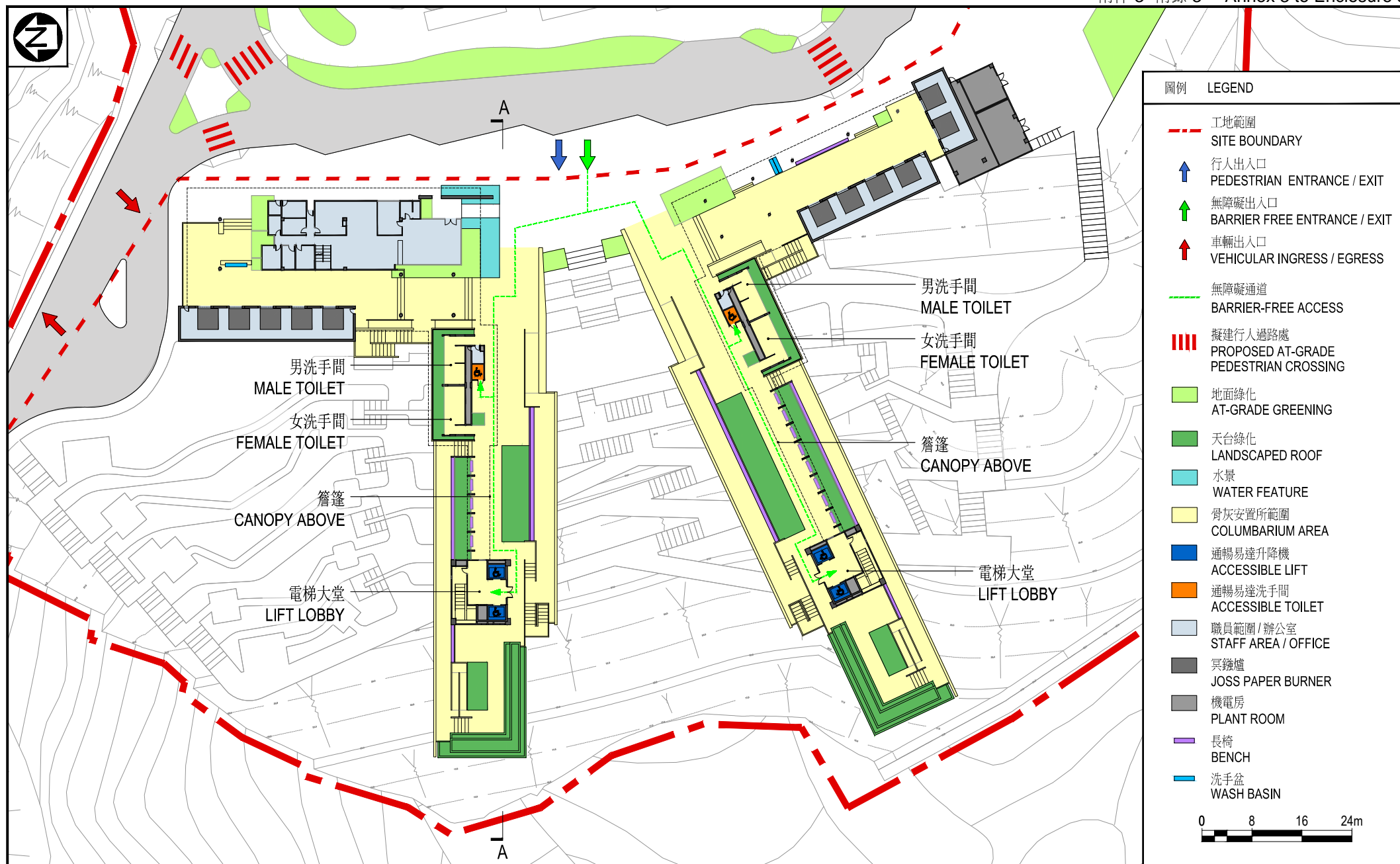




工地平面圖
SITE PLAN

28NB
在沙嶺墳場興建骨灰安置所及紀念花園(第一期工程)
PROVISION OF COLUMBARIUM AND GARDEN OF REMEMBRANCE
AT SANDY RIDGE CEMETERY (PHASE 1 DEVELOPMENT)

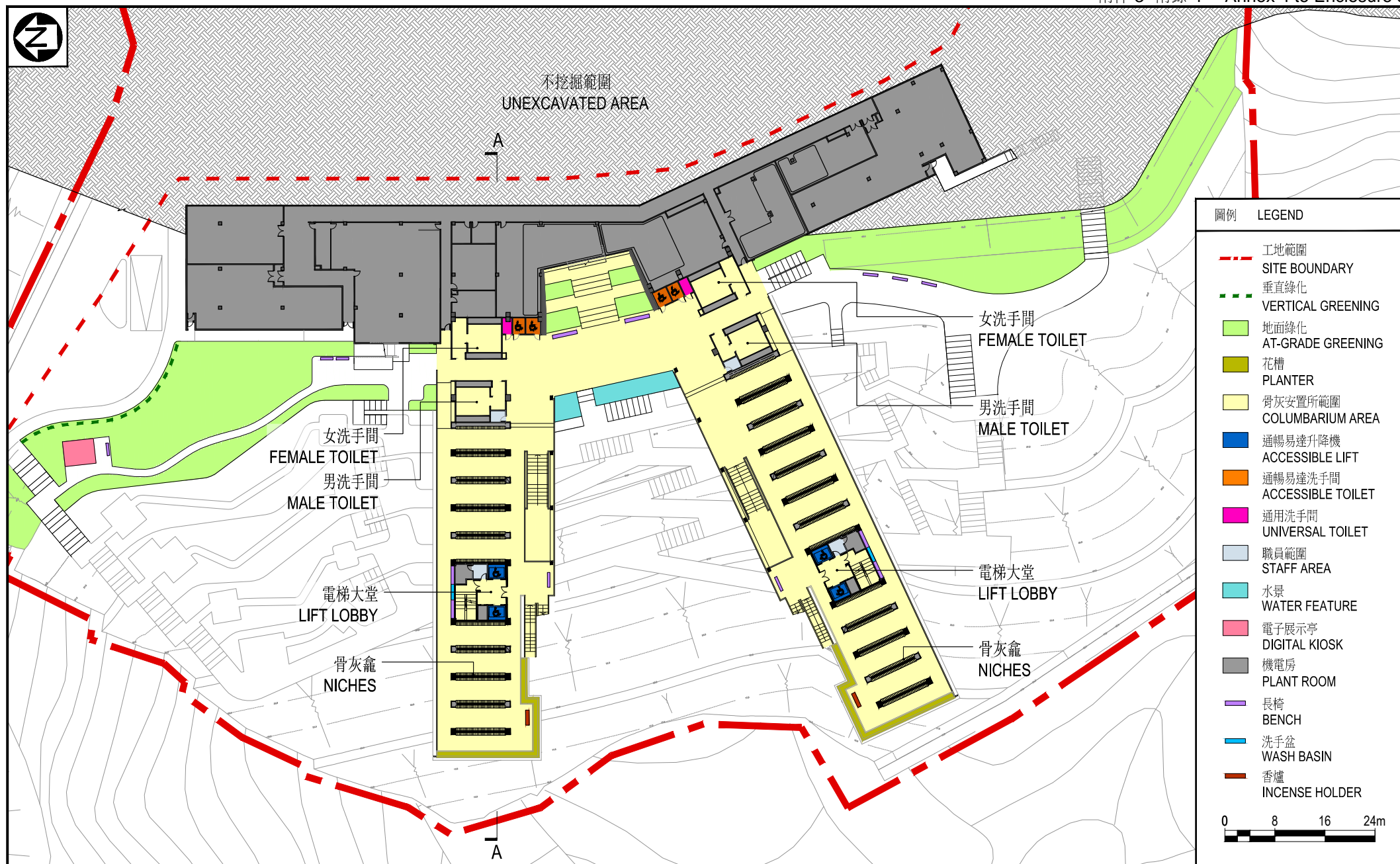
ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



骨灰安置所地面平面圖
COLUMBARIUM
GROUND FLOOR PLAN

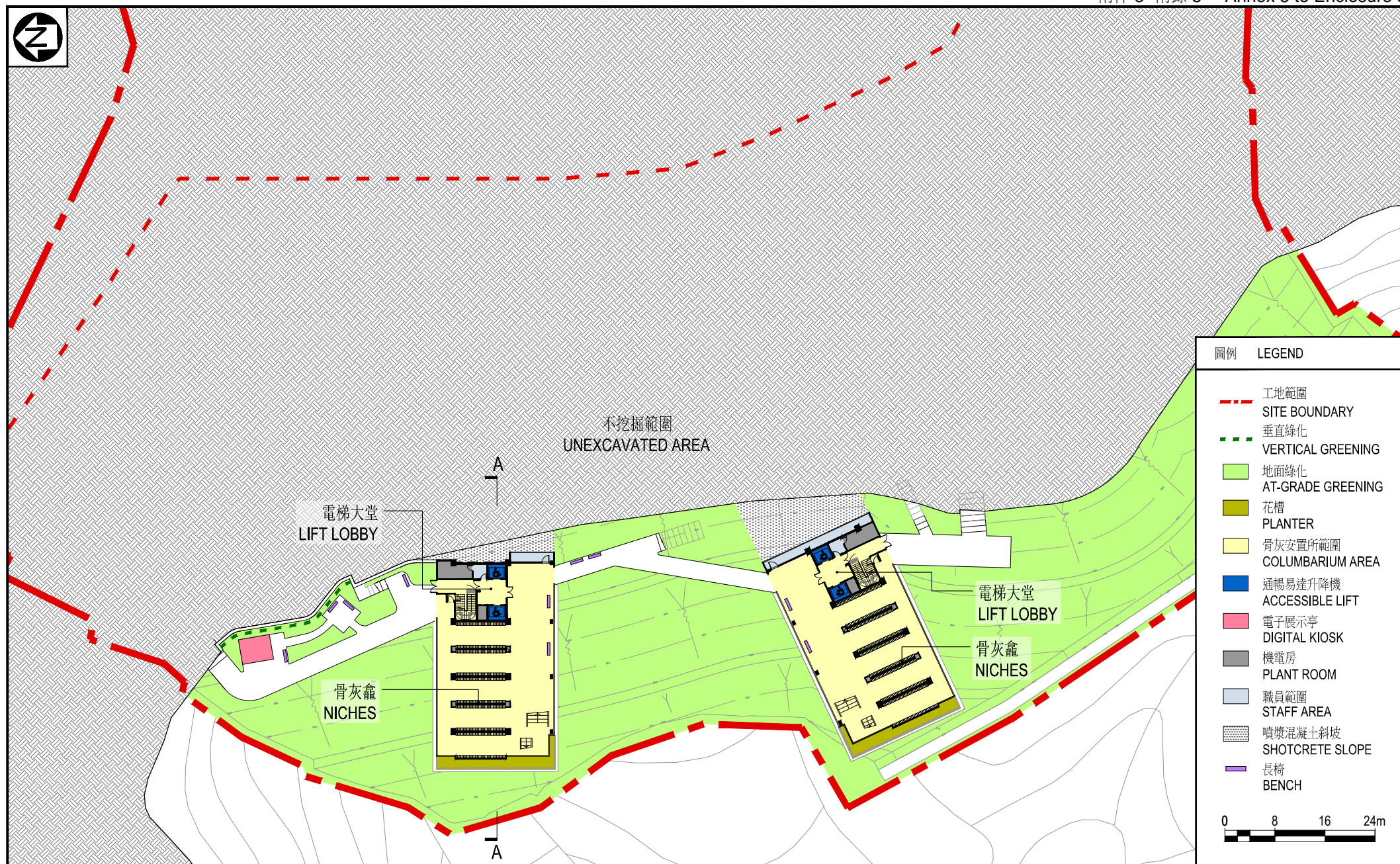
28NB
在沙嶺墳場興建骨灰安置所及紀念花園(第一期工程)
PROVISION OF COLUMBARIUM AND GARDEN OF REMEMBRANCE
AT SANDY RIDGE CEMETERY (PHASE 1 DEVELOPMENT)

**ARCHITECTURAL
SERVICES**
DEPARTMENT 建築署



骨灰安置所地下一樓平面圖
COLUMBARIUM
LG1/F FLOOR PLAN

28NB
在沙嶺墳場興建骨灰安置所及紀念花園(第一期工程)
PROVISION OF COLUMBARIUM AND GARDEN OF REMEMBRANCE
AT SANDY RIDGE CEMETERY (PHASE 1 DEVELOPMENT)



骨灰安置所地下五樓平面圖
COLUMBARIUM
LG5/F FLOOR PLAN

28NB
在沙嶺墳場興建骨灰安置所及紀念花園(第一期工程)
PROVISION OF COLUMBARIUM AND GARDEN OF REMEMBRANCE
AT SANDY RIDGE CEMETERY (PHASE 1 DEVELOPMENT)



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

天台
R/F
58.00

地面
G/F
49.90

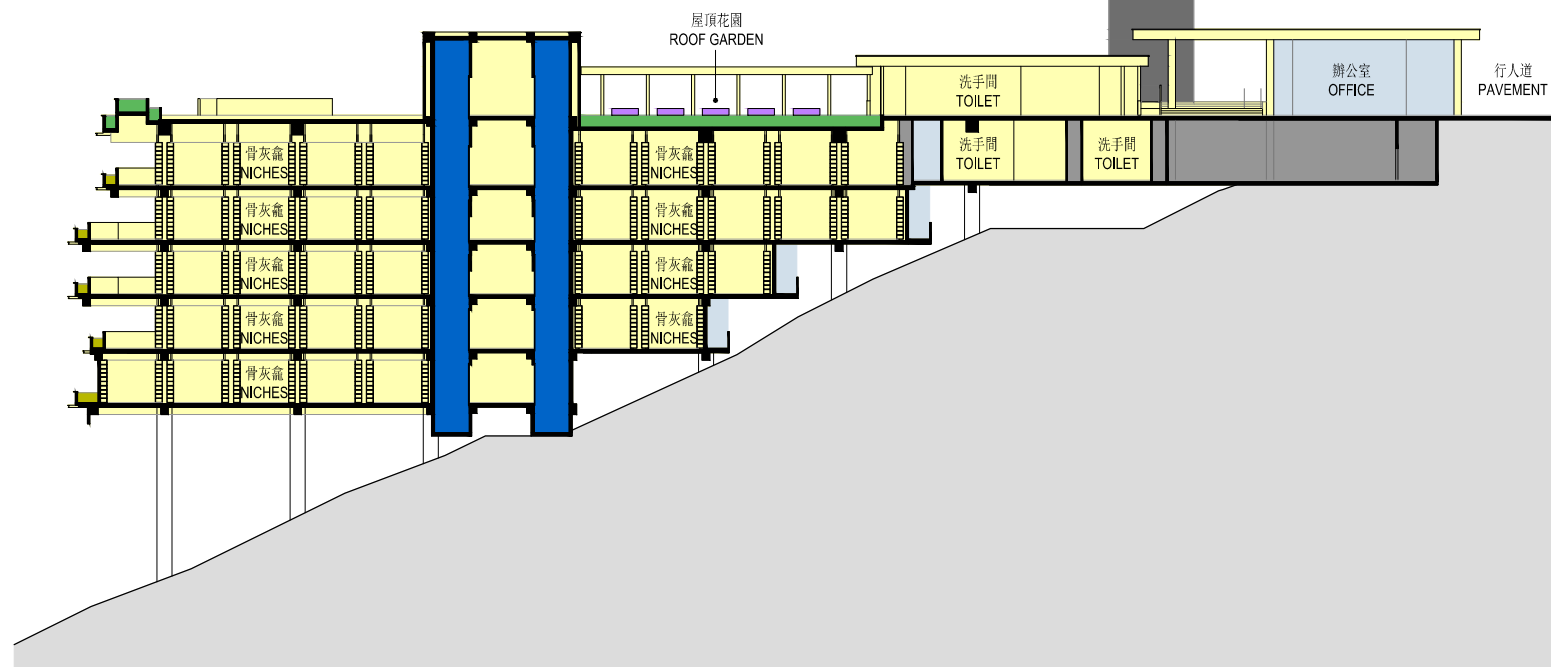
地下一樓
LG1/F
45.30

地下二樓
LG2/F
41.70

地下三樓
LG3/F
38.10

地下四樓
LG4/F
34.50

地下五樓
LG5/F
30.90



圖例 LEGEND

工地範圍
SITE BOUNDARY

花槽
PLANTER

通暢易達升降機
ACCESSIBLE LIFT

天台綠化
LANDSCAPED ROOF

冥鏢爐
JOSS PAPER BURNER

骨灰安置所範圍
COLUMBARIUM AREA

機電房
PLANT ROOM

職員範圍
STAFF AREA

長椅
BENCH

0 5 15m

骨灰安置所 A-A 剖面圖
COLUMBARIUM
SECTION A-A

28NB
在沙嶺墳場興建骨灰安置所及紀念花園(第一期工程)
PROVISION OF COLUMBARIUM AND GARDEN OF REMEMBRANCE
AT SANDY RIDGE CEMETERY (PHASE 1 DEVELOPMENT)

 ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



從西南面望向骨灰安置所的構思透視圖
PERSPECTIVE VIEW OF COLUMBARIUM FROM SOUTHWEST DIRECTION

構思圖
ARTIST'S IMPRESSION

28NB
在沙嶺墳場興建骨灰安置所及紀念花園(第一期工程)
PROVISION OF COLUMBARIUM AND GARDEN OF REMEMBRANCE
AT SANDY RIDGE CEMETERY (PHASE 1 DEVELOPMENT)

 ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

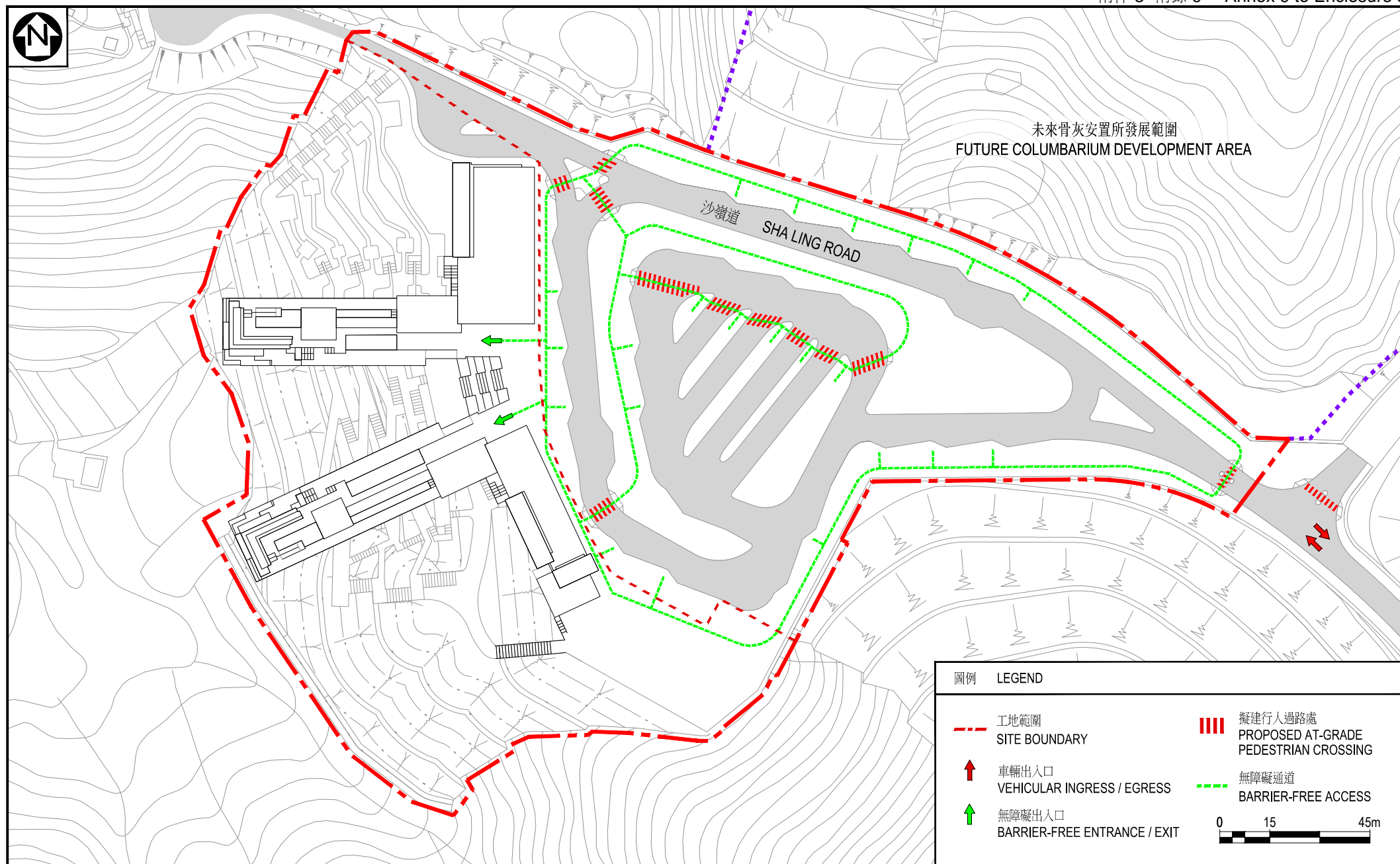


從骨灰安置所望向西面的構思透視圖
PERSPECTIVE VIEW FROM COLUMBARIUM TO WEST DIRECTION

構思圖
ARTIST'S IMPRESSION

28NB
在沙嶺墳場興建骨灰安置所及紀念花園(第一期工程)
PROVISION OF COLUMBARIUM AND GARDEN OF REMEMBRANCE
AT SANDY RIDGE CEMETERY (PHASE 1 DEVELOPMENT)

 ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



無障礙通道平面圖
PLAN OF
BARRIER-FREE ACCESS

28NB
在沙嶺墳場興建骨灰安置所及紀念花園(第一期工程)
PROVISION OF COLUMBARIUM AND GARDEN OF REMEMBRANCE
AT SANDY RIDGE CEMETERY (PHASE 1 DEVELOPMENT)



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

Annex 10 to Enclosure 3 to PWSC(2019-20)14

28NB – Provision of Columbarium and Garden of Remembrance at Sandy Ridge Cemetery (Phase 1 development)

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2018 prices)

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Consultants' fees for contract administration (Note 2)	Professional	–	–	–	18.0
	Technical	–	–	–	6.7
	Sub-total				24.7#
(b) Resident site staff (RSS) costs (Note 3)	Professional	71	38	1.6	9.3
	Technical	369	14	1.6	17.0
	Sub-total				26.3
Comprising -					
(i) Consultants' fees for management of RSS			1.7#		
(ii) Remuneration of RSS			24.6#		
Total					51.0

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants (as at now, MPS salary point 38 = \$81,975 per month and MPS salary point 14 = \$28,725 per month).
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for provision of contract administration and site supervision of **28NB**. The assignment will only be executed subject to Finance Committee's funding approval to upgrade **28NB** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.

Remarks

The cost figures in this Enclosure 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 6 of Enclosure 3.