

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Recreation, Culture and Amenities – Swimming pools

288RS – Swimming pool complex and open space in Area 107, Tin Shui Wai

**275RS – Provision of heated pool at the Morse Park Swimming Pool
Complex, Wong Tai Sin**

Recreation, Culture and Amenities – Open spaces

427RO – Open space in Area 47 and 48, North District

433RO – Open space in Area 6, Tai Po

Recreation, Culture and Amenities – Sports facilities

291RS – Redevelopment of Yuen Long Stadium – pre-construction activities

Members are invited to recommend to the Finance
Committee –

- (a) the upgrading of **288RS, 275RS, 427RO, 433RO**
and part of **291RS** to Category A at estimated costs
of \$1,336.0 million, \$576.5 million, \$123.7 million,
\$93.8 million and \$45.4 million in
money-of-the-day (MOD) prices respectively; and
- (b) the retention of the remainder of 291RS in
Category B.

PROBLEM

We need to carry out the above projects under the Five-Year Plan

/for

for Sports and Recreation Facilities¹ to meet the demand for recreational space and promote sports development.

PROPOSAL

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

- (a) **288RS** at an estimated cost of \$1,336.0 million in MOD prices for the development of swimming pool complex and open space in Area 107, Tin Shui Wai;
- (b) **275RS** at an estimated cost of \$576.5 million in MOD prices for the provision of heated pool at the Morse Park Swimming Pool Complex, Wong Tai Sin;
- (c) **427RO** at an estimated cost of \$123.7 million in MOD prices for the development of open space in Area 47 and 48, North District;
- (d) **433RO** at an estimated cost of \$93.8 million in MOD prices for the development of open space in Area 6, Tai Po; and
- (e) part of **291RS** at an estimated cost of \$45.4 million in MOD prices for the pre-construction activities for the redevelopment of Yuen Long Stadium.

PROJECT SCOPE AND NATURE

3. Details of the five projects above are provided at Enclosures 1 to 5 respectively.

Home Affairs Bureau
May 2018

¹ The Policy Address in January 2017 announced that \$20 billion will be spent in the coming five years to launch 26 projects to develop new or improve existing sports and recreation facilities. Technical feasibility study for another 15 sports and recreation facility projects will also be conducted to prepare for their implementation in the future.

Swimming pool complex and open space in Area 107, Tin Shui Wai

PROJECT SCOPE AND NATURE

The project site covers three sites (Sites A, B and C) and occupies an area of about 27 000 square metres (m²)¹ in the undeveloped portion of the district open space in Area 107, Tin Shui Wai. The proposed scope of works under **288RS** comprises —

A Swimming Pool Complex at Site A

- (a) an outdoor swimming pool (50 m x 25 m) and a spectator stand with a capacity of 700;
- (b) an outdoor training pool (25 m x 15 m);
- (c) an indoor heated training pool (25 m x 25 m);
- (d) an indoor Jacuzzi²;
- (e) ancillary facilities including changing rooms and toilet facilities, first-aid rooms, a babycare room, a multi-purpose room, a management office, a staff room, storage facilities and filtration plant facilities, and a loading and unloading area for operational and emergency vehicles; and

Remaining Area of Site A and Sites B & C

- (f) landscaped areas including a community garden, a children's play area and fitness stations, and an emergency vehicular access through Site B leading to the proposed swimming pool complex.

_____ A site and location plan, two layout plans, a section plan, an artist's impression and a barrier-free access plan for the project are at Annexes 1 to 6 to Enclosure 1 respectively. Subject to the funding approval of the Finance Committee by mid-2018, we plan to commence construction in the fourth quarter of 2018 for completion in the third quarter of 2022.

/JUSTIFICATION

¹ Sites A, B and C occupy areas of about 23 000 m², 1 000 m² and 3 000 m² respectively.

² The Jacuzzi is designed to accommodate 10 users at one time.

JUSTIFICATION

2. Yuen Long District has a population of about 650 800, which is expected to increase to about 685 200 by 2024. At present, Yuen Long District has three swimming pools, namely, Yuen Long Swimming Pool, Tin Shui Wai Swimming Pool and Ping Shan Tin Shui Wai Swimming Pool, meeting the suggested provision level of Hong Kong Planning Standards and Guidelines³. That said, the former one is located in Yuen Tong town centre while the latter two pools are located in the southern part of Tin Shui Wai and the facilities⁴ therein cannot fully meet the demand in the district, in particular for holding swimming competitions and events. The annual attendance of the three existing pools in the past 5 years has been steadily increasing with an average attendance of 951 089. The proposed swimming pool and open space are situated in the northern part of Tin Shui Wai and close to Tin Sau Light Rail Stop. The proposed location can effectively serve the local community, including six housing estates⁵ and seven schools⁶, and facilitate public access to and enjoyment of the facilities.

3. At present, there are two public heated pools in Yuen Long, one in Yuen Long Swimming Pool and one in Ping Shan Tin Shui Wai Swimming Pool. Their attendance during winter season (from November to March) has increased steadily from 162 397 in 2012-13 to 253 175 in 2016-17. The provision of another indoor heated training pool under this project can help promote year-round swimming in the community. The proposed project will provide a 50 m main pool and other ancillary facilities to meet the demand from the local schools⁷ and sports organisations for holding swimming competitions and events, and additional public open space with park facilities for the enjoyment of the local community.

/FINANCIAL

³ The Hong Kong Planning Standards and Guidelines suggest a provision of one swimming pool complex per 287 000 people.

⁴ Tin Shui Wai Swimming Pool provides a 25m x 22m outdoor training pool, a 20m x 12m outdoor teaching pool and an outdoor leisure pool whereas Ping Shan Tin Shui Wai Swimming Pool provides a 25m x 25m indoor training pool.

⁵ The six housing estates are Grandeur Terrace, Tin Yat Estate, Tin Yuet Estate, Tin Ching Estate, Tin Fu Court and Vianni Cove.

⁶ The seven schools include two secondary schools (Chinese Y.M.C.A. Secondary School and Tin Shui Wai Methodist College) and five primary schools (Chinese Y.M.C.A. Primary School, Cumberland Presbyterian Church Yao Dao Primary School, S.K.H. Tin Shui Wai Ling Oi Primary School, Xianggang Putonghua Yanxishe Primary School of Science and Creativity, and Y.L.P.M.S. Alumni Association Ying Yip Primary School).

⁷ There are 49 primary schools and 42 secondary schools with over 60 000 students in Yuen Long District in 2017-18, among which 26 primary schools and 21 secondary schools are located in Tin Shui Wai area.

FINANCIAL IMPLICATIONS

4. We estimate the capital cost of the project to be \$1,336.0 million in money-of-the-day (MOD) prices, broken down as follows –

| | | \$ million (in MOD prices) |
|-----|--|---------------------------------------|
| (a) | Site works | 49.0 |
| (b) | Piling | 95.3 |
| (c) | Building ⁸ | 532.9 |
| (d) | Building services ⁹ | 215.4 |
| (e) | Drainage | 68.3 |
| (f) | External works ¹⁰ | 196.4 |
| (g) | Additional energy conservation, green and recycled features | 26.1 |
| (h) | Furniture and equipment ¹¹ | 12.6 |
| (i) | Consultants' fees for | 16.0 |
| | (i) contract administration | 15.7 |
| | (ii) management of resident site staff (RSS) | 0.3 |
| (j) | Remuneration of RSS | 2.5 |
| (k) | Contingencies | 121.5 |
| | Total | 1,336.0 |

/We

⁸ Building works cover construction of substructure and superstructure of the building.

⁹ Building services works cover electrical installation, ventilation and air-conditioning installation, fire services installation, lift installation and other specialist installations.

¹⁰ External works cover construction of the access road, footpaths, pavilions, seating, community garden, soft landscaping, children play area, fitness stations and other external installations.

¹¹ The estimated cost is based on an indicative list of furniture and equipment required.

We propose to engage consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at Annex 7 to Enclosure 1. The construction floor area (CFA) of **288RS** is 17 108 m². The estimated construction unit cost, represented by the building and the building services costs, is \$43,740 per m² of CFA in MOD prices. We consider this comparable to that of similar projects built by the Government.

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

| Year | \$ million (MOD) |
|-------------|---------------------|
| 2018 – 2019 | 8.4 |
| 2019 – 2020 | 88.7 |
| 2020 – 2021 | 193.1 |
| 2021 – 2022 | 344.4 |
| 2022 – 2023 | 413.3 |
| 2023 – 2024 | 195.3 |
| 2024 – 2025 | 70.9 |
| 2025 – 2026 | 21.9 |
| | <hr/> 1,336.0 <hr/> |

6. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period 2018 to 2026. We will deliver the construction works through a lump-sum contract because we can clearly define the scope of the works in advance. The contract will provide for price adjustments.

7. We estimate the annual recurrent expenditure arising from this project to be \$46.5 million. The capital and recurrent costs arising from the project would be taken into consideration when determining the relevant fees and charges in future.

/PUBLIC

PUBLIC CONSULTATION

8. We consulted the District Facilities Management Committee of the Yuen Long District Council on the scope of the project on 9 May 2008, 4 July 2008, 3 September 2010, 2 March 2012, 4 January 2013 and 2 May 2014, and on the conceptual design on 6 January 2017. Members supported the project and requested its early implementation.

9. We consulted the Legislative Council Panel on Home Affairs on 23 April 2018. Members supported the project and had no objection to the submission of the funding proposal to the Public Works Subcommittee.

ENVIRONMENTAL IMPLICATIONS

10. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We have completed the Preliminary Environmental Review (PER) for the project in March 2018. The PER has concluded and the Director of Environmental Protection agreed that the project would not have any long-term environmental impacts. We will include the mitigation measures recommended in the PER to control the environmental impacts arising from the construction works within established standards and guidelines into the works contract. These measures include the use of quality powered mechanical equipment and movable noise barrier for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel washing facilities. We have included in the project estimate the cost to implement suitable mitigation measures to control short-term environmental impacts.

11. 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. excavated materials for backfilling) 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 facilities¹². We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimise the generation of construction waste.

/12.

¹² 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.

12. 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.

13. We estimate that the project will generate in total about 33 436 tonnes of construction waste. Of these, we will reuse about 7 322 tonnes (21.9%) of inert construction waste on site and deliver 21 608 tonnes (64.6%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 4 506 tonnes (13.5%) 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 \$2.5 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

14. The 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

15. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

16. This project will adopt various forms of energy efficient features and renewable energy technologies including –

- (a) heat pump for hot water / space heating / dehumidification;
- (b) heat pump for pool water heating;
- (c) heat energy reclaim of exhaust air;

/(d)

- (d) demand control of supply air; and
- (e) solar hot water system.

17. For greening features, we will provide green roof at the indoor swimming pool building and vertical greening at the spectator stand.

18. For recycled features, we will adopt a rainwater harvesting system for landscape irrigation with a view to conserving water.

19. The total estimated additional cost for adoption of the above energy conservation measures, green features and recycled features is \$26.1 million (including \$7.0 million for energy efficient features), which has been included in the cost estimate for this project. The energy efficient features will achieve 10.1% energy savings in the annual energy consumption with a payback period of about 8.5 years.

BACKGROUND INFORMATION

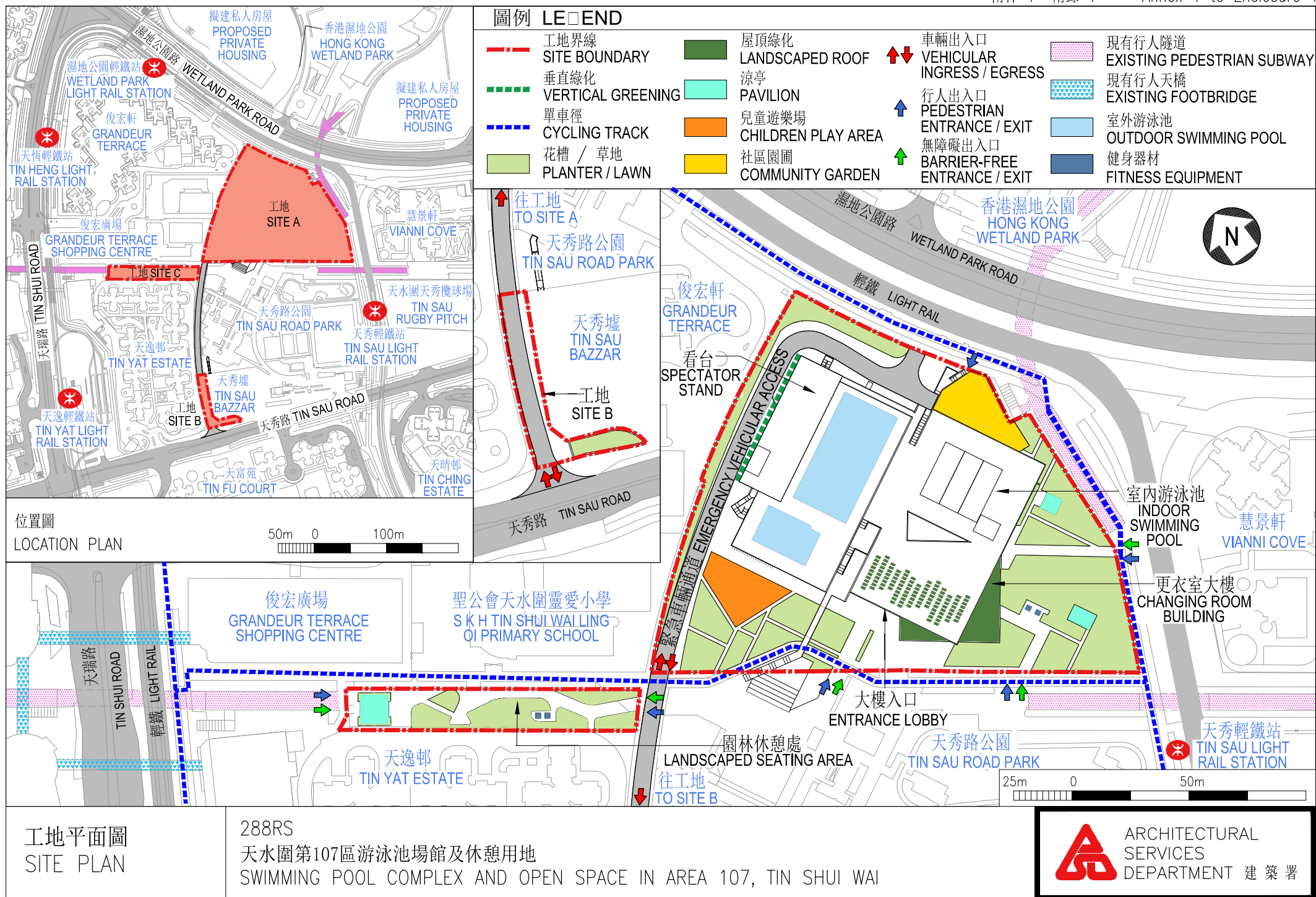
20. We upgraded **288RS** to Category B in September 2015. We engaged consultants to undertake various services, including topographical survey in January 2015, value management services in November 2015, geotechnical assessment in November 2015, traffic impact assessment in December 2015, ground investigation in May 2016, preliminary environmental review in September 2016, town planning application in September 2016 and utility mapping in October 2017. We are going to engage consultants to undertake quantity surveying and façade detailing services in May 2018. The total cost of the above consultancy services and works is about \$5.1 million. We have charged this amount to block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fees for items in Category D of the Public Works Programme”. Except the preliminary environmental review, quantity surveying and façade detailing services, all other pre-construction activities have been completed.

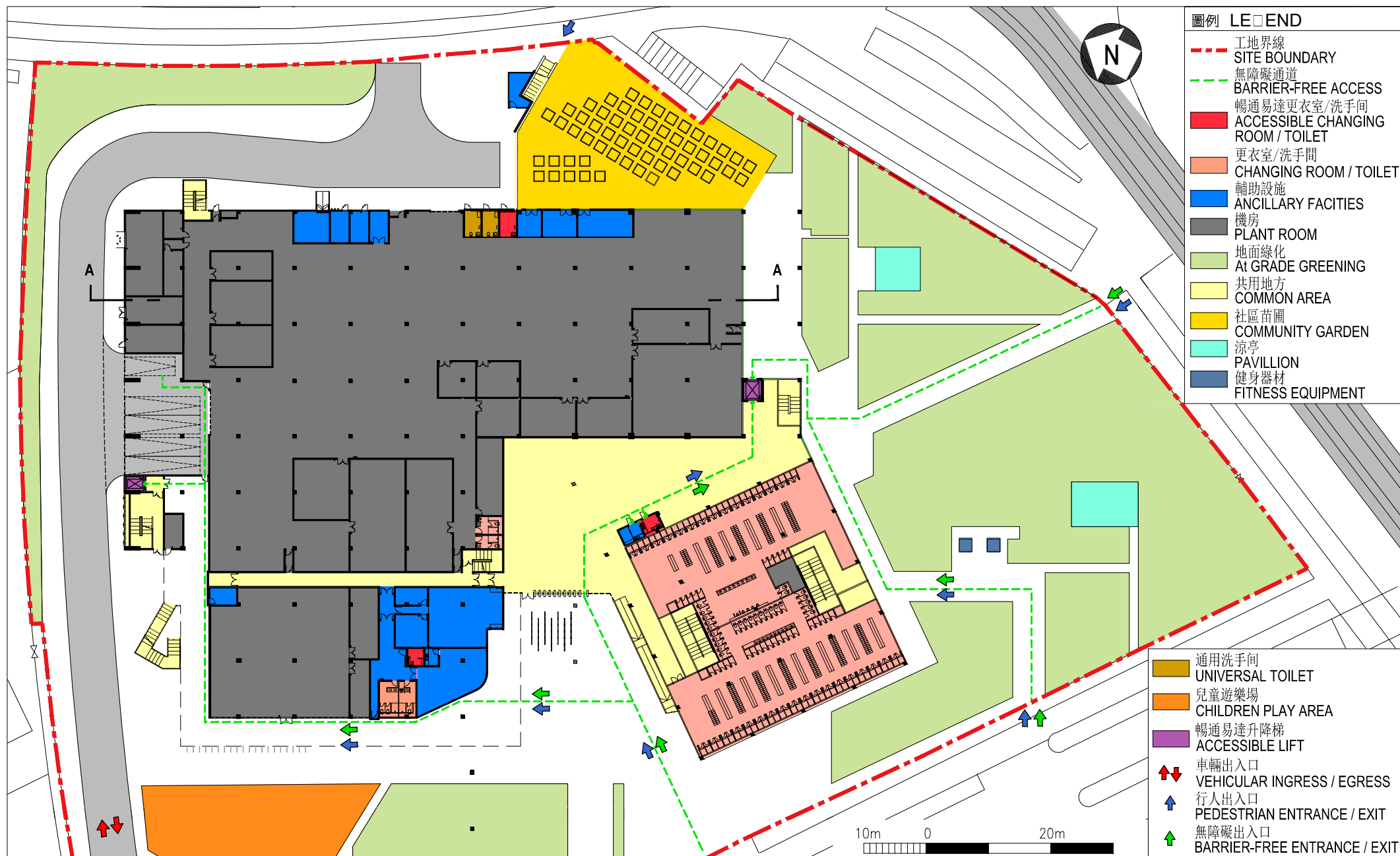
21. Of the 382 trees within the project boundary, 41 trees will be preserved. The proposed works will involve the removal of 341 trees, including 317 trees to be felled and 24 trees to be replanted within the project site. All the trees to be removed are not important trees¹³. We will incorporate planting proposals as part of the project, including estimated quantities of 260 trees, 30 000 shrubs, 52 000 groundcovers and 2 000 m² of grassed area.

22. We estimate that the proposed works will create about 475 jobs (440 for labourers and another 35 for professional/technical staff) providing a total employment of 8 700 man-months.

¹³ “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 –

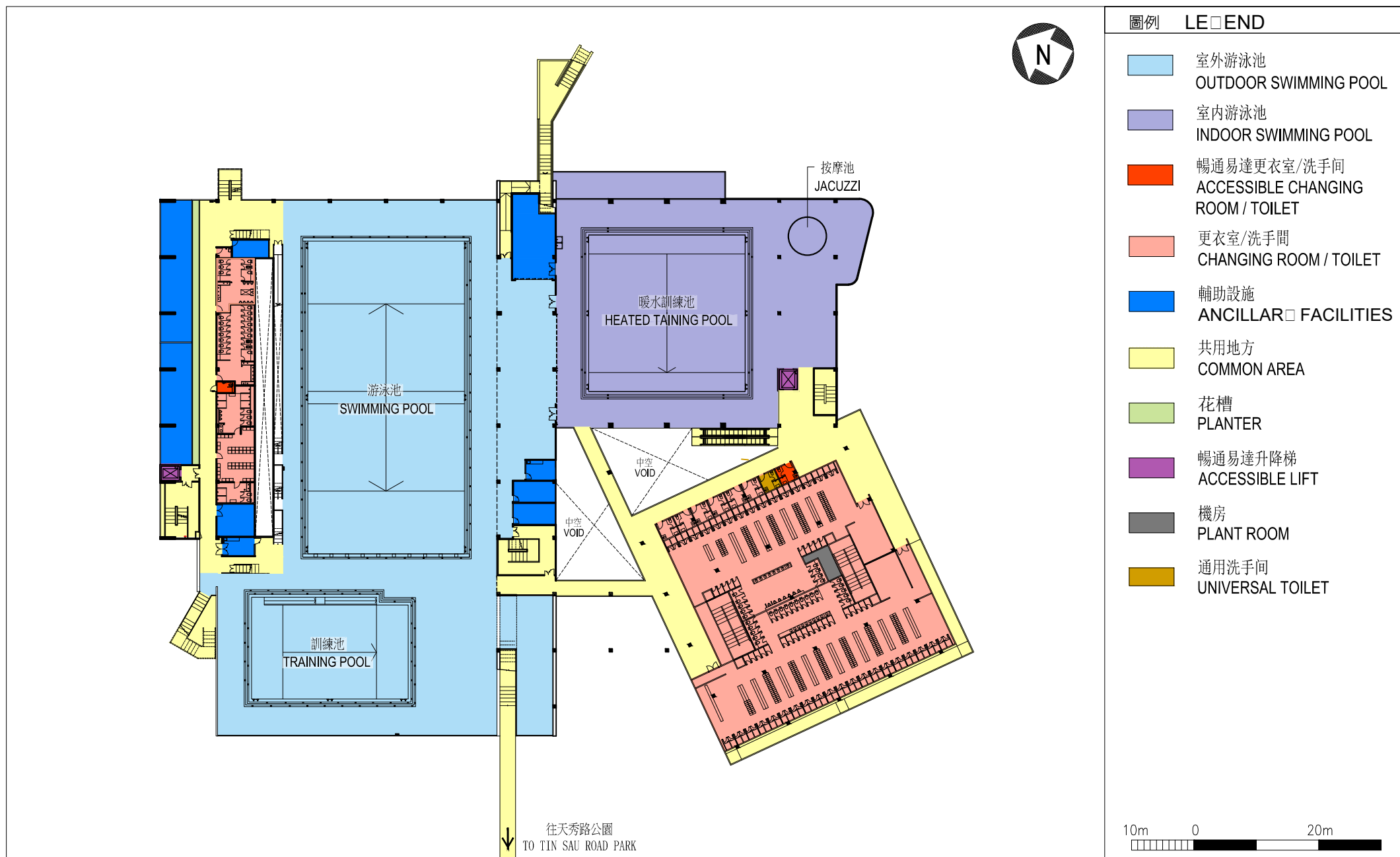
- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking 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.





工地A 地下平面圖
SITE A GROUND FLOOR PLAN

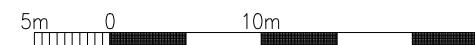
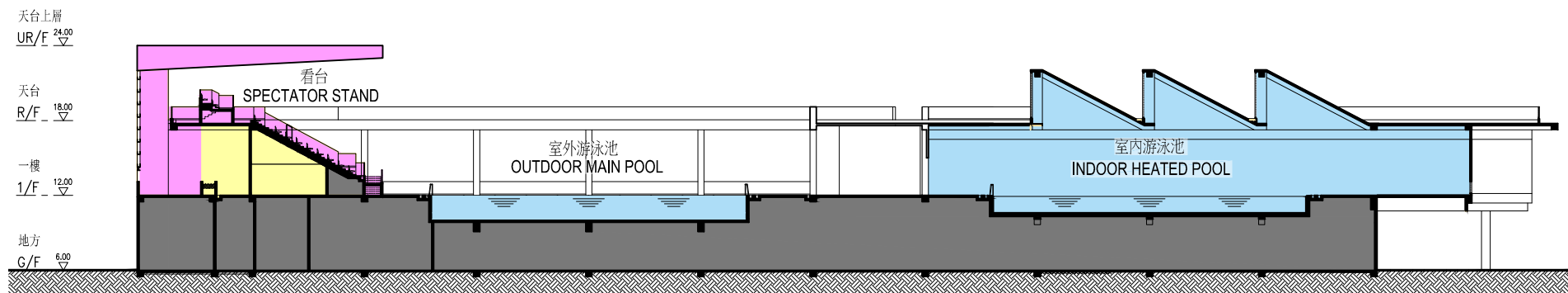
288RS
天水圍第107區游泳池場館及休憩用地
SWIMMING POOL COMPLEX AND OPEN SPACE IN AREA 107, TIN SHUI WAI



| | | |
|--|--|--|
| <p>工地A 一樓平面圖 SITE A FIRST FLOOR PLAN</p> | <p>288RS 天水圍第107區游泳池場館及休憩用地 SWIMMING POOL COMPLEX AND OPEN SPACE IN AREA 107, TIN SHUI WAI</p> | <p>ARCHITECTURAL SERVICES DEPARTMENT 建築署</p> |
|--|--|--|

圖例 LE □ END

- 看台
SPECTATOR STAND
- 游泳池範圍
SWIMMING POOL AREA
- 共用地方
COMMON AREA
- 機房
PLANT ROOMS



A-A 剖面圖
SECTION A-A

288RS
天水圍第107區游泳池場館及休憩用地
SWIMMING POOL COMPLEX AND OPEN SPACE IN AREA 107, TIN SHUI WAI



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

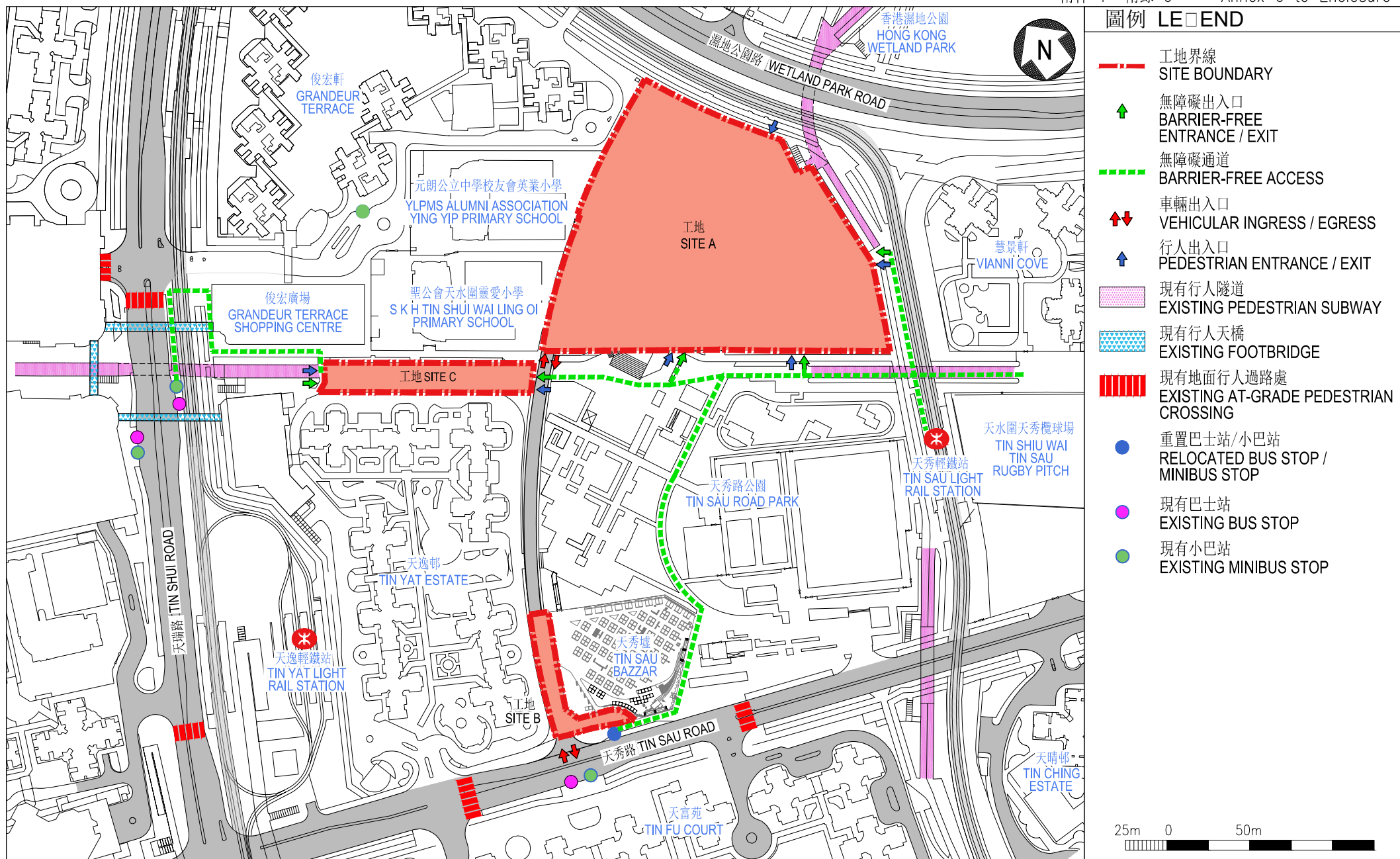


構思圖
ARTIST'S IMPRESSION

288RS
天水圍第107區游泳池場館及休憩用地
SWIMMING POOL COMPLEX AND OPEN SPACE IN AREA 107, TIN SHUI WAI



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



無障礙通道平面圖
PLAN OF BARRIER-FREE ACCESS

288RS
天水圍第107區游泳池場館及休憩用地
SWIMMING POOL COMPLEX AND OPEN SPACE IN AREA 107, TIN SHUI WAI



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

Annex 7 to Enclosure 1 of PWSC(2018-19)22

288RS – Swimming pool complex and open space in Area 107, Tin Shui Wai

Breakdown of the estimates for consultants' fees and resident site staff (RSS) costs (in September 2017 prices)

| | | Estimated man-months | Average MPS [*] salary point | Multiplier (Note 1) | Estimated fee (\$ million) |
|--|--------------|-------------------------|--|------------------------|----------------------------------|
| (a) Consultants' fees for contract administration (Note 2) | Professional | – | – | – | 9.3 |
| | Technical | – | – | – | 3.2 |
| | | | | Sub-total | 12.5# |
| (b) RSS costs (Note 3) | Professional | – | – | – | – |
| | Technical | 51 | 14 | 1.6 | 2.2 |
| | | | | Sub-total | 2.2 |
| Comprising - | | | | | |
| (i) Consultants' fees for management of RSS | | | | 0.2# | |
| (ii) Remuneration of RSS | | | | 2.0# | |
| | | | | Total | 14.7 |

* 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 = \$78,775 per month and MPS salary point 14 = \$27,485 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 **288RS**. The assignment will only be executed subject to Finance Committee's funding approval to upgrade **288RS** 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 4 of Enclosure 1.

**Provision of heated pool at the Morse Park Swimming Pool Complex,
Wong Tai Sin**

PROJECT SCOPE AND NATURE

The project site covers an area of about 15 400 square metres (m²) and is part of the Morse Park Swimming Pool Complex managed by the Leisure and Cultural Services Department (LCSD). The proposed scope of works under **275RS** comprises —

- (a) construction of a new secondary pool in-situ with provision of a water heating system and provision of a new outdoor children's pool;
- (b) demolition of one children's pool and two toddler's fun pools to provide space for installing a new plant room for the heated secondary pool;
- (c) provision of a permanent roof and retractable sidewalls or side doors for the secondary pool with suitable ancillary facilities, so as to form an enclosed area to trap warm, heated air in winter and allow ventilation in summer;
- (d) associated improvements to the ventilation and heating systems and the hot water system in the existing changing rooms;
- (e) provision of a surge tank to prevent suction of air into the circulation system for the heated secondary pool and children's pool;
- (f) renovation works to provide a new female changing room cum toilet¹ next to the new secondary pool and re-provisioning of family changing rooms;
- (g) provision of barrier-free access, including a lift to the pool deck level to facilitate access to the pool by people with disability and wheel-chair users;

/(h)

¹ The new female changing room cum toilet was designed to allow conversion into male/female toilet to meet operational needs.

- (h) provision of a control room and maintenance staff room in the plant room, a briefing room overlooking the pool facilities, and two store rooms for aquatic equipment for training course and activities;
- (i) provision of a babycare room;
- (j) relocation of staff rest room with locker area, toilet and changing cum shower facilities, pantry, store room and management office and re-instate/re-install the necessary building services and facilities for such use; and
- (k) upgrading works at swimming pool entrance to provide an entrance plaza, enhanced entrance lobby with canopy and a lift to facilitate users to arrive at the entrance from street level.

— A site and location plan, two floor plans, an artist's impression and a barrier-free access plan for the project are at Annexes 1 to 5 to Enclosure 2 respectively. Subject to the funding approval of the Finance Committee by mid-2018, we plan to commence construction in the fourth quarter of 2018 for completion in the second quarter of 2022.

JUSTIFICATION

2. Wong Tai Sin District has a population of about 423 000, which is expected to increase to about 426 000 by 2024. At present, Wong Tai Sin District has two public swimming pools, namely, the Morse Park Swimming Pool and Hammer Hill Road Swimming Pool (HHRSP), meeting the suggested provision level of Hong Kong Planning Standards and Guidelines². That said, only HHRSP provides indoor heated public swimming facility and its attendance during winter season (from November to March) has steadily increased from 40 908 in 2012-13 to 79 856 in 2016-17. The provision of another indoor heated pool by this project would help promote year-round swimming as well as provide a safe and comfortable venue for swimming during inclement weather in the summer months.

/3.

² Hong Kong Planning Standards and Guidelines suggest a provision of one swimming pool complex per 287 000 people.

3. The Morse Park Swimming Pool is close to a number of housing estates, including Upper Wong Tai Sin Estate, Lower Wong Tai Sin Estate, Wang Tau Hom Estate, Chuk Yuen South Estate, Chuk Yuen North Estate, Tin Wang Court and Tin Ma Court. In addition, there are six secondary schools and five primary schools³ in the vicinity. The proposed indoor heated swimming pool is expected to be well patronized by local residents and students.

FINANCIAL IMPLICATIONS

4. We estimate the capital cost of the project to be \$576.5 million in money-of-the-day (MOD) prices, broken down as follows –

| | \$ million (in MOD prices) |
|--|-------------------------------|
| (a) Site works | 6.0 |
| (b) Demolition | 12.3 |
| (c) Foundation and basement | 80.8 |
| (d) Building works ⁴ | 186.6 |
| (e) Building services ⁵ | 120.3 |
| (f) Drainage | 24.4 |
| (g) External works | 33.7 |
| (h) Renovation works | 25.5 |
| (i) Furniture and equipment ⁶ | 0.6 |
| | /(j) |

³ The secondary schools in the vicinity include C.C.C. Kei Heep Secondary School, C.C.C. Rotary Secondary School, Hop Lap College, Kit Sam Lam Bing Yim Secondary School, Lok Sin Tong Yu Kan Hing Secondary School, Lung Cheung Government School and the primary schools include Baptist Rainbow Primary School, Canossa Primary School, Confucian Tai Shing Primary School, SKH Kei Tai Primary School, Wong Tai Sin Government Primary School.

⁴ Building works cover construction of superstructure of the building .

⁵ Building services works cover electrical installation, ventilation installation, fire services installation, lift installation, plumbing and other specialist installations ie swimming pool filtration system.

⁶ The estimated cost of furniture and equipment is based on an indicative list of items including staff lockers and chairs etc. in the new portion. The cost excludes relocation and minor improvement works of existing facilities in the venue like re-configuration of the turnstiles entering system, which would be funded and implemented by LCSD and the Electrical and Mechanical Services Trading Fund.

| | | \$ million (in MOD prices) |
|-------|---|-------------------------------|
| (j) | Additional energy conservation measures and recycled features | 4.2 |
| (k) | Consultants' fees for | 10.0 |
| | (i) contract administration | 8.5 |
| | (ii) management of resident site staff (RSS) | 1.5 |
| (l) | Remuneration of RSS | 19.7 |
| (m) | Contingencies | 52.4 |
| | | <hr/> |
| Total | | 576.5 |
| | | <hr/> |

We propose to engage consultants to undertake tender assessment, contract administration and site supervision of the project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at Annex 6 to Enclosure 2. The construction floor area (CFA) of **275RS** is approximately 6 516 m². The estimated construction unit cost, represented by the building works and the building services costs, is \$47,099 per m² of CFA in MOD prices. We consider this comparable to that of similar projects built by the Government.

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

| Year | \$ million (MOD) |
|-------------|---------------------|
| 2018 – 2019 | 5.3 |
| 2019 – 2020 | 39.9 |
| 2020 – 2021 | 112.3 |
| 2021 – 2022 | 159.9 |
| 2022 – 2023 | 129.2 |
| 2023 – 2024 | 70.5 |

/2024 – 2025

| Year | \$ million (MOD) |
|-------------|-----------------------------|
| 2024 – 2025 | 39.7 |
| 2025 – 2026 | 19.7 |
| | <hr/> 576.5 <hr/> |

6. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period 2018 to 2026. 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.

7. We estimated the annual recurrent expenditure arising from this project to be \$16.3 million. The capital and recurrent costs arising from the project would be taken into consideration when determining the relevant fees and charges in future.

PUBLIC CONSULTATION

8. We consulted the District Facilities Management Committee of the Wong Tai Sin District Council on the proposed scope of the project on 2 December 2008, 20 January 2009 and 23 March 2010. Members supported the project. Members were further consulted on 16 July 2013 and 27 May 2014 on an updated scope and design, and the project was supported.

9. We consulted the Legislative Council Panel on Home Affairs on 23 April 2018. Members supported the project and had no objection to the submission of the funding proposal to the Public Works Subcommittee.

ENVIRONMENTAL IMPLICATIONS

10. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause long-term adverse environmental impact. We have included in the project estimate the cost to implement suitable mitigation measures to control short-term environmental impacts during construction.

11. 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 contract. These include the use of silencers, mufflers, acoustic linings or shields for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities to prevent dust nuisance.

12. 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 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. excavated materials for backfilling) on site or in other suitable construction sites as far as possible, in order to minimize the disposal of inert construction waste to public fill reception facilities⁷. We will encourage the contractor to maximize the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimize the generation of construction waste.

13. 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 measures 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.

14. We estimate that the project will generate in total about 37 944 tonnes of construction waste. Of these, we will reuse about 2 008 tonnes (5.3%) of inert construction waste on site and deliver 33 413 tonnes (88.1%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 2 523 tonnes (6.6%) 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 \$2.9 million for this project (based on an 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

⁷ 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

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

LAND ACQUISITION

16. This project does not require any land acquisition. This is an improvement project to an existing venue of the LCSD. No land resumption or land clearance is required. The site is currently occupied by LCSD and is readily available.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

17. This project will adopt various forms of energy efficient features and renewable energy technologies, including –

- (a) heat pump for hot water / space heating / dehumidification;
- (b) heat pump for pool water heating;
- (c) heat energy reclaim of exhaust air;
- (d) demand control of supply air; and
- (e) solar hot water system.

18. For recycled features, we will adopt a rainwater harvesting system for landscape irrigation with a view to conserving water.

19. The total estimated additional cost for adoption of the above energy conservation measures, green features and recycled features is around \$4.2 million (including \$3.3 million for energy efficient features), which has been included in the cost estimate for this project. The energy efficient features will achieve 10.1% energy saving in the annual energy consumption with a payback period of about eight years.

/BACKGROUND

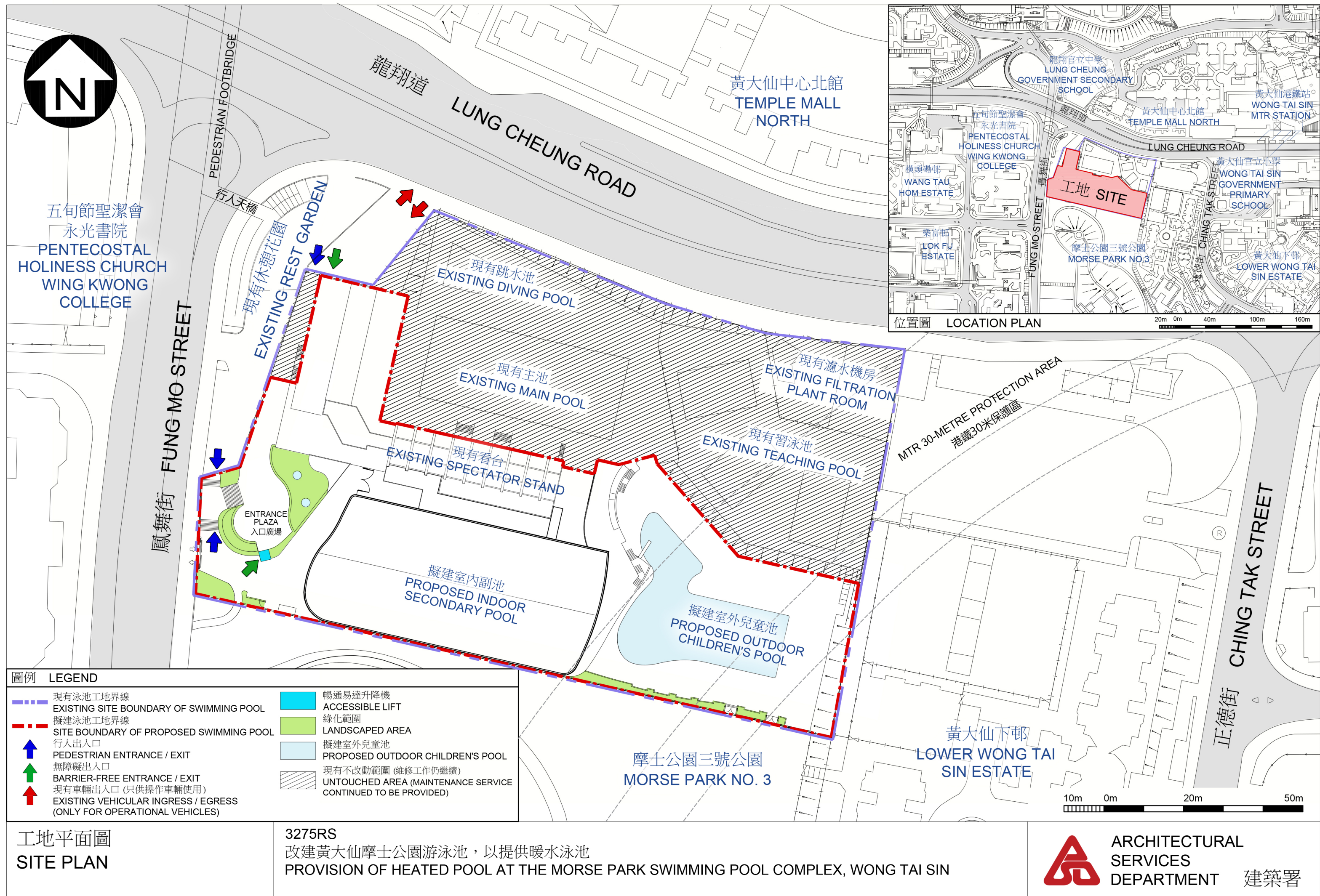
BACKGROUND INFORMATION

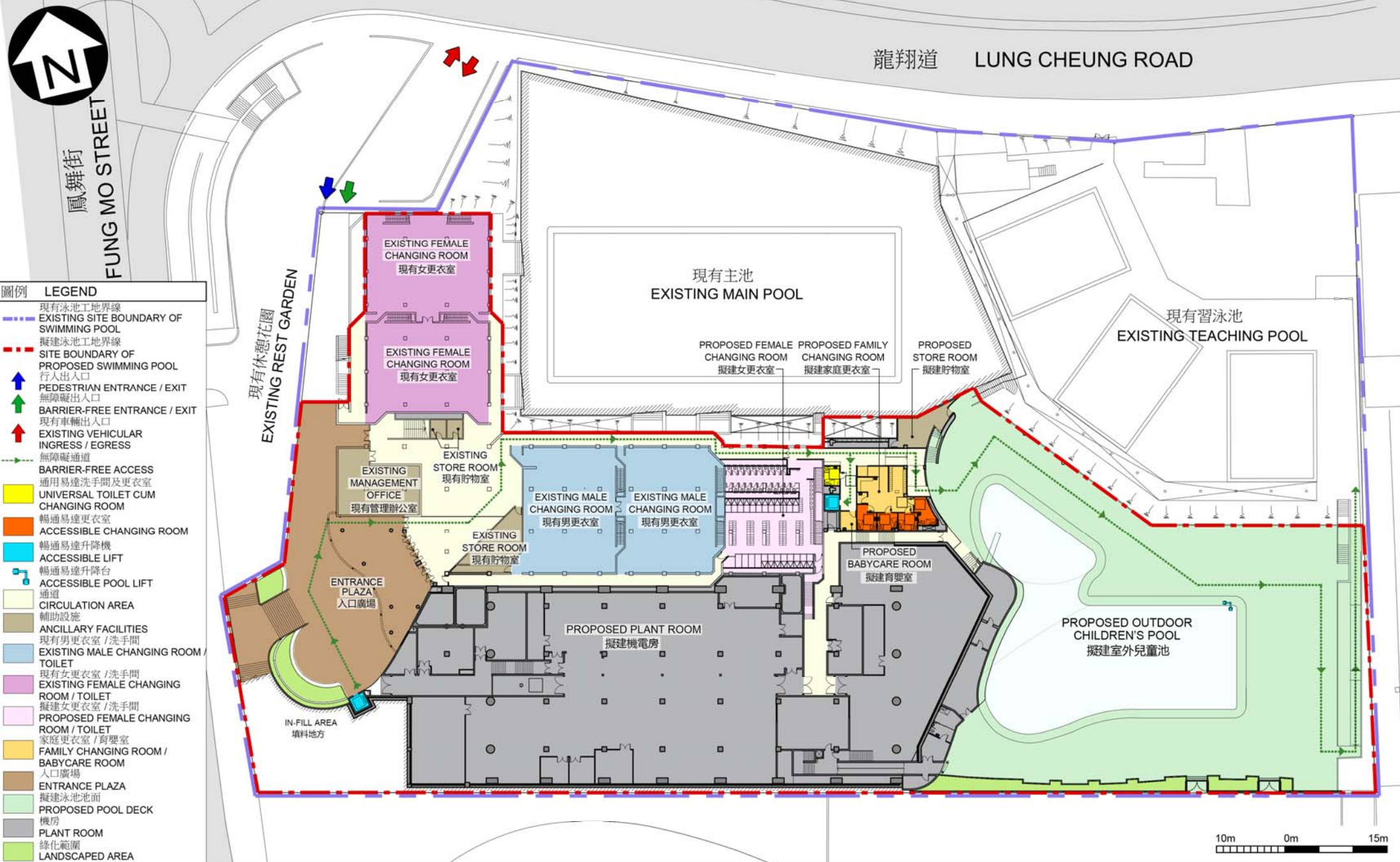
20. We upgraded **275RS** to Category B in September 2011. We engaged an architectural lead consultant to undertake the detailed design and site investigation in December 2012 and a quantity surveying consultant to prepare tender documents in July 2015. The total cost of the above consultancy services and works is about \$13.1 million. We have charged this amount to block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fees for items in Category D of the Public Works Programme”. Detailed design and site investigation have been completed and the tender documents are being finalised.

21. The proposed works will not involve removal of tree within the project site. We will incorporate planting proposals as part of the project, including estimated quantities of 7 trees and 3 146 shrubs and 16 359 groundcovers.

22. The proposed works will be delivered in two phases. In the first phase, the Morse Park Swimming Pool will be closed for about 15 months after the commencement of works for provision of temporary changing rooms, diversion of existing building services, demolition/excavation works, construction of basement and foundation. The main pool, diving pool and teaching pools will be re-opened around April 2020. The second phase works will mainly comprise the construction of superstructure of the new heated pool and children pool, interior fitting-out works, testing and commissioning.

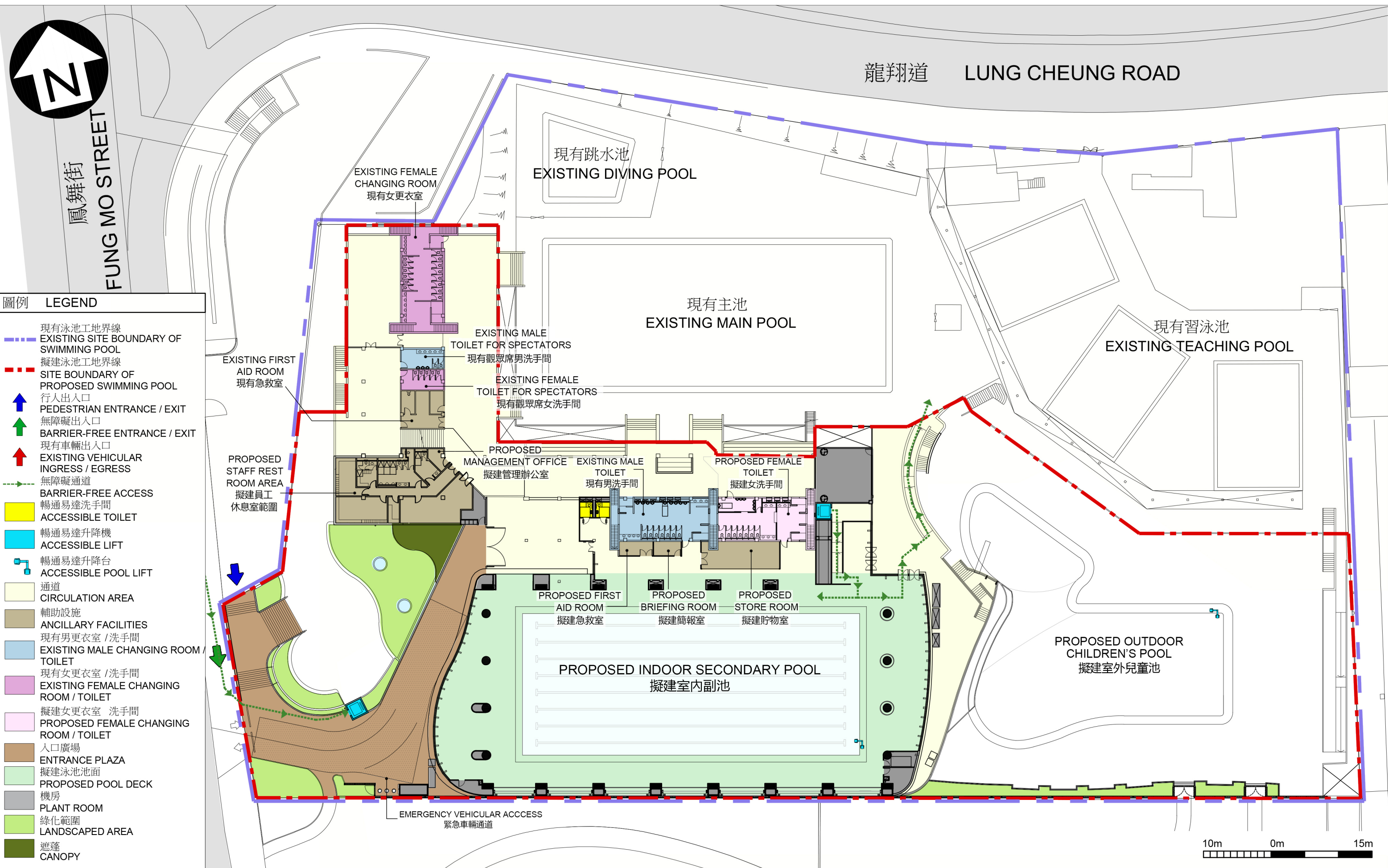
23. We estimate that the project will create about 120 jobs (110 for labourers and another 10 for professional/technical staff) providing a total employment of 4 300 man-months.





地下平面圖
GROUND FLOOR PLAN

3275RS
改建黃大仙摩士公園游泳池，以提供暖水泳池
PROVISION OF HEATED POOL AT THE MORSE PARK SWIMMING POOL COMPLEX, WONG TAI SIN



一樓平面圖
FIRST FLOOR PLAN

3275RS
改建黃大仙摩士公園游泳池，以提供暖水泳池
PROVISION OF HEATED POOL AT THE MORSE PARK SWIMMING POOL COMPLEX, WONG TAI SIN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



PERSPECTIVE VIEW FROM SOUTH-WESTERN DIRECTION (ARTIST'S IMPRESSION)

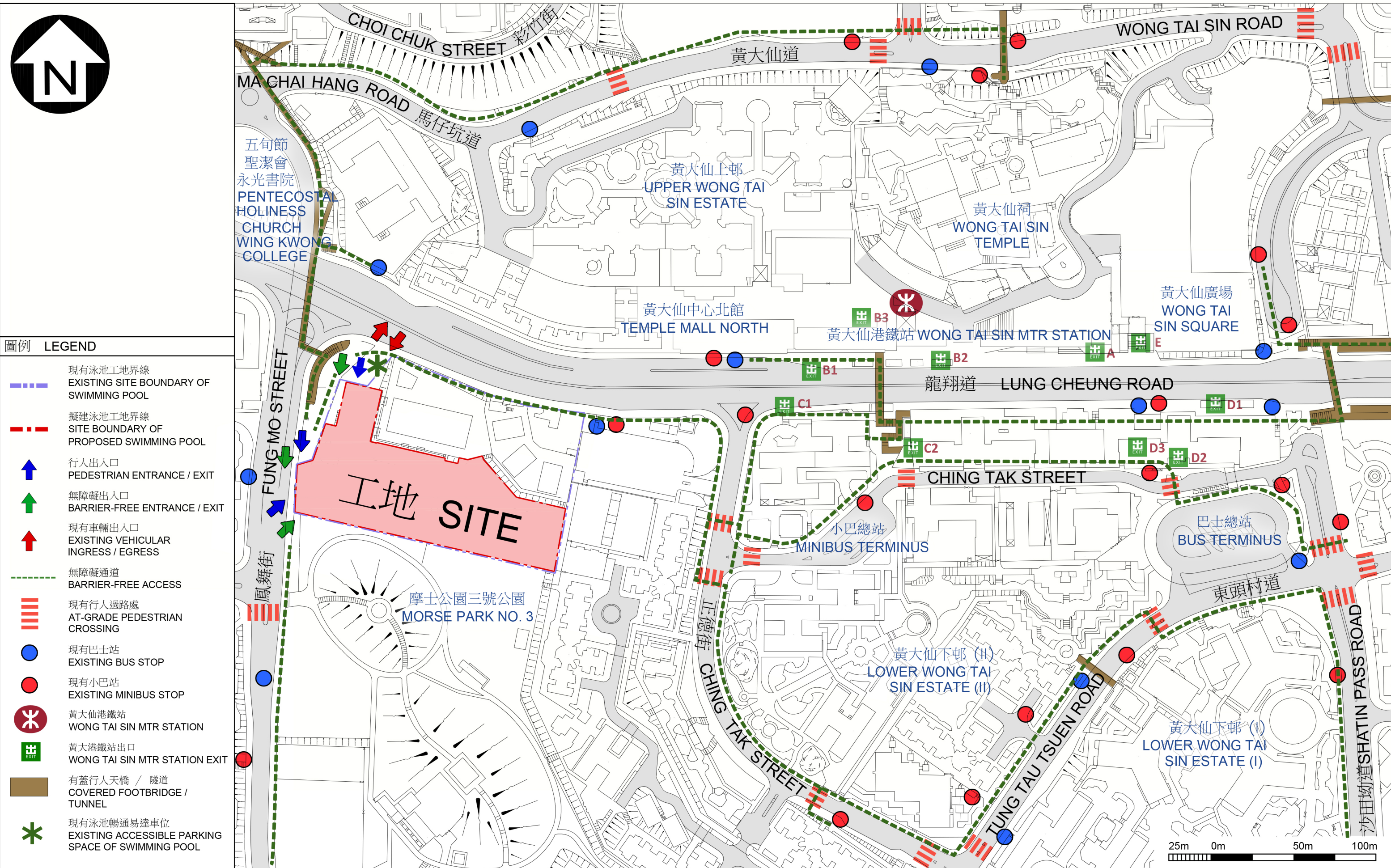
從西南面望向大樓的構思透視圖

構思圖
ARTIST'S IMPRESSION

3275RS
改建黃大仙摩士公園游泳池，以提供暖水泳池
PROVISION OF HEATED POOL AT THE MORSE PARK SWIMMING POOL COMPLEX, WONG TAI SIN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



無障礙通道平面圖
PLAN OF BARRIER-FREE ACCESS

3275RS
改建黃大仙摩士公園游泳池，以提供暖水泳池
PROVISION OF HEATED POOL AT THE MORSE PARK SWIMMING POOL COMPLEX, WONG TAI SIN



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

Annex 6 to Enclosure 2 of PWSC(2018-19)22

275RS – Provision of heated pool at the Morse Park Swimming Pool Complex, Wong Tai Sin

Breakdown of the estimates for consultants' fees and resident site staff (RSS) costs (in September 2017 prices)

| | | Estimated man- months | Average MPS [*] salary point | Multiplier (Note 1) | Estimated fee (\$ million) |
|---|--------------|-----------------------------|--|------------------------|----------------------------------|
| (a) Consultants' fees for contract administration (Note 2) | Professional | — | — | — | 5.0 |
| | Technical | — | — | — | 1.8 |
| | | | | Sub-total | 6.8# |
| (b) RSS costs (Note 3) | Professional | 26 | 38 | 1.6 | 3.3 |
| | Technical | 314 | 14 | 1.6 | 13.8 |
| | | | | Sub-total | 17.1 |
| Comprising - | | | | | |
| (i) Consultants' fees for management of resident site staff | | | | 1.3# | |
| (ii) Remuneration of resident site staff | | | | 15.8# | |
| | | | | Total | 23.9 |

* 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 = \$78,775 per month and MPS salary point 14 = \$27,485 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 **275RS**. The assignment will only be executed subject to Finance Committee's funding approval to upgrade **275RS** to Category A.
3. The consultants' staff cost for site supervision is based on the estimate prepared by the Director of Architectural Services. The actual man-months and actual costs will only be known after completion of the construction works.

Remarks

The figures in this Annex are shown in constant prices to correlate with the MPS salary point of the same year. The costs marked with # are shown in money-of-the-day prices in paragraph 4 of Enclosure 2.

Open Space in Area 47 and 48, North District

PROJECT SCOPE AND NATURE

The project site occupies an area of about 8 700 square metres (m²) in Area 47 and 48, Fanling at the junction of Pak Wo Road and Yat Ming Road, near Fanling Government Secondary School. The proposed scope of works under **427RO** comprises —

- (a) children's play areas with play equipment for children of different age groups;
- (b) fitness corners;
- (c) a jogging track;
- (d) a Tai Chi area;
- (e) landscaped areas and leisure lawn areas;
- (f) a pet garden; and,
- (g) ancillary facilities including toilets, a babycare room, and a park office.

———— A site and location plan, an artist's impression and a barrier-free access plan for the project are at Annexes 1 to 3 to Enclosure 3 respectively. Subject to the funding approval of the Finance Committee by mid-2018, we plan to commence construction in the fourth quarter of 2018 for completion in the second quarter of 2020.

JUSTIFICATION

2. North District has a population of about 315 300, which is expected to increase to about 378 500 by 2024. The project site is surrounded by residential buildings including Wah Sum Estate, Wah Ming Estate, Dawning Views and Flora Plaza, as well as two schools¹. The open space managed by the Leisure and

/Cultural

¹ The two schools include one secondary school (Fanling Government Secondary School) and one primary school (Fanling Assembly of God Church Primary School).

Cultural Services Department in the neighbourhood, namely Wo Hing Playground which occupies an area of about 1 060 m² and the limited facilities, cannot meet the need of the local community. This project will add about 8 700 m² of open space with landscaped and sitting-out area, leisure lawns and recreational facilities such as a pet garden, fitness corners and a jogging track. The proposed open space is expected to be well patronised by local residents and students.

FINANCIAL IMPLICATIONS

3. We estimate the capital cost of the project to be \$123.7 million in money-of-the-day (MOD) prices, broken down as follows –

| | \$ million (in MOD prices) |
|---|---------------------------------------|
| (a) Site works | 6.5 |
| (b) Building | 10.9 |
| (c) Building services | 11.4 |
| (d) Drainage | 11.1 |
| (e) External works | 56.2 |
| (f) Additional energy conservation and recycled features | 0.8 |
| (g) Furniture and equipment ² | 0.4 |
| (h) Consultants' fees for | 5.3 |
| (i) contract administration | 5.0 |
| (ii) management of resident site staff (RSS) | 0.3 |
| (i) Remuneration of RSS | 9.9 |
| (j) Contingencies | 11.2 |
| Total | 123.7 |

/We

² The estimated cost is based on an indicative list of furniture and equipment required.

_____ We propose to engage consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at Annex 4 to Enclosure 3. We consider this comparable to that of similar projects built by the Government.

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

| Year | \$ million (MOD) |
|-------------|---------------------|
| 2018 – 2019 | 2.1 |
| 2019 – 2020 | 46.6 |
| 2020 – 2021 | 48.0 |
| 2021 – 2022 | 14.8 |
| 2022 – 2023 | 7.7 |
| 2023 – 2024 | 4.5 |
| | <hr/> 123.7 <hr/> |

5. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on trend rate of change in the prices of public sector building and construction output for the period 2018 to 2024. We will deliver the construction works through a lump-sum contract because we can clearly define the scope of the works in advance. The contract will provide for price adjustments.

6. We estimate the annual recurrent expenditure arising from this project to be \$4.0 million.

PUBLIC CONSULTATION

7. We consulted the Recreation and Culture Committee of the North District Council (NDC) on 6 July 2006, 5 July and 6 September 2007 on the project scope and the District Facilities Management Committee (DFMC) of the NDC on 27 March 2008 and 19 March 2009 on the revised project scope. We

/further

further consulted DFMC of the NDC on 11 November 2010 on the design of the project. We have provided regular updates on the project progress to the DFMC and the most recent update was given in March 2018. Members supported the project and requested its early implementation.

8. We consulted the Legislative Council Panel on Home Affairs on 23 April 2018. Members supported the project and had no objection to the submission of the funding proposal to the Public Works Subcommittee.

ENVIRONMENTAL IMPLICATIONS

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

10. 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 contract. These include the use of silencers, mufflers, acoustic linings or shields and the use of temporary noise barriers for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel washing facilities to prevent dust nuisance.

11. 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. excavated materials for backfilling) 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.

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

/include

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.

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.

13. We estimate that the project will generate in total about 12 300 tonnes of construction waste. Of these, we will reuse about 3 700 tonnes (30.1%) of inert construction waste on site and deliver 7 800 tonnes (63.4%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 800 tonnes (6.5%) 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 \$0.7 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 IMPLICATIONS

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

LAND ACQUISITION

15. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

16. This project will adopt various forms of energy efficient features and renewable energy technologies, including –

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

17. For recycled features, we will adopt rainwater recycling system for landscape irrigation with a view to conserving water.

18. The total estimated additional cost for adoption of the above energy conservation measures, green features and recycled features is around \$0.8 million (including \$20,000 for energy efficient features), which has been included in the cost estimate for this project. The energy efficient features will achieve 3.5% energy savings in the annual energy consumption with a payback period of about eight years.

BACKGROUND INFORMATION

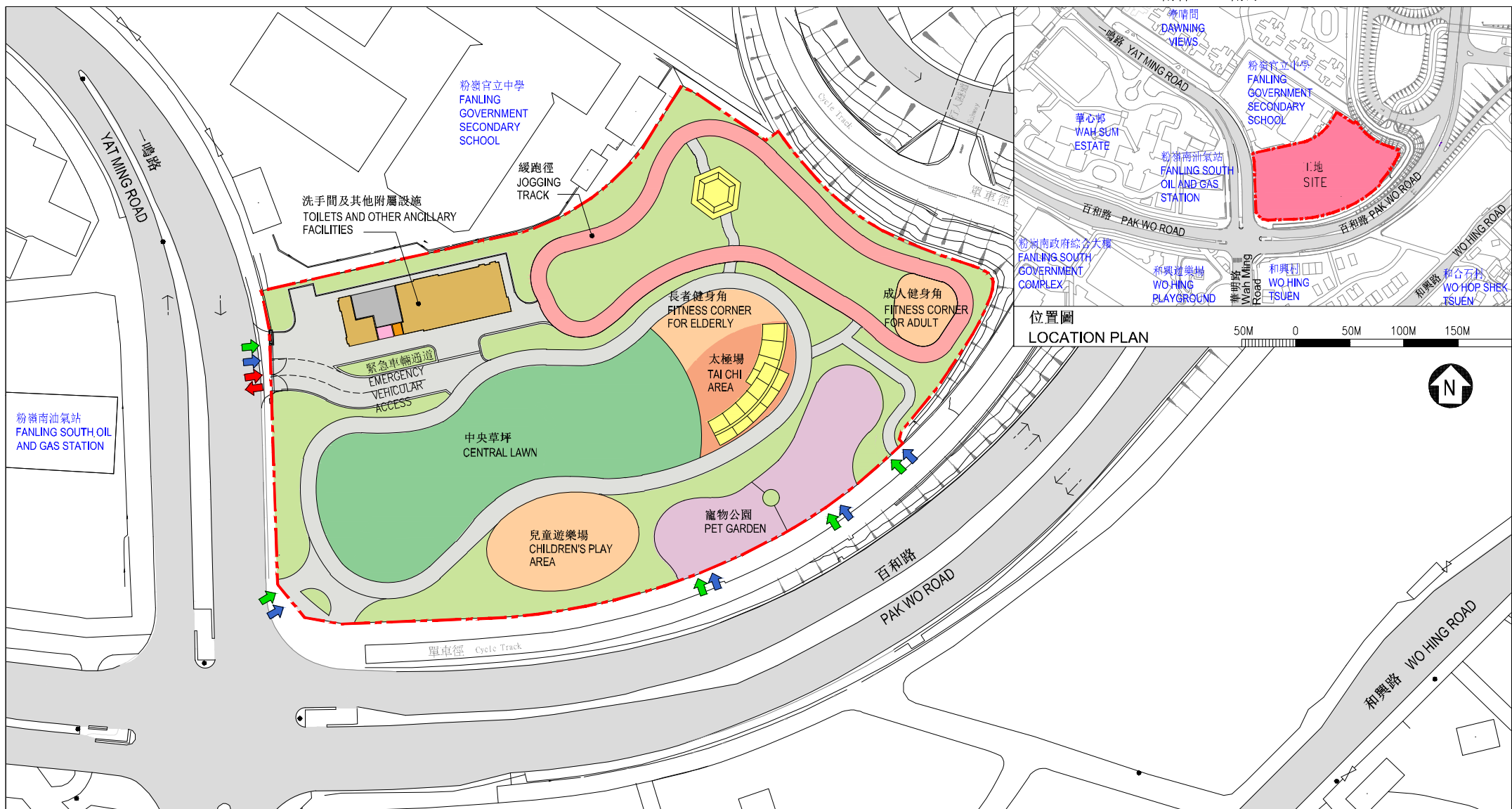
19. We upgraded **427RO** to Category B in November 2008. We engaged an architectural consultant to undertake the layout design, detailed design and related services in August 2009. We engaged a quantity surveying consultant to prepare tender documents in July 2009. We also carried out preliminary works including site investigation, topographic survey, tree survey and underground utility mapping. The total cost of the above consultancy services and works is about \$4.5 million. We have charged this amount to block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fees for items in Category D of the Public Works Programme”. The layout design, detailed design and site investigation works have been completed.

20. Of the 248 trees within the project boundary, the proposed works will involve felling of 234 trees and the remaining 14 trees will be preserved. All the trees to be removed are not important trees⁴. We will incorporate planting proposals as part of the project, including the estimated quantities of 212 trees, 13 800 shrubs, 56 500 groundcovers and 2 300 m² of grassed area.

21. We estimate that the proposed works will create about 60 jobs (50 for labourers and another 10 for professional/technical staff) providing a total employment of 950 man-months.

⁴ “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.



圖例 LEGEND:

| | | | | | | | | | | | |
|--|------------------------------------|--|---------------------------------------|--|-------------------|--|------------------------------|--|---------------------------|--|----------------------|
| | 工地範圍 SITE BOUNDARY | | 無障礙出入口 BARRIER-FREE ENTRANCE/ EXIT | | 機電房 PLANT ROOM | | 暢通易達洗手間 ACCESSIBLE TOILET | | 花槽及樹木 PLANTER AND TREE | | 中央草坪 CENTRAL LAWN |
| | 行人出入口 PEDESTRIAN ENTRANCE/ EXIT | | 車輛出入口 VEHICULAR INGRESS / EGRESS | | 涼亭 PAVILION | | 通用洗手間 UNIVERSAL TOILET | | 行人道 FOOTPATH | | |

工地平面圖
SITE PLAN

427RO
北區第47及48區休憩用地
OPEN SPACE IN AREA 47 AND 48, NORTH DISTRICT.

10M 0 10M 20M 30M

ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

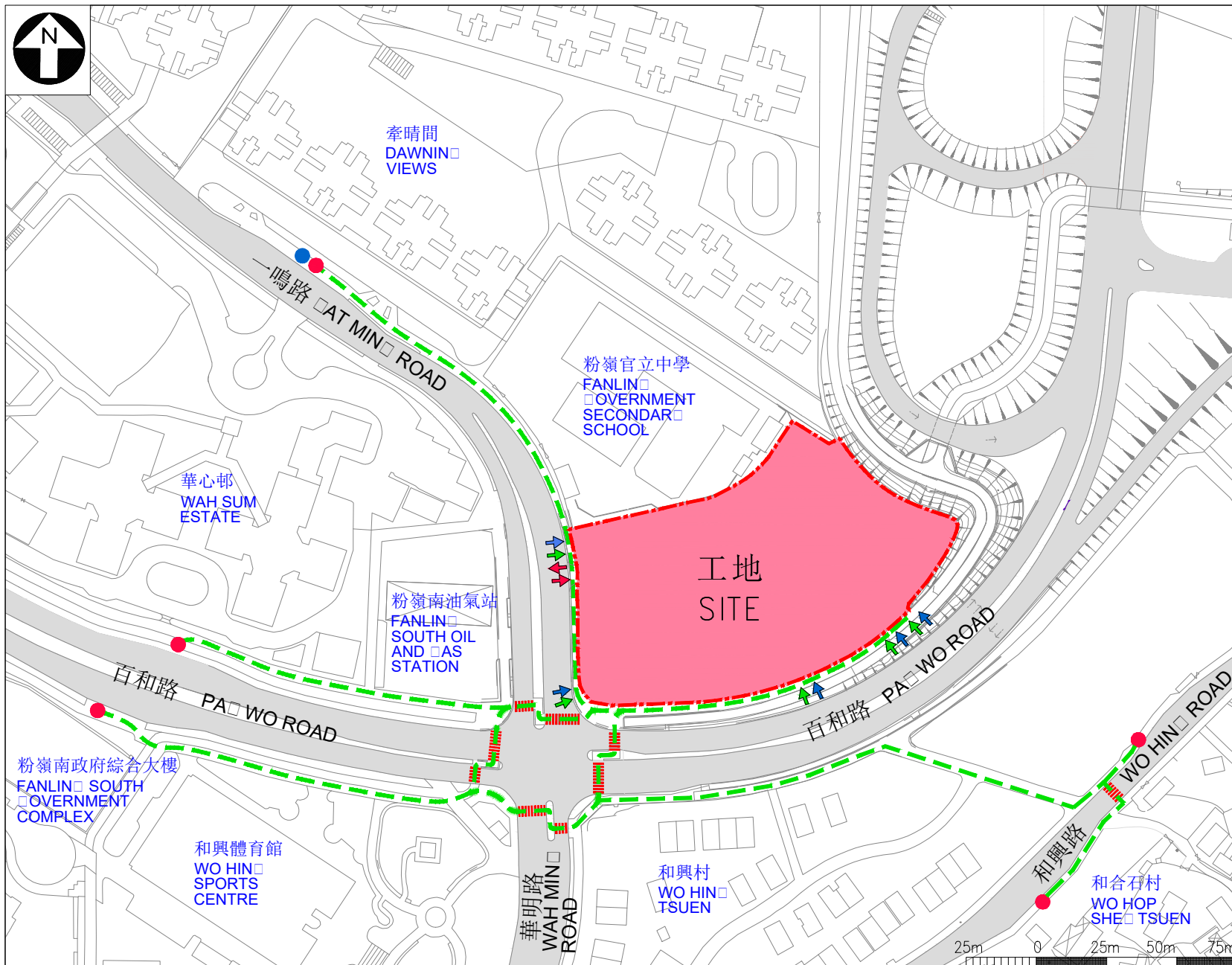


西南面望向休憩用地的構思圖
PERSPECTIVE VIEW
FROM SOUTHWEST
DIRECTION
(ARTIST'S IMPRESSION)

42□RO
北區第47及48區休憩用地
OPEN SPACE IN AREA 4□AND 4□, NORTH DISTRICT□



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



圖例 LEEND

- 工地範圍
SITE BOUNDARY
- 現有巴士站
EXISTING BUS STOP
- 現有小巴士站
EXISTING MINI-BUS STOP
- 無障礙通道
BARRIER-FREE ACCESS
- ||||| 路面行人過路處
AT-TRADE PEDESTRIAN CROSSING
- ↑ 車輛出入口
VEHICULAR ENTRANCE/EXIT
- ↑ 行人出入口
PEDESTRIAN ENTRANCE/EXIT
- ↑ 無障礙出入口
BARRIER-FREE ENTRANCE/EXIT

無障礙通道平面圖
PLAN OF BARRIER-FREE ACCESS

42RO
北區第47及48區休憩用地
OPEN SPACE IN AREA 47 AND 48, NORTH DISTRICT



ARCHITECTURAL SERVICES DEPARTMENT 建築署

Annex 4 to Enclosure 3 of PWSC(2018-19)22

427RO – Open space in Area 47 and 48, North District

Breakdown of the estimates for consultants' fees and resident site staff (RSS) costs (in September 2017 prices)

| | | Estimated man- months | Average MPS* salary point | Multiplier (Note 1) | Estimated fee (\$ million) |
|--|--------------|-----------------------------|------------------------------------|------------------------|----------------------------------|
| (a) Consultants' fees for contract administration (Note 2) | Professional | — | — | — | 1.8 |
| | Technical | — | — | — | 2.5 |
| | | | | Sub-total | 4.3# |
| (b) RSS costs (Note 3) | Professional | — | — | — | |
| | Technical | 197 | 14 | 1.6 | 8.7 |
| | | | | Sub-total | 8.7 |
| Comprising - | | | | | |
| (i) Consultants' fees for management of RSS | | | | 0.2# | |
| (ii) Remuneration of RSS | | | | 8.5# | |
| Total | | | | | 13.0 |

* 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 14 = \$27,485 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 **427RO**. The assignment will only be executed subject to Finance Committee's funding approval to upgrade **427RO** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.

Remarks

The 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 3 of Enclosure 3.

Open space in Area 6, Tai Po

PROJECT SCOPE AND NATURE

The project site occupies an area of about 7 090 square metres (m²) in Area 6, Tai Po. The proposed scope of works under 433RO comprises —

- (a) two basketball-cum-volleyball courts;
- (b) sheltered sitting-out areas;
- (c) a theme garden;
- (d) a pebble walking trail;
- (e) a fitness corner; and
- (f) ancillary facilities including toilets, a babycare room and changing rooms.

_____ A site and location plan, an artist's impression and a barrier-free access plan for the project are at Annexes 1 to 3 to Enclosure 4 respectively. Subject to the funding approval of the Finance Committee by mid-2018, we plan to commence construction in the fourth quarter of 2018 for completion in the third quarter of 2020.

JUSTIFICATION

2. Tai Po District has a population of about 320 500, which is expected to increase to about 381 000 by 2024. The project site is surrounded by residential buildings including Wan Tau Tong Estate, King Nga Court and Classical Gardens and two schools¹. There are one sitting-out area and two open spaces in the neighbourhood² which only provide a total of about 1 000 m² public open space with limited facilities. The Tai Po District Council (TPDC) and the local residents have requested the Government to provide additional open space in

/Area

¹ The two schools are Law Ting Pong Secondary School and American School Hong Kong.

² These include Tat Wan Road Sitting-out Area and two open spaces in Wan Tau Tong Estate. They are managed by the Leisure and Cultural Services Department and the Housing Department respectively.

Area 6 of Tai Po. This project will add around 7 090 m² of open space including a theme garden, sheltered sitting-out areas, and recreational facilities such as basketball-cum-volleyball courts and a fitness corner, which will meet the public demand for open space and help encourage sports participation in the neighbourhood.

FINANCIAL IMPLICATIONS

3. We estimate the capital cost of the project to be \$93.8 million in money-of-the-day (MOD) prices, broken down as follows –

| | | \$ million (in MOD prices) |
|-------|--|-------------------------------|
| (a) | Site works | 7.5 |
| (b) | Building | 11.7 |
| (c) | Building services | 8.8 |
| (d) | Drainage | 7.4 |
| (e) | External works | 37.1 |
| (f) | Additional energy conservation, green and recycled features | 1.2 |
| (g) | Furniture and equipment ³ | 0.5 |
| (h) | Consultants' fees for | 2.1 |
| | (i) contract administration | 1.6 |
| | (ii) management of resident site staff (RSS) | 0.5 |
| (i) | Remuneration of RSS | 9.1 |
| (j) | Contingencies | 8.4 |
| Total | | 93.8 |

/We

³ The estimated cost is based on an indicative list of furniture and equipment required.

_____ We propose to engage consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimates for consultants' fees and RSS costs by man-months is at Annex 4 to Enclosure 4. We consider this comparable to that of similar projects built by the Government.

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

| Year | \$ million (MOD) |
|-------------|---------------------|
| 2018 – 2019 | 2.1 |
| 2019 – 2020 | 21.1 |
| 2020 – 2021 | 50.3 |
| 2021 – 2022 | 7.4 |
| 2022 – 2023 | 6.5 |
| 2023 – 2024 | 6.4 |
| | <hr/> 93.8 <hr/> |

5. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period 2018 to 2024. We will deliver the construction works through a lump-sum contract because we can clearly define the scope of the works in advance. The contract will provide for price adjustments.

6. We estimate the annual recurrent expenditure arising from this project to be \$2.4 million.

PUBLIC CONSULTATION

7. We consulted the District Facilities Management Committee (DFMC) of the TPDC on the revised project scope and conceptual layout on 17 January 2012 and on the detailed design of the proposed project

/on

on 8 September 2016. We have provided regular updates on project progress to the DFMC and the most recent update was given in January 2018. In general, Members supported the project and requested its early implementation.

8. We consulted the Legislative Council Panel on Home Affairs on 23 April 2018. Members supported the project and had no objection to the submission of the funding proposal to the Public Works Subcommittee.

ENVIRONMENTAL IMPLICATIONS

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

10. 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 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 to prevent dust nuisance.

11. 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. excavated materials for backfilling) 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 facilities⁴. 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.

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

/include

⁴ 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.

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.

13. We estimate that the project will generate in total about 5 770 tonnes of construction waste. Of these, we will reuse about 3 310 tonnes (57.4%) of inert construction waste on site and deliver 1 980 tonnes (34.3%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 480 tonnes (8.3%) 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 \$0.3 million for this project (based on an 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

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

LAND ACQUISITION

15. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

16. This project will adopt various forms of energy efficient features and renewable energy technologies, including –

- (a) light-emitting diode (LED) type light fittings; and
- (b) solar powered light fittings.

17. For greening features, we will provide vertical greening, green roof and soft landscape at appropriate areas and locations for environmental and amenity benefits.

18. For recycled features, we will adopt a rainwater recycling system for landscape irrigation with a view to conserving water.

19. The total estimated additional cost for adopting the above energy conservation measures, green features and recycled features is around \$1.2 million (including \$10,000 for energy efficient features), which has been included in the cost estimate for this project. The energy efficient features will achieve 3.5% energy savings in the annual energy consumption with a payback period of about eight years.

BACKGROUND INFORMATION

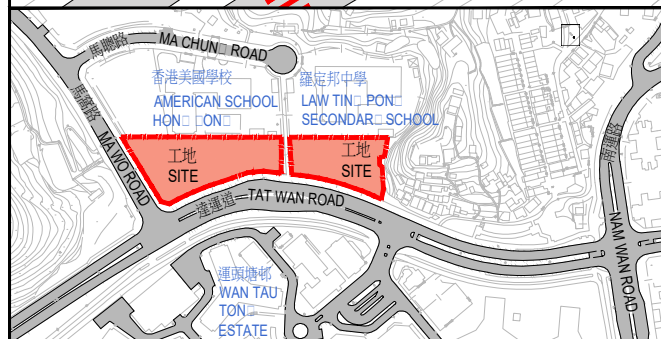
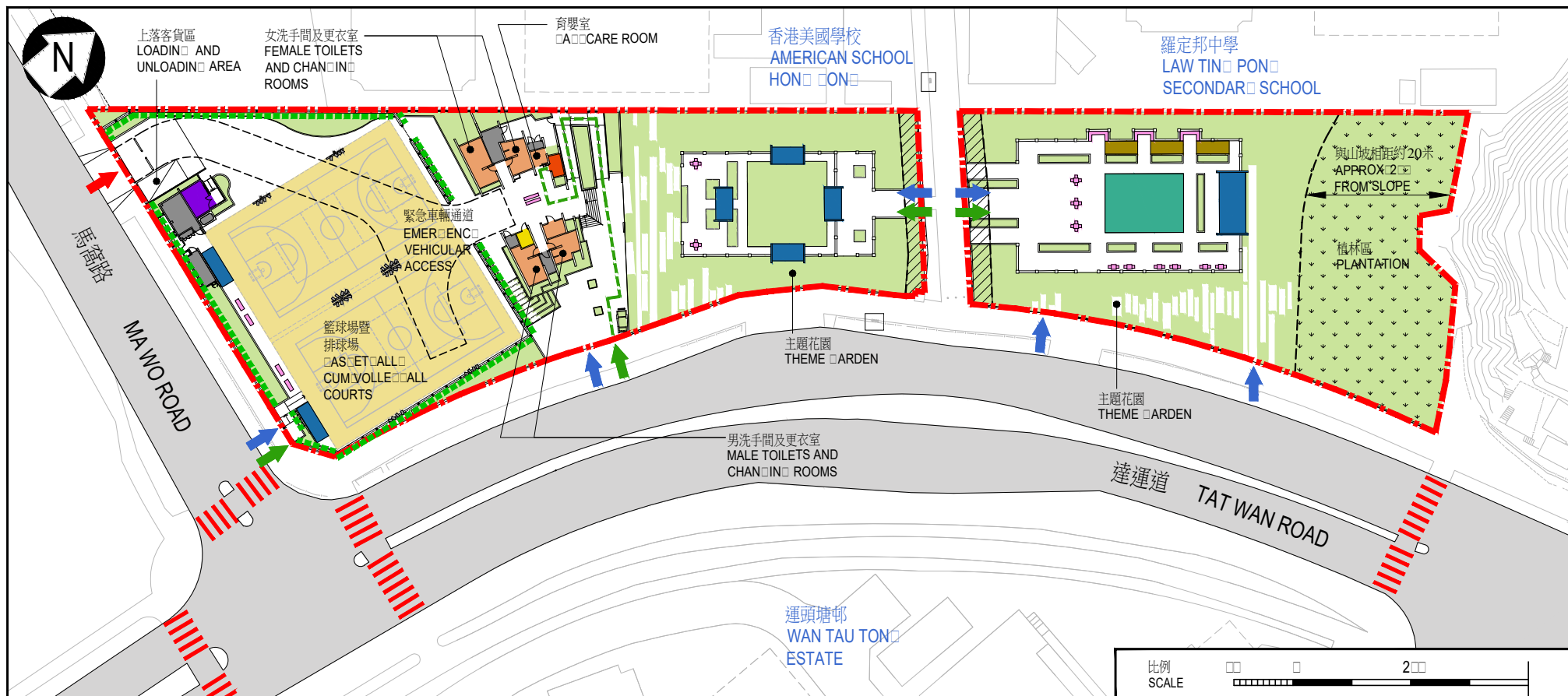
20. We upgraded **433RO** to Category B in 5 October 2009. We engaged consultants to undertake various services, including layout design, detailed design and site investigation in May 2010, at a total cost of about \$4.0 million. We have charged this amount to the block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fees for items in Category D of the Public Works Programme”. All the above consultancy services and works have been completed.

21. Of the 118 trees within the project boundary and 14 trees outside the project boundary, all these trees will be felled. All the trees to be felled are not important trees⁵. We will incorporate planting proposals as part of the project, including estimated quantities of 305 trees, 1 744 bamboo, 14 220 shrubs, 387 climbers, 20 529 groundcovers and 462 m² of grassed area.

22. We estimate that the proposed works will create about 40 jobs (35 for labourers and another 5 for professional/technical staff) providing a total employment of about 640 man-months.

⁵ “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.

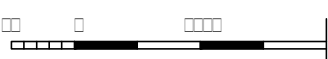


圖例 LEGEND

| | | | |
|--|---|--|--|
| <p>無障礙出入口 BARRIER-FREE ENTRANCE/EXIT</p> <p>行人出入口 PEDESTRIAN ENTRANCE/EXIT</p> <p>車輛出入口 VEHICULAR ENTRANCE/EXIT</p> <p>無障礙通道 BARRIER-FREE ACCESS</p> <p>工地界線 SITE BOUNDARY</p> | <p>現有行人過路處 EXISTING AT-RADE PEDESTRIAN CROSSING</p> <p>垂直綠化 VERTICAL GREENING</p> <p>籃球場暨排球場 BASKETBALL AND VOLLEYBALL COURTS</p> <p>排水渠保留區 DRAINAGE RESERVE</p> <p>地面綠化 AT-RADE GREENING</p> <p>服務大樓 SERVICE BLOCK</p> | <p>男女通用洗手間 UNIVERSAL TOILET</p> <p>暢通易達洗手間 ACCESSIBLE TOILET</p> <p>機房 PLANT ROOMS</p> <p>有蓋座椅 SHELTERED SEATING</p> <p>卵石路步行徑 PEBBLE WALING TRAIL</p> <p>健身角 FITNESS CORNER</p> | <p>貯物室 STORE ROOM</p> <p>鋪設路面地區 HARD PAVED AREA</p> <p>長檯 棋桌 BENCH/CHESSTABLE</p> <p>植林區 PLANTATION</p> <p>球場泛光燈 ALL COURT FLOOD LIGHT</p> <p>球場圍欄 ALL COURT STEEL FENCE</p> |
|--|---|--|--|

LOCATION PLAN 位置圖

比例
SCALE



平面圖
LAYOUT PLAN

433RO
大埔第6區休憩用地
OPEN SPACE IN AREA 6, TAI PO



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

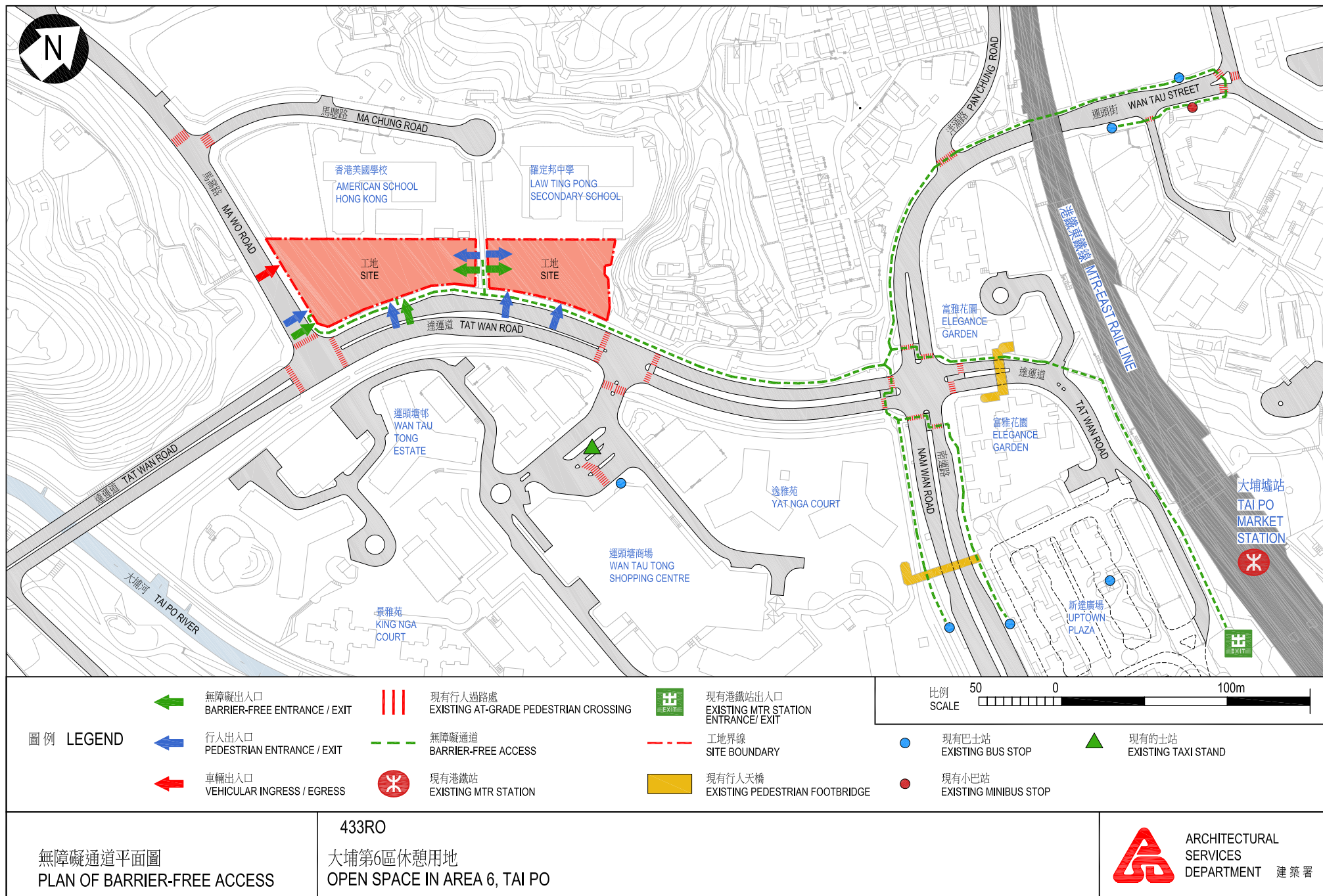


從南面望向休憩用地的構思概念圖
PERSPECTIVE VIEW FROM SOUTHERN DIRECTION
(ARTIST'S IMPRESSION)

433RO
大埔第6區休憩用地
OPEN SPACE IN AREA 6, TAI PO



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



433RO – Open space in Area 6, Tai Po**Breakdown of the estimates for consultants' fees and resident site staff (RSS) costs (in September 2017 prices)**

| | | Estimated man- months | Average MPS* salary point | Multiplier (Note 1) | Estimated fee (\$ million) |
|--|--------------|--------------------------------------|--|--------------------------------|---|
| (a) Consultants' fees for contract administration (Note 2) | Professional | – | – | – | 0.5 |
| | Technical | – | – | – | 0.9 |
| | | | | Sub-total | 1.4# |
| (b) RSS costs (Note 3) | Professional | – | – | – | – |
| | Technical | 184 | 14 | 1.6 | 8.1 |
| | | | | Sub-total | 8.1 |
| Comprising - | | | | | |
| (i) Consultants' fees for management of RSS | | | | 0.4# | |
| (ii) Remuneration of RSS | | | | 7.7# | |
| Total | | | | | 9.5 |

* 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 14 = \$27,485 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 **433RO**. The assignment will only be executed subject to FC's funding approval to upgrade **433RO** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.

Remarks

The figures in this Annex are shown in constant prices correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 3 of Enclosure 4.

Redevelopment of Yuen Long Stadium – pre-construction activities

PROJECT SCOPE AND NATURE

The project site occupies an area of about 29 800 square metres (m²) and is located between Yuen Long Tai Yuk Road and Town Park Road North, Yuen Long. The part of **291RS** that we propose to upgrade to Category A comprises –

- (a) design work for the redevelopment of Yuen Long Stadium (YLS) with facilities as described in paragraph 2 below;
- (b) site investigation works and minor studies ¹ to facilitate the design work described in paragraph 1(a) above; and
- (c) preparation of tender documents (including tender drawings) and assessment of tenders for the redevelopment of the YLS.

2. The redevelopment of YLS will upgrade the venue to allow the hosting of international football matches and large-scale athletics events. The proposed project scope comprises –

- (a) re-provisioning of an 11-a-side natural turf football pitch (with improvement to floodlights and provision of drainage system);
- (b) re-provisioning of an 8-lane 400m-long synthetic athletics track and field facilities, including shot put, discus and hammer circles, high jump area, javelin, long jump, triple jump and pole vault runways and sand pits, and steeple chase feature meeting the standards and requirements of the International Association of Athletics Federations (IAAF);

/(c)

¹ Site investigation works and minor studies include topographical and tree surveys, utility mapping, ground investigation, traffic review, preliminary environmental review, drainage impact assessment, air ventilation assessment, fire engineering study and asbestos survey, etc.

- (c) re-provisioning of west spectator stand with cover and refurbishment of all seats and ancillary facilities (including plant rooms) in the existing east spectator stand; the total seating capacity of the new YLS will be around 6 900;
- (d) provision of ancillary facilities to comply with the Asian Football Confederation (AFC) Stadia Regulations for the hosting of AFC Champions League and AFC Cup matches, including multi-purpose meeting rooms, a media centre, media tribune, a press conference room, commentator's rooms, TV studios, first aid rooms and a doping control room;
- (e) provision of ancillary facilities such as a control room for electronic timing and video finishing equipment, television camera platforms and a prize presentation platform in the spectator stands, a babycare room, box offices with retractable turnstiles and an entrance plaza;
- (f) re-provisioning of existing ancillary facilities such as toilets and changing facilities, control rooms, offices, parking spaces, loading and unloading areas; and
- (g) beautification works for the public passage between YLS and the Yuen Long Swimming Pool.

A site and location plan for the project is at Annex 1 to Enclosure 5. Subject to the funding approval by the Finance Committee by mid-2018, we plan to commence the pre-construction activities in the fourth quarter of 2018 for completion in the second quarter of 2021.

3. We will retain the remainder of **291RS** in Category B and will seek funding at a later stage after completion of the pre-construction activities.

JUSTIFICATION

4. The YLS commissioned in 1968 is a major sports facility in the populated western New Territories and a main venue for hosting football matches of the Hong Kong Premier League. With basic infrastructure of YLS close to 50 years old, its spectator accommodation and ancillary facilities are far below current day standard for hosting high-level sports competitions.

5. As football develops further in Hong Kong, local football clubs are competing in AFC competitions including the AFC Champions Leagues in 2017 and 2018. To host AFC-sanctioned matches, the stadium must meet the AFC standards including the surrounding pitch area, teams and AFC delegation facilities, media-related areas, medical facilities, VIP and hospitality areas and spectator-related areas as stipulated in AFC Stadium Regulations for AFC Champions League and AFC Cup. Currently, the Hong Kong Stadium and the Mong Kok Stadium are the only venues in Hong Kong that can meet the relevant AFC standards. There is no such venue in the New Territories. The redevelopment project will enable the YLS to be another designated venue for hosting international matches sanctioned by the AFC in Hong Kong.

6. Given the large population in the western New Territories (a total of around 1.2 million in Tuen Mun and Yuen Long districts), the strong interest in football in the region as shown by the relatively high level of community support for the Yuen Long and Tuen Mun district teams as well as the ease of connectivity between the YLS and the urban area on the Mass Transit Railway Corporation West Rail line, YLS is a suitable venue for hosting AFC-sanctioned matches. Apart from AFC-sanctioned matches, the new YLS will provide 8-lane athletics track and field facilities meeting all the technical requirements of IAAF for holding relevant competitions. The venue will also continue to be available to local football matches and school athletics meets as well as community jogging and exercise during non-event days.

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the proposed pre-construction activities to be \$45.4 million in money-of-the-day (MOD) prices, broken down as follows –

| | \$ million (in MOD prices) |
|--|---------------------------------------|
| (a) Consultants' fees for design and preparation of tender documents | 35.9 |
| (b) Site investigation works and minor studies | 5.4 |
| (c) Contingencies | 4.1 |
| Total | 45.4 |

_____ A detailed breakdown of the estimates for consultants' fees by man-months is at Annex 2 to Enclosure 5.

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

| Year | \$ million (MOD) |
|-------------|-----------------------------|
| 2018 – 2019 | 4.2 |
| 2019 – 2020 | 21.1 |
| 2020 – 2021 | 10.5 |
| 2021 – 2022 | 8.6 |
| 2022 – 2023 | 1.0 |
| | <hr/> 45.4 <hr/> |

9. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period 2018 to 2023. We will engage consultants to undertake the proposed consultancy services on a lump-sum basis based on pre-defined scope of works with provision for price adjustments. We will deliver the site investigation works through a re-measurement contract, with provision of price adjustment as necessary, because the quantity of works to be involved may vary depending on actual ground conditions and design development.

10. The proposed pre-construction activities will not give rise to any recurrent consequences.

/PUBLIC

PUBLIC CONSULTATION

11. We consulted the District Facilities Management Committee of the Yuen Long District Council in November 2013, January 2018 and March 2018 on the project scope. Members strongly requested the early implementation of this project and supported to consult the Legislative Council Panel on Home Affairs as soon as possible. Members also requested to provide a cover for the east spectator stand for major district events. On this, the proposed pre-construction activities will study the design options for modification of existing building and structure to facilitate the provision of a cover at the east spectator stand on a demand basis.

12. We consulted the Legislative Council Panel on Home Affairs on 23 April 2018. Members supported the project and had no objection to the submission of the funding proposal to the Public Works Subcommittee.

ENVIRONMENTAL IMPLICATIONS

13. The proposed pre-construction activities will not cause long-term environmental impacts. We have included in the project estimate the cost to implement suitable mitigation measures to control short-term environmental impacts.

14. The proposed pre-construction activities will only generate very little construction waste. We will require the consultant to fully consider measures to minimise the generation of construction waste and to reuse or recycle construction waste as much as possible in the future implementation of the construction project.

HERITAGE IMPLICATIONS

15. The proposed pre-construction activities will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

16. The proposed pre-construction activities do not require any land acquisition.

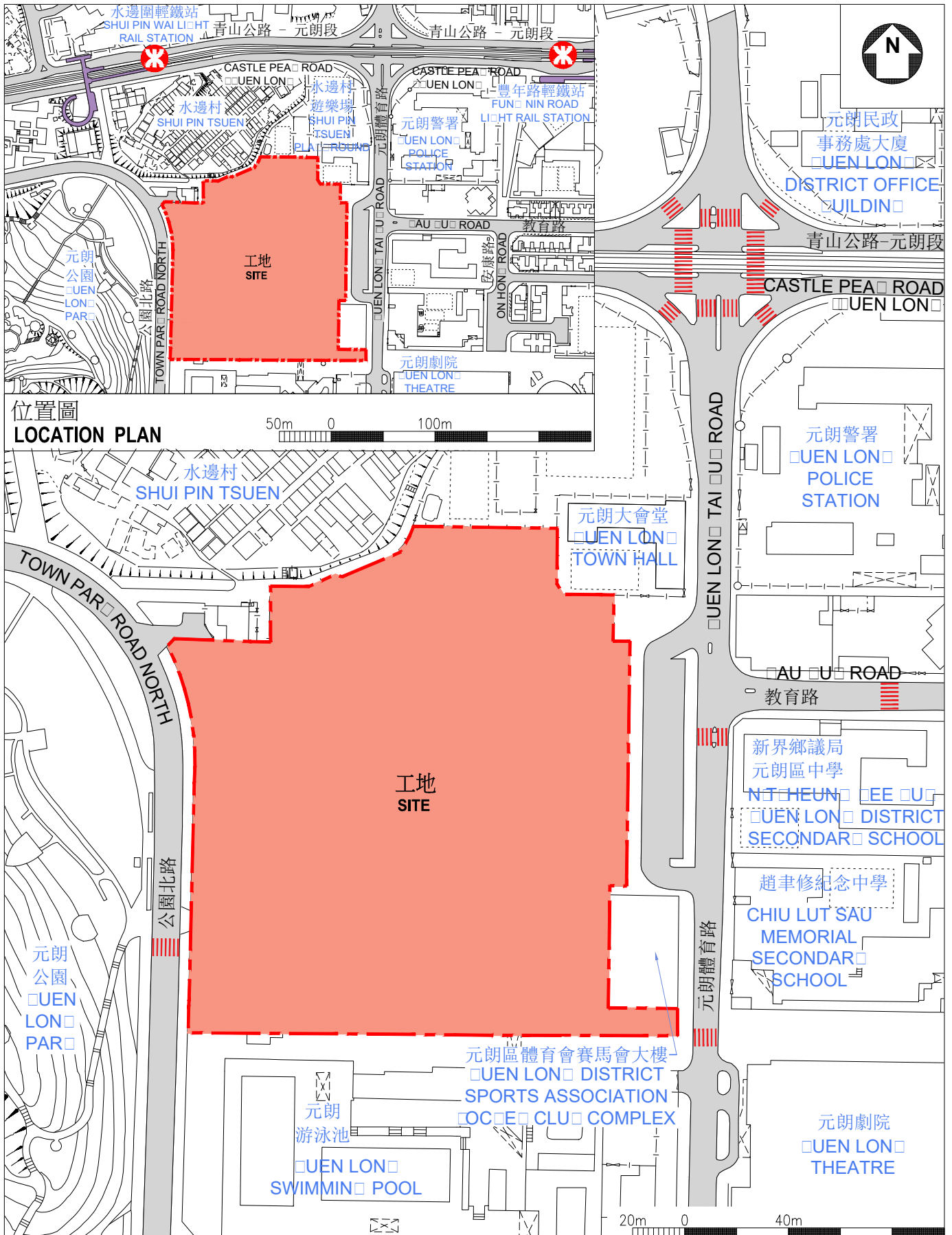
/BACKGROUND

BACKGROUND INFORMATION

17. We upgraded **291RS** to Category B in September 2015. We have engaged consultants to undertake preliminary tree survey, preliminary ground investigation works since March 2015, at a total cost of about \$2.3 million. We have charged this amount to the block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fees for items in Category D of the Public Works Programme”. All the above consultancy services and works would be completed in by 2019.

18. The proposed pre-construction activities will not involve any tree removal or planting works. We will require the consultants to take into consideration the need for tree preservation and formulate tree removal proposals during the planning and design stages of the project. We will also incorporate tree planting proposals, where possible, during the construction phase.

19. We estimate that the proposed pre-construction activities will create about 16 jobs (3 for labourers and another 13 for professional/technical staff) providing a total employment of 320 man-months.



LEND 圖例

--- 工地界線
SITE BOUNDARY

■ 工地
SITE

有蓋行人天橋 / 隧道
COVERED FOOTBRIDGE / TUNNEL

現有行人過路處
EXISTING AT-GRADE PEDESTRIAN CROSSING

工地平面圖
SITE PLAN

291RS
重建元朗大球場
REDEVELOPMENT OF YUEN LONG STADIUM,
YUEN LONG



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

**291RS – Redevelopment of Yuen Long Stadium, Yuen Long
– pre-construction activities**

Breakdown of the estimates for consultants' fees (in September 2017 prices)

| | | | Estimated man- months | Average MPS* salary point | Multiplier (Note 1) | Estimated fee (\$ million) |
|--------------|-------------------|--------------|--------------------------------------|--|--------------------------------|---|
| (a) | Consultants' fees | Professional | 135 | 38 | 2.0 | 21.3 |
| | for design and | Technical | 180 | 14 | 2.0 | 9.9 |
| | preparation of | | | | | _____ |
| | tender documents | | | | | |
| | (Note 2) | | | | | |
| Total | | | | | | 31.2 # |
| | | | | | | _____ |

* MPS = Master Pay Scale

Notes

1. A multiplier of 2.0 is applied to the average MPS salary point to estimate the full staff cost including the consultants' overheads and profit as the staff will be employed in the consultants' office. (As at now, MPS salary point 38 = \$78,775 per month and MPS salary point 14 = \$27,485 per month).
2. The actual man-months and fees will only be known after the consultants have been selected.

Remarks

The figure in this Annex is shown in constant prices to correlate with the MPS salary point of the same year. The figure marked with # is shown in money-of-the-day prices in paragraph 7 of Enclosure 5.