For discussion
on 28 May 2024

Legislative Council
Panel on Development

Drainage improvement in Mong Kok, Wong Tai Sin, Kwun Tong, Kowloon City, Eastern District, Sha Tin and Sai Kung, and Tai Po

PURPOSE

This paper briefs Members on the proposals to upgrade the following items to Category A for taking forward the drainage improvement works projects in Mong Kok, Wong Tai Sin, Kwun Tong, Kowloon City, Eastern District, Sha Tin and Sai Kung, and Tai Po:

(a) **4174CD (part) – "Drainage improvement works in Mong Kok – phase 1"** at an estimated cost of about $1,237.8 million in money-of-the-day (MOD) prices;

(b) **4176CD – "Drainage improvement works in Wong Tai Sin"** at an estimated cost of about $1,962.6 million in MOD prices;

(c) **4177CD (part) – "Drainage improvement works in Kwun Tong – phase 2"** at an estimated cost of about $1,416.2 million in MOD prices;

(d) **4179CD – "Drainage improvement works in Kowloon City"** at an estimated cost of about $2,405.0 million in MOD prices;

(e) **4181CD (part) – "Drainage improvement works in Eastern District – phase 1"** at an estimated cost of about $268.3 million in MOD prices;

(f) **4182CD (part) – "Drainage improvement works in Sha Tin and Sai Kung – phase 1"** at an estimated cost of about $867.0 million in MOD prices; and

(g) **4183CD (part) – "Drainage improvement works in Tai Po – phase 1"** at an estimated cost of about $1,360.0 million in MOD prices.

2. Details of the above proposals are at **Enclosures 1** to **7**.

PROJECT SCOPE AND NATURE

3. The Drainage Services Department (DSD) has been striving to reduce the flood risk of various districts through implementing of flood-control infrastructure projects. Since 1994, the DSD has formulated drainage master plans for the major areas of the territory in stages as well as implementing the drainage improvement measures proposed in the plans according to the flood risk. With years of efforts, the overall flooding condition of Hong Kong under heavy rainstorms was improved significantly.

4. Nevertheless, torrential rainstorms still caused severe flooding in some areas of the territory. In September 2023, Hong Kong experienced the challenges from two successive extreme weather events, including Super Typhoon Saola and a torrential rainstorm, causing severe flooding in various districts. To cope with the more frequent extreme weather events in recent years, the Government adopts a multi-pronged approach to enhance the flood control capabilities, including implementation of comprehensive flood management strategies, integration of drainage works, blue-green infrastructure, management and contingency measures. The Government will also consider the cost-effectiveness of various measures to develop a territory-wide flood control strategy to respond to the future challenges in long run. The DSD will continue to take forward flood-control infrastructures and carry out the construction works of 11 on-going drainage improvement projects in full swing. For the continuous improvement of the flood control capabilities, the DSD is now seeking funding approval from the Legislative Council to take forward

the proposed seven drainage improvement works projects.

5. In addition to the construction of flood-control infrastructures, the Government stresses on early warning and flood control action plans. In respect of early warning, the DSD will maintain close liaison with the Hong Kong Observatory to make advance arrangements and preparations for the potential flooding caused by rainstorms. The DSD will deploy inspection teams in advance to inspect the flood prone areas in the territory and clear blocked drains. In respect of flood defence actions, the DSD will activate its Emergency Control Centre as needed, handle flooding cases and clear the blocked drainage channels and rivers. After a rainstorm, the DSD will also inspect all major drainage channels and rivers, remove debris such as soil, rock, leaves, and litters etc., and carry out necessary emergency repair works to prepare for the next one.

6. The DSD proactively applies innovative technologies in drainage works, including the development and expansion of a smart drainage and hydrological information system and the use of desilting robots. A few years ago, the DSD enhanced the use of hydrological information system, developed mobile applications, and monitored real-time regional rainfall, water levels of major rivers and drainage channels, as well as tide levels at different locations. We recently have increased the number of remote monitoring devices and planned to carry out trials to monitor water level at manholes, and flood situation of roads. In addition, the DSD introduced the use of desilting robots and pipeline inspection robots to assist in the operation and maintenance works for rivers and drainage channels to improve the work efficiency and safety.

7. Furthermore, the DSD will arrange meetings with relevant stakeholders, including government departments, public organizations, public utility companies and property management organisations to enhance communications and provide technical advice before the rainy season. To assist relevant stakeholders to prepare for appropriate response measures and contingency plans, the DSD promulgated a practice note on flood resilience and emergency response measures to cope with the flooding due to climate change for public reference.

8. We propose taking forward the following seven drainage improvement works projects. The scope and nature of the proposed works are as follows –

(a) **4174CD (part):** construction of an underground stormwater storage tank and the associated above ground structure at Shek Kip Mei Park; re-provision and enhancement of part of Shek Kip Mei Park; as well as implementation of drainage improvement works at Cornwall Street, Tai Hang Tung Road and Embankment Road;

(b) **4176CD:** construction of an underground stormwater storage tank and the associated above ground structure at Morse Park in Wong Tai Sin; re-provision and enhancement of part of Morse Park; as well as implementation of drainage improvement works at Wing Chuk Street, Chuk Yuen Road, Ma Chai Hang Road, Fung Mo Street, Wong Tai Sin Road and Po Kong Village Road;

(c) **4177CD (part):** construction of an underground stormwater storage tank and the associated above ground structure at Kwun Tong Hoi Bun Road Park, and an underground stormwater pumping station and the associated above ground structures at Kwun Tong Promenade; re-provision and enhancement of part of Kwun Tong Hoi Bun Road Park and Kwun Tong Promenade; as well as implementation of drainage improvement works at and near Kwun Tong Road, Ngau Tau Kok Road, Hang Yip Street, Wai Yip Street and Hoi Bun Road;

(d) **4179CD:** construction of an underground stormwater storage tank, a stormwater pumping station and the associated above ground structure at Argyle Street Playground in Kowloon City; re-provision and enhancement of Argyle Street Playground; as well as implementation of drainage improvement works at Olympic Avenue, Kowloon City Road and Ma Tau Kok Road in To Kwa Wan, and Baker Street, Lo Lung Hang Street, Bulkeley Street and Dock Street in Hung Hom;

(e) **4181CD (part):** implementation of drainage improvement works at Kam Hong Street and Java Road in North Point, Yee Shun Street and Kam Yuen Lane in Chai Wan, Mount Parker Road in Quarry Bay, and Wang Wa Street, Shau Kei Wan Main Street East and A Kung Ngam Road in Shau Kei Wan;

(f) **4182CD (part):** construction of an underground stormwater storage tank, a stormwater pumping station and the associated above ground structure at Sha Tin Park; re-provision and enhancement of part of Sha Tin Park; implementation of drainage improvement works at Pak Hok Ting Street, Sha Tin Centre Street, Yi Ching Lane, Tai Po Road – Sha Tin and Wong Chuk Yeung Village in Sha Tin, and Po Lo Che Road in Sai Kung; as well as construction of flood walls along Shing Mun River and at Kau To Hang in Sha Tin; and

(g) **4183CD (part):** construction of an underground stormwater storage tank, a stormwater pumping station, and the associated above ground structure at Tai Po Old Market Playground; re-provision and enhancement of part of Tai Po Old Market Playground; implementation of drainage improvement works at Ting Kok Road, Tai Po Tai Wo Road, Chui Lok Street, Chui Wo Lane, Kau Hui Chik Street, Mei Sun Lane and Po Nga Road in Tai Po, and San Uk Pai Tsuen and Sha Pa in Lam Tsuen Valley; as well as construction of flood walls along Lam Tsuen River.

9. The flood protection standard of Hong Kong (with trunk drains designed for rainstorms of 200-year return period) is comparable to that of major cities in China and other foreign countries, including Beijing, Shanghai, Shenzhen, London, Copenhagen, Amsterdam, etc. After the torrential rainstorm in September 2023, the DSD reviewed the rainfall data from 1884 to 2023 obtained from the Hong Kong Observatory. After analyses, we made an upward adjustment in the design rainfall parameters and updated the Stormwater Drainage Manual in March this year. The proposed seven drainage improvement projects were designed according to this updated design standard.

WAY FORWARD

10. If funding approval can be obtained from the Finance Committee (FC) in a short period of time, we plan to commence the proposed works in the third quarter of this year for completion in stages from the first quarter of 2028 to the third quarter of 2030.

11. Regarding the proposed works projects under **4174CD (part)**, **4176CD, 4177CD (part), 4179CD, 4181CD (part), 4182CD (part)** and **4183CD (part)** as stated above, we plan to seek funding approval from the FC within this financial year after consulting the Public Works Subcommittee. Members are invited to offer their views on the proposed funding applications and the related works projects.

Development Bureau
Drainage Services Department
May 2024

4174CD (part) Drainage improvement works in Mong Kok – phase 1

PROJECT SCOPE

The proposed scope of works under **4174CD** (part) comprises –

(a) construction of an underground stormwater storage tank with a capacity of about 49 000 cubic metres and the associated above ground structure[1] at Shek Kip Mei Park;

(b) re-provision and enhancement of part of Shek Kip Mei Park[2];

(c) construction of stormwater drains of about 530 metres (m) long with diameters ranging from 225 millimetres to 1.2 m at Cornwall Street, Tai Hang Tung Road and Embankment Road; and

(d) carrying out ancillary works[3].

2. A layout plan, the affected area of open space to be re-provisioned and the associated artistic impression of the proposed works are at **Annexes 1 to 3 to Enclosure 1**.

3. We plan to commence the proposed works as soon as possible upon obtaining funding approval from the Finance Committee (FC) for target completion of the above works in stages in around five years with the underground stormwater storage tank targeting for completion in around four and a half years. To meet the works programme, we invited tenders in parallel to enable early commencement of the proposed works. The relevant contract will be awarded only after obtaining funding approval from the FC.

---

[1] Above ground structure includes electrical and mechanical plant rooms and associated facilities.

[2] During the construction period, the children's play facilities, elderly fitness facilities, water feature, amphitheatre and elevated walkway will be temporarily closed. The above facilities will be re-provisioned and enhanced. The enhancements include diversified children's play facilities, smart fitness facilities and water play facilities.

[3] Ancillary works include utilities diversion, temporary closure and reinstatement of carriageways/footpaths/open space, landscaping works and other related works that are required for completion of the proposed works.

4. For the remaining works[4] of **4174CD**, we will seek funding for the relevant works only after the completion of the detailed design.

JUSTIFICATION

5. Owing to the increase in surface runoff caused by continuous land development and torrential rainstorms caused by climate change, the flood risks in Mong Kok near Boundary Street and Nathan Road were increased. The drainage capacity of the long-established existing stormwater drainage system in Mong Kok needs to be enhanced. According to the records, flooding incidents occurred at the above-mentioned areas, causing impacts to the nearby traffic and the public.

6. We propose carrying out the proposed works mentioned in paragraph 1 above, including the construction of an underground stormwater storage tank and stormwater drains. Specifically, we plan to construct an underground stormwater storage tank and the associated stormwater drains in Shek Kip Mei Park. During heavy rainstorm, stormwater will be intercepted to the proposed underground stormwater storage tank for temporary storage. The stored stormwater will be discharged to the downstream drainage system in the vicinity of Boundary Street and Nathan Road only after the peak flow. Upon the completion of the drainage improvement works, the capacity of the drainage system concerned will be upgraded and the flood risks in the above-mentioned areas will be alleviated.

7. To facilitate the construction of the proposed underground stormwater storage scheme, part of the facilities in Shek Kip Mei Park will need to be temporarily closed. The affected open space will be re-provisioned and enhanced above the newly constructed underground stormwater storage tank.

FINANCIAL IMPLICATIONS

8. We estimate the cost of the proposed works to be about

[4] The remaining works include extension of Tai Hang Tung stormwater storage tank.

$1,237.8 million in money-of-the-day prices. The breakdown of the estimated cost in percentage is as follows –

	PWP Item No. 4174CD (part)
(a) Underground stormwater storage tank and the associated above ground structure	About 65%
(b) Drainage improvement works	About 5%
(c) Re-provision and enhancement of open space	About 10%
(d) Other cost	About 20%

PUBLIC CONSULTATION

9. We consulted the Environment, Hygiene and Housing Affairs Committee of the Sham Shui Po District Council on 2 February 2023. Members had no objection to the proposed works.

ENVIRONMENTAL IMPLICATIONS

10. The proposed works project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). A Preliminary Environmental Review was conducted in January 2023. It was concluded that the proposed works would not cause long-term adverse environmental impacts. The Director of Environmental Protection agreed to the above conclusion.

11. During the construction, we will also put in place various precautionary and mitigation measures in environmental aspects, such as using quieter equipment and movable noise enclosure or noise barriers for noise control; water-spraying the construction site regularly and provision of wheel washing facilities for dust control; and collecting and treating site runoff by temporary drains before discharge for avoidance of polluting the surrounding environment. We have reserved part of the fund in the project estimate to implement the necessary environmental mitigation measures.

12. At the planning and design stages, we have considered measures to reduce generation of construction waste where possible including the use of trenchless construction to minimise the extent of excavation. In addition, we will require the contractor to reuse inert construction waste generated under this project (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimise disposal amount at the public fill reception facilities (PFRF[5]). 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.

13. At the construction stage, we will require the contractor to submit for approval a plan setting out 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 measures stipulated on 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 PFRF and landfills respectively through a trip-ticket system.

14. We estimate that the proposed works will generate about 210 500 tonnes of construction waste. Of these, we will reuse about 18 400 tonnes (about 9%) of inert construction waste on site and deliver about 182 100 tonnes (about 86%) of inert construction waste to PFRF for subsequent reuse. We will dispose of the remaining about 10 000 tonnes (about 5%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfills is estimated to be about $19.5 million for the proposed works (based on a unit charge rate of $87 per tonne for disposal at PFRF and $365 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N) and Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Amendment of Schedules) Notice 2023).

[5] PFRF are specified in Schedule 4 of Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at PFRF requires a licence issued by the Director of Civil Engineering and Development.

HERITAGE IMPLICATIONS

15. The proposed works project will not affect any heritage sites, i.e. all declared monuments, proposed monuments, graded historic sites/buildings/structures, sites of archaeological interest, all sites/buildings/structures on the new list of proposed grading items; and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

16. The proposed works does not require resumption of private land.

TRAFFIC IMPLICATIONS

17. We have conducted a traffic impact assessment (TIA) for the proposed works and the TIA indicates that the construction and operation of the proposed works will not cause any significant traffic impact on the surrounding road networks, with the implementation of appropriate temporary traffic arrangements (TTAs) and the use of trenchless construction on the road sections as needed during construction. We will also establish a traffic management liaison group to discuss, scrutinise and review the TTAs proposed by the contractor with a view to minimising traffic impact arising from the proposed works. In addition, we will set up a community liaison group and telephone hotline to respond to public enquiries or complaints.

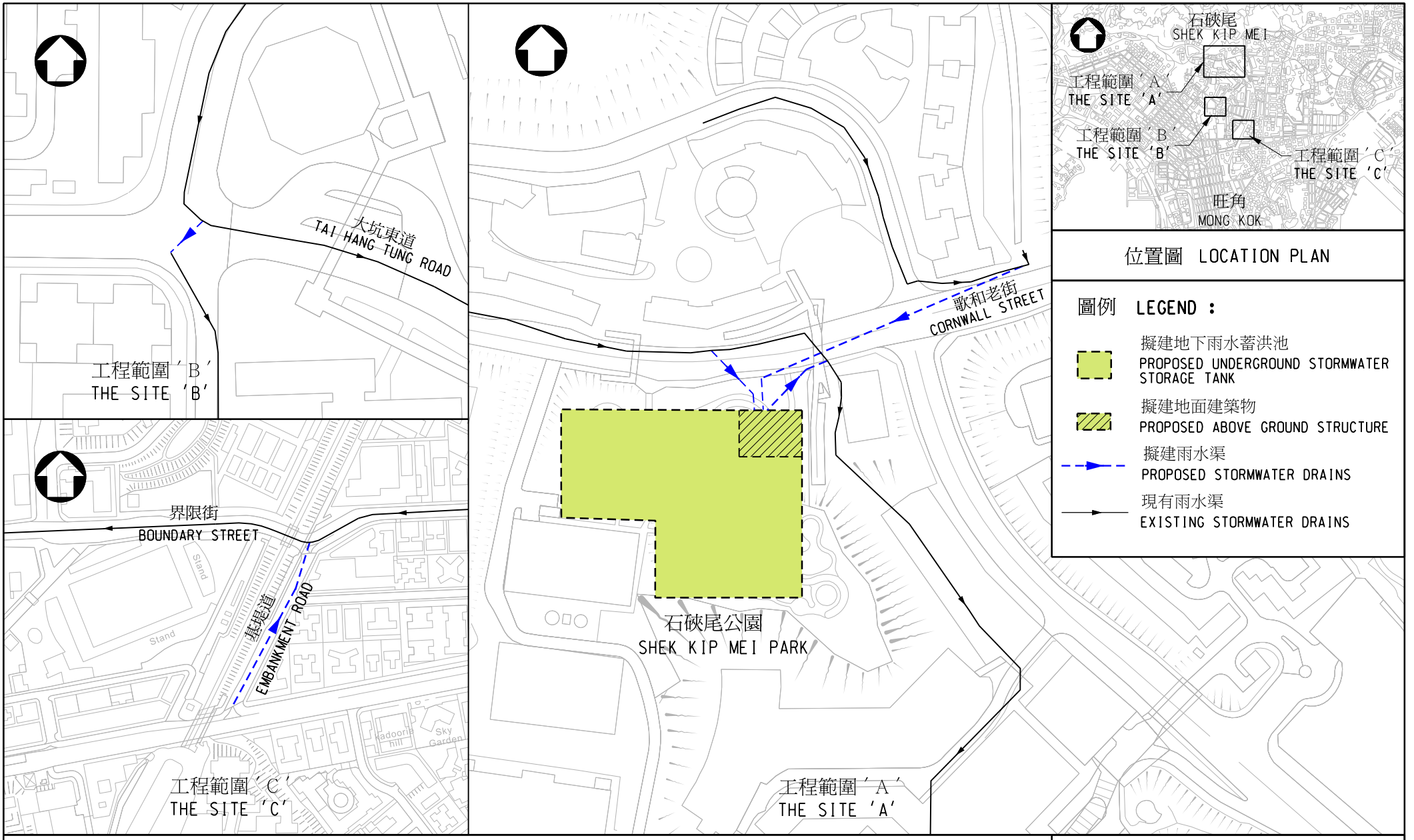
BACKGROUND

18. We have completed the detailed design of the proposed works mentioned in paragraph 1 above.

19. There are 145 trees within the proposed works boundary, of which 53 will be retained. The proposed works project will involve removal of 39 trees and transplantation of 53 trees. All trees to be removed or transplanted are not trees of particular interest[6]. Compensatory planting of 39 trees will be carried out as part of the project.

[6] Trees of particular interest are defined in paragraph 3.3 of the "Guidelines for Tree Risk Assessment and Management Arrangement" promulgated by the Development Bureau. Examples of trees of particular interest are listed as below for reference:

(a) Old and Valuable Trees (OVTs) and trees that are potentially registerable in the Register of OVTs;
(b) Trees of 100 years old or above;
(c) Trees with trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with height/canopy spread equal to or exceeding 25 m;
(d) Stonewall trees or trees of outstanding form (taking account of overall tree sizes, shape and any special features);
(e) Rare tree species listed in "Rare and Precious Plants of Hong Kong" (https://www.herbarium.gov.hk/en/publications/books/book2/index.html) published by the Agriculture, Fisheries and Conservation Department;
(f) Endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap 586);
(g) Tree species listed in the Forestry Regulations (Cap. 96A) under the Forests and Countryside Ordinance (Cap. 96);
(h) Well-known Fung Shui trees;
(i) Landmark trees with evidential records to support the historical or cultural significance of the trees;
(j) Trees which may arouse widespread public concerns; and
(k) Trees which may be subject to strong local objections on removal.

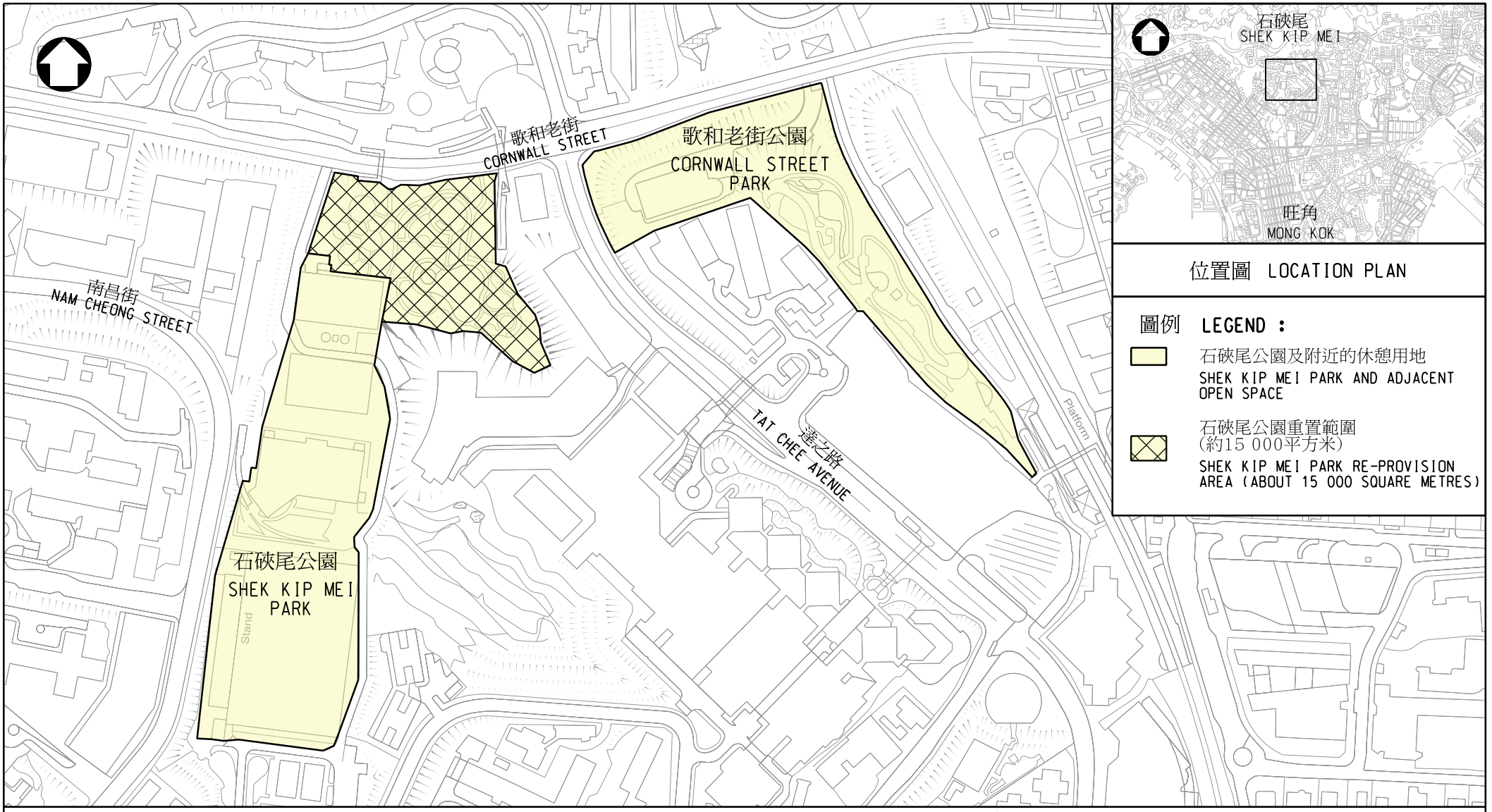


工務計劃項目第4174CD號(部份) - 旺角雨水排放系統改善工程 - 第1期

PWP ITEM NO. 4174CD (PART) - DRAINAGE IMPROVEMENT WORKS IN MONG KOK - PHASE 1

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/174CD/11101



石硤尾公園重置範圍
SHEK KIP MEI PARK RE-PROVISION AREA

工務計劃項目第4174CD號(部份)- 旺角雨水排放系統改善工程 - 第1期

PWP ITEM NO. 4174CD (PART) - DRAINAGE IMPROVEMENT WORKS IN MONG KOK - PHASE 1

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/174CD/11103

重置及優化部分石硤尾公園（構思圖）

RE-PROVISION AND ENHANCEMENT OF PART OF SHEK KIP MEI PARK (ARTIST'S IMPRESSION)

註釋 ：構思圖只作展述一般佈局之用，設計因實質需要或須作出修改

NOTES : ARTIST'S IMPRESSION IS FOR GENERAL ILLUSTRATION PURPOSE ONLY AND DESIGN IS SUBJECT TO CHANGE

工務計劃項目第4174CD號（部份）- 旺角雨水排放系統改善工程 - 第1期

PWP ITEM NO. 4174CD (PART) - DRAINAGE IMPROVEMENT WORKS IN MONG KOK - PHASE 1

渠務署

DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/174CD/11102

4176CD – Drainage improvement works in Wong Tai Sin

PROJECT SCOPE

The proposed scope of works under **4176CD** comprises –

(a) construction of an underground stormwater storage tank with a capacity of about 47 000 cubic metres and the associated above ground structure[1] at Morse Park in Wong Tai Sin;

(b) re-provision and enhancement of part of Morse Park[2];

(c) construction of stormwater drains of about 1.4 kilometres long with diameters ranging from 1.2 metres (m) to 2.5 m at Wing Chuk Street, Chuk Yuen Road, Ma Chai Hang Road, Fung Mo Street, Wong Tai Sin Road and Po Kong Village Road in Wong Tai Sin;

(d) rehabilitation of stormwater drains of about 560 m long at Po Kong Village Road in Wong Tai Sin; and

(e) carrying out ancillary works[3].

2. A layout plan, the affected area of open space to be re-provisioned and the associated artistic impression of the proposed works are at **Annexes 1 to 3 to Enclosure 2**.

3. We plan to commence the proposed works as soon as possible upon obtaining funding approval from the Finance Committee (FC) for target completion

---

[1] Above ground structure includes electrical and mechanical plant rooms and associated facilities.

[2] During the construction period, two seven-a-side hard-surface soccer pitches, an outdoor badminton court, planters and a staircase will be temporarily closed, while part of the open space adjacent to the sports centre will be converted to a temporary soccer pitch. The above facilities will be re-provisioned and enhanced. The enhancements include making use of the roof of the proposed electrical and mechanical plant rooms at the slope of Fung Mo Street to provide additional open space with smart fitness facilities.

[3] Ancillary works include provision of drain holes at the central divider of Lung Cheung Road and construction of transverse drainage channel at the upstream of Shatin Pass Road for early alleviation of flood risk, as well as utilities diversion, temporary closure and reinstatement of carriageways/footpaths/open space, landscaping works and other related works that are required for completion of the proposed works.

of the above works in stages in around five years, with the underground stormwater storage tank targeting for completion in around four and a half years. To meet the works programme, we invited tenders in parallel to enable early commencement of the proposed works. The relevant contract will be awarded only after obtaining funding approval from the FC.

JUSTIFICATION

4. Owing to the increase in surface runoff caused by continuous land development and torrential rainstorms caused by climate change, the flood risks in the vicinity of Lung Cheung Road near Shatin Pass Road were increased[4]. The drainage capacity of the long-established existing stormwater drainage system in Wong Tai Sin needs to be enhanced. According to the records, flooding incidents occurred at the above-mentioned areas, causing impacts to the nearby traffic and the public.

5. We propose carrying out the proposed works mentioned in paragraph 1 above, including the construction of an underground stormwater storage tank and stormwater drains. Specifically, we plan to construct an underground stormwater storage tank and the associated stormwater drains in Morse Park. During heavy rainstorm, the stormwater originally conveyed through the section of Lung Cheung Road in Wong Tai Sin will be intercepted to the proposed underground stormwater storage tank for temporary storage. The stored stormwater will be discharged to Kai Tai River at the downstream only after the peak flow. Upon the completion of the drainage improvement works, the capacity of the drainage system concerned will be upgraded and the flood risks in the above-mentioned areas will be alleviated.

6. To facilitate the construction of the proposed underground stormwater storage scheme, part of the facilities in Morse Park will need to be temporarily closed. The affected open space will be re-provisioned and enhanced above the newly constructed underground stormwater storage tank.

---

[4] After the torrential rainstorm in September 2023, the Drainage Services Department has completed short term measures for improvement of the intake chamber at the upstream of Shatin Pass Road and the stepped channel adjacent to Wong Tai Sin Temple, and construction of additional drainage channel adjacent to Hsin Kuang Centre in order to alleviate the flood risk.

FINANCIAL IMPLICATIONS

7. We estimate the cost of the proposed works to be about $1,962.6 million in money-of-the-day prices. The breakdown of the estimated cost in percentage is as follows –

	PWP Item No. 4176CD
(a) Underground stormwater storage tank and the associated above ground structure	About 55%
(b) Drainage improvement works	About 15%
(c) Re-provision and enhancement of open space	About 10%
(d) Other cost	About 20%

PUBLIC CONSULTATION

8. We consulted the Wong Tai Sin District Council (DC) and the District Facilities and Works Committee of the Wong Tai Sin DC in August 2022 and on 19 March 2024 respectively. Members had no objection to the proposed works.

ENVIRONMENTAL IMPLICATIONS

9. The proposed works project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). A Preliminary Environmental Review was conducted in March 2024. It was concluded that the proposed works would not cause long-term adverse environmental impacts. The Director of Environmental Protection agreed to the above conclusion.

10. During the construction, we will also put in place various precautionary and mitigation measures in environmental aspects, such as using quieter equipment and movable noise enclosure or noise barriers for noise control; water-spraying the construction site regularly and provision of wheel washing facilities for dust control; and collecting and treating site runoff by temporary drains before discharge for avoidance of polluting the surrounding environment. We have reserved part of the fund in the project estimate to implement the necessary environmental mitigation measures.

11. At the planning and design stages, we have considered measures to reduce generation of construction waste where possible including the use of trenchless construction to minimise the extent of excavation. In addition, we will require the contractor to reuse inert construction waste generated under this project (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimise disposal amount at the public fill reception facilities (PFRF[5]). 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 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 measures stipulated on 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 PFRF and landfills respectively through a trip-ticket system.

13. We estimate that the proposed works will generate about 270 300 tonnes of construction waste. Of these, we will reuse about 28 500 tonnes (about 10%) of inert construction waste on site and deliver about 240 100 tonnes (about 89%) of inert construction waste to PFRF for subsequent reuse. We will dispose of the remaining about 1 700 tonnes (about 1%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfills is estimated to be about $21.5 million for the proposed works (based on a unit charge rate of $87 per tonne for disposal at PFRF and $365 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N) and Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Amendment of Schedules) Notice 2023).

[5] PFRF are specified in Schedule 4 of Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at PFRF requires a licence issued by the Director of Civil Engineering and Development.

HERITAGE IMPLICATIONS

14. The proposed works project will not affect any heritage sites, i.e. all declared monuments, proposed monuments, graded historic sites/buildings/structures, sites of archaeological interest, all sites/buildings/structures on the new list of proposed grading items; and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

15. The proposed works does not require resumption of private land.

TRAFFIC IMPLICATIONS

16. We have conducted a traffic impact assessment (TIA) for the proposed works and the TIA indicates that the construction and operation of the proposed works will not cause any significant traffic impact on the surrounding road networks, with the implementation of appropriate temporary traffic arrangements (TTAs) and the use of trenchless construction on the road sections as needed during construction. We will also establish a traffic management liaison group to discuss, scrutinise and review the TTAs proposed by the contractor with a view to minimising traffic impact arising from the proposed works. In addition, we will set up a community liaison group and telephone hotline to respond to public enquiries or complaints.

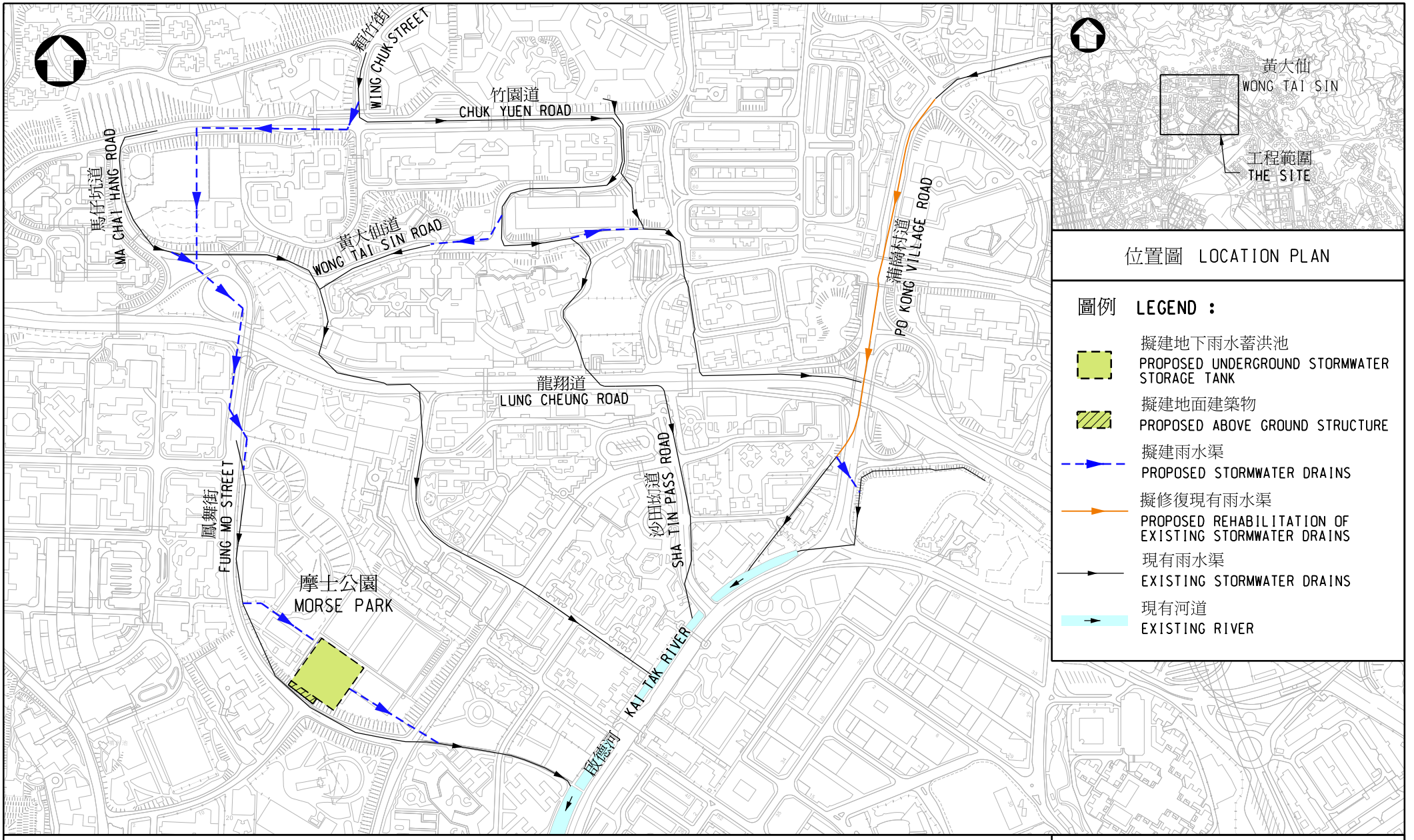
BACKGROUND

17. We have completed the detailed design of the proposed works mentioned in paragraph 1 above.

18. There are 178 trees within the proposed works boundary, of which 89 will be retained. The proposed works project will involve removal of 75 trees and transplantation of 14 trees. All trees to be removed or transplanted are not trees of particular interest[6]. Compensatory planting of 75 trees will be carried out as part of the project.

[6] Trees of particular interest are defined in paragraph 3.3 of the "Guidelines for Tree Risk Assessment and Management Arrangement" promulgated by the Development Bureau. Examples of trees of particular interest are listed as below for reference:

(a) Old and Valuable Trees (OVTs) and trees that are potentially registerable in the Register of OVTs;
(b) Trees of 100 years old or above;
(c) Trees with trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with height/canopy spread equal to or exceeding 25 m;
(d) Stonewall trees or trees of outstanding form (taking account of overall tree sizes, shape and any special features);
(e) Rare tree species listed in "Rare and Precious Plants of Hong Kong" (https://www.herbarium.gov.hk/en/publications/books/book2/index.html) published by the Agriculture, Fisheries and Conservation Department;
(f) Endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap 586);
(g) Tree species listed in the Forestry Regulations (Cap. 96A) under the Forests and Countryside Ordinance (Cap. 96);
(h) Well-known Fung Shui trees;
(i) Landmark trees with evidential records to support the historical or cultural significance of the trees;
(j) Trees which may arouse widespread public concerns; and
(k) Trees which may be subject to strong local objections on removal.

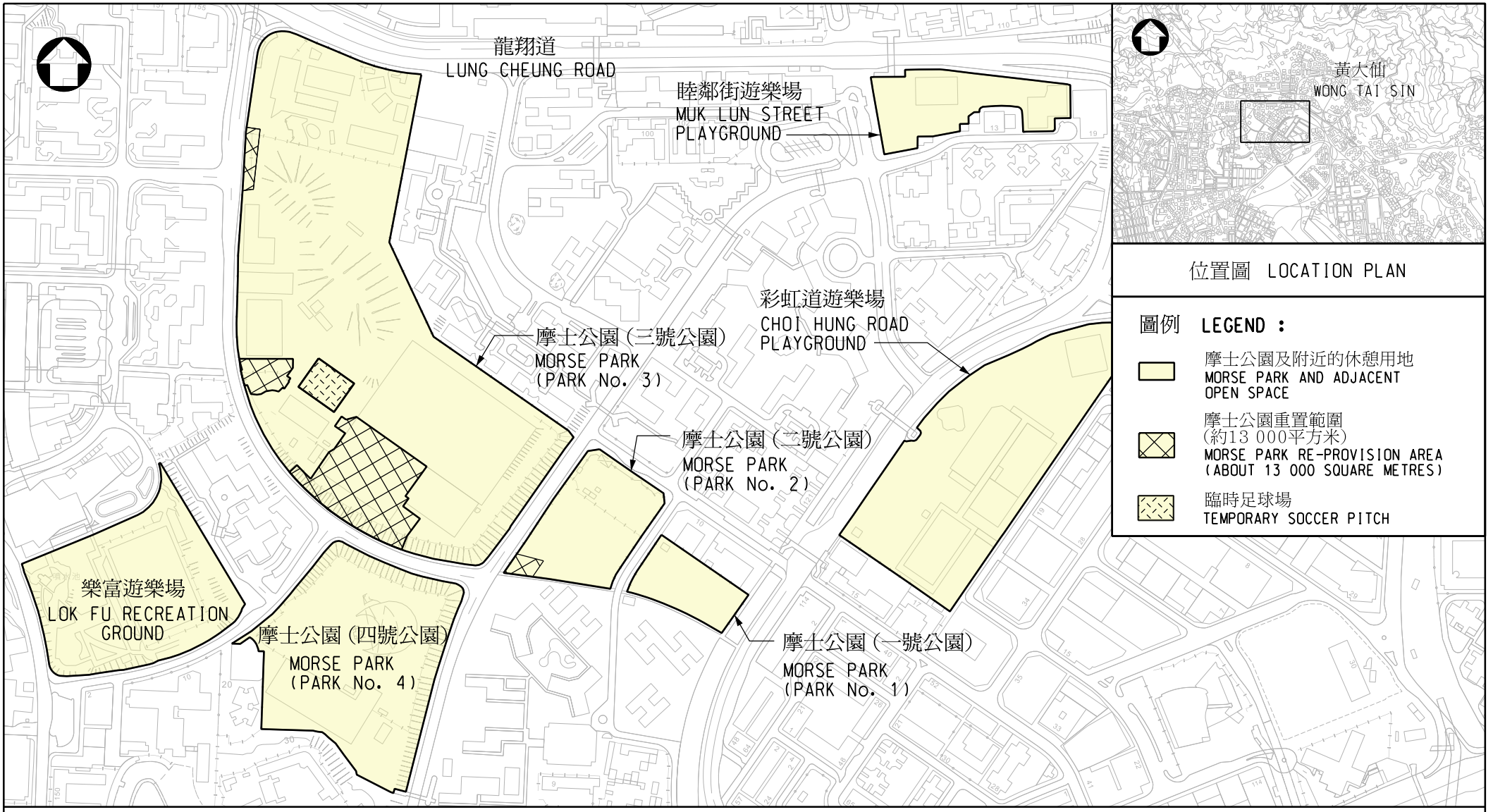


工務計劃項目第4176CD號 - 黃大仙雨水排放系統改善工程

PWP ITEM NO. 4176CD - DRAINAGE IMPROVEMENT WORKS IN WONG TAI SIN

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DPM/176CD/11037



摩士公園重置範圍
MORSE PARK RE-PROVISION AREA

工務計劃項目第 4176CD號 - 黃大仙雨水排放系統改善工程
PWP ITEM NO. 4176CD - DRAINAGE IMPROVEMENT WORKS IN WONG TAI SIN

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DPM/176CD/11039

重置及優化部分摩士公園 (構思圖)

RE-PROVISION AND ENHANCEMENT OF PART OF MORSE PARK (ARTIST'S IMPRESSION)

註釋 ：構思圖只作展述一般佈局之用，設計因實質需要或須作出修改

NOTES : ARTIST'S IMPRESSION IS FOR GENERAL ILLUSTRATION PURPOSE ONLY AND DESIGN IS SUBJECT TO CHANGE

工務計劃項目第4176CD號 - 黃大仙雨水排放系統改善工程

PWP ITEM NO. 4176CD - DRAINAGE IMPROVEMENT WORKS IN WONG TAI SIN

渠務署

DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DPM/176CD/11038

4177CD (part) – Drainage improvement works in Kwun Tong – phase 2

PROJECT SCOPE

The proposed scope of works under **4177CD** (part) comprises –

(a) construction of an underground stormwater storage tank with a capacity of about 25 000 cubic metres and the associated above ground structure[1] at Kwun Tong Hoi Bun Road Park, and an underground stormwater pumping station and the associated above ground structures[1] at Kwun Tong Promenade;

(b) re-provision and enhancement of part of Kwun Tong Hoi Bun Road Park and Kwun Tong Promenade[2];

(c) construction of stormwater drains of about 3.4 kilometres long with diameters ranging from 225 millimetres to 2.4 metres in the vicinity of Kwun Tong Road, Ngau Tau Kok Road, Hang Yip Street, Wai Yip Street and Hoi Bun Road; and

(d) carrying out ancillary works[3].

2. A layout plan, the affected area of open space to be re-provisioned and the associated artistic impression of the proposed works are at **Annexes 1 to 4 to Enclosure 3**.

3. We plan to commence the proposed works as soon as possible upon obtaining funding approval from the Finance Committee (FC) for target completion of the above works in stages in around five years, with the underground stormwater

---

[1] Above ground structure includes electrical and mechanical plant rooms and associated facilities.

[2] During the construction period, a five-a-side soccer pitch, part of the promenade and Leisure and Cultural Services Department's store room will be temporarily closed. The above facilities will be re-provisioned and enhanced. The enhancements include provision of a sheltered spectator stand in the re-provisioned soccer pitch and provision of additional seats and amenity lawn in Kwun Tong Promenade.

[3] Ancillary works include utilities diversion, temporary closure and reinstatement of carriageways/footpaths/open space, landscaping works and other related works that are required for completion of the proposed works.

storage tank and the stormwater pumping station targeting for completion in around four and a half years. To meet the works programme, we invited tenders in parallel to enable early commencement of the proposed works. The relevant contract will be awarded only after obtaining funding approval from the FC.

4. For the remaining works[4] of **4177CD**, we will seek funding for the relevant works only after the completion of the detailed design.

JUSTIFICATION

5. Owing to the increase in surface runoff caused by continuous land development and torrential rainstorms caused by climate change, the flood risks in the vicinity of Kwun Tong near Ngau Tau Kok Station were increased. The drainage capacity of the long-established existing stormwater drainage system in Kwun Tong needs to be enhanced. According to the records, flooding incidents occurred at the above-mentioned areas, causing impacts to the nearby traffic and the public.

6. We propose carrying out the proposed works mentioned in paragraph 1 above, including the construction of an underground stormwater storage tank, a stormwater pumping station, and stormwater drains. Specifically, we plan to construct an underground stormwater storage tank in Kwun Tong Hoi Bun Road Park, a stormwater pumping station and the associated stormwater drains in Kwun Tong Promenade. During heavy rainstorm, stormwater will be intercepted to the proposed underground stormwater storage tank for temporary storage. The stored stormwater will be discharged to Kwun Tong Typhoon Shelter via the proposed stormwater pumping station. Upon the completion of the drainage improvement works, the capacity of the drainage system concerned will be upgraded and the flood risks in the above-mentioned areas will be alleviated.

7. To facilitate the construction of the proposed underground stormwater storage tank scheme, part of the facilities in Kwun Tong Hoi Bun Road Park and Kwun Tong Promenade will need to be temporarily closed. The affected open

[4] The remaining works include Kwun Tong Action Area stormwater storage scheme and the associated drainage improvement works.

space will be re-provisioned and enhanced above the newly constructed underground stormwater storage tank and stormwater pumping station.

FINANCIAL IMPLICATIONS

8. We estimate the cost of the proposed works to be about $1,416.2 million in money-of-the-day prices. The breakdown of the estimated cost in percentage is as follows –

	PWP Item No. 4177CD (part)
(a) Underground stormwater storage tank, stormwater pumping station and the associated above ground structures	About 50%
(b) Drainage improvement works	About 20%
(c) Re-provision and enhancement of open space	About 10%
(d) Other cost	About 20%

PUBLIC CONSULTATION

9. We consulted the Food, Environmental Hygiene and District Facilities Management Committee of the Kwun Tong District Council on 10 November 2022. Members had no objection to the proposed works.

ENVIRONMENTAL IMPLICATIONS

10. The proposed works project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). A Preliminary Environmental Review was conducted in December 2023. It was concluded that the proposed works would not cause long-term adverse environmental impacts. The Director of Environmental Protection agreed to the above conclusion.

11. During the construction, we will also put in place various precautionary and mitigation measures in environmental aspects, such as using quieter equipment and movable noise enclosure or noise barriers for noise control;

water-spraying the construction site regularly and provision of wheel washing facilities for dust control; and collecting and treating site runoff by temporary drains before discharge for avoidance of polluting the surrounding environment. We have reserved part of the fund in the project estimate to implement the necessary environmental mitigation measures.

12. At the planning and design stages, we have considered measures to reduce generation of construction waste where possible including the use of trenchless construction to minimise the extent of excavation. In addition, we will require the contractor to reuse inert construction waste generated under this project (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimise disposal amount at the public fill reception facilities (PFRF[5]). 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.

13. At the construction stage, we will require the contractor to submit for approval a plan setting out 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 measures stipulated on 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 PFRF and landfills respectively through a trip-ticket system.

14. We estimate that the proposed works will generate about 168 500 tonnes of construction waste. Of these, we will reuse about 18 500 tonnes (about 11%) of inert construction waste on site and deliver about 146 700 tonnes (about 87%) of inert construction waste to PFRF for subsequent reuse. We will dispose of the remaining about 3 300 tonnes (about 2%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfills is estimated to be about $14.0 million for the proposed works (based on a unit charge rate of $87 per tonne for disposal at PFRF and $365 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of

[5] PFRF are specified in Schedule 4 of Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at PFRF requires a licence issued by the Director of Civil Engineering and Development.

Construction Waste) Regulation (Cap. 354N) and Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Amendment of Schedules) Notice 2023).

HERITAGE IMPLICATIONS

15. The proposed works project will not affect any heritage sites, i.e. all declared monuments, proposed monuments, graded historic sites/buildings/structures, sites of archaeological interest, all sites/buildings/structures on the new list of proposed grading items; and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

16. The proposed works does not require resumption of private land.

TRAFFIC IMPLICATIONS

17. We have conducted a traffic impact assessment (TIA) for the proposed works and the TIA indicates that the construction and operation of the proposed works will not cause any significant traffic impact on the surrounding road networks, with the implementation of appropriate temporary traffic arrangements (TTAs) and the use of trenchless construction technology on the road sections as needed during construction. We will also establish a traffic management liaison group to discuss, scrutinise and review the TTAs proposed by the contractor with a view to minimising traffic impact arising from the proposed works. In addition, we will set up a community liaison group and telephone hotline to respond to public enquiries or complaints.

BACKGROUND

18. In July 2022, we upgraded part of **177CD** to Category A as **192CD**[6] at an Approved Project Estimate of $938.3 million in MOD prices. The construction works commenced in September 2022 and targeted for completion in 2028.

19. We have completed the detailed design of the proposed works mentioned in paragraph 1 above.

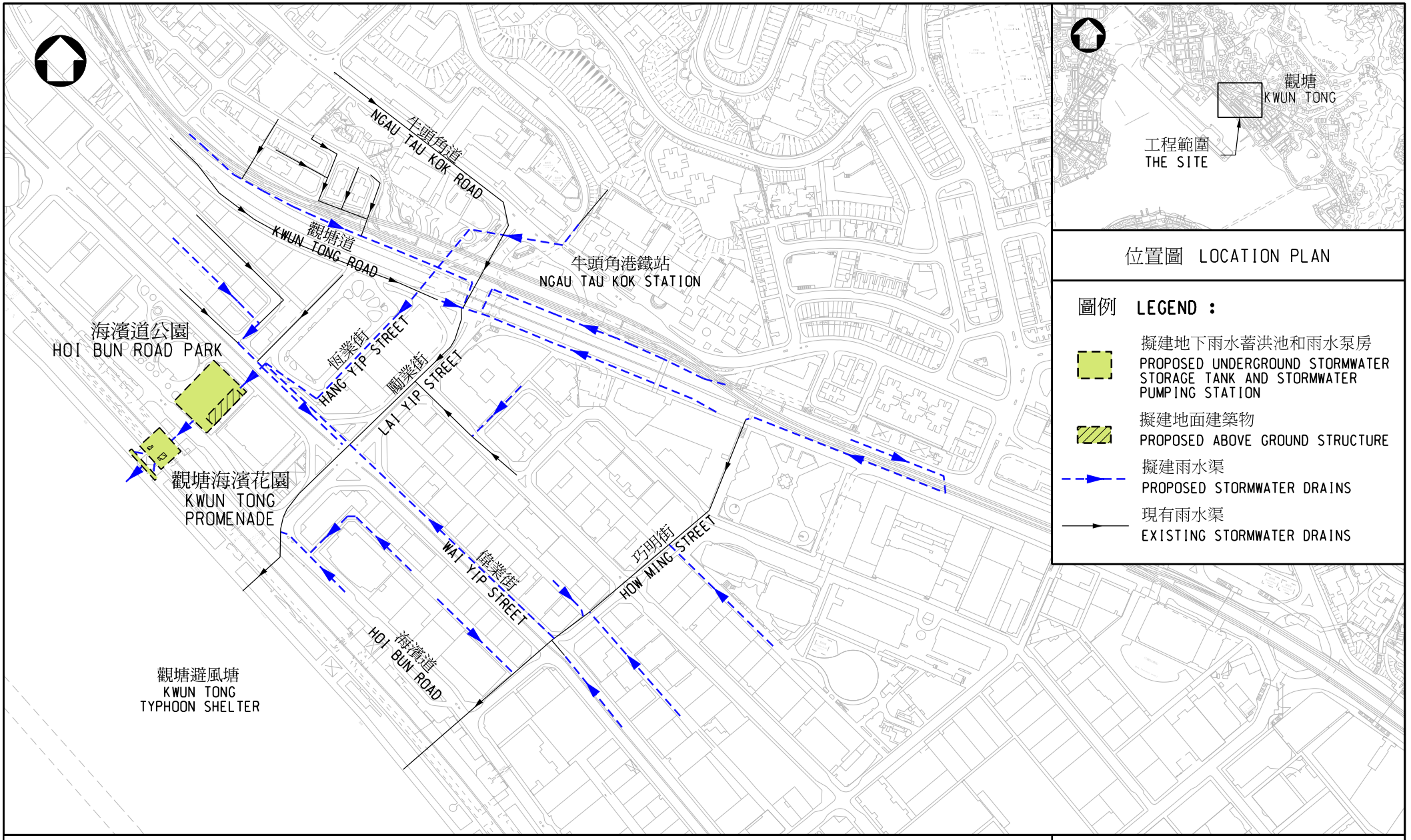
20. There are 217 trees within the proposed works boundary, of which 132 will be retained. The proposed works project will involve removal of 45 trees and transplantation of 40 trees. All trees to be removed or transplanted are not trees of particular interest[7]. Compensatory planting of 45 trees will be carried out as part of the project.

---

[6] 192CD – Drainage improvement works in Kwun Tong – phase 1

[7] Trees of particular interest are defined in paragraph 3.3 of the "Guidelines for Tree Risk Assessment and Management Arrangement" promulgated by the Development Bureau. Examples of trees of particular interest are listed as below for reference:

(a) Old and Valuable Trees (OVTs) and trees that are potentially registerable in the Register of OVTs;
(b) Trees of 100 years old or above;
(c) Trees with trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with height/canopy spread equal to or exceeding 25 m;
(d) Stonewall trees or trees of outstanding form (taking account of overall tree sizes, shape and any special features);
(e) Rare tree species listed in "Rare and Precious Plants of Hong Kong" (https://www.herbarium.gov.hk/en/publications/books/book2/index.html) published by the Agriculture, Fisheries and Conservation Department;
(f) Endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap 586);
(g) Tree species listed in the Forestry Regulations (Cap. 96A) under the Forests and Countryside Ordinance (Cap. 96);
(h) Well-known Fung Shui trees;
(i) Landmark trees with evidential records to support the historical or cultural significance of the trees;
(j) Trees which may arouse widespread public concerns; and
(k) Trees which may be subject to strong local objections on removal.



位置圖 LOCATION PLAN

圖例 LEGEND :

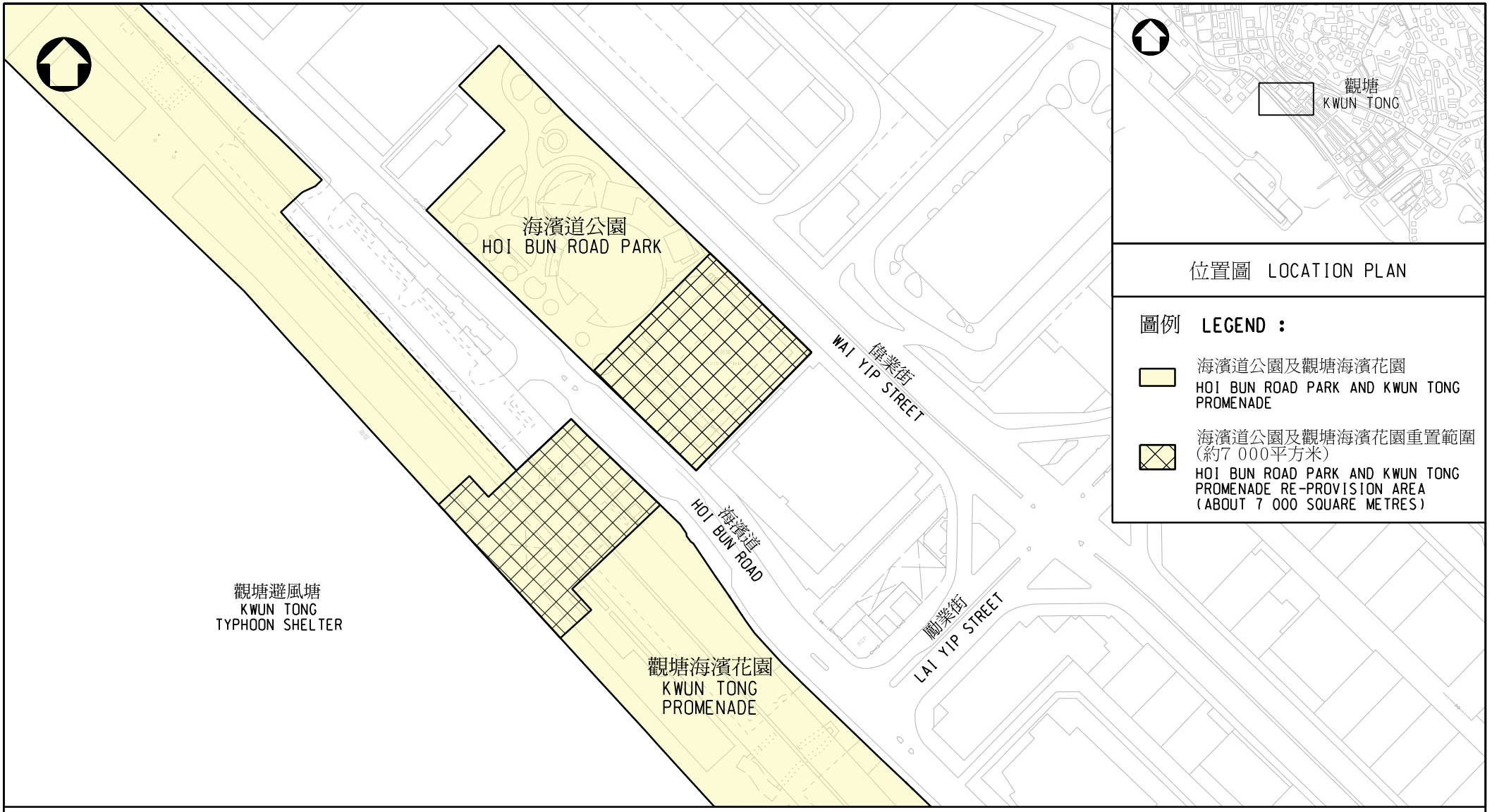
- 擬建地下雨水蓄洪池和雨水泵房 PROPOSED UNDERGROUND STORMWATER STORAGE TANK AND STORMWATER PUMPING STATION
- 擬建地面建築物 PROPOSED ABOVE GROUND STRUCTURE
- 擬建雨水渠 PROPOSED STORMWATER DRAINS
- 現有雨水渠 EXISTING STORMWATER DRAINS

工務計劃項目第4177CD號(部份) - 觀塘雨水排放系統改善工程 - 第2期

PWP ITEM NO. 4177CD (PART) - DRAINAGE IMPROVEMENT WORKS IN KWUN TONG - PHASE 2

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/177CD/11024



海濱道公園及觀塘海濱花園重置範圍
HOI BUN ROAD PARK AND KWUN TONG PROMENADE RE-PROVISION AREA

工務計劃項目第4177CD號(部份) - 觀塘雨水排放系統改善工程 - 第2期
PWP ITEM NO. 4177CD (PART) - DRAINAGE IMPROVEMENT WORKS IN KWUN TONG - PHASE 2

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/177CD/11027

重置及優化部分海濱道公園（構思圖）

RE-PROVISION AND ENHANCEMENT OF PART OF HOI BUN ROAD PARK (ARTIST'S IMPRESSION)

註釋 ：構思圖只作展述一般佈局之用，設計因實質需要或須作出修改

NOTES : ARTIST'S IMPRESSION IS FOR GENERAL ILLUSTRATION PURPOSE ONLY AND DESIGN IS SUBJECT TO CHANGE

工務計劃項目第4177CD號（部份）- 觀塘雨水排放系統改善工程 - 第2期

PWP ITEM NO. 4177CD (PART) - DRAINAGE IMPROVEMENT WORKS IN KWUN TONG - PHASE 2

渠務署

DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/177CD/11025

重置及優化部分觀塘海濱花園 (構思圖)

RE-PROVISION AND ENHANCEMENT OF PART OF KWUN TONG PROMENADE (ARTIST'S IMPRESSION)

註釋 ：構思圖只作展述一般佈局之用，設計因實質需要或須作出修改

NOTES : ARTIST'S IMPRESSION IS FOR GENERAL ILLUSTRATION PURPOSE ONLY AND DESIGN IS SUBJECT TO CHANGE

工務計劃項目第4177CD號 (部份) - 觀塘雨水排放系統改善工程 - 第2期

PWP ITEM NO. 4177CD (PART) - DRAINAGE IMPROVEMENT WORKS IN KWUN TONG - PHASE 2

渠務署

DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/177CD/11028

4179CD – Drainage improvement works in Kowloon City

PROJECT SCOPE

The proposed scope of works under **4179CD** comprises –

(a) construction of an underground stormwater storage tank with a capacity of about 75 000 cubic metres, a stormwater pumping station and the associated above ground structure [1] at Argyle Street Playground in Kowloon City;

(b) re-provision and enhancement of Argyle Street Playground[2];

(c) construction of stormwater drains of about 1.1 kilometres long with diameters ranging from 600 millimetres (mm) to 2.1 metres (m) and single cell stormwater box culverts of about 500 m long with inner widths ranging from 3 m to 3.6 m and heights ranging from 1.3 m to 1.6 m at Olympic Avenue, Kowloon City Road, Ma Tau Kok Road in To Kwa Wan, and Baker Street, Lo Lung Hang Street, Bulkeley Street and Dock Street in Hung Hom; and

(d) carrying out ancillary works[3].

2. A layout plan, the affected area of open space to be re-provisioned and the associated artistic impression of the proposed works are at **Annexes 1 to 3 to Enclosure 4**.

3. We plan to commence the proposed works as soon as possible upon obtaining funding approval from the Finance Committee (FC) for target completion of the above works in stages in around six years with the re-provision of the soccer

---

[1] Above ground structure includes electrical and mechanical plant rooms and associated facilities.

[2] During the construction period, a seven-a-side soccer pitch, elderly fitness facilities, children's play facilities, toilets and Leisure and Cultural Services Department's store room will be temporarily closed. The above facilities will be re-provisioned and enhanced. The enhancements include provision of diversified children's play facilities and smart fitness facilities.

[3] Ancillary works include utilities diversion, temporary closure and reinstatement of carriageways/footpaths/open space, landscaping works and other related works that are required for completion of the proposed works.

pitch targeting for completion in around five years. To meet the works programme, we invited tenders in parallel to enable early commencement of the proposed works. The relevant contract will be awarded only after obtaining funding approval from the FC.

JUSTIFICATION

4. Owing to the increase in surface runoff caused by continuous land development and torrential rainstorms caused by climate change, the flood risks in the vicinity of To Kwa Wan near Sung Wong Toi Road, Mok Cheong Street, Kowloon City Road, Ma Tau Kok Road, Hung Hom near Baker Street, Lo Lung Hang Street, Bulkeley Street and Dock Street were increased. The drainage capacity of the long-established existing stormwater drainage system in To Kwa Wan and Hung Hom needs to be enhanced. According to the records, flooding incidents occurred at the above-mentioned areas, causing impacts to the nearby traffic and the public.

5. We propose carrying out the proposed works mentioned in paragraph 1 above, including the construction of an underground stormwater storage tank, a stormwater pumping station and stormwater drains. Specifically, we plan to construct an underground stormwater storage tank, a stormwater pumping station and the associated stormwater drains in Argyle Street Playground. During heavy rainstorm, stormwater will be intercepted to the proposed underground stormwater storage tank for temporary storage. The stored stormwater will be discharged to the downstream drainage system in the vicinity of Sung Wong Toi Road and Mok Cheong Street via the proposed stormwater pumping station only after the peak flow. Upon the completion of the improvement works, the capacity of the stormwater drainage system concerned will be enhanced and the flood risks in the above-mentioned areas will be alleviated.

6. To facilitate the construction of the proposed underground stormwater storage scheme, whole Argyle Street Playground will need to be temporarily closed. The affected open space will be re-provisioned and enhanced above the newly constructed underground stormwater storage tank and stormwater pumping station.

FINANCIAL IMPLICATIONS

7. We estimate the cost of the proposed works to be about $2,405.0 million in money-of-the-day (MOD) prices. The breakdown of the estimated cost in percentage is as follows –

	PWP Item No. 4179CD
(a) Underground stormwater storage tank, stormwater pumping station and the associated above ground structure	About 70%
(b) Drainage improvement works	About 5%
(c) Re-provision and enhancement of open space	About 5%
(d) Other cost	About 20%

PUBLIC CONSULTATION

8. We consulted the District Facilities and Works Committee of the Kowloon City District Council on 5 March 2024. Members had no objection to the proposed works.

ENVIRONMENTAL IMPLICATIONS

9. The proposed works project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). A Preliminary Environmental Review was conducted in April 2024. It was concluded that the proposed works would not cause long-term adverse environmental impacts. The Director of Environmental Protection agreed to the above conclusion.

10. During the construction, we will also put in place various precautionary and mitigation measures in environmental aspects, such as using quieter equipment and movable noise enclosure or noise barriers for noise control; water-spraying the construction site regularly and provision of wheel washing facilities for dust control; and collecting and treating site runoff by temporary drains before discharge for avoidance of polluting the surrounding environment. We have reserved part of the fund in the project estimate to implement the

necessary environmental mitigation measures.

11. At the planning and design stages, we have considered measures to reduce generation of construction waste where possible including the use of trenchless construction to minimise the extent of excavation. In addition, we will require the contractor to reuse inert construction waste generated under this project (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimise disposal amount at the public fill reception facilities (PFRF[4]). 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 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 measures stipulated on 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 PFRF and landfills respectively through a trip-ticket system.

13. We estimate that the proposed works will generate about 336 300 tonnes of construction waste. Of these, we will reuse about 31 200 tonnes (about 9%) of inert construction waste on site and deliver about 299 200 tonnes (about 89%) of inert construction waste to PFRF for subsequent reuse. We will dispose of the remaining about 5 900 tonnes (about 2%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfills is estimated to be about $28.2 million for the proposed works (based on a unit charge rate of $87 per tonne for disposal at PFRF and $365 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N) and Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Amendment of Schedules) Notice 2023).

[4] PFRF are specified in Schedule 4 of Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at PFRF requires a licence issued by the Director of Civil Engineering and Development.

HERITAGE IMPLICATIONS

14. The proposed works project will not affect any heritage sites, i.e. all declared monuments, proposed monuments, graded historic sites/buildings/structures, sites of archaeological interest, all sites/buildings/structures on the new list of proposed grading items; and government historic sites identified by the Antiquities and Monuments Office (AMO). However, due to the construction of stormwater drains at Olympic Avenue is located near the site of Sacred Hill, which has archaeological potential according to past record, we will implement the mitigation measures as recommended in the Detailed Heritage Review Report approved by AMO during the course of works. In case of discovery of any archaeological finds or supposed heritage, we will inform AMO immediately.

LAND ACQUISITION

15. The proposed works does not require resumption of private land.

TRAFFIC IMPLICATIONS

16. We have conducted a traffic impact assessment (TIA) for the proposed works and the TIA indicates that the construction and operation of the proposed works will not cause any significant traffic impact on the surrounding road networks, with the implementation of appropriate temporary traffic arrangements (TTAs) and the use of trenchless construction on the road sections as needed during construction. We will also establish a traffic management liaison group to discuss, scrutinise and review the TTAs proposed by the contractor with a view to minimising traffic impact arising from the proposed works. In addition, we will set up a community liaison group and telephone hotline to respond to public enquiries or complaints.

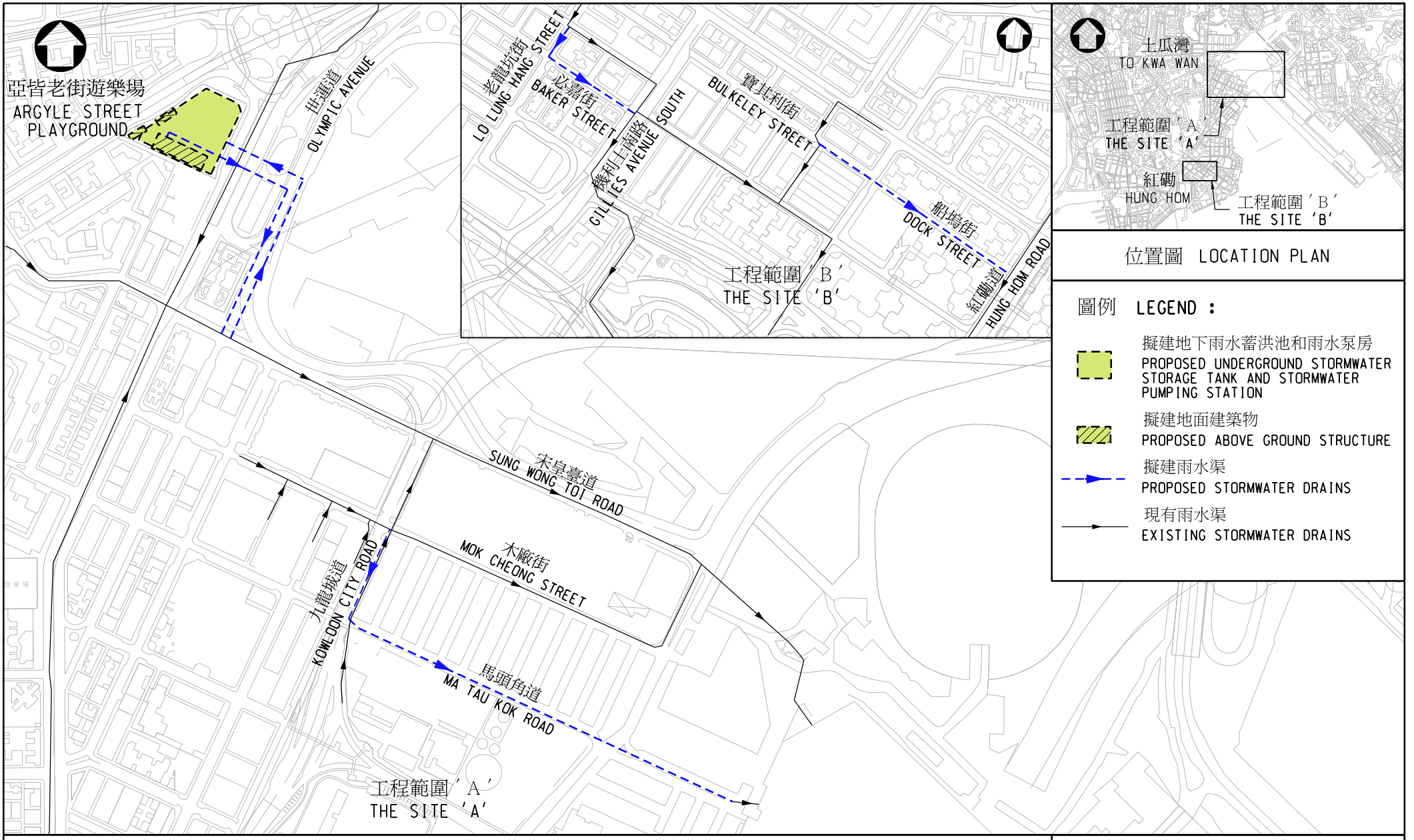
BACKGROUND

17. We have completed the detailed design of the proposed works mentioned in paragraph 1 above.

18. There are 30 trees within the proposed works boundary, of which 6 will be retained. The proposed works project will involve removal of 14 trees and transplantation of 10 trees. All trees to be removed or transplanted are not trees of particular interest[5]. Compensatory planting of 14 trees will be carried out as part of the project.

[5] Trees of particular interest are defined in paragraph 3.3 of the "Guidelines for Tree Risk Assessment and Management Arrangement" promulgated by the Development Bureau. Examples of trees of particular interest are listed as below for reference:

(a) Old and Valuable Trees (OVTs) and trees that are potentially registerable in the Register of OVTs;
(b) Trees of 100 years old or above;
(c) Trees with trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with height/canopy spread equal to or exceeding 25 m;
(d) Stonewall trees or trees of outstanding form (taking account of overall tree sizes, shape and any special features);
(e) Rare tree species listed in "Rare and Precious Plants of Hong Kong" (https://www.herbarium.gov.hk/en/publications/books/book2/index.html) published by the Agriculture, Fisheries and Conservation Department;
(f) Endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap 586);
(g) Tree species listed in the Forestry Regulations (Cap. 96A) under the Forests and Countryside Ordinance (Cap. 96);
(h) Well-known Fung Shui trees;
(i) Landmark trees with evidential records to support the historical or cultural significance of the trees;
(j) Trees which may arouse widespread public concerns; and
(k) Trees which may be subject to strong local objections on removal.



位置圖 LOCATION PLAN

圖例 LEGEND :

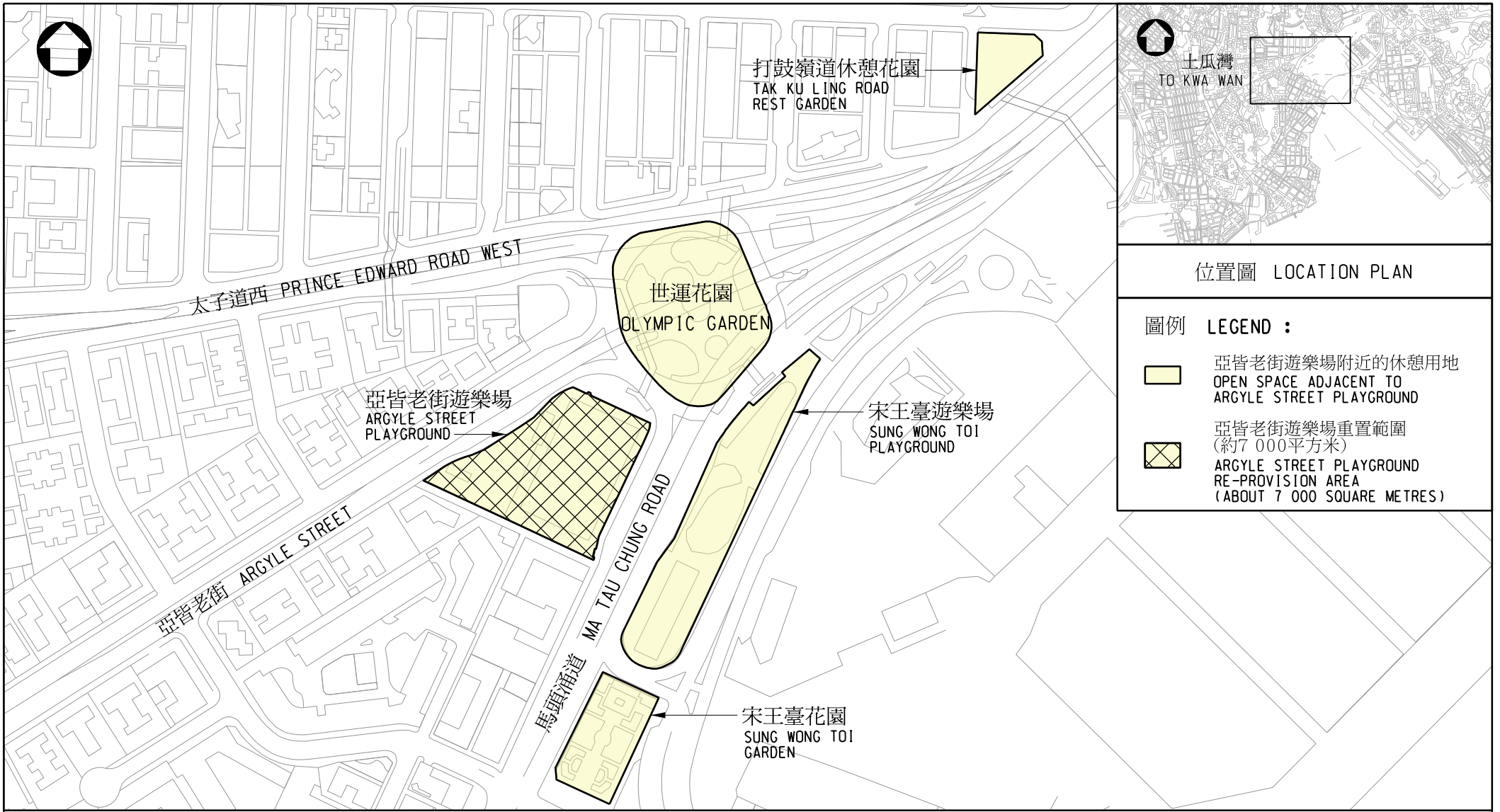
- 擬建地下雨水蓄洪池和雨水泵房 PROPOSED UNDERGROUND STORMWATER STORAGE TANK AND STORMWATER PUMPING STATION
- 擬建地面建築物 PROPOSED ABOVE GROUND STRUCTURE
- 擬建雨水渠 PROPOSED STORMWATER DRAINS
- 現有雨水渠 EXISTING STORMWATER DRAINS

工務計劃項目第4179CD號 - 九龍城雨水排放系統改善工程

PWP ITEM NO. 4179CD - DRAINAGE IMPROVEMENT WORKS IN KOWLOON CITY

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DPM/179CD/11054



亞皆老街遊樂場重置範圍
ARGYLE STREET PLAYGROUND RE-PROVISION AREA

工務計劃項目第4179CD號 - 九龍城雨水排放系統改善工程
PWP ITEM NO. 4179CD - DRAINAGE IMPROVEMENT WORKS IN KOWLOON CITY

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DPM/179CD/11057

重置及優化亞皆老街遊樂場（構思圖）

RE-PROVISION AND ENHANCEMENT OF ARGYLE STREET PLAYGROUND (ARTIST'S IMPRESSION)

註釋 ：構思圖只作展述一般佈局之用，設計因實質需要或須作出修改

NOTES : ARTIST'S IMPRESSION IS FOR GENERAL ILLUSTRATION PURPOSE ONLY AND DESIGN IS SUBJECT TO CHANGE

工務計劃項目第4179CD號 - 九龍城雨水排放系統改善工程

PWP ITEM NO. 4179CD - DRAINAGE IMPROVEMENT WORKS IN KOWLOON CITY

渠務署

DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DPM/179CD/11056

4181CD (part) – Drainage improvement works in Eastern District – phase 1

PROJECT SCOPE

The proposed scope of works under **4181CD** (part) comprises –

(a) construction of stormwater drains of about 1.8 kilometres long with diameters ranging from 300 millimetres to 1.6 metres (m) at Kam Hong Street and Java Road in North Point, Yee Shun Street and Kam Yuen Lane in Chai Wan, Mount Parker Road in Quarry Bay, Wang Wa Street, Shau Kei Wan Main Street East and A Kung Ngam Road in Shau Kei Wan; and

(b) carrying out ancillary works[1].

2. A layout plan of the proposed works is at **Annex 1 to Enclosure 5**.

3. We plan to commence the proposed works as soon as possible upon obtaining funding approval from the Finance Committee (FC) for target completion of the above works in stages in around two years to three and a half years. To meet the works programme, we invited tenders in parallel to enable early commencement of the proposed works. The relevant contract will be awarded only after obtaining funding approval from the FC.

4. For the remaining works[2] of **4181CD**, we will seek funding for the relevant works only after the completion of the detailed design.

JUSTIFICATION

5. Owing to the increase in surface runoff caused by continuous land development and torrential rainstorms caused by climate change, the flood risks at

---

[1] Ancillary works include utilities diversion, temporary closure and reinstatement of carriageways/footpaths/open space, landscaping works and other related works that are required for completion of the proposed works.

[2] The remaining works include construction of a stormwater drainage tunnel in Eastern District.

Kam Hong Street and Java Road in North Point, Yee Shun Street and Kam Yuen Lane in Chai Wan, Mount Parker Road in Quarry Bay, Wang Wa Street, Shau Kei Wan Main Street East and A Kung Ngam Road in Shau Kei Wan were increased[3]. The drainage capacity of the long-established existing stormwater drainage system in Eastern District needs to be enhanced. According to the records, flooding incidents occurred at the above-mentioned areas, causing impacts to the nearby traffic and the public.

6. We propose carrying out the proposed works mentioned in paragraph 1 above. Upon completion of the drainage improvement works, the capacity of the drainage system concerned will be upgraded and the flood risk in the above-mentioned areas will be alleviated.

FINANCIAL IMPLICATIONS

7. We estimate the cost of the proposed works to be about $268.30 million in money-of-the-day prices. The breakdown of the estimated cost in percentage is as follows –

	PWP Item No. 4181CD (part)
(a) Drainage improvement works	About 80%
(b) Other cost	About 20%

PUBLIC CONSULTATION

8. We consulted the Planning, Works and Housing Committee of the Eastern District Council on 18 October 2022. Members had no objection to the proposed works.

[3] After the torrential rainstorm in September 2023, the Drainage Services Department had completed the construction of additional gullies and inlets at Chai Wan Road roundabout to alleviate the flood risk. In addition, the construction of underground packaged pumps at Chai Wan Road roundabout and the construction of stormwater drain at Fei Tsui Road, which is located at the upstream of Chai Wan Road roundabout, were in progress.

ENVIRONMENTAL IMPLICATIONS

9. The proposed works project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). A Preliminary Environmental Review was conducted in March 2022. It was concluded that the proposed works would not cause long-term adverse environmental impacts. The Director of Environmental Protection agreed to the above conclusion.

10. During the construction, we will also put in place various precautionary and mitigation measures in environmental aspects, such as using quieter equipment and movable noise enclosure or noise barriers for noise control; water-spraying the construction site regularly and provision of wheel washing facilities for dust control; and collecting and treating site runoff by temporary drains before discharge for avoidance of polluting the surrounding environment. We have reserved part of the fund in the project estimate to implement the necessary environmental mitigation measures.

11. At the planning and design stages, we have considered measures to reduce generation of construction waste where possible including the use of trenchless construction to minimise the extent of excavation. In addition, we will require the contractor to reuse inert construction waste generated under this project (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimise disposal amount at the public fill reception facilities (PFRF[4]). 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 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 measures stipulated on 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

[4] PFRF are specified in Schedule 4 of Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at PFRF requires a licence issued by the Director of Civil Engineering and Development.

construction waste at PFRF and landfills respectively through a trip-ticket system.

13. We estimate that the proposed works will generate about 25 300 tonnes of construction waste. Of these, we will reuse about 10 200 tonnes (about 40%) of inert construction waste on site and deliver about 14 600 tonnes (about 58%) of inert construction waste to PFRF for subsequent reuse. We will dispose of the remaining about 500 tonnes (about 2%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfills is estimated to be about $1.5 million for the proposed works (based on a unit charge rate of $87 per tonne for disposal at PFRF and $365 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N) and Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Amendment of Schedules) Notice 2023).

HERITAGE IMPLICATIONS

14. The Antiquities and Monuments Office mentioned that there are two historic buildings in the vicinity of the proposed works areas at A Kung Ngam Road[5], Shau Kei Wan Main Street East and Wang Wa Street[6]. Nevertheless, the proposed locations of works are at certain distances from the historic buildings and the scale of the proposed works is relatively small. We anticipate that the proposed works will not constitute unacceptable impacts on the historic buildings. We will implement appropriate mitigation measures[7] recommended in the Project Profile and the approved preliminary environmental review report.

LAND ACQUISITION

15. The proposed works does not require resumption of private land.

---

[5] Tsung Tsin Mission of Hong Kong Shaukiwan Church (N50 historic building) at A Kung Ngam Road is located within 50 m from the proposed works area.

[6] Shing Wong Temple (Grade 3 historic building) at Kam Wa Street, Shau Kei Wan is located within 50 m from the proposed works area.

[7] For example, setting up checkpoints for monitoring vibration, tilting and settlement, and selecting construction method and machinery with a goal to minimise the impact on the works.

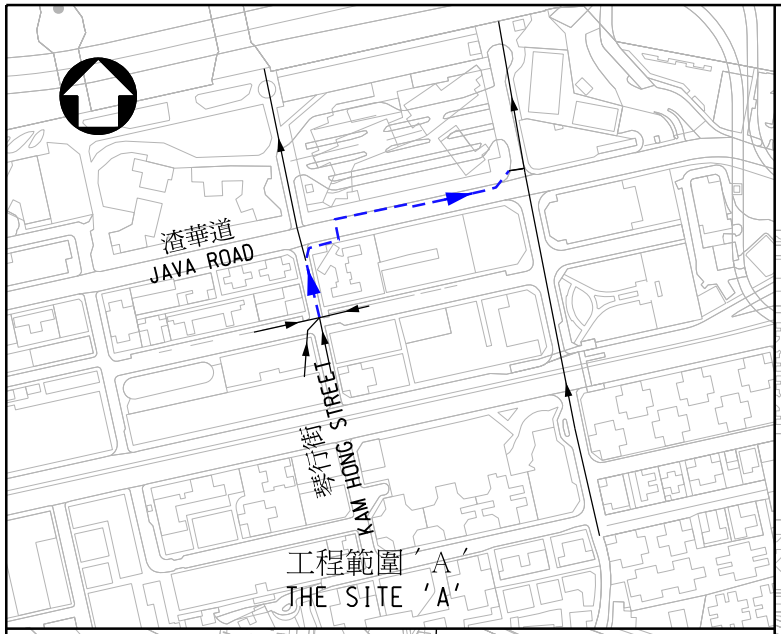
TRAFFIC IMPLICATIONS

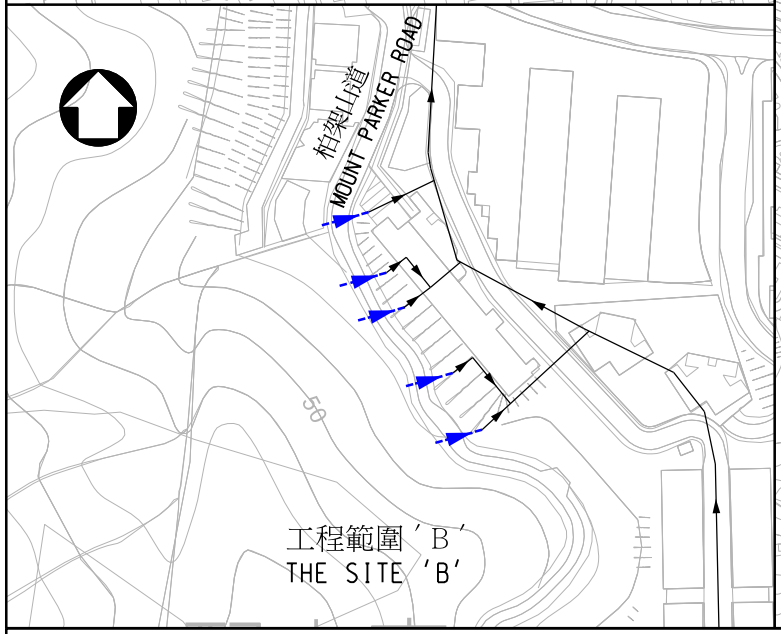
16. We have conducted a traffic impact assessment (TIA) for the proposed works and the TIA indicates that the construction and operation of the proposed works will not cause any significant traffic impact on the surrounding road networks, with the implementation of appropriate temporary traffic arrangements (TTAs) and the use of trenchless construction on the road sections as needed during construction. We will also establish a traffic management liaison group to discuss, scrutinise and review the TTAs proposed by the contractor with a view to minimising traffic impact arising from the proposed works. In addition, we will set up a community liaison group and telephone hotline to respond to public enquiries or complaints.

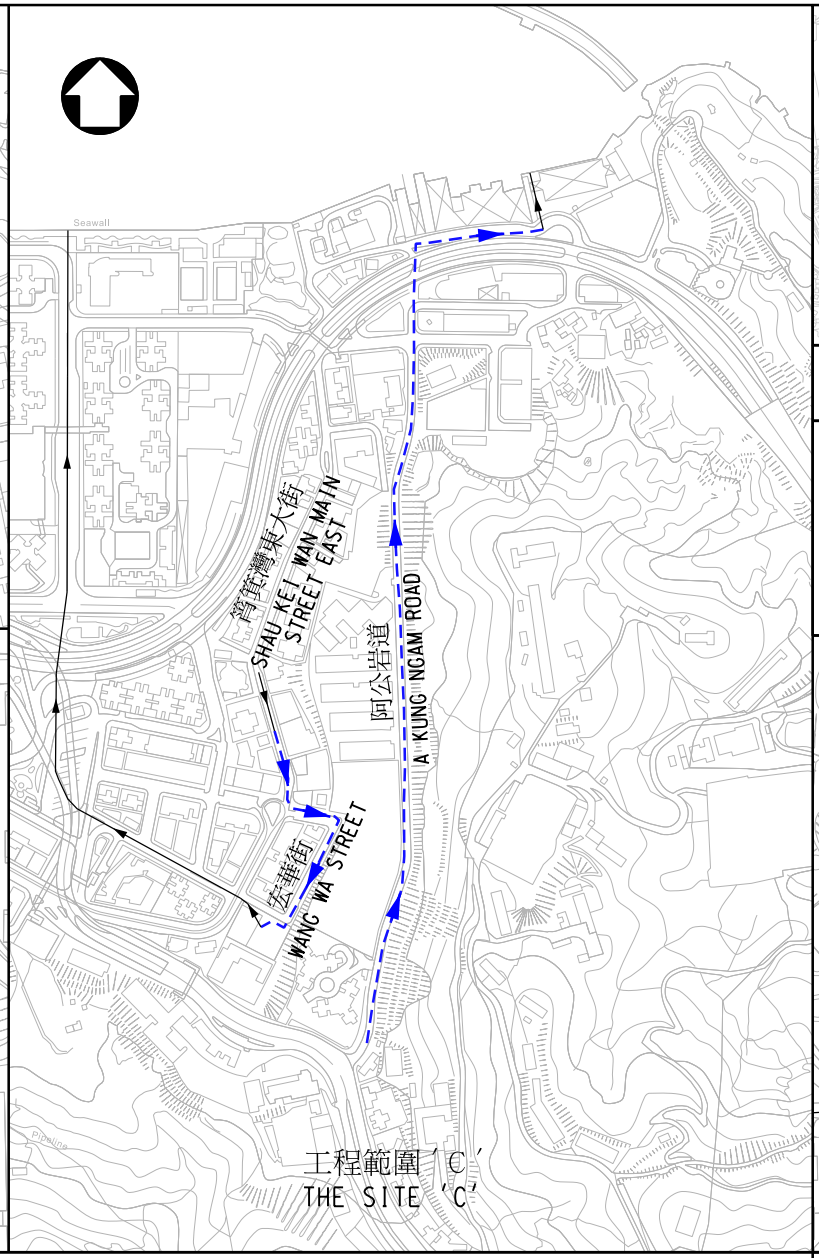
BACKGROUND

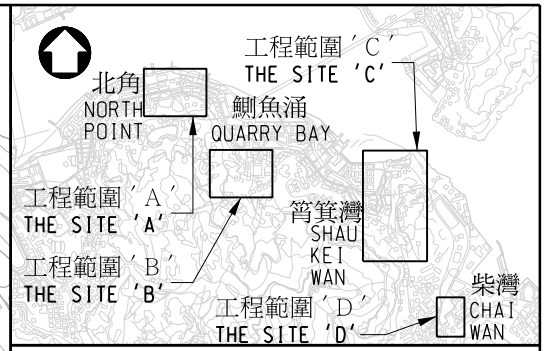
17. We have completed the detailed design of the proposed works mentioned in paragraph 1 above.

18. The proposed works project will not involve any tree removal or transplantation proposal.







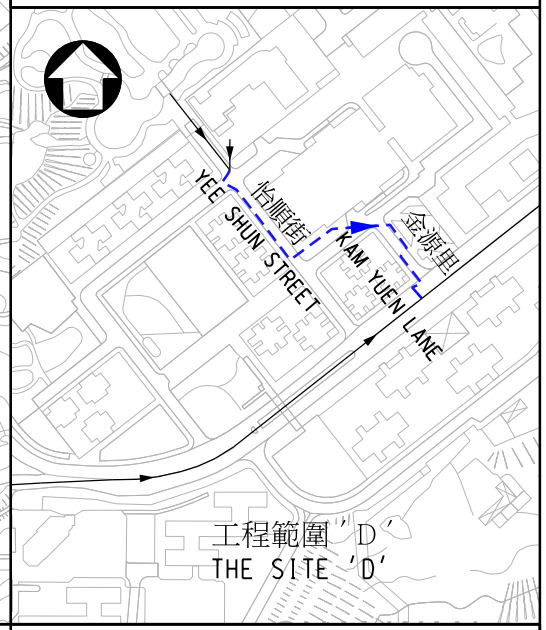


位置圖 LOCATION PLAN

圖例 LEGEND :

擬建雨水渠
PROPOSED STORMWATER DRAINS

現有雨水渠
EXISTING STORMWATER DRAINS



工務計劃項目第4181CD號(部份) - 東區雨水排放系統改善工程 - 第1期

PWP ITEM NO. 4181CD (PART) - DRAINAGE IMPROVEMENT WORKS IN EASTERN DISTRICT - PHASE 1

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/181CD/11101

4182CD (part) – Drainage improvement works in Sha Tin and Sai Kung – phase 1

PROJECT SCOPE

The proposed scope of works under **4182CD** (part) comprises –

(a) construction of an underground stormwater storage tank with a capacity of about 8 600 cubic metres, a stormwater pumping station and the associated above ground structure[1] at Sha Tin Park;

(b) re-provision and enhancement of part of Sha Tin Park[2];

(c) construction of stormwater drains of about 1.6 kilometres (km) long with diameters ranging from 375 millimetres to 2.2 metres (m) at Pak Hok Ting Street, Sha Tin Centre Street, Yi Ching Lane and Tai Po Road – Sha Tin in Sha Tin, and Po Lo Che Road in Sai Kung;

(d) improvement of existing drainage channels of about 90 m long by increasing the height by 1 m at Wong Chuk Yeung Village in Sha Tin;

(e) construction of flood walls of about 1.8 km long and about 1 m tall along Shing Mun River and at Kau To Hang in Sha Tin; and

(f) carrying out ancillary works[3].

2. The layout plans, the affected area of open space to be re-provisioned and the associated artistic impression of the proposed works are at **Annexes 1 to 4 to Enclosure 6**.

---

[1] Above ground structure includes electrical and mechanical plant rooms and associated facilities.

[2] During the construction period, the elderly fitness facilities, sheltered seats and pebble walking trail will be temporarily closed. The above facilities will be re-provisioned and enhanced. The enhancements include smart fitness facilities.

[3] Ancillary works include utilities diversion, temporary closure and reinstatement of carriageways/footpaths/open space, landscaping works and other related works that are required for completion of the proposed works.

3. We plan to commence the proposed works as soon as possible upon obtaining funding approval from the Finance Committee (FC) for target completion of the above works in stages in around five years with the underground stormwater storage tank and the stormwater pumping station targeting for completion in around three years and nine months. To meet the works programme, we invited tenders in parallel to enable early commencement of the proposed works. The relevant contract will be awarded only after obtaining funding approval from the FC.

4. For the remaining works[4] of **4182CD**, we will seek funding for the relevant works only after the completion of the detailed design.

JUSTIFICATION

5. Owing to the increase in surface runoff caused by continuous land development and torrential rainstorms caused by climate change, the flood risks in Sha Tin and in the vicinity of Po Lo Che in Sai Kung were increased. The drainage capacity of the long-established existing stormwater drainage system in Sha Tin and Sai Kung needs to be enhanced. According to the records, flooding incidents occurred at the above-mentioned areas, causing impacts to the nearby traffic and the public.

6. We propose carrying out the proposed works mentioned in paragraph 1 above, including the construction of an underground stormwater storage tank, a stormwater pumping station, stormwater drains, flood walls and improvement of existing drainage channels. Specifically, we plan to construct an underground stormwater storage tank, a stormwater pumping station and the associated stormwater drains in Sha Tin Park. During heavy rainstorm, the majority of the stormwater will be intercepted to the proposed underground stormwater storage tank for temporary storage. The stored stormwater will be discharged to Shing Mun River via the proposed stormwater pumping station. Upon the completion of the drainage improvement works, the capacity of the drainage system concerned will be upgraded and the flood risks in the above-

[4] The remaining works include the construction of Chui Tin Street stormwater storage scheme and carrying out drainage improvement works at Pok Hong Estate, Fui Yiu Ha, Tai Po Road – Ma Liu Shui, Ma Ling Path, Hang Hong Street and Hang Kwong Street in Sha Tin and Ho Chung and Wong Chuk Wan in Sai Kung.

mentioned areas will be alleviated.

7. To facilitate the construction of the proposed underground stormwater storage scheme, part of the facilities in Sha Tin Park will need to be temporarily closed. The affected open space will be re-provisioned and enhanced above the newly constructed underground stormwater storage tank and stormwater pumping station.

FINANCIAL IMPLICATIONS

8. We estimate the cost of the proposed works to be about $867.0 million in money-of-the-day prices. The breakdown of the estimated cost in percentage is as follows –

	PWP Item No. 4182CD (part)
(a) Underground stormwater storage tank, stormwater pumping station and the associated above ground structure	About 45%
(b) Drainage improvement works	About 25%
(c) Re-provision and enhancement of open space	About 10%
(d) Other cost	About 20%

PUBLIC CONSULTATION

9. We consulted the Health and Environment Committee, and Development, Housing and Environment and Health Committee of the Sha Tin District Council on 6 July 2021 and 19 July 2022 respectively, and the Food, Environment and Hygiene Committee Meeting of the Sai Kung District on 16 February 2024. Members had no objection to the proposed works.

ENVIRONMENTAL IMPLICATIONS

10. The proposed works at Po Lo Che Road is an exempted designated project (DP) under the Environmental Impact Assessment Ordinance (Cap. 499)

(EIAO)[5]. The remaining proposed works project is not DP under the EIAO. A Preliminary Environmental Review was conducted in December 2023. It was concluded that the proposed works would not cause long-term adverse environmental impacts. The Director of Environmental Protection agreed to the above conclusion.

11. During the construction, we will also put in place various precautionary and mitigation measures in environmental aspects, such as using quieter equipment and movable noise enclosure or noise barriers for noise control; water-spraying the construction site regularly and provision of wheel washing facilities for dust control; and collecting and treating site runoff by temporary drains before discharge for avoidance of polluting the surrounding environment. We have reserved part of the fund in the project estimate to implement the necessary environmental mitigation measures.

12. At the planning and design stages, we have considered measures to reduce generation of construction waste where possible including the use of trenchless construction to minimise the extent of excavation. In addition, we will require the contractor to reuse inert construction waste generated under this project (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimise disposal amount at the public fill reception facilities (PFRF[6]). 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.

13. At the construction stage, we will require the contractor to submit for approval a plan setting out 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 measures stipulated on 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

[5] The network of drainage channels proposed to be upgraded at Po Lo Che Road, which falls within the Conservation Area, is built before 1 April 1998. According to Section 9(2)(g) of the Environmental Impact Assessment Ordinance, the proposed works are exempted from the provisions of this Ordinance.

[6] PFRF are specified in Schedule 4 of Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at PFRF requires a licence issued by the Director of Civil Engineering and Development.

construction waste at PFRF and landfills respectively through a trip-ticket system.

14. We estimate that the proposed works will generate about 95 800 tonnes of construction waste. Of these, we will reuse about 14 400 tonnes (about 15%) of inert construction waste on site and deliver about 79 500 tonnes (about 83%) of inert construction waste to PFRF for subsequent reuse. We will dispose of the remaining about 1 900 tonnes (about 2%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfills is estimated to be about $7.6 million for the proposed works (based on a unit charge rate of $87 per tonne for disposal at PFRF and $365 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N) and Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Amendment of Schedules) Notice 2023).

HERITAGE IMPLICATIONS

15. The proposed works project will not affect any heritage sites, i.e. all declared monuments, proposed monuments, graded historic sites/buildings/structures, sites of archaeological interest, all sites/buildings/structures on the new list of proposed grading items; and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

16. The proposed works does not require resumption of private land.

TRAFFIC IMPLICATIONS

17. We have conducted a traffic impact assessment (TIA) for the proposed works and the TIA indicates that the construction and operation of the proposed works will not cause any significant traffic impact on the surrounding road networks, with the implementation of appropriate temporary traffic arrangements (TTAs) and the use of trenchless construction on the road sections as needed during

construction. We will also establish a traffic management liaison group to discuss, scrutinise and review the TTAs proposed by the contractor with a view to minimising traffic impact arising from the proposed works. In addition, we will set up a community liaison group and telephone hotline to respond to public enquiries or complaints.

BACKGROUND

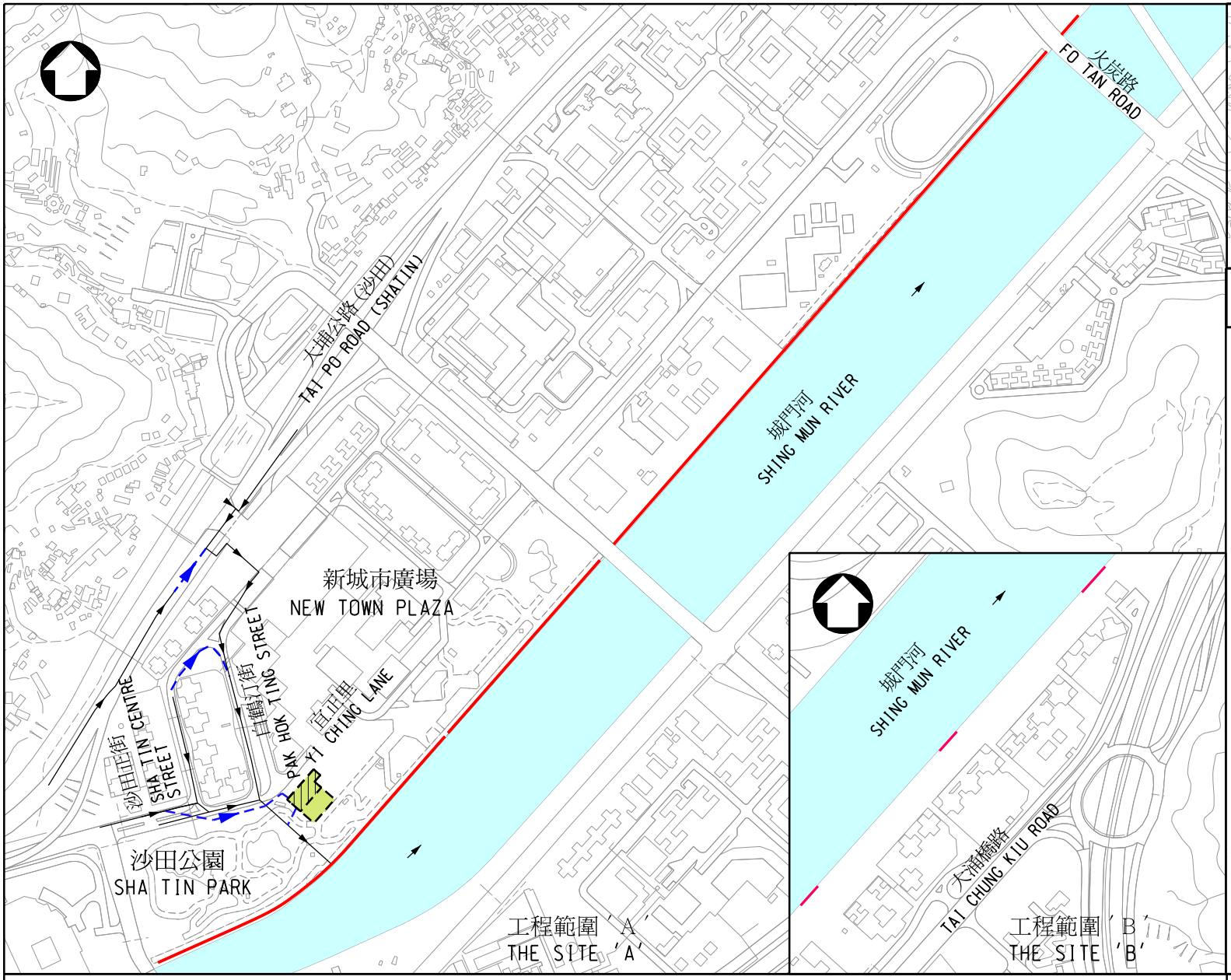
18. We have completed the detailed design of the proposed works mentioned in paragraph 1 above.

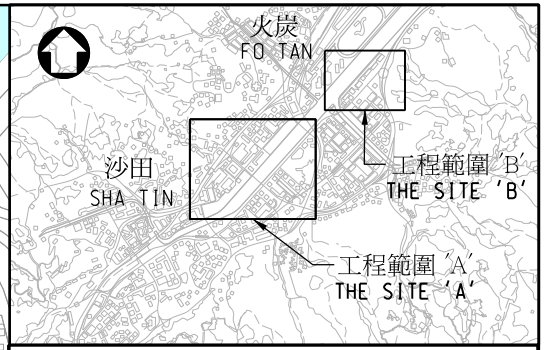
19. There are 266 trees within the proposed works boundary, of which 180 will be retained. The proposed works project will involve removal of 86 trees. All trees to be removed are not trees of particular interest[7]. Compensatory planting of 86 trees will be carried out as part of the project.

---

[7] Trees of particular interest are defined in paragraph 3.3 of the "Guidelines for Tree Risk Assessment and Management Arrangement" promulgated by the Development Bureau. Examples of trees of particular interest are listed as below for reference:

(a) Old and Valuable Trees (OVTs) and trees that are potentially registerable in the Register of OVTs;
(b) Trees of 100 years old or above;
(c) Trees with trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with height/canopy spread equal to or exceeding 25 m;
(d) Stonewall trees or trees of outstanding form (taking account of overall tree sizes, shape and any special features);
(e) Rare tree species listed in "Rare and Precious Plants of Hong Kong" (https://www.herbarium.gov.hk/en/publications/books/book2/index.html) published by the Agriculture, Fisheries and Conservation Department;
(f) Endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap 586);
(g) Tree species listed in the Forestry Regulations (Cap. 96A) under the Forests and Countryside Ordinance (Cap. 96);
(h) Well-known Fung Shui trees;
(i) Landmark trees with evidential records to support the historical or cultural significance of the trees;
(j) Trees which may arouse widespread public concerns; and
(k) Trees which may be subject to strong local objections on removal.





位置圖　LOCATION PLAN

圖例　LEGEND :

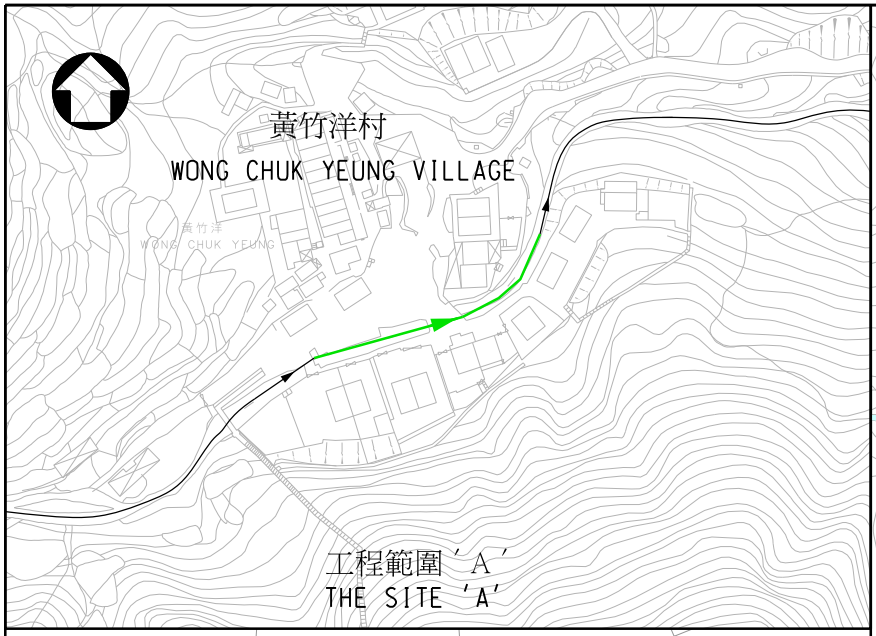
- 擬建地下雨水蓄洪池和雨水泵房 PROPOSED UNDERGROUND STORMWATER STORAGE TANK AND STORMWATER PUMPING STATION
- 擬建地面建築物 PROPOSED ABOVE GROUND STRUCTURE
- 擬建雨水渠 PROPOSED STORMWATER DRAINS
- 擬建防洪牆 PROPOSED FLOODWALL
- 現有雨水渠 EXISTING STORMWATER DRAINS
- 現有河道 EXISTING RIVER

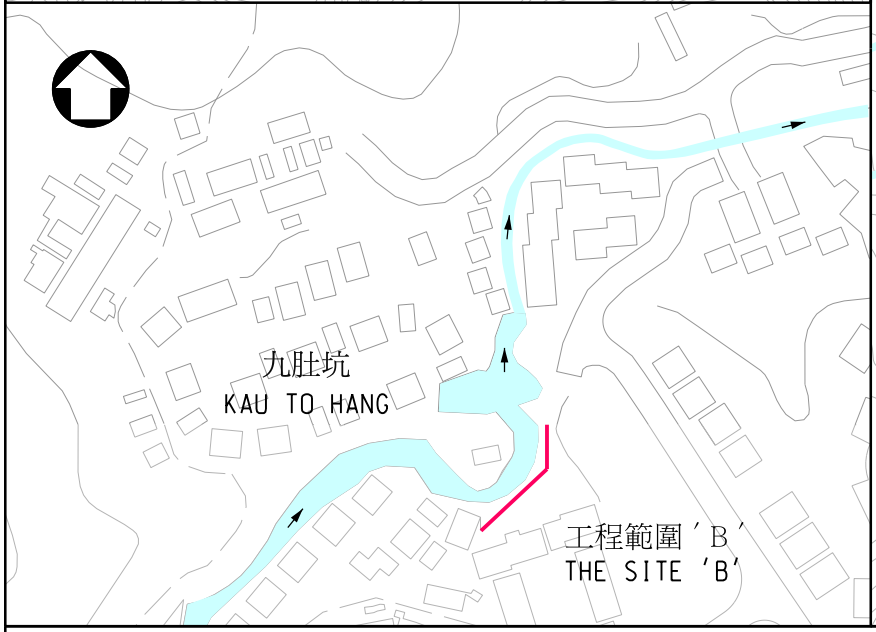
工務計劃項目第4182CD號(部份) - 沙田及西貢雨水排放系統改善工程 - 第1期

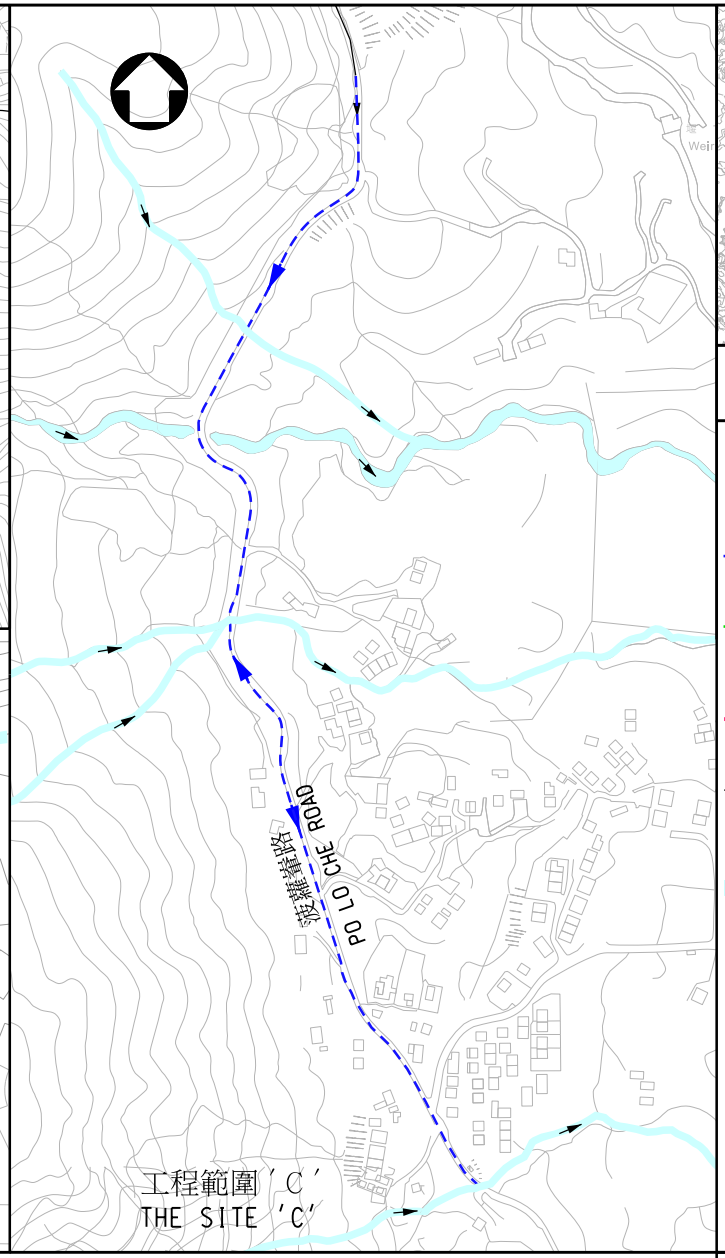
PWP ITEM NO. 4182CD (PART) - DRAINAGE IMPROVEMENT WORKS IN SHA TIN AND SAI KUNG - PHASE 1

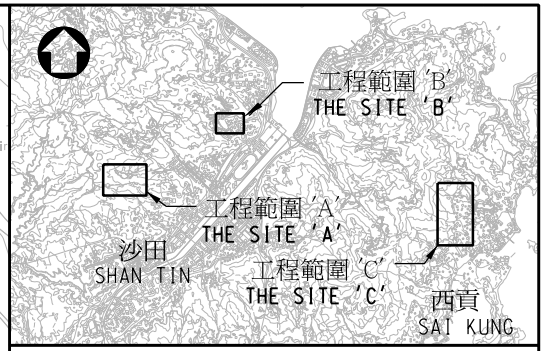
渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/182CD/11101









位置圖 LOCATION PLAN

圖例 LEGEND :

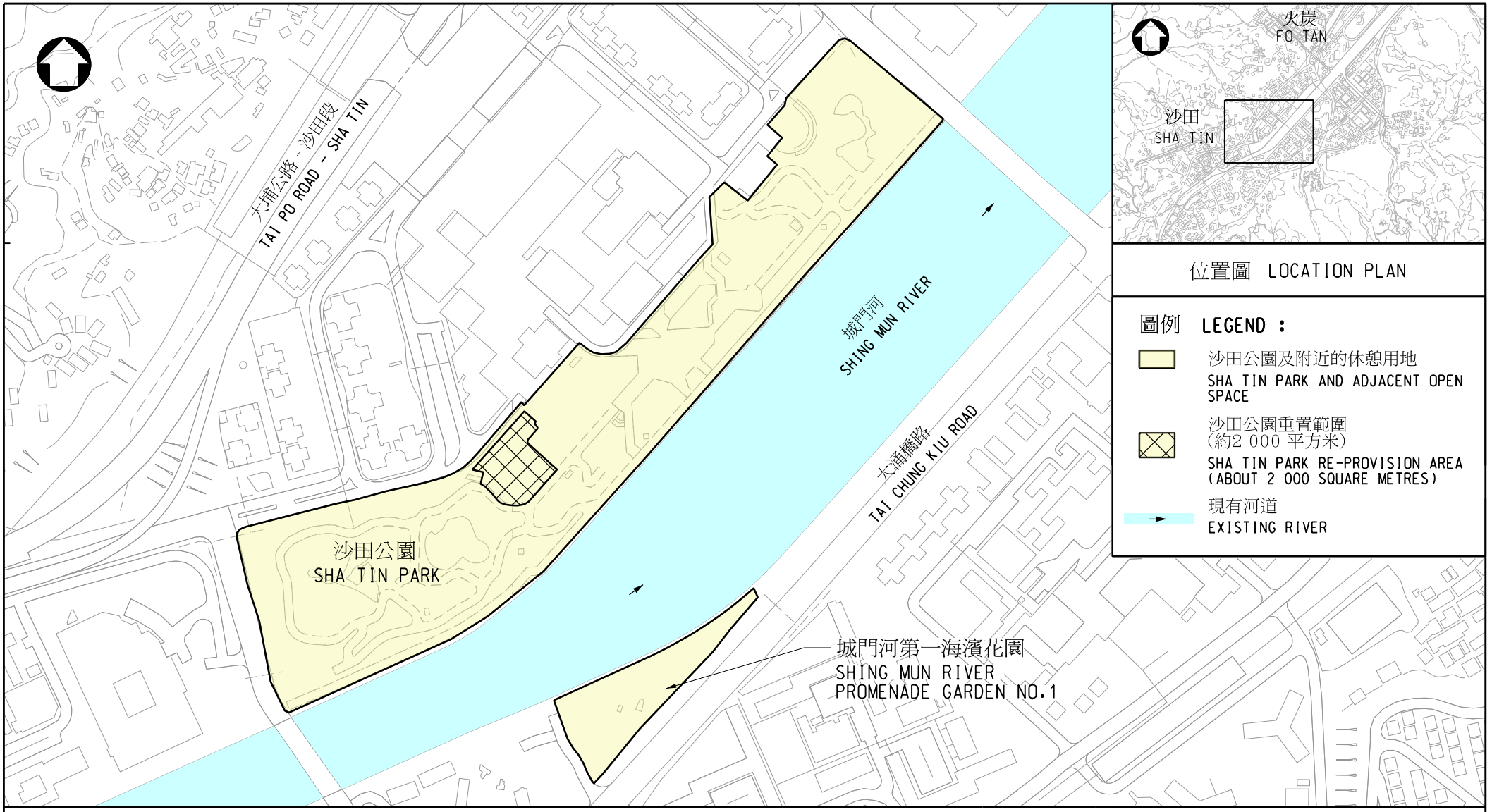
- 擬建雨水渠 PROPOSED STORMWATER DRAINS
- 改善現有排水道 IMPROVEMENT OF EXISTING DRAINAGE CHANNELS
- 擬建防洪牆 PROPOSED FLOODWALL
- 現有雨水渠/排水道 EXISTING STORMWATER DRAINS/ DRAINAGE CHANNELS
- 現有河道 EXISTING RIVERS

工務計劃項目第4182CD號(部份) - 沙田及西貢雨水排放系統改善工程 - 第1期

PWP ITEM NO. 4182CD (PART) - DRAINAGE IMPROVEMENT WORKS IN SHA TIN AND SAI KUNG - PHASE 1

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/182CD/11102



沙田公園重置範圍
SHA TIN PARK RE-PROVISION AREA

工務計劃項目第4182CD號(部份) - 沙田及西貢雨水排放系統改善工程 - 第1期
PWP ITEM NO. 4182CD (PART) - DRAINAGE IMPROVEMENT WORKS IN SHA TIN AND SAI KUNG - PHASE 1

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/182CD/11103

重置及優化部分沙田公園（構思圖）

RE-PROVISION AND ENHANCEMENT OF PART OF SHA TIN PARK (ARTIST'S IMPRESSION)

註釋 ：構思圖只作展述一般佈局之用，設計因實質需要或須作出修改

NOTES : ARTIST'S IMPRESSION IS FOR GENERAL ILLUSTRATION PURPOSE ONLY AND DESIGN IS SUBJECT TO CHANGE

工務計劃項目第4182CD號（部份）- 沙田及西貢雨水排放系統改善工程 - 第1期

PWP ITEM NO. 4182CD (PART) - DRAINAGE IMPROVEMENT WORKS IN SHA TIN AND SAI KUNG - PHASE 1

渠務署

DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/182CD/16101

4183CD (part) – Drainage improvement works in Tai Po – phase 1

PROJECT SCOPE

The proposed scope of works under **4183CD** (part) comprises –

(a) construction of an underground stormwater storage tank with a capacity of 25 000 cubic metres, a stormwater pumping station and the associated above ground structure[1] at Tai Po Old Market Playground;

(b) re-provision and enhancement of part of Tai Po Old Market Playground[2];

(c) construction of stormwater drains of about 1.9 kilometres (km) long with diameters ranging from 300 millimetres to 3.2 metres (m) at Ting Kok Road, Tai Po Tai Wo Road, Chui Lok Street, Chui Wo Lane, Kau Hui Chik Street, Mei Sun Lane and Po Nga Road in Tai Po, and San Uk Pai Tsuen in Lam Tsuen Valley;

(d) improvement of existing drainage channels of about 200 m long by increasing the width from 4 m to 6 m at Sha Pa in Lam Tsuen Valley;

(e) construction of flood walls of about 1.2 km long and about 1 m tall along Lam Tsuen River in Tai Po; and

(f) carrying out ancillary works[3].

2. The layout plans, the affected area of open space to be re-provisioned and the associated artistic impression of the proposed works are at **Annexes 1 to 4 to Enclosure 7**.

---

[1] Above ground structure includes electrical and mechanical plant rooms and associated facilities.

[2] During the construction period, a basketball court, children's play facilities, elderly fitness facilities and the sundial will be temporarily closed. The above facilities will be re-provisioned and enhanced. The enhancements include diversified children's play facilities and smart fitness facilities.

[3] Ancillary works include utilities diversion, temporary closure and reinstatement of carriageways/footpaths/open space, landscaping works and other related works that are required for completion of the proposed works.

3. We plan to commence the proposed works as soon as possible upon obtaining funding approval from the Finance Committee (FC) for target completion of the above works in stages in around five years with the underground stormwater storage tank and the stormwater pumping station targeting for completion in around four and a half years. To meet the works programme, we invited tenders in parallel to enable early commencement of the proposed works. The relevant contract will be awarded only after obtaining funding approval from the FC.

4. For the remaining works[4] of **4183CD**, we will seek funding for the relevant works only after the completion of the detailed design.

JUSTIFICATION

5. Owing to the increase in surface runoff caused by continuous land development and torrential rainstorms caused by climate change, the flood risks in the vicinity of Tai Po Old Market and Lam Tsuen Valley were increased. The drainage capacity of the long-established existing stormwater drainage system in Tai Po needs to be enhanced. According to the records, flooding incidents occurred at the above-mentioned areas, causing impacts to the nearby traffic and the public.

6. We propose carrying out the proposed works mentioned in paragraph 1 above, including the construction of an underground stormwater storage tank, a stormwater pumping station, stormwater drains, flood walls and improvement of existing drainage channels. Specifically, we plan to construct an underground stormwater storage tank, a stormwater pumping station and the associated stormwater drains in Tai Po Old Market Playground. During heavy rainstorm, stormwater will be intercepted to the proposed underground stormwater storage tank for temporary storage. The stored stormwater will be discharged to Lam Tsuen River via the proposed stormwater pumping station. Upon the completion of the drainage improvement works, the drainage capacity of the drainage system concerned will be upgraded and the flood risks in the above-mentioned areas will be alleviated.

[4] The remaining works include expansion of Tai Po Market floodwater pumping station; and carrying out drainage improvement works at in Lam Tsuen Valley and Ting Kok in Tai Po and Sai Sha Road in Sai Kung.

7. To facilitate the construction of the proposed underground stormwater storage scheme, part of the facilities in Tai Po Old Market Playground will need to be temporarily closed. The affected open space will be re-provisioned and enhanced above the newly constructed underground stormwater storage tank and stormwater pumping station.

FINANCIAL IMPLICATIONS

8. We estimate the cost of the proposed works mentioned in paragraph 1 above to be about $1,360.0 million in money-of-the-day prices. The breakdown of the estimated cost in percentage is as follows –

	PWP Item No. 4183CD (part)
(a) Underground stormwater storage tank and stormwater pumping station	About 55%
(b) Drainage improvement works	About 15%
(c) Re-provision and enhancement of open space	About 10%
(d) Other cost	About 20%

PUBLIC CONSULTATION

9. We consulted the Planning, Housing and Works Committee of the Tai Po District Council on 19 July 2022. Members had no objection to the proposed works.

ENVIRONMENTAL IMPLICATIONS

10. The proposed works project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). A Preliminary Environmental Review was conducted in March 2024. It was concluded that the proposed works would not cause long-term adverse environmental impacts. The Director of Environmental Protection agreed to the above conclusion.

11. During the construction, we will also put in place various

precautionary and mitigation measures in environmental aspects, such as using quieter equipment and movable noise enclosure or noise barriers for noise control; water-spraying the construction site regularly and provision of wheel washing facilities for dust control; and collecting and treating site runoff by temporary drains before discharge for avoidance of polluting the surrounding environment. We have reserved part of the fund in the project estimate to implement the necessary environmental mitigation measures.

12. At the planning and design stages, we have considered measures to reduce generation of construction waste where possible including the use of trenchless construction to minimise the extent of excavation. In addition, we will require the contractor to reuse inert construction waste generated under this project (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimise disposal amount at the public fill reception facilities (PFRF[5]). 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.

13. At the construction stage, we will require the contractor to submit for approval a plan setting out 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 measures stipulated on 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 PFRF and landfills respectively through a trip-ticket system.

14. We estimate that the proposed works will generate about 202 000 tonnes of construction waste. Of these, we will reuse about 22 500 tonnes (about 11%) of inert construction waste on site and deliver about 175 600 tonnes (about 87%) of inert construction waste to PFRF for subsequent reuse. We will dispose of the remaining about 3 900 tonnes (about 2%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfills is estimated to be about $16.7 million for the proposed

[5] PFRF are specified in Schedule 4 of Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at PFRF requires a licence issued by the Director of Civil Engineering and Development.

works (based on a unit charge rate of $87 per tonne for disposal at PFRF and $365 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N) and Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Amendment of Schedules) Notice 2023).

HERITAGE IMPLICATIONS

15. The proposed works project will not affect any heritage sites, i.e. all declared monuments, proposed monuments, graded historic sites/buildings/structures, sites of archaeological interest, all sites/buildings/structures on the new list of proposed grading items; and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

16. The proposed works does not require resumption of private land, but require to clear about 2 300 square metres of government land. The cost of land clearance will be charged to **Head 701 – Land Acquisition**.

TRAFFIC IMPLICATIONS

17. We have conducted a traffic impact assessment (TIA) for the proposed works and the TIA indicates that the construction and operation of the proposed works will not cause any significant traffic impact on the surrounding road networks, with the implementation of appropriate temporary traffic arrangements (TTAs) and the use of trenchless construction on the road sections as needed during construction. We will establish a traffic management liaison group to discuss, scrutinise and review the TTAs proposed by the contractor with a view to minimising traffic impact arising from the proposed works. In addition, we will set up a community liaison group and telephone hotline to respond to public enquiries or complaints.

BACKGROUND

18. We have completed the detailed design of the proposed works mentioned in paragraph 1 above.

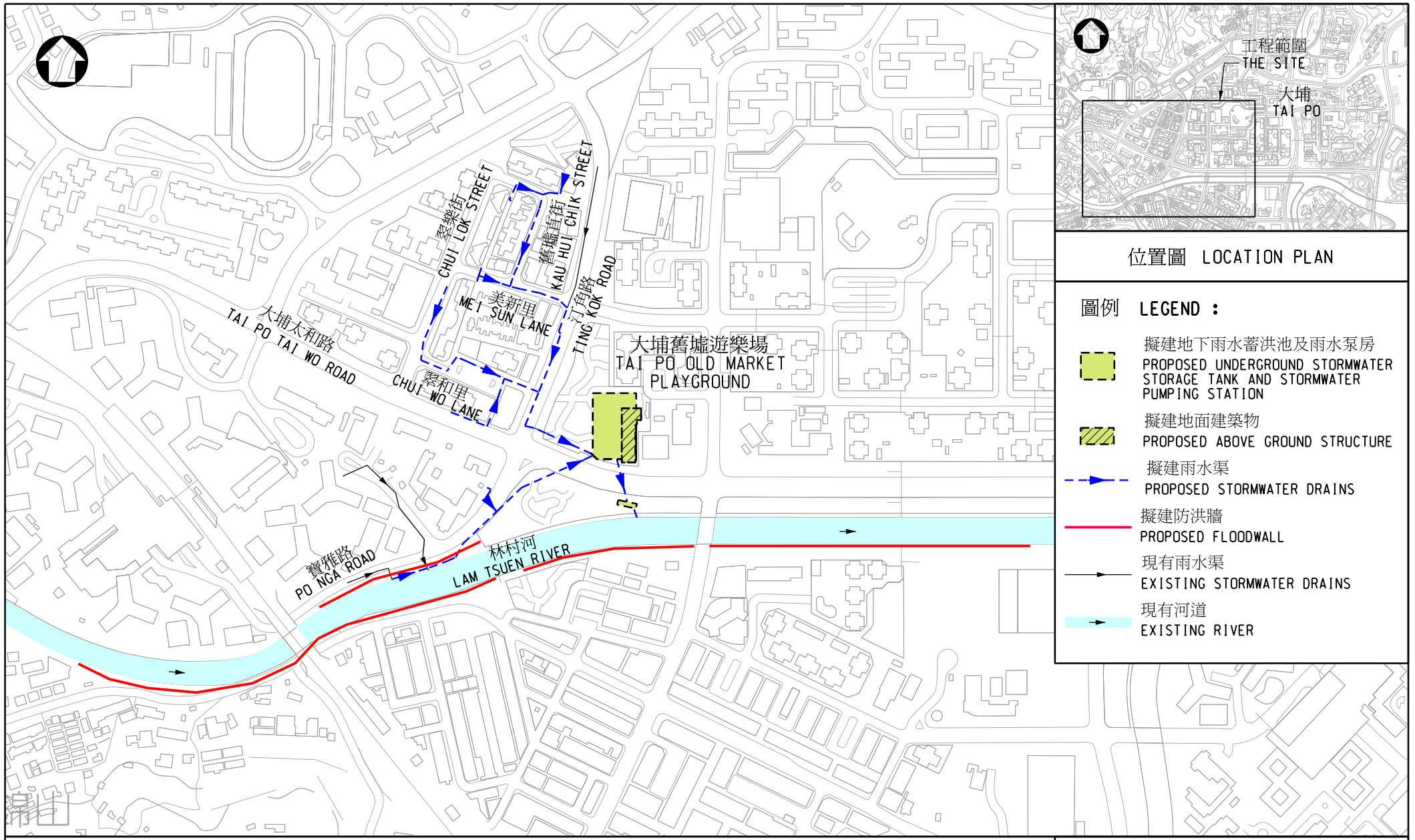
19. There are 565 trees within the proposed works boundary, of which 371 will be retained. The proposed works project will involve removal of 193 trees within the project site including three trees that are confirmed to be undesirable species among the invasive species which compensatory plant will not be carried out[6]. All trees to be removed are not trees of particular interest[7]. Compensatory planting of 190 trees will be carried out as part of the project. In addition, we will transplant one trees as part of the project.

---

[6] Pursuant to Development Bureau Technical Circular (Works) No. 4/2020, no compensatory planting is required for removal of trees of undesirable species.

[7] Trees of particular interest are defined in paragraph 3.3 of the "Guidelines for Tree Risk Assessment and Management Arrangement" promulgated by the Development Bureau. Examples of trees of particular interest are listed as below for reference:

(a) Old and Valuable Trees (OVTs) and trees that are potentially registerable in the Register of OVTs;
(b) Trees of 100 years old or above;
(c) Trees with trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with height/canopy spread equal to or exceeding 25 m;
(d) Stonewall trees or trees of outstanding form (taking account of overall tree sizes, shape and any special features);
(e) Rare tree species listed in "Rare and Precious Plants of Hong Kong" (https://www.herbarium.gov.hk/en/publications/books/book2/index.html) published by the Agriculture, Fisheries and Conservation Department;
(f) Endangered plant species protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap 586);
(g) Tree species listed in the Forestry Regulations (Cap. 96A) under the Forests and Countryside Ordinance (Cap. 96);
(h) Well-known Fung Shui trees;
(i) Landmark trees with evidential records to support the historical or cultural significance of the trees;
(j) Trees which may arouse widespread public concerns; and
(k) Trees which may be subject to strong local objections on removal.



位置圖 LOCATION PLAN

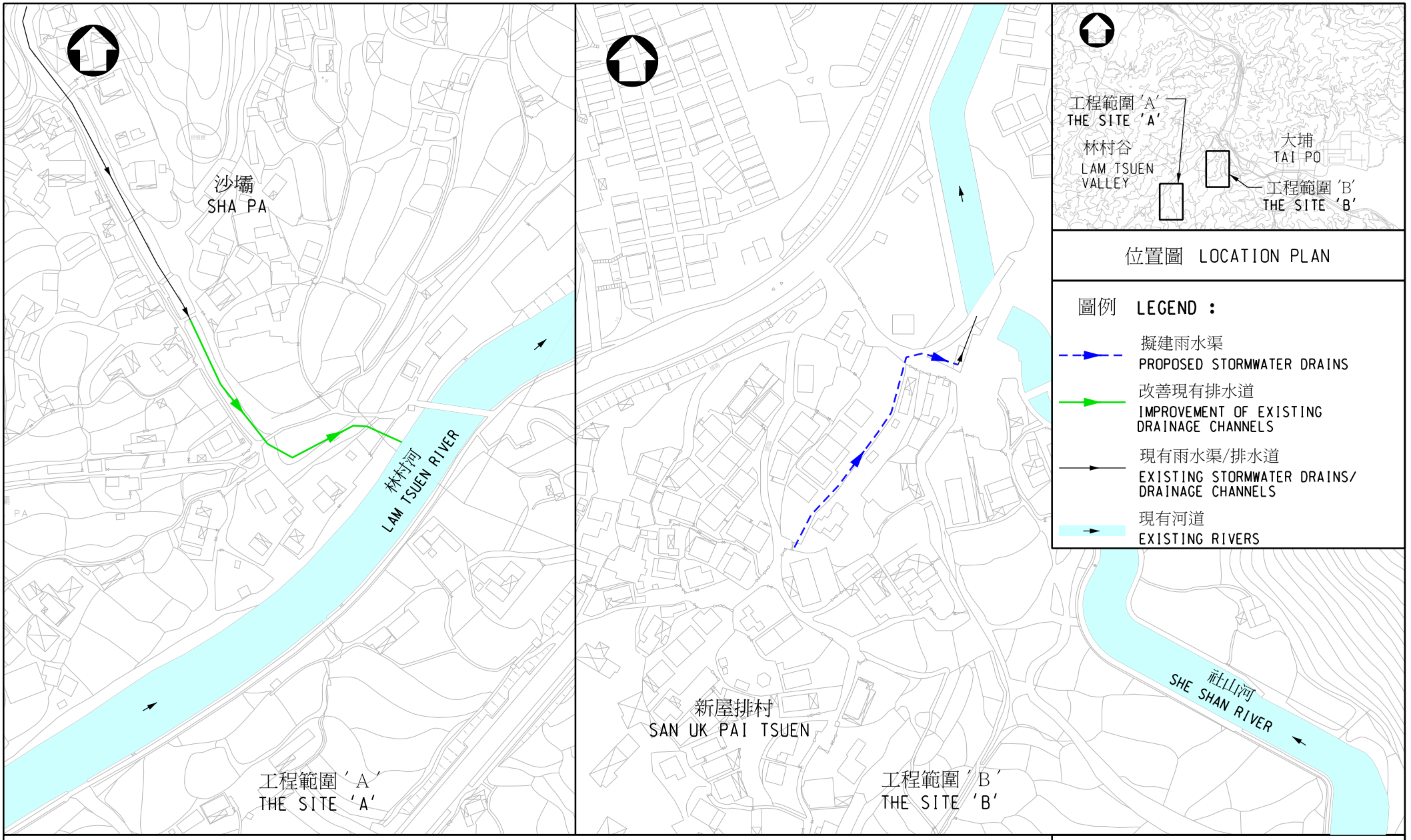
圖例 LEGEND :

- 擬建地下雨水蓄洪池及雨水泵房 PROPOSED UNDERGROUND STORMWATER STORAGE TANK AND STORMWATER PUMPING STATION
- 擬建地面建築物 PROPOSED ABOVE GROUND STRUCTURE
- 擬建雨水渠 PROPOSED STORMWATER DRAINS
- 擬建防洪牆 PROPOSED FLOODWALL
- 現有雨水渠 EXISTING STORMWATER DRAINS
- 現有河道 EXISTING RIVER

工務計劃項目第4183CD號(部份) - 大埔雨水排放系統改善工程 - 第1期
PWP ITEM NO. 4183CD (PART) - DRAINAGE IMPROVEMENT WORKS IN TAI PO - PHASE 1

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/183CD/11101



位置圖 LOCATION PLAN

圖例 LEGEND :

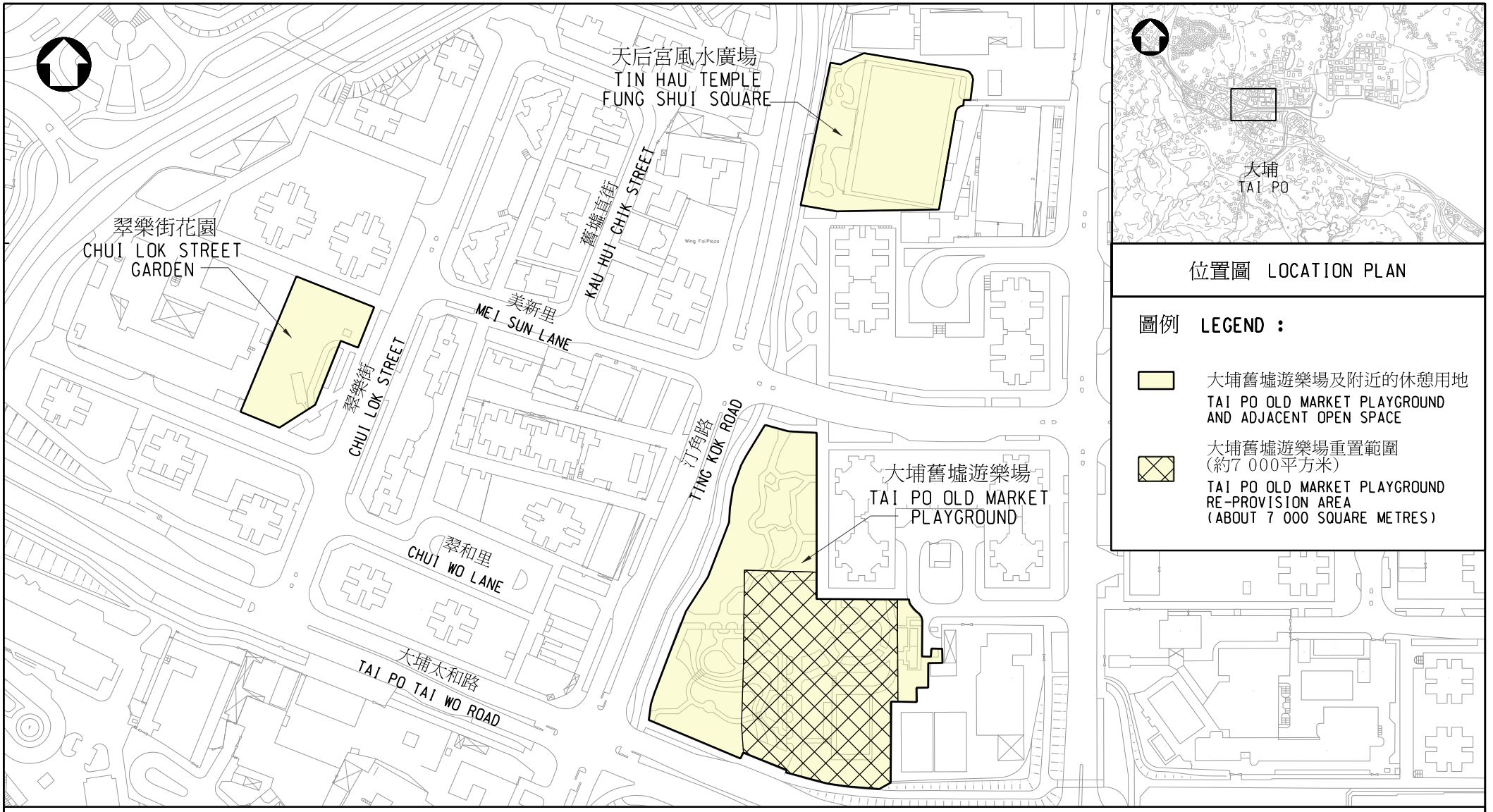
- 擬建雨水渠 PROPOSED STORMWATER DRAINS
- 改善現有排水道 IMPROVEMENT OF EXISTING DRAINAGE CHANNELS
- 現有雨水渠/排水道 EXISTING STORMWATER DRAINS/ DRAINAGE CHANNELS
- 現有河道 EXISTING RIVERS

工務計劃項目第4183CD號 (部份) - 大埔雨水排放系統改善工程 - 第1期

PWP ITEM NO. 4183CD (PART) - DRAINAGE IMPROVEMENT WORKS IN TAI PO - PHASE 1

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/183CD/11102



大埔舊墟遊樂場重置範圍

TAI PO OLD MARKET PLAYGROUND RE-PROVISION AREA

工務計劃項目第4183CD號工程計劃(部份) - 大埔雨水排放系統改善工程 - 第1期

PWP ITEM NO. 4183CD (PART) - DRAINAGE IMPROVEMENT WORKS IN TAI PO - PHASE 1

渠務署
DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/183CD/11103

重置及優化部分大埔舊墟遊樂場（構思圖）

RE-PROVISION AND ENHANCEMENT OF PART OF TAI PO OLD MARKET PLAYGROUND (ARTIST'S IMPRESSION)

註釋 ：構思圖只作展述一般佈局之用，設計因實質需要或須作出修改

NOTES : ARTIST'S IMPRESSION IS FOR GENERAL ILLUSTRATION PURPOSE ONLY AND DESIGN IS SUBJECT TO CHANGE

工務計劃項目第4183CD號（部份）- 大埔雨水排放系統改善工程 - 第1期

PWP ITEM NO. 4183CD (PART) - DRAINAGE IMPROVEMENT WORKS IN TAI PO - PHASE 1

渠務署

DRAINAGE SERVICES DEPARTMENT

圖則編號 drawing no. DDP/183CD/16103