

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 704 – DRAINAGE

Civil Engineering – Drainage and erosion protection

171CD – Revitalization of Tsui Ping River

HEAD 703 – BUILDINGS

Recreation, Culture and Amenities – Open spaces

468RO – Improvement of Lam Wah Street Playground and adjacent area

Members are invited to recommend to the Finance Committee the upgrading of **171CD** and **468RO** to Category A at estimated costs of \$1,762.7 million and \$145.5 million in money-of-the-day (MOD) prices respectively.

PROBLEM

We need to carry out the following projects to improve the environment and walkability to complement the Energizing Kowloon East Initiative in transforming Kowloon East into another Core Business District –

- (a) **171CD** to revitalize the King Yip Street Nullah into Tsui Ping River as a green river corridor that will enhance connectivity as well as flood conveyance capability; and
- (b) **468RO** to improve Lam Wah Street Playground (the Playground) and its adjacent area to enhance the provision of recreational facilities and the streetscape in the area.

/PROPOSAL

PROPOSAL

2. The Director of Drainage Services, with the support of the Secretary for Development, proposes to upgrade **171CD** to Category A at an estimated cost of \$1,762.7 million in MOD prices, for the construction works for the revitalization of the existing King Yip Street Nullah into Tsui Ping River.

3. The Director of Architectural Services, with the support of the Secretary for Development, proposes to upgrade **468RO** to Category A at an estimated cost of \$145.5 million in MOD prices for the improvement of the Playground and its adjacent area.

PROJECT SCOPE AND NATURE

——— 4. Details of the above two projects are provided at Enclosures 1 and 2 respectively.

Development Bureau
May 2019

Revitalization of Tsui Ping River

PROJECT SCOPE AND NATURE

The proposed scope of works under **171CD** comprises –

- (a) revitalization of the existing King Yip Street Nullah, comprising resurfacing of the channel, installation of a smart water gate, provision of water-friendly features, provision of a water supplement system (including modification of two underground stormwater storage tanks near Anderson Road and On Sau Road and provision of a seawater circulation system), installation of three dry weather flow interceptors, provision of a smart surveillance and weather forecast system, riverside lighting, and in-stream plantation, etc.;
- (b) dredging at the existing channel for about 800 metres in length and reconstruction/strengthening of existing nullah structures for about 740 metres in length;
- (c) construction of riverside walkways, six cross-river walkways and six landscaped decks;
- (d) modification of an existing footbridge across Lei Yue Mun Road; and
- (e) ancillary works¹.

2. A layout plan and artist's impressions showing the proposed works are at Annexes 1 and 2 to Enclosure 1 respectively.

3. Subject to the funding approval of the Finance Committee (FC), we plan to commence works in the fourth quarter of 2019 for completion in phases from the fourth quarter of 2022 to the fourth quarter of 2023.

/JUSTIFICATION

¹ Ancillary works include provision of public leisure spaces, streetscape enhancement works, landscaping works, energy conservation and green features, and associated roadworks, etc.

JUSTIFICATION

4. The existing King Yip Street Nullah in Kwun Tong was built over 50 years ago. With a length of approximately one kilometre, it runs along Tsui Ping Road and King Yip Street from Kai Lim Road to the harbour. It abuts the Kwun Tong Business Area and a residential area, having a prime geographical location. Given its riverine characteristics, the nullah possesses excellent conditions to become a precious public space in the urban area.

5. To complement the Energizing Kowloon East Initiative in transforming Kowloon East into another Core Business District, we propose to revitalize the King Yip Street Nullah into a green and vibrant Tsui Ping River with environmental, ecological and landscaping upgrading, while enhancing the flood conveyance capability of the nullah at the same time.

6. The project accords with the initiative of revitalizing suitable existing nullahs promulgated in the 2017 Policy Agenda, aiming at enhancing their ecological value, providing a greener environment, promoting water friendliness, and improving the environment for building a liveable city.

7. We will revitalize the nullah through enriching its waterscape and ambience. We will enhance the appearance and habitat of the nullah by resurfacing part of the nullah bed with natural materials and introducing aquatic plants. To manifest the characteristics of Tsui Ping River as a water body, a smart water gate that can adjust itself with tides will be installed at the downstream near Hung To Road to regulate the water level. This will create a waterfall effect when water plunges down from the water storage area. We will also provide along the riverside water-friendly features such as engineered wetland, landscaped decks and a floating pontoon. We will modify two underground stormwater storage tanks near Anderson Road and On Sau Road to supplement water to Tsui Ping River in dry weather, as necessary, in addition to natural runoff and tidal water. We will also construct three dry weather flow interceptors at King Yip Street, Wai Fat Road and Hip Wo Street to reduce polluted discharge into the river to improve water quality.

8. We will dredge the existing channel, reconstruct/strengthen the existing nullah structures to enhance structural integrity, and relocate an existing footbridge ramp above the nullah to improve flood conveyance capability.

9. In line with the concept of “Walkable Kowloon East”, riverside pedestrian walkways as well as walkways and landscaped decks spanning across

/the

the river will be constructed to enhance connectivity along the river and with the surrounding areas (including Tsui Ping River Garden). Tsui Ping River will become a green river corridor, connecting various leisure and recreational facilities in Kwun Tong. We adopt a design concept that integrates with adjacent leisure facilities, to create public leisure spaces centred on the river, for instance, by providing seating and viewing platforms on the proposed cross-river walkways and landscaped decks. We will also develop a piece of land beneath Kwun Tong Bypass adjacent to the estuary of Tsui Ping River into a public leisure space, with landscaping, seating and pet-friendly facilities for public enjoyment.

FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the proposed works to be \$1,762.7 million in MOD prices (please see paragraph 12 below), broken down as follows –

		\$ million (in MOD prices)
(a)	Revitalization of nullah	432.3
(b)	Dredging of channel and reconstruction/strengthening of nullah structures	457.1
(c)	Construction of riverside/cross-river walkways and landscaped decks	358.1
(d)	Modification of footbridge	45.0
(e)	Ancillary works	109.7
(f)	Environmental mitigation measures	17.3
(g)	Consultants' fees for	12.7
	(i) contract administration	6.7
	(ii) management of resident site staff (RSS)	6.0
(h)	Remuneration of RSS	170.3
(i)	Contingencies	160.2
Total		<hr/> 1,762.7 <hr/>

11. We propose to engage consultants to provide services for contract management and site supervision of the proposed works. A detailed breakdown of the estimates for the consultants' fees and RSS costs by man-months is at Annex 3 to Enclosure 1.

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

Year	\$ million (MOD)
2019 – 2020	1.5
2020 – 2021	80.0
2021 – 2022	290.0
2022 – 2023	540.0
2023 – 2024	500.0
2024 – 2025	140.0
2025 – 2026	120.0
2026 – 2027	91.2
	<u>1,762.7</u>

13. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2019 to 2027. We will deliver the proposed works under a New Engineering Contract (NEC)² form. The contract will provide for price adjustments.

14. We estimate the annual recurrent expenditure arising from the proposed works to be about \$7.5 million.

/PUBLIC

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

PUBLIC CONSULTATION

15. We conducted two stages of public engagement from January to March 2017 and from May to July 2018 respectively. The public generally supported the proposed works.

16. We consulted the District Facilities Management Committee of the Kwun Tong District Council on the proposed works on 12 January 2017 and 17 May 2018. The Committee supported the proposed works.

17. We also briefed the Task Force on the Kai Tak Harbourfront Development of the Harbourfront Commission on the proposed works on 13 January 2017 and 23 May 2018. The Task Force supported the proposed works.

18. We gazetted the proposed works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 9 November 2018 and received no objection. The authorization notice was gazetted on 15 February 2019.

19. We consulted the Legislative Council Panel on Development on 26 February 2019. Members generally supported the submission of this funding proposal to the Public Works Subcommittee for consideration. Some Members requested for supplementary information on the results of the revitalization of Kai Tak River in beautifying the environment and enhancing the diversity of river ecology; enforcement actions against illegal connections of sewers to stormwater drains linking the King Yip Street Nullah; a comparison of the feasibility and merits of the proposed project and the decking of the King Yip Street Nullah; and the provision of a suitable area for riding balance bikes. At the request of the Panel, we have provided supplementary information after the meeting, and included information on enforcement actions against expedient connections (ECs) of sewers to stormwater drains linking the King Yip Street Nullah in paragraphs 32 to 35 below.

ENVIRONMENTAL IMPLICATIONS

20. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We completed a Preliminary Environmental Review for the proposed works, which concluded that the proposed works would not cause any long-term adverse environmental impacts. The Director of Environmental Protection agreed to the above conclusion. We have included in the project estimates the cost for implementation of suitable mitigation measures to control short-term environmental impacts.

/21.

21. During construction, we will minimize environmental nuisances to levels within established standards and guidelines through implementation of mitigation measures in the contract. These measures include the use of temporary noise barriers, silencers, mufflers and quiet plant to reduce noise, frequent cleaning and watering of the construction site, and provision of wheel-washing facilities to reduce dust generation, and the use of temporary drains to collect site runoff for on-site treatment. We will also carry out regular site inspections to ensure that these mitigation measures and good site practices will be properly implemented on site.

22. At the planning and design stages, we have considered measures to reduce generation of construction waste where possible including using trenchless construction method to avoid excavation works as far as practicable. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimize disposal of inert construction waste at public fill reception facilities (PFRF)³. We will encourage the contractor to maximize the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further reduce generation of construction waste.

23. At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will also 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.

24. We estimate that the proposed works will generate in total about 95 500 tonnes of construction waste. Of these, we will reuse about 4 000 tonnes (4%) of inert construction waste on site and deliver about 90 000 tonnes (94%) of inert construction waste to PFRF for subsequent reuse. We will dispose of the remaining 1 500 tonnes (2%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfill sites is estimated to be \$6.7 million for the proposed works (based on a unit charge rate of \$71 per tonne for disposal at PFRF and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

/HERITAGE

³ PFRF are specified in Schedule 4 of Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in PFRF requires a licence issued by the Director of Civil Engineering and Development.

HERITAGE IMPLICATIONS

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

LAND ACQUISITION

26. The proposed works will only involve government land and do not require any land acquisition.

TRAFFIC IMPLICATIONS

27. We have conducted a traffic impact assessment (TIA) for the proposed works. The TIA indicates that the works will not cause significant traffic impact to the surrounding road network. Temporary traffic arrangements will be implemented to maintain the traffic flow during construction.

BACKGROUND

28. We upgraded **171CD** to Category B in September 2014.

29. In July 2015, we engaged consultants to carry out site investigation, surveys, impact assessments and preliminary design for the project. The cost was about \$15.4 million in MOD prices. In December 2017, we engaged consultants to carry out detailed design and further site investigation for the project. The cost was about \$14.6 million in MOD prices. They were funded under block allocation **Subhead 4100DX** “Drainage works, studies and investigations for items in Category D of the Public Works Programme”. We have substantially completed the detailed design of the proposed works.

30. Of the 329 trees within the boundary of the proposed works, there is no important tree⁴. In implementing the proposed works, 243 trees will be preserved and 86 trees will be removed, including 69 trees to be felled and 17 trees to be transplanted within the project site. We will incorporate planting proposal as part of the proposed works, including planting of 69 trees.

31. We estimate that the proposed works will create about 360 jobs (290 for labourers and 70 for professional or technical staff), providing a total employment of 15 500 man-months.

Actions Taken Against Expedient Connections in the Catchment Area

32. The Drainage Services Department (DSD) has been closely collaborating with the Environmental Protection Department (EPD) to tackle ECs in the catchment of the King Yip Street Nullah⁵ since the planning stage of the project. An extensive EC survey was jointly carried out by DSD and EPD in the catchment and its adjacent areas between 2014 and 2015. The survey identified 30 ECs, including 13 cases in the King Yip Street Nullah catchment, mainly involving residential buildings, restaurants and shops. All cases were rectified in 2016.

33. DSD has continued to facilitate EPD's investigation of illegal discharge and follow up on the EC cases referred. Between 2016 and 2018, EPD further identified 16 ECs in the Kwun Tong District, including two connecting to the King Yip Street Nullah, and 14 of them have been rectified while the remaining two cases are being dealt with.

/34.

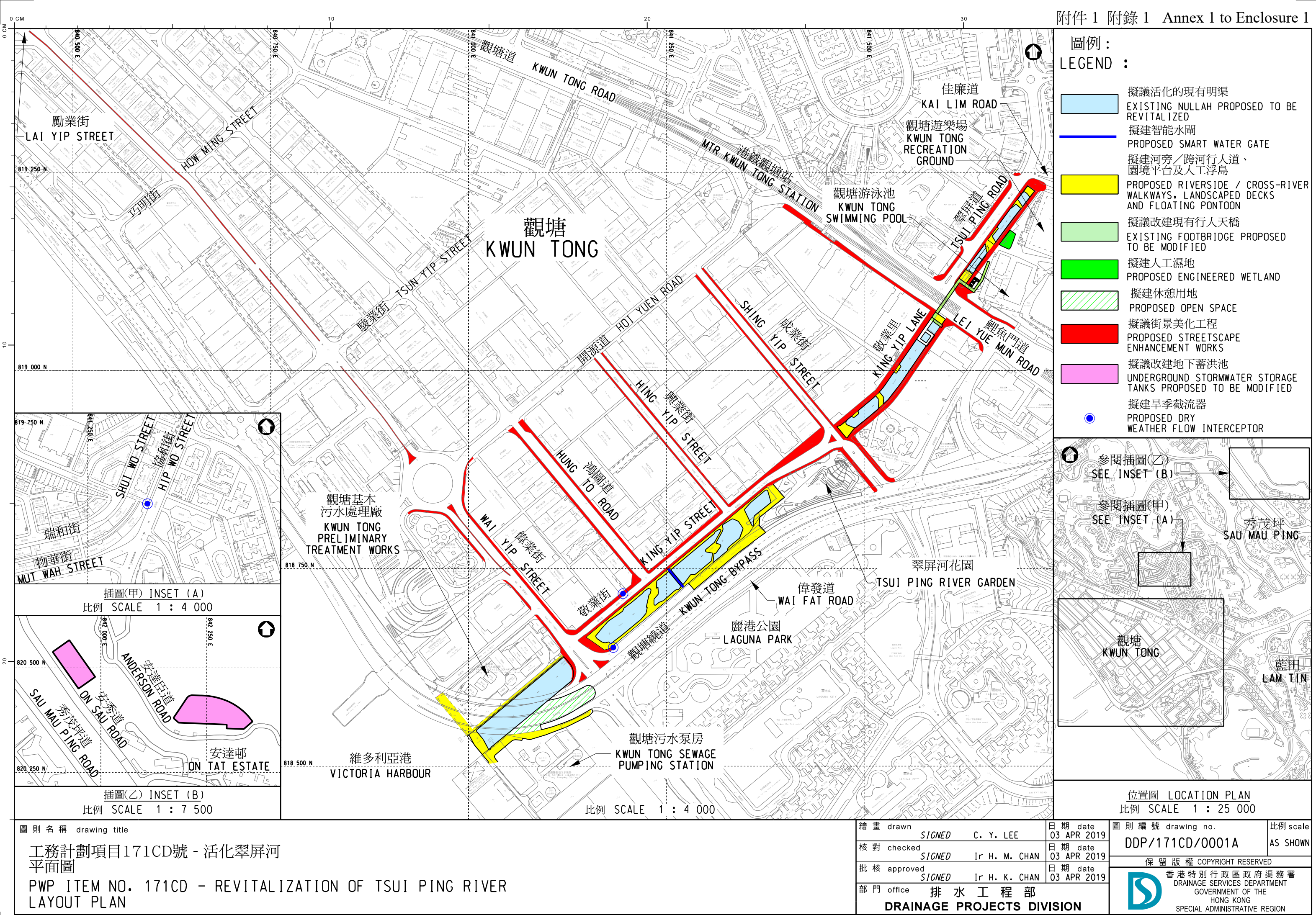
⁴ "Important trees" refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria -

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance, e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of important persons or events;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 metre (measured at 1.3 metres above ground level), or with height or canopy spread equal or exceeding 25 metres.

⁵ The catchment of the King Yip Street Nullah includes the Tsui Ping, Sau Mau Ping, Yuet Wah and Shun Tin areas, etc.

34. EPD is responsible for enforcing the Water Pollution Control Ordinance (Cap. 358) to combat illegal discharge. In following up each case, EPD will trace the discharge, identify the polluting source and gather evidence, including collecting water samples to ascertain a polluted discharge. EPD will initiate prosecution against the suspected discharger if there is sufficient evidence. For ECs in buildings, EPD will refer those cases to the Buildings Department for following up and overseeing the rectification works by the responsible parties pursuant to the Buildings Ordinance (Cap. 123).

35. Between 2014 and 2018, EPD successfully prosecuted 196 cases in the territory for violating the Water Pollution Control Ordinance. Nine of them are in the Kwun Tong District, including five cases in the King Yip Street Nullah catchment. The nine cases were mostly related to illegal discharges by construction activities and restaurants.






圖則名稱 drawing title 工務計劃項目171CD 號 - 活化翠屏河 從佳廉道望向翠屏河的構想圖 PWP ITEM NO. 171CD - REVITALIZATION OF TSUI PING RIVER ARTIST'S IMPRESSION OF TSUI PING RIVER VIEWING FROM KAI LIM ROAD	繪畫 drawn <i>SIGNED</i> W. T. CHEUNG		日期 date 30 JAN 2019	圖則編號 drawing no. DDP/171CD/0002A 保留版權 COPYRIGHT RESERVED 香港特別行政區政府渠務署 DRAINAGE SERVICES DEPARTMENT GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION	比例 scale --
	核對 checked <i>SIGNED</i> Ir H. M. CHAN		日期 date 30 JAN 2019		
	批核 approved <i>SIGNED</i> Ir H. K. CHAN		日期 date 30 JAN 2019		
	部門 office 排水工程處 DRAINAGE PROJECTS DIVISION				



圖則名稱 drawing title
工務計劃項目171CD 號 - 活化翠屏河
從翠屏河下游望向擬建智能水閘的構想圖
PWP ITEM NO. 171CD - REVITALIZATION OF TSUI PING RIVER
ARTIST'S IMPRESSION OF PROPOSED SMART WATER GATE VIEWING FROM TSUI PING RIVER DOWNSTREAM

繪 畫 drawn		日期 date		圖 則 編 號 drawing no.		比例 scale	
SIGNED W. T. CHEUNG		30 JAN 2019		DDP/171CD/0003A		- -	
核 對 checked		日期 date		保留版權 COPYRIGHT RESERVED			
SIGNED Ir H. M. CHAN		30 JAN 2019					
批 核 approved		日期 date		 香港特別行政區政府渠務署 DRAINAGE SERVICES DEPARTMENT GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION			
SIGNED Ir H. K. CHAN		30 JAN 2019					
部 門 office 排 水 工 程 部 DRAINAGE PROJECTS DIVISION							



圖則名稱 drawing title

工務計劃項目171CD 號 - 活化翠屏河
從維多利亞港望向翠屏河的構想圖
PWP ITEM NO. 171CD - REVITALIZATION OF TSUI PING RIVER
ARTIST'S IMPRESSION OF TSUI PING RIVER VIEWING FROM VICTORIA HARBOUR

繪畫 drawn	SIGNED W. T. CHEUNG	日期 date	30 JAN 2019
核對 checked	SIGNED Ir H. M. CHAN	日期 date	30 JAN 2019
批核 approved	SIGNED Ir H. K. CHAN	日期 date	30 JAN 2019
部門 office	排水工程處 DRAINAGE PROJECTS DIVISION		

圖則編號 drawing no.	比例 scale
DDP/171CD/0004	--
保留版權 COPYRIGHT RESERVED	
 香港特別行政區政府渠務署 DRAINAGE SERVICES DEPARTMENT GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION	

171CD – Revitalization of Tsui Ping River**Breakdown of the estimates for consultants' fees and resident site staff costs
(in September 2018 prices)**

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Consultants' fees for contract administration (Note 2)	Professional	-	-	-	4.0
	Technical	-	-	-	1.4
	Sub-total				5.4#
(b) Resident site staff (RSS) costs (Note 3)	Professional	590	38	1.6	77.4
	Technical	1 400	14	1.6	64.3
	Sub-total				141.7
Comprising –					
(i)	Consultants' fees for management of RSS			4.8#	
(ii)	Remuneration of RSS			136.9#	
Total					147.1

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants (as at now, MPS salary point 38 = \$81,975 per month and MPS salary point 14 = \$28,725 per month).
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **171CD**. The construction phase of the assignment will only be executed subject to FC's approval to upgrade **171CD** to Category A.
3. The actual man-months and actual costs will only be known after the completion of the construction works.

Remarks

The figures in this Annex are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 10 of the main paper.

Improvement of Lam Wah Street Playground and adjacent area

PROJECT SCOPE AND NATURE

The proposed scope of works under the project **468RO** comprises –

- (a) improvement of the Playground (Site A at Annex 1 to Enclosure 2), with an area of about 5 870 square metres (m²), which includes -
 - (i) reprovisioning of a 5-a-side soccer pitch for co-use as a handball court;
 - (ii) landscaped areas with multi-purpose lawn and tree planting;
 - (iii) a fitness corner, sitting-out areas and shelters with benches; and
 - (iv) ancillary facilities including toilets-cum-changing rooms, a baby care room, a management office, a first-aid room and Wi-Fi access points.
- (b) construction of the sitting-out area between Sheung Yuet Road and Wang Yuen Street (Site B at Annex 1 to Enclosure 2), which forms part of the Green Spine in the Kowloon Bay Business Area (KBBA), with an area of about 960 m² which includes -
 - (i) landscaped areas and tree planting;
 - (ii) shelters with benches; and
 - (iii) ancillary facilities with Wi-Fi access points.
- (c) face-lifting of a section of the pedestrian walkway between Wang Chiu Road and Wang Kwun Road (Site C at Annex 1 to Enclosure 2) and enhancement of streetscape near the Playground and the Green Spine (Site D at Annex 1 to Enclosure 2).

2. A location plan, two site plans, artist's impressions and a barrier-free access plan for the project area are at Annexes 1 to 7 to Enclosure 2 respectively.

3. Subject to funding approval by the Finance Committee, we plan to commence construction works in the fourth quarter of 2019 for completion in phases from end of 2020 to the end of 2021.

JUSTIFICATION

4. To complement the Energizing Kowloon East initiative in transforming Kowloon East into another Core Business District and to improve walkability and the pedestrian environment, the Playground and the streetscape nearby are proposed to be improved. A new sitting-out area along the Green Spine will also be provided.

5. The Playground was built in 1989 serving mainly the working population in the then industrial area. With the area transforming into a business area, the existing facilities of the Playground would need to be improved to cater for the changing needs of the community and the general public. The Playground lies along the East/West Section of the Green Spine which facilitates pedestrian movements within KBBA. Under the project, the green coverage in the Playground will be increased with more bio-diversity in the planting species. The leisure facilities in the Playground will also be enhanced, including the reprovisioning of a 5-a-side soccer pitch for co-use as a handball court, and the provision of new facilities such as a fitness corner, a multi-purpose lawn and enhanced sitting-out areas.

6. The proposed new sitting-out area at Site B will form part of the North/South Section of the Green Spine to provide more leisure space for public enjoyment. Together with the proposed greening and streetscape enhancement works near the Playground and the Green Spine and face-lifting of a section of the pedestrian walkway between Wang Chiu Road and Wang Kwun Road, the pedestrian environment in the area will be further enhanced.

/FINANCIAL

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the project to be \$145.5 million in MOD prices, broken down as follows –

	\$ million (in MOD prices)
(a) Site works	13.9
(b) Demolition	7.9
(c) Building works	20.6
(d) Building services	12.9
(e) Drainage	8.6
(f) External works	36.3
(g) Soft landscaping	7.5
(h) Energy conservation, green and recycled features	1.0
(i) Furniture and equipment ¹	0.1
(j) Streetscape enhancement works	22.0
(k) Consultants' fees for quantity surveying and tree preservation services	1.5
(l) Contingencies	<u>13.2</u>
Total	<u>145.5</u>

8. We propose to engage a consultant to undertake quantity surveying and tree preservation services under the project. A detailed breakdown of the estimate for consultants' fees is at Annex 8 to Enclosure 2. We consider the estimated project cost is comparable to those of similar projects built by the Government.

/9.

¹ The estimated cost is based on an indicative list of furniture and equipment.

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

Year	\$ million (MOD)
2019 – 2020	5.2
2020 – 2021	51.7
2021– 2022	56.6
2022– 2023	15.8
2023– 2024	10.2
2024– 2025	6.0
	<hr/>
	145.5
	<hr/>

10. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period 2019 to 2025. Subject to funding approval, we will deliver the construction works through a lump sum contract because we can clearly define the scope of works in advance. The contract will provide for price adjustments.

11. We estimate the annual recurrent expenditure arising from this project to be about \$3.6 million.

PUBLIC CONSULTATION

12. We consulted the District Facilities Management Committee of the Kwun Tong District Council (KTDC) on the project scope, conceptual layout, detailed design and implementation schedule of the project on 20 November 2014, 15 September 2016 and 15 March 2018 respectively. The project was generally supported by KTDC.

13. We consulted the Legislative Council Panel on Development on 22 January 2019. Members raised no objection to submitting the funding proposal to the Public Works Subcommittee for consideration.

/ENVIRONMENTAL

ENVIRONMENTAL IMPLICATIONS

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

15. During demolition and construction, we will control noise, dust and site run-off nuisances to levels within established standards and guidelines through implementation of mitigation measures in the relevant contract. These measures include the use of silencers, mufflers, acoustic linings or shields for noisy construction activities, frequent cleaning and watering of the site, and provision of wheel-washing facilities. We will carry out site inspections to ensure that the mitigation measures and good site practices are properly implemented.

16. At the planning and design stages, we have considered measures to reduce generation of construction waste where possible (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste on site (e.g. use of excavated materials for filling within the site) or in other suitable construction sites as far as possible, in order to minimize disposal of inert construction waste at public fill reception facilities². 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 generation of construction waste.

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

/18.

² Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

18. We estimate that the project will generate in total about 25 340 tonnes of construction waste. Of these, we will reuse about 2 180 tonnes (8.6%) of inert construction waste on site and deliver 22 600 tonnes (89.2%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 560 tonnes (2.2%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be \$1.7 million for this project (based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

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

LAND ACQUISITION

20. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

21. This project will adopt various forms of energy efficient features and renewable energy technologies, in particular photovoltaic system and solar powered light fittings.

22. The total estimated additional cost for adoption of the above features is about \$1.0 million (including \$18,000 for energy efficient features), which has been included in the cost estimate of the project. The energy efficient features will achieve 3.5% energy saving in the annual energy consumption with a payback period of about 8 years.

/BACKGROUND

BACKGROUND INFORMATION

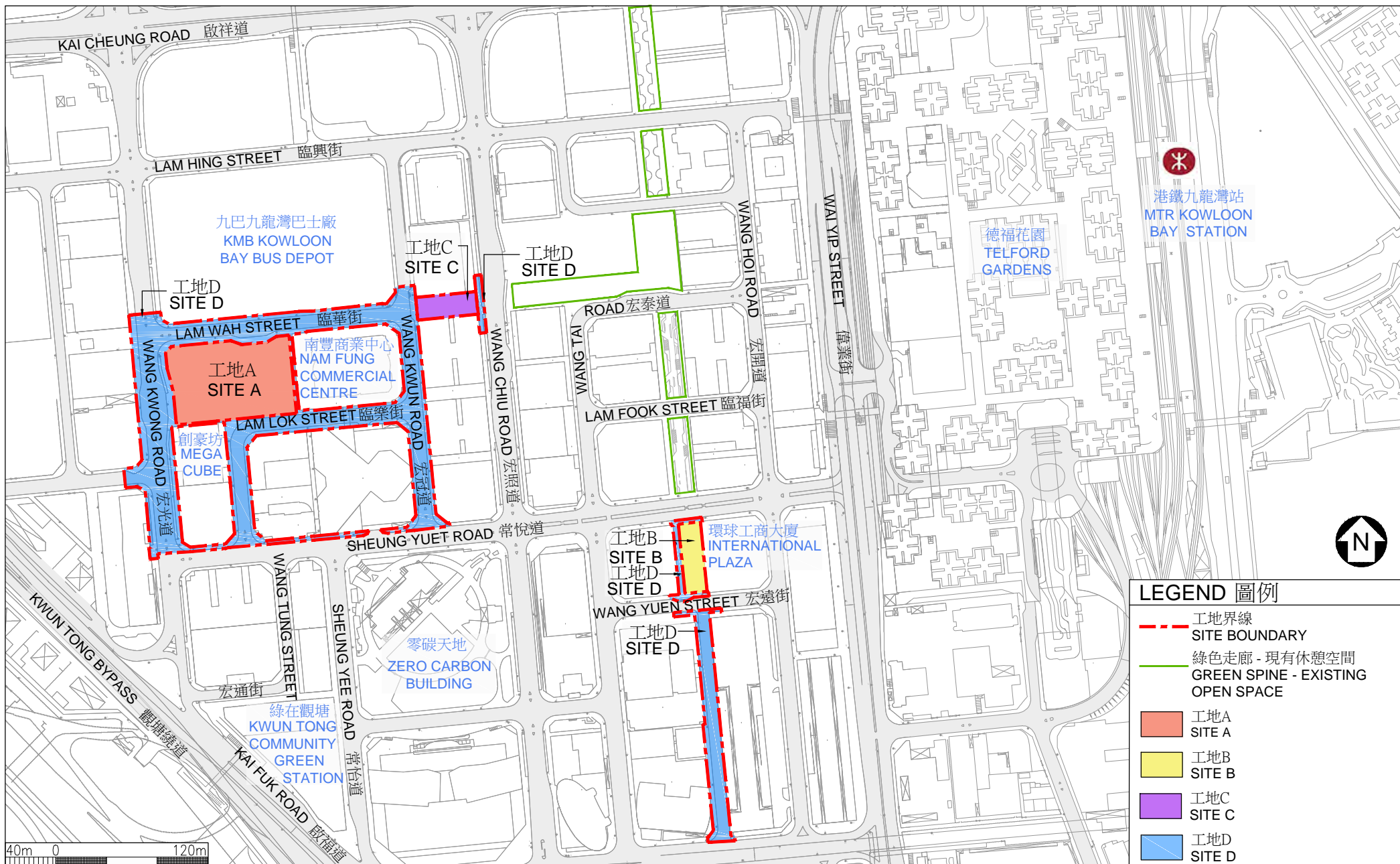
23. We upgraded **468RO** to Category B in September 2015. We engaged consultants to carry out various services including site investigation, topographic survey, tree survey, underground utility mapping, building information modelling and quantity survey services. The total cost of these services at about \$1.9 million was funded under block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fee for items in Category D of the Public Works Programme”. Except for the building information modelling and quantity survey services, all other services have been completed.

24. Of the 97 trees within the project boundary, 24 trees will be preserved. The proposed works will involve felling of 47 trees and 26 trees will be transplanted within the project site. All trees to be removed are not important trees³. We will incorporate planting proposals as part of the project, including the planting of 60 trees, 12 000 shrubs, 8 800 groundcovers and 950 m² of grassed area.

25. We estimate that the proposed works will create about 55 jobs (50 for labourers and 5 for professional or technical staff) providing a total employment of 1 200 man-months.

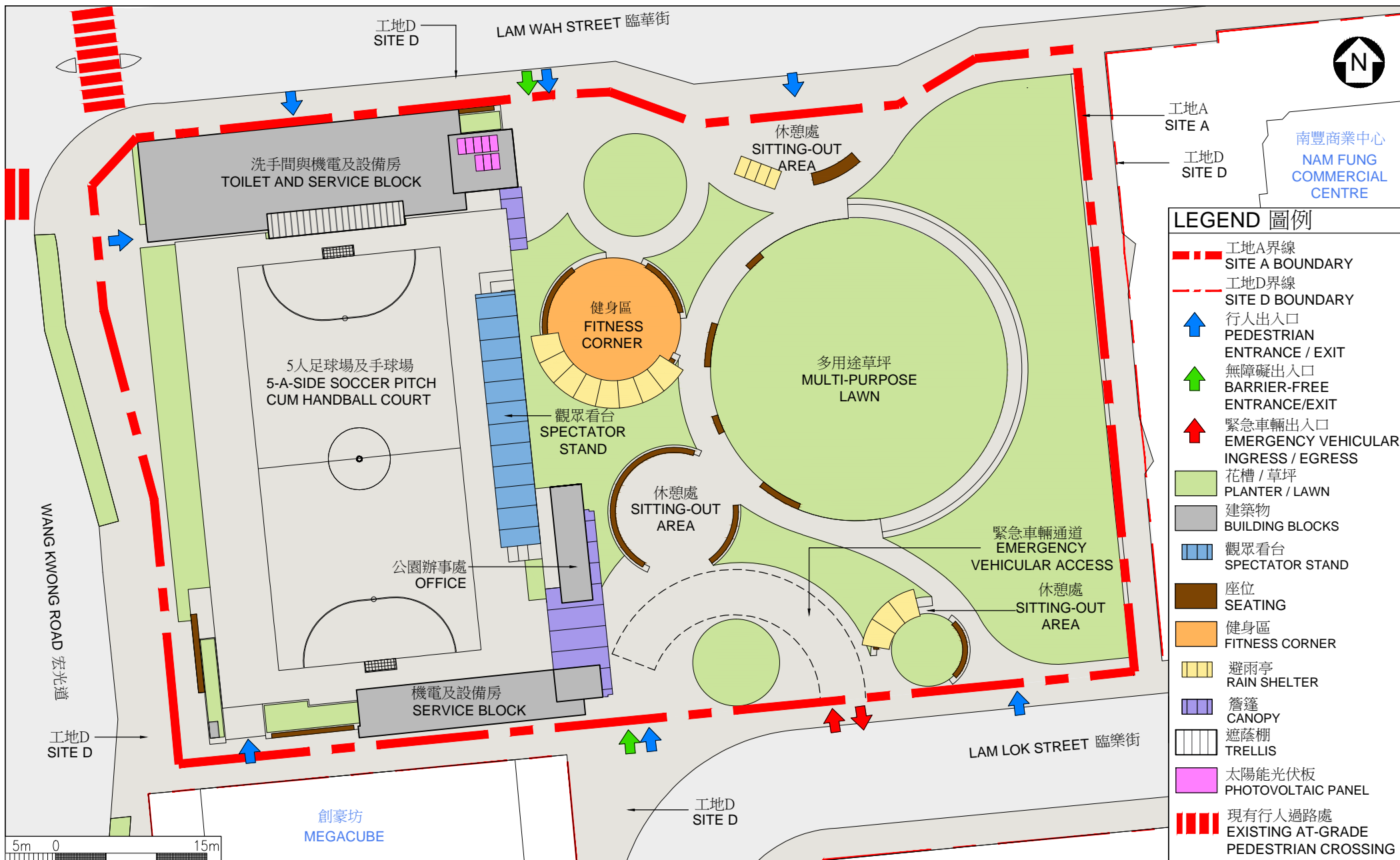
³ “Important trees” refer to trees in the Register of Old and Valuable Trees, or any trees that meet one or more of the following criteria –

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance, e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtail like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 metre (measured at 1.3 metres above ground level), or with height/canopy spread equal or exceeding 25 metres.



位置圖
LOCATION PLAN

468RO
臨華街遊樂場及其鄰近範圍改善工程
IMPROVEMENT OF LAM WAH STREET PLAYGROUND AND
ADJACENT AREA

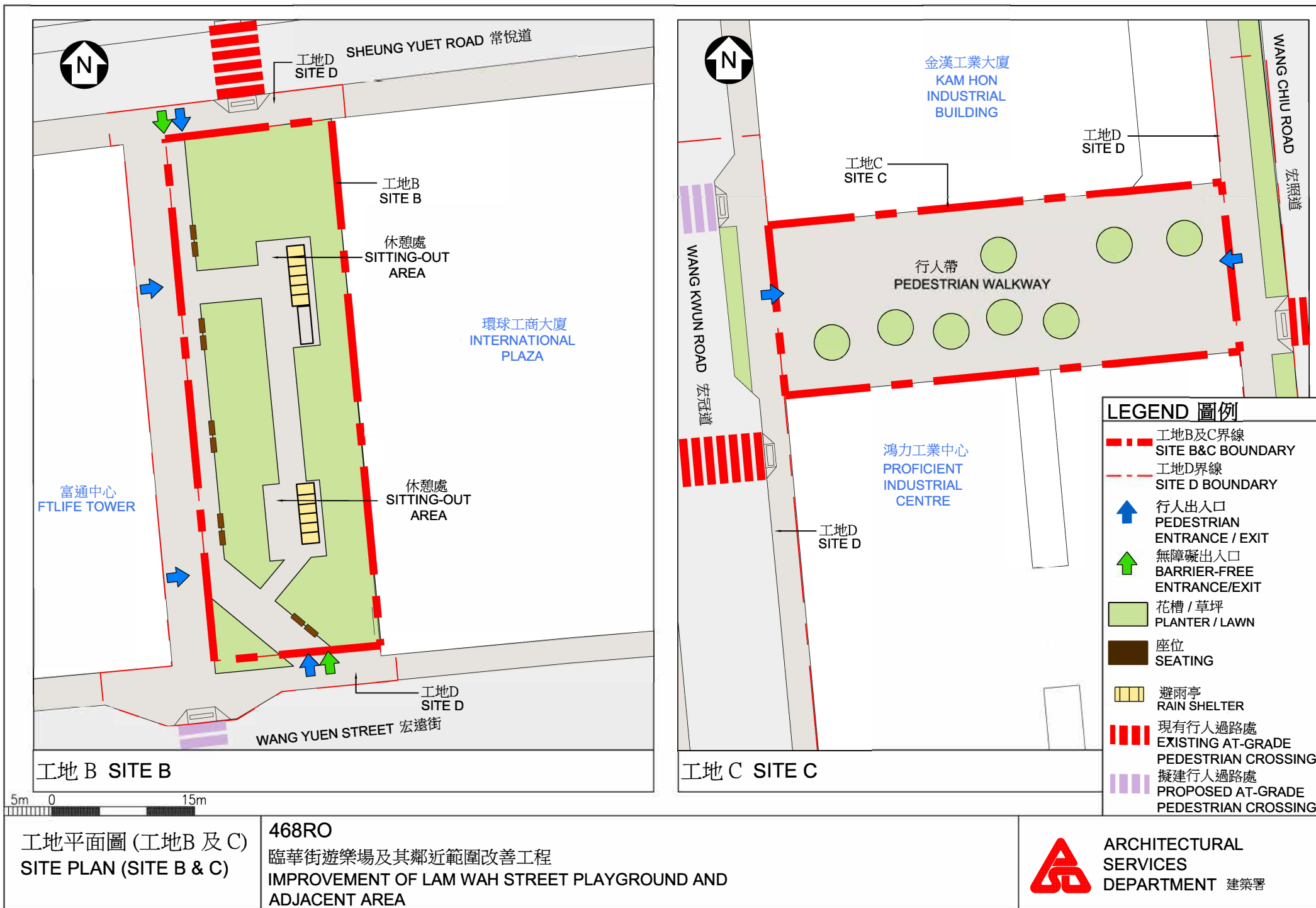


工地平面圖 (工地A)
SITE PLAN (SITE A)

468RO
臨華街遊樂場及其鄰近範圍改善工程
IMPROVEMENT OF LAM WAH STREET PLAYGROUND AND
ADJACENT AREA



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署





從西北面望向工地A之構思透視圖

PERSPECTIVE VIEW OF SITE A FROM NORTH WEST DIRECTION

構思圖

ARTIST'S IMPRESSION

468RO

臨華街遊樂場及其鄰近範圍改善工程

IMPROVEMENT OF LAM WAH STREET PLAYGROUND AND
ADJACENT AREA



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



從南面望向工地B之構思透視圖

PERSPECTIVE VIEW OF SITE B FROM SOUTH DIRECTION

構思圖

ARTIST'S IMPRESSION

468RO

臨華街遊樂場及其鄰近範圍改善工程

IMPROVEMENT OF LAM WAH STREET PLAYGROUND AND
ADJACENT AREA



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



從西面望向工地C之構思透視圖

PERSPECTIVE VIEW OF SITE C FROM WEST DIRECTION

構思圖

ARTIST'S IMPRESSION

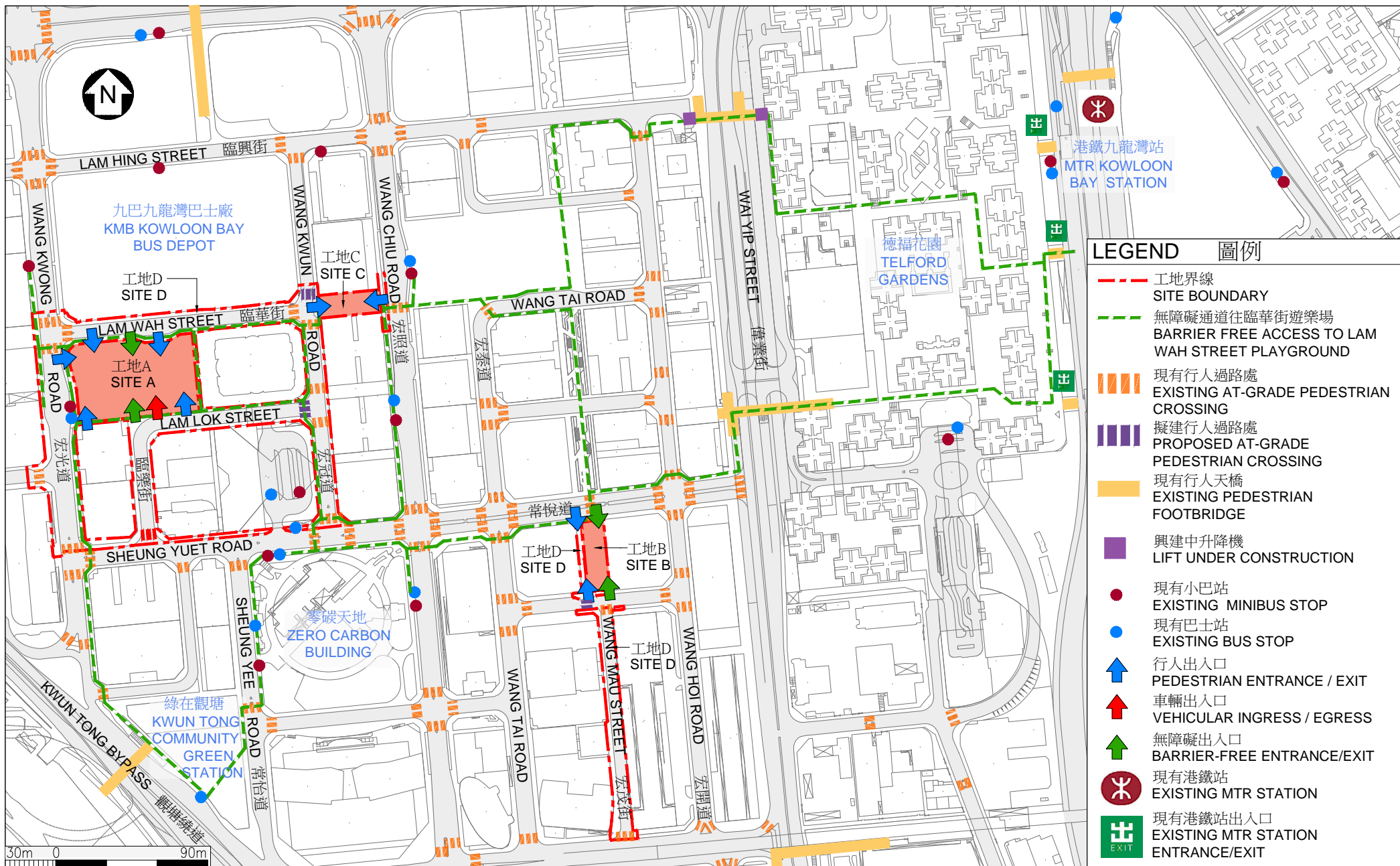
468RO

臨華街遊樂場及其鄰近範圍改善工程

IMPROVEMENT OF LAM WAH STREET PLAYGROUND AND
ADJACENT AREA



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署



無障礙通道平面圖 (工地A至D)
PLAN OF BARRIER-FREE ACCESS
(SITES A TO D)

468RO
臨華街遊樂場及其鄰近範圍改善工程
IMPROVEMENT OF LAM WAH STREET PLAYGROUND AND
ADJACENT AREA



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

Annex 8 to Enclosure 2

468RO – Improvement of Lam Wah Street Playground and adjacent area

Breakdown of the estimates for consultants' fees (in September 2018 prices)

		Estimated man- months	Average MPS* salary point	Multiplier	Estimated fee (\$ million)
(a) Consultants' fees for quantity surveying (Note)	Professional	—	—	—	0.7
	Technical	—	—	—	0.5
				Sub-total	1.2
(b) Consultants' fees for tree preservation services	Professional	—	—	—	0.1
				Total	1.3

*MPS = Master Pay Scale

Notes

The consultants' fees for quantity surveying is calculated in accordance with the existing quantity surveying consultancy agreement of 468RO. The construction phase of the assignment will only be executed subject to Finance Committee's funding approval to upgrade 468RO to Category A.