For discussion **PWSC(2024-25)21**
on 19 February 2025

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT
Civil Engineering – Land development
786CL – Tung Chung New Town Extension

Members are invited to recommend to Finance Committee ("FC") the upgrading of part of **786CL**, as **898CL** entitled "Tung Chung New Town Extension – site formation and infrastructure works (Second Phase)", to Category A at an estimated cost of $4,758.1 million in money-of-the-day ("MOD") prices.

PROBLEM

Tung Chung New Town Extension ("TCNTE") is being implemented in phases. The First Phase works[1] commenced in mid-2021. We plan to seek funding approval for the TCNTE – site formation and infrastructure works (Second Phase)" ("Second Phase works") for commencement of works in the first half of 2025 so as to support the gradual population intake in TCNTE.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Development, proposes to upgrade part of **786CL** to Category A at an estimated cost of $4,758.1 million in MOD prices for the Second Phase works of TCNTE.

/OVERVIEW …..

[1] The funding application for the First Phase works of $19,332.9 million in MOD prices was approved by the Finance Committee on 19 February 2021. For details, please refer to the Finance Committee Paper No. FCR(2020-21)88 (www.legco.gov.hk/yr20-21/english/fc/fc/papers/f20-88e.pdf).

OVERVIEW

3. The TCNTE is one of the Government's major development projects to increase land and housing supply. It covers areas on the eastern and western flanks of the existing Tung Chung New Town. The extension in Tung Chung East ("TCE") involves creation of 130 hectares ("ha") of new land from reclamation (latest development as at October 2024 is shown in the photo at **Enclosure 1**), while the extension in Tung Chung West ("TCW") (total area of about 120 ha) would involve land to be formed and developed from resumption of private lots and clearance of Government land. Upon full development, TCNTE will provide about 64 800 public/private housing units and about 877 000 square meters ("m^2") of commercial floor space, accommodating a population of about 182 000.

4. The TCE reclamation and advance works for TCNTE that commenced in 2017 were substantially completed in January 2023, i.e. six months ahead of the original schedule. The site formation and infrastructure works are implemented in three phases. The plan indicating the phasing of the works is at **Enclosure 2**. The First Phase of workscommenced in mid-2021 and by now, about half of the works has been completed. It is anticipated that full completion would be in 2028 as originally scheduled. In the meantime, sites on reclaimed land in Tung Chung East have gradually been handed over to relevant departments or organisations. The first piece of reclaimed land of about 7 ha was handed over for public housing development in March 2020. The time required from reclamation to land handover was less than 30 months. As at now, the Civil Engineering and Development Department ("CEDD") has handed over a total of 13 land parcels (about 28 ha in total) in the extension area for public housing development. Another 10 land parcels for private housing and commercial development, as well as the Tung Chung Line Extension ("TCLE") (about 21 ha in total), have also been handed over for land sale or development. The first population intake for public housing will be from 2025 onwards.

5. The Second Phase of works under current funding application mainly comprise most of the remaining infrastructure works within the extension areas such as (a) road works; (b) drainage, sewerage and water supply works; and (c) open space development and landscaping works, etc.

6. Key parameters of TCNTE development are tabulated below –

	First Phase (Funding approved by LegCo in 2021; anticipated to be completed in 2028)	**Second Phase (Current funding application)**	**Remaining Phase (Funding to be sought in the future)**	**Entire Development**
Housing yield (public housing)	About 62 400 units (about 42 300 units)	About 400 units (0 unit)	About 2 000 units (about 2 000 units)	About 64 800 units (about 44 300 units)
Planned population	About 175 000	About 2 000	About 5 000	About 182 000
Floor areas for economic uses	About 877 000 m^2	0 m^2	0 m^2	About 877 000 m^2
Private lots to be resumed[Note]	About 8 ha	About 7 ha	0	About 15 ha
Government land to be cleared	About 51 ha	About 15.4 ha	About 3.1 ha	About 69.5 ha
Households affected[Note]	2	0	0	2
Business undertakings affected[Note]	15	1	0	16

Note: The 130 ha of reclaimed land in TCE do not involve land resumption or clearance. The above figures reflect the land, households and business undertakings affected by works implemented by the Government in TCW.

PROJECT SCOPE AND NATURE

7. The proposed works of **898CL** comprises –

(i) construction of infrastructure works in TCE, including two four-span cycle track cum pedestrian bridges (about 740 metres ("m") long in total), cycle tracks of about 160 m long and noise barriers of about 600 m long;

(ii) construction of infrastructure works in TCW, including roads of about 1.7 kilometres ("km") long (including a total of about 150 m long elevated roads), footbridges of about 110 m long and cycle tracks of about 360 m long; construction of drainage system (including sustainable urban drainage system ("SUDS")), sewerage system (including three new sewage pumping stations and

/village …..

village sewerage system in eight villages within the extension area), waterworks and flood protection measures; construction of Tung Chung River Park (Phase 2); re-provisioning of Shek Mun Kap Public Toilet and refuse collection point;

(iii) construction of open space development (Stage 1) in TCE, including waterfront promenade of about 1.8 km long, cycle park cum skatepark and associated sitting-out area of about 1.6 ha, and provision of greening and landscaping facilities in open space area of about 6.7 ha; and

(iv) implementation of environmental mitigation measures and environmental monitoring and audit ("EM&A") programme as well as construction supervision for the works mentioned in paragraphs (i) to (iii) above.

8. We plan to seek funding approval in the first half year of 2025 from the FC. Subject to the FC's approval, we will commence the Second Phase works for completion in phases from 2026 to 2030. CEDD has invited tenders for the major works and the returned tender prices have been reflected in the estimated cost in this paper. The works contracts will only be awarded upon obtaining funding approval from the FC.

9. Funding for the remaining phase under **786CL** will be duly sought in future.

JUSTIFICATION

10. To support the population intake from 2025 onwards, we need to take forward the infrastructure works of the Second Phase works in the extension areas of TCE and TCW. The scope of the Second Phase works is indicated on sheet 1 of **Enclosure 3**. Details of the Second Phase works are as follows.

Infrastructure in TCE (please refer to Sheets 2 to 5 of **Enclosure 3**)

11. As residents of the extension area will gradually move in, vehicular traffic will increase accordingly. It is anticipated that the two main junctions at Ying Hei Road/Ying Tung Road and Tung Chung Waterfront Road/Yi Tung Road will start to reach full capacity in 2029 and there may then be congestion during peak hours. Therefore, we propose to construct two four-span cycle tracks cum

/pedestrian …..

pedestrian bridges[2] at the two main junctions mentioned above. By then, pedestrians could make use of the footbridge, after which the at-grade pedestrian crossing could be removed. Traffic capacity could then be enhanced as cars no longer need to wait for pedestrians to cross the street. In addition, we will construct an additional cycle track of about 160m long to optimise the cycle track network in TCE. In addition, with the increasing traffic volume on Ying Hei Road and Tung Chung Waterfront Road, the traffic noise on these road sections will also increase. According to the environmental review report of the TCNTE project, we need to implement noise mitigation measures at the above road sections, including provision of noise barriers[3] at appropriate locations and road repaving by low-noise road surfacing materials in order to avoid excessive traffic noise.

Infrastructure in TCW (please refer to Sheets 6 to 17 of **Enclosure 3**)

12. At present, there are a number of villages in the TCW extension area, which would benefit from the proposed road, sewage, drainage and other improvement works under this development project. In proximity to these villages are rivers with ecological value, including Tung Chung Bay and Tung Chung Stream. Tung Chung Stream is considered as an Ecologically Important Stream by the Agriculture, Fisheries and Conservation Department. Given that public/private housing developments would gradually be implemented here in the future, we propose to carry out a series of infrastructure works to improve the living environment and protect the water quality of the river creeks concerned.

13. As regards road improvement works, we will provide up-to-standard roads to link six existing villages (namely Shek Mun Kap Village, Ngau Au Village, Lam Che Village, Nim Yuen Village, Mok Ka Village and Shek Lau Po Village) with adjoining development sites. As such, we will construct Road L22, Road L24, Road L25, Road L26, Road L28 and Road L31 in TCW to enhance connectivity within the Tung Chung Town Centre area[4]. The total length of the above roads is about 1.7 km, including three sections of elevated roads with a total length of about 150 m across the river[5]. To tie in with the construction of Road L24, we will also construct a footbridge of about 110 m long that will connect with the existing footpaths. In addition, we need to modify the footbridge at Yu Tung Road (near Fuk Yat House of Yat Tung Estate) and replace a ramp connecting to the ground level with a lift in order to make room for the construction of Road L31. We will also provide an additional cycle track of about 360 m to optimize the cycle track network in TCW.

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[2] The relevant location plan and artistic impression are shown in Sheets 3 to 4 of **Enclosure 3**.

[3] The relevant location plan and artistic impression are shown in Sheet 5 of **Enclosure 3**.

[4] The relevant location plan is shown in Sheet 7 of **Enclosure 3**.

[5] The relevant artistic impression is shown in Sheet 8 of **Enclosure 3**.

14. To protect the water quality of the Tung Chung Stream, we will install SUDS in TCW, which includes stormwater attenuation and treatment ponds, as well as bioswales[6] and permeable pavements, in order to control the amount and improve the quality of surface runoff to be discharged into the Tung Chung Stream[7]. Besides, the eight villages located in the proximity to streams of important ecological value within the extension area (namely Wong Nai Uk Village, Ma Wan Chung Village, Shek Mun Kap Village, Ngau Au Village, Lam Che Village, Nim Yuen Village, Mok Ka Village and Shek Lau Po Village) have not yet been laid with sewers at present. Currently, villagers of these villages could only rely on individual and simple on-site facilities (such as septic tanks and soakaway systems[8]) to treat and discharge sewage. The Environmental Impact Assessment Report ("EIA") for TCNTE has recommended the provision of public sewerage systems (mainly including village sewers and sewage pumping stations) for the above villages to further reduce the discharge of pollutants into streams of important ecological value, and also to improve environmental hygiene[9]. The public sewerage systems will be extended to the development sites mentioned in paragraph 13 above.

15. In respect of the enhancement of flood resilience, the above-mentioned stormwater attenuation and treatment ponds will serve as buffers for flood prevention purpose for the Tung Chung Stream. We will also construct polders[10] of about 1.3 km long to protect the existing villages and other development sites in the vicinity. In addition, we will also upgrade the drainage and water supply systems in the extension area of TCW for the development sites mentioned in paragraph 13 above.

16. In view that the Tung Chung Stream in Tung Chung Valley has important ecological value, we are working to develop the section of Tung Chung Stream on the eastern side of Shek Lau Po into the Tung Chung River Park[11], so as to provide ecological education and recreational use for the public. The

/construction …..

[6] Different from the conventional drainage systems, bioswales utilise vegetation and the design of vegetated open channels to collect and filter surface runoff. While some of the runoff may permeate into the underground space, the remaining will flow into the stormwater attenuation and treatment ponds via the drainage systems.

[7] The relevant location plan and artistic impression are shown in Sheet 9 of **Enclosure 3**.

[8] Septic tanks and soakaway ("STS") systems operate by allowing the effluent to percolate through soil layers so that pollutants could be removed in a natural manner. However, if a STS system is located in an area where the ground water table is high, such as an area in proximity to the seaside or watercourses, it will not function properly due to ineffective percolation. There are also maintenance issues with some STS systems.

[9] The relevant location plan and artistic impression are shown in Sheet 10 of **Enclosure 3**.

[10] The relevant location plan, typical section and artistic impression are shown in Sheets 11 to 12 of **Enclosure 3**.

[11] The relevant location plan and artistic impression are shown in Sheets13 to 16 of **Enclosure 3**.

construction of Tung Chung River Park is to be implemented in two phases. The first phase of Tung Chung River Park with funding already secured is currently under construction. The first phase of works mainly involves the construction of a visitor centre and revitalisation of a channelized section of the Tung Chung Stream (about 415 m long) so as to restore the ecological connection between upstream and downstream. We propose to build the second phase of Tung Chung River Park (approximately 360 m long) at upstream area, which is where First Phase works are taking place. Such works would include the building of a pedestrian walkway, a butterfly garden and viewing platforms. This part of works would be implemented under the Second Phase works, which also aims to protect the Tung Chung Stream. The works areas will be kept away from the river as far as practicable, and excavation of the river bed will be avoided. During construction, we will implement environmental mitigation measures and EM&A programme as required under the EIA Report.

17. The proposed Road L28 will affect the existing Shek Mun Kap Public Toilet and a refuse collection point. We propose that a public toilet and a refuse collection point be reprovisioned and upgraded at the side of Road L28[12].

Open Space and Recreation Development (Stage 1) in TCE (please refer to Sheets 18 to 37 of **Enclosure 3**)

18. To provide greening and recreation facilities for residents, we propose to take forward the open space development (Stage 1) in TCE. We will provide bioswales and solar photovoltaic system to align with the development concept of smart and low-carbon community for TCNTE. The project includes extending the existing waterfront promenade at Area 52, which is about 0.4 km long, by about 1.8 km. This project would provide an open space area of about 3.8 ha at Area 16 and Area 111, another open space area of about 2.9 ha at Area 118 and a cycle park cum skatepark and associated sitting-out area of about 1.6 ha at Area 147[13]. This part of open space will provide a wide diversity of leisure and recreational facilities for people of different ages and interests. Proposed facilities include passive facilities such as waterfront promenade with viewing galleries, greening and landscaping facilities, amenity lawn, water feature, children's play area, fitness corners, etc.

19. As for the proposed active facilities, skateboarding has, since being included in the Olympic Games in Tokyo 2020, become popular among the youths, leading to an increase in demand for skateparks. Considering that the existing

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[12] The relevant location plan and artistic impression are shown in Sheet 17 of **Enclosure 3**.

[13] The relevant location plan is shown in Sheet 18 of **Enclosure 3**, and relevant location plan of cycle track network and transport facilities is shown in Sheet 24 of **Enclosure 3**.

skateparks under the Leisure and Cultural Services Department ("LCSD") are mainly located in Kowloon, New Territories East or New Territories North[14], and there is currently no cycle park in the Islands District, there is a need for a cycle park cum skatepark[15] to be built in Tung Chung. The proposed facility will include an elevated cycle track of about 500m long[16], a bicycle practising area, and an adventure cycling area to cater for different age groups and users at different levels of skills. This will help to further promote urban sports and with gradual population intake in TCNTE, residents' demand for skateparks will also increase. In relation to the facilities concerned, we have consulted relevant stakeholders, including the District Council and related sports associations, and have attained their support.

20. As for transport facilities, the cycle park cum skatepark is adjacent to a public car park with about 60 parking spaces and roadside lay-bys[17], which are being constructed under First Phase of works. The park is also adjacent to the Siu Ho Wan MTR station, which is under construction, and the public can gain access to the park by MTR in the future.

Entrusted part of the works to the MTR Corporation Limited

21. We plan to entrust the following works to the MTR Corporation Limited ("MTRCL"): (i) part of the promenade of about 100 m long near Sheraton Hong Kong Tung Chung Hotel as mentioned in paragraph 18 above; (ii) Road L31 of about 430 m long as mentioned in paragraph 13 above and (iii) the lift as mentioned in paragraph 13 above. These works are within or in close proximity to the works area of MTRCL's TCLE project. The entrustment arrangement can facilitate effective coordination between the infrastructure works required by the Government and the works under MTRCL's TCLE, and help enable early

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[14] The four existing skateparks under the LCSD are Hong Kong Velodrome Park in Sai Kung District, Lai Chi Kok Park in Sham Shui Po District, On Fuk Street Playground in North District, and Po Kong Village Road Park in Wong Tai Sin District. To accommodate the construction of the Fanling Bypass (Eastern Section) in North District, the original On Lok Mun Street Playground was permanently closed on 6 February 2023. The reprovisioned On Lok Mun Street Playground will be located about 150 m north of the original site. Its construction is expected to be completed by the second quarter of 2025.

[15] The proposed skatepark could be used by players of freestyle BMX, skateboarding, aggressive inline skating and freestyle scootering. The facilities would be of multiple uses by different extreme sports players (including skateboard players).

[16] The space underneath the elevated cycle track will provide other park facilities, including park office, toilet and changing room, bicycle rental kiosk, pedestrian walkway, seatings, etc. for better utilisation of the land.

[17] The public near cycle park can access the park by pedestrian walkway of waterfront promenade and cycle track network, while the public in adjacent areas can also drive to the park and utilise bicycle rental facilities or bring along their own equipment to the skatepark. As such, there is need to provide parking spaces.

commissioning of these public facilities. In this regard, we will reimburse MTRCL the actual cost incurred in relation to the entrustment works and on-cost for management and supervision of the entrusted works by MTRCL[18].

FINANCIAL IMPLICATIONS

22. We estimate that the total cost in MOD prices of the Second Phase works with breakdown are as follows –

			$ million (in MOD prices)
(a)	Road works		1,291.4
	i. At-grade roads	202.9	
	ii. Elevated roads	193.9	
	iii. Pedestrian bridges	674.4	
	iv. Noise barriers	116.5	
	v. Other associated works	103.7	
(b)	Drainage, sewerage and water supply works		939.8
	i. Drainage system (including drains, polder and SUDS)	426.0	
	ii. Sewerage system (including sewage pumping station, gravity sewers and rising mains)	457.2	
	iii. Water supply systems (including fresh water mains and flushing water mains)	56.6	
(c)	Open Space Development[19] and the concerned works		1,681.2
	i. Site works[20]	122.4	

/ii. …..

[18] Based on the previous arrangement, the on-cost for management and supervision of the entrusted works for Government to reimburse MTRCL will be capped at 16.5% of the cost estimate. The cost estimation under this funding application is based on this limit. The actual amount of on-cost payable to MTRCL is subject to further discussion with MTRCL with a view to minimising financial expenditure.

[19] Including open space development (Stage 1) in TCE and the second phase of Tung Chung River Park in TCW.

[20] Site works cover site clearance, temporary site hoarding, ground investigation, monitoring, etc.

			$ million (in MOD prices)
	ii. Building works	286.7	
	iii. Building services works	268.7	
	iv. Drainage works	142.9	
	iv. External works[21]	860.5	
(d)	On-cost payable to the MTRCL		27.8
(e)	Furniture and Equipment ("F&E")[22]		4.0
(f)	Environmental mitigation measures and EM&A programme		45.4
(g)	Consultants' fees		59.1
	i. Contract administration	35.9	
	ii. Supervision of Resident Site Staff ("RSS")	13.5	
	iii. EM&A programme	9.7	
(h)	Remuneration of RSS		276.9
(i)	Contingencies		432.5
	Total		4,758.1

23. We propose to engage consultants to undertake contract administration and site supervision for the construction works. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at **Enclosure 4**.

24. Subject to funding approval, we plan to phase the expenditure for Second Phase works as follows –

/Year …..

[21] External works cover outdoor flooring, pedestrian walkway, fencing, seating, children's play facilities, fitness facilities, hard and soft landscaping, etc.

[22] The estimated cost is based on an indicative list of F&E required. The cost will be provided to LCSD for the procurement of furniture and equipment for management office in the open space.

Year	$ million (in MOD Prices)
2025-26	429.5
2026-27	993.0
2027-28	1,357.7
2028-29	991.0
2029-30	585.6
2030-31	286.0
2031-32	115.3
	4,758.1

25. We have derived the MOD estimate on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period from 2025 to 2032.

26. In view of the variety of categories of the Second Phase works, we will set out in ensuing paragraphs and **Enclosure 5** details on cost estimation and measures taken at the design stage to keep the cost down.

27. The Second Phase works under this paper are divided into three major works categories – (a) road works; (b) drainage, sewerage and water supply systems; and (c) open space development and landscaping works. The three works categories altogether account for about 82% of the total cost for Second Phase works. The details are as follows –

Correspond to the items in paragraph 22 above	**Cost Estimate**	**Percentage**
(a) Road works	$1,291.4 million	27%
(b) Drainage, sewerage and water supply systems	$939.8 million	20%
(c) Open space development and the concerned works	$1,681.2 million	35%
(d) to (h)	$845.7 million	18%
(i)		
Total	$4,758.1 million	100%

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28. The unit costs for the abovementioned three works categories are provided at **Enclosure 5.** Overall speaking, the unit costs shown in the enclosure are similar to those of other projects of a similar scale, nature and works value in the past few years.

29. To contain cost and reduce expenditure, CEDD has made reference to good design practices in various projects in the detailed design stage. For examples, in the design of the two four-span cycle track cum pedestrian bridges in TCE, since lifts and staircases are provided for pedestrians, we will only provide cycle ramps without additional footpath to save cost. The cycle ramps will also be provided only in directions with high cycling flow to minimise number of cycle ramps. On the other hand, in the design of road works at Ying Hei Road and Tung Chung Waterfront Road in TCE, we have maximised the use of low noise road surfacing to reduce the extent of noise barriers. Furthermore, in the design of noise barriers and the buildings for open space development (Stage 1) in TCE (including park office, elevated cycle track, toilets, etc), we will adopt shallow foundations in lieu of pile foundation as far as possible to save construction costs.

30. CEDD will deliver the Second Phase works under works contracts using the New Engineering Contract ("NEC")[23] form.

31. We estimate the annual recurrent expenditure arising from the Second Phase works to be about $180.21 million, mainly covering the operational, management and maintenance expenses for the roadworks, open space, waterworks, drainage and sewerage facilities, etc.

PUBLIC CONSULTATION

32. The Draft Tung Chung Extension Area Outline Zoning Plan, the Draft Tung Chung Valley Outline Zoning Plan and the Draft Tung Chung Town Centre Area Outline Zoning Plan ("OZPs") have undergone statutory planning processes. In February 2017, the Chief Executive in Council ("CE in C") approved the three draft OZPs. The approved OZPs were then exhibited for public inspection on 17 February 2017.

33. We gazetted the proposed road schemes for the Second Phase works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370), as well as the proposed sewerage schemes for the Second Phase works under the Water Pollution Control (Sewerage) Regulation (Cap. 358AL) in seven packages in phases from 2022 to 2023. No objection was received for three of the packages.

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[23] NEC is a contract form that emphasizes cooperation, mutual trust and collaborative risk management between contracting parties, with provision of price adjustment.

For the remaining four packages, 253 objections were received. After resolution, objection cases have been reduced to 124. These objection cases are mainly about design and extent of works, environmental nuisance, private land resumption and the potential impact to a grave. The CE in C authorised the works in May 2024. The notices of authorisation were gazetted in June 2024.

34. We consulted the Tung Chung Rural Committee ("TCRC") and the Islands District Council ("IsDC") respectively in September 2024 regarding the Second Phase works. Both TCRC and IsDC indicated their support for our funding application and implementation of the Second Phase works.

35. We consulted the Legislative Council Panel on Development on 26 November 2024, and the Panel supported the submission of funding application to the Public Works Subcommittee ("PWSC") for consideration, and requested for more information on the scope of works and breakdown of cost estimation to be included in the funding submission. We have included the relevant information into this paper.

ENVIRONMENTAL IMPLICATIONS

36. The TCNTE project is a Designated Project under Schedule 3 of the Environmental Impact Assessment Ordinance (Cap. 499). The environmental implications of these works were covered by the EIA report approved in April 2016, and the Environmental Permit ("EP") for TCNTE was issued in August 2016. The EIA report and its subsequent review concluded that, with the implementation of the recommended mitigation measures, these works would not cause adverse environmental impacts.

37. We will implement measures and the EM&A programme recommended in the approved EIA report and its subsequent review, and to comply with relevant conditions under the EP. Key mitigation measures to be implemented during operation phase include the construction of noise barriers and use of low-noise road surfacing for roadworks, installation of deodorisers at the sewage pumping stations, adoption of noise reduction measures, prevention measures for emergency sewage bypass, etc.

38. To control short-term environmental impacts caused by the Second Phase works during construction, we will incorporate relevant conditions in the contract to require the contractors to implement environmental mitigation measures. These measures include regular watering of exposed site area to reduce emission of fugitive dust, the use of movable noise barriers and quiet plant to reduce

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noise, and the use of trucks with cover or enclosed containers for waste transportation. We have included the cost of implementing the environmental mitigation measures as well as the EM&A programme in the overall project estimates of Second Phase works.

39. At the planning and design stages, we have considered the process for all the Second Phase works and construction works, so as to reduce the generation of construction waste where possible. Moreover, we will require the contractors to reuse inert construction waste (e.g. excavated soil) on site or in other suitable construction sites as far as possible in order to minimise the disposal of inert construction waste at public fill reception facilities ("PFRF")[24]. We will encourage the contractors 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.

40. At the construction stage, we will require the contractors to submit for approval a plan setting out the waste management measure, 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 contractors to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of construction waste through a trip-ticket system.

41. We estimate that the Second Phase works will generate in total about 183 520 tonnes of construction waste. Of these, we will reuse about 65 890 tonnes (about 36%) of inert construction waste on site. We will dispose of the remaining 96 650 tonnes (53%) of inert construction waste at PFRF and 20 980 tonnes (about 11%) of construction waste at landfills. The total cost for disposal of the construction waste at PFRF and landfills is estimated to be about $11.06 million for the Second Phase works (based on a unit charge rate of $71 per tonne for disposal at PFRF and $200 per tonne for disposal at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N).

TRAFFIC IMPLICATIONS

42. The traffic impact of the TCNTE development during the construction stage will be manageable. Temporary traffic arrangements ("TTAs") will be implemented to facilitate the construction works. We will establish a Traffic Management Liaison Group ("TMLG") comprising representatives of the CEDD, the Transport Department, the Hong Kong Police Force and other /stakeholders …..

[24] PFRF are specified in Schedule 4 of the 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.

stakeholders to discuss, scrutinise and review the TTAs proposed by the contractors with a view to minimising traffic impact arising from the Second Phase works. We will maintain close contact with the TMLG members, the Islands District Office, the IsDC, public transport operators and utility undertakers. We will also consult the IsDC prior to the implementation of major TTAs for the Second Phase works. In addition, we will set up a telephone hotline to respond to public enquiries or complaints.

HERITAGE IMPLICATIONS

43. We have completed a cultural heritage impact assessment under the EIA for TCNTE. The Second Phase works would not affect heritage sites including declared monuments, proposed monuments, graded or in the new list of historic sites / buildings / structures, Government historic sites identified by Antiquities and Monuments Office and Fu Tei Wan Kiln (relocated to Tung Chung) Site of Archaeological Interest. As part of the Second Phase works will fall within the Ma Wan Chung and Sha Tsui Tau Sites of Archaeological Interest and archaeological potential areas identified by the approved EIA report, we will implement mitigation measures as recommended by the approved EIA report accordingly.

LAND ACQUISITION

44. The cost of land resumption and clearance for Second Phase works (including payment to eligible land owners and business undertakings) is estimated at about $1,094.2 million. The cost will be charged to **Head 701 – Land Acquisition**, a breakdown of which is at **Enclosure 6**. The annual cashflow will be sought separately according to established procedures together with other block allocation subheads under the Capital Works Reserve Fund.

BACKGROUND INFORMATION

45. On 27 May 2016, the FC approved the upgrading of part of **786CL** to Category A as **799CL** "Tung Chung New Town Extension – Detailed Design and Site Investigation" at an approved project estimate of $729.5 million in MOD prices for engaging consultants to undertake the detailed design and site investigation works for the TCNTE project. We have completed the site investigation and the detailed design is still in progress.

46. On 13 October 2017, the FC approved the upgrading of part of **786CL** to Category A as **814CL** "Tung Chung New Town Extension – Reclamation and Advance Works" at an approved project estimate of $20,210 million in MOD prices for the reclamation works at TCE and advance works for the TCNTE project. The reclamation works at TCE and the advance works for TCNTE commenced in 2017, and were substantially completed in January 2023.

47. On 19 February 2021, the FC approved the upgrading of part of **786CL** to Category A as **859CL** "Tung Chung New Town Extension – Site Formation and Infrastructure Works" at an approved project estimate of $19,332.9 million in MOD prices for the First Phase development of TCNTE. The works for the First Phase development commenced in mid-2021 for completion in phases from 2024 to 2028.

48. Of the 3 533 trees within the project boundary of Second Phase works, 1 737 trees will be preserved. The proposed engineering infrastructure works will affect 1 793 trees, including 1 756 trees to be felled and 37 trees to be transplanted within the project site. Besides, three trees of particular interest[25] will be affected during the implementation of the project. A summary of trees of particular interest affected is provided at **Enclosure 7**. We will incorporate planting proposals as part of the project, including estimated quantities of about 1 807 trees, 1 265 whip trees, 217 600 shrubs, 180 500 groundcovers and climbers, and 17 650m^2 of turf.

/49. …..

[25] 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 follows –

(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 the 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 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; or
(k) Trees which may be subject to strong local objections on removal.

49. We estimate that the Second Phase works will create about 740 jobs (610 for labourers and 130 for professional or technical staff) providing a total employment of about 37 980 man-months.

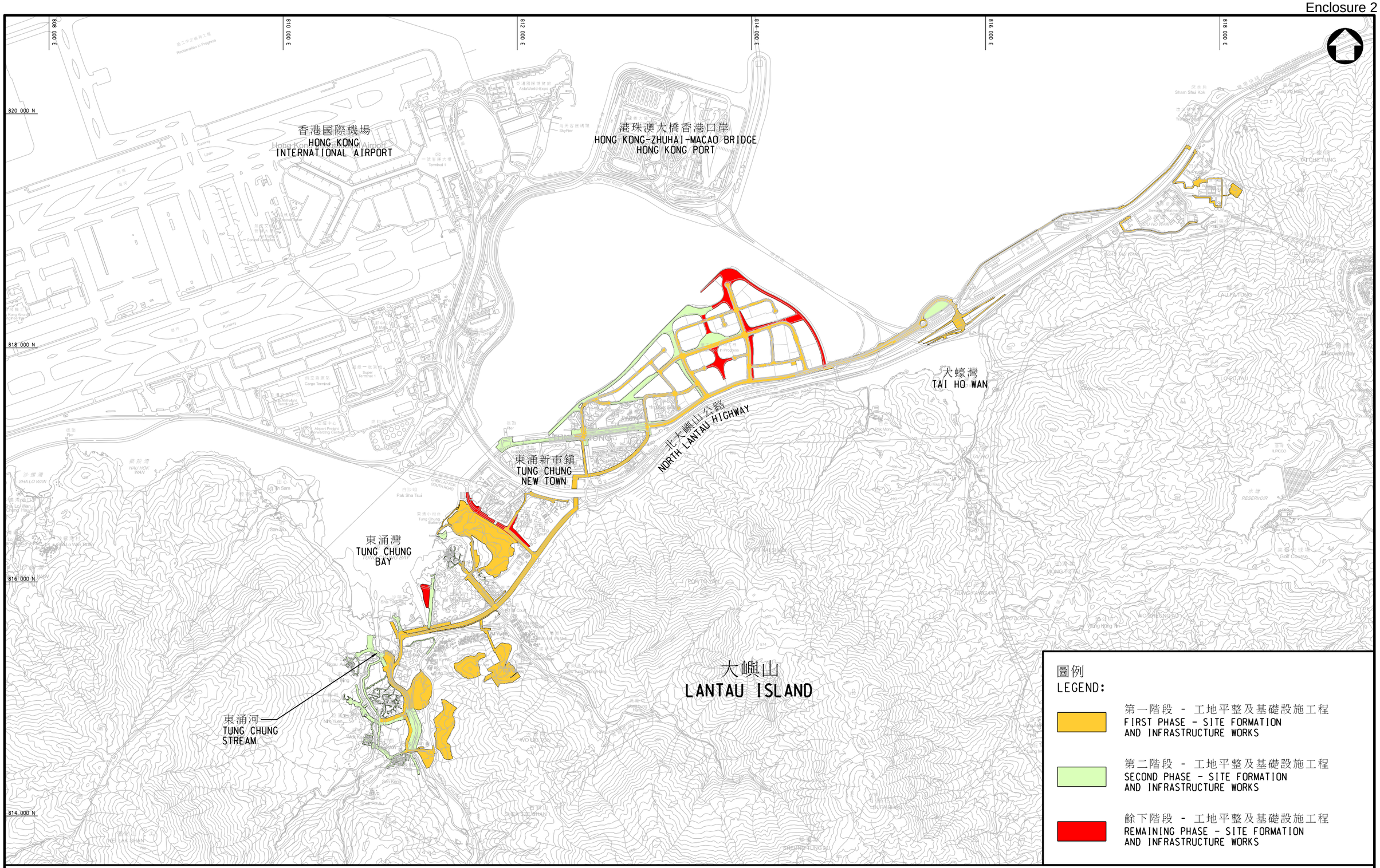
Development Bureau
February 2025



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 東涌東填海區的現況

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
CURRENT VIEW OF TUNG CHUNG EAST RECLAMATION AREA

附件 2
Enclosure 2



圖則名稱 drawing title

工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程 - 工程分期安排

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS - PHASING PLAN

SLO-Z1162B

A3 420 x 297

東涌東
TUNG CHUNG EAST

東涌西
TUNG CHUNG WEST

香港國際機場
HONG KONG INTERNATIONAL AIRPORT

東涌新市鎮
TUNG CHUNG NEW TOWN

北大嶼山公路
NORTH LANTAU HIGHWAY

大蠔灣
TAI HO WAN

東涌灣
TUNG CHUNG BAY

東涌河
TUNG CHUNG STREAM

大嶼山
LANTAU ISLAND

818 000 N
816 000 N
810 000 E
812 000 E
814 000 E
816 000 E

圖例
LEGEND:

擬議東涌東基礎設施工程
PROPOSED INFRASTRUCTURE WORKS IN TUNG CHUNG EAST

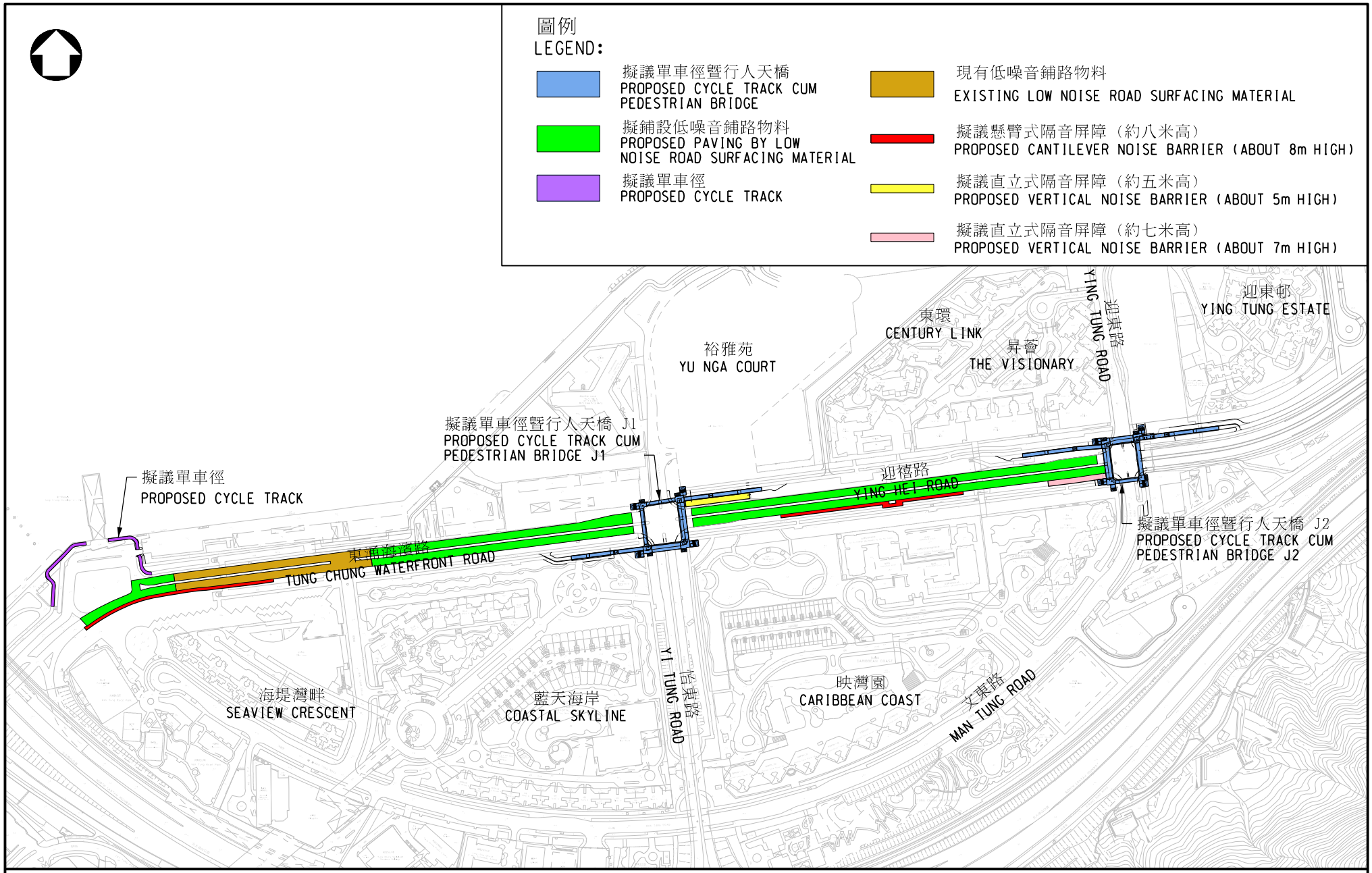
擬議東涌西基礎設施工程
PROPOSED INFRASTRUCTURE WORKS IN TUNG CHUNG WEST

擬議東涌東休憩用地（第一期）
PROPOSED OPEN SPACE IN TUNG CHUNG EAST (STAGE 1)

圖則名稱 drawing title

工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）的位置圖

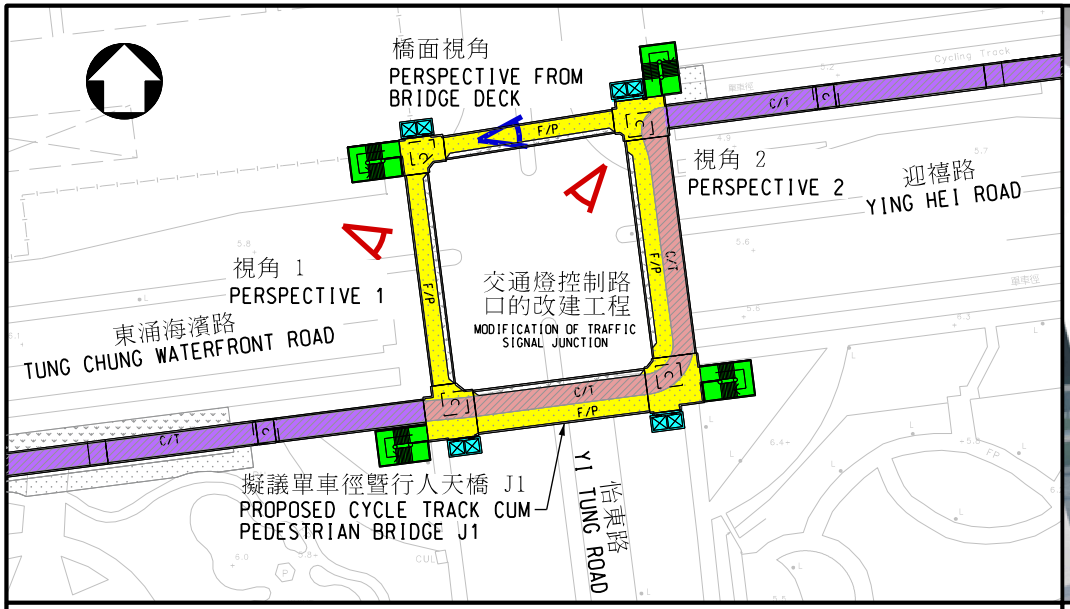
PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - LOCATION PLAN OF SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE)



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議東涌東基礎設施工程的平面圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
LAYOUT PLAN OF PROPOSED INFRASTRUCTURE WORKS IN TUNG CHUNG EAST

A4 297MM X 210MM



索引圖
KEY PLAN



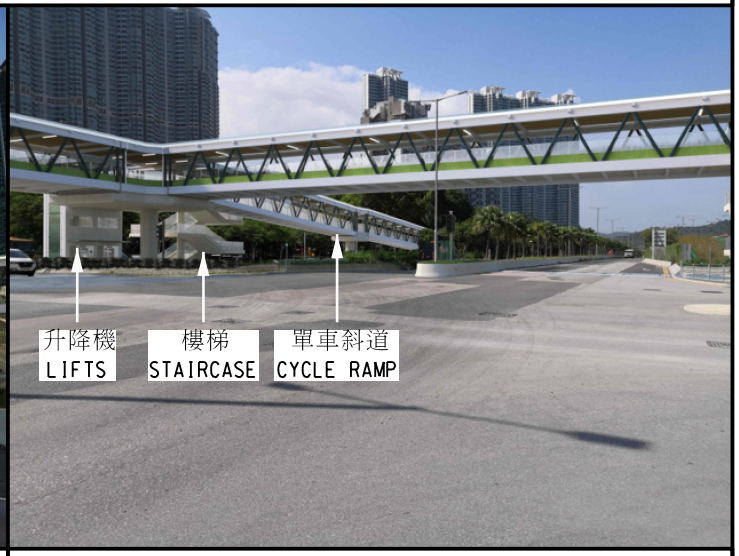
橋面視角
PERSPECTIVE FROM BRIDGE DECK

圖例
LEGEND:

- 擬議高架單車徑 PROPOSED ELEVATED CYCLE TRACK
- 擬議單車斜道 PROPOSED CYCLE RAMP
- 擬議高架行人路 PROPOSED ELEVATED FOOTPATH
- 擬議樓梯 PROPOSED STAIRCASE
- 擬議兩部升降機 PROPOSED 2 NOS. OF LIFTS



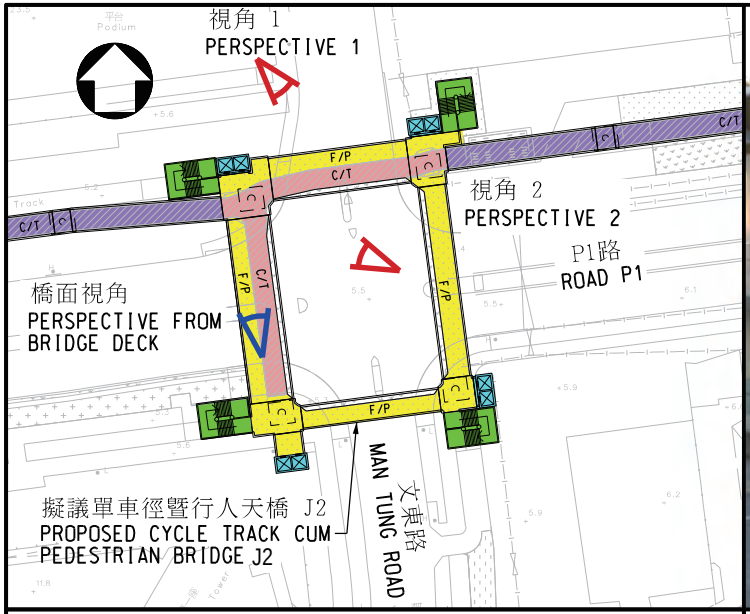
視角 1
PERSPECTIVE 1



視角 2
PERSPECTIVE 2

工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議單車徑暨行人天橋J1的平面圖及構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
LAYOUT PLAN AND ARTISTIC IMPRESSION OF PROPOSED CYCLE TRACK CUM PEDESTRIAN BRIDGE J1



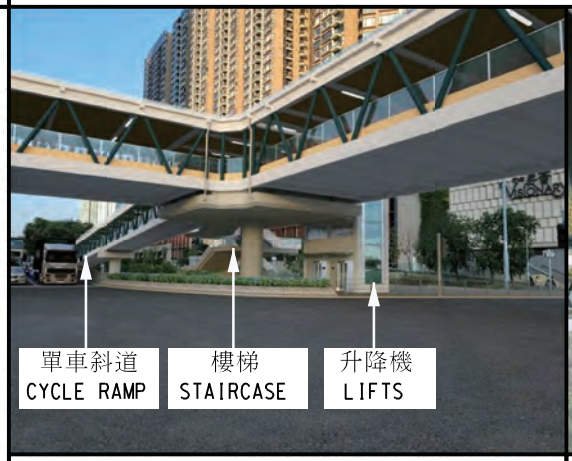
索引圖
KEY PLAN



視角 1
PERSPECTIVE 1

圖例
LEGEND:

- 擬議高架單車徑 PROPOSED ELEVATED CYCLE TRACK
- 擬議單車斜道 PROPOSED CYCLE RAMP
- 擬議高架行人路 PROPOSED ELEVATED FOOTPATH
- 擬議樓梯 PROPOSED STAIRCASE
- 擬議兩部升降機 PROPOSED 2 NOS. OF LIFTS



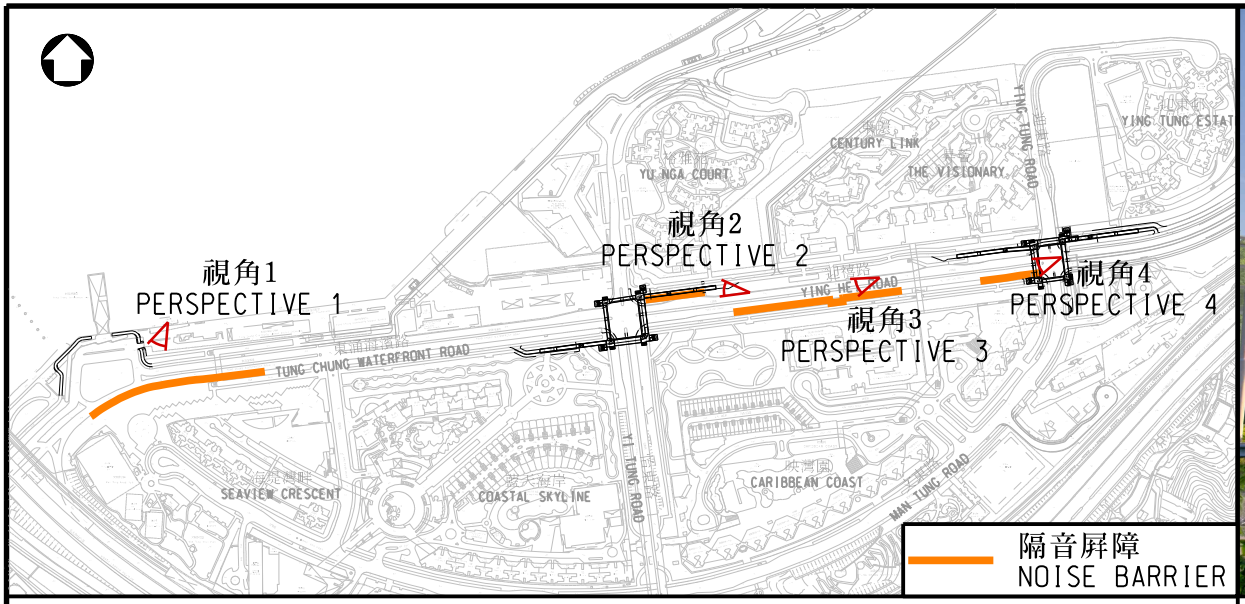
視角 2
PERSPECTIVE 2



橋面視角
PERSPECTIVE FROM BRIDGE DECK

工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議單車徑暨行人天橋J2的平面圖及構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
LAYOUT PLAN AND ARTISTIC IMPRESSION OF PROPOSED CYCLE TRACK CUM PEDESTRIAN BRIDGE J2



索引圖
KEY PLAN



視角1
PERSPECTIVE 1



視角2
PERSPECTIVE 2



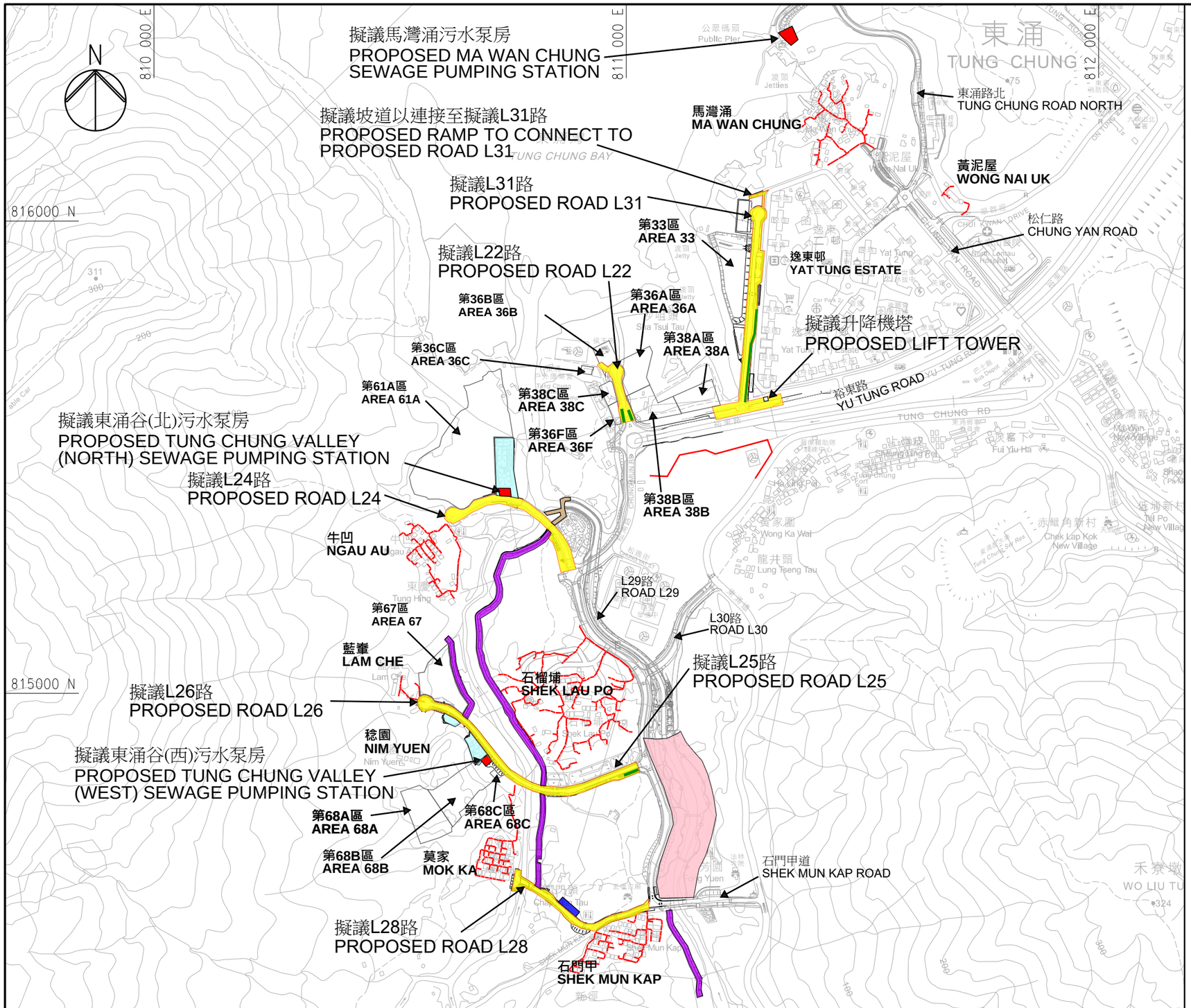
視角3
PERSPECTIVE 3



視角4
PERSPECTIVE 4

工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程(第二階段) - 擬議隔音屏障的平面圖及構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE)
- LAYOUT PLAN AND ARTISTIC IMPRESSION OF PROPOSED NOISE BARRIERS



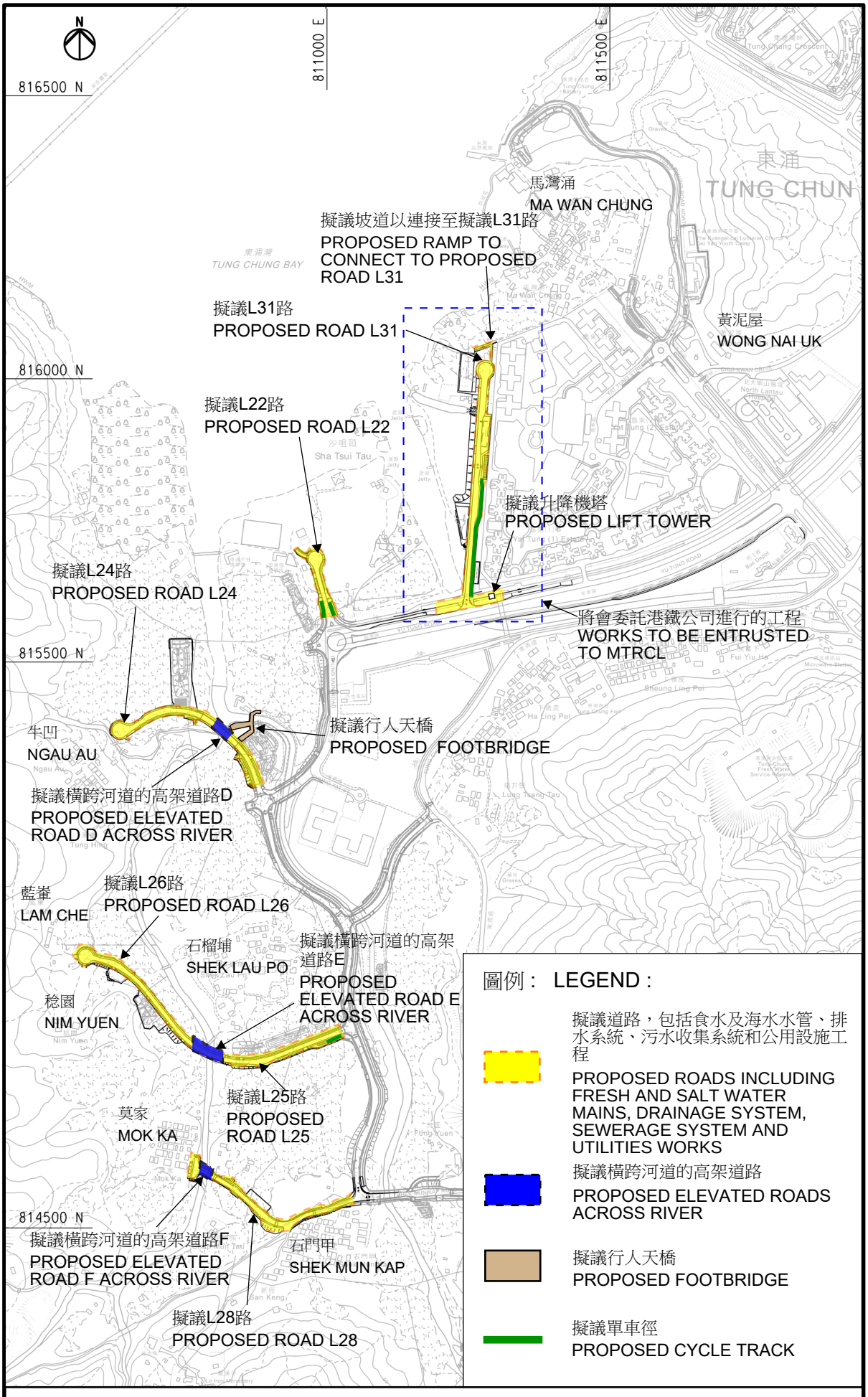
圖例： LEGEND :

- 擬議道路，包括食水及海水水管、排水系統、污水收集系統和公用設施工程
  PROPOSED ROADS INCLUDING FRESH AND SALT WATER MAINS, DRAINAGE SYSTEM, SEWERAGE SYSTEM AND UTILITIES WORKS
- 擬議行人天橋
  PROPOSED FOOTBRIDGE
- 擬議單車徑
  PROPOSED CYCLE TRACK
- 擬議污水收集系統
  PROPOSED SEWERAGE SYSTEM
- 擬議污水泵房
  PROPOSED SEWAGE PUMPING STATION
- 擬議東涌河公園(第二期)
  PROPOSED TUNG CHUNG RIVER PARK (PHASE 2)
- 擬議雨水滯留及處理池
  PROPOSED STORMWATER ATTENUATION AND TREATMENT POND
- 擬議堤堰
  PROPOSED POLDER
- 擬議重置石門甲的公廁和垃圾收集站
  PROPOSED REPROVISION OF SHEK MUN KAP PUBLIC TOILET AND REFUSE COLLECTION POINT

工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議東涌西基礎設施工程的平面圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) - LAYOUT PLAN OF PROPOSED INFRASTRUCTURE WORKS IN TUNG CHUNG WEST

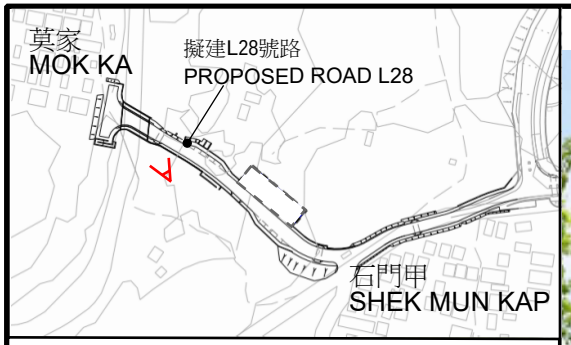
A3 297MM X 420MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 東涌西擬議道路工程的平面圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) - LAYOUT PLAN OF PROPOSED ROADWORKS IN TUNG CHUNG WEST

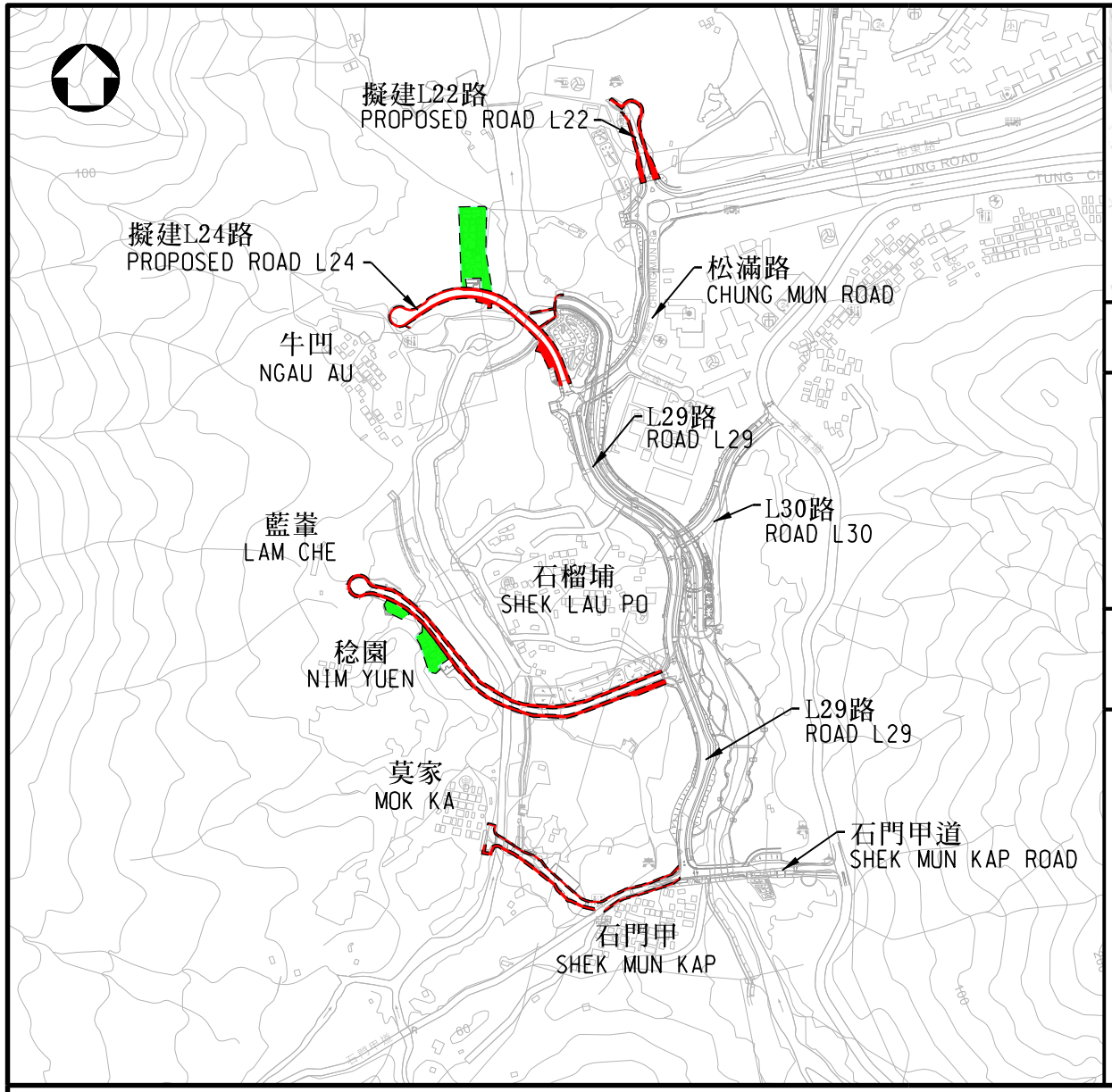
A4 210MM X 297MM

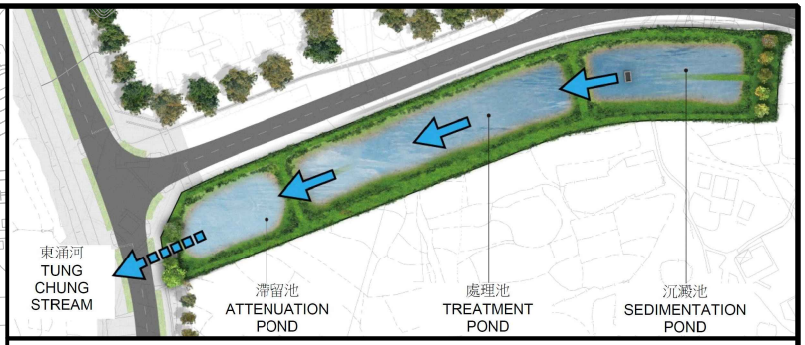


索引圖 KEY PLAN

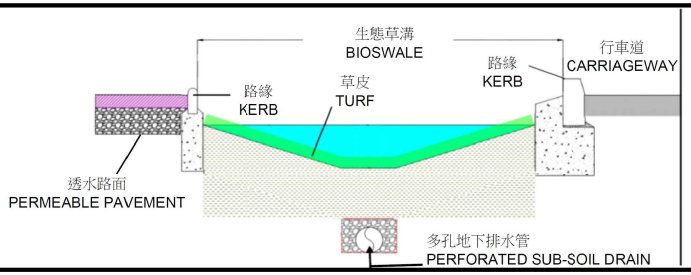
工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議高架道路的構想圖
PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED ELEVATED ROAD

A4 297 x 210





擬議雨水滯留及處理池
PROPOSED STORMWATER ATTENUATION AND TREATMENT POND



擬議路邊可持續城市排水系統（生態草溝 / 透水路面）
PROPOSED ROADSIDE SUDS (WITH BIOSWALE / PERMEABLE PAVEMENT)

圖例
LEGEND:

擬議雨水滯留及處理池
PROPOSED STORMWATER ATTENUATION AND TREATMENT POND

擬議路邊可持續城市排水系統
(生態草溝/透水路面)
PROPOSED ROADSIDE SUDS
(WITH BIOSWALES / PERMEABLE PAVEMENT)

圖則名稱 drawing title

工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議可持續城市排水系統的平面圖及構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
LAYOUT PLAN AND ARTISTIC IMPRESSION OF PROPOSED SUSTAINABLE URBAN DRAINAGE SYSTEM (SUDS)

SLO-ZH79 A4 297 x 210



擬議馬灣涌污水泵房的構想圖

ARTISTIC IMPRESSION OF PROPOSED MA WAN CHUNG SEWAGE PUMPING STATION



擬議東涌谷(北)污水泵房的構想圖

ARTISTIC IMPRESSION OF PROPOSED TUNG CHUNG VALLEY (NORTH) SEWAGE PUMPING STATION



擬議東涌谷(西)污水泵房的構想圖

ARTISTIC IMPRESSION OF PROPOSED TUNG CHUNG VALLEY (WEST) SEWAGE PUMPING STATION

圖例： LEGEND:

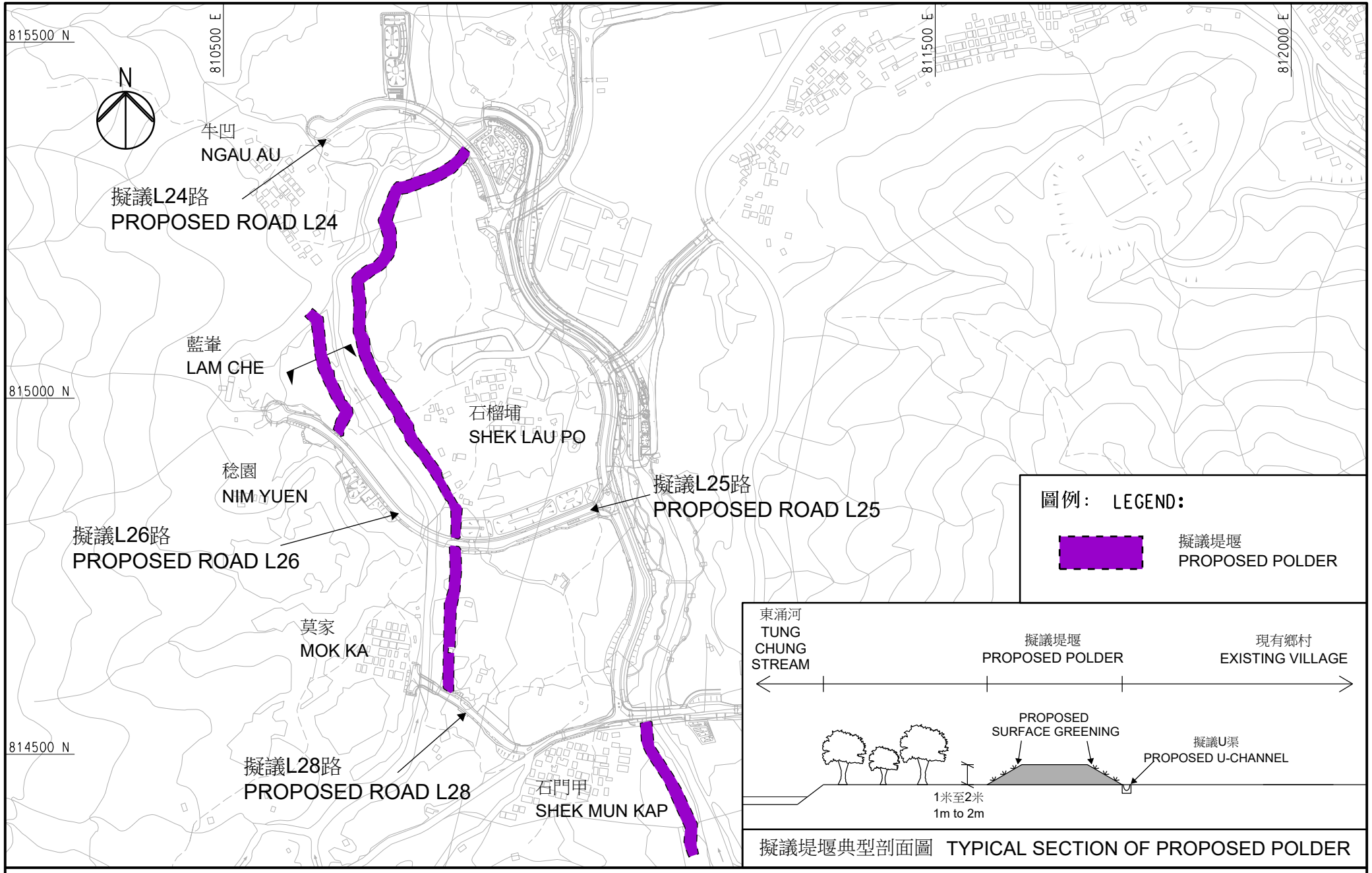
擬議污水收集系統
PROPOSED SEWERAGE SYSTEM

擬議污水泵房
PROPOSED SEWAGE PUMPING STATION

工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議排污設備工程的平面圖及構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) - LAYOUT PLAN AND ARTISTIC IMPRESSION OF PROPOSED SEWERAGE WORKS

A4 210MM X 297MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議堤堰的平面圖及剖面圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
LAYOUT PLAN AND TYPICAL SECTION OF PROPOSED POLDER

A4 297MM X 210MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議堤堰的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED POLDER

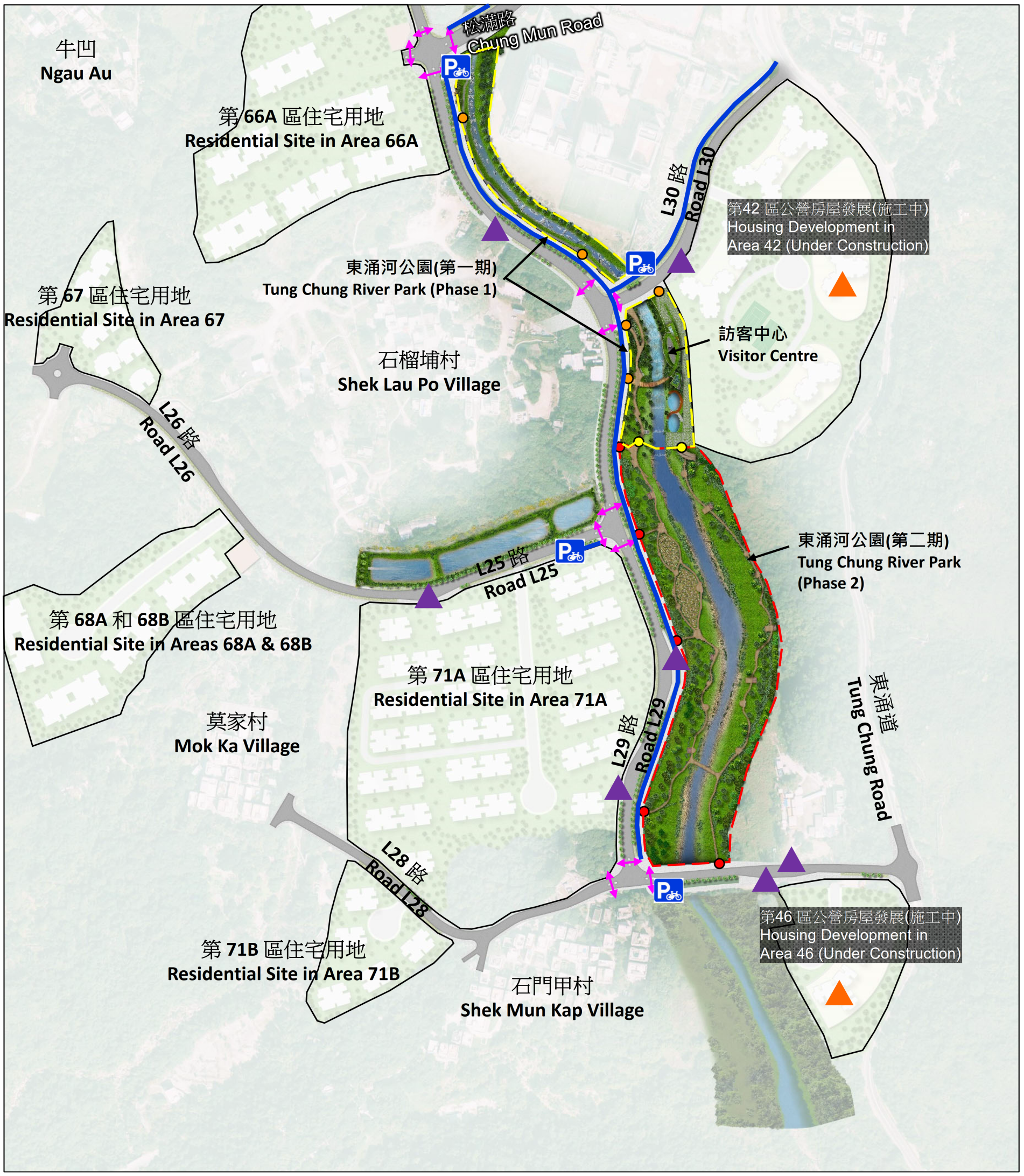
A4 297 x 210



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議東涌河公園(第二期)的平面圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) - LAYOUT PLAN OF PROPOSED TUNG CHUNG RIVER PARK (PHASE 2)

A3 297 x 420



圖例 :
Legend :

- 擬議出入口 Proposed Entrance / Exit
- 擬議第二期的出入口 Proposed Entrance / Exit of Phase 2
- 擬議維護/緊急使用閘門 Proposed Gate for maintenance / emergency use
- 擬議單車徑 Proposed Cycle Track
- 擬議單車泊位處 Proposed Cycle Parking
- 擬議停車灣 Proposed Lay-bys
- 擬議訪客車位 Proposed Visitor Parking
- 擬議行人過路處 Proposed Pedestrian Crossing

工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）-
擬議東涌河公園(第二期)及鄰近範圍的平面圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
LAYOUT PLAN OF PROPOSED TUNG CHUNG RIVER PARK (PHASE 2) AND ADJACENT AREA

A3 297 x 420



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議東涌河公園(第二期)的構想圖(行人步道及觀景平台)

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED TUNG CHUNG RIVER PARK (PHASE 2)(PEDESTRIAN WALKWAY AND VIEWING PLATFORMS)

A4 297 x 210

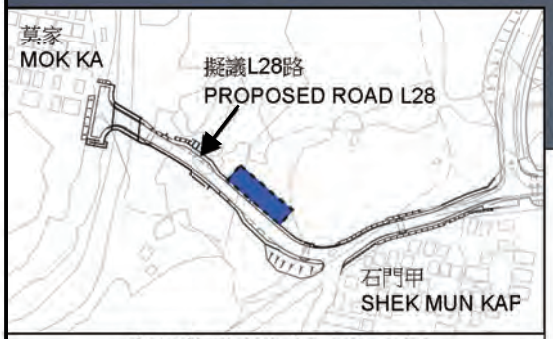


工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議東涌河公園(第二期)的構想圖(蝴蝶花園)

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED TUNG CHUNG RIVER PARK (PHASE 2)(BUTTERFLY GARDEN)

A4 297 x 210





索引圖 KEY PLAN

圖例： LEGEND:

擬議重置石門甲的公廁和垃圾收集站
PROPOSED REPROVISION OF SHEK MUN KAP PUBLIC TOILET AND REFUSE COLLECTION POINT

工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議重置石門甲的公廁和垃圾收集站的平面圖及構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
LAYOUT PLAN AND ARTISTIC IMPRESSION OF PROPOSED REPROVISION OF SHEK MUN KAP PUBLIC TOILET AND REFUSE COLLECTION POINT

A4 297MM X 210MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 東涌東休憩用地（第一期）的位置圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE)-
LOCATION PLAN OF OPEN SPACE IN TUNG CHUNG EAST (STAGE 1)

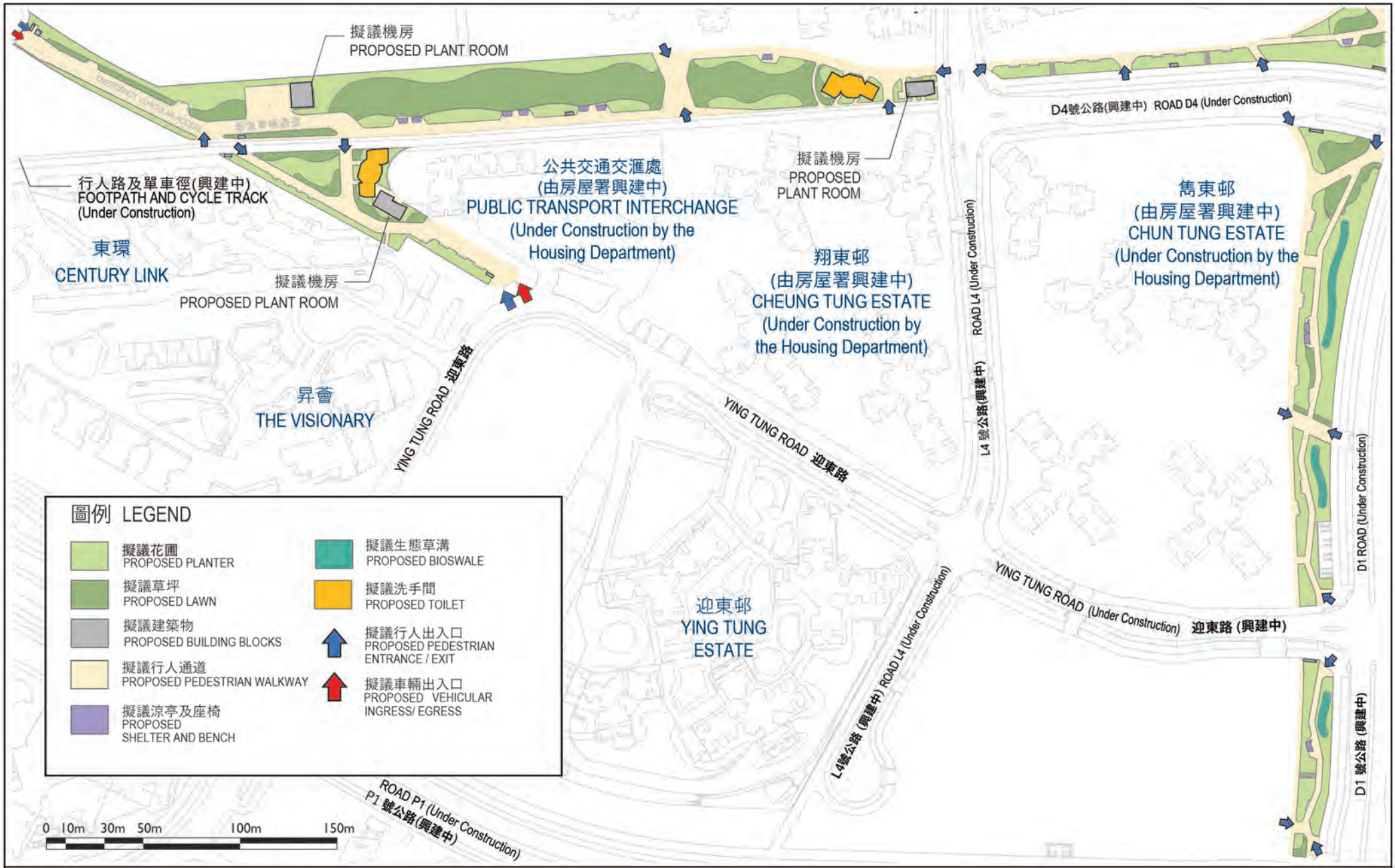
A4 297MM X 210MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 東涌東休憩用地（第一期）的平面圖1A及1B

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
LAYOUT PLANS 1A AND 1B OF OPEN SPACE IN TUNG CHUNG EAST (STAGE 1)

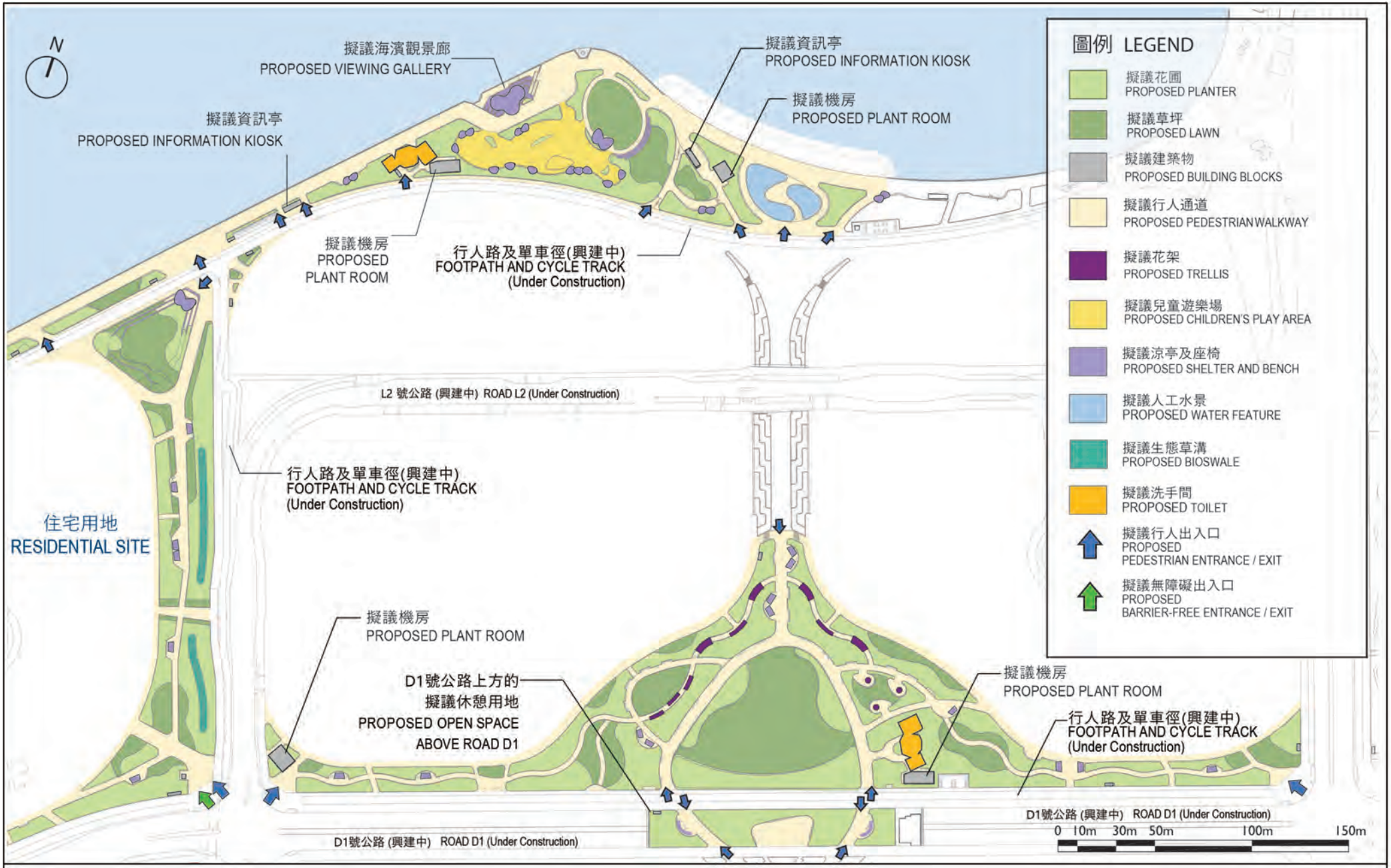
A4 297MM X 210MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議東涌東休憩用地（第一期）的平面圖2

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
LAYOUT PLAN 2 OF PROPOSED OPEN SPACE IN TUNG CHUNG EAST (STAGE 1)

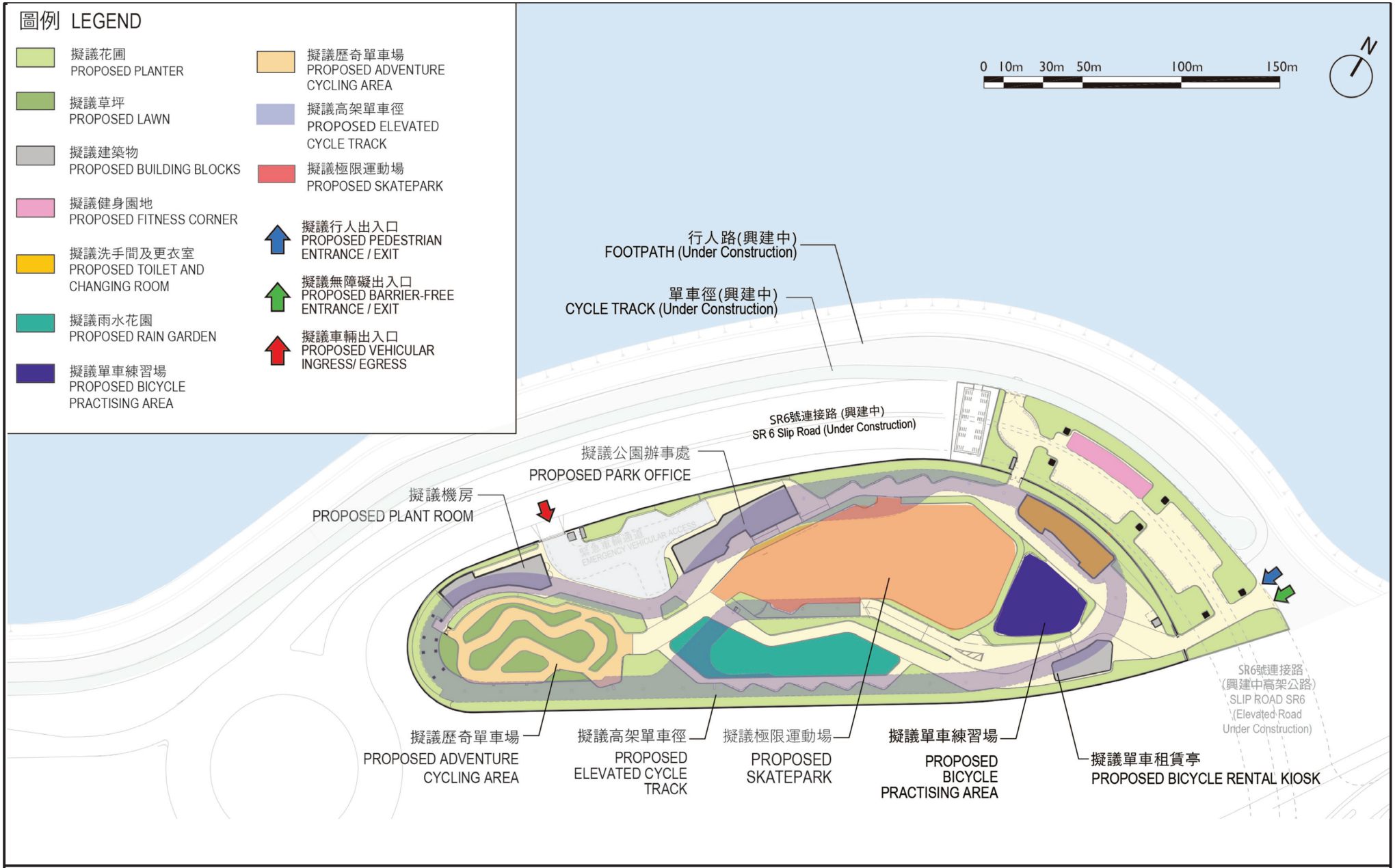
A4 297MM X 210MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議東涌東休憩用地（第一期）的平面圖3

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
LAYOUT PLAN 3 OF PROPOSED OPEN SPACE IN TUNG CHUNG EAST (STAGE 1)

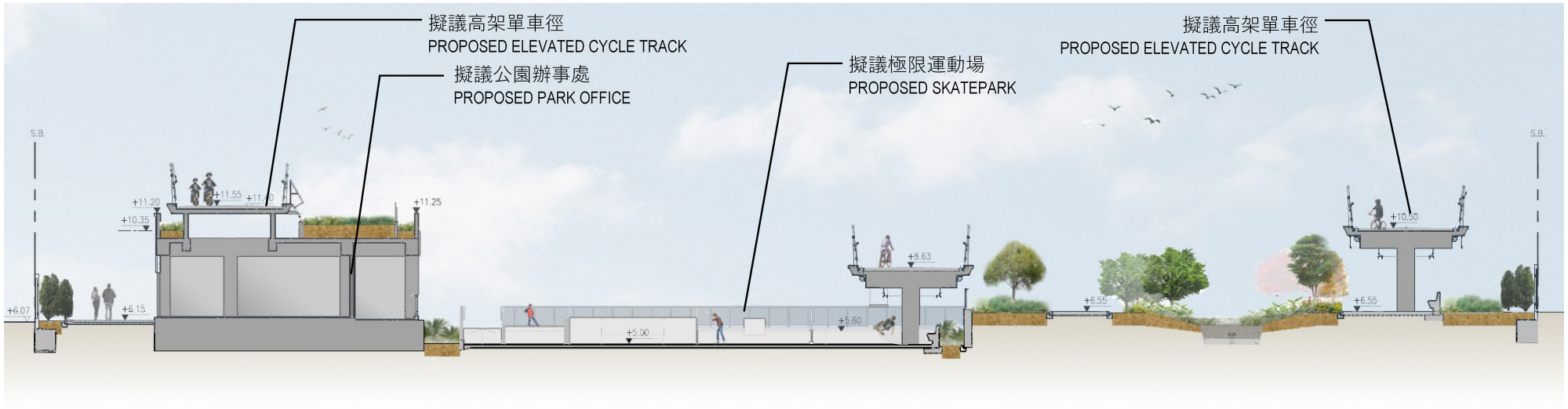
A4 297MM X 210MM

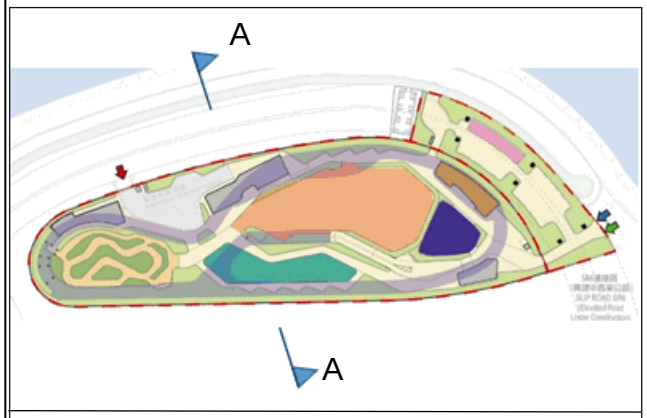


工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 東涌東休憩用地（第一期）的平面圖4

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
LAYOUT PLAN 4 OF OPEN SPACE IN TUNG CHUNG EAST (STAGE 1)

A4 297MM X 210MM





索引圖 KEY PLAN

工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第147區單車公園暨極限運動場的剖面圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
SECTION OF PROPOSED AREA 147 CYCLE PARK CUM SKATEPARK



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 東涌東單車徑網絡及擬建第147區單車公園暨極限運動場的交通配套設施位置圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE)-
LOCATION PLAN OF CYCLE TRACK NETWORK IN TUNG CHUNG EAST AND TRANSPORT FACILITIES FOR THE PROPOSED AREA 147 CYCLE PARK CUM SKATEPARK

A4 297MM X 210MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第52區海濱長廊的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED AREA 52 WATERFRONT PROMENADE



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第52區海濱觀景廊的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED AREA 52 VIEWING GALLERY



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第52區健身園地的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED AREA 52 FITNESS CORNER



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第52區人工水景的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED AREA 52 WATER FEATURE



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第118區休憩用地的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED AREA 118 OPEN SPACE



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第147區單車公園暨極限運動場的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED AREA 147 CYCLE PARK CUM SKATEPARK



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第147區單車公園暨極限運動場的行人出入口的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PEDESTRIAN ENTRANCE/EXIT OF PROPOSED AREA 147 CYCLE PARK CUM SKATEPARK

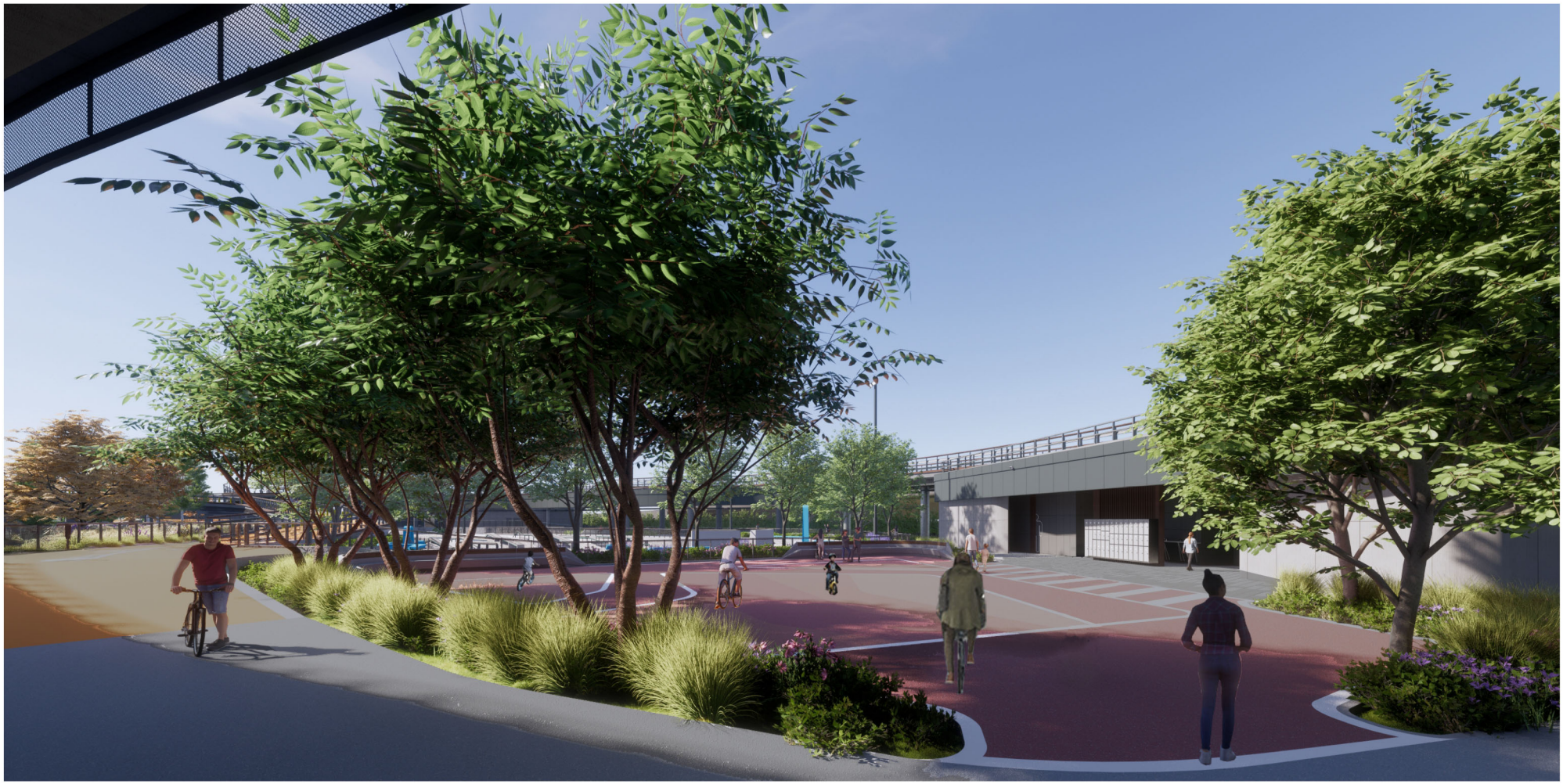
A4 297MM X 210MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第147區單車公園暨極限運動場的毗連的休憩處的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF ASSOCIATED SITTING-OUT AREA AT PROPOSED AREA 147 CYCLE PARK CUM SKATEPARK

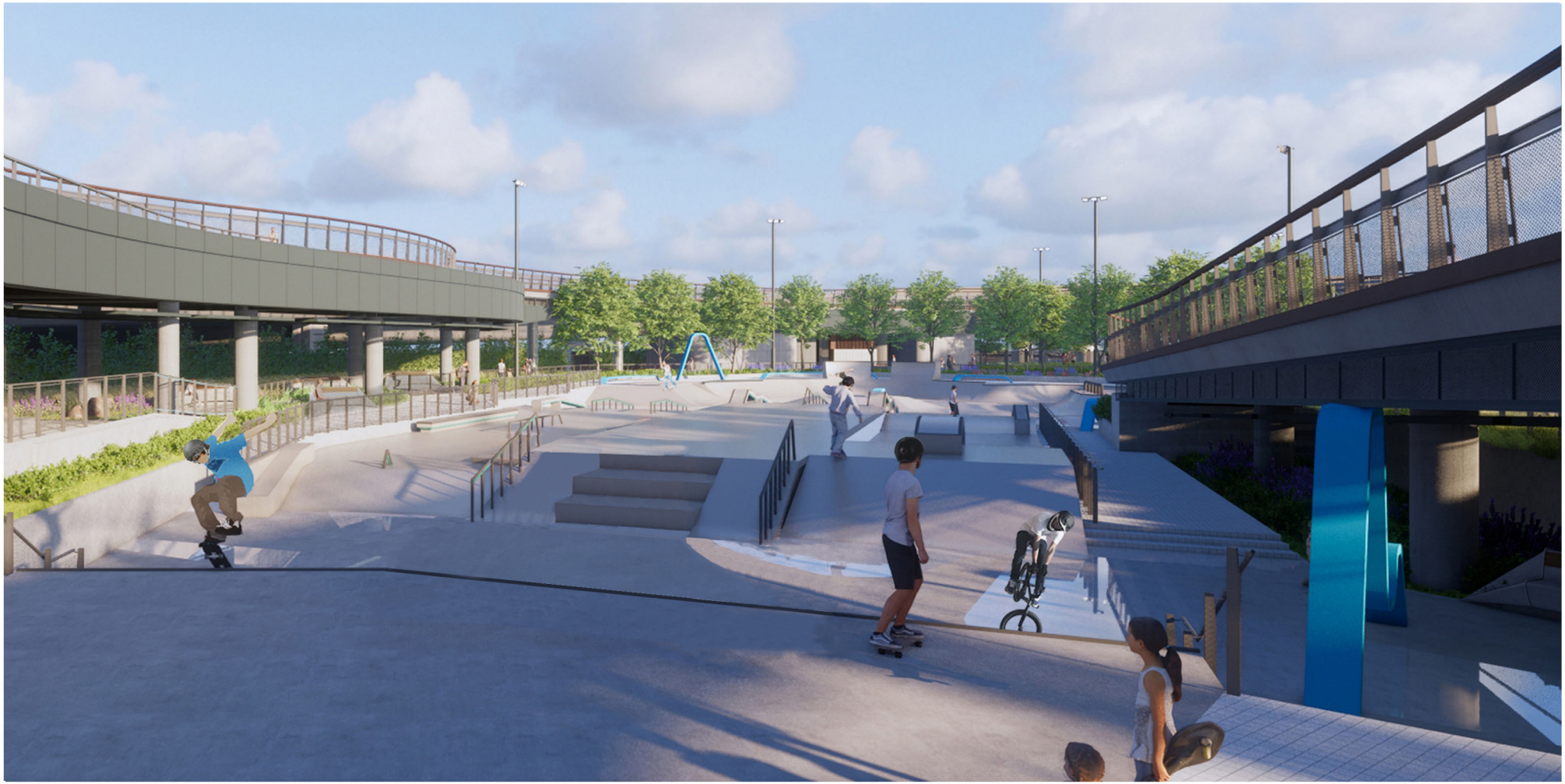
4 297MM X 210MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第147區單車練習場的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED AREA 147 BICYCLE PRACTISING AREA

A4 297MM X 210MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第147區極限運動場的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED AREA 147 SKATEPARK



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第147區歷奇單車場的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED AREA 147 ADVENTURE CYCLING AREA

A4 297MM X 210MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第147區單車公園暨極限運動場的有蓋座椅的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF SHELTERED SEATING AT PROPOSED AREA 147 CYCLE PARK CUM SKATEPARK

A4 297MM X 210MM



工務計劃項目第786CL號
東涌新市鎮擴展 - 工地平整及基礎設施工程（第二階段）- 擬議第147區單車租賃亭的構想圖

PWP ITEM NO. 786CL
TUNG CHUNG NEW TOWN EXTENSION - SITE FORMATION AND INFRASTRUCTURE WORKS (SECOND PHASE) -
ARTISTIC IMPRESSION OF PROPOSED AREA 147 BICYCLE RENTAL KIOSK

786CL (Part) – Tung Chung New Town Extension – site formation and infrastructure works (Second Phase)

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2024 prices)

			Estimated man-months	Average MPS* salary point	Multiplier (Note 1)		Estimated fees ($ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	-	-	-		19.8
		Technical	-	-	-		11.6
					Sub-total		31.4 #
(b)	Consultants' fee for Environmental Monitoring and Audit Programme (Note 3)	Professional	26	38	2.0		4.8
		Technical	54	14	2.0		3.6
					Sub-total		8.4 #
(c)	Residential site staff (RSS) costs (Note 3)	Professional	971	38	1.6		144.9
		Technical	2 041	14	1.6		109.1
					Sub-total		254.0
	Comprising –						
	(i) Consultants' fees for management of RSS					11.8#	
	(ii) Remuneration of RSS					242.2 #	
					Total		**293.8**

* 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. A multiplier of 2.0 is applied to the average MPS salary point to estimate the full staff cost for the staff employed in the consultants' office, including the consultants' overheads and profit (as at now, MPS point 14 = $33,405 per month and MPS point 38 = $93,255 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 part of **786CL**. The

construction phase of the assignment will only be executed subject to Finance Committee's approval to upgrade the part of **786CL** to Category A.

3. The actual man-months and actual costs will only be known after completion of the construction works.

Remarks

The cost figures in this Enclosure are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 20 of the main paper.

786CL (Part) – Tung Chung New Town Extension – site formation and infrastructure works (Second Phase)

Estimation of Unit Costs

The Second Phase works under this paper are divided into three major works categories: (a) road works; (b) drainage, sewerage and water supply systems; and (c) open space development and landscaping works. The three works categories altogether account for about 82% of the total cost for Second Phase works. The unit cost of the three works categories and relevant projects[1] are listed below. The unit cost estimation and information are calculated in the prices of September 2024.

(a) Road works

	Unit Cost	Unit costs in other projects of similar scale and nature
Road works	$286,900 per m	$232,300 – $376,500 per m

The unit cost of the proposed road works is $286,900 per m and within the range of unit costs in other projects of similar scale and nature in the past few years ($232,300 – $376,500 per m). The proposed road works mainly involve construction of at-grade roads and three elevated roads of a total of about 150m long across the river. PWP Item No. **899CL**, which has the lowest unit cost in the range, does not involve elevated roads and therefore the complexity of construction works and unit cost are

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[1] For (a) road works and (b) drainage, sewerage and water supply works, relevant projects with funding applications approved are included – **899CL** - Development of San Tin Technopole (2024), **828CL** - Remaining Phase Development of Kwu Tung North/Fanling North ("KTN/FLN") New Development Area ("NDA") (2024), **787CL** and **829CL** - Second Phase Development of Hung Shui Kiu/Ha Tsuen ("HSK/HT") NDA (2024), **771CL** - Phase 2 Development of ex-Cha Kwo Ling Kaolin Mine Site (2023), **817CL** and **872CL** - Stage 1 and First Phase of Stage 2 Development of Yuen Long South ("YLS") NDA (2022), **859CL** - First Phase Development of TCNTE (2021), **856CL** - Main Works Package 1 of Development of Lok Ma Chau Loop (2021), **845CL** and **796CL** - First Phase Development of HSK/HT NDA (2020), **759CL** and **747CL** - First Phase Development of KTN/FLN NDA (2019); as well as other engineering infrastructure works projects including PWP nos. **332CL**, **272DS**, **345DS** and **355DS**. For (c) open space development and landscaping works, relevant projects with funding applications approved are included: **477RO** - Public Open Space at East Coast Park Precinct North Point (2024), **886CL** - Kai Tak Development - Open Spaces near Kai Tak River and Kai Tak Station Square (2023), **478RO** - Quarry Park in Anderson Road Quarry (2023), **476RO** - Improvement of Tsuen Wan Riviera Park and Tsuen Wan Park – phase 1 development (2022), **475RO** - Open space at Eastern Street North, Sai Ying Pun (2022), **451RO** - Town Park in Area 68, Tseung Kwan O (2021), and **441RO** - Hoi Sham Park Extension in Kowloon City District (2020).

relatively low. PWP Item No. **856CL**, which has the highest unit cost in the range, involves construction of an elevated road of about 340 m long crossing existing at-grade roads with more than ten lanes, and therefore the complexity of construction works and unit cost are relatively high.

Individual Key Items	**Unit Costs**	**Unit costs in other projects of similar scale and nature**
- At-grade roads	$63,300 per m	$59,300 – $88,600 per m
- Elevated roads	$680,100 per m	$624,200 – $938,100 per m
- Cycle track cum pedestrian footbridges	$907,700 per m	$989,300 – $1,160,000 per m
- Noise barriers	$25,500 per m^2	$32,000 – $54,000 per m^2

(b) Drainage, sewerage and water supply systems

	Unit Cost	**Unit costs in other projects of similar scale and nature**
Drainage, sewerage and water supply systems	$2,900 per m^2	$1,900 – $3,800 per m^2

The unit cost of the proposed drainage, sewerage and water supply systems is $2,900 per m^2 and within the range of unit costs in other projects of similar scale and nature in the past few years ($1,900 – $3,800 per m^2). The proposed works mainly involve construction of drainage, sewerage and water supply pipes at Tung Chung Valley and Ma Wan Chung, and also construction of three sewage pumping stations due to the topographic constraints. PWP Item No. **796CL**, which has the lowest unit cost in the range, involves less building structures and therefore the complexity of construction works and unit costs are relatively low. PWP Item No. **829CL**, which has the highest unit cost in the range, involves more building structures (including four sewage pumping stations and box culvert with depth below ground of 3 to 13 m) and therefore the complexity of construction works and unit costs are relatively high.

Individual Key Items	**Unit Costs**	**Unit costs in other projects of similar scale and nature**
- Drainage system		
• Drains and Sustainable Urban Drainage System	$26,300 per m	$26,300–$28,600 per m

Individual Key Items	Unit Costs	Unit costs in other projects of similar scale and nature
• Polder	$65,700 per m	$59,300–$88,600 per m
- Sewerage system		
• Sewage pumping stations	$21,000 per m^3/day	$19,800 – $30,700 per m^3/day
• Gravity sewers and rising mains	$11,300 per m	$8,900 – $20,300 per m
- Water supply system		
• Fresh and flushing water mains	$6,700 per m	$7,200 – $14,000 per m

(c) Open space development and landscaping works

	Unit Cost	Unit costs in other projects of similar scale and nature
Open space development and landscaping works	$8,900 per m^2	$8,300 - $14,300 per m^2

The unit cost of the proposed open space development and landscaping works is $8,900 per m^2 and within the range of unit costs in other projects of similar scale and nature in the past few years ($8,300 – $14,300 per m^2). PWP Item No. **478RO**, which has the lowest unit cost in the range, mainly involves at-grade greening, the density and complexity of buildings are relatively low and therefore the unit cost is relatively low. PWP Item No. **886CL**, which has the highest unit cost in the range, with a relatively small site area, involves construction of observation decks, footbridge and other associated facilities at Kai Tak River, the density of buildings, complexity of construction works and unit costs are relatively high.

Enclosure 6 to PWSC(2024-25)21

786CL (Part) - Tung Chung New Town Extension – site formation and infrastructure works (Second Phase)

Breakdown of Land Acquisition Cost

			$ million
(I)	**Estimated cost for land acquisition**		**861.52**
(II)	**Estimated cost for land clearance**		**133.21**
	(a) Ex-gratia allowances (EGAs) for domestic occupiers (e.g. EGA for permitted occupiers of licensed structures and surveyed squatters affected by clearance and domestic removal allowance, etc.)	0	
	(b) Other ex-gratia allowances (e.g. crop compensation, disturbance allowance for cultivators, EGA for miscellaneous permanent improvements to farms, EGA for shops, workshops, godowns, slipways, schools, churches and ornamental fish breeding undertakings, EGA for open-air/ outdoor business undertakings, EGA for clearance of graves, urns (Kam Taps) and shrines and EGA for "Tun Fu" ceremonial fees, etc.)	133.21	
(III)	**Interest and Contingency Payment**		**99.47**
	Total		**1,094.20**

Note
The above estimated land acquisition cost is based on the prevailing ex-gratia compensation rates and the valuation as at April 2024.

Enclosure 7 to PWSC(2024-25)21

786CL (Part) – Tung Chung New Town Extension - site formation and infrastructure works (Second Phase)

Summary of "Trees of Particular Interest"

Tree Ref. No.[1]	Species		Measurements			Amenity value[3]	Form	Health condition	Structural condition	Suitability for transplanting[4]		Conservation Status[5]	Recomm-endation (Retain/ Transplant/Fell)	Maintenance department to provide comments on Tree Preservation and Removal Proposal		Additional Remarks
	Scientific name	Chinese name	Height (m)	DBH[2] (mm)	Crown spread (m)	(High/ Med/ Low)	(Good/Average/Poor)			(High/ Med/ Low)	Remarks			Before	After	
T10140	*Aquilaria sinensis*	土沉香	8	330	4	High	Average	Average	Average	Low	-	Protection of Endangered Species of Animals and Plants Ordinance, Cap. 586	Retain	Lands Department	Lands Department	
T11121	*Ficus microcarpa*	細葉榕	15	1800	17	Med	Average	Average	Average	Low	--	Trees of particular interest (DBH ≥1m)	Retain	Lands Department	Lands Department	DBH over 1m
T188	*Ficus microcarpa*	細葉榕	18	1800	15	Med	Average	Average	Average	Low	The tree is located on slope, with multi-trunk, and impractical to prepare root ball for transplanting	Trees of particular interest (DBH ≥1m)	Fell	Lands Department	-	DBH over 1m

Notes:

1. There are no trees within site boundary in the Register of Old and Valuable Trees.
2. DBH of a tree refers to its Diameter at Breast Height (i.e. measurement at 1.3 m above ground level).
3. Amenity value of the tree is assessed by its functional values for shade, seasonal interest, screening, reduction of pollution and noise and also its "fung shui" significance, and classified into the following categories.

   High (H): important trees which should be retained by adjusting the design layout accordingly.

   Med (M): trees that are desirable to be retained in order to create a pleasant environment, which includes healthy specimens of lesser importance than "High" trees.

   Low(L): trees that are dead, dying or potentially hazardous and should be removed.

4. Assessment has taken into account conditions of individual trees at the time of survey (including health, structure, age and root conditions), site conditions (including topography and accessibility), and intrinsic characters of tree species (survival rate after transplanting).

5. Conservation status is based on the rarity and protection status of the species under relevant ordinances in Hong Kong, such as
   RPPHK – Species included in Agriculture, Fisheries and Conservation Department publication "Rare and Precious Plants of Hong Kong (2003)";
   Cap. 586 – Native plants listed in Protection of Endangered Species of Animals and Plants Ordinance, Cap. 586;
   Cap. 96 – Species listed in the Scheduled to the Forests and Countryside Ordinance, Cap 96; and
   IUCN:VU – “Vulnerable” under IUCN Red List of Threatened Species.