# ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

### **HEAD 711 – HOUSING**

Civil Engineering – Land development

811CL – Site formation and infrastructure works for public housing developments at Tuen Mun Central

776CL – Site formation and infrastructure works for public housing developments at Kam Tin South, Yuen Long

Members are invited to recommend to Finance Committee –

- (a) the upgrading of part of **811CL** as **857CL**, entitled "Site formation and infrastructure works for public housing developments at Tuen Mun Central Phase 1", to Category A at an estimated cost of \$968.4 million in money-of-the-day (MOD) prices;
- (b) the upgrading of part of **776CL** as **858CL**, entitled "Site formation and infrastructure works for public housing developments at Kam Tin South, Yuen Long Phase 1", to Category A at an estimated cost of \$907.1 million in MOD prices; and
- (c) the retention of the remainder of **811CL** and the remainder of **776CL** in Category B.

### **PROBLEM**

- 2. We need to carry out the following projects
  - (a) Phase 1 works of **811CL** to carry out site formation and infrastructure works to support the proposed public housing developments at Wu Shan Road, Tin Hau Road, Hang Fu Street and Hin Fat Lane of Tuen Mun Central; and
  - (b) Phase 1 works of **776CL** to carry out site formation and infrastructure works to support the proposed public housing developments at Sites 1, 4a-1 and 6 of Kam Tin South.

### **PROPOSAL**

- 3. The Director of Civil Engineering and Development, with the support of the Secretary for Transport and Housing, proposes to upgrade the following projects to Category A–
  - (a) part of **811CL** at an estimated cost of \$968.4 million in MOD prices for the site formation and infrastructure works; and
  - (b) part of **776CL** at an estimated cost of \$907.1 million in MOD prices for the site formation and infrastructure works.
- 4. Details of **811CL** and **776CL** are provided at Enclosures 1 and 2 respectively.

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Transport and Housing Bureau November 2020

### 811CL – Site formation and infrastructure works for public housing developments at Tuen Mun Central

#### PROJECT SCOPE AND NATURE

We propose to upgrade part of **811CL** (i.e. Phase 1 works) to Category A and the scope of works comprises—

- (a) site formation works and construction of associated retaining structures and slopes at Wu Shan Road site<sup>1</sup>;
- (b) modification works to the existing pedestrian and cycle bridge across Wu Shan Road near Lung Mun Road, including demolition of a section of ramp within the boundary of Wu Shan Road site and construction of 2 lifts to replace the demolished ramp;
- (c) improvement works at junctions of (i) Pui To Road and Tsing Wun Road, (ii) Pui To Road and Tsun Wen Road, (iii) Hoi Wong Road and Hoi Chu Road, (iv) Pui To Road and Tuen Mun Heung Sze Wui Road, (v) Castle Peak Road Castle Peak Bay and Tuen Shing Street, (vi) Castle Peak Road Castle Peak Bay and Tuen Hing Road, and (vii) Castle Peak Road Castle Peak Bay, Hin Fat Lane and Tsing Hoi Circuit;
- (d) construction/modification of lay-bys at Lung Mun Road, Wu Shan Road, Tin Hau Road, Tuen Shing Street, Tuen Hing Road and Castle Peak Road – Castle Peak Bay and other minor road works; and
- (e) ancillary works including drainage, sewerage, water supply, slope stabilisation and landscaping works.
- 2. The location and site plans together with sections of the proposed works are at **Annex 1 to Enclosure 1**.

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<sup>&</sup>lt;sup>1</sup> Site formation works are not required for the public housing sites at Tin Hau Road, Hang Fu Street and Hin Fat Lane.

- 3. We will retain the remainder of **811CL**, which covers the site formation and associated infrastructure works for the public housing development at Tuen Hing Road, in Category B. We will seek funding approval for the remainder of **811CL** at an appropriate juncture.
- 4. We plan to commence the proposed works upon obtaining funding approval from the Finance Committee for expected substantial completion in around 3.5 years to tie in with the population intake of the public housing developments.

#### **JUSTIFICATION**

- 5. We propose to carry out Phase 1 works of **811CL** at four government lands of Tuen Mun Central, i.e. Sites at Wu Shan Road, Tin Hau Road, Hang Fu Street and Hin Fat Lane, to provide formed land and associated infrastructure to tie in with the public housing developments. The key development parameters and the conceptual plan of the public housing developments are at **Annexes 2 and 3 to Enclosure 1** respectively.
- 6. According to the findings of the traffic impact assessment (TIA), we also propose to carry out the road improvement works as listed in paragraph 1(b) to (d) above to accommodate the traffic and transportation needs arising from the proposed developments.

### FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the proposed works to be \$968.4 million in money-of-the-day (MOD) prices, broken down as follows –

		\$ mill (in MOD	
(a)	Site formation works, retaining wall construction and slope construction/ stabilisation works		410.2
(b)	Road and junction improvement works and modification works to the pedestrian and cycle bridge		230.3
(c)	Ancillary works including drainage, sewerage, water supply and landscaping works		135.2
(d)	Consultants' fees for		5.7
	(i) contract administration	3.0	
	(ii) management of Resident Site Staff (RSS)	2.7	
(e)	Remuneration of RSS		99.2
(f)	Contingencies		87.8
		Total	968.4

<sup>8.</sup> In view of insufficient in-house resources, we propose to engage consultants to undertake contract administration and site supervision of the proposed works. A breakdown of the estimates for consultants' fees and RSS costs by man-months is at **Annex 4 to Enclosure 1**.

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

Year	\$ million (MOD)
2021 – 2022	63.2
2022 - 2023	309.9
2023 – 2024	335.1
2024 - 2025	139.5
2025 - 2026	97.8
2026 - 2027	22.9
	968.4

- 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 from 2021 to 2027. Civil Engineering and Development Department (CEDD) will deliver the proposed works under New Engineering Contract<sup>2</sup>. The contract will provide for price adjustments.
- 11. We estimate the annual recurrent expenditure arising from the proposed works to be about \$9.84 million.

### **PUBLIC CONSULTATION**

12. We consulted the full council meeting of Tuen Mun District Council (TMDC) about the proposed road and sewerage facilities on 5 March 2019. Members expressed concerns about the traffic condition of Tuen Mun district after population intake of the proposed public housing developments. We expect that after completion of the proposed road improvement works, the road networks in the vicinity will be able to accommodate the traffic and transportation needs arising from the proposed public housing developments.

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<sup>&</sup>lt;sup>2</sup> New Engineering Contract is a suite of contracts developed by Institution of Civil Engineers, United Kingdom. It is a contract form that emphasises cooperation, mutual trust and collaborative risk management between contracting parties.

- 13. We gazetted the proposed road works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (RO) and the proposed sewerage works under RO as applied by Section 26 of the Water Pollution Control (Sewerage) Regulation (Cap. 358AL) on 6 September and 13 September 2019 respectively. No objection was received. The notices of authorisation were subsequently gazetted on 20 December and 27 December 2019 respectively.
- 14. We also updated the full council meeting of TMDC on the latest progress of the whole **811CL** on 18 September 2020. Since the remainder of **811CL** will involve clearance of part of the existing Tseng Tau Sheung Tsuen, TMDC expressed concerns about the settlement of villagers and passed a motion requesting to shelve the public housing development at Tuen Hing Road. We will keep communicating with TMDC, Tuen Mun Rural Committee and other stakeholders in respect of the public housing development at Tuen Hing Road.
- 15. Besides, CEDD consulted the Advisory Committee on the Appearance of Bridges and Associated Structures<sup>3</sup> (ACABAS) about the design of the modification works to the existing pedestrian and cycle bridge across Wu Shan Road near Lung Mun Road on 19 May and 21 July 2020. The Committee accepted the design in principle and made some suggestions. We will refine the aesthetic of the relevant modification works according to the suggestions and will continue to consult ACABAS.
- 16. We consulted the Legislative Council Panel on Housing on 2 November 2020. Members generally expressed concerns about the adequacy of traffic facilities, community and welfare facilities after population intake of the proposed public housing developments. We have provided the supplementary information requested by the Members to the Panel on Housing.

### **ENVIRONMENTAL IMPLICATIONS**

17. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). CEDD has completed the Preliminary Environmental Review (PER) for the project. The PER concluded that the project would not cause any long-term environmental impacts. We have included in the project estimate the cost to implement suitable mitigation measures to control short-term environmental impacts.

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<sup>&</sup>lt;sup>3</sup> The ACABAS comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, an academic institution, Architectural Services Department, Highways Department, Housing Department, and Civil Engineering and Development Department. It is responsible for vetting the design of bridges and other structures associated with the public highway system, including noise barriers and semi-enclosure, from the aesthetic and visual impact points of view.

- 18. CEDD has incorporated into the works contracts the mitigation measures that the contractor should implement to control noise, dust and site runoff nuisances during construction to within established standards and guidelines.
  These measures include the use of movable noise barriers or enclosures and quiet
  plants to reduce noise generation, frequent cleaning and watering of the work
  sites, installations of sprinklers and the provision of wheel-washing facilities to
  minimise dust generation, and the use of temporary drains to collect site runoff for
  on-site treatment before discharge.
- 19. At the planning and design stages, CEDD has considered the design levels and layout of the proposed site formation so as to reduce the generation of construction waste where possible. In addition, CEDD will require the contractor to reuse inert construction waste (e.g. excavated soil and rock fill) on site or at other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities<sup>4</sup> (PFRF). CEDD 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.
- 20. At the construction stage, CEDD will require the contractor to submit for Government's approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. CEDD will ensure that the day-to-day operations on site comply with the approved plan. CEDD will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. CEDD will control the disposal of inert construction waste and non-inert construction waste at PFRF and landfills respectively through a trip-ticket system.
- 21. CEDD estimates that Phase 1 works of **811CL** will generate in total about 215 700 tonnes of construction waste. Of these, CEDD will reuse about 26 100 tonnes (12%) of inert construction waste on site and deliver 149 500 tonnes (69%) of inert construction waste to PFRF for subsequent reuse. CEDD will dispose of the remaining 40 100 tonnes (19%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfill sites is estimated to be about \$18.6 million for this project (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)).

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<sup>&</sup>lt;sup>4</sup> 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 at public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

### HERITAGE IMPLICATIONS

- 22. The Wu Shan Road site is within the Northern Shek Kok Tsui Site of Archaeological Interest. CEDD has conducted an archaeological impact assessment review for the proposed works site and concluded that the chance of discovering in situ archaeological deposits was very low. CEDD has also carried out confirmatory exploration works on the proposed works site which revealed no valuable archaeological resources nor prehistoric layer. As a precautionary measure, we will inform the Antiquities and Monuments Office (AMO) immediately in case of discovery of antiquities or supposed antiquities in the course of construction works. Agreement from the AMO will be sought on the follow-up actions if required.
- 23. Ceramic Kiln, Hin Fat Lane (a confirmed Grade 3 historic building) is located more than 50 metres away from the woks boundary of Phase 1 works of **811CL**. Pursuant to the Development Bureau Technical Circular (Works) No. 6/2009, Heritage Impact Assessment is not required.

### TRAFFIC IMPLICATIONS

24. CEDD has conducted TIA for the proposed developments. According to the findings of the assessment, after completion of the proposed road improvement works, the road networks in the vicinity will be able to accommodate the traffic and transportation needs arising from the proposed developments. CEDD will also implement temporary traffic arrangements and appropriate control measures on the construction vehicles in order to minimise the traffic impact to the nearby roads during construction.

### LAND ACQUISITION

25. The project does not require any land acquisition.

### **BACKGROUND INFORMATION**

- 26. We upgraded **811CL** to Category B in September 2016.
- 27. CEDD engaged consultants in February 2018 to undertake the site investigation and detailed design for **811CL** at an estimated cost of about \$28.2 million in MOD prices. This amount is charged to the Block Allocation **Subhead B100HX** "Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme". CEDD has substantially completed the detailed design for Phase 1 works of **811CL**.

- 28. Of the 1 895 numbers of trees within the project site boundary of Phase 1 works, 1 022 numbers of trees will be preserved. The project will involve the removal of 873 numbers of trees, including 851 numbers of trees to be felled and 22 numbers of trees to be transplanted. Among the affected trees, 2 numbers of trees are important trees<sup>5</sup>, of which the details were summarised at **Annex 5 to Enclosure 1**. We will incorporate planting proposals as part of the project, including estimated quantities of 220 numbers of whips and 15 000 numbers of shrubs.
- 29. We estimate that Phase 1 works of **811CL** will create about 410 jobs (330 for labourers and another 80 for professional or technical staff) providing a total employment of 10 000 man-months.

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<sup>&</sup>lt;sup>5</sup> "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 –

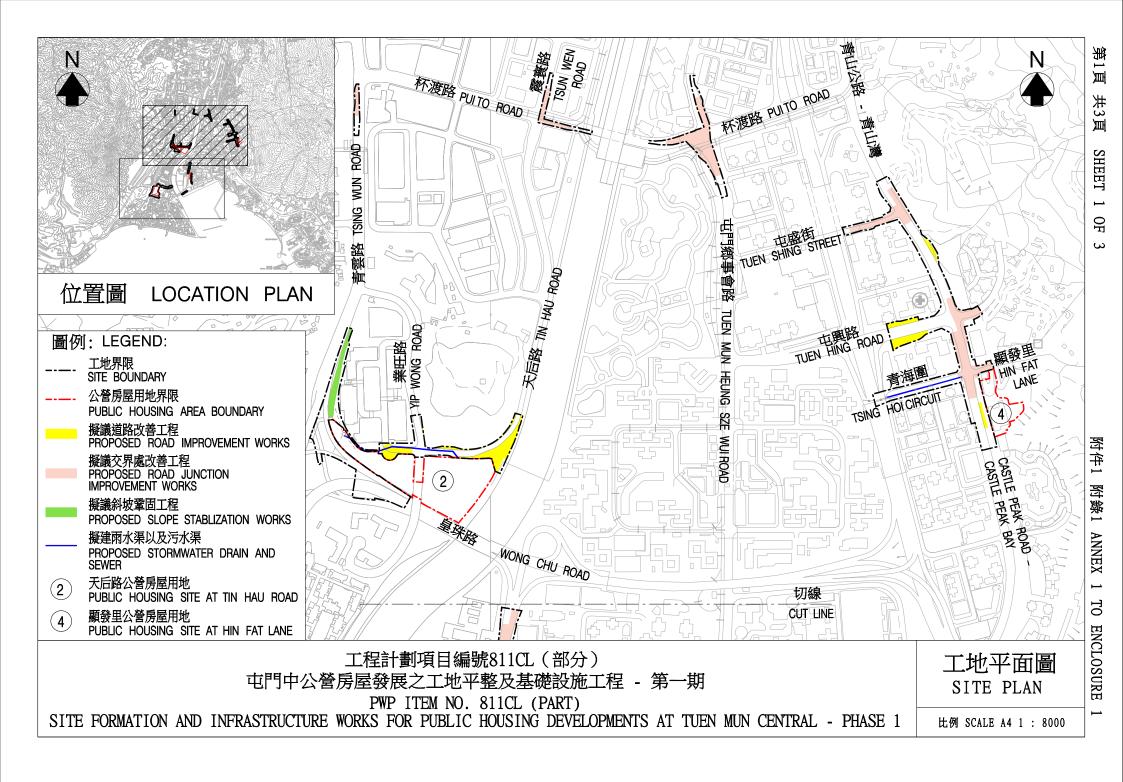
<sup>(</sup>a) trees of 100 years old or above;

<sup>(</sup>b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees at landmark of monastery or heritage monument, and trees in memory of an important person or event;

<sup>(</sup>c) trees of precious or rare species;

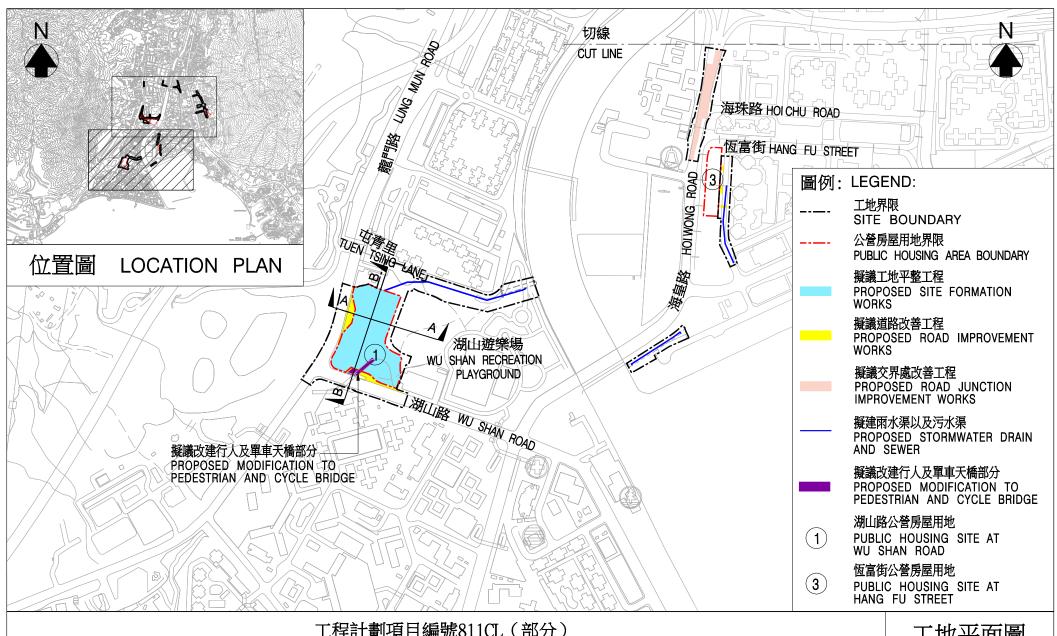
<sup>(</sup>d) trees of outstanding form (taking account of the overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or

<sup>(</sup>e) trees with trunk diameter equal to or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with a height/canopy spread equal to or exceeding 25 m.









工程計劃項目編號811CL(部分) 屯門中公營房屋發展之工地平整及基礎設施工程 - 第一期

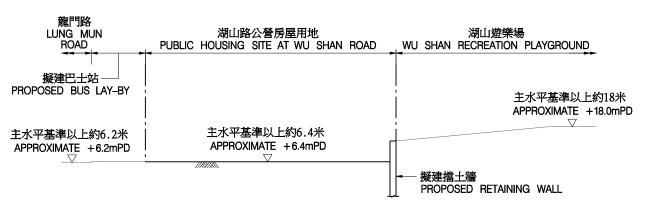
PWP ITEM NO. 811CL (PART)

SITE FORMATION AND INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENTS AT TUEN MUN CENTRAL - PHASE 1

工地平面圖 SITE PLAN

比例 SCALE A4 1: 8000

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工程計劃項目編號811CL(部分) 屯門中公營房屋發展之工地平整及基礎設施工程 - 第一期

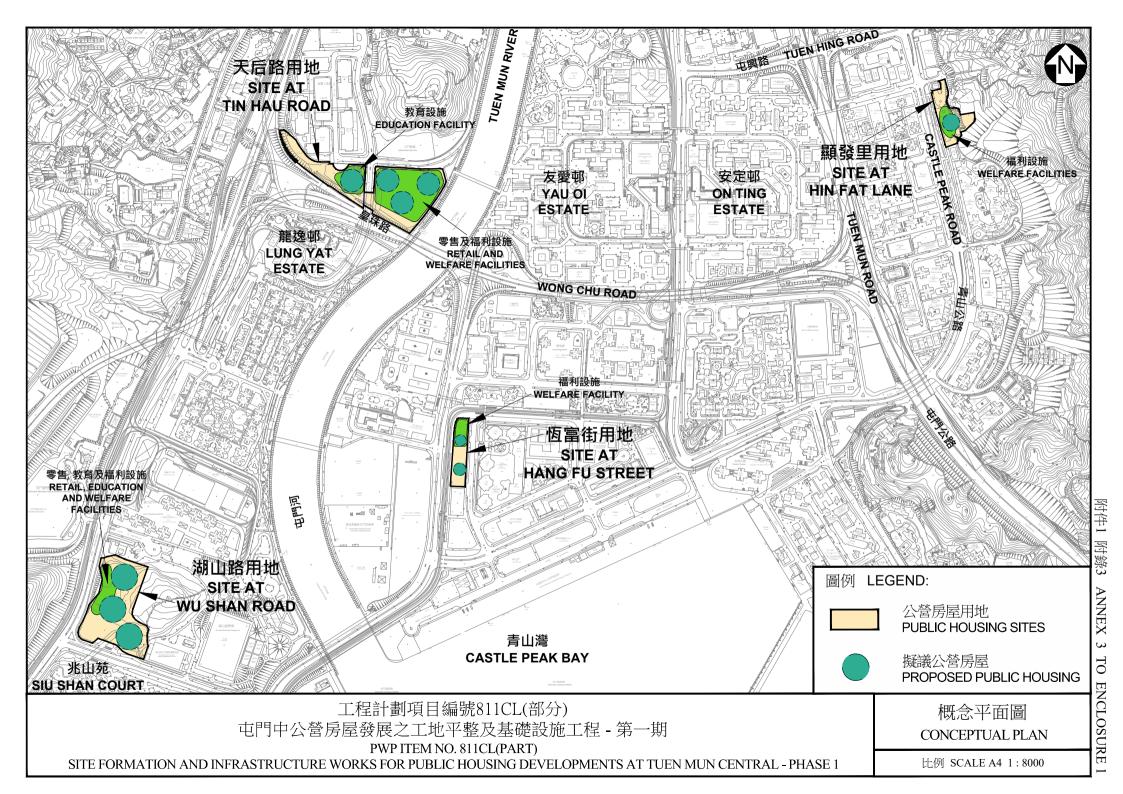
PWP ITEM NO. 811CL (PART)

SITE FORMATION AND INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENTS AT TUEN MUN CENTRAL - PHASE 1

剖面圖 SECTIONS

### Key development parameters of the public housing developments at Tin Hau Road, Wu Shan Road, Hang Fu Street and Hin Fat Lane at Tuen Mun Central

Site area	A total of about 5.3 hectares			
Total gross floor area	About 320 000 m <sup>2</sup>			
Building height restriction	Height bands of 100, 125, 140 and 150 meters above Principal Datum			
No. of domestic blocks	10 (Subject to detailed design)			
No. of flats	About 8 000			
Projected population	About 21 300			
Completion date	In phases from 2024			
Non-domestic facilities	Ancillary parking spaces, local open spaces, kindergartens, recreational, welfare and retail facilities, etc.			



### 811CL (Part) – Site formation and infrastructure works for public housing developments at Tuen Mun Central – Phase 1

### Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2020 prices)

			Estimated man- months	Average MPS* Salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants' fees for	Professional				2.3
	contract administration (Note 2)	Technical				0.3
					Sub-total	2.6#
(b)	Resident site staff	Professional	292	38	1.6	40.1
	(RSS) costs (Note 3)	Technical	1032	14	1.6	49.9
	Comprising –				Sub-total	90.0
	(i) Consultants' fees for management of RSS				2.4#	
	(ii) Remuneration of RSS				87.6#	
					Total	92.6
	*MPS = Master Pay Se	cale				

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 = \$85,870 per month and MPS salary point 14 = \$30,235 per month).
- 2. The consultants' staff cost for the contract administration is calculated in accordance with the existing consultancy agreements. The construction phase of the assignment will only be executed upon Finance Committee's approval to upgrade part of **811CL** to Category A.
- 3. We will only know the actual man-months and actual costs after completion of the construction works.

### Remarks

The figures in this Annex are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 7 of Enclosure 1.

# 811CL (Part) – Site formation and infrastructure works for public housing developments at Tuen Mun Central – Phase 1

### **Summary of "Important Trees" to be affected**

Tree ref.	Speci	es	N	Ieasurem	ents	Amenity Value <sup>3</sup>	Form	Health condition	Structural condition	Suitabili	ty for transplanting <sup>4</sup>	Conservation Status <sup>5</sup>	Recommendation	Department to provide	Additional remarks
	Scientific name	Chinese name	Height (m)	DBH <sup>2</sup> (mm)	Crown spread (m)		(Good/	Fair/ Poor)		(High/ Medium/ Low)	Remarks		(Retain/ Transplant/ Fell)	expert advice to Lands Department	
T842	Michelia x alba	白蘭	15	1390	8	Poor	Poor	Fair	Fair	Low	The tree is heavily covered by climber, which inhibits its growth. The tree is in poor form. Due to the large size of the tree, heavy pruning would be required for transplanting, which would lead to permanent damage to the form, health and structure of the tree. As the tree is mature, its transplant survival rate would be low. Therefore, the tree is not considered suitable for transplanting.	Cap. 96	Fell	LCSD	It is not practical to retain the tree as the difference between the current ground level (+11.7mPD) and the proposed formation level (+6.4mPD) is too large (up to 5.3m).

Tree ref.	Speci	es	N.	Ieasurem	ents	Amenity Value <sup>3</sup>	Form	Health condition	Structural condition	Suitabili	ty for transplanting <sup>4</sup>	Conservation Status <sup>5</sup>	Recommendation	Department to provide	Additional remarks
	Scientific name	Chinese name	Height (m)	DBH <sup>2</sup> (mm)	Crown spread (m)		(Good/	Fair/Poor)		(High/ Medium/ Low)	Remarks		(Retain/ Transplant/ Fell)	expert advice to Lands Department	
T986A	Dalbergia milletti	香港黄檀	3	135	8	Poor	Poor	Poor	Fair	Low	The tree has poor form and health conditions. Therefore, the tree is not considered suitable for transplanting.	Cap. 586	Fell	LCSD	It is not practical to retain the tree as the difference between the current ground level (+10.8mPD) and the proposed formation level (+6.4mPD) is too large (up to 4.4m).

- 1. The two trees are not 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, shelter, screening, reduction of pollution and noise and also its fung shui significance, and classified into the following categories

Good: important trees which should be retained by adjusting the design layout accordingly.

Fair: trees that are desirable to be retained in order to create a pleasant environment, which includes healthy specimens of lesser importance than "Good" trees.

Poor: 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 AFCD 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 Scheduled under Forests and Countryside Ordinance, Cap 96;
  - CPRDB Species Included in "China Plant Red Data Book".

## 776CL – Site formation and infrastructure works for public housing developments at Kam Tin South, Yuen Long

### PROJECT SCOPE AND NATURE

We propose to upgrade part of **776CL** (i.e. Phase 1 works) to Category A and the scope of works comprises –

- (a) site formation works and construction of associated retaining structures and slopes;
- (b) construction of a single two-lane carriageway with footpaths connecting to Tung Wui Road at Site 1;
- (c) widening of a section of Kam Po Road from an existing single lane road to a single two-lane carriageway with footpaths and a cycle track;
- (d) improvement works at junction of Tung Wui Road and Kam Po Road;
- (e) construction of a lay-by and road improvement works at Kam Ho Road;
- (f) road improvement works at Tung Wui Road, and provision of a cycle parking area near Site 6; and
- (g) ancillary works including drainage, sewerage, water supply and landscaping works.
- 2. The location and site plans together with sections of the proposed works are at **Annex 1 to Enclosure 2**.
- 3. We will retain the remainder of **776CL**, which covers the site formation and associated infrastructure works for the public housing development at Site 4a-2 of Kam Tin South, in Category B. We will seek funding approval for the remainder of **776CL** at an appropriate juncture.

4. We plan to commence the proposed works upon obtaining funding approval from the Finance Committee for expected substantial completion in around 5 years to tie in with the population intake of the public housing developments.

### **JUSTIFICATION**

- 5. We propose to carry out Phase 1 works of **776CL** at Sites 1, 4a-1 and 6 of Kam Tin South to provide formed land and associated infrastructure to tie in with the public housing developments. The key development parameters and the conceptual plan of the public housing developments are at **Annexes 2 and 3 to Enclosure 2** respectively.
- 6. According to the findings of the traffic impact assessment (TIA), we also propose to carry out the road improvement works as listed in paragraph 1 (b) to (f) above to accommodate the traffic and transportation needs arising from the proposed developments.

### FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the proposed works to be \$907.1 million in money-of-the-day (MOD) prices, broken down as follows –

		\$ million (in MOD prices)	
(a)	Site formation works and construction of retaining structures and slopes	618.2	
(b)	Road works	31.2	
(c)	Ancillary works including drainage, sewerage, water supply and landscaping works	93.0	
(d)	Consultants' fees for  (i) contract administration  (ii) management of Resident Site Staff (RSS)	8.7 5.1 3.6	
		/(e)	

			6 million MOD prices)
(e)	Remuneration of RSS		73.6
(f)	Contingencies		82.4
		Total	907.1

- 8. In view of insufficient in-house resources, we propose to engage consultants to undertake contract administration and site supervision of the proposed works. A breakdown of the estimates for the consultants' fees and RSS costs by man-months is at **Annex 4 to Enclosure 2**.
- 9. Subject to funding approval, we plan to phase the expenditure as follows—

Year	\$ million (MOD)
2021 - 2022	10.0
2022 - 2023	175.0
2023 - 2024	228.9
2024 - 2025	218.9
2025 - 2026	95.9
2026 - 2027	90.4
2027 - 2028	68.9
2028 – 2029	19.1
	907.1

- 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 from 2021 to 2029. Civil Engineering and Development Department (CEDD) will deliver the proposed works under New Engineering Contract<sup>1</sup>. The contract will provide for price adjustments.
- 11. We estimate the annual recurrent expenditure arising from the proposed works to be about \$3.41 million.

#### **PUBLIC CONSULTATION**

12. We gazetted the proposed road works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (RO) and the proposed sewerage works under RO as applied by Section 26 of the Water Pollution Control (Sewerage) Regulation (Cap. 358AL) on 22 February 2019. After the gazettal, we received 17 objections to the proposed road works and 15 objections to the proposed sewerage works. We met the objectors to explain the details of the works. In the end, 3 objections to the proposed roadworks and 3 objections to the proposed sewerage works were withdrawn unconditionally, while the remaining 14 objections to the proposed road works and 12 objections to the proposed sewerage works were The unresolved objections were mainly about compensation and maintained. rehousing arrangements, and traffic and transportation issues. We subsequently submitted the objections and the correspondences with the objectors (including meeting minutes) to the Chief Executive in Council (CE in C) for consideration. On 31 March 2020, the CE in C authorised the proposed road works and the proposed sewerage works with no modification required. The notices of authorisation were subsequently gazetted on 29 April 2020.

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New Engineering Contract 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.

- 13. We consulted the Kam Tin Rural Committee on 12 March 2020. The Committee expressed in-principle support for the Government to carry out public housing developments, but expressed concerns about community facilities, traffic and transportation impacts, compensation and rehousing arrangements as well as sewerage systems. CEDD provided a detailed written reply to address their concerns on 18 May 2020.
- 14. We also consulted the Housing, Town Planning and Development Committee (HTPDC) of Yuen Long District Council (YLDC) and Pat Heung Rural Committee on 29 April 2020 and 21 May 2020 respectively. While both Committees acknowledged the urgency to tackle the housing problem in the territory, HTPDC of YLDC passed a motion against the Kam Tin South public housing developments in view of the traffic facilities and infrastructure issues. Both Committees also passed motions to express concerns about community facilities, traffic and transportation impacts, associated compensation and rehousing arrangements, agricultural land rehabilitation issue as well as drainage and sewerage systems. CEDD provided a detailed written reply to address their motions and concerns on 24 June 2020.
- 15. We consulted the Legislative Council Panel on Housing on 2 November 2020. Members generally expressed concerns about the adequacy of traffic facilities, community and welfare facilities after the population intake of the proposed public housing developments. We have provided the supplementary information requested by the Members to the Panel on Housing.

### **ENVIRONMENTAL IMPLICATIONS**

16. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). CEDD has completed the Preliminary Environmental Review (PER) for the project. The PER has concluded and the Director of Environmental Protection has agreed that the project would not cause any long-term environmental impacts. We have included in the project estimate the cost to implement suitable mitigation measures to control short-term environmental impacts.

- 17. CEDD has incorporated into the works contract the mitigation measures that the contractor should implement to control noise, dust and site run-off nuisances during construction to within established standards and guidelines. These measures include the use of silencers, mufflers, movable noise barriers or enclosures and quiet plants to reduce noise generation, frequent cleaning and watering of the works sites, installations of sprinklers and the provision of wheel-washing facilities to minimise dust generation, and the use of temporary drains to collect site runoff for on-site treatment before discharge.
- 18. At the planning and design stages, CEDD has considered the design levels and layout of the proposed site formation so as to reduce the generation of construction waste where possible. In addition, CEDD will require the contractor to reuse inert construction waste (e.g. excavated soil and rock fill) on site or at other suitable construction sites as far as possible, in order to minimise disposal of inert construction waste at public fill reception facilities (PFRF) <sup>2</sup>. CEDD 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.
- 19. At the construction stage, CEDD will require the contractor to submit for Government's approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. CEDD will ensure that the day-to-day operations on site comply with the approved plan. CEDD will require the contractor to separate the inert portion from the non-inert construction waste on site for disposal at appropriate facilities. CEDD will control the disposal of inert construction waste and non-inert construction waste at PFRF and landfills respectively through a trip-ticket system.

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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 at public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

20. CEDD estimates that Phase 1 works of **776CL** will generate in total about 591 500 tonnes of construction waste. Of these, CEDD will reuse about 363 700 tonnes (61.5%) of inert construction waste on site and deliver 104 200 tonnes (17.6%) of inert construction waste to PFRF for subsequent reuse. CEDD will dispose of the remaining 123 600 tonnes (20.9%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfill sites is estimated to be \$32.1 million for the project (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)).

### HERITAGE IMPLICATIONS

21. The 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.

### TRAFFIC IMPLICATIONS

22. CEDD has conducted TIA for the proposed developments. According to the findings of the assessment, after completion of the proposed improvement works, the road networks in the vicinity will be able to accommodate the traffic and transportation needs arising from the proposed developments. CEDD will also implement temporary traffic arrangements and appropriate control measures on the construction vehicles in order to minimise the traffic impacts to the nearby roads during construction.

### **LAND ACQUISITION**

- We will resume about 12.4 hectare of private land and clear about 8.3 hectare of government land. A total of about 190 domestic households (involving about 390 persons) and about 18 business undertakings<sup>3</sup> will be affected and about 880 temporary structures (no graves and urns) will be cleared, on both private and government land. Apart from the provision for statutory compensation under the relevant ordinances, we will offer various prevailing administrative ex-gratia allowances to affected eligible land owners and occupiers and, where eligible, rehousing arrangements to domestic households affected by clearance on an ex-gratia basis in accordance with the prevailing general ex-gratia compensation and rehousing arrangements.
- 24. The land acquisition cost, estimated at \$1,375.4 million, including payment to eligible land owners, business undertakings, domestic occupiers of squatters and farmers, will be charged to **Head 701 Land Acquisition**. A breakdown of the estimated land acquisition cost is at **Annex 5 to Enclosure 2**.

#### **BACKGROUND INFORMATION**

25. We upgraded **776CL** to Category B in September 2014.

26. CEDD engaged consultants in November 2014 to undertake site investigation and detailed design for 776CL at an estimated cost of about \$27.12 million in MOD prices. This amount is charged to the Block Allocation **Subhead B100HX** "Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme". CEDD has substantially completed the detailed design for Phase 1 works of 776CL.

/27. .....

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Ex-gratia Allowances ("EGAs") will be provided to eligible business undertakings, including the EGA for open-air/outdoor business undertakings newly introduced in 2018 as part of the enhancements to the general ex-gratia compensation and rehousing arrangements for the clearance exercises for the Government development projects. Alternatively, business undertakings which are not eligible or do not wish to receive EGAs may also make claims to the Government for statutory compensation.

- Of the 1 625 numbers of trees within the project site boundary of Phase 1 works, 307 trees will be preserved whereas 1 318 numbers of trees will be felled. All trees to be removed are not important trees<sup>4</sup>. We will incorporate planting proposals as part of the project, including estimated quantities of about 6 000 numbers of shrubs.
- 28. We estimate that Phase 1 works of **776CL** will create about 180 jobs (142 for labourers and another 38 for professional or technical staff) providing a total employment of 9 050 man-months.

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<sup>4 &</sup>quot;Important trees" refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

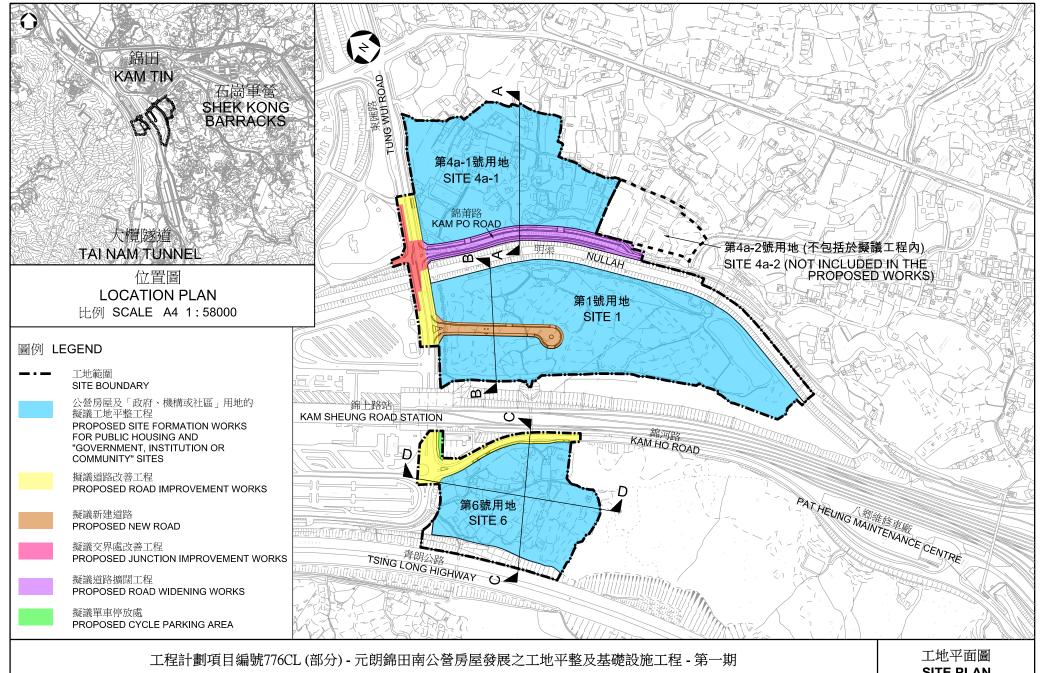
<sup>(</sup>a) trees of 100 years old or above;

<sup>(</sup>b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of an important person or event;

<sup>(</sup>c) trees of precious or rare species;

<sup>(</sup>d) trees of outstanding form (taking account of the overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or

<sup>(</sup>e) trees with trunk diameter equal to or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with a height/canopy spread equal to or exceeding 25 m.

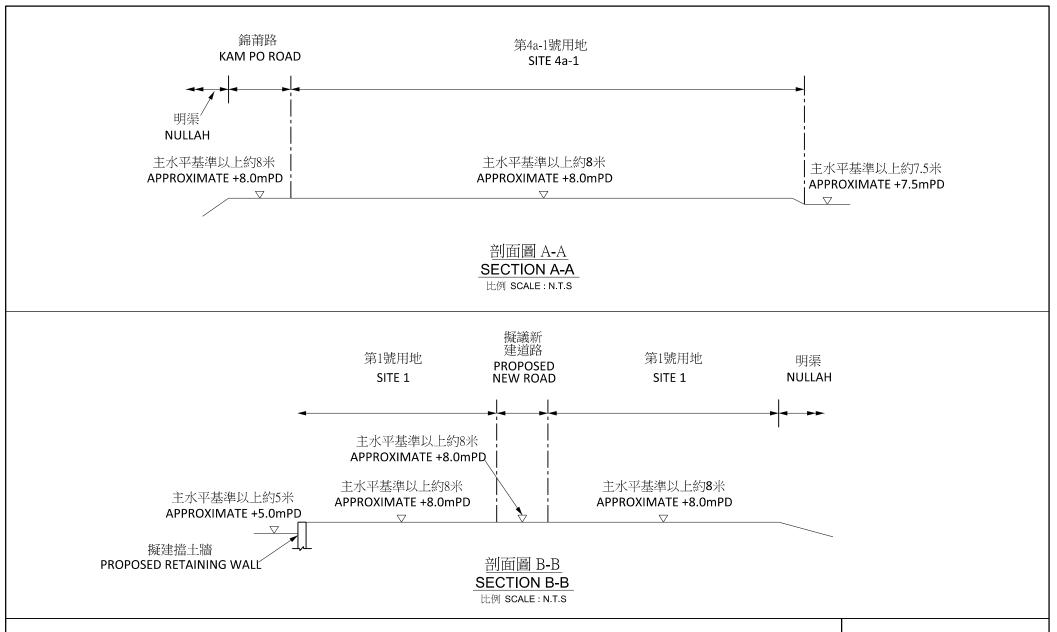


PWP ITEM NO. 776CL (PART) -

SITE FORMATION AND INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENTS AT KAM TIN SOUTH, YUEN LONG - PHASE 1

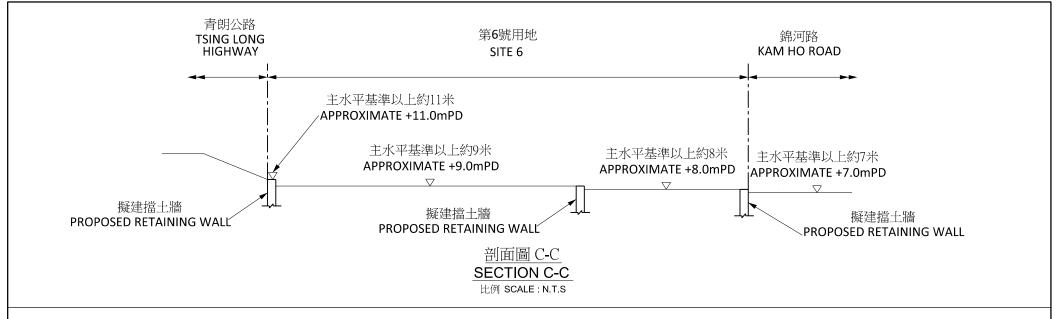
SITE PLAN

比例 SCALE A4 1:5800



工程計劃項目編號776CL (部分) - 元朗錦田南公營房屋發展之工地平整及基礎設施工程 - 第一期 PWP ITEM NO. 776CL (PART) - SITE FORMATION AND INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENTS AT KAM TIN SOUTH, YUEN LONG - PHASE 1

剖面圖 SECTIONS





剖面圖 D-D SECTION D-D 比例 SCALE: N.T.S

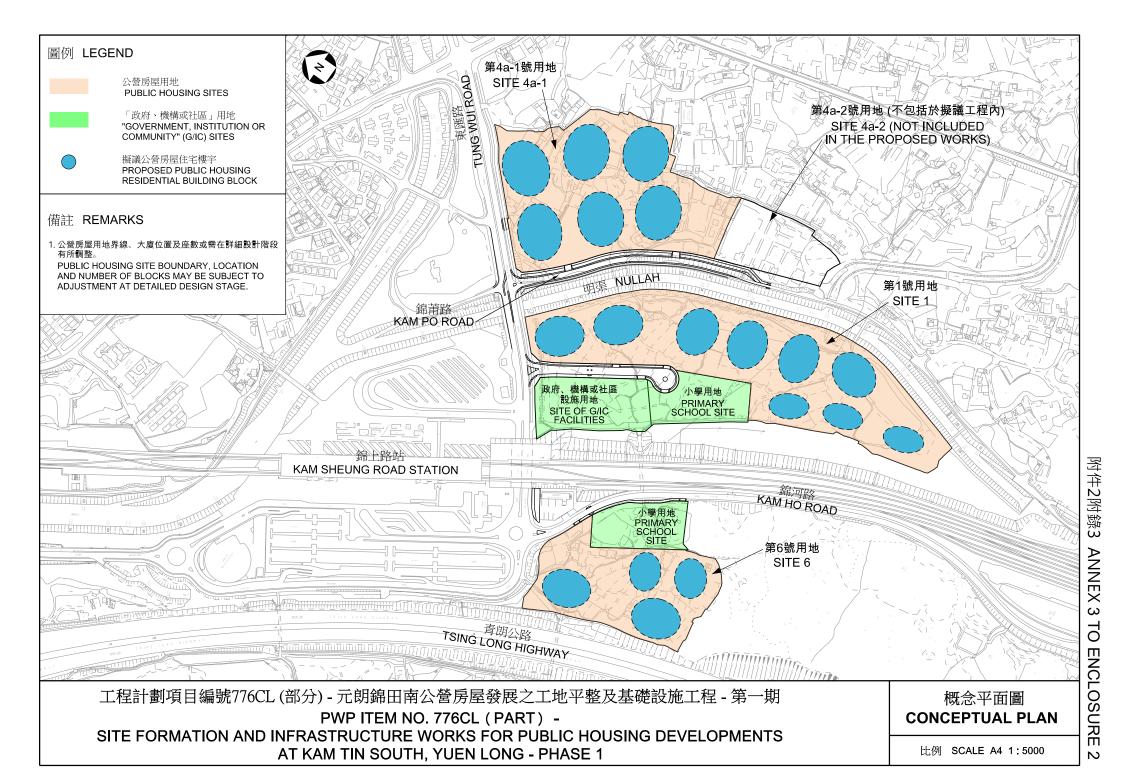
工程計劃項目編號776CL (部分) - 元朗錦田南公營房屋發展之工地平整及基礎設施工程 - 第一期 PWP ITEM NO. 776CL (PART) -

SITE FORMATION AND INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENTS AT KAM TIN SOUTH, YUEN LONG - PHASE 1 剖面圖 SECTIONS

# **Key development parameters of the public housing developments** at Sites 1, 4a-1 and 6 of Kam Tin South, Yuen Long

Site area	A total of about 13.0 hectares			
Total gross floor area	About 390 000 m <sup>2</sup>			
Building height restriction	69 metres above Principle Datum			
No. of domestic blocks	19 (subject to detailed design)			
No. of flats	About 8 100			
Projected population	About 22 700			
Completion date	In phases from 2026			
Non-domestic facilities#	Ancillary parking spaces, local open spaces, kindergartens, recreational, welfare, retail facilities and wet market, etc.			

<sup>#</sup> The "Government, Institution or Community" ("GIC") sites in Sites 1 and 6 with a total area of about 2.4 hectares will be reserved for supporting facilities including primary schools, an electricity sub-station as well as a community complex.



### 776CL (Part) – Site formation and infrastructure works for public housing developments at Kam Tin South, Yuen Long – Phase 1

### Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2020 prices)

		Estimate man- months	Average MPS* salary point	a. I.		nted fee Illion)
(a) Consultants' fees for contract administration (Note 2)	Professional Technical	-	- -	- -		2.1 2.1
				Sub-total	_	4.2#
(b) Resident site staff	Professional	127	38	1.6		17.4
(RSS) costs (Note 3)	Technical	968	14	1.6		46.8
				Sub-total	_	64.2
Comprising –						
(i) Consultants' fees for management of RSS					3.0#	
(ii) Remuneration of RSS					61.2#	
				Total	<del>-</del>	68.4

<sup>\*</sup> 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 = \$85,870 per month and MPS salary point 14 = \$30,235 per month).
- 2. The consultants' staff costs for contract administration are calculated in accordance with the existing consultancy agreements. The construction phase of the assignment will only be executed upon Finance Committee's approval to upgrade part of **776CL** to Category A.
- 3. We will only know the actual man-months and actual costs after completion of the construction works.

### Remarks

The figures in this Annex are shown in constant prices to correlate with the MPS salary point of the same year. The figure marked with # are shown in money-of-the-day prices in paragraph 7 of Enclosure 2.

### 776CL (Part) – Site formation and infrastructure works for public housing developments at Kam Tin South, Yuen Long – Phase 1

### Breakdown of the land acquisition cost

			\$ million
(I)	Estimated cost for land compensation		1,097.6
(II)	Estimated cost for land clearance		98.4
	(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.)	17.6	
	(b) Other EGAs (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 a shrine and EGA for "Tun Fu" ceremonial fees, etc.)	80.8	
(III)	<b>Interest and Contingency Payment</b>		179.4
		Total -	1,375.4

#### Note

The above estimated land acquisition cost is based on the prevailing rates as at October 2020.