For discussion
on 11 May 2016

PWSC(2016-17)15

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

Head 711 – HOUSING
Civil Engineering - Land development
777CL – Road and infrastructure works for development at Lin Cheung Road, Sham Shui Po
783CL – Infrastructure works for development at Queen's Hill, Fanling

Members are invited to recommend to the Finance Committee the upgrading of **777CL** and **783CL** to Category A at estimated costs of $114.8 million and $1,459.5 million in money-of-the-day prices respectively.

PROBLEM

We need to provide roads and infrastructure to support the proposed public housing developments at Lin Cheung Road, Sham Shui Po and Queen's Hill, Fanling.

/**PROPOSAL** …..

PROPOSAL

2. 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) the construction of roads and infrastructure to support the proposed public housing developments at Lin Cheung Road, Sham Shui Po at an estimated cost of $114.8 million in money-of-the-day (MOD) prices (viz. **777CL**); and

(b) the construction of infrastructure to support the proposed public housing developments at Queen's Hill, Fanling at an estimated cost of $1,459.5 million in MOD prices (viz. **783CL**).

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

Transport and Housing Bureau
May 2016

Road and infrastructure works for development at Lin Cheung Road, Sham Shui Po

PROJECT SCOPE AND NATURE

The proposed scope of **777CL** comprises construction of the following supporting the public housing developments at Lin Cheung Road, Sham Shui Po–

(a) a single two-lane carriageway with footpaths along the site to the east of Hing Wah Street West;

(b) a pedestrian walkway at the eastern boundary of the site leading to MTR Nam Cheong Station; and

(c) ancillary works including drainage, waterworks, sewerage, retaining wall and landscaping works.

A site plan and an artist's impression of the project are at Annexes 1 and 2 to Enclosure 1 respectively.

2. Subject to the funding approval of the Finance Committee (FC), we plan to commence the construction works in late 2016 for completion in mid-2018. To meet the programme, the Civil Engineering and Development Department plans to invite tenders in the second quarter of 2016 but the contract will only be awarded upon obtaining FC's funding approval.

JUSTIFICATION

3. The proposed public housing developments at Lin Cheung Road site will be completed in phases from 2018-19 onwards and will provide about 3 800 flats for a population of about 11 300. It is necessary to construct a carriageway of approximately 410 metre (m) long and a pedestrian walkway of approximately 350 m long, as well as associated infrastructure to support the developments. To tie in with the population intake of the proposed public housing developments, timely completion of the roads and infrastructure is necessary. Upon completion, the proposed works will be handed over to relevant government departments for management and maintenance.

FINANCIAL IMPLICATIONS

4. We estimate the capital cost of the project to be $114.8 million in MOD prices (please see paragraph 6 below), broken down as follows –

			$ million	
(a)	Road works		16.4	
(b)	Ancillary works including drainage, waterworks, sewerage, retaining wall and landscaping		63.8	
(c)	Consultants' fees for		4.7	
	(i) contract administration	4.2		
	(ii) management of resident site staff (RSS)	0.5		
(d)	Remuneration of RSS		9.5	
(e)	Contingencies		6.1	
	Sub-total		100.5	(in September 2015 prices)
(f)	Provision for price adjustment		14.3	
	Total		114.8	(in MOD prices)

5. In view of insufficient in-house resources, we propose to engage consultants to undertake contract administration and site supervision for the proposed works. A breakdown of the estimates for consultants' fees and resident site staff costs by man-months is at Annex 3 to Enclosure 1.

/6. …..

6. Subject to funding approval, we will phase the expenditure as follows –

Year	$ million (Sept 2015)	Price adjustment factor	$ million (MOD)
2016 – 2017	13.1	1.05775	13.9
2017 – 2018	54.7	1.12122	61.3
2018 – 2019	22.8	1.18849	27.1
2019 – 2020	9.9	1.25980	12.5
	100.5		114.8

7. 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 2016 to 2020. Subject to funding approval, we will deliver the works under a New Engineering Contract[1] with provision for price adjustment.

8. We estimate the annual recurrent expenditure arising from the proposed works to be about $2.1 million.

PUBLIC CONSULTATION

9. We consulted the Sham Shui Po District Council on the proposed works on 2 February 2016. Members did not object the proposal to support public housing developments at the Lin Cheung Road site, but requested the relevant departments to look into ways to mitigate the possible traffic impact and to explore the feasibility of connecting the proposed new road to Wholesale Market Street in the long term.

/10. …..

[1] 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.

10. We gazetted the proposed road works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (RO), and the proposed sewerage works, applying the RO in accordance with the Water Pollution Control (Sewerage) Regulation (Cap. 358AL), on 17 July 2015. No written objection was received. The authorisation notice was gazetted on 31 December 2015.

11. We consulted the Task Force on Harbourfront Developments in Kowloon, Tsuen Wan and Kwai Tsing of Harbourfront Commission on 9 November 2015. Members did not object to the landscape design proposal.

12. We consulted the Advisory Committee on the Appearance of Bridges and Associated Structures[2] (ACABAS) on 19 January 2016 with regard to the design of the retaining wall to be built under the proposed works. Members of the ACABAS accepted the proposed design of the retaining wall.

13. We consulted the Legislative Council Panel on Housing on the proposed works on 7 March 2016. Members supported submitting the funding proposal to the Public Works Subcommittee for consideration. The supplementary information requested by Panel Members has been submitted to the Panel.

ENVIRONMENTAL IMPLICATIONS

14. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We have completed the Preliminary Environmental Review (PER) for the project. The PER concluded and the Director of Environmental Protection agreed that the project would not have any long-term adverse environmental impacts.

/15. …..

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[2] The Advisory Committee on the Appearance of Bridges and Associated Structures, which comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institution of Planners, academic institutions, Architectural Services Department, Highways Department, Housing Department and Civil Engineering and Development Department, is responsible for vetting the design of bridges and other structures associated with the public highway system, including noise barriers and semi-enclosures, from aesthetic and visual impact points of view.

15. We will incorporate into the works contracts the mitigation measures recommended in the PER to control environmental impacts arising from the construction works to within established standards and guidelines. These measures include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the site. We have included in the project estimate the cost for the implementation of the environmental mitigation measures.

16. At the planning and design stages, we have considered the alignment, design level and construction method of the proposed works so as to reduce the generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated soil and rock fill) 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[3](PFRF). We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste and the use of non-timber formwork to further reduce the generation of construction waste.

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

/18. …..

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

18. We estimate that the proposed works will generate 31 511 tonnes of construction waste in total. Of these, we will reuse 15 653 tonnes (50%) of inert construction waste on site and deliver 13 343 tonnes (42%) of inert construction waste to PFRF for subsequent reuse. We will dispose of the remaining 2 515 tonnes (8%) non-inert construction waste at landfills. The total cost for accommodating construction waste at PFRF and landfill sites is estimated to be $0.7 million for this project (based on a unit charge rate of $27 per tonne for disposal at PFRF, and $125 per tonne for disposal at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

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

TRAFFIC IMPLICATIONS

20. The proposed works will not cause any significant traffic impact. Temporary traffic arrangements will be implemented to facilitate the construction works which will require temporary partial road closures. We will display publicity boards on site giving details of the temporary traffic arrangements, and the anticipated completion dates of individual section of works. In addition, we will set up a telephone hotline to respond to public enquiries or complaints.

LAND ACQUISITION

21. The proposed works do not require any land acquisition.

BACKGROUND INFORMATION

22. We upgraded **777CL** to Category B in September 2014.

23. We engaged consultants in March 2015 to undertake the detailed design and site investigation for the proposed works at an estimated cost of about $12 million under the block allocation **Subhead B100HX** "Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme". We have completed the detailed design for the proposed works mentioned in paragraph 1 above.

24. The proposed works will involve removal of 137 trees including 136 trees to be felled and one tree to be transplanted within the project site. All the trees proposed to be felled and transplanted are not important trees[4]. We will incorporate planting proposals as part of the project, including a total of 262 trees, 52 000 shrubs and 4 800 m^2 of grassed area.

25. We estimate that the proposed works will create about 70 jobs (55 for labourers and another 15 for professional or technical staff) providing a total employment of 1 350 man-months.

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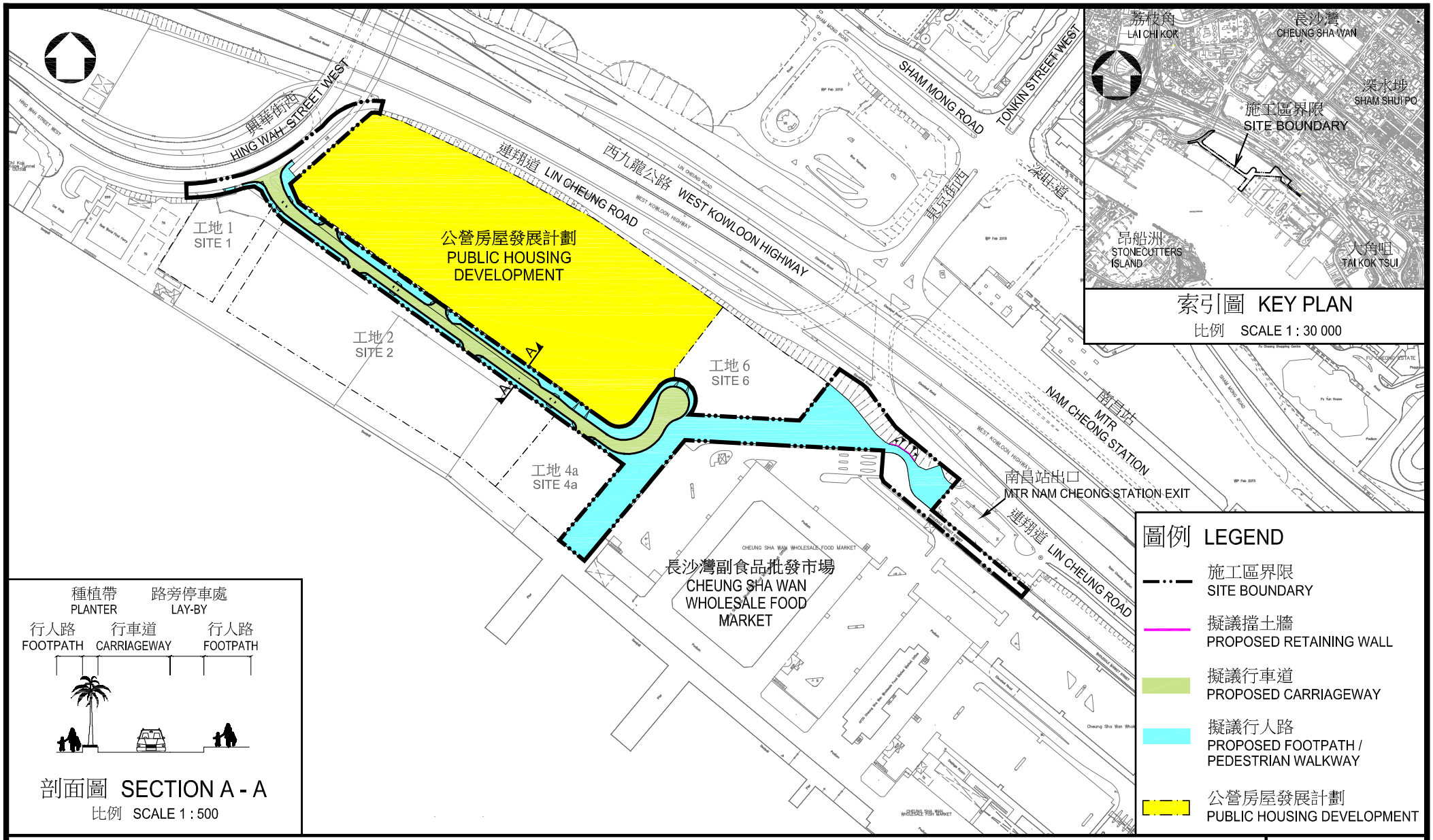
[4] "Important trees" refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

(a) trees of 100 years old or above;
(b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of an important person or event;
(c) trees of precious or rare species;
(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
(e) trees with a trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with a height or canopy spread equal to or exceeding 25 m.



工務計劃項目編號 777CL

深水埗連翔道用地發展之道路及基礎設施工程

PWP ITEM NO. 777CL

ROAD AND INFRASTRUCTURE WORKS FOR DEVELOPMENT AT LIN CHEUNG ROAD, SHAM SHUI PO

工地平面圖
SITE PLAN

比例 SCALE 1:4000

附件一 附錄一 Annex 1 to Enclosure 1

從東北面望向擬議行人路
VIEW OF PROPOSED PEDESTRIAN WALKWAY FROM NORTH-EAST DIRECTION

工務計劃項目編號 777CL
深水埗連翔道用地發展之道路及基礎設施工程
PWP ITEM NO. 777CL
ROAD AND INFRASTRUCTURE WORKS FOR DEVELOPMENT AT LIN CHEUNG ROAD, SHAM SHUI PO

構思圖
ARTIST'S IMPRESSION DRAWING

附件一 附錄二 Annex 2 to Enclosure 1

Annex 3 to Enclosure 1

777CL – Road and infrastructure works for development at Lin Cheung Road, Sham Shui Po

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2015 prices)

			Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee ($ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	--	--	--	3.7
		Technical	--	--	--	0.5
					Sub-total	4.2
(b)	Resident site staff (RSS) costs (Note 3)	Professional	36	38	1.6	4.3
		Technical	140	14	1.6	5.7
					Sub-total	10.0
	Comprising –					
	(i) Consultants' fees for management of RSS				0.5	
	(ii) Remuneration of RSS				9.5	
					Total	**14.2**

* 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 point 38 = $74,210 per month and MPS point 14 = $25,505 per month).

2. The consultants' staff cost for the contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **777CL**. The construction phase of the assignment will only be executed upon Finance Committee's approval to upgrade **777CL** to Category A.

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

Infrastructure works for development at Queen's Hill, Fanling

PROJECT SCOPE AND NATURE

The proposed scope of **783CL** comprises the following supporting the proposed public housing developments at Queen's Hill, Fanling –

(a) widening and realignment of Lung Ma Road to a single two-lane carriageway, and improvement works at associated roads and junctions;

(b) construction of a sewage pumping station (SPS) near the junction of Lung Ma Road and Sha Tau Kok Road;

(c) construction of gravity sewers and rising mains; and

(d) construction of ancillary works including drainage, waterworks and landscaping works.

Site plans and artist's impression of the project are at Annexes 1 and 2 to Enclosure 2 respectively.

2. Subject to funding approval of the Finance Committee (FC), we plan to commence the construction works in late 2016 for completion in late 2019. To meet the programme, the Civil Engineering and Development Department plans to invite tenders in the second quarter of 2016 but the contract will only be awarded upon obtaining FC's funding approval.

JUSTIFICATION

3. The proposed public housing developments at the western part of Queen's Hill site will be completed in phases from 2020-21 onwards and will provide about 12 000 flats for a population of about 37 300.

4. To support the developments, it is necessary to improve the infrastructure in the vicinity such as widening of the existing Lung Ma Road and provision of drainage, sewerage and waterworks systems. Lung Ma Road, which is about 470 metres (m) long and about 5.9 m to 7.0 m wide at present connecting the Queen's Hill site to Sha Tau Kok Road, will be realigned and widened to a standard single two-lane carriageway of 7.3 m wide and 12.4 m wide at locations with lay-bys. The existing sewerage system would not have sufficient capacity to cater for the additional sewage discharge from the proposed public housing developments, it is therefore essential to construct a new SPS with associated gravity sewers and rising mains to convey the additional sewage to the Shek Wu Hui Sewage Treatment Works (SWHSTW).

5. To tie in with the proposed public housing developments, timely completion of the infrastructure works is necessary. Upon completion, the proposed works will be handed over to relevant government departments for management and maintenance.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be $1,459.5 million in MOD prices (please see paragraph 8 below), broken down as follows –

			$ million
(a)	Widening and realignment of Lung Ma Road and other road improvement works		125.0
(b)	SPS		234.3
	(i) civil works	149.1	
	(ii) electrical and mechanical (E&M) works	85.2	
(c)	Gravity sewers and rising mains		509.8

/**$ million** …..

			$ million	
(d)	Ancillary works including drainage, waterworks and landscaping works		101.6	
(e)	Consultants' fees for		8.7	
	(i) contract administration	4.0		
	(ii) management of resident site staff (RSS)	4.7		
(f)	Remuneration of RSS		88.3	
(g)	Contingencies		105.0	
	Sub-total		1,172.7	(in September 2015 prices)
(h)	Provision for price adjustment		286.8	
	Total		1,459.5	(in MOD prices)

7. In view of insufficient in-house resources, we propose to engage consultants to undertake contract administration and site supervision for the proposed works. A breakdown of the estimates for consultants' fees and resident site staff costs by man-months is at Annex 3 to Enclosure 2.

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

Year	**$ million (Sept 2015)**	**Price adjustment factor**	**$ million (MOD)**
2016 – 2017	43.1	1.05775	45.6
2017 – 2018	176.8	1.12122	198.2
2018 – 2019	202.0	1.18849	240.1

/**Year** …..

Year	$ million (Sept 2015)	Price adjustment factor	$ million (MOD)
2019 – 2020	403.0	1.25980	507.7
2020 – 2021	307.0	1.33539	410.0
2021 – 2022	33.0	1.40549	46.4
2022 – 2023	7.8	1.47577	11.5
	1,172.7		1,459.5

9. 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 2016 to 2023. Subject to funding approval, we will deliver the works under a New Engineering Contract[1] with provision for price adjustment.

10. We estimate the annual recurrent expenditure arising from the proposed works to be about $8.2 million.

PUBLIC CONSULTATION

11. We consulted the North District Council (NDC) on the proposed works on 9 October 2014 and 17 February 2016, and consulted the Working Group on Housing and Town Planning of North District on 2 December 2014 and 30 April 2015. Members supported the proposal.

/12. …..

[1] 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.

12. We gazetted the first amendment of the proposed widening of Lung Ma Road under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (RO) on 31 July 2015 and received six objections. One objection was related to a private lot boundary and it was withdrawn unconditionally after clarification. The other five objectors were against the provision of noise barriers nearby their lots on Lung Ma Road. Subsequently, the second amendment with the deletion of the concerned section of noise barriers was gazetted under the RO on 18 December 2015 to address the objectors' concerns. No objection to the second amendment scheme was received. The five objections against the first amendment scheme were withdrawn unconditionally. The notice of authorisation was gazetted on 24 March 2016.

13. We consulted the Advisory Committee on the Appearance of Bridges and Associated Structures [2] (ACABAS) on 16 February and 15 March 2016. The ACABAS accepted the proposed design of the noise barriers.

14. We maintained close dialogues with local stakeholders, including the NDC Members and the Fanling District Rural Committee and secured their support.

15. We consulted the Legislative Council Panel on Housing on the proposed works on 7 March 2016. Members supported submitting the funding proposal to the Public Works Subcommittee for consideration. The supplementary information requested by Panel Members has been submitted to the Panel.

/ENVIRONMENTAL …..

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[2] The Advisory Committee on the Appearance of Bridges and Associated Structures, which comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, academic institutions, Architectural Services Department, Highways Department, Housing Department and Civil Engineering and Development Department, is responsible for vetting the design of bridges and other structures associated with the public highway system, including noise barriers and semi-enclosures, from aesthetic and visual impact points of view.

ENVIRONMENTAL IMPLICATIONS

16. The proposed SPS is a designated project (DP) under Schedule 2 of the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO). The Director of Environmental Protection (DEP), with the consent of the Secretary for the Environment, and pursuant to the EIAO, granted the permission to apply directly for an environmental permit (EP) on 20 November 2015 and subsequently issued the EP on 22 January 2016. We shall implement the mitigation measures set out in the project profile, and the EP as well as those required by the DEP. We have included in the project estimate the cost for the implementation of environmental mitigation measures.

17. Except for the proposed SPS, other parts of **783CL** are not DP under EIAO. We have undertaken to carry out a Preliminary Environmental Review (PER) on the non-DP parts of **783CL**. The PER concluded that with the implementation of the recommended mitigation measures, the non-DP parts of **783CL** will not cause any long-term adverse environmental impacts. These measures include water spraying for dust suppression, use of quality powered mechanical equipment, installation of noise barriers, use of sand and silt removal facilities, etc. We have included in the project estimate the cost for the implementation of the suitable mitigation measures.

18. For controlling the short-term environmental impacts caused by the proposed works during construction, mitigation measures will be implemented under the works contract. 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 noise generation, and the use of trucks with cover or enclosed containers for waste transportation.

19. At the planning and design stages, we have considered the alignment, design level and construction method of the proposed works so as to reduce the generation of construction waste where possible. In addition, we will require the contractor 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 …..

disposal of inert construction waste at public fill reception facilities[3] (PFRF). We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

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

21. We estimate that the proposed works will generate 36 900 tonnes of construction waste in total. Of these, we will reuse 11 800 tonnes (32%) of inert construction waste on site and deliver 20 450 tonnes (55%) of inert construction waste to PFRF for subsequent reuse. We will dispose of the remaining 4 650 tonnes (13%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at PFRF and landfill sites is estimated to be $1.1 million for this project (based on a unit charge rate of $27 per tonne for disposal at PFRF and $125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

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

/23. …..

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

23. We have conducted an archaeological review on the concerned section of Lung Ma Road and concluded that the archaeological potential of the concerned area is negligible.

TRAFFIC IMPLICATIONS

24. The proposed works will not cause any significant traffic impact. Temporary traffic arrangements will be implemented to facilitate the construction works which will require temporary partial road closures. We will display publicity boards on site giving details of the temporary traffic arrangements and the anticipated completion dates of individual section of works. In addition, we will set up a telephone hotline to respond to public enquires or complaints.

LAND ACQUISITION

25. The proposed works do not require any land acquisition but require clearance of Government land of about 62 270 square metres (m^2). The cost of clearance, estimated to be $2.9 million, will be charged to **Head 701 – Land Acquisition**. A breakdown of the land clearance cost is at Annex 4 to Enclosure 2.

BACKGROUND INFORMATION

26. We upgraded **783CL** to Category B in September 2014.

27. We engaged consultants in February 2015 to undertake the detailed design and site investigation for the proposed works at an estimated cost of about $8.7 million under the block allocation **Subhead B100HX** "Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme". We have completed the detailed design for the proposed works mentioned in paragraph 1 above.

28. The proposed works will involve removal of 490 trees including 452 trees to be felled and 38 trees to be transplanted within or outside the project site. All the trees to be felled and transplanted are not important trees[4]. We will incorporate planting proposals as part of the project, including about 282 trees, 224 052 shrubs and 10 000 m^2 of grassed area.

29. We estimate that the proposed works will create 600 jobs (480 for labourers and another 120 for professional or technical staff), providing a total employment of 15 000 man-months.

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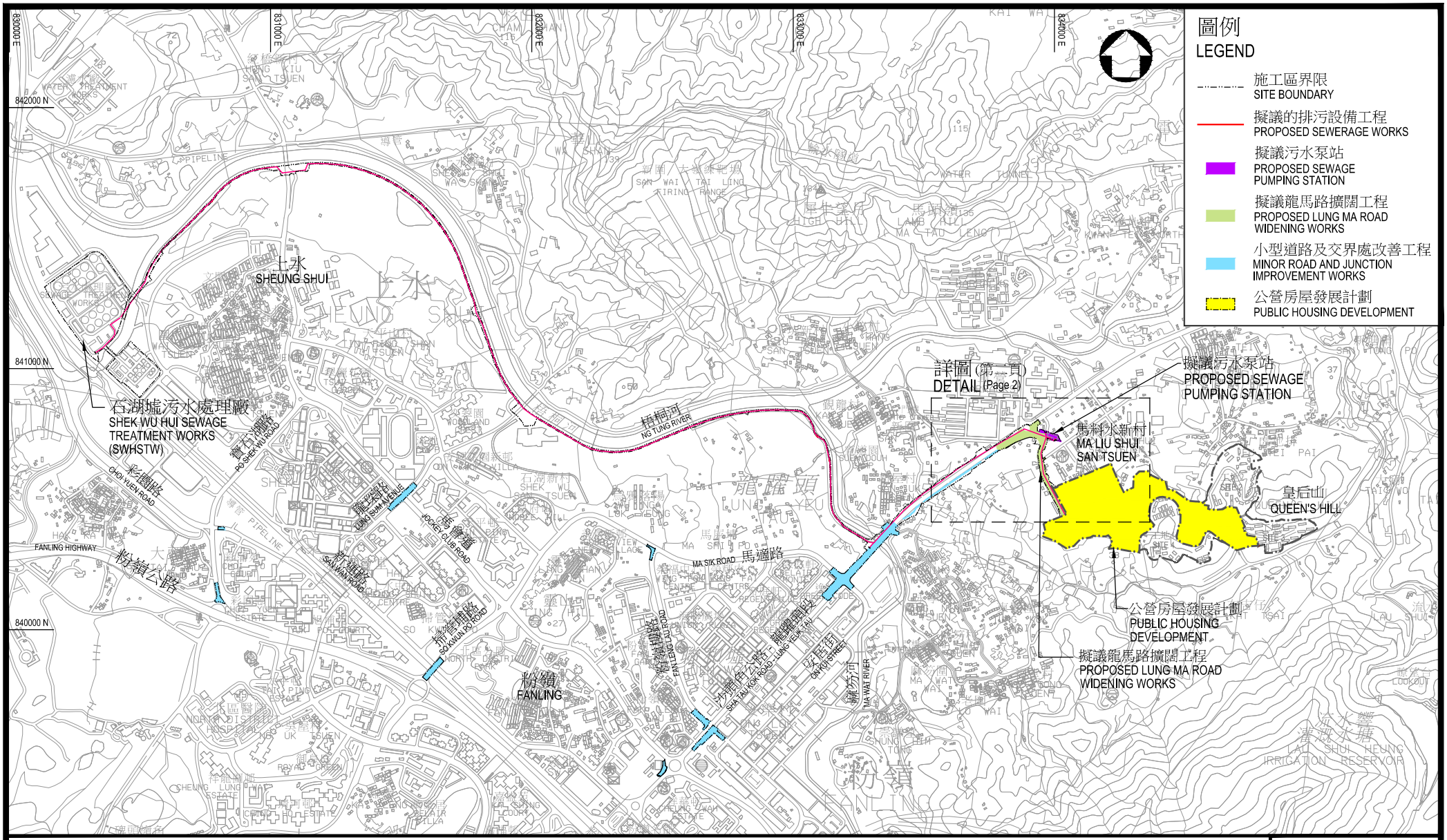
[4] "Important trees" refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

(a) trees of 100 years old or above;
(b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of an important person or event;
(c) trees of precious or rare species;
(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
(e) trees with a trunk diameter equal to or exceeding 1.0m (measured at 1.3m above ground level), or with a height or canopy spread equal to or exceeding 25m).

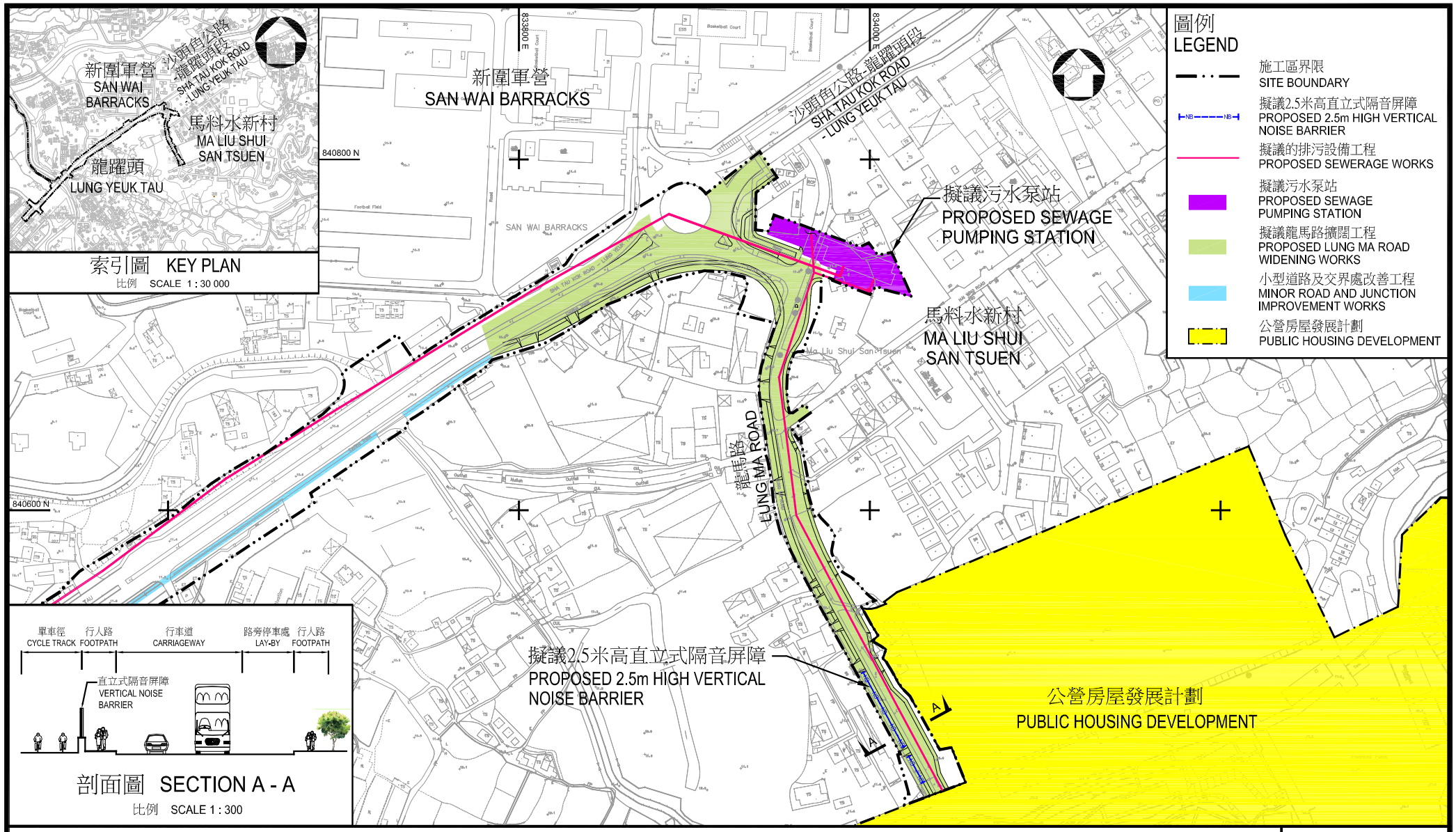


工務計劃項目編號 783CL
粉嶺皇后山發展之基礎設施工程

PWP ITEM NO. 783CL
INFRASTRUCTURE WORKS FOR DEVELOPMENT AT QUEEN'S HILL, FANLING

工地平面圖
SITE PLAN
比例 SCALE 1:20 000

附件二 附錄一 Annex 1 to Enclosure 2
第一頁 Page 1



工務計劃項目編號 783CL
粉嶺皇后山發展之基礎設施工程

PWP ITEM NO. 783CL
INFRASTRUCTURE WORKS FOR DEVELOPMENT AT QUEEN'S HILL, FANLING

工地平面圖
SITE PLAN

比例 SCALE 1:3000

從北面望向龍馬路
VIEW OF LUNG MA ROAD FROM NORTH DIRECTION

工務計劃項目編號 783CL
粉嶺皇后山發展之基礎設施工程
PWP ITEM NO. 783CL
INFRASTRUCTURE WORKS FOR DEVELOPMENT AT QUEEN'S HILL, FANLING

構思圖
ARTIST'S IMPRESSION DRAWING

附件二 附錄二 Annex 2 to Enclosure 2

Annex 3 to Enclosure 2

783CL – Infrastructure works for development at Queen's Hill, Fanling

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2015 prices)

Consultants' staff costs			**Estimated man-months**	**Average MPS* salary point**	**Multiplier** (Note 1)	**Estimated fee ($ million)**
(a)	Consultants' fees for contract administration (Note 2)	Professional	-	-	-	4.0
		Technical	-	-	-	-
					Sub-total	4.0
(b)	Resident site staff (RSS) costs (Note 3)	Professional	332	38	1.6	39.4
		Technical	1 313	14	1.6	53.6
					Sub-total	93.0
	Comprising –					
	(i) Consultants' fees for management of RSS				4.7	
	(ii) Remuneration of RSS				88.3	
					Total	**97.0**

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants (as at now, MPS point 38 = $74,210 per month and MPS point 14 = $25,505 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 **783CL**. The construction phase of the assignment will only be executed upon Finance Committee's approval to upgrade **783CL** to Category A.

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

Annex 4 to Enclosure 2

783CL – Infrastructure works for development at Queen's Hill, Fanling

Breakdown of the land clearance cost

			$ million
(I)	**Estimated clearance cost**		**2.55**
(a)	Ex-gratia allowance of crop compensation	0.01	
(b)	Ex-gratia allowances for miscellaneous indigenous villager matters e.g. removal of graves and shrines	0.04	
(c)	Ex-gratia allowance for domestic occupiers and business undertakings	2.50	
(II)	**Contingency Payment**		**0.26**
(a)	Contingency on the above cost	0.26	
		Total	2.81
			(say 2.90)