# ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

#### HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT Civil Engineering – Land development 765CL – Development of Anderson Road Quarry site

Members are invited to recommend to Finance Committee –

- (a) the upgrading of part of 765CL, entitled
  "Development of Anderson Road Quarry site detailed design and site investigations", to
  Category A at an estimated cost of
  \$187.2 million in money-of-the-day prices; and
- (b) the retention of the remainder of **765CL** in Category B.

#### PROBLEM

We need to develop the Anderson Road Quarry (ARQ) site, with a view to making available housing land to address the current tight housing supply situation as soon as possible.

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# PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Development, proposes to upgrade part of **765CL** to Category A at an estimated cost of \$187.2 million in money-of-the-day (MOD) prices to undertake detailed design and site investigation works of the site formation and associated infrastructural works, off-site road/junction improvement works, as well as pedestrian linkage facilities, for the proposed development at the ARQ site.

#### PROJECT SCOPE AND NATURE

- 3. We propose to upgrade part of **765CL** to Category A, comprising
  - (a) detailed design of the works described in paragraph 5 below, including review of the conceptual design and impact assessments on traffic, environmental, waterworks, drainage, sewerage and geotechnical aspects;
  - (b) environmental impact assessment (EIA);
  - (c) associated site investigation works and supervision; and
  - (d) preparation of tender documents and assessment of tenders for the works described in paragraph 5 below.

A layout plan showing the location of the proposed works is at Enclosure 1.

4. Subject to funding approval of the Finance Committee, we plan to commence the detailed design and site investigation works of the project in June 2014 for completion in June 2018.

5. We will retain the remainder of **765CL** in Category B, for which we will seek funding in phases to dovetail with the implementation programme of the project. The scope of the remainder mainly comprises –

(a) site formation and infrastructural works including road works, waterworks, geotechnical works, drainage works and sewerage works for the 40-hectare land platforms for housing and other developments at the ARQ site;

- road improvement works at the junction of Lin Tak Road and Sau Mau Ping Road over Tseung Kwan O Road;
- (c) widening of Lin Tak Road between Hong Wah Court and Pik Wan Road;
- (d) road improvement works at the junction of Clear Water Bay Road and Anderson Road;
- (e) widening of a section of New Clear Water Bay Road near Shun Lee Tsuen Road;
- (f) provision of footbridges, lift towers/escalators and subways to enhance the pedestrian linkage between the ARQ site and housing estates in the vicinity, the Kwun Tong town centre, as well as the proposed bus-to-bus interchange at the toll plaza of Tseung Kwan O Tunnel; and
- (g) provision of the associated environmental mitigation measures and landscaping works.

# JUSTIFICATION

6. To meet the housing and other development needs of the Hong Kong community, the Government will continue to adopt a multi-pronged approach to increase land supply in the short, medium and long term, through the continued and systematic implementation of a series of measures, including the optimal use of developed land as far as practicable and creating new land for development. As set out in the 2013 Policy Address, the development of ARQ site is one of the major initiatives to increase housing land supply in the short to medium term.

7. The development of ARQ site will provide about 12 hectares of land for both private and subsidised housing development with about 9 410 flats (with a private-to-subsidised housing ratio of 80:20) for a planned population of

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about 25 000. Land will also be provided for commercial uses, government, institution or community facilities, a quarry park, open spaces and amenity areas. The Civil Engineering and Development Department (CEDD) commenced the engineering feasibility study in end October 2012 to assess the technical feasibility of the proposed ARQ development as set out in the final Recommended Outline Development Plan (RODP) formulated by the Planning Department (PlanD), and propose necessary measures to duly address the potential impacts on traffic and environment, etc. so arising. The engineering feasibility study, which is now close to completion, has confirmed the feasibility of the proposed ARQ development. We intend to commence the construction works in mid-2016 and complete the site formation in stages from 2019 to 2020 for the initial population intake in 2022/23, with a view to making available housing land to address the tight housing supply situation as soon as possible.

8. In addition to the site formation and infrastructural works within the development site, a series of associated off-site road/junction improvement works and pedestrian linkage facilities to enhance the pedestrian linkage between the ARQ site and housing estates in the vicinity, the Kwun Tong town centre, as well as the proposed bus-to-bus interchange at the toll plaza of Tseung Kwan O Tunnel, are required to mitigate the potential cumulative traffic impact arising from the proposed ARQ development. With all the proposed off-site road/junction improvement works and pedestrian linkage facilities in place, the proposed development at the ARQ site will not cause any unacceptable impact on the traffic in Kwun Tong.

#### FINANCIAL IMPLICATIONS

9. We estimate the cost of the proposed detailed design and site investigation works to be \$187.2 million in MOD prices (please see paragraph 10 below), broken down as follows –

				\$ million	1
(a)	Con	sultants' fees for		83.8	
	(i)	detailed design	67.7		
	(ii)	environmental impact assessment	5.3		
	(iii)	supervision of site investigation works	6.0		
	(iv)	preparation of tender documents and assessment of tenders	4.8		
(b)	Site	investigation works		60.0	
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			\$ million	
(c)	Contingencies		14.3	
		Sub-total	158.1	(in September 2013 prices)
(d)	Provision for price adjustment		29.1	
		Total	187.2	(in MOD prices)

In view of the multi-disciplinary nature of this project and insufficient in-house resources, we propose to engage consultants to undertake the detailed design and supervision of site investigation works for the project. A breakdown of the estimate for consultants' fees by man-months is at Enclosure 2.

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

Year	\$ million (Sept 2013)	Price adjustment factor	\$ million (MOD)
2014 - 2015	25.5	1.06000	27.0
2015 - 2016	52.6	1.12360	59.1
2016 - 2017	33.5	1.19102	39.9
2017 - 2018	20.9	1.26248	26.4
2018 - 2019	12.9	1.32876	17.1
2019 - 2020	12.7	1.39519	17.7
	158.1		187.2

11. We have derived the MOD estimate 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 2014 to 2020. We will tender the proposed detailed design consultancy on a lump sum basis with provision for price adjustment. We will tender the site investigation works under a standard re-measurement contract because the quantity of works involved may vary depending on actual ground conditions. The contract for site investigation works will provide for price adjustment.

12. The proposed detailed design and site investigation works will not give rise to any recurrent consequences.

### PUBLIC CONSULTATION

13. We briefed the Kwun Tong District Council (KTDC) and the Housing and Environmental Hygiene Committee of the Sai Kung District Council (SKDC) on 1 and 14 March 2013 respectively on the final RODP for the ARQ site. While KTDC members generally supported and SKDC members noted the proposed development, both DCs expressed concerns on the potential traffic impact. In particular, most KTDC members expressed their concerns on the aggregate traffic impact on Kwun Tong arising from the residential development at ARQ site, and urged for the early implementation of the major projects (e.g. Tseung Kwan O-Lam Tin Tunnel) to relieve the pressure on traffic congestion in Kwun Tong. We explained to them that the traffic impact and possible mitigation measures were being examined in the engineering feasibility study and that we would revert to their Traffic and Transport Committee in due course (please see paragraph 15 below).

14. Some SKDC members also suggested increasing the proportion of public housing at the ARQ site. We explained to them the reason and the need to maintain a desirable housing mix in Kwun Tong which is now predominantly occupied by public housing.

15. With the engineering feasibility study, we subsequently presented the findings of traffic impact assessment, the proposed associated road/junction improvement works and pedestrian linkage facilities to the Traffic and Transport Committees of KTDC and SKDC both on 26 September 2013. SKDC members supported in-principle the proposed works and expressed views on public transport for the proposed development. KTDC supported the scheme and urged for its early implementation, with some members suggested enhancement of the existing pedestrian linkage facilities in the vicinity of the ARQ site. We will maintain close liaison with KTDC to examine their suggestions at the detailed design stage.

16. We also consulted the Legislative Council Panel on Development on 20 December 2013. Members in general supported the project but expressed concerns on the possibly aggravating traffic condition of the Kwun Tong town centre and Choi Hung Interchange. We anticipate that traffic circulation at the Kwun Tong town centre will improve upon completion of the Kwun Tong Town Centre Redevelopment, while the road/junction improvement works and

pedestrian linkage facilities being proposed as part of the ARQ development, and the planned public transport connection from the ARQ site to MTR stations other than Kwun Tong would help limit the traffic impact on the Kwun Tong town centre to an insignificant level. Besides, CEDD will also explore every means to complete the proposed road/junction improvement works and pedestrian linkage facilities as early as possible. Furthermore, it is anticipated that a significant amount of traffic volume at Clear Water Bay Road will be attracted to Route 6 when it is completed. The spared traffic capacity of Clear Water Bay Road to be released would amply accommodate the traffic volume generated from the development of ARQ. Separately, the traffic condition of Choi Hung Interchange is a regional traffic issue not solely caused by the development of ARQ. The Transport Department (TD) is consulting KTDC and relevant stakeholders on some short-term improvement measures. TD will also investigate the long-term solution for a major improvement scheme. In short, as regards the traffic situation of the Shun Lee and Sau Mau Ping area in general and the specific issue of the Choi Hung Interchange, since these are not directly related to the development at the ARQ site and the traffic impact assessment shows that the traffic situation would be no worse off after the ARQ development, examination of these issues and exploration of any solutions would be beyond the scope of the current works project, and would be looked into separately by the Government as appropriate.

#### ENVIRONMENTAL IMPLICATIONS

17. The proposed detailed design and site investigation works are not designated projects under the EIA Ordinance (Cap. 499) and will not cause any long-term environmental impact. We have included in the project estimate the cost of implementing suitable mitigation measures to control the short-term environmental impacts during the site investigation works.

18. The engineering feasibility study is a designated project under Schedule 3 of the EIA Ordinance. We are carrying out a Schedule 3 EIA study to assess the environmental impacts of the construction and operation for the proposed development to meet the requirements under the EIA Ordinance. Environmental permits will be required for the construction and operation of those proposed works if identified as designated projects under Schedule 2 of the EIA Ordinance during the course of the Schedule 3 EIA study. We will carry out the necessary EIA study for those identified designated projects, as part of the design works, to meet the requirements of the EIA Ordinance.

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19. The proposed site investigation works will only generate very little construction waste. We will require the consultants to fully consider appropriate measures to minimise the generation of construction waste and reuse/recycle construction waste as much as possible in implementing the construction works.

### HERITAGE IMPLICATIONS

20. The proposed detailed design and site investigation works will not affect any heritage sites, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

# LAND ACQUISITION

21. The proposed detailed design and site investigation works will not require any land acquisition.

### **BACKGROUND INFORMATION**

22. In January 2011, PlanD engaged consultants to undertake a planning study on the future land use of the ARQ site. Based on the recommendations of the planning study, CEDD engaged consultants in October 2012 to undertake a follow-up engineering feasibility study on the site formation and associated infrastructural works for the proposed development at the ARQ site, as well as the proposed associated road/junction improvement works and pedestrian linkage facilities. Those works, at a total estimated cost of \$23.5 million, have been charged to **Head 711 Subhead B100HX** "Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme". We have substantially completed the engineering feasibility study.

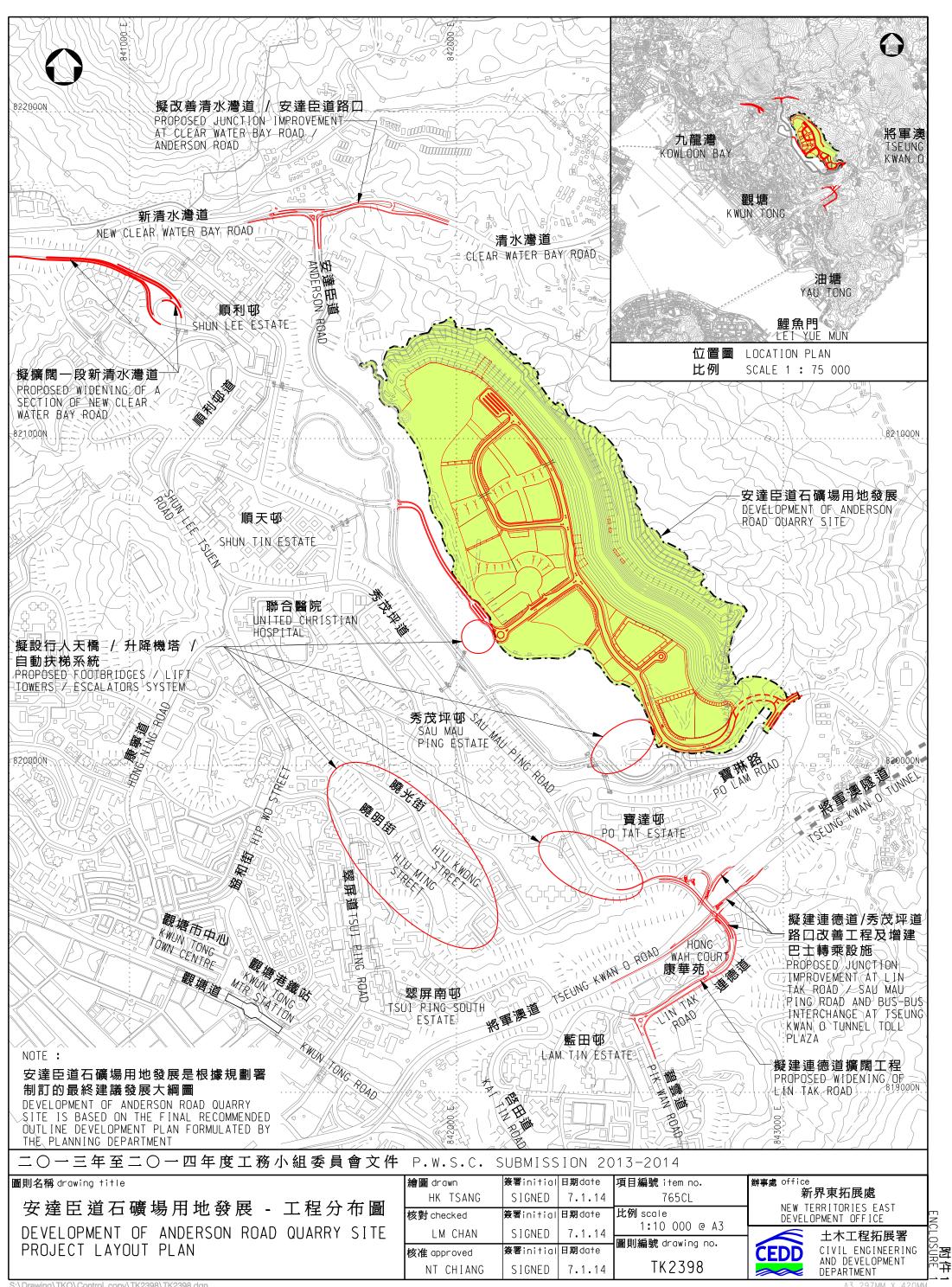
23. We upgraded **765CL** to Category B in September 2013.

24. No old and valuable tree is identified in the site. The proposed detailed design and site investigation works will not involve any tree removal or planting proposals. We will require the consultants to take into consideration the need for tree preservation and planting proposal during the detailed design stage.

25. We estimate that the proposed detailed design and site investigation works will create about 76 jobs (36 for labourers and another 40 for professional/technical staff), providing a total employment of 1 530 man-months.

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Development Bureau January 2014



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#### Enclosure 2 to PWSC(2013-14)32

#### 765CL (Part) – Development of Anderson Road Quarry site

#### Breakdown of the estimate for consultants' fees (in September 2013 prices)

Consultants' staff costs (Note 1)	Estimated man- months	Average MPS* salary point	Multiplier (Note 2)	Estimated fee (\$million)	
(i) Detailed design	Professional	332	38	2.0	44.7
	Technical	493	14	2.0	23.0
(ii) Environmental impact	Professional	25	38	2.0	3.4
assessment	Technical	41	14	2.0	1.9
(iii) Supervision of site	Professional	26	38	2.0	3.5
investigation works	Technical	54	14	2.0	2.5
(iv) Preparation of tender	Professional	24	38	2.0	3.2
documents and assessment of tenders	Technical	34	14	2.0	1.6
				Total	83.8

#### \* MPS = Master Pay Scale

#### Notes

- 1. The actual man-months and fees will only be known after we have selected the consultants through the usual competitive lump sum fee bidding system.
- 2. A multiplier of 2.0 is applied to the average MPS salary point to estimate the full staff costs including the consultants' overheads and profit as the staff will be employed in the consultants' offices. (As at now, MPS salary point 38 = \$67,370 per month and MPS salary point 14 = \$23,285 per month.)