For discussion **PWSC(2009-10)57**
on 15 June 2009

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS
Recreation, Culture and Amenities – Mixed amenity packages
51RG – Redevelopment of Kwun Tong Swimming Pool Complex and Kwun Tong Recreation Ground

Members are invited to recommend to Finance Committee the upgrading of **51RG** to Category A at an estimated cost of $1,323.8 million in money-of-the-day prices for the redevelopment of the Kwun Tong Swimming Pool Complex and Kwun Tong Recreation Ground.

PROBLEM

The facilities at the Kwun Tong Swimming Pool Complex (KTSPC) and the Kwun Tong Recreation Ground (KTRG) are worn out and obsolete. The facilities are inadequate to cope with the needs of the community and the KTSPC is not up to the standard required for hosting swimming competitions.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Home Affairs, proposes to upgrade **51RG** to Category A at an estimated cost of $1,323.8 million in money-of-the-day (MOD) prices for the redevelopment of the KTSPC and the KTRG.

/PROJECT…..

PROJECT SCOPE AND NATURE

3. The project site occupies an area of 39 000 square metres (m^2) at the junction of Lei Yue Mun Road and Tsui Ping Road. The proposed scope of works under **51RG** includes —

Phase 1

(a) demolition of the three training pools at the KTSPC and of the KTRG;

(b) construction of a new KTSPC at the location of the current soccer pitches at the KTRG with the following facilities —

(i) one 50 metres (m) x 25 m indoor heated main pool with water depth of 1.9 m at the middle and 1.4 m at each end;

(ii) a spectator stand with a seating capacity of 1 500;

(iii) one 25 m x 30 m indoor heated multi-purpose pool with uniform water depth of 1.2 m;

(iv) one 50 m x 21 m outdoor secondary pool with water depth of 1.4 m at the middle and 1.1 m at each end;

(v) two 25 m x 12.5 m outdoor teaching pools with water depth from 0.7 m sloping to 0.9 m;

(vi) a sun bathing area;

(vii) ancillary facilities including a general restaurant, shroff office, pool management offices, a babycare room, a first-aid room, changing rooms and toilets; and

(viii) Kwun Tong District Leisure Services Office with shroff office and booking counters.

/ Phase…..

Phase 2

(c) demolition of the main pool and other facilities of the existing KTSPC;

(d) reprovisioning of the facilities at the KTRG at the location of the existing KTSPC and at the north-eastern part of the existing KTRG comprising –

(i) one 7-a-side standard artificial turf soccer pitch with spectator stand;

(ii) two 7-a-side mini-soccer pitches with colour floor coating;

(iii) three basketball cum volleyball courts;

(iv) one roller skating rink;

(v) two children's play areas;

(vi) walkways and jogging trail with provision of fitness corners for elderly people;

(vii) a garden with sitting-out areas and rain shelters / pavilions;

(viii) a toilet block cum changing rooms; and

(ix) a service building with management office, staff roll call point room, store rooms, first-aid room, meter room, refuse collection chamber, dangerous goods store and loading / unloading bay.

A site plan is at Enclosure 1. A section view and view of the proposed development (artist's impression) are at Enclosure 2. We plan to start the construction works in December 2009 for completion of Phase 1 by December 2012; and Phase 2 by December 2014.

/ **JUSTIFICATION**…..

JUSTIFICATION

4. The KTSPC has been open to the public since 1971 and is the only swimming pool complex with standard swimming pool facilities in the Kwun Tong District. Although the KTSPC is under regular maintenance, given the heavy use of the complex for nearly 40 years, its facilities are worn out and obsolete. Major problems include –

(a) water leakage in the plant room;

(b) unstable water pressure of the showering facilities in the changing rooms;

(c) unsatisfactory drainage channel in the changing rooms; and

(d) insufficient facilities for people with disabilities.

Improvement to the existing KTSPC would not be cost effective due to its poor condition and site constraints, and therefore we propose a comprehensive redevelopment.

5. At present, there is no indoor heated 50 m pool in the Kwun Tong District, although indoor heated pool complex with training pool facilities is now under planning in Lam Tin for completion in 2012. In view of the increasing demand for all weather pools, we propose to take this opportunity to develop the KTSPC into a swimming pool complex with indoor heated pools. The redevelopment will offer the opportunity to upgrade the complex so that it can meet the standards necessary for hosting local swimming competitions.

6. In-situ redevelopment of the KTSPC would require the closure of the swimming pool for three consecutive swimming seasons. We therefore propose to develop the new swimming pool complex at the site of the existing soccer pitches of the KTRG, thereby allowing the KTSPC to remain open for public use during the construction period. Upon completion of the redevelopment works, we will demolish the existing KTSPC and the site will be used to reprovision the affected recreational facilities at the KTRG. This will also enable us to replace the worn out and obsolete recreational facilities in the KTRG.

/**FINANCIAL**…..

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the project to be $1,323.8 million in MOD prices (see paragraph 8 below), made up as follows –

			$ million
(a)	Site works and demolition		75.7
(b)	Piling		68.8
(c)	Building		506.4
(d)	Building services		205.9
(e)	Drainage		17.6
(f)	External works		137.1
(g)	Soft landscaping		9.2
(h)	Additional energy conservation measures		12.9
(i)	Consultants' fees for –		34.3
	(i) contract administration	34.0	
	(ii) management of resident site staff	0.3	
(j)	Remuneration of resident site staff		22.6
(k)	Furniture and equipment[1]		3.4
(l)	Contingencies		109.1

/**$ million**…..

[1] The estimated cost of furniture and equipment is based on an indicative list of items required, including recreation and sports equipments, office furniture, first aid equipments.

		$ million	
	Sub-total	1,203.0	(in September 2008 prices)
(m)	Provision for price adjustment	120.8	
	Total	1,323.8	(in MOD prices)

We propose to engage consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimates for the consultants' fees and resident site staff costs by man-months is at Enclosure 3. The construction floor area (CFA) of the KTSPC under **51RG** is about 23 038 m^2. The estimated construction unit cost for the new KTSPC, represented by the building and the building services costs, is $30,918 per m^2 of CFA in September 2008 prices. We consider this reasonable when compared with similar projects built by the Government.

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

Year	**$ million (Sept 2008)**	**Price adjustment factor**	**$ million (MOD)**
2009 – 10	12.0	1.03500	12.4
2010 – 11	166.0	1.05570	175.2
2011 – 12	196.0	1.07681	211.1
2012 – 13	543.0	1.09835	596.4
2013 – 14	119.0	1.12032	133.3
2014 – 15	95.0	1.15113	109.4
2015 – 16	54.0	1.18566	64.0
2016 – 17	18.0	1.22123	22.0

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Year	$ million (Sept 2008)	Price adjustment factor	$ million (MOD)
	1,203.0		1,323.8

9. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period 2009 to 2017. We will deliver the construction works through lump-sum contracts because we can clearly define the scope of the works in advance. The contracts will provide for price adjustments.

10. We estimate the annual recurrent expenditure arising from this project to be about $30.5 million.

PUBLIC CONSULTATION

11. We consulted the Kwun Tong District Council (KTDC) and its Culture, Recreation and Sports Committee on 16 November 2006 and 21 November 2006 respectively on the proposed scope of development. The District Facilities Management Committee of the KTDC endorsed the design on 22 January 2009. Members expressed strong support for the project and requested its early implementation.

12. The Town Planning Board gave permission on 17 April 2009 for the redevelopment proposal. To address concerns on the air flow and visual impact of the proposed new KTSPC, we will implement design measures such as setting the complex back from the main road to enhance air ventilation in the area. We will provide extensive greening features including "vertical" greening to mitigate the visual impact of the complex.

13. We circulated an information paper to the Legislative Council Panel on Home Affairs on 8 May 2009. Members did not raise any objection to this proposal.

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14. One KTDC member has raised a concern expressed by a member of the public over the demolition of the diving pool in the existing KTSPC which will not be provided in the new complex. Accordingly, we have explored the feasibility of including a diving pool in the new KTSPC. However, taking account of site constraints and the low usage rate (around 2%) of the diving pool in the existing KTSPC, we consider that it would not be practical to re-provision the pool. We have explained the situation to the KTDC member and advised the member that there are diving pool facilities in alternative venues. The member had no further views on the project.

ENVIRONMENTAL IMPLICATIONS

15. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The project has very little potential for giving rise to adverse environmental impact.

16. During construction, we will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the contract. These include the use of silencers, mufflers, acoustic lining or shields and the building of barrier wall for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

17. We have considered measures in the planning and design stages to reduce the generation of construction waste where possible (e.g., using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste on site (e.g., use of excavated materials for filling within the site) or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities[2]. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimise the generation of construction waste.

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

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

19. We estimate that the project will generate in total about 59 905 tonnes of construction waste. Of these, we will reuse about 22 843 tonnes (38.1%) of inert construction waste on site and deliver 29 878 tonnes (49.9%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of 7 184 tonnes (12.0%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be $1.7 million for this project (based on a unit cost of $27/tonne for disposal at public fill reception facilities and $125/tonne[3] at landfills).

ENERGY CONSERVATION MEASURES

20. This project has adopted various forms of energy efficient features, including —

(a) T5 energy efficient fluorescent tubes with electronic ballast and lighting control by occupancy sensors and daylight sensors;

(b) light-emitting diode (LED) type exit signs;

(c) LED type feature lights;

(d) a heat pump for domestic hot water service, space heating and dehumidification; and

/(e) …..

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[3] This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at $90/m^3), nor the cost to provide new landfills (which is likely to be more expensive), when the existing ones are filled.

(e) automatic on/off switching of lighting and ventilation fans inside lifts.

21. For renewable energy technologies, we will adopt solar hot water system, photovoltaic system and solar park lighting for environmental benefits.

22. For greening features, we will provide landscape greening on the podium deck and vertical greening at the external facade.

23. For recycled features, we will adopt a rain water recycling system for landscape irrigation with a view to conserving water.

24. The total estimated additional cost for adoption of the energy conservation measures is around $12.9 million (including $1.8 million for energy efficient features), which has been included in the cost estimate of the project. The energy efficient features will achieve 5.3% energy savings in annual energy consumption with a payback period of about 4.2 years.

HERITAGE IMPLICATIONS

25. This project will not affect any heritage site, 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

26. The project does not require any land acquisition.

/**BACKGROUND**…..

BACKGROUND INFORMATION

27. We upgraded **51RG** to Category B in September 2007. We engaged an architectural consultant in May 2008 to undertake the topographical survey, the detailed design and the site investigation. We engaged a quantity surveying consultant in June 2008 to prepare tender documents. The total cost of these consultancy services and works is about $20.8 million. We have charged this amount to block allocation **Subhead 3100GX** "Project feasibility studies, minor investigations and consultants' fees for items in Category D of the Public Works Programme". The architectural consultant has completed the topographical survey, the detailed design and site investigation. The quantity surveying consultant is preparing the tender documents.

28. The proposed works will involve the removal of 231 trees, including 21 trees to be felled, 195 trees to be transplanted elsewhere and 15 trees to be replanted within the project site. All trees to be removed are not important trees[4]. We will incorporate planting proposals as part of the project, including an estimated quantity of 286 trees and 100 000 shrubs, ground cover, and climbers.

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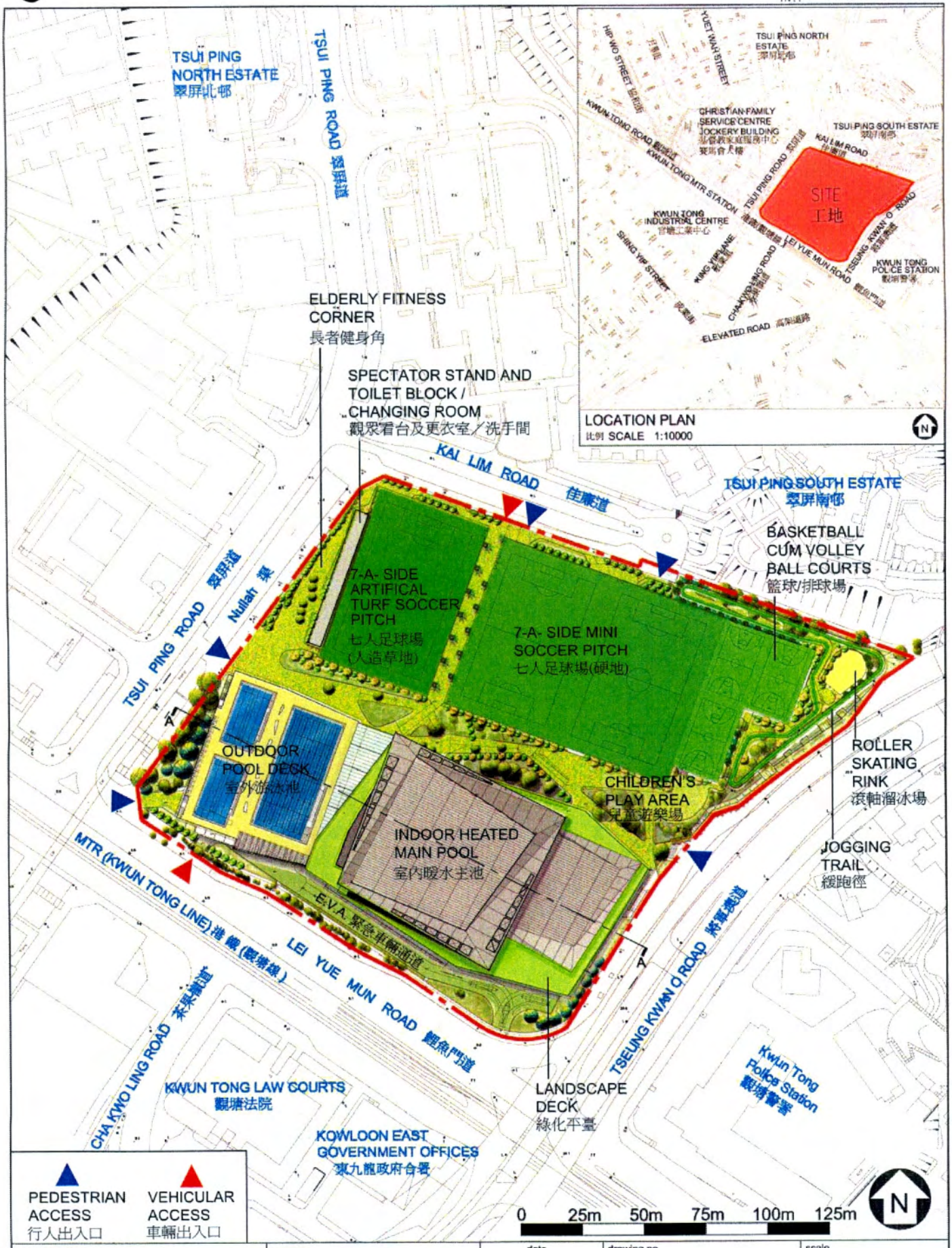
[4] "Important trees" refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

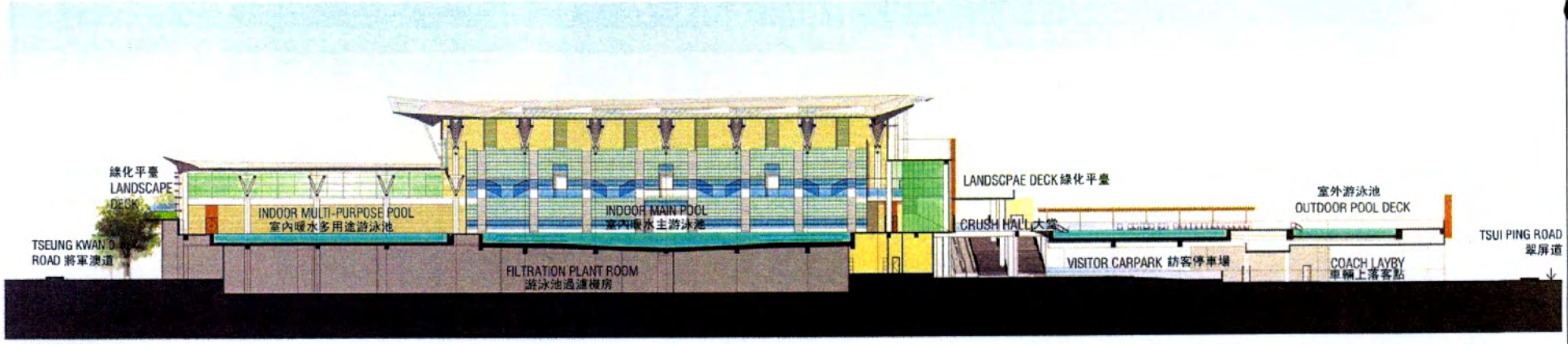
(a) trees of 100 years old or above;
(b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;
(c) trees of precious or rare species;
(d) trees of outstanding form (taking account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

29. We estimate that the proposed works will create about 339 jobs (298 for labourers and another 41 for professional/technical/ancillary staff) providing a total employment of 18 630 man-months.

Home Affairs Bureau
June 2009



title 51RG 重建觀塘泳池場館及觀塘遊樂場 REDEVELOPMENT OF KWUN TONG SWIMMING POOL COMPLEX AND KWUN TONG RECREATION GROUND	drawn by W.H. LAM	date 21.5.2009	drawing no. AB/7222/XA001	scale 1:2000
	approved by KELVIN LO	date 21.5.2009	ARCHITECTURAL SERVICES DEPARTMENT	
	office PROJECT MANAGEMENT BRANCH 3			



剖面圖 A-A
SECTION A-A

SCALE 1:800 0 5 10 20 30 40 (m)

西北面鳥瞰圖
PERSPECTIVE VIEW FROM NORTH-WESTERN DIRECTION (ARTIST'S IMPRESSION)

title 51RG 重建觀塘泳池場館及觀塘遊樂場 REDEVELOPMENT OF KWUN TONG SWIMMING POOL COMPLEX AND KWUN TONG RECREATION GROUND	drawn by W.H. LAM	date 21.5.2009	drawing no. AB/7222/XA002	scale As Shown
	approved by KELVIN LO	date 21.5.2009	ARCHITECTURAL SERVICES DEPARTMENT	
	office PROJECT MANAGEMENT BRANCH 3			

附件 2 PWSC ENCLOSURE 2

51RG – Redevelopment of Kwun Tong Swimming Pool Complex and Kwun Tong Recreation Ground

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2008 prices)

			Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee ($ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	–	–	–	24.0
		Technical	–	–	–	10.0
					Sub-total	34.0
(b)	Resident site staff costs (Note 3)	Professional	20.6	38	1.6	2.0
		Technical	658.6	14	1.6	20.9
					Sub-total	22.9
	Comprising —					
	(i) Consultants' fees for management of resident site staff					0.3
	(ii) Remuneration of resident site staff					22.6
					Total	56.9

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of resident site staff supplied by the consultants. (As at 1 April 2008, MPS point 38 = $60,535 per month and MPS point 14 = $19,835 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 **51RG**. The assignment will only be executed subject to Finance Committee's approval to upgrade **51RG** to Category A.

3. The consultants' staff cost for site supervision is based on the estimate prepared by the Director of Architectural Services. We will only know the actual man-months and actual costs after completion of the construction works.