

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Recreation, Culture and Amenities – Open spaces

421RO – District open space in Area 37, Tseung Kwan O

Members are invited to recommend to Finance Committee the upgrading of **421RO** to Category A at an estimated cost of \$140.6 million in money-of-the-day prices for the construction of a district open space in Area 37, Tseung Kwan O.

PROBLEM

There is insufficient public open space in Tseung Kwan O to meet the needs of residents.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Home Affairs (SHA), proposes to upgrade **421RO** to Category A at an estimated cost of \$140.6 million in money-of-the-day (MOD) prices for the construction of a district open space in Area 37, Tseung Kwan O.

/PROJECT

PROJECT SCOPE AND NATURE

3. The project site covers an area of about 1.91 hectares in Area 37, Tseung Kwan O. The scope of **421RO** includes –

- (a) a Chinese-style garden;
- (b) an entrance corridor with sculptures, display banners and panels;
- (c) a covered piazza;
- (d) a fitness corner for elderly people;
- (e) an artificial turf bowling green; and
- (f) ancillary facilities, including toilets, changing rooms, and a management office.

————— A site plan showing the conceptual layout of the proposed district open space is at Enclosure 1. We plan to start the construction works in January 2010 for completion in January 2012.

JUSTIFICATION

4. Tseung Kwan O is a densely populated and fast developing new town. It has a population of 353 300 which is expected to increase by about 18% to 417 000 by 2016. The Hong Kong Planning Standards and Guidelines suggest a provision of 70.66 hectares of public open space for the current population. At present, there are about 60.09 hectares of public open space (including 19.39 and 40.70 hectares of public open space managed by the Leisure and Cultural Services Department and the Housing Department respectively) in Tseung Kwan O. Some 11.56 hectares of public open space are under construction and planning. There is a need to provide more public open space to cope with demand for leisure facilities in Tseung Kwan O.

5. The proposed public open space is located in a densely populated residential area surrounded by public and private residential developments such as Nan Fung Plaza, La Cite Noble, Maritime Bay, Residence Oasis, East Point City, On Ning Garden, Wo Ming Court and Yuk Ming Court. It is expected that the proposed provision of a bowling green, passive soft landscaping and sitting-out facilities will be welcomed as additional leisure facilities for local residents.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be \$140.6 million in MOD prices (see paragraph 7 below), made up as follows –

	\$ million
(a) Site works and site formation	6.6
(b) Building	22.6
(c) Building services	9.4
(d) Drainage	3.3
(e) External works	58.9
(f) Soft landscaping works	8.7
(g) Additional energy conservation measure	0.4
(h) Furniture and equipment ¹	0.4
(i) Consultants' fees	2.8
(i) contract administration	2.5
(ii) management of resident site staff	0.3
(j) Remuneration of resident site staff	5.3

/\$ million.....

¹ Based on the furniture and equipment provided in existing/planned facilities of similar scale (e.g. office furniture, litter bins and portable signages, etc).

		\$ million	
(k)	Contingencies	10.9	
	Sub-total	129.3	(in September 2008 prices)
(l)	Provision for price adjustment	11.3	
	Total	140.6	(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 2. We consider the estimated project cost reasonable as compared with similar projects undertaken by the Government.

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

Year	\$ million (Sept 2008)	Price adjustment factor	\$ million (MOD)
2009 – 10	1.0	1.03500	1.0
2010 – 11	25.0	1.05570	26.4
2011 – 12	50.0	1.07681	53.8
2012 – 13	30.0	1.09835	33.0
2013 – 14	15.0	1.12032	16.8
2014 – 15	8.3	1.15113	9.6
	129.3		140.6

/8.

8. 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 2015. We will deliver the construction works through a lump-sum contract because we can clearly define the scope of the works in advance. The contract will provide for price adjustments.

9. We estimate the annual recurrent expenditure arising from this project to be \$4.2 million.

PUBLIC CONSULTATION

10. We consulted the District Facilities Management Committee of the Sai Kung District Council on the scope of the project on 18 January 2007, 1 February 2007 and 12 February 2008, and the conceptual layout of the project on 20 January 2009 and 24 March 2009. Members supported the project and requested its early implementation.

11. We consulted the Incorporated Owners and Owners' Committees in the vicinity, including Nan Fung Plaza, La Cite Noble, Maritime Bay, Residence Oasis, East Point City and On Ning Garden on the project scope on 31 January 2007 and on the project design on 27 February 2009. They welcomed the project and looked forward to its early implementation.

12. We circulated an information paper to the Legislative Council Panel on Home Affairs on 30 April 2009. Members did not raise any objection to this project.

ENVIRONMENTAL IMPLICATIONS

13. 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 impacts.

14. 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.

15. 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 minimize the disposal of inert construction waste to public fill reception facilities². We will encourage the contractor to maximize the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimize the generation of construction waste.

16. 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 to public fill reception facilities and landfills respectively through a trip-ticket system.

17. We estimate that the project will generate in total about 12 620 tonnes of construction waste. Of these, we will reuse about 3 120 tonnes (24.7%) of inert construction waste on site and deliver 8 735 tonnes (69.2%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of 765 tonnes (6.1%) of non-inert construction waste at

/landfills

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.

landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$331,470 for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne³ at landfills).

ENERGY CONSERVATION MEASURES

18. 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; and
- (c) LED feature lights.

19. For renewable energy technologies, we will adopt solar park lighting for environmental benefits.

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

21. The total estimated additional cost for adoption of the above energy conservation measures is around \$0.4 million (including \$13,000 for energy efficient features), which has been included in the cost estimate of the project. The energy efficient features will achieve 1.2% energy savings in the annual energy consumption with a payback period at about 5.9 years.

/HERITAGE

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/m³), nor the cost to provide new landfills (which is likely to be more expensive), when the existing ones are filled.

HERITAGE IMPLICATIONS

22. This project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interests and Government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

23. The project does not require any land acquisition.

BACKGROUND INFORMATION

24. We upgraded **421RO** to Category B in August 2007. We engaged an architectural consultant to undertake the detailed design and site investigation, and a quantity surveying consultant to prepare tender documents in October 2008. We charged the total cost of \$4.3 million 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 detailed design. Site investigation work is in progress and the quantity surveying consultant is finalising the tender documents.

25. The proposed development of the open space will involve removal of 73 trees, including three trees to be felled, 48 trees to be replanted within the project site and 22 trees to be transplanted elsewhere. All trees to be removed are not important trees⁴. We will incorporate planting proposals as part of the project, including an estimated quantities of 86 trees, 15 000 shrubs, 10 000 ground covers and 100 climbers.

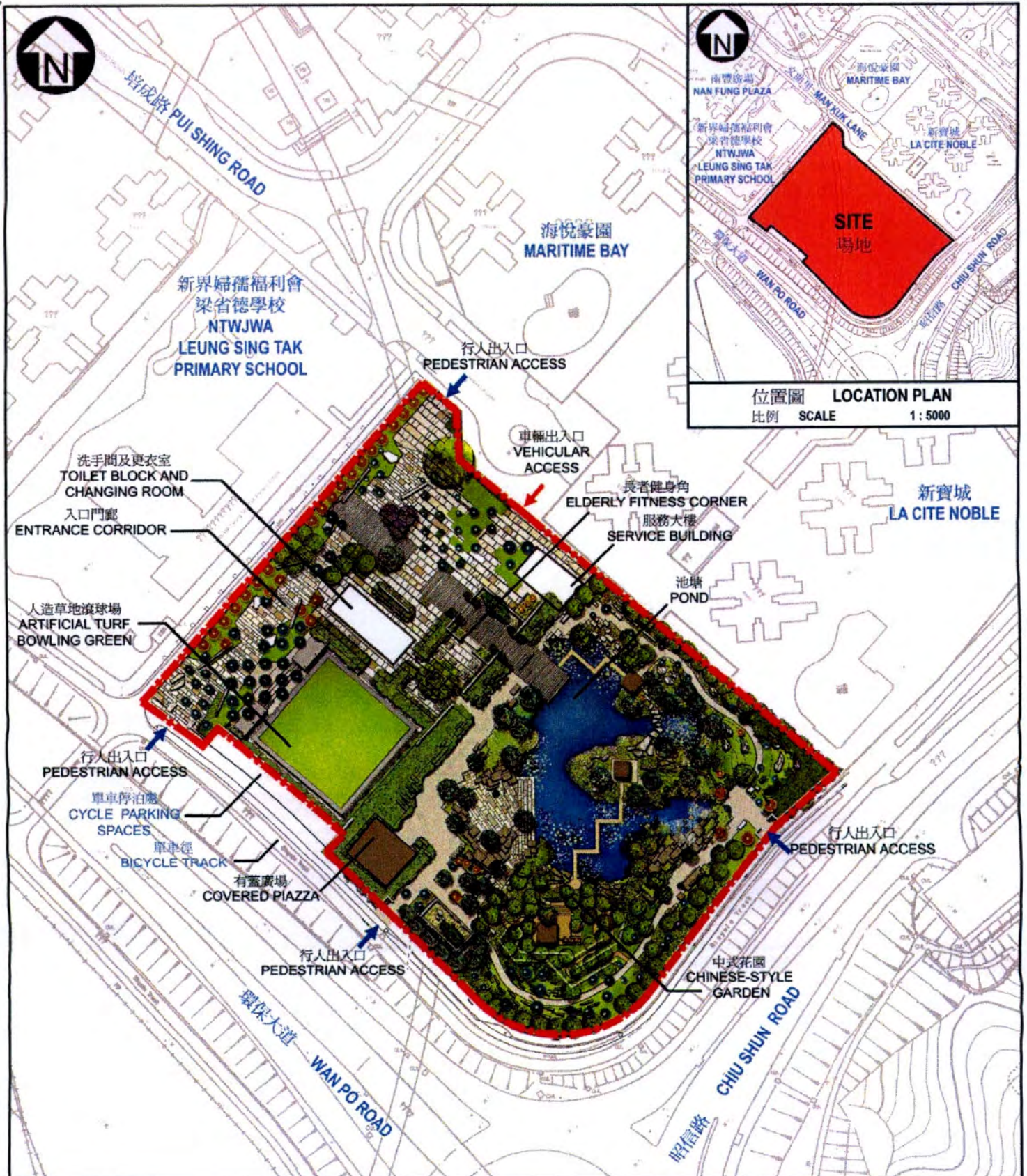
/26.

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 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 (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.

26. We estimate that the proposed works will create about 108 jobs (96 for labourers and another 12 for professional/technical staff) providing a total employment of 1 950 man-months.

Home Affairs Bureau
May 2009



421RO
將軍澳第37區
地區休憩用地
DISTRICT OPEN SPACE
IN AREA 37,
TSEUNG KWAN O

drawn by 繪圖
Esther Li

date 日期
3/2009

drawing no. 圖號
AB / 421RO / XA001

scale 比例
1:1500

approved 覆核
Alfred Lai

date 日期
3/2009

office PROJECT MANAGEMENT BRANCH
辦事處 工程策劃管理處



**ARCHITECTURAL
SERVICES
DEPARTMENT** 建築署

421RO – District open space in Area 37 Tseung Kwan O

**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 fees (\$ million)
(a) Consultants' fees for contract administration (Note 2)	Professional	--	--	--	1.0
	Technical	--	--	--	1.5
				Sub-total	2.5
(b) Resident site staff costs (Note 3)	Technical	176	14	1.6	5.6
				Sub-total	5.6
Comprising –					
(i) Consultants' fees for management of resident site staff					0.3
(ii) Remuneration of resident site staff					5.3
				Total	8.1

* 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 pt. 38 = \$60,535 per month and MPS pt. 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 **421RO**. The assignment will only be executed subject to Finance Committee's approval to upgrade **421RO** 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.