

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

Medical Subventions

76MM – Establishment of the Centre of Excellence in Paediatrics

Members are invited to recommend to Finance Committee the upgrading of **76MM** to Category A at an estimated cost of \$12,985.5 million in money-of-the-day prices for the construction of the Centre of Excellence in Paediatrics.

PROBLEM

We do not have a dedicated children hospital providing tertiary specialised care in the public sector.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Food and Health, proposes to upgrade **76MM** to Category A at an estimated cost of \$12,985.5 million in money-of-the-day (MOD) prices for the establishment of the Centre of Excellence in Paediatrics (CEP) in the South Apron of the Kai Tak Development (KTD).

/PROJECT

PROJECT SCOPE AND NATURE

3. The scope of **76MM** comprises the construction of the CEP, which apart from providing tertiary paediatric services, will take emergency transfer cases and provide some secondary services so as to render a comprehensive range of sub-specialty services. The major services and facilities to be provided at the CEP include –

- (a) in-patient and day-patient services with 468 beds, including general wards, neo-natal intensive care unit, paediatric intensive care unit, special care baby unit, day beds for general surgeries/procedures and a private ward;
- (b) ambulatory care services including specialist outpatient clinics, ambulatory surgery/day procedure centre, integrated rehabilitation centre and child development assessment services;
- (c) community care services, including patient education and resource centre, community health education and medical social services;
- (d) supporting diagnostic and treatment facilities, including radiology (with magnetic resonance imaging, computed tomography scanner, angiography, interventional radiology and ultrasonography), electro-diagnostic studies laboratories, operating theatres, cardiac catheterisation laboratory and clinical pathology laboratories;
- (e) medical research, teaching and training facilities to provide specific support for basic and translational research in paediatrics as well as teaching and research activities, including clinical research centre, simulation skill laboratory, lecture theatre and meeting and conference facilities;
- (f) support facilities and services to cater for the special needs of children and their families such as children recreation and play therapy areas, classrooms, family rest area, parent's support and spiritual support facilities; and

/(g)

- (g) other general support and administrative services and facilities including admission, medical records, theatre sterile supplies unit, pharmacy, linen, mortuary, procurement and supplies, housekeeping, hospital data centre, food services, cafeteria/restaurant, transportation and staff accommodation.

4. The overall design objective of the CEP is to create a non-institutional, home-like, child-friendly, comfortable and cozy environment that provides the best clinical practice under a patient-centred approach, facilitates multi-disciplinary and cross-specialty collaboration, and allows efficient and flexible use of facilities and resources with appropriate sharing. The CEP project will provide the following features –

- (a) a podium-free design comprising two separate towers inter-connected by two link bridges to facilitate internal circulation;
- (b) the towers will house an Integrated Rehabilitation Centre, main operating theatres, clinical laboratories, research laboratories, hospital data centre, education and training facilities, in-patient services facilities and ambulatory care services facilities. The basement will mainly accommodate general supporting services including sterile supplies unit, plant rooms, stores, linen services, kitchen, pharmacy and car parking spaces; and
- (c) a landscaped courtyard on the ground floor near the main entrance, which is intended to be highly transparent with views through to the landscaped courtyard and the harbour beyond. It will integrate with the overall architectural settings and the outdoor spaces to make it a prominent gateway of the CEP.

————— A site plan showing the proposed development is at Enclosure 1. The floor plans,
————— the sections and the perspective view (artist's impression) of the CEP are at
Enclosures 2 to 6.

5. Subject to funding approval of the Finance Committee, we plan to start the construction works in September 2013 for completion in June 2017.

JUSTIFICATION

6. In paediatrics, there are many uncommon yet serious conditions that require special treatment knowledge and skills which could only be acquired through accumulating clinical experiences from sufficient caseloads. Unlike many other major international cities, Hong Kong, with seven million population (about 18% of which age under 18), does not have a children hospital dedicated to tertiary specialised paediatric services by concentrating complex cases. At present, tertiary and specialised medical services in Hong Kong are spread too thinly over 13 designated public hospitals including the two teaching hospitals and other major acute hospitals managed by the Hospital Authority (HA).

7. The experiences of children hospitals in other international cities suggest that there are merits of concentrating the caseload of rare paediatric diseases in a centralised facility, i.e. tertiary services. Such a facility will also facilitate training and research in specific fields and specialties. The Administration announced in 2007 to study the establishment of the CEP to further enhance the quality of paediatric services in Hong Kong.

8. With the establishment of the CEP, paediatric services in public hospitals will be re-organised under a hub-and-spoke model which should help to link up community care, primary, secondary and tertiary paediatric services more effectively, thereby establishing a well-coordinated and connected paediatric service network. Upon commissioning, the CEP will be the key player of the paediatric network in HA by serving as principally a tertiary territory-wide referral centre for diagnosing and treatment of complex cases requiring multi-disciplinary management or surgical intervention in addition to secondary care; whereas other public hospitals with paediatric departments will continue to provide acute paediatric services, secondary care services and community care in their respective communities. HA will also work closely with the paediatrician community in both the private and public sectors. Referral guidelines, common clinical protocols and practical shared care model will be developed accordingly.

/9.

9. As a public hospital within the HA system, a hospital governing committee will be formed upon commissioning of the CEP in accordance with the statutory requirements. The membership of the governing committee will include government officials, community and clinician leaders, academics and representatives of the non-governmental organisations.

FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the project to be \$12,985.5 million in MOD prices (please see paragraph 12 below), broken down as follows –

	\$ million
(a) Site works	30.0
(b) Piling works ¹	509.4
(c) Basement works ²	398.1
(d) Building works ³	3,778.2
(e) Building services works ⁴	2,141.1
(f) Drainage works	16.0
(g) External works	81.7
(h) Soft landscaping works	11.2

/(i)

¹ Piling works cover the construction of piles and all related testing and monitoring.

² Basement works comprise construction of basement enclosure, water proofing and excavation works.

³ Building works comprise construction of the substructure and superstructure of the building.

⁴ Building services works comprise electrical installations, ventilation and air-conditioning, fire services installation, lifts and escalators, etc.

		\$ million	
(i)	Additional energy conservation measures	111.9	
(j)	Furniture and equipment (F&E) ⁵	1,754.0	
(k)	Consultants' fees for	23.0	
	(i) quantity surveying services	10.0	
	(ii) risk management	6.0	
	(iii) management of resident site staff	7.0	
(l)	Remuneration of resident site staff	159.0	
(m)	Contingencies	901.4	
	Sub-total	9,915.0	(in September 2012 prices)
(n)	Provision for price adjustment	3,070.5	
	Total	12,985.5	(in MOD prices)

11. We propose to engage consultants to undertake quantity surveying services, risk management and site supervision for the project. A detailed breakdown of the estimate for consultants' fees and resident site staff costs by man-months is at Enclosure 7. The construction floor area (CFA) of this project is about 164 965 square metres (m²). The estimated construction unit cost, represented by the building and the building services costs, is \$35,882 per m² of CFA in September 2012 prices. We consider this unit cost reasonable as compared with that of similar hospital projects.

/12.

⁵ Based on an indicative list of furniture and equipment items and their estimated prices. An indicative list of the major F&E items is at Enclosure 8.

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

Year	\$ million (Sept 2012)	Price adjustment factor	\$ million (MOD)
2013 – 14	485.0	1.06225	515.2
2014 – 15	820.0	1.12599	923.3
2015 – 16	1,520.0	1.19354	1,814.2
2016 – 17	2,440.0	1.26516	3,087.0
2017 – 18	1,979.0	1.34107	2,654.0
2018 – 19	1,080.0	1.41147	1,524.4
2019 – 20	614.0	1.48205	910.0
2020 – 21	501.0	1.55615	779.6
2021 – 22	476.0	1.63396	777.8
	9,915.0		12,985.5

13. 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 2013 to 2022. We will deliver the works through a design-and-build contract. We will award the contract on a lump-sum basis because we can clearly define the scope of the works in advance. The contract will provide for price adjustments.

14. The HA has assessed the requirements for F&E for this project, and estimates the F&E costs to be \$1,754 million. The proposed F&E provision represents 29.1% of the total construction cost of the project⁶. An indicative list of major F&E items (costing \$1 million or above per item) to be procured for the project is at Enclosure 8.

/15.

⁶ Represented by the building, building services, drainage, external and soft landscaping works costs.

15. We estimate the annual recurrent expenditure arising from this project to be \$977.0 million.

PUBLIC CONSULTATION

16. We consulted the Task Force on Kai Tak Harbourfront Development of the Harbourfront Commission on 16 January 2012. We also consulted the Wong Tai Sin District Council (DC), the Kwun Tong DC as well as the Food, Environment and Health Committee of the Kowloon City DC on 17 January, 2 February and 9 February 2012 respectively. All of them supported the proposed development of the CEP.

17. We consulted the Legislative Council Panel on Health Services on 12 March 2012 and 15 April 2013. Members of the Panel supported the project for submission of the funding proposal to the Finance Committee. Some Panel members expressed concern about the resources requirement of the CEP, re-organisation of HA's paediatric services, governance arrangements for the CEP operation, models of collaboration with paediatric specialists outside the HA, and the manpower situation in HA. A few Panel members also suggested to rename the facility as "Children Hospital" rather than medical centre of excellence. The HA will look into these matters in formulating the operation and service plans for the CEP.

ENVIRONMENTAL IMPLICATIONS

18. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We have engaged a consultant to carry out a Preliminary Environmental Review (PER). The PER, completed in 2012, concluded that the project would not have long-term adverse environmental impact. We have included in the project estimates the cost to implement mitigation measures as recommended in the PER to control short-term environmental impacts.

19. 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 to prevent dust nuisance.

/20.

20. At the planning and design stages, we have considered measures 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 facilities⁷. We will encourage the contractor to maximise the use of recycled/recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

21. 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 means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operation 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.

22. We estimate that the project will generate in total about 214 320 tonnes of construction waste. Of these, we will reuse about 19 500 tonnes (9.1%) of inert construction waste on site and deliver 175 500 tonnes (81.9%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 19 320 tonnes (9.0%) 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 \$7,153,500 for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne⁸ at landfills).

/ENERGY

⁷ 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.

⁸ 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 per m³), nor the cost to provide new landfills (which is likely to be more expensive), when the existing ones are filled.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

23. District Cooling System for air-conditioning will be adopted for this project at the KTD. Besides, this project will adopt various forms of energy efficient features and renewable energy technologies, in particular –

- (a) automatic demand control of chilled water circulation system;
- (b) automatic demand control of supply air;
- (c) demand control of fresh air supply with carbon dioxide sensors;
- (d) heat wheel/heat pipe for heat energy reclaim of exhaust air; and
- (e) heat pump for domestic hot water/space heating/dehumidification.

24. For greening features, we will provide greening on the appropriate roofs and facades of the buildings for environmental and amenity benefits.

25. For recycled features, we will adopt rainwater and condensate water recycling system for landscape irrigation.

26. The total estimated additional cost for adoption of the above features is around \$111.9 million (including \$33.8 million for energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 5.5% energy savings in the annual energy consumption with a payback period of about 8.7 years.

HERITAGE IMPLICATIONS

27. 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

LAND ACQUISITION

28. The project does not require any land acquisition.

BACKGROUND INFORMATION

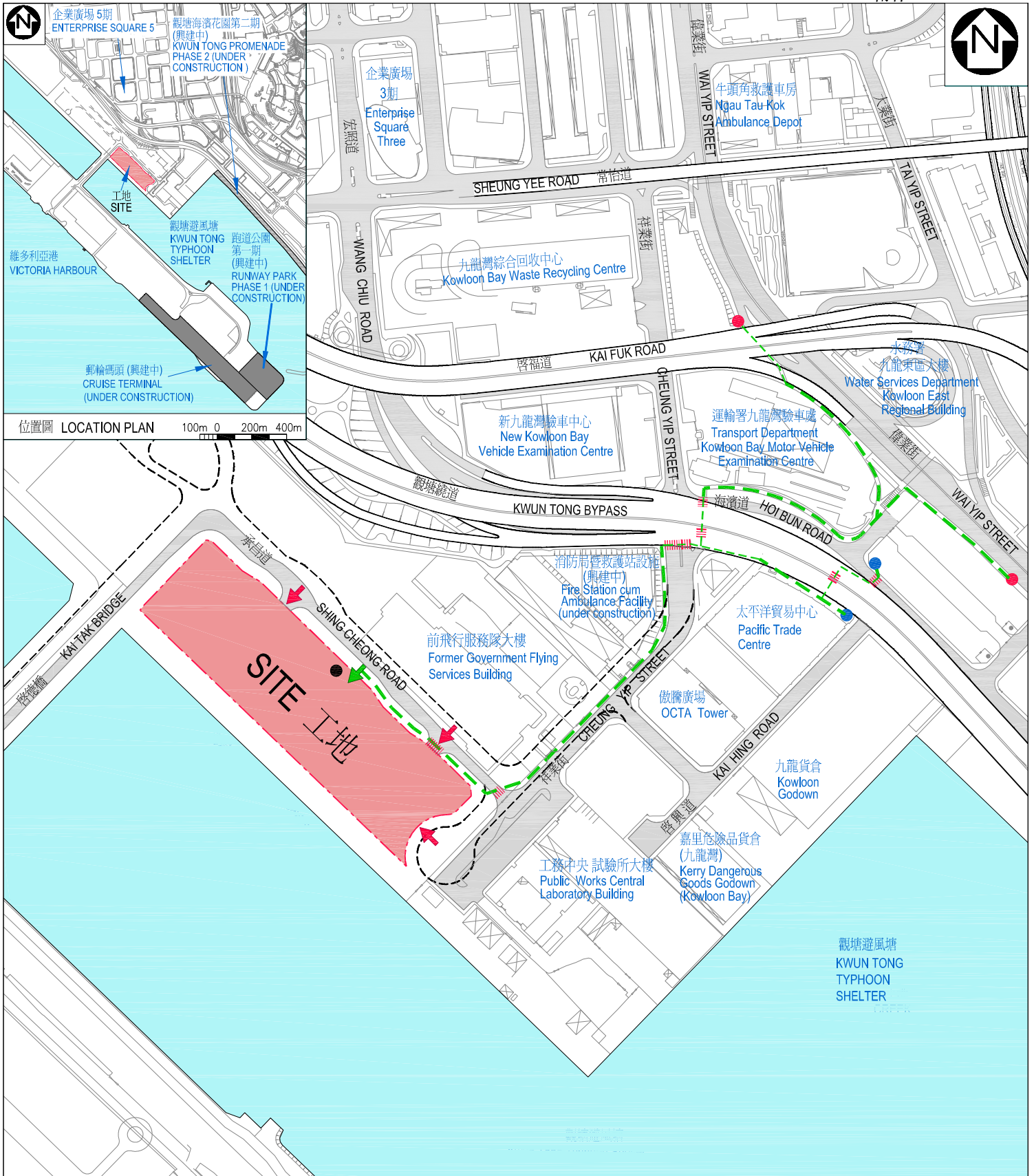
29. We upgraded **76MM** to Category B in September 2010.

30. We engaged consultants to carry out traffic impact assessment, utility mapping, PER, topographical survey and environmental impact assessment, visual impact assessment and employed a term contractor to carry out ground investigation works. We also appointed a quantity surveying consultant to prepare tender document. The total cost of the above-mentioned services is about \$7.1 million. We have charged this amount to block allocation **Subhead 8100MX** “Hospital Authority – improvement works, feasibility studies, investigations and pre-contract consultancy services for building projects”. All the above consultancy services and investigation works have been completed.

31. At the Public Works Subcommittee (PWSC) meeting on 31 October 2001, some Members suggested and the Administration agreed to include information on the scope, approved project estimates and progress of all the KTD (formerly known as the “South East Kowloon Development”) Public Works Programme items in future PWSC submissions relating to the KTD. Please refer to the Development Bureau's PWSC submission PWSC(2013-14)11 on **469CL** “Kai Tak development – infrastructure at north apron area of Kai Tak Airport”, which has been submitted to be considered at the same PWSC meeting.

32. There is no existing tree within the project boundary. We will incorporate planting proposals as part of the project, including estimated quantities of 200 trees, 50 000 shrubs and groundcovers.

33. We estimate that the proposed works will create about 2 650 jobs (2 380 for labourers and another 270 for professional/technical staff) providing a total employment of 97 630 man-months.



圖例 LEGEND	
	工地範圍 SITE BOUNDARY
	擬建道路 PROPOSED ROAD
	無障礙通道 BARRIER-FREE ACCESS
	無障礙通道 (高架道下) BARRIER-FREE ACCESS (UNDER ELEVATED ROAD)
	路面行人過路處 AT-GRADE PEDESTRIAN CROSSING
	現有巴士站 EXISTING BUS STOP
	現有小巴站 EXISTING MINI-BUS STOP
	擬建的士站及小巴站 PROPOSED TAXI STAND AND MINI-BUS STOP
	車輛出入口 VEHICULAR INGRESS & EGRESS
	無障礙出入口 BARRIER-FREE ENTRANCE & EXIT

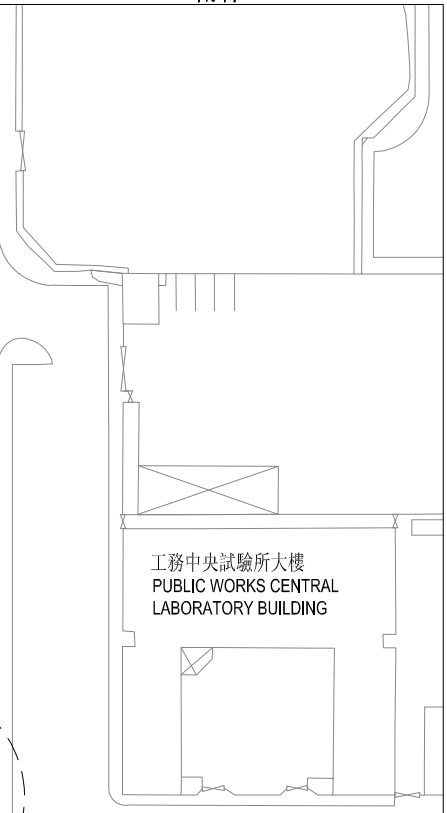
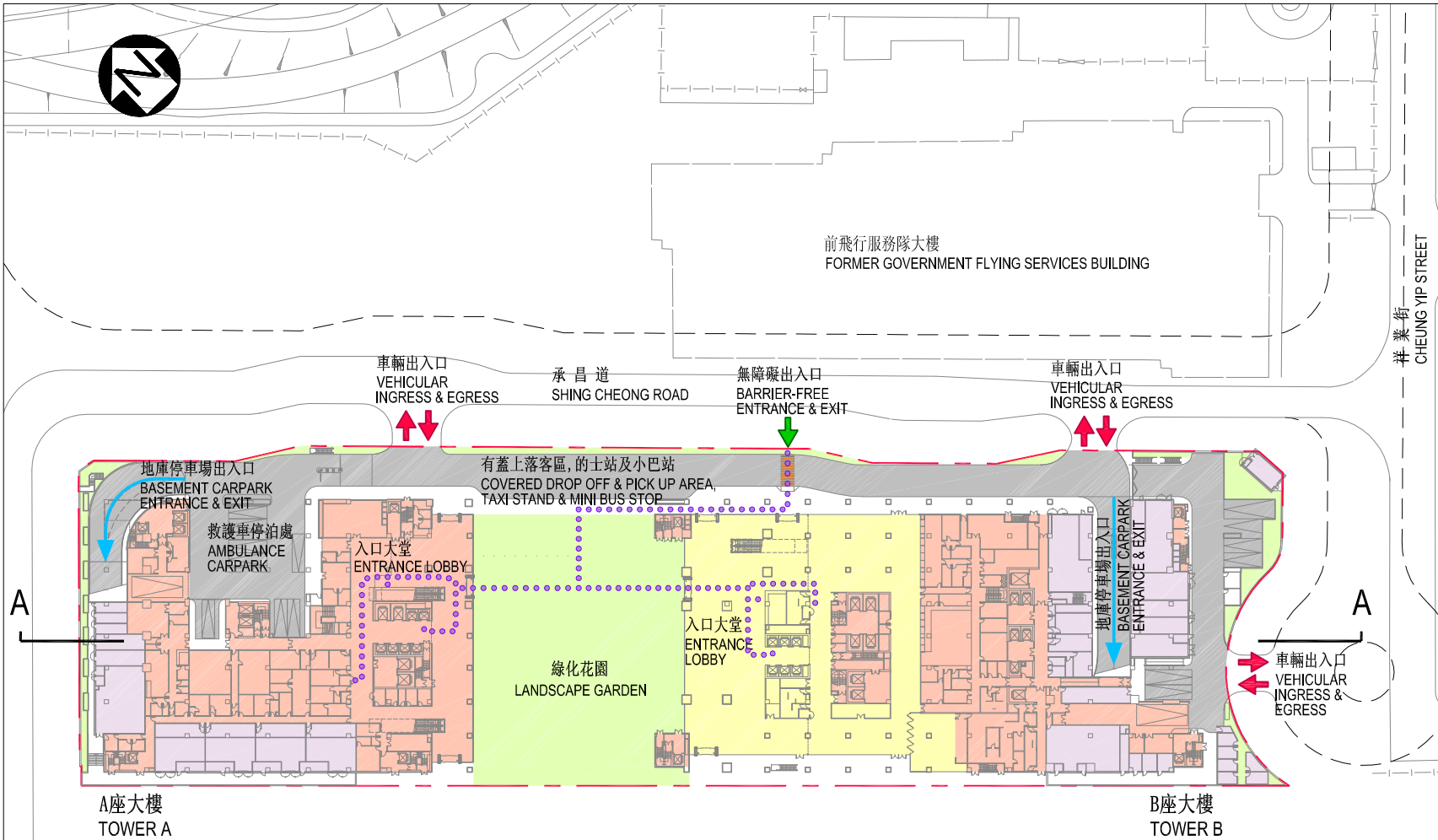
50m 0 50m 100m 150m

project title 項目名稱 76MM

設立兒童專科卓越醫療中心
ESTABLISHMENT OF THE CENTRE OF EXCELLENCE IN PAEDIATRICS

drawing title 圖則名稱
SITE PLAN 工地平面圖





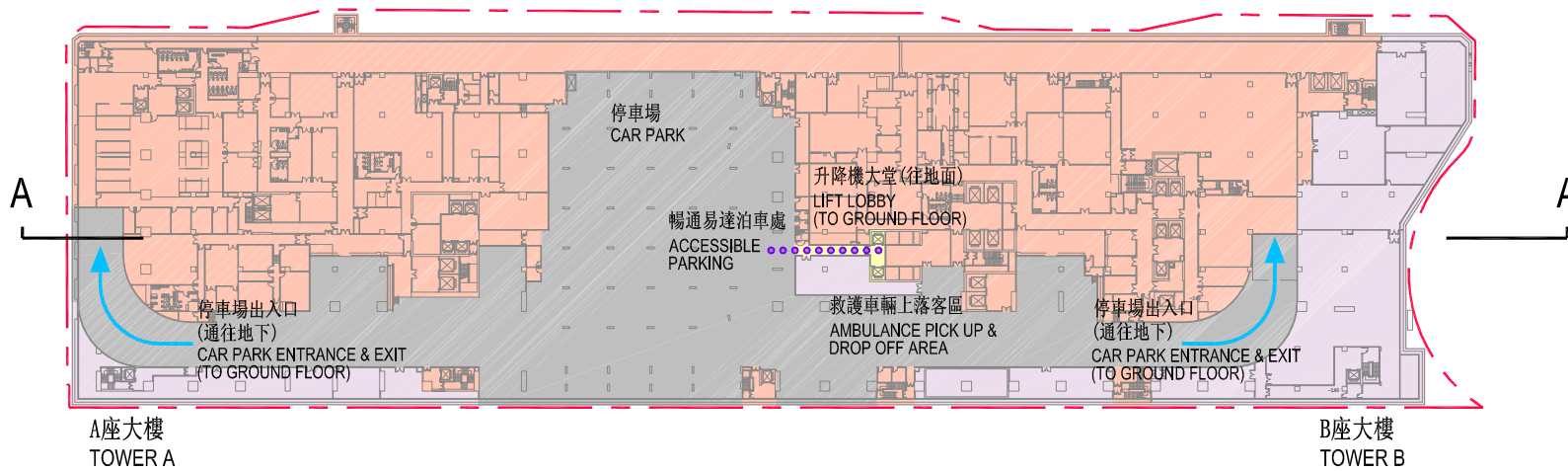
project title 項目名稱 76MM
 設立兒童專科卓越醫療中心
 ESTABLISHMENT OF THE
 CENTRE OF EXCELLENCE
 IN PAEDIATRICS

drawing title 圖則名稱
 地下平面圖
 GROUND FLOOR PLAN

圖例 LEGEND :

- | | | | | |
|--|------------------------------------|------------------------|-------------------|--------------------------|
| 公眾區域
PUBLIC AREA | 員工及醫療區域
STAFF AND CLINICAL AREA | 車輛區域
VEHICULAR AREA | 機電房
PLANT ROOM | 綠化花園
LANDSCAPE GARDEN |
| 有蓋無障礙通道
COVERED BARRIER-FREE ACCESS | 地盤界線
SITE BOUNDARY | 擬建道路
PROPOSED ROAD | 15m 0 30m 60m 75m | |

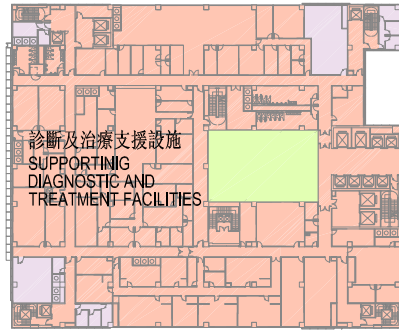




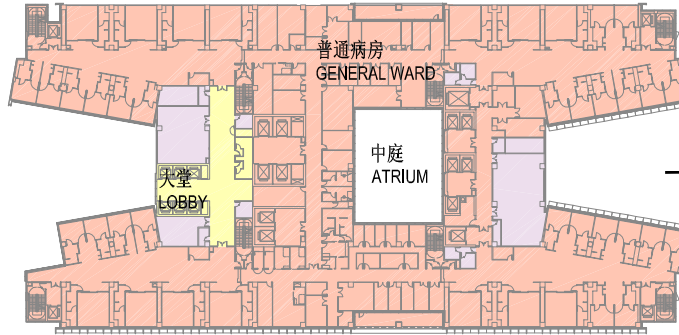
project title 項目名稱 76MM
 設立兒童專科卓越醫療中心
 ESTABLISHMENT OF THE
 CENTRE OF EXCELLENCE
 IN PAEDIATRICS

drawing title 圖則名稱
 地庫平面圖
 BASEMENT FLOOR PLAN

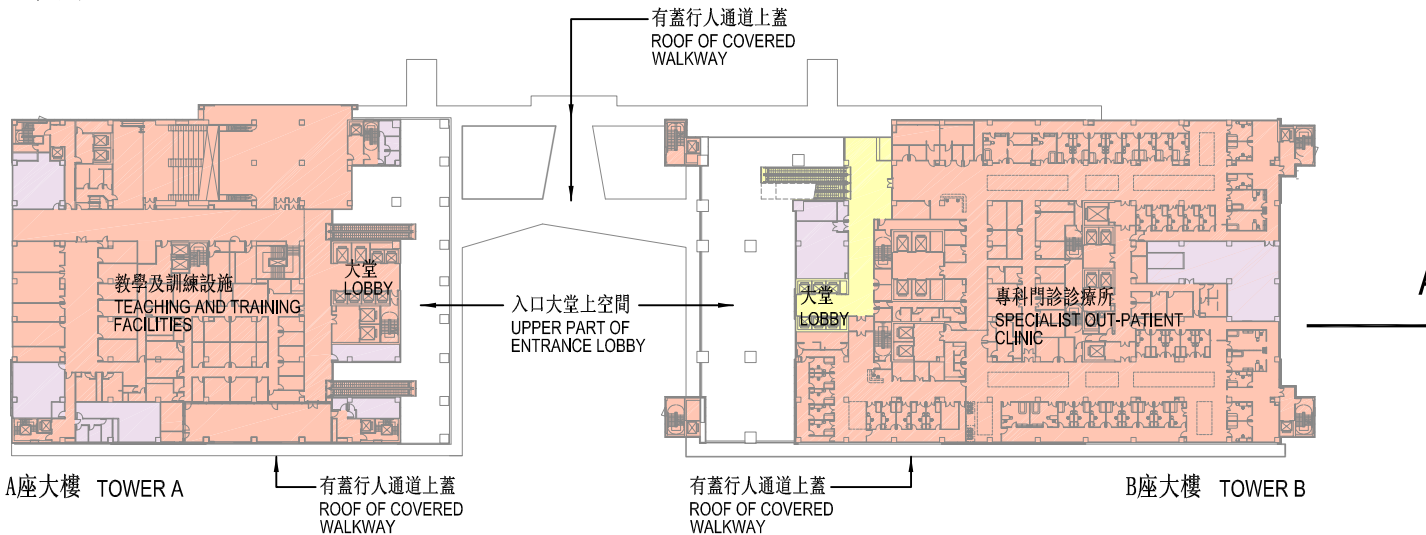




A座大樓 TOWER A
六樓平面圖 SIXTH FLOOR PLAN



B座大樓 TOWER B



A座大樓 TOWER A
一樓平面圖 FIRST FLOOR PLAN

圖例 LEGEND :

公眾區域
PUBLIC AREA

員工及醫療區域
STAFF AND CLINICAL AREA

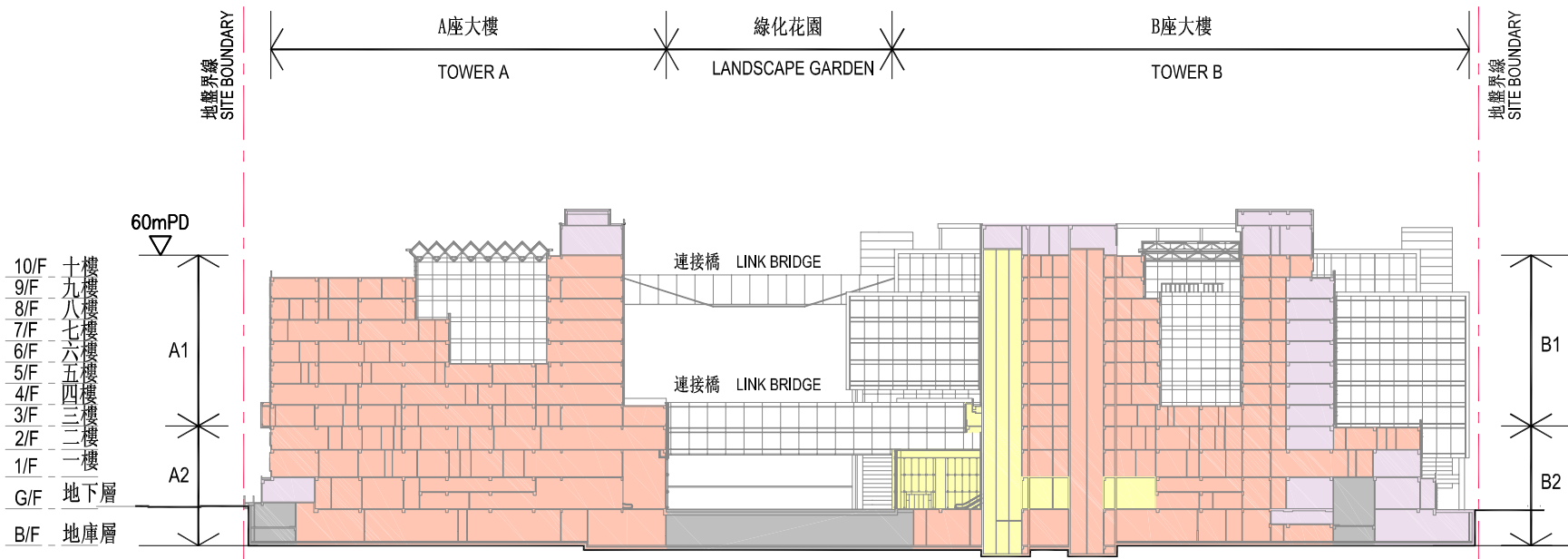
機電房
PLANT ROOM

綠化花園
LANDSCAPE GARDEN

project title 項目名稱 76MM
設立兒童專科卓越醫療中心
ESTABLISHMENT OF THE
CENTRE OF EXCELLENCE
IN PAEDIATRICS

drawing title 圖則名稱
一樓平面圖及六樓平面圖
FIRST FLOOR PLAN
AND
SIXTH FLOOR PLAN





10/F 十樓
9/F 九樓
8/F 八樓
7/F 七樓
6/F 六樓
5/F 五樓
4/F 四樓
3/F 三樓
2/F 二樓
1/F 一樓
G/F 地下層
B/F 地庫層

60mPD

A1

A2

B1

B2

連接橋 LINK BRIDGE

連接橋 LINK BRIDGE

A座大樓

TOWER A

綠化花園

LANDSCAPE GARDEN

B座大樓

TOWER B

地盤界線
SITE BOUNDARY

地盤界線
SITE BOUNDARY

圖例 LEGEND :

A1 診斷及治療支援及其他設施
SUPPORTING DIAGNOSTIC AND
TREATMENT AND OTHER FACILITIES

A2 一般配套、復康及培訓設施
GENERAL SUPPORT, REHABILITATION
AND TRAINING FACILITIES

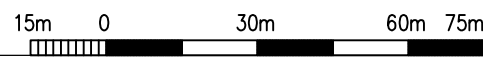
B1 住院及支援設施
IN-PATIENT AND
SUPPORTING FACILITIES

B2 日間護理、診斷及治療支援設施
AMBULATORY CARE,
SUPPORTING DIAGNOSTIC AND
TREATMENT FACILITIES

公眾區域 PUBLIC AREA (Yellow box)
員工及醫療區域 STAFF AND CLINICAL AREA (Orange box)
車輛區域 VEHICULAR AREA (Grey box)
機電房 PLANT ROOM (Purple box)

project title 項目名稱 76MM
設立兒童專科卓越醫療中心
ESTABLISHMENT OF THE
CENTRE OF EXCELLENCE
IN PAEDIATRICS

drawing title 圖則名稱
剖面圖 A-A
SECTION A-A





project title 項目名稱 76MM
設立兒童專科卓越醫療中心
ESTABLISHMENT OF THE
CENTRE OF EXCELLENCE
IN PAEDIATRICS

drawing title 圖則名稱
從東南面望向醫院的
構思透視圖
PERSPECTIVE VIEW FROM
SOUTHEAST DIRECTION
(ARTIST'S IMPRESSION)

Enclosure 7 to PWSC(2013-14)6

76MM – Establishment of the Centre of Excellence in Paediatrics

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2012 prices)

		Estimated man- months	Average MPS [*] salary point	Multiplier <small>(Note 1)</small>	Estimated fee (\$ million)
(a) Consultants' fee for					
(i) quantity surveying services <small>(Note 2)</small>	Professional	–	–	–	5.0
	Technical	–	–	–	5.0
				Sub-total	10.0
(ii) risk management	Professional	42	38	1.6	4.4
	Technical	45	14	1.6	1.6
				Sub-total	6.0
(b) Resident site staff costs <small>(Note 3)</small>	Professional	571	38	1.6	60.0
	Technical	2 957	14	1.6	106.0
				Sub-total	166.0
Comprising –					
(i) Consultants' fees for management of resident site staff				7.0	
(ii) Remuneration of resident site staff				159.0	
				Total	182.0

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of resident site staff supplied by the consultants. (As at now, MPS salary point 38 = \$65,695 per month and MPS salary point 14 = \$22,405 per month.)

2. The consultants' staff cost for quantity surveying services is calculated in accordance with the existing consultancy agreement for provision of quantity surveying services for **76MM**. The consultancy assignment will only be executed subject to Finance Committee's approval to upgrade **76MM** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.

76MM – Establishment of the Centre of Excellence in Paediatrics

**Indicative list of furniture and equipment items
with unit cost of \$1 million or above**

Item description	Quantity	Unit cost (\$ million)	Total cost (\$ million)
Access Control System	1	13.600	13.600
Advanced Debriefing and Teleconference System	1	1.400	1.400
Analyser, Broad-Spectrum Toxicology System, Automated	1	1.400	1.400
Analysers, Laboratory, Clinical Chemistry/Haematology/Immunoassay, Chemiluminescent	4	1.300	5.200
Analyser, Laboratory, Haematology, Cell Counting, Automated	1	6.800	6.800
Analysers, Laboratory, Haematology/Immunoassay, Chemiluminescent/Molecular Assay	3	1.800	5.400
Aspirator, Ultrasonic	1	1.500	1.500
Asset Tagging System	1	1.800	1.800
Audio-Visual System	1	1.200	1.200
Automation System, Laboratory	1	16.500	16.500
Body Tagging System (Mortuary)	1	1.800	1.800

Item description	Quantity	Unit cost (\$ million)	Total cost (\$ million)
Closed Circuit Television (CCTV) System	1	18.700	18.700
Cold Body Chamber	1	3.110	3.110
Computed Tomography System	1	15.000	15.000
Computer-Aided Detection System, Karyotyping	1	2.000	2.000
Cytometers, Automated, Flow	1	1.000	1.000
Cytometers, Automated, Flow/Cell Sorter	2	3.000	6.000
Display Systems, Electronic Queuing	2	1.300	2.600
Extracorporeal Photo-Chemotherapy Machine	1	1.000	1.000
Gait Lab Equipment	1	2.270	2.270
Heart-Lung Bypass Unit	1	3.700	3.700
Hydrotherapy Pool	1	5.200	5.200
Imaging Modality Post-Processing System	1	2.500	2.500
Impedance Test System, Laryngopharyngeal and Gastroesophageal	1	1.100	1.100

Item description	Quantity	Unit cost (\$ million)	Total cost (\$ million)
Information System, Data Management, Anaesthesia	1	5.000	5.000
Information System, Data Management, Bedside	1	13.000	13.000
Information System, Data Management, Cardiology, Electrocardiography	1	3.000	3.000
Information System, Picture Archiving and Communication System (PACS)	1	10.000	10.000
Integrated Security System	1	3.600	3.600
Intercom System	1	4.300	4.300
Laser, Carbon Dioxide, Surgical/Dermatologic	1	1.600	1.600
Magnetic Resonance Imaging (MRI) System	1	25.000	25.000
Mass Spectrometer, Inductively-Coupled Plasma	1	1.930	1.930
Mass Spectrometers, Liquid Chromatograph	4	3.000	12.000
Microscope, Electron	1	4.724	4.724
Microscopes, Light, Operating	2	2.500	5.000
Mobile Shelving System (Medical Records)	1	4.500	4.500

Item description	Quantity	Unit cost (\$ million)	Total cost (\$ million)
Mobile Shelving Systems (Pharmacy & Sterile Stores)	2	1.700	3.400
Monitoring System, Electroencephalography (EEG), Video	1	1.100	1.100
Monitoring System, Physiologic, Acute Care	1	28.000	28.000
Magnetic Resonance Imaging (MRI) Safe Incubator	1	3.300	3.300
Nucleic Acids Processors, Sequencing	2	2.000	4.000
Public Address System	1	7.300	7.300
Pumps, Extracorporeal Perfusion	1	1.860	1.860
Radiographic/Fluoroscopic System, Angiography/Interventional	1	16.000	16.000
Radiographic/Fluoroscopic System, Cardiovascular	1	25.000	25.000
Radiographic/Fluoroscopic System, General Purpose	1	7.000	7.000
Radiographic/Fluoroscopic Unit, Mobile, Three Dimensional (3D)	1	2.100	2.100
Radiographic/Fluoroscopic Units, Mobile	2	1.300	2.600
Radiographic Systems, Digital	2	3.300	6.600

Item description	Quantity	Unit cost (\$ million)	Total cost (\$ million)
Radiographic Units, Dental	1	3.000	3.000
Radiographic Units, Mobile	5	1.100	5.500
Scanning Systems, Ultrasonic, Cardiac	3	2.800	8.400
Security Patient Tagging System	1	4.150	4.150
Slide Stainers, Immunohistochemistry	2	1.200	2.400
Stereotactic Systems, Surgery, Multi-purposes	2	3.500	7.000
Sterilising Unit, Plasma	1	1.700	1.700
Sterilising Units, Steam	5	2.300	11.500
Tables, Operating, Spinal/Orthopaedics	2	1.200	2.400
Telephone System, Mobile Communication	1	7.616	7.616
Telephone System, Private Automatic Branch Exchange (PABX)	1	7.424	7.424
Ultrasound Scanners (Radiology)	3	1.600	4.800
Ultrasound Scanners (Various Units)	5	1.200	6.000
Uninterruptable Power Supply (Hospital Data Centre)	2	4.000	8.000

Item description	Quantity	Unit cost (\$ million)	Total cost (\$ million)
Uninterruptable Power Supply, Picture Archiving and Communication System (PACS) servers	2	1.000	2.000
Vibration Therapy and Tilt-Table System	1	1.606	1.606
Video Systems, Endoscopic	4	1.200	4.800
Vacuum Insulated Evaporator (VIE) Tank	1	3.300	3.300
Washer Decontamination Units, Surgical Instrument, Free-standing	2	1.200	2.400
Washer Decontamination Units, Surgical Instrument, Tunnel	5	5.000	25.000
Washer, Cart	1	4.000	4.000
Water Purification Systems	2	2.700	5.400
Workstation, Computer-Aided Design, Prosthetic & Orthotic	1	3.312	3.312