ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 - BUILDINGS Education - Tertiary/other 91ET - Education Resource Centre-cum-Public Transport Interchange at Kowloon Tong

Members are invited to recommend to Finance Committee -

- (a) the upgrading of part of **91ET**, entitled "Education Resource Centre-cum-Public Transport Interchange at Kowloon Tong Stage 1" to Category A at an estimated cost of \$90.0 million in money-of-the-day prices; and
- (b) the retention of the remainder of **91ET** in Category B.

PROBLEM

The Education Department (ED)'s education resource centres and service centres for children of special education needs are scattered across the territory. ED's clients have to go to centres in different locations for the information/services they need.

2. Also, there are not enough loading and unloading areas in Kent Road,

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To Fuk Road and Suffolk Road for commuters travelling around the Kowloon Tong Mass Transit Railway (MTR) and the Kowloon-Canton Railway (KCR)

stations.

PROPOSAL

3. The Director of Architectural Services (D Arch S), with the support of the Secretary for Education and Manpower and the Secretary for Transport, proposes to upgrade **91ET**, entitled "Education Resource Centre-cum-Public Transport Interchange at Kowloon Tong - Stage 1" to Category A at an estimated cost of \$90.0 million in money-of-the-day (MOD) prices (see paragraph 7(a) below).

PROJECT SCOPE AND NATURE

- 4. The full scope of **91ET** covers the construction of an Education Resource Centre (ERC)-cum-Public Transport Interchange (PTI) on a site of about 9 300 square metres at the junction of Suffolk Road and To Fuk Road in Kowloon Tong. The ERC will house ED's education resource centres as well as the Department's service centres for children with special education needs. The PTI will serve as a transport interchange for public transport including franchised buses, cross boundary coaches and green minibuses.
- 5. An extended MTR underground concourse and a subway connecting the extended concourse and the Kowloon Tong KCR station will be built underneath part of the site to alleviate the congestion problem at the Kowloon Tong MTR/KCR interchange. This part of the works will be carried out and funded by the Mass Transit Railway Corporation Limited (MTRCL).
- 6. The ERC, PTI and the extended MTR underground concourse will form an integrated structure after completion. Details of the proposed development are at Enclosure 1.
- 7. The project will be implemented in two stages -
 - (a) Stage 1 Site foundation works and pre-contract consultancy for works under Stage 2

Stage 1 is further divided into two parts. The first part

/comprises

comprises the site foundation works of the ERC-cum-PTI, including the construction of a basement plant

room (with a construction floor area of 550 square metres) for accommodating the fire fighting tanks and pumping equipment for the PTI. The second part is to commission a pre-contract consultancy to prepare tender documents for the construction works under Stage 2 of the project, and to provide specialist advice on façade engineering and fluid dynamics study for the detailed design of the ERC-cum-PTI.

Since the ERC-cum-PTI and the extended MTR underground concourse will form an integrated structure on completion, subject to Finance Committee(FC)'s funding approval for Stage 1 of 91ET, the Administration intends to entrust the site foundation works of the ERC-cum-PTI (the first part of Stage 1) to the MTRCL to avoid interface problems. For the pre-contract consultancy, we will undergo normal tendering procedures for the appointment of consultants.

(b) Stage 2 - Actual construction works of the ERC-cum-PTI

Stage 2 covers the actual construction of the ERC-cum-PTI. The Architectural Services Department will oversee the works.

8. The site plan for the ERC-cum-PTI project is at Enclosure 2. MTRCL will commence the site foundation works in June 2001 for completion in September 2002. Separately, the pre-contract consultancy will commence in June 2001 for completion in August 2002. We plan to start Stage 2 of **91ET** in October 2002 for completion in early 2005. We will be seeking the necessary funding approval from the FC nearer the time.

JUSTIFICATION

Education Resource Centre

9. We envisage that the ERC will bring about the following benefits -

/(a)

(a) Improving the standard of services by reprovisioning scattered centres in a centrally located building

The spread of education resource centres and service centres for children with special education needs in different locations is not convenient to clients. Also, owing to accommodation constraints, some facilities in these centres are sub-standard, e.g. no access facilities for the disabled. Housing these scattered centres in a centrally located composite ERC will provide a focal point of resource support with improved facilities to teachers in the delivery of quality education. In addition, through centralising these centres, the ED will be able to achieve economies of scale by extending their opening hours to after school hours without the need for additional manpower resources.

(b) Facilitating constructive exchanges among educational professionals

The ERC, through offering conference facilities like lecture theatres and conference rooms, can provide a common meeting place for teachers, principals, teachers organisations and educational bodies to share experience and organise seminars or workshops.

(c) Facilitating the pursuit of life-long learning

To promote life-long learning and reading habits, and to increase access to information technology (IT), we will be setting up learning centres with IT facilities, lecture rooms, and library services. Our current plan is to set up these centres in convenient locations with flexible opening hours to serve a diverse range of clients, e.g. housewives and elderly people during daytime, and working adults in the evening. Given its convenient location, the proposed ERC would be a good choice to incorporate one such centre.

(d) Releasing three existing school premises for other educational uses

The former Tin Kwong Road Government Secondary School (currently occupied by the Curriculum Centre),

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the former Perth Street Government Primary School (currently occupied by Perth Street Special Education Services Centre) and the former Sir Robert Black College of Education, Hung Hom Annex (currently occupied by Hong Kong Teachers' Centre) can be released for other educational uses, such as providing temporary accommodation for schools undergoing insitu re-development.

(e) Releasing existing office accommodation occupied by various ED's centres

With the relocation of various centres occupying premises in commercial buildings, nearly \$7 million a year in rental will be saved. The existing office accommodation of the Information Technology Education Resource Centre/Regional Support Unit at Kai Tak Government Building can also be returned to Government Property Agency for re-allocation.

Public Transport Interchange

10. At present, there is heavy traffic congestion, particularly during peak hours¹, on Kent Road, To Fuk Road and Suffolk Road. This is mainly due to the loading and unloading of passengers travelling to and from the area surrounding the Kowloon Tong MTR and the KCR stations. There are four franchised bus routes and four green minibus routes terminating at Suffolk Road and To Fuk Road. There are also some 70 daily cross-boundary coaches loading and unloading passengers near the Kowloon Tong MTR and KCR stations. To alleviate traffic congestion in Kowloon Tong, we propose to construct a covered PTI underneath the ERC. This will provide a more comfortable waiting area for passengers.

Height of the ERC-cum-PTI

11. The ERC-cum-PTI will be constructed on a site which is subject to a height restriction of 51 metres above principal datum (i.e. about 31 metres above Suffolk Road). The height restriction is imposed by the Town Planning Board after public consultation to ensure compatibility with the height of buildings in the surrounding area. The Administration sees no strong case at present to justify a

/relaxation

relaxation of height restriction for the subject site.

Peak hours refer to the period from 7 a.m. to 10 a.m. and 4 p.m. to 7 p.m.

- 12. To maximise site potential, the ERC-cum-PTI will be constructed to the full height limit (i.e. six-storey high) with the foundation and structure designed to allow for one additional storey to be added should the height restriction be relaxed in future.
- 13. We have considered whether it is feasible to strengthen the foundation of the ERC-cum-PTI further to allow for the possible addition of more storeys in future. This is however technically not feasible. As mentioned in paragraph 5 above, a MTR concourse will be constructed underneath part of the site. The columns of the ERC-cum-PTI will therefore need to be supported by horizontal beams laid above the concourse. The loading capacity of these beams is dictated by the limited underground space above the concourse. This in turn limits the loading of the superstructure permitted. In addition, wide spacing of the columns within the PTI is required for vehicle manoeuvring. This not only limits the number of columns, but also the loading to be imposed by the superstructure on the beams. The D Arch S has confirmed that the current arrangement of providing for a possible extra floor to be added in future has already maximised the loading capacity of the beams.

FINANCIAL IMPLICATIONS

We estimate that the total capital cost of **91ET** will be about \$740 million in September 2000 prices. The cost of Stage 1 is estimated to be \$90 million in MOD prices (see paragraph 16 below). A breakdown is shown below -

				\$ million
(a)	Site	Formation Work		78.9
	(i)	Foundation for the ERC-cum-PTI	56.1	
	(ii)	Basement plant room	10.0	
	(iii)	Contingencies	6.6	
	(iv)	MTRCL ² on-cost	6.2	
				/(b) \$ million

An on-cost of 8.56% of the project base cost, i.e. items 14 (a) (i) to (iii) above, will be payable to the MTRCL for undertaking the sub-structure works for **91ET**.

(b) Pre-contract consultancy		6.5	
(i) specialist advice on certain aspects of the detailed design of the ERC-cum-PTI	2.3		
(ii) contract documentation	4.2		
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Sub-tota	ı1	85.4	(in September
(c) Provision for price adjustment		4.6	2000 prices)
Tota	- il -	90.0	(in MOD prices)

15. A detailed breakdown by man-months of the estimates for the fees of the pre-contract consultancy is at Enclosure 3.

16. Subject to approval, we will phase the expenditure as follows -

Year	\$ million (Sept 2000)	Price adjustment factor	\$ million (MOD)
2001 - 02	18.0	1.02550	18.5
2002 - 03	58.2	1.05627	61.5
2003 - 04	9.2	1.08795	10.0
	85.4		90.0

17. We derived the MOD estimates on the basis of Government's forecast of trend labour and construction prices for the period 2001 to 2004. The

/MTRCL

MTRCL will tender the foundation and basement works under a fixed-price lumpsum contract because the contract period will be shorter than 21 months and the scope of works can be defined in advance, leaving little room for uncertainty. The contract for the pre-contract consultancy will also be tendered on a fixed-price lump-sum basis.

18. Stage 1 of **91ET** will not give rise to any recurrent expenditure.

PUBLIC CONSULTATION

- 19. We consulted the Kowloon City District Council in September 2000. Members of the Council supported the project.
- 20. We consulted the Legislative Council Panel on Education in December 2000 on the project. There was broad support for the project. Some Members have asked us to consider the possibility of strengthening the foundation works of the ERC-cum-PTI further to allow for the addition of more storeys in future. As explained in paragraph 12 above, the proposal has already maximised the development potential of the site.
- At the same LegCo Panel meeting, a Member also queried about the lack of parking facilities in the ERC. Given the convenient location of the ERC (with the Kowloon Tong MTR and KCR stations adjacent to it and a PTI beneath it), we do not consider it necessary to provide further private parking facilities for the ERC. Indeed, patrons of the ERC may use the parking facilities available nearby, such as on-street parking metres on Devon Road and Norfolk Road. Furthermore, if we were to offer private parking facilities for the ERC, the facilities would reduce the space for the PTI. As the PTI is a public transport facility, it should be given priority over private parking in the use of space.

ENVIRONMENTAL IMPLICATIONS

22. The consultant engaged by the MTRCL completed a Preliminary Environmental Review (PER) for the ERC-cum-PTI in December 1998. This concluded that no long-term environmental impact would arise from the project. The Director of Environmental Protection vetted the PER and agreed that an Environmental Impact Assessment was not necessary. When the site foundation works are carried out, the MTRCL will control noise, dust and site run-off nuisances through the implementation of mitigation measures in the relevant

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contract. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, as well as frequent cleaning and watering of the site.

23. Ways of minimizing the generation of construction and demolition (C&D) materials were considered at the planning and design stage. In carrying out the site foundation works, the MTRCL will require the relevant contractor to submit for its approval a waste management plan with appropriate measures to, amongst others, minimize the generation of C&D materials. The MTRCL will ensure that the day-to-day operations on site comply with the waste management plan approved. Where C&D materials are produced, the contractor will be required to reuse and recycle them. If this is not possible, C&D materials will be disposed of through designated public filling facilities and/or in landfills. We will record their disposal through a trip-ticket system. The reuse, recycling and disposal of C&D materials will also be properly recorded for monitoring purposes. It is estimated that some 20 940 cubic metres of C&D materials will be generated by 91ET: about 2 240 cubic metres (10.7%) will be reused on site, 18 000 cubic metres of inert C&D materials (86%) will be reused in public filling areas³ and about 700 cubic metres of C&D waste (3.3%) will be disposed of at landfills.

LAND ACQUISITION

24. This project does not require any land acquisition.

BACKGROUND INFORMATION

- We upgraded 91ET to Category B in January 2000. The MTRCL engaged a consultant to carry out a Preliminary Project Feasibility Study (PPFS) including a PER for the ERC-cum-PTI in December 1998 at a cost of \$397,720. We employed a term contractor to carry out ground investigation in April 2000 at a cost of \$561,100. The two expenditure items were charged to block allocation Subhead 3100GX "Project feasibility studies, minor investigations and consultants' fees for items in Category D of the Public Works Programme". The consultant and the term contractor have completed the PPFS and ground investigation respectively.
- We estimate that the Stage 1 of **91ET** will create some 130 jobs

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with a total of 1 870 man-months comprising five professional staff, 15 technical staff and 110 labourers.

A public filling area is a designated part of a development project that accepts public fill for reclamation purposes. Disposal of public fill in a public filling area requires a licence issued by the Director of Civil Engineering.

Education and Manpower Bureau January 2001

Proposed Education Resource Centre (ERC)-cum-Public Transport Interchange (PTI)

The proposed development comprises -

- (a) an ERC (5-storey) with an operational area of about 14 000 m². The ERC will provide accommodation (details at Attachment) for the following facilities
 - i) three additional education resource centres on business, science and home economics subjects respectively;
 - ii) 17 existing education resource centres and service centres for children with special education needs;
 - iii) accommodation for the Teacher Centre (and the future General Teaching Council) and possibly also a Principal Centre;
 - iv) a life-long learning centre with lecture rooms, as well as IT and library facilities;
 - v) support and conference facilities including lecture theatres, conference rooms etc.; and
 - vi) space for Regional Education Office Kowloon (REO(K)) which currently occupies leased premises in a commercial building; and
- (b) a PTI with four departure bays for buses, two departure bays for cross boundary coaches, four departure bays for green minibuses, and ancillary facilities such as a bus regulators' kiosk and a passenger waiting room.

91ET - Education Resource Centre-cum-Public Transport Interchange at Kowloon Tong

DETAILS OF FEES OF THE PRE-CONTRACT CONSULTANCY

Breakdown of estimates of the pre-contract consultancy

Category of works/items		Estimated man months	Average MPS* salary point	Multiplier factor	Estimated fee (\$ million)
(I) Specialist advice for the detailed design of the ERC-cum-PTI					
(a) Façade engineering	Professional Technical	4.6 9.9	38 14	2.4 2.4	0.6 0.5
(b) Fluid dynamics study	Professional Technical	5.3 9.9	38 14	2.4 2.4	0.7 0.5
				Sub-total	2.3
(II) Contract documentation					
(a) Quantity surveying	Professional Technical	18.6 35.7	38 14	2.4 2.4	2.6 1.6
				Sub-total	4.2
				Total	6.5

^{*} MPS = Master Pay Scale

Notes

- 1. Regarding the staff employed in the consultants' offices, a multiplier factor of 2.4 is applied to the average MPS point to arrive at the full staff costs including the consultants' overheads and profit. (At 1 April 2000, MPS point 38 = \$57,525 p.m. and MPS point 14 = \$19,055 p.m.).
- 2. The figures given above are based on estimates prepared by the D Arch S.

Attachment to Enclosure 1

Tentative Breakdown of Total Operational Area (TOA) of ERC

	Facilities	Area (m²)
I.	Centre Management Office for centralized administration	101.20
II.	Communal Area	1,550.00
	• Lecture theatre/room	550.00
	Conference/Seminar/Meeting room	600.00
	Multi-purpose area	300.00
	Media production room	50.00
	 Collection and distribution area for resource materials 	50.00
III.	Resource Centres for Principals/Teachers	2,950.40
	School-based Management	204.30
	Curriculum Development	401.40
	Media Production Services	311.00
	Technical Subjects	400.40
	Business Subjects	247.70
	Science Subjects	120.00
	Home Economics Subjects	245.40
	Art Education Subjects	833.80
	Language Education	186.40
IV.	Service Centre for Children of Special Education Needs	2,558.00
	 Special Education General Office 	467.50
	 Resource Centre for Special Education Teachers of Special Education Support & Placement Section 	150.00
	Psychological Services (Special Education) Section	339.00
	 Psychological Services (Professional Support) Section 	275.50
	Audiological Services Section	496.90
	Special Education Support & Placement Section	255.50
	Speech Therapy Services Section	252.70
	Special Education Resource Teaching Unit	320.90

	Facilities	Area (m²)
	Facilities	Area (m²)
V.	Training Centre for Principals/Teachers	3,002.20
	Training and Development	636.80
	Hong Kong Teachers' Centre cum Multimedia Professional Library	933.40
	 Information Technology (including School Administration and Management System & Computer Education) 	1,432.00
VI.	Kowloon Regional Education Office for Schools and Members of the Public	1,963.70
VII.	General Teaching Council (GTC)	285.00
VIII.	Centre for Life Long Learning	1,700.00 plus
	TOA	14,110.50
	IVA	(say 14,000.00)

