

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, 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

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 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 (MOD) prices (see paragraph 6(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 an 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 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 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 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 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 a fluid dynamics study for the detailed design of the ERC-cum-PTI.

/Since

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.

7. The site plan for the ERC-cum-PTI project is at Enclosure 1. 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 seek the necessary funding approval from the FC nearer the time.

8. Details of the proposed development are at Enclosure 2. The facilities to be provided in the ERC will be subject to further refinement before we seek approval from the FC for Stage 2 of the project.

JUSTIFICATION

Education Resource Centre

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

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

The spread of ED's service centres in different locations is not convenient to clients. Also, owing to accommodation constraints, some facilities in these centres are sub-standard. Housing these scattered centres in a centrally located composite ERC will also 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 office hours without the need for additional manpower resources.

- (b) Releasing three existing school premises for other educational uses

The former Tin Kwong Road Government Secondary School (currently occupied by the Curriculum Centre), 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 to enable existing bi-sessional primary schools to convert to whole-day operation or provide temporary accommodation for schools undergoing in-situ re-development.

- (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) Facilitating constructive exchanges among educational professionals

/The

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.

- (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. 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. At present, there are four franchised bus routes and four green minibus routes terminating at Suffolk Road and To Fuk Road. There are also some 70 cross-boundary coaches loading and unloading passengers daily 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 also improve passenger safety by relocating the existing on-street loading/unloading activities of buses and coaches to this off-street PTI which will also 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 the principal datum (i.e. about 31 metres above Suffolk Road). The height restriction was imposed by the Town Planning Board in 1997 after public consultation to ensure that the development will fit in well with the existing low-rise and low-density character of Kowloon Tong and will not create undue pressure on the infrastructural facilities in the area. It is incorporated in the statutory notes of the Kowloon Tong Outline Zoning Plan.

/12.

¹ Peak hours refer to the period from 7 a.m. to 10 a.m. and 4 p.m. to 7 p.m.

12. Under the current proposal, the ERC-cum-PTI will be constructed to the height limit (i.e. six-storey high) with the foundation and structure designed to allow for one additional storey to be built if the height restriction could be relaxed in future. The D Arch S has confirmed that, given the current design of the MTR concourse and the PTI, this arrangement has already maximised the site potential.

13. At this Subcommittee's meeting on 17 January, Members requested the Administration to consider the feasibility of further increasing the loading capacity of the foundation/structure of the ERC-cum-PTI to allow for the addition of more storeys should the height restriction on the site be relaxed in future. The Administration has conducted a review and has come to the conclusion that we should not do so, for the reasons set out in paragraphs 14 to 17 below.

14. First, as advised by the D Arch S, on the premise that the existing superstructure would not be demolished when storeys are added in future, the stronger the foundation/structure we want to allow for the addition of more storeys, the higher the foundation and associated costs will be. Also, more usable floor space in the superstructure will need to be sacrificed in exchange for more lift shafts and bigger fire escapes and plant rooms. As an illustration, if we were to increase the loading capacity of the foundation/structure of the ERC-cum-PTI to allow for the construction of four additional storeys in future (on top of the one additional storey already included in the current design), D Arch S has advised that some 600 square metres of usable floor space would have to be given up for lift shafts, fire escapes, etc. As an indication, 600 square metres would be roughly equivalent to a lecture theatre, or one-fifth of the planned provision for teachers' resource centres. The additional foundation and associated costs (excluding the cost for constructing the four additional storeys) are about \$85 million.

15. Secondly, a redesign of the ERC-cum-PTI would entail a reduction in the capacity of the PTI because of the need to adjust the column dimensions and spacing. Consequently, up to two single-lane bus bays would have to be sacrificed. This is highly undesirable from the traffic point of view since only eight bus bays will be left, and this will not be adequate to alleviate the traffic congestion in Kowloon Tong. Some franchised buses, green minibuses or cross-boundary coaches may still have to load and unload passengers on street.

16. Thirdly, revising the structural design of the ERC-cum-PTI together with the MTR concourse will result in a delay of up to 16 months in completing the project and delaying the service improvement to be brought about by the ERC and the PTI. As mentioned in paragraph 9(b) above, the reprovisioning of existing education resource centres to the proposed ERC will release three existing school premises to enable existing bi-sessional schools to convert to whole-day operation or to provide temporary accommodation for schools undergoing in-situ re-development. A delay in the completion of the ERC will affect the whole-day conversion programme or redevelopment programme for at least three existing schools. Delay in completing the MTR concourse will also mean the pedestrian congestion at the Kowloon Tong MTR/KCR interchange will remain for another eight months.

17. Fourthly, the Planning Department is conducting a review on permissible development intensity for Kowloon. The latest findings indicate that there will not be a blanket relaxation of development restrictions in Kowloon, including Kowloon Tong, because there will continue to be infrastructural constraints in the short to medium term. These include inadequate sewerage and road capacities, and an under-provision of government, institution or community facilities such as schools. Furthermore, the height restrictions in Kowloon Tong are imposed to preserve the existing low-rise and low-density character in the area. Adding five storeys to the proposed ERC-cum-PTI development will almost double the height of the ERC and will result in a drastic change to the overall outlook of Kowloon Tong.

FINANCIAL IMPLICATIONS

18. 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 20 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)	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	
Sub-total		85.4	(in September 2000 prices)
(c)	Provision for price adjustment	4.6	
Total		90.0	(in MOD prices)

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

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

/2001 - 02

² An on-cost of 8.56% of the project base cost, i.e. items 18 (a) (i) to (iii) above, will be payable to the MTRCL for undertaking the sub-structure works for 91ET.

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
	—————		—————

21. 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 will tender the foundation and basement works under a fixed-price lump-sum 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.

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

PUBLIC CONSULTATION

23. We consulted the Kowloon City District Council in September 2000. Members of the Council supported the project.

24. We consulted the Legislative Council Panel on Education in December 2000 on the project. There was again broad support for the project. Some Members have asked us to consider the possibility of increasing the loading capacity of the foundation and structure of the ERC-cum-PTI further to allow for the addition of more storeys in future. As explained in paragraphs 11 to 17 above, the Administration has considered the proposal thoroughly. For various reasons set out therein, we do not recommend the foundation/structure of the ERC-cum-PTI be strengthened any further.

25. 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. 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

26. 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 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.

27. 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 Stage 1 of 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

³ 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.

LAND ACQUISITION

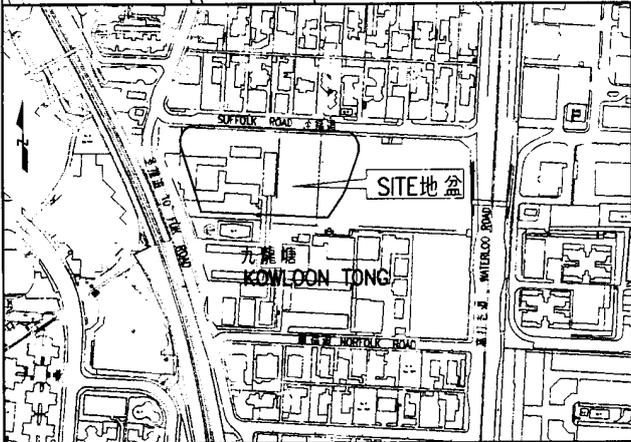
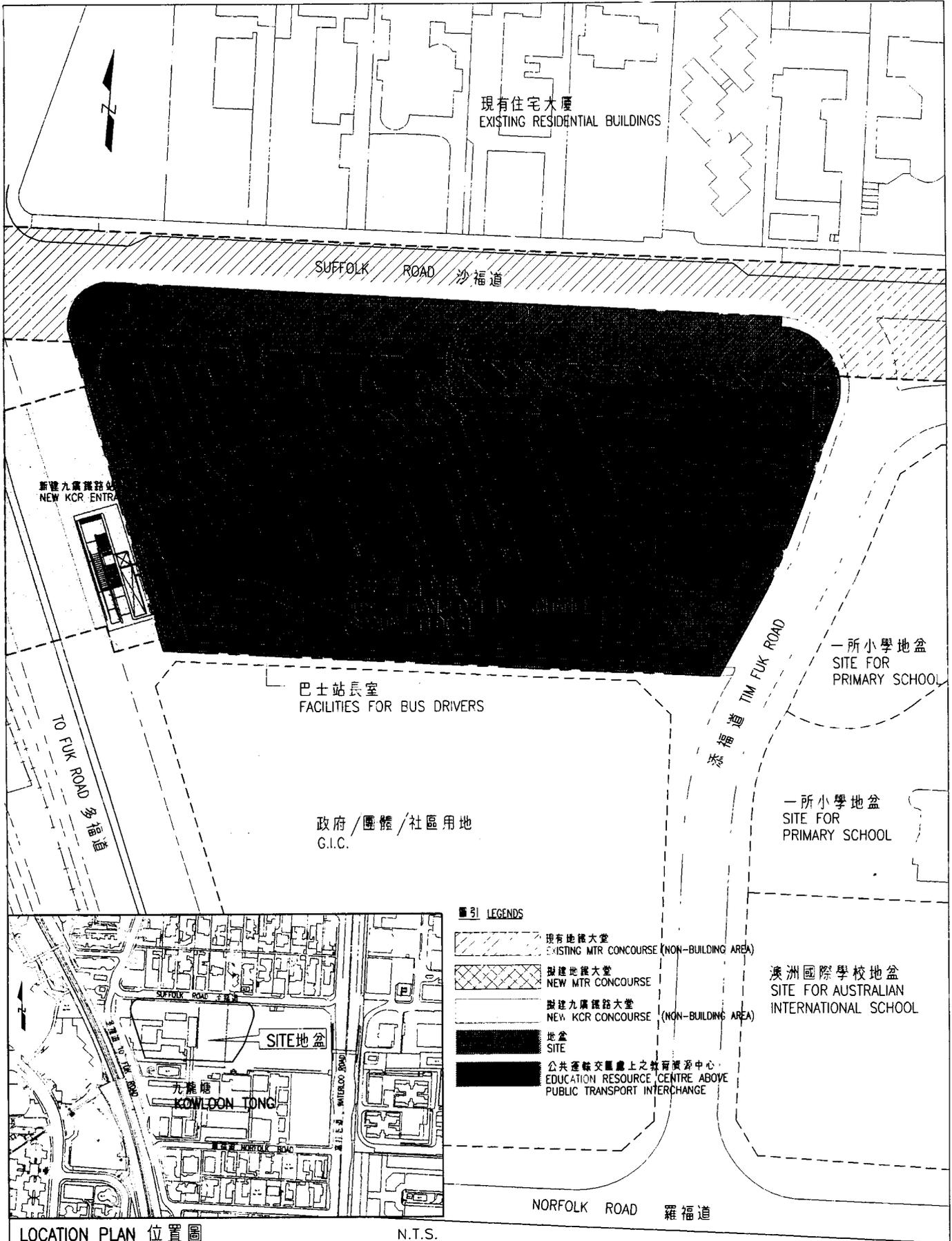
28. This project does not require any land acquisition.

BACKGROUND INFORMATION

29. 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.

30. We estimate that the Stage 1 of **91ET** will create some 130 jobs with a total of 1 870 man-months comprising five professional staff, 15 technical staff and 110 labourers.

Education and Manpower Bureau
February 2001



title 91ET 九龍塘教育資源中心 暨公共運輸交匯處 EDUCATION RESOURCE CENTRE-CUM-PUBLIC TRANSPORT INTERCHANGE AT KOWLOON TONG	drawn by W.M. YU	date 11.10.00	drawing no. AB/6080/XA101	scale 1:1000
	approved A. YUE	date 11.10.00		
office ARCHITECTURAL BRANCH			 ARCHITECTURAL SERVICES DEPARTMENT	

Enclosure 2 to PWSC(2000-01)100

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.

Tentative Breakdown of Total Operational Area (TOA) of ERC

(subject to further refinement before seeking approval from the FC for Stage 2 of the project)

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)
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
		14,110.50
		TOA
		(say 14,000.00)

Enclosure 3 to PWSC(2000-01)100

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	4.6	38	2.4	0.6
	Technical	9.9	14	2.4	0.5
(b) Fluid dynamics study	Professional	5.3	38	2.4	0.7
	Technical	9.9	14	2.4	0.5
Sub-total					2.3
(II) Contract documentation					
(a) Quantity surveying	Professional	18.6	38	2.4	2.6
	Technical	35.7	14	2.4	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.