For discussion
on 17 May 2000

PWSC(2000-01)24

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 706 - HIGHWAYS
Transport - Roads
589TH - Salisbury Road underpass & associated road improvement works

Members are invited to recommend to Finance Committee the upgrading of **589TH** to Category A, at an estimated cost of $331.3 million in money-of-the-day prices for the construction of Salisbury Road underpass and associated road improvement works including the Middle Road traffic circulation system

PROBLEM

The junctions of Salisbury Road with Chatham Road South and Nathan Road have insufficient capacity to cope with future traffic demand.

PROPOSAL

2. The Director of Highways, with the support of the Secretary for Transport, proposes to upgrade **589TH** to Category A at an estimated cost of $331.3 million in money-of-the-day (MOD) prices for the construction of Salisbury Road underpass and associated road improvement works including the Middle Road traffic circulation system.

/PROJECT .....

PROJECT SCOPE AND NATURE

3. The scope of works for **589TH** comprises two portions, as described below. One portion will be entrusted to Kowloon Canton Railway Corporation (KCRC) and the other will be undertaken by the Government -

(a) Portion to be entrusted to KCRC

(i) construction of a 370-metre long dual 2-lane underpass along Salisbury Road at its junction with Chatham Road South;

(ii) relocation of an existing 4.5-metre wide pedestrian subway across Salisbury Road;

(iii) widening of Salisbury Road from Wing On Plaza to Nathan Road to accommodate two additional traffic lanes; and

(iv) associated road reconstruction, traffic signalization, drainage, water and landscaping works.

(b) Portion to be carried out by the Government

(i) implementation of the Middle Road traffic circulation scheme by modification of the roads layout and traffic signalization works in Kowloon Park Drive, Middle Road, Hankow Road, Nathan Road and Salisbury Road;

(ii) widening of Salisbury Road from Nathan Road to Canton Road to accommodate two additional traffic lanes; and

(iii) associated road reconstruction, traffic signalization, drainage, water and landscaping works.

JUSTIFICATION

4. Salisbury Road is a primary distributor in Tsim Sha Tsui (TST) running in an east-west direction. It has long been a busy road serving

/traffic .....

traffic from Central/Southwest Kowloon and TST. The opening of Hung Hom Bypass and Princess Margaret Road Link in October 1999 introduced a convenient route for traffic to proceed from North and East Kowloon, via Salisbury Road, to TST. At present, Salisbury Road is operating beyond its design capacity during peak hours, with westbound traffic queuing from the junction with Nathan Road back to a point some 200 metres east of the junction with Chatham Road South. We anticipate that the on-going developments in Hung Hom reclamation and West Kowloon reclamation will generate additional TST-bound traffic in the coming years, hence overloading Salisbury Road, particularly at the junctions with Chatham Road South and Nathan Road. Eventually, traffic movements throughout TST South will suffer from significant delays during peak hours in the absence of improvements to Salisbury Road.

5. To resolve traffic congestion along Salisbury Road, we need to increase the capacity of two critical junctions - those at Chatham Road South and Nathan Road. We propose to build the Salisbury Road underpass below the Chatham Road South junction to provide for uninterrupted through traffic, hence eliminating the conflict with other at-grade junction traffic. We will also disallow the time-consuming right turning traffic movement from Salisbury Road westbound towards Nathan Road to enhance the junction capacity. In conjunction with these two measures, we will implement the Middle Road traffic circulation system by confining right turning traffic movements from Salisbury Road westbound to the junction with Kowloon Park Drive, designating Middle Road for one-way eastbound traffic and modifying the kerblines of related local roads. We will establish a gyratory system composing primarily of Salisbury Road, Kowloon Park Drive, and Middle Road. This system will allow westbound vehicles from Salisbury Road to gain smooth access to Nathan Road.

6. The current and projected reserve capacities of the two concerned junctions with or without the proposed improvements during critical peak hours are as follows -

	Junction reserve capacity	
	Salisbury Road/ Chatham Road South	Salisbury Road/ Nathan Road
1999	-1%	-5%
2004		
With improvements	52%	44%

/without .....

	Junction reserve capacity	
	Salisbury Road/ Chatham Road South	Salisbury Road/ Nathan Road
Without improvements	-26%	-20%
2011		
With improvements	50%	5%
Without improvements	-44%	-43%

7. To accommodate the proposed underpass and designated right-turning lanes, we will widen the section of Salisbury Road from Wing On Plaza to Canton Road. We will also reconstruct the existing road sections, which have not undergone major reconstruction for over 20 years and are now in dilapidated condition. In addition, we will relocate an existing pedestrian subway crossing underneath Salisbury Road linking the north and south footways near the Chatham Road South junction, as it conflicts with the proposed underpass.

8. The eastern portion of the project site from Mody Lane to Nathan Road for **589TH** overlaps with that of the proposed TST Station to be built as part of the KCR East Rail Extension project. We intend to entrust this portion of works to KCRC for construction in conjunction with the railway project so as to avoid interface problems between the two projects. We will undertake that portion of **589TH** which lies to the west of Nathan Road in-house.

FINANCIAL IMPLICATIONS

9. We estimate the cost of the project to be $331.3 million in MOD prices (see paragraph 10 below), made up as follows -

		$million	
(a)	Portion entrusted to KCRC		228.9
	(i) Salisbury Road underpass	141.7	

/(ii) .....

			$million	
	(ii)	relocation of pedestrian subway including associated ramps and staircase	14.7	
	(iii)	road widening and reconstruction	28.3	
	(iv)	associated traffic signalization, drainage, water and landscaping works	20.4	
	(v)	on cost[1] payable to KCRC	23.8	
(b)	In-house portion carried out by the Government			30.5
	(i)	implementation of the Middle Road traffic circulation scheme	5.7	
	(ii)	road widening and reconstruction	19.7	
	(iii)	associated traffic signalization, drainage, water and landscaping works	5.1	
(c)	Contingencies			25.9
		Sub-total		285.3 (at December 1999 prices)

/ (d) .....

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[1] An on-cost at 11.6% of the base cost for the entrusted works, i.e. items (i) to (iv) in paragraph 9(a) will be payable to KCRC for undertaking construction management and supervision of the entrusted works.

(d)	Provision for price adjustment	46.0	
	Total	331.3	(in MOD prices)

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

Year	$ million (Dec 1999)	Price adjustment factor	$ million (MOD)
2001 – 2002	42.8	1.04500	44.7
2002 – 2003	79.9	1.10770	88.5
2003 – 2004	85.6	1.17416	100.5
2004 – 2005	54.2	1.24461	67.5
2005 – 2006	22.8	1.31929	30.1
	285.3		331.3

11. We have derived the MOD estimate on the basis of the Government forecast of trend labour and construction prices for the period 2001 to 2006. The KCRC will tender the entrusted portion of the works under lump sum contracts. We will also tender the in-house portion of the works under a lump sum contract.

12. We estimate the additional annually recurrent expenditure arising from the proposed works to be $0.8 million.

PUBLIC CONSULTATION

13. We consulted the Traffic and Transport Committee and the Environment Committee of the Yau Tsim Mong Provisional District Board on 31 July 1997 and on 12 March 1998 respectively. We also consulted the Provisional Urban Council on 21 April 1998. Members of the two committees and the Council supported the proposed works.

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14. We gazetted the proposed works under the Roads (Works, Use and Compensation) Ordinance on 18 December 1998 and received one objection from a hotel concerning the possible visual impact to its hotel entrance. Subsequent to our explanation on details of the works, the objector withdrew the objection unconditionally. The Secretary for Transport authorized the works on 14 April 2000.

ENVIRONMENTAL IMPLICATIONS

15. The project is a designated project under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Cap.499) and an environmental permit is required for the construction and operation of the project. In August 1999, the EIA report for the project was endorsed by the Advisory Council on the Environment without conditions, and was subsequently approved under the EIA Ordinance. The EIA report concluded that the environmental impact of the project could be controlled to meet the criteria set under the EIA Ordinance and the Technical Memorandum on the EIA Process. We shall implement the measures recommended in the approved EIA report. The key measure includes a landscape planting scheme, with planting and transplanting proposals, to soften the landscape impact. We estimate the cost of implementing the environmental mitigation measures to be $5.5 million[2] (at December 1999 prices). We have included this cost in the overall project estimate.

16. We have assessed the air quality impact of the project on the area during construction and operation of the underpass scheme. The assessment concluded that the construction process could be controlled to meet the criteria set under the Air Pollution Control Ordinance. We will implement dust reduction measures to minimise dust emission during construction. The assessment also shows that the air quality would not exceed the Air Quality Objectives and other standards establish under the Air Pollution Control Ordinance during the operation of the underpass scheme.

17. During the planning and design stages, we considered ways of reducing the generation of construction and demolition material (C&M). About 300 cubic metres of C&D waste will be disposed of at landfills and 45 000 cubic metres of public fill will be delivered to public filling areas. Under the terms of the contract, we shall require the contractor to submit a waste management plan to

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[2] The environmental mitigation measures consist mainly of soft landscaping works. The estimated cost of these works, which are included in items a(iv) and b(iii) in paragraph 9 above, are $4.3 million and $1.2 million respectively.

the Engineer for approval. This will set out appropriate mitigation measures including the allocation of an area for waste segregation. The Engineer shall ensure that the day-to-day operations on site comply with the approved waste management plan. We shall separate public fill from C&D waste for disposal at appropriate locations and we will also sort the C&DM by category on-site to facilitate reuse/recycling. This will reduce the generation of waste. The recycled materials shall include paper/cardboard, timber and metal. We shall reuse/recycle C&DM on-site to reduce waste generation. We shall control the disposal of C&DM to the designated public filling facility and/or landfill through a trip ticket system. We shall record the disposal, reuse and recycling of C&DM for monitoring purpose.

LAND ACQUISITION

18. The project does not require any land acquisition.

BACKGROUND INFORMATION

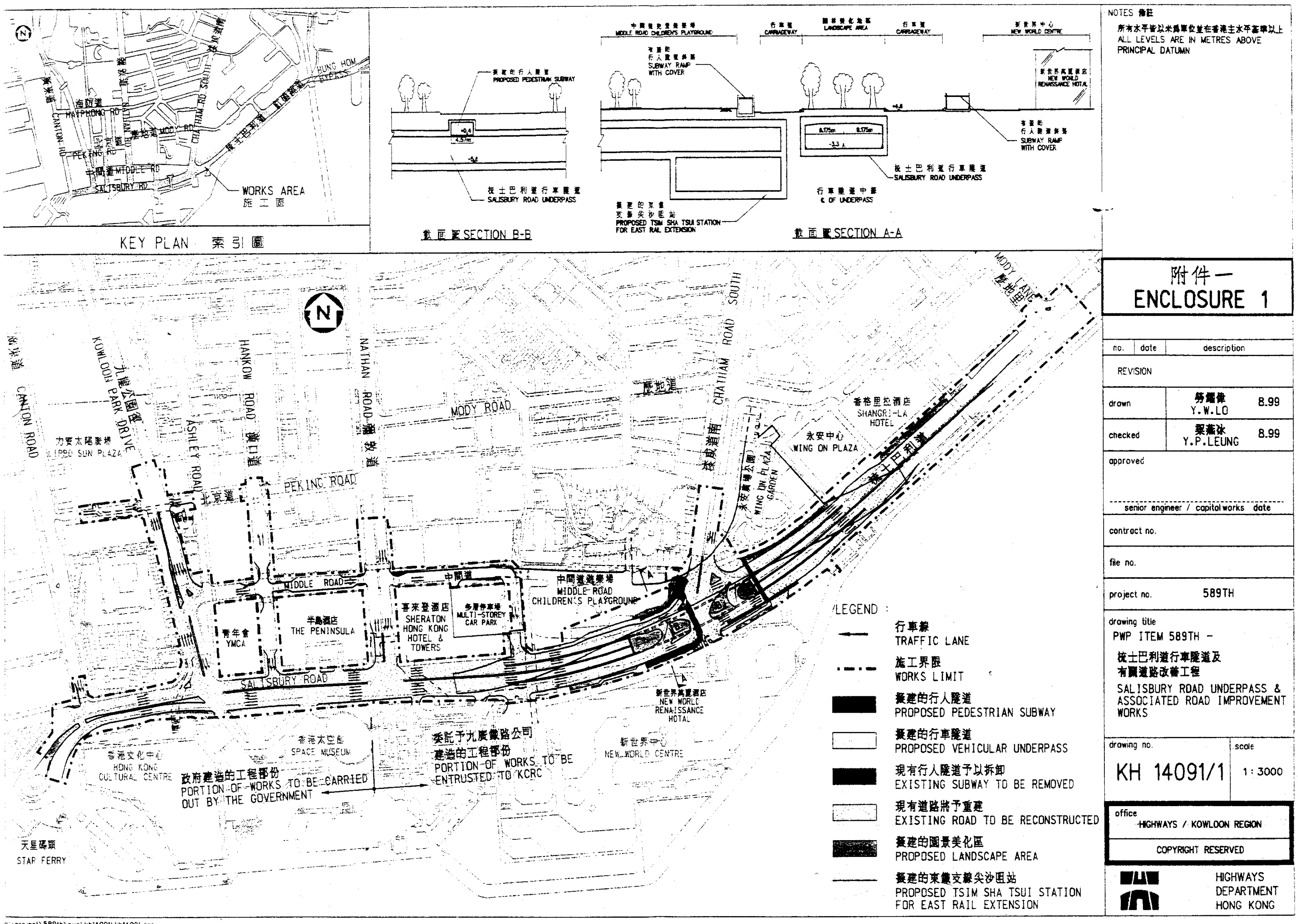
19. We upgraded **589TH** to Category B in January 1996. We engaged consultants for the detailed design of the project in June 1997. We charged the cost of $9.7 million for the design to **370TH** - 'Road improvement and pedestrian schemes in the Salisbury Road, Canton Road and Austin Road corridors - consultants' fees and investigations'.

20. We have completed the design of **589TH**. Our plan is to entrust a portion of **589TH** to KCRC under the same construction contract for the TST Station of the East Rail Extension project to be tendered in August 2000. We aim to start the construction of both the entrusted portion and the in-house portion of **589TH** in March 2001 for completion in August 2004.

21. We estimate that the project will create some 140 jobs totalling 5 060 man-months, comprising 25 professional/technical staff and 115 labourers during construction period.

Transport Bureau
May 2000

(PWSC0268/WIN11)



NOTES 備註
所有水平皆以米爲單位並在香港主水平基準以上
ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM
KEY PLAN 索引圖
WORKS AREA
施工區
CANTON RD
HAIPHONG RD
PEKING RD
MIDDLE RD
SALISBURY RD
MODY RD
CHATHAM RD SOUTH
HUNG HOM
PROPOSED PEDESTRIAN SUBWAY
SALISBURY ROAD UNDERPASS
截面 SECTION B-B
MIDDLE ROAD CHILDREN'S PLAYGROUND
CARRIAGEWAY
LANDSCAPE AREA
NEW WORLD CENTRE
SUBWAY RAMP WITH COVER
NEW WORLD RENAISSANCE HOTAL
PROPOSED TSIM SHA TSUI STATION FOR EAST RAIL EXTENSION
℄ OF UNDERPASS
截面 SECTION A-A
附件一
ENCLOSURE 1
no.
date
description
REVISION
drawn
勞耀偉
Y.W.LO
8.99
checked
梁燕冰
Y.P.LEUNG
8.99
approved
senior engineer / capital works date
contract no.
file no.
project no.
589TH
drawing title
PWP ITEM 589TH –
梳士巴利道行車隧道及
有關道路改善工程
SALISBURY ROAD UNDERPASS & ASSOCIATED ROAD IMPROVEMENT WORKS
drawing no.
KH 14091/1
scale
1:3000
office
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HIGHWAYS DEPARTMENT HONG KONG
CANTON ROAD
KOWLOON PARK DRIVE
九龍公園徑
ASHLEY ROAD
HANKOW ROAD
漢口道
NATHAN ROAD
彌敦道
MODY ROAD
麼地道
CHATHAM ROAD SOUTH
漆咸道南
MODY LANE
麼地里
PEKING ROAD
北京道
MIDDLE ROAD
中間道
SALISBURY ROAD
梳士巴利道
力寶太陽廣場
LIPPO SUN PLAZA
香格里拉酒店
SHANGRI-LA HOTEL
永安中心
WING ON PLAZA
永安廣場公園
WING ON PLAZA GARDEN
青年會
YMCA
半島酒店
THE PENINSULA
喜來登酒店
SHERATON HONG KONG HOTEL & TOWERS
多層停車場
MULTI-STOREY CAR PARK
中間道遊樂場
MIDDLE ROAD CHILDREN'S PLAYGROUND
新世界萬麗酒店
NEW WORLD RENAISSANCE HOTAL
香港文化中心
HONG KONG CULTURAL CENTRE
香港太空館
SPACE MUSEUM
新世界中心
NEW WORLD CENTRE
天星碼頭
STAR FERRY
政府建造的工程部份
PORTION OF WORKS TO BE CARRIED OUT BY THE GOVERNMENT
委託予九廣鐵路公司建造的工程部份
PORTION OF WORKS TO BE ENTRUSTED TO KCRC
LEGEND :
行車線
TRAFFIC LANE
施工界限
WORKS LIMIT
擬建的行人隧道
PROPOSED PEDESTRIAN SUBWAY
擬建的行車隧道
PROPOSED VEHICULAR UNDERPASS
現有行人隧道予以拆卸
EXISTING SUBWAY TO BE REMOVED
現有道路將予重建
EXISTING ROAD TO BE RECONSTRUCTED
擬建的園景美化區
PROPOSED LANDSCAPE AREA
擬建的東鐵支線尖沙咀站
PROPOSED TSIM SHA TSUI STATION FOR EAST RAIL EXTENSION