

For discussion  
on 14 November 2001

PWSC(2001-02)73

## **ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE**

**HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT**  
**New Territories North Development**  
**Civil Engineering – Land development**  
**658CL – Remaining engineering infrastructure works for Pak Shek Kok  
development**

Members are invited to recommend to Finance  
Committee -

- (a) the upgrading of part of **658CL**, entitled  
“Remaining engineering infrastructure works for  
Pak Shek Kok development – stage 1”, to  
Category A at an estimated cost of \$537 million  
in money-of-the-day prices; and
- (b) the retention of the remainder of **658CL**, retitled  
“Remaining engineering infrastructure works for  
Pak Shek Kok development – stage 2”, in  
Category B.

### **PROBLEM**

We need to provide the essential engineering infrastructure, including road network, drainage and sewerage system, to support the planned development at Pak Shek Kok.

**/PROPOSAL .....**

## PROPOSAL

2. The Director of Territory Development (DTD), with the support of the Secretary for Planning and Lands, proposes to upgrade part of **658CL** to Category A at an estimated cost of \$537 million in money-of-the-day (MOD) prices for construction of the road network, drainage and sewerage system to serve the proposed development at Pak Shek Kok.

## PROJECT SCOPE AND NATURE

3. The scope of the part of **658CL** we propose to upgrade to Category A comprises the construction of the following engineering infrastructure at Pak Shek Kok and Ma Liu Shui -

**Works at Pak Shek Kok** (Site plan and section diagram are at Enclosures 1 and 3)

- (a) a 2-kilometre dual 2-lane distributor Road D1 including a 40-metre (m) vehicular/pedestrian/cyclist bridge (D1 Bridge);
- (b) local roads including Roads L1, L2, L4 (part), and L5 (part), and an extension to an existing pedestrian subway underneath Tolo Highway;
- (c) a public transport interchange;
- (d) footpath, cycle tracks, roadside amenities and landscaping works associated with the road works;
- (e) drainage works including a 350-m box culvert associated with the road works;
- (f) sewers and rising main along the proposed road network, two sewage pumping stations and ancillary works;
- (g) 420 m of noise barriers (5 m high) along Road D1;

/Works .....

**Works at Ma Liu Shui** (Site plan and section diagram are at Enclosures 2 and 3)

- (h) reclamation at Ma Liu Shui to provide 3.5 hectares of land for the remaining works of the Southern Access and the expansion of Ma Liu Shui Interchange;
- (i) 550-m seawall, three public landing steps and ancillary facilities at the Ma Liu Shui reclamation;
- (j) a 0.3-kilometre dual 2-lane distributor Road D1 including a 150-m vehicular bridge;
- (k) local roads including Road SL3, a 40-m pedestrian subway, a loading/unloading area and a car park;
- (l) footpath, cycle tracks, roadside amenities and landscaping works associated with the road works;
- (m) drainage works including a 100-m box culvert associated with the road works;
- (n) environmental monitoring and audit programme (EM&A) for the works mentioned in items (a) to (m) above.

We plan to start the proposed works in May 2002 for completion in phases from October 2003 to December 2006.

4. The remainder of **658CL** to be retained in Category B comprises the construction of Roads L3, L4 (part), L5 (part), L7, Yau King Lane extension and realignment, waterfront promenade and cycle tracks, public landing steps and fire tug pier at Pak Shek Kok and associated works including construction of noise barriers, drainage, sewerage and landscape works (coloured blue on the site plan at Enclosure 1). We plan to implement these remaining works at Pak Shek Kok in mid-2003 for completion in end 2006.

## **JUSTIFICATION**

5. The major proposed land use for the 118-hectare Pak Shek Kok Development Area (the Area) includes a Science Park, private housing developments, tertiary education expansion, strategic recreation and open spaces.

6. The Science Park is being developed in three phases. The first phase is under construction and will start operation in early 2002. To serve Science Park Phase 1 and to facilitate reclamation for the remaining areas of Pak Shek Kok, we started the construction of the engineering works including the Southern Access Phase 1 and the Northern Access in October 1999 under 496CL "Advance engineering infrastructure works for Pak Shek Kok development" (see paragraph 25 below). Based on the current progress, we will complete the advanced works in early 2002 to meet the commissioning date of Science Park Phase 1. The Science Park Phases 2 and 3 are scheduled for operation in late-2004 and early 2007 respectively.

7. The private housing sites HS 1 to HS 4 (as shown in Enclosure 1) located in the northern part of the Area will provide about 3 800 flats accommodating 10 600 persons upon full development. We plan to dispose of housing sites HS 1 to HS 3 in 2003-04 and HS 4 in 2006-07 upon completion of the supporting engineering infrastructure works in the Area in stages from October 2003 to December 2006.

8. To ensure timely provision of engineering infrastructure for the above planned development, we need to commence construction of the road network, and drainage and sewerage systems at Pak Shek Kok in May 2002 for completion in phases by end 2006. We will commence the proposed reclamation at Ma Liu Shui in May 2002 for completion by end 2004 to provide land for the proposed roadworks. We plan to commence the roadworks at Ma Liu Shui in mid-2003 for completion in end 2006.

9. As regards the landscaping works, we will provide about 64 000 square metres of amenity area along the proposed roads. We will transplant about 10 existing trees affected by the project and plant about 3 400 new trees using native species in roadside planting as far as possible. We will protect formed slope by hydroseeding and plant trees on the slopes as appropriate.

## FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the project to be \$537 million in MOD prices (see paragraph 11 below), made up as follows -

/(a) .....

	<b>\$million</b>
(a) Road works	75.0
(b) Vehicular bridges and pedestrian subways	76.1
(c) Public transport interchange and loading/unloading area	19.9
(d) Drainage works	98.9
(e) Sewerage works	41.8
(i) sewers and rising main	17.2
(ii) sewage pumping stations	24.6
(f) Reclamation	20.6
(g) Seawall and public landing steps	63.5
(h) Environmental mitigation measures	25.1
(i) noise barriers	22.3
(ii) other mitigation measures at construction stage	2.8
(i) Landscaping works	25.0
(j) EM&A programme	2.7
(k) Consultants' fees	36.4
(i) construction stage	4.6
(ii) resident site staff costs	31.8

		<b>\$million</b>	
(l)	Contingencies	47.0	
	Sub-total	532.0	(in September 2001 prices)
(m)	Provision for price adjustment	5.0	
	Total	537.0	(in MOD prices)

The Director of Civil Engineering will supervise the reclamation works at Ma Liu Shui using in-house staff. Due to insufficient in-house resources, DTD proposes to employ consultants to carry out the construction supervision of the remaining engineering infrastructure works. A breakdown by man-months of the estimate for the consultants' fees is at Enclosure 4.

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

<b>Year</b>	<b>\$ million (Sept. 2001)</b>	<b>Price adjustment factor</b>	<b>\$ million (MOD)</b>
2002 - 2003	90.0	0.99700	89.7
2003 - 2004	155.0	1.00398	155.6
2004 - 2005	154.2	1.01101	155.9
2005 - 2006	69.3	1.01808	70.6
2006 - 2007	54.5	1.02521	55.9
2007 - 2008	9.0	1.03239	9.3
	<u>532.0</u>		<u>537.0</u>

12. We have derived the MOD estimate on the basis of the Government's latest forecast of trend labour and construction prices for the period 2002 to 2008. We will tender the proposed reclamation works at Ma Liu Shui under a standard remeasurement contract, because the works involve extensive earthworks, the quantities of which may vary according to actual ground conditions. We will

/tender .....

tender the remaining engineering infrastructure works under a lump-sum contract because we can clearly define the scope of the majority of these works in advance. Both contracts will provide for price adjustments as the contract period will exceed 21 months.

13. We estimate the annual recurrent expenditure arising from the project to be \$7.7 million.

### **PUBLIC CONSULTATION**

14. We consulted the Development and Housing Committee of the Sha Tin District Council on 31 October 2000, and the Tai Po District Council on 7 November 2000. Both Councils supported the proposed works.

15. We gazetted the proposed stage 1 roadworks of **658CL** under the Roads (Works, Use and Compensation) Ordinance (RO) on 16 February 2001 and received no objection. The gazetted scheme also included reclamation of foreshore and sea-bed at Sha Tin Hoi to provide land for the proposed roadworks at Ma Liu Shui. The Secretary for Transport authorised the proposed roadworks on 18 May 2001.

16. We gazetted the proposed sewage pumping stations, gravity sewers and rising mains of the stage 1 works of **658CL** under the RO as applied by Water Pollution Control (Sewerage) Regulation on 16 February 2001 and received no objection. The Director of Environmental Protection authorised the proposed sewerage works on 18 May 2001.

17. We circulated an information paper to the LegCo Panel on Planning, Lands and Works in October 2001 to brief Members on the proposed works. Members do not have specific comments on the proposal.

### **ENVIRONMENTAL IMPLICATIONS**

18. Pak Shek Kok Development (PSKD) is a designated project under schedule 3 of the Environmental Impact Assessment (EIA) Ordinance. Road D1, the Southern Access and the sewage pumping station No. 1 of the remaining engineering works that form part of the PSKD are also designated projects under

Schedule 2 of the EIA Ordinance and an environmental permit is required for the construction and operation of the works.

19. In May 1998, we completed the EIA report as an integral part of the PSKD Feasibility Study. On 6 July 1998, the Advisory Council on the Environment endorsed the findings and recommendations of the EIA report. The key concern of the remaining engineering works is the traffic noise impacts due to the operation of a district distributor road (Road D1). To mitigate the traffic noise impacts on nearby planned sensitive receivers, we will, in line with existing standards, construct approximately 420 m of 5-m high noise barriers at critical sections of Road D1. The EIA also recommended that future developers of the planned residential sites in PSKD area should provide a package of noise mitigation measures including building setback, building design and orientation and acoustic insulation. We will liaise with the Director of Lands to impose suitable conditions in the land sale of the residential sites to require future developers to adopt effective building layout and design as noise mitigation measures.

20. We will incorporate into the works contracts standard measures to control pollution arising from construction works to within established standards and guidelines. These measures include frequent watering of the site and provision of wheel-washing facilities to reduce emission of fugitive dust, the use of silenced construction plant to reduce noise generation, the provision of silt curtains for the reclamation works at Ma Liu Shui and other procedures as recommended in EPD's Recommended Pollution Control Clauses. The proposed reclamation works will not cause adverse impact on water quality to sensitive receivers in the Tolo Harbour area. We will implement the EM&A programme recommended in the EIA report and ensure their timely implementation. We have included in the project estimate a sum of \$25.1 million for implementing the environmental mitigation measures and \$2.7 million for the EM&A programme.

21. At the planning and design stage, we have designed the level of roadworks and construction sequence to reduce the generation of construction and demolition (C&D) materials as far as possible. We estimate that about 115 300 cubic metres (m<sup>3</sup>) of C&D materials will be generated by the project. Of these,

/about .....



about 111 000 m<sup>3</sup> (96 %) will be reused on site, 3 000 m<sup>3</sup> (3 %) will be reused as fill in public filling areas<sup>1</sup> and 1 300 m<sup>3</sup> (1 %) will be disposed of at landfills. The notional cost of accommodating C&D waste at landfill sites is estimated to be \$162,500 for this project (based on a notional unit cost<sup>2</sup> of \$125/m<sup>3</sup>).

22. We estimate that about 450 000 m<sup>3</sup> of dredged marine mud will be generated by construction of the seawall in Ma Liu Shui. We will deliver about 70 000 m<sup>3</sup> of non-contaminated marine mud to the marine dumping site at East Ninepin or East Tung Lung Chau. We will also deliver about 380 000 m<sup>3</sup> of contaminated mud to the contaminated mud disposal facility at East Sha Chau.

23. We will require the contractor to submit a waste management plan for approval. The waste management plan will include appropriate mitigation measures to avoid, reduce, reuse and recycle C&D materials, including the allocation of an area for waste segregation. We will require the contractor to ensure that the day-to-day operations on site comply with the waste management plan submitted. To further minimise the generation of C&D materials, we will encourage the contractor to use non-timber formwork and recyclable materials for temporary works. We will also require the contractor to separate public fill from C&D waste for disposal at appropriate locations and sort the C&D materials by category on-site to facilitate reuse/recycling of paper/cardboard, timber and metal. We will control the disposal of public fill and C&D waste to designated public filling facilities and landfills respectively through a trip-ticket system. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes.

## LAND ACQUISITION

24. The proposed works do not require any land acquisition.

**/BACKGROUND .....**

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<sup>1</sup> 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.

<sup>2</sup> 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/m<sup>3</sup>), nor the cost to provide new landfills (which are likely to be more expensive) when the existing ones are filled. The notional cost estimate is for reference only and does not form part of this project estimate.

**BACKGROUND INFORMATION**

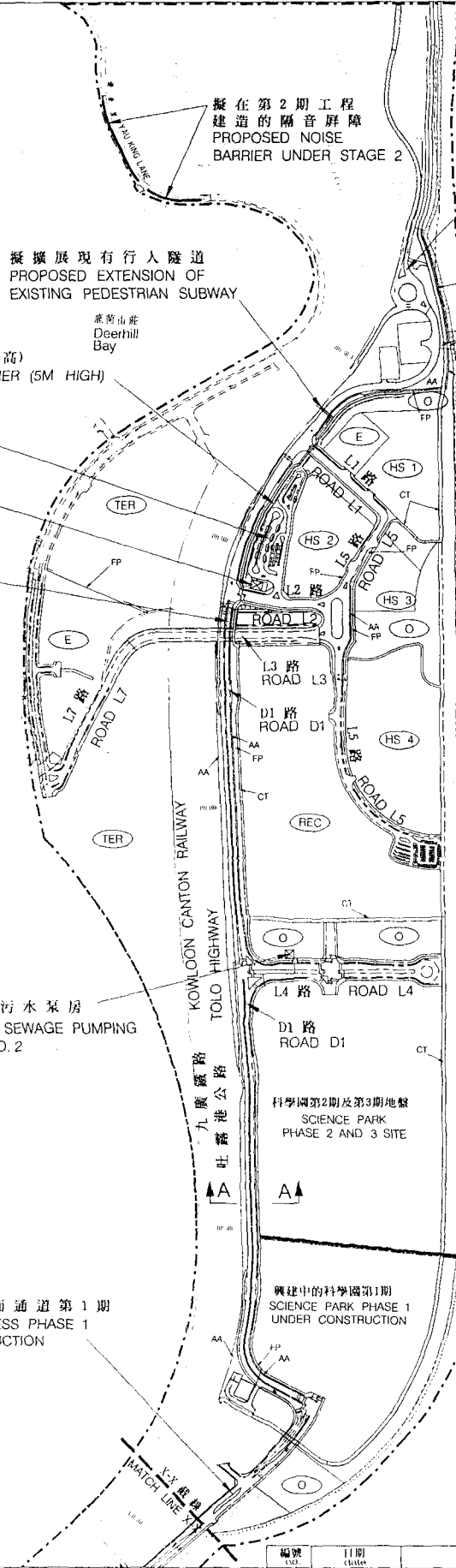
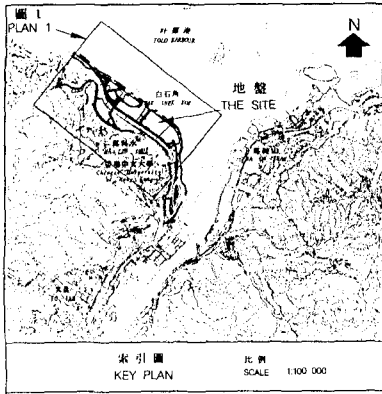
25. We upgraded **496CL** to Category A in June 1999 at an estimated cost of \$357.3 million for the advance engineering infrastructure works at Pak Shek Kok and commenced the advance works in October 1999 for completion in early 2002.

26. We upgraded **658CL** to Category B in September 1999.

27. In January 2000, FC approved the upgrading of part of **658CL** to Category A as **663CL** "Site investigation works and consultants' fees for remaining engineering infrastructure works for Pak Shek Kok development" at an estimated cost of \$30.3 million in MOD prices for engaging consultants to carry out the site investigation and detailed design of the project. The consultants have completed the site investigation, detailed design and preparation of tender documents for the proposed works.

28. We estimate that the project will create some 260 jobs comprising 45 professional/technical staff and 215 labourers, totalling 13 100 man-months.

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興建中的北面通道  
NORTHERN ACCESS  
UNDER CONSTRUCTION

吐露港  
TOLO HARBOUR

圖例 LEGEND:

已提升為甲級的工程：  
WORKS UPGRADED TO CATEGORY A:

496CL - 白石角發展計劃  
基礎設施前期工程  
496CL - ADVANCE ENGINEERING  
INFRASTRUCTURE WORKS FOR  
PAK SHEK KOK DEVELOPMENT

建議提升為甲級的工程(第1期工程)：  
WORKS PROPOSED TO BE UPGRADED  
TO CATEGORY A (STAGE 1 WORKS):

- 擬建道路(包括行車路、行人路、單車徑及美化市容地帶)  
PROPOSED ROADWORKS  
(INCLUDING CARRIAGEWAY, FOOTPATH,  
CYCLE TRACK AND AMENITY AREA)
- 擬建行車天橋  
PROPOSED VEHICULAR BRIDGE
- 擬建行人隧道  
PROPOSED PEDESTRIAN SUBWAY
- 擬建箱形暗渠  
PROPOSED BOX CULVERT
- 擬建污水泵房  
PROPOSED SEWAGE PUMPING STATION
- 擬建隔音屏障  
PROPOSED NOISE BARRIER

建議保留為乙級的餘下工程(第2期工程)：  
REMAINING WORKS PROPOSED TO BE  
RETAINED IN CATEGORY B  
(STAGE 2 WORKS):

- 第 2 期的工程範圍  
EXTENT OF STAGE 2 WORKS
- 發展範圍  
LIMIT OF DEVELOPMENT AREA
- CT 擬建單車徑  
PROPOSED CYCLE TRACK
- FP 擬建行人路  
PROPOSED FOOTPATH
- AA 擬建美化市容地帶  
PROPOSED AMENITY AREA
- EVA 緊急車輛通道  
EMERGENCY VEHICULAR ACCESS
- HS 1 住宅用地 1  
HOUSING SITE 1
- REC 策略性康樂用地  
STRATEGIC RECREATION SITE
- E 教育用地  
EDUCATION SITE
- TER 高等教育擴展用地  
TERTIARY EDUCATION EXPANSION SITE
- O 休憩用地  
OPEN SPACE

擬建隔音屏障(5米高)  
PROPOSED NOISE BARRIER (5M HIGH)

擬建公共交通轉車處  
PROPOSED PUBLIC  
TRANSPORT INTERCHANGE

擬建 1 號污水泵房  
PROPOSED SEWAGE PUMPING  
STATION NO. 1

擬建 D1 橋  
PROPOSED D1 BRIDGE

樟樹灘  
Cheung Shue Tan

鹿衛山莊  
Deerhill  
Bay

擬建 2 號污水泵房  
PROPOSED SEWAGE PUMPING  
STATION NO. 2

九廣鐵路  
KOWLOON CANTON RAILWAY

吐露港公路  
TOLO HIGHWAY

科學園第 2 期及第 3 期地盤  
SCIENCE PARK  
PHASE 2 AND 3 SITE

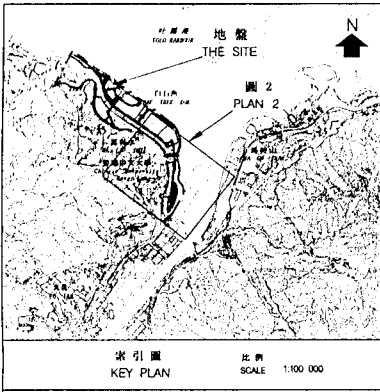
興建中的科學園第 1 期  
SCIENCE PARK PHASE 1  
UNDER CONSTRUCTION

香港中文大學  
Chinese University of Hong Kong

興建中的南面通道第 1 期  
SOUTHERN ACCESS PHASE 1  
UNDER CONSTRUCTION

二〇〇一至二〇〇三年年度工務小組委員會文件: P.W.S.C. SUBMISSION 2001/2002		修訂 REVISION		核對 checked		核准 approved	
圖則名稱 drawing title		編號 no.	日期 date	內容摘要 description			
白石角發展計劃基礎設施餘下工程第 1 期 - 白石角		K S LO	SIGNED	19.10.2001	項目編號 item no.	658CL	
REMAINING ENGINEERING INFRASTRUCTURE WORKS FOR PAK SHEK KOK DEVELOPMENT - STAGE 1 - PAK SHEK KOK		核對 checked	簽署 initial	日期 date	比例 scale	1:7 500	
		H W LAU	SIGNED	24.10.2001	圖則編號 drawing no.	NTN 2107	
		核准 approved	簽署 initial	日期 date			
		C S LIU	SIGNED	26.10.2001			
				辦事處 office		新界北拓展處 NEW TERRITORIES NORTH DEVELOPMENT OFFICE	
				拓展署 TERRITORY DEVELOPMENT DEPARTMENT			

附件 1 ENCLOSURE 1



香港中文大學  
Chinese University of Hong Kong

香港生物科學研究院  
HK INSTITUTE OF  
BIO TECHNOLOGY

科學園第2及第3期地盤  
SCIENCE PARK  
PHASE 2 AND 3 SITE

興建中的科學園第1期  
SCIENCE PARK PHASE 1  
UNDER CONSTRUCTION

興建中的南面通道第1期  
SOUTHERN ACCESS PHASE 1  
UNDER CONSTRUCTION

馬料水  
MA LIU SHUI

擬拆卸的現有公眾碼頭  
EXISTING PUBLIC PIER  
TO BE DEMOLISHED

瑞祥街  
SUI CHEUNG STREET

擬建馬料水天橋  
PROPOSED MA LIU SHUI BRIDGE

擬擴展的現有馬料水交匯處  
EXISTING MA LIU SHUI  
INTERCHANGE TO BE EXPANDED

SL3 路  
ROAD SL3

現有海岸  
EXISTING SHORELINE

擬建上落客貨區  
PROPOSED LOADING  
/UNLOADING AREA

擬建行人隧道  
PROPOSED PEDESTRIAN SUBWAY

擬建之公眾登岸梯台  
PROPOSED PUBLIC  
LANDING STEPS

擬建泊車處  
PROPOSED CARPARK

圖例 LEGEND:

已提升為甲級的工程：  
WORKS UPGRADED TO CATEGORY A:

496CL - 白石角發展計劃基礎設施前期工程  
496CL - ADVANCE ENGINEERING INFRASTRUCTURE  
WORKS FOR PAK SHEK KOK DEVELOPMENT

建議提升為甲級的工程(第1期工程)：  
WORKS PROPOSED TO BE UPGRADED  
TO CATEGORY A (STAGE I WORKS):

擬建道路(包括行車路、行人路、  
單車徑及美化市容地帶)  
PROPOSED ROADWORKS  
(INCLUDING CARRIAGEWAY, FOOTPATH,  
CYCLE TRACK AND AMENITY AREA)

擬建行車天橋  
PROPOSED VEHICULAR BRIDGE

擬建行人隧道  
PROPOSED PEDESTRIAN SUBWAY

擬建箱形暗渠  
PROPOSED BOX CULVERT

建議填海工程範圍  
EXTENT OF PROPOSED RECLAMATION WORKS

擬建海堤  
PROPOSED SEAWALL

發展範圍  
LIMIT OF DEVELOPMENT AREA

擬建單車徑  
PROPOSED CYCLE TRACK

擬建行人路  
PROPOSED FOOTPATH

擬建美化市容地帶  
PROPOSED AMENITY AREA

休憩用地  
OPEN SPACE

二〇〇一至二〇〇二年度工務小組委員會文件 P.W.S.C. SUBMISSION 2001/2002

編號 NO.	日期 DATE	內容摘要 DESCRIPTION	核對 CHECKED	核准 APPROVED
修訂 REVISION				

圖則名稱 drawing title  
白石角發展計劃基礎設施餘下工程第1期 -  
馬料水  
REMAINING ENGINEERING INFRASTRUCTURE WORKS FOR  
PAK SHEK KOK DEVELOPMENT - STAGE 1 - MA LIU SHUI

繪圖 DRAWN K S LO	簽署 SIGNED	日期 DATE 19.10.2001	項目編號 ITEM NO. 658CL
核對 CHECKED H W LAU	簽署 SIGNED	日期 DATE 24.10.2001	比例 SCALE 1:5 000
核准 APPROVED C S LIU	簽署 SIGNED	日期 DATE 26.10.2001	圖則編號 DRAWING NO. NTN 2108

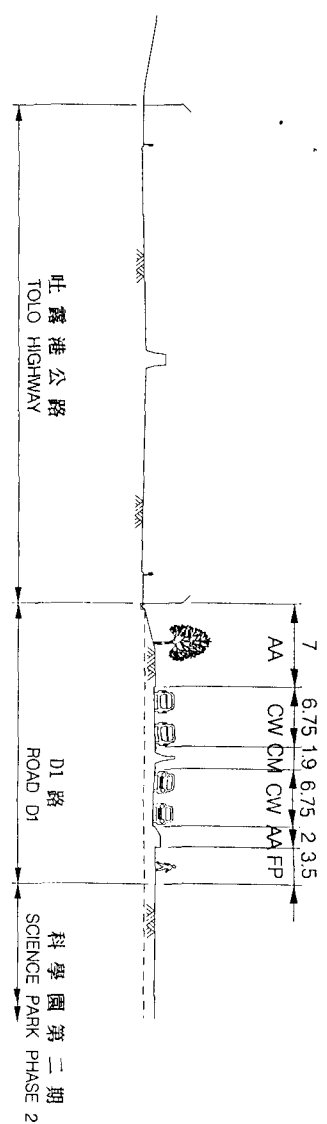
辦事處  
OFFICE  
新界北拓展處  
NEW TERRITORIES NORTH  
DEVELOPMENT OFFICE

拓展署  
TERRITORY  
DEVELOPMENT  
DEPARTMENT

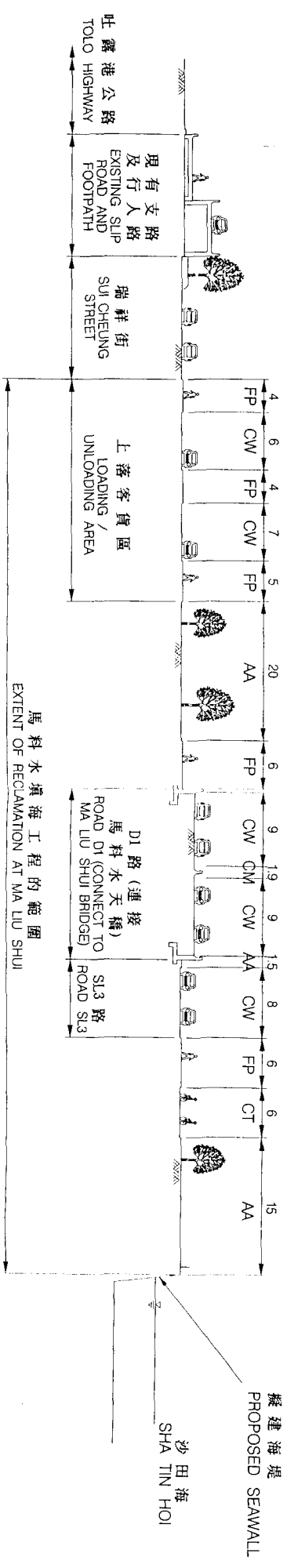
- 註釋 NOTES:
- 全部以米為度量單位  
ALL DIMENSIONS ARE IN METRES
  - 所示闊度在其他位置會改變  
OTHER LOCATIONS

圖例 LEGEND:

- CW 行車道  
CARRIAGEWAY
- CM 中央分隔帶  
CENTRAL MEDIAN
- FP 行人路  
FOOTPATH
- CT 單車徑  
CYCLE TRACK
- AA 美化市容地帶  
AMENITY AREA



截面圖 A-A  
橫切白石角 D1 路  
SECTION A-A  
ACROSS ROAD D1 AT PAK SHEK KOK



截面圖 B-B  
橫切馬料水填海區  
SECTION B-B  
ACROSS MA LIU SHUI RECLAMATION AREA

二〇〇一至二〇〇二年度工務小組委員會文件 P.W.S.C. SUBMISSION 2001/2002

圖則名稱 drawing title

白石角發展計劃基礎設施餘下工程 - 截面圖  
REMAINING ENGINEERING INFRASTRUCTURE WORKS FOR PAK SHEK KOK DEVELOPMENT -  
TYPICAL SECTIONS

編號 no.	日期 date	內容摘要 description	核對 checked	校核 approved
1	19.10.2001	簽署 initial	SIGNED	日期 date 19.10.2001
2	24.10.2001	簽署 initial	SIGNED	日期 date 24.10.2001
3	26.10.2001	簽署 initial	SIGNED	日期 date 26.10.2001

繪圖 drawn K S LO	簽署 initial SIGNED	日期 date 19.10.2001	項目編號 item no. 658CL	辦事處 office 新界北拓展處 NEW TERRITORIES NORTH DEVELOPMENT OFFICE
核對 checked H W LIU	簽署 initial SIGNED	日期 date 24.10.2001	比例 scale 1:500	拓展署 TERRITORY DEVELOPMENT DEPARTMENT
核准 approved C S LIU	簽署 initial SIGNED	日期 date 26.10.2001	圖則編號 drawing no. NTN 2109	

**Enclosure 4 to PWSC(2001-02)73**

**658CL – Remaining engineering infrastructure works for Pak Shek Kok development**

**Breakdown of the estimate for consultants' fees**

<b>Consultants' staff costs</b>			<b>Estimated man-months</b>	<b>Average MPS* salary point</b>	<b>Multiplier</b>	<b>Estimated fees (\$ million)</b>
(a)	Consultants' fees for construction stage					
(i)	contract administration	Professional	23.0	38	2.4	3.3
		Technical	23.5	14	2.4	1.1
(ii)	preparation of as-built drawings	Professional	0.7	38	2.4	0.1
		Technical	2.2	14	2.4	0.1
(b)	Resident site staff costs	Professional	156.0	38	1.7	16.0
		Technical	476.0	14	1.7	15.8
<b>Total consultants' staff costs</b>						36.4

\* MPS = Master Pay Scale

Notes

1. A multiplier of 2.4 is applied to the average MPS point to estimate the full staff costs including the consultants' overheads and profit, as the staff will be employed in the consultants' offices. A multiplier of 1.7 is applied to the average MPS point in the case of resident site staff supplied by the consultants. (At 1.4.2001, MPS pt. 38 = \$60,395 p.m. and MPS pt. 14 = \$19,510 p.m.)
2. The figures given above are based on estimates prepared by the Director of Territory Development. The consultancy works for this project have been included as part of an existing consultancy agreement for the Pak Shek Kok development. We will only know the actual man-months and fees when we have appointed the resident site staff.