

For discussion  
on 16 May 2001

PWSC(2001-02)21

## ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

### HEAD 705 – CIVIL ENGINEERING

#### Civil Engineering – Land development

#### 304CL – Formation, roads and drains for package 6 remainder, Sai Kung

Members are invited to recommend to Finance Committee the upgrading of **304CL** to Category A at an estimated cost of \$63.9 million in money-of-the-day prices for construction of roads and drains in Sai Kung Area 4.

### PROBLEM

The existing infrastructure in Sai Kung Area 4 is inadequate to cope with planned developments in the area.

### PROPOSAL

2. The Director of Civil Engineering, with the support of the Secretary for Planning and Lands, proposes to upgrade **304CL** to Category A at an estimated cost of \$63.9 million in money-of-the-day (MOD) prices for the provision of roads and drains in Sai Kung Area 4.

/PROJECT ....

**PROJECT SCOPE AND NATURE**

3. The scope of the project comprises -
- (a) construction of about 1 900 metres (m) of roads with associated footpaths and a pedestrian subway about 14 m in length;
  - (b) construction of about 270 m of a box culvert and about 1 400 m of stormwater drains;
  - (c) construction of about 900 m of sewers;
  - (d) landscaping works; and
  - (e) archaeological rescue excavation.

----- A site plan showing details of the proposed works is at Enclosure 1. We plan to start works in October 2001 for completion in April 2004.

**JUSTIFICATIONS**

4. The roads and drainage works are essential to provide infrastructure to serve the developments planned in accordance with the approved Sai Kung Town North Planning Area 4 Layout Plan. These include a hotel, a school and recreational, residential and commercial developments. Upon full development in 2007, Sai Kung Area 4 will accommodate about 8 000 persons.

----- 5. Part of the project site is located within an archaeological site, Sha Ha as shown in Enclosure 2. We will, as the Antiquities and Monuments Office of Home Affairs Bureau has proposed, carry out archaeological rescue excavation to salvage the affected archaeological materials before commencing construction work on site.

**FINANCIAL IMPLICATIONS**

6. We estimate the total cost of the project to be \$63.9 million in MOD prices (see paragraph 7 below), made up as follows -

/(a) ....

	<b>\$ million</b>	
(a) Roads, footpaths and pedestrian subway	32.0	
(b) Box culvert and stormwater drainage works	14.1	
(c) Sewerage works	4.8	
(d) Landscaping works	2.3	
(e) Archaeological rescue excavation	6.0	
(f) Contingencies	5.6	
Sub-total	64.8	(in September 2000 prices)
(g) Provision for price adjustment	(0.9)	
Total	63.9	(in MOD prices)

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

<b>Year</b>	<b>\$ million (Sept. 2000)</b>	<b>Price Adjustment Factor</b>	<b>\$ million (MOD)</b>
2001 - 2002	7.2	0.98000	7.1
2002 - 2003	26.3	0.97976	25.8
2003 - 2004	25.4	0.98759	25.1
2004 - 2005	4.3	0.99549	4.3
2005 - 2006	1.6	1.00346	1.6
	64.8		63.9

8. We have derived the MOD estimate on the basis of the Government's latest forecast of trend labour and construction prices for the period from 2001 to 2006. We will tender the proposed works under a lump sum contract with Bills of Quantities because we can clearly define the scope of works in advance. The contract will provide for inflation adjustments as the contract period will exceed 21 months. We will deploy in-house resources to supervise the construction works.

9. We estimate the annually recurrent expenditure arising from this project to be \$1.53 million.

## **PUBLIC CONSULTATION**

10. We consulted the then Sai Kung Provisional District Board on 23 April 1998 and the Sai Kung District Council on 22 April 1999. We have also consulted the local representatives on 16 December 1999. All these parties supported the project.

11. We gazetted the proposed sewerage works under Roads (Works, Use and Compensation) Ordinance pursuant to Section 26 of the Water Pollution Control (Sewerage) Regulation on 14 July 2000 and received no objection. We also gazetted the proposed roadworks under the Roads (Works, Use and Compensation) Ordinance on 14 July 2000 and received three objections. The objectors were against the resumption of their lots. We met the objectors and agreed to modify the resumption limits of the proposed works. Consequently, all three objectors withdrew their objections. On 20 February 2001, the Chief Executive in Council authorized the proposed roadworks with modifications. Notices of authorization for both the proposed sewerage works and roadworks were gazetted on 9 March 2001.

12. We circulated an information paper on this project to the LegCo Panel on Planning, Lands and Works in February 2001. Members did not raise any objection to the project.

## **ENVIRONMENTAL IMPLICATIONS**

13. The project is not a designated project under the Environmental Impact Assessment Ordinance. The Director of Environmental Protection completed an Environmental Review in August 1995 and concluded that the project would not result in adverse long-term environmental impacts. We shall include in the relevant works contract standard pollution control clauses for dust,

/noise ....

noise and site run-off nuisances during construction to control short-term environmental impacts within the established standards and guidelines. We have also planned and designed landscaping works to enhance aesthetics.

14. We have considered in the planning and design stages ways to minimize excavation work to reduce the generation of construction and demolition (C&D) materials as much as possible. We will require the contractor to implement measures to minimize the generation of C&D materials and to reuse and recycle C&D materials where practicable. We estimate that the proposed works will generate about 8 000 cubic metres (m<sup>3</sup>) of C&D materials. Of these, about 7 600 m<sup>3</sup> (95%) will be reused on site and 400 m<sup>3</sup> (5%) will be disposed of at landfills. We will require the contractor under the contract to submit a waste management plan to the Engineer for approval, with appropriate mitigation measures such as allocating an area for waste segregation. We will ensure that the day-to-day operations on site comply with the approved plan. We will control the disposal of C&D waste to designated landfills through a trip-ticket system. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes.

## LAND ACQUISITION

15. We will resume about 14 700 square metres of agricultural land and 40 square metres of building land for the project. The clearance will affect about 50 structures involving four families. Eligible families will be offered ex-gratia allowances and accommodation in public housing in accordance with the established rehousing policy. We will charge the land acquisition and clearance costs, estimated at \$40.3 million, to **Head 701** – Land Acquisition.

## BACKGROUND INFORMATION

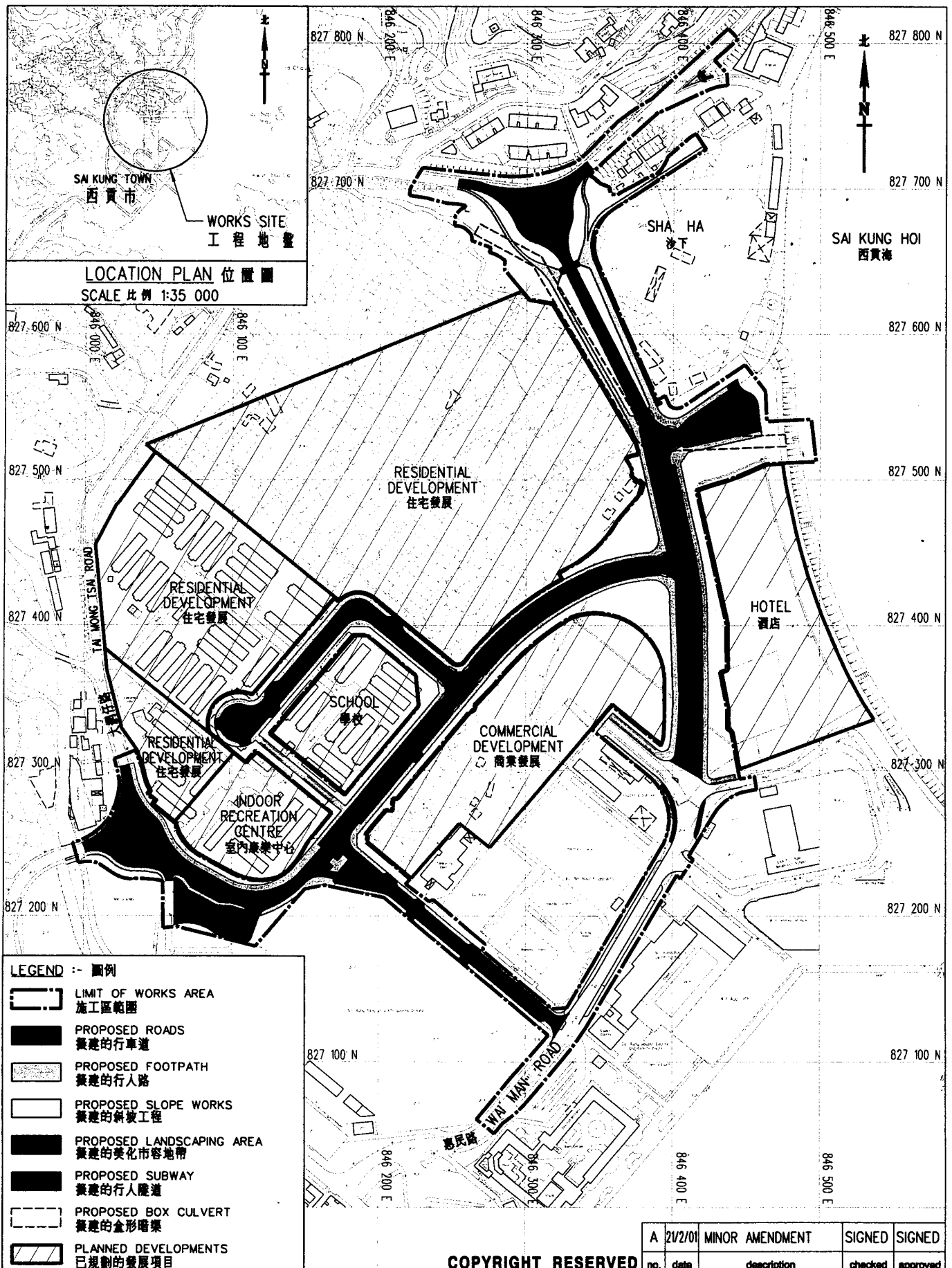
16. We included **304CL** in Category B of the Public Works Programme in December 1993.

17. As the works agent of this project, the Director of Civil Engineering has completed the detailed design and drawings for the proposed works using in-house resources.

18. We estimate that the project will create some 65 jobs comprising ten professional/technical staff and 55 labourers, totalling 1 700 man-months.

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Planning and Lands Bureau  
May 2001



LOCATION PLAN 位置圖  
SCALE 比例 1:35 000

**LEGEND :- 圖例**

	LIMIT OF WORKS AREA 施工區範圍
	PROPOSED ROADS 擬建的行車道
	PROPOSED FOOTPATH 擬建的行人路
	PROPOSED SLOPE WORKS 擬建的斜坡工程
	PROPOSED LANDSCAPING AREA 擬建的美化市容地帶
	PROPOSED SUBWAY 擬建的行人隧道
	PROPOSED BOX CULVERT 擬建的金形暗渠
	PLANNED DEVELOPMENTS 已規劃的發展項目

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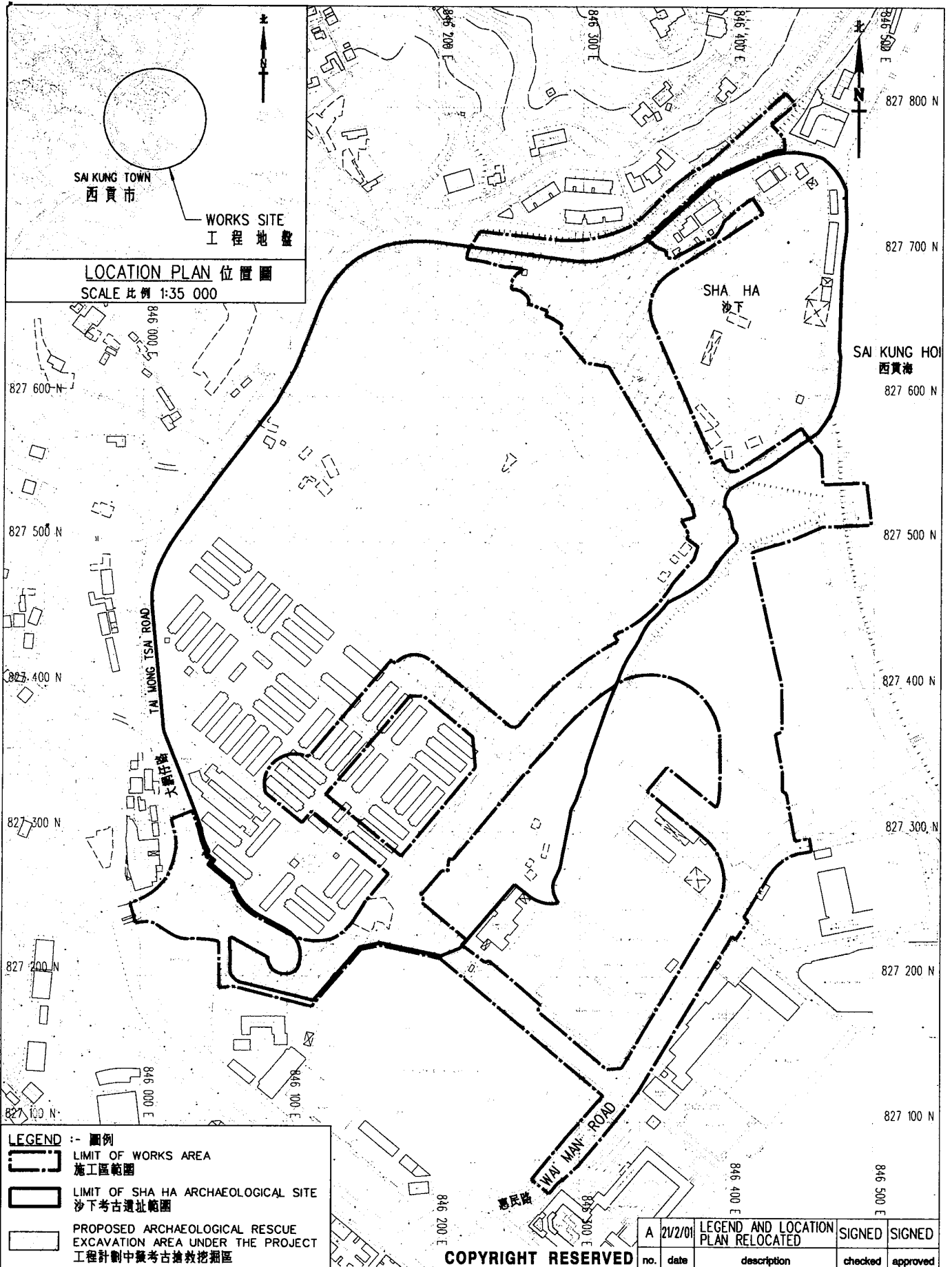
**title 名稱**  
PWP ITEM No. 304CL  
FORMATION, ROADS AND DRAINS  
FOR PACKAGE 6 REMAINDER, SAI KUNG  
工務計劃項目第 304CL 號  
西貢第六組工程餘下部份 -  
開拓、道路及渠務工程

	name	initial	date
designed	S K CHIU	SIGNED	14.02.2001
drawn	W M LEUNG	SIGNED	13.02.2001
checked	S K CHIU	SIGNED	14.02.2001
approved	M F CHIU	SIGNED	14.02.2001
office	DEVELOPMENT DIVISION 拓展部 CIVIL ENGINEERING OFFICE 土木工程處		

A	2/2/01	MINOR AMENDMENT	SIGNED	SIGNED
no.	date	description	checked	approved

**drawing no. 圖則編號**  
DEV 5087A  
**scale 比例**  
1:3 500

**CIVIL ENGINEERING DEPARTMENT**  
HONG KONG 土木工程署



**LEGEND :- 圖例**

- LIMIT OF WORKS AREA  
施工區範圍
- LIMIT OF SHA HA ARCHAEOLOGICAL SITE  
沙下考古遺址範圍
- PROPOSED ARCHAEOLOGICAL RESCUE EXCAVATION AREA UNDER THE PROJECT  
工程計劃中擬考古搶救挖掘區

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**title 名稱**  
PWP ITEM No. 304CL  
FORMATION, ROADS AND DRAINS  
FOR PACKAGE 6 REMAINDER, SAI KUNG  
(ARCHAEOLOGICAL RESCUE EXCAVATION)  
**工務計劃項目第 304CL 號**  
西貢第六組工程餘下部份 -  
開拓、道路及渠務工程  
(考古搶救挖掘)

	name	initial	date
<b>designed</b>	S K CHIU	SIGNED	20.02.2001
<b>drawn</b>	W M LEUNG	SIGNED	20.02.2001
<b>checked</b>	S K CHIU	SIGNED	20.02.2001
<b>approved</b>	M F CHIU	SIGNED	20.02.2001
<b>office</b>	DEVELOPMENT DIVISION 拓展部 CIVIL ENGINEERING OFFICE 土木工程處		

no.	date	description	checked	approved
A	20/2/01	LEGEND AND LOCATION PLAN RELOCATED	SIGNED	SIGNED

**drawing no. 圖則編號**  
**DEV 5094A**

**scale 比例**  
1:3 500



**CIVIL ENGINEERING DEPARTMENT**  
**HONG KONG 土木工程署**