

**Discussion Paper for Legislative Council  
LegCo Panel on Planning, Lands and Works  
Meeting on 23 March 1999**

**81CD – Main Drainage Channels for  
Yuen Long and Kam Tin Stage 2 – Kam Tin Road to Tai Kek**

**Introduction**

1. The Government has scheduled to submit a PWSC paper for upgrading part of 81CD entitled “Main drainage channels for Yuen Long and Kam Tin stage 2 - Kam Tin Road to Tai Kek section” to Category A for consideration in PWSC Meeting on 14 April 1999. This paper is to brief Members of the background and the pertinent information on the proposed works.

2. Yuen Long and Kam Tin are low-lying areas, which are subject to flooding during the rainy season. The recent rapid development in the areas has extensively changed the land use and has significantly aggravated the flooding problem. The “North West New Territories Base Strategy Studies” (the Study), completed in 1983, recommended a series of river training works to alleviate the flooding hazard in the North West New Territories, including the low-lying areas of Yuen Long and Kam Tin. The “Territorial Land Drainage and Flood Control Strategy Study - Phase II”, completed in 1993 under 52CD, also confirmed the recommendation of the Study. The river training works for Shan Pui River and the downstream of Kam Tin River under 60CD and 43CD respectively commenced in 1993 and are near completion. The proposed works under 81CD aim at alleviating flooding hazard in the upstream of Kam Tin River and form part of the overall flood alleviation programme.

3. Drawing No. NTN 2023A shows the locations of sites of 81CD in relation to other drainage channel works in the Yuen Long and Kam Tin areas.

4. We upgraded part of 81CD to Category A in March 1999 for the construction of a main drainage channel from Kam Tin San Tsuen to Wang Toi Shan. The part of 81CD we now propose to upgrade to Category A comprises the construction of a drainage channel and associated works from Kam Tin Road to Tai Kek.

### **Scope of Works**

5. The detailed scope of the proposed works comprises the following:

- (a) a trapezoidal drainage channel about 3.5 kilometres long along the section of Kam Tin River between Kam Tin Road and Tai Kek;
- (b) maintenance roads and ramps with associated drainage works;
- (c) six footbridges and two vehicular bridges;
- (d) a pump chamber with the associated pumping equipment and water storage tank;
- (e) a gauging station to replace the existing gauging station;
- (f) environmental mitigation measures including landscaping works; and;
- (g) environmental monitoring and audit programme for works mentioned in paragraphs (a) to (f) above.

——— 6. Drawing No. NTN 2024C shows the details of the scope of the proposed works.

### **Public Consultation**

7. We consulted Pat Heung and Kam Tin rural committees, Yuen Long District Board and the Advisory Council on the Environment (ACE) on the proposed works. A summary of the consultation is listed below.

| <u>Organisation consulted</u> | <u>Date</u>     | <u>Results</u>          |
|-------------------------------|-----------------|-------------------------|
| a) Pat Heung Rural Committee  | 22 January 1994 | Supported the project   |
| b) Kam Tin Rural Committee    | 28 March 1994   | Supported the project   |
| c) Yuen Long District Board   | 14 April 1994   | Supported the project   |
| d) EIA Subcommittee of ACE    | 1 July 1996     | Endorsed the EIA report |

8. We also gazetted the proposed works under the relevant Ordinances. A summary of the gazettal is listed below:

| <u>Gazettal</u>  | <u>Date</u>       | <u>Results/Remarks</u> |
|--|-------------------|------------------------|
| a) Gazette under Foreshore and Sea-bed (Reclamations) Ordinance                        | 16 September 1994 | No objection received  |
| b) Authorization under Foreshore and Sea-bed (Reclamations) Ordinance                  | 2 December 1994   | ---                    |
| c) Gazette under Roads (Works, Use & Compensation) Ordinance                           | 25 November 1994  | 6 objections received  |
| d) Gazette of Amendment under Section 7 of Roads (Works, Use & Compensation) Ordinance | 20 December 1996  | 9 objections received  |

- |  |                  |   |
|--|------------------|---|
| e) Degazette and regazette under Roads (Works, Use & Compensation) Ordinance   | 3 October 1997   | Degazette the whole length of the road scheme and regazette the midstream portion           |
|  |                  | 8 objections received, 4 of which remained unresolved                                       |
| f) Gazette of ExCo authorisation on the road scheme with modifications under Roads (Works, Use & Compensation) Ordinance | 20 November 1998 | There were minor amendments of the resumption boundary as a result of objections resolution |

### **Entrustment to KCRC**

9. The West Rail project was given the formal go-ahead in December 1996 and the alignment of which was confirmed in early 1997 with a civil works construction programme for mid 1999 – mid 2002. However, the alignment of the West Rail including the rail depot will overlap with that of the upstream and downstream portions of the proposed drainage channel. The construction programme for the West Rail will also overlap with that for the drainage channel project. In order to avoid interface problems and to ensure cost-effectiveness and timely completion of the drainage channel, we intend to entrust the construction of the drainage channel and the ancillary works to KCRC.

10. The Director of Drainage Services (D of DS) has completed the detailed design and drawings for the proposed works using in-house resources. To integrate with the layout of the West Rail project, KCRC has re-designed the alignment for the parts of the drainage channel within the site boundary of the West Rail project. KCRC will also extend the drainage channel upstream to Ho Pui. KCRC will bear the additional cost due to the realignment and extension of the channel. Drawing No. NTN 2026A shows the original

alignment of the drainage channel designed by D of DS and the new alignment modified by KCRC.

11. We plan to start construction in July 1999 for completion in March 2002. With approval from the Secretary for the Treasury, KCRC included the proposed works as “works subject to excision” in the West Rail Depot and Kam Tin Station contract, tender for which was invited in end February 1999. “Works subject to excision” means a particular part of works included in a tender or contract which can be excised at any time prior to a specified date and no claim from the contractor or KCRC on this account will be entertained.

### **Financial Implications**

12. We estimate the capital cost of the project to be about \$460 million in MOD prices, which includes an estimated on-cost for contract administration and site supervision by KCRC. The exact on-cost percentage is being negotiated with KCRC.

13. KCRC will tender the proposed works as part of a fixed price lump-sum contract for West Rail depot and station with remeasurement for earthworks and foundation works because the quantities of which may vary according to the actual ground conditions. The contract will not provide for price adjustment.

### **Land Acquisition**

14. The Government has already resumed the land within the site boundary of the West Rail project, including the upstream and downstream sections of the proposed drainage channel. The Government will handover the required land to KCRC in April 1999 for construction of the West Rail works in July 1999. The acquisition and clearance costs for the land within the site boundary of the West Rail project will be borne by KCRC according to the

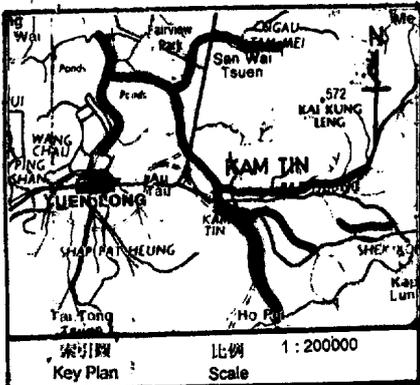
West Rail Project Agreement established between the Government and KCRC. For the midstream section of the drainage channel, we will resume about 6.5 hectares of agricultural land. The land acquisition and clearance will affect 13 households involving 37 persons and 61 temporary structures. The Director of Housing will offer the eligible families accommodation in public housing in line with the existing policy. The cost of land acquisition and clearance for the midstream section of the drainage channel and associated works is estimated at about \$110 million, which will be charged under Head 701 - Land Acquisition.

### **Programme of Works**

15. The PWSC paper for 81CD has been scheduled for discussion at the PWSC meeting on 14 April 1999 and FC meeting on 7 May 1999. After funding approval, we intend to sign an entrustment agreement with KCRC, who will award the contract in June 1999 and commence construction in July 1999. The drainage channel and the ancillary works are scheduled for completion in March 2002.

16. We will commence the remaining works under 81CD in October 2000 for completion in January 2003.

March 1999  
Works Bureau

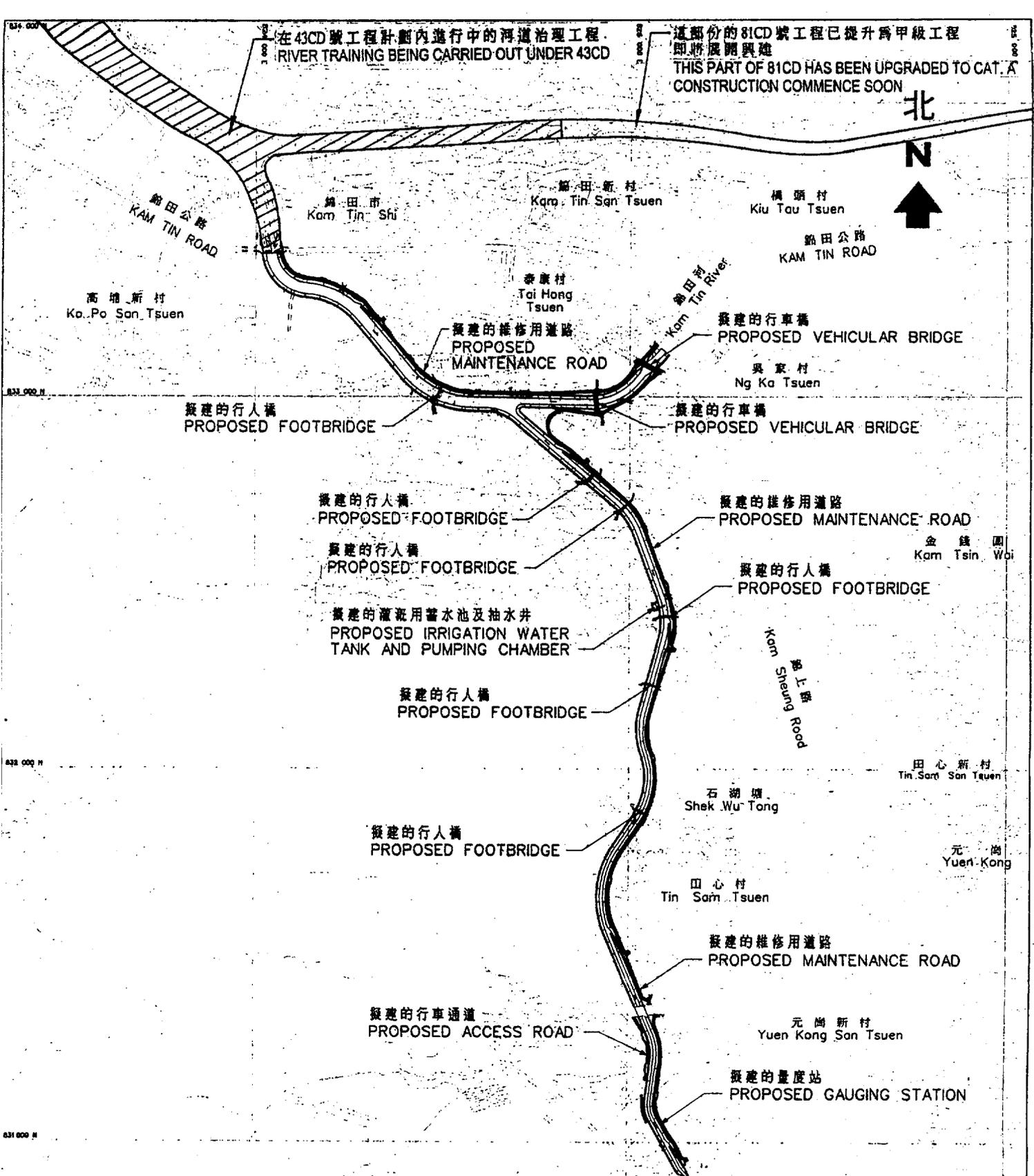


圖例 LEGEND:

建議提升為甲級的工程  
PROPOSED WORKS TO BE UPGRADED TO CAT. A

| A         | 14/1/99    | GENERAL REVISION    | 日期            | 日期             |
|-----------|------------|---------------------|---------------|----------------|
| 編號<br>no. | 日期<br>date | 內容摘要<br>description | 核對<br>checked | 批准<br>approved |

|  |          |                               |             |                       |   |
|--|----------|-------------------------------|-------------|-----------------------|---|
| 一九九零至二零零零年度工務小組委員會文件   |          | P.W.S.C. SUBMISSION 1999/2000 |             | 修訂 REVISION           |   |
| 圖則名稱 drawing title<br><br>元朗及錦田主要排水道第2階段-餘下工程<br>MAIN DRAINAGE CHANNELS FOR<br>YUEN LONG AND KAM TIN STAGE 2 - REMAINDER | 繪圖 drawn | 校對 checked                    | 核對 approved | 項目編號 item no.<br>81CD | 辦事處 office<br>新界北拓展處<br>NEW TERRITORIES NORTH<br>DEVELOPMENT OFFICE |
|  | 日期 date  | 日期 date                       | 日期 date     | 比例 scale<br>1:50 000  |   |
|  | K.S. LO  | H.W. NGAI                     | M.Y. MA     | 日期 date<br>17 12 98   | 圖則編號 drawing no.<br>NTN 2023A                                       |

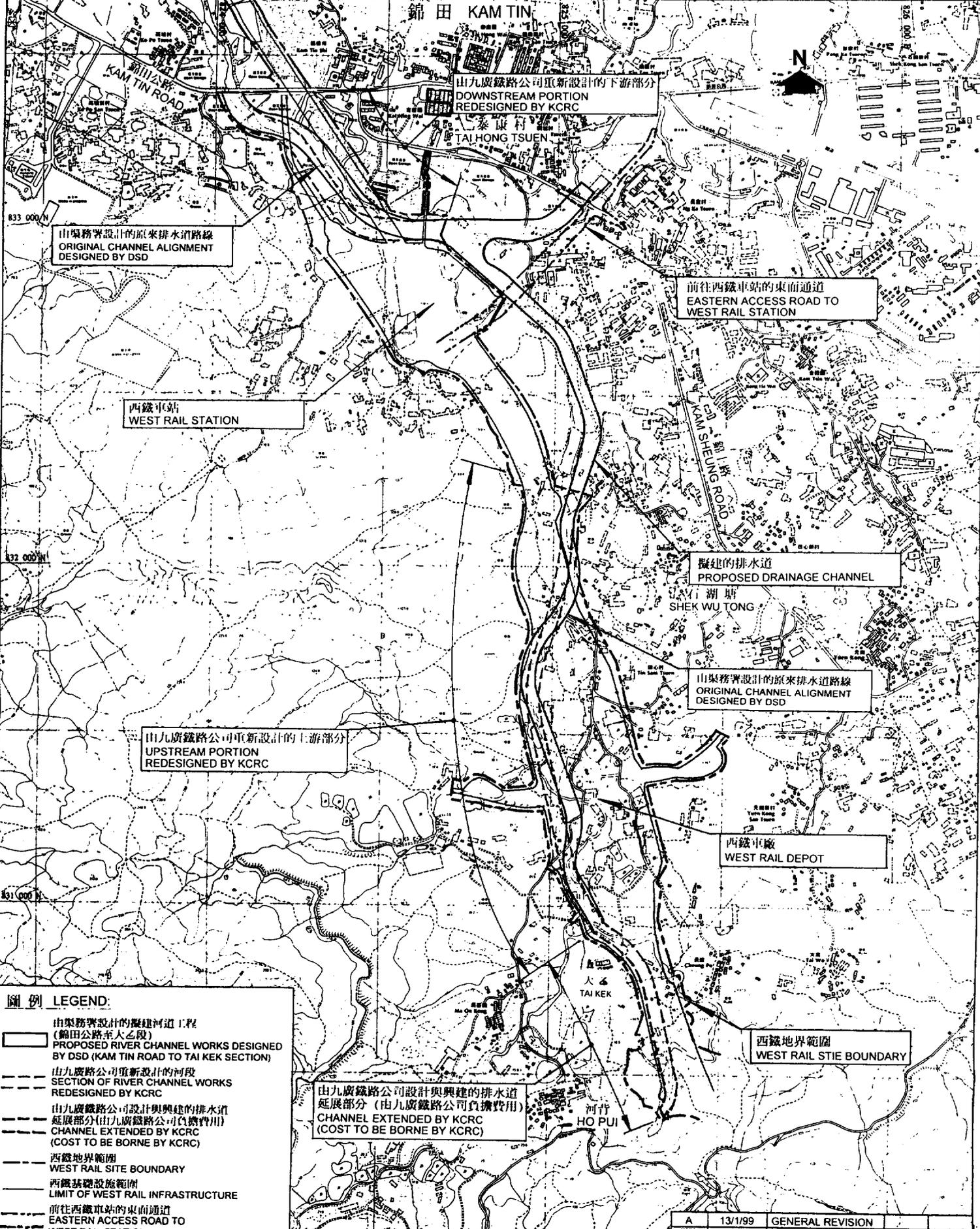


**圖例 LEGEND:**

|  |   |
|--|---|
|  | 擬建的河道工程<br>PROPOSED RIVER CHANNEL WORKS |
|  | 擬建的維修用道路<br>PROPOSED MAINTENANCE ROAD   |
|  | 擬建的行人橋<br>PROPOSED FOOTBRIDGE           |
|  | 擬建的行車橋<br>PROPOSED VEHICULAR BRIDGE     |

|        |         |  |            |             |
|--------|---------|--|------------|-------------|
| C      | 3/3/99  | One Footbridge in the upstream section deleted |            |             |
| B      | 27/1/99 | Works already upgraded to Cat. A added         |            |             |
| A      | 14/1/99 | GENERAL REVISION                               |            |             |
| 編號 no. | 日期 date | 修訂 description                                 | 核對 checked | 核准 approved |

|   |                |                       |  |
|---|----------------|-----------------------|--|
| 一九九九至二零零零年度工務小組委員會文件<br>P.W.S.C. SUBMISSION 1999/2000   |                | 修訂 REVISION           |  |
| 元朗及錦田主要排水道第2階段 - 餘下工程<br>MAIN DRAINAGE CHANNELS FOR YUEN LONG AND KAM TIN STAGE 2 - REMAINDER |                | 項目編號 item no.<br>81CD | 辦事處 office<br>新界北拓展處<br>NEW TERRITORIES NORTH DEVELOPMENT OFFICE |
| 繪圖 drawn<br>K. S. LO  | 簽署 initial<br> | 日期 date<br>17.12.98   | 比例 scale<br>1 : 10 000   |
| 核對 checked<br>H. W. NGAI  | 簽署 initial<br> | 日期 date<br>17.12.98   |  |
| 核准 approved<br>M. Y. MA   | 簽署 initial<br> | 日期 date<br>17.12.98   |  |
|   |                | 圖則編號<br>NTN 2024 C    | 拓展署<br>TERRITORY DEVELOPMENT DEPARTMENT                          |



- 圖例 LEGEND:**
- 由渠務署設計的擬建河道工程 (錦田公路至大乙段)  
PROPOSED RIVER CHANNEL WORKS DESIGNED BY DSD (KAM TIN ROAD TO TAI KEK SECTION)
  - 由九廣鐵路公司重新設計的分段  
SECTION OF RIVER CHANNEL WORKS REDESIGNED BY KCRC
  - 由九廣鐵路公司設計與興建的排水道  
CHANNEL EXTENDED BY KCRC (COST TO BE BORNE BY KCRC)
  - 西鐵地界範圍  
WEST RAIL SITE BOUNDARY
  - 西鐵基礎設施範圍  
LIMIT OF WEST RAIL INFRASTRUCTURE
  - 前往西鐵車站的東面通道  
EASTERN ACCESS ROAD TO WEST RAIL STATION

由九廣鐵路公司設計與興建的排水道  
延長部分 (由九廣鐵路公司負擔費用)  
CHANNEL EXTENDED BY KCRC  
(COST TO BE BORNE BY KCRC)

一九九九年二零零零年度工程小組委員會文件 P.W.S.C. SUBMISSION 1999/2000

圖則名稱 drawing title  
元朗及錦田主要排水道第2階段 餘下工程  
MAIN DRAINAGE CHANNELS FOR  
YUEN LONG AND KAM TIN STAGE 2 - REMAINDER

|             |                    |          |
|-------------|--------------------|----------|
| 繪圖 drawn    | 簽署 initial         | 日期 date  |
| K. S. LO    | <i>[Signature]</i> | 23.12.98 |
| 核對 checked  | 簽署 initial         | 日期 date  |
| H. W. NGAI  | <i>[Signature]</i> | 23.12.98 |
| 核准 approved | 簽署 initial         | 日期 date  |
| M. Y. MA    | <i>[Signature]</i> | 23.12.98 |

|        |         |                  |            |             |
|--------|---------|------------------|------------|-------------|
| A      | 13/1/99 | GENERAL REVISION |            |             |
| 編號 no. | 日期 date |                  | 核對 checked | 核准 approved |

|             |               |
|-------------|---------------|
| 修訂 REVISION | 項目編號 item no. |
|             | 81CD          |
|             | 比例 scale      |
|             | 1 : 10 000    |
| 圖則號         | NTN 2026 A    |

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

拓展署  
TERRITORY  
DEVELOPMENT  
DEPARTMENT