

羅湖鐵路橋的遷移及保存

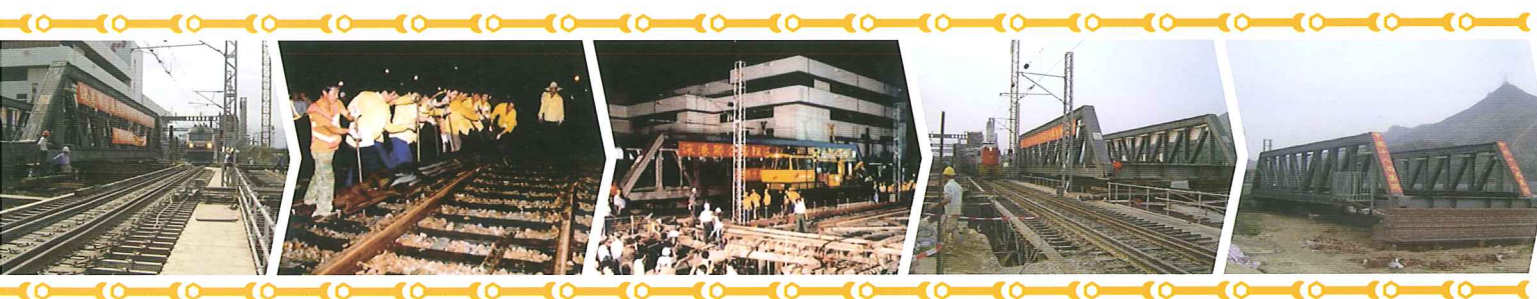
原羅湖鐵路橋因治河工程而須重建。因其極具歷史價值並可追溯至一九四五年，雙方政府決定將原羅湖鐵路橋作為文物保存，放置於羅湖火車站旁深圳河邊的空地上，讓兩地居民往返時都可以看見，保留集體回憶。

施工期間我們用了整體拖行法，將整條羅湖鐵路橋從原來位置，遷移到最終的位置，使橋體能完整的保留下來，不受施工損害。

Shifting and Preservation of Lo Wu Railway Bridge

The training of the Shenzhen River requires the reconstruction of the Old Lo Wu Railway Bridge. Because of its high historical value that could be traced back to 1945, both Governments decided to preserve the Lo Wu Railway Bridge at the site adjacent to the river and the Lo Wu Railway Station so that people can have a view of the bridge that recalls their old memory.

A system of pulley and trolley was used to shift the Lo Wu Railway Bridge to its final position. This construction method enabled the whole Bridge to be preserved in its original form without causing any damages.



羅湖鐵路橋的遷移過程
Shifting of Lo Wu Railway Bridge

深圳河治理工程項目資料 Project Information for Shenzhen River Regulation Project	建造費用(百萬港元) Construction Cost (HK\$)	動工日期 Commencement Date	完工日期 Completion Date
第一期 Stage I	300	5/1995	4/1997
第二期 第一階段 (港方) Stage II, Phase I (HK side)	140	11/1996	11/1998
第二期 第二階段 合約A Stage II, Phase II, Contract A	200	5/1997	5/1999
第二期 第二階段 合約B Stage II, Phase II, Contract B	500	11/1997	6/2000
第三期 第一階段 (港方) Stage III, Phase I (HK side)	100	3/2002	6/2004
第三期 第二階段 合約A Stage III, Phase II, Contract A	110	12/2001	4/2004
第三期 第二階段 合約B Stage III, Phase II, Contract B	250	7/2002	3/2006
第三期 第二階段 合約C Stage III, Phase II, Contract C	195	12/2003	11/2006

深圳河治理工程 Shenzhen River Regulation Project



深圳河治理工程

深圳河是香港特別行政區和深圳經濟特區之間的分界河，發源於深圳市梧桐山的牛尾嶺，由東北向西南流入深圳灣，全長37公里，流域面積達312平方公里。它是香港梧桐河、平原河及新田溪流的排放出口，也是深圳市沙灣河、布吉河及福田河的排放出口。歷史上，兩岸經常氾濫成災，給深港兩地人民的生命財產安全造成威脅。

香港特別行政區政府和深圳市政府均決心整治深圳河，並成立了聯合治理深圳河工作小組，專責推行這項工程。渠務署與深方在工程規劃、設計及施工方面一直保持緊密合作。工程除預防水浸外，亦同時改善了河流環境及河道航運情況。

整個工程分三期進行，將原有長約18公里的深圳河拉直、擴闊和挖深為13.5公里的新河道：

第一期：拉直落馬洲河曲及料壘河曲

第二期：將料壘河曲至河口的餘下段落擴闊和挖深

第三期：將料壘河曲上游至平原河匯流處的段落擴闊和挖深

深圳河治理工程第一期和第二期乃新界北區最關鍵的防洪計劃，分別耗資港幣三億元及八點五億元，新河道長9.5公里。這兩項工程已先後於一九九七年及二零零零年竣工，大大提高了從羅湖至前海灣河口一段深圳河的防洪能力，並配合了新界北區其他的上游河道整治，基本消除了該區的水浸威脅。

深圳河治理工程第三期分兩階段進行，第一階段屬前期工程，將工程範圍內的邊防巡邏路及邊防圍網遷移重建，第二階段屬河道工程，並分三份合約分段建造，主要工程項目包括河道疏浚、局部裁彎取直、築堤護岸護底、改建或加固羅湖鐵路橋、人行老橋、文錦渡橋等五座橋樑、改造東深供水管線及生態環境恢復與綠化工程等。新河道長4公里，耗資港幣六點五億元。

隨著深圳河治理工程第三期的圓滿完工，深圳河一改她狹窄曲折、雜草叢生的舊貌，換上了新顏。新河道寬闊順直，堤壩連綿整齊，護坡平整流暢，並將防洪水平提高到五十年一遇。

深圳河治理前後 Shenzhen River Before & After River Training

工程前
Before River Training



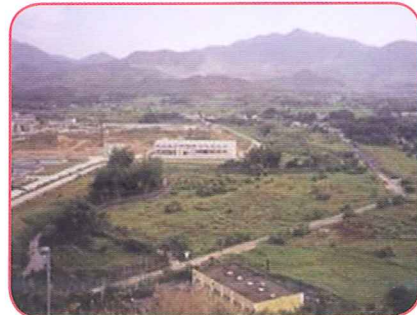
羅湖 Lo Wu



圍嶺仔 Yuen Leng Chai



文錦渡橋上游 Upstream of Man Kam To Bridge



平原河匯流處 Confluence with Ping Yuen River

工程後
After River Training



Shenzhen River Regulation Project

Shenzhen River is the boundary river between the Hong Kong Special Administrative Region (HKSAR) and the Shenzhen Special Economic Zone. It originates near Niuweiling of the Wutong Mountain, flowing from northeast to southwest into Deep Bay. The total length of Shenzhen River is 37 km, with a catchment area of 312 km². It is the drainage outlet of Ng Tung River, Ping Yuen River and the San Tin streams on Hong Kong side as well as that of Shawan River, Buji River and Futian River on Shenzhen side. Regional flooding in these river catchments was frequently threatening the public safety and properties on both sides of the Shenzhen River.

The Government of the HKSAR and the Shenzhen Municipal Government are determined to regulate the Shenzhen River. A Joint Working Group on the Regulation of the Shenzhen River has been set up to oversee the project implementation. The Drainage Services Department worked closely with the Shenzhen side in the planning, design and construction of the project. While the main objective of the project is flooding prevention, it has also other associated benefits such as improving the river environment and navigation.

The Project consists of a three-stage scheme to straighten, widen and deepen the previously 18 km of Shenzhen River into 13.5 km of new river channel:

Stage I : Straightening of the Lok Ma Chau bend and the Liu Pok bend

Stage II : Widening and deepening of the remaining sections from Liu Pok bend to the estuary

Stage III : Widening and deepening of the section upstream of the Liu Pok bend to the confluence with the Ping Yuen River

Stage I and Stage II works of the Shenzhen River Regulation Project are the most critical flood mitigation projects in the North New Territories. They cost about HK\$300 million and HK\$850 million, and were completed in 1997 and 2000 respectively. The new river channel is 9.5 km long. The flow capacity of Shenzhen River from Lo Wu to its estuary at Deep Bay has been significantly increased and, together with other river training works in the upstream, have basically eliminated the regional flooding in the North New Territories.

The Shenzhen River Regulation Project Stage III is divided into two phases. Phase I covers the advance works for the reconstruction of border roads and fences. The river training works under Phase II are divided into 3 contracts, which involve river dredging, channel straightening, construction of river embankments, channel lining protection works, reconstruction or strengthening of 5 bridges (Lo Wu Railway Bridge, old footbridge, Man Kam To Bridge, etc.), improvement works to Dongjiang-Shenzhen watermains, environmental improvement works and landscaping works. The project costs about HK\$650 million and the new river channel is 4 km long.

Upon the successful implementation of Shenzhen River Regulation Project (Stage I to III), Shenzhen River has been straightened, widened and deepened, and is no longer a narrow and sinuous river covered with wild vegetations. The trained Shenzhen River section has a flood protection level of a 1 in 50 year return period.

