

# 建基立業

## Capital Projects

我們將動用約110億元，更換或修復本港水管系統

\$11 billion to be spent on mains systems works

- 水管更換及復修計劃  
Mains replacement and rehabilitation projects

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- 濾水廠重建  
Works reprovisioning

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- 新近完成的工程  
Newly completed

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- 在未來數年完成的工程  
Due for completion

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- 工程管理  
Project management

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- 資本投資  
Capital investment







## 耗資110億元的水管更換及修復計劃

我們將動用約110億元，推行在20年內更換或修復本港水管系統的大規模計劃。我們正進行檢討，以加快推行這項計劃。

這項計劃的第一階段工程包括更換或修復350公里的水管，造價為22億元，目前進展理想，預期在二零零八年竣工。我們已完成這個階段下一期工程的設計，並會繼續進行工程的設計工作。

為免對公眾造成不便，我們修復或更換大約3 000公里水管時會盡可能

採用無開掘方法，當中包括內喉緊貼法、原位內搪喉管法、喉管推頂或撞擊法、喉管爆破法及水平定向鑽挖法等。

## 濾水廠重建

我們正計劃重建全港最大的沙田濾水廠。該濾水廠已投入運作40年，過濾的食水約佔全港每日食水用量的四成。按照目前的計劃，重建工程會分期進行，在二零零七年展開，至二零二零年完成。此外，當局亦正在研究另一個以「公私營機構夥伴合作」模式進行重建計劃的方案。

其他工作還包括：

- 本署委聘的顧問公司，現正為小濠灣濾水廠日產量倍增至30萬立方米的事宜進行研究及環境影響評估。有關的擴建工程計劃在二零一一年完竣，以配合北大嶼山的發展；
- 本署將耗資約1.2億元在坪輦進行食水配水庫建造工程，預計於二零零七年年末前竣工。該配水庫可支援現有的供水系統，以及應付上水和粉嶺發展項目的用水需求；

▲ 配水庫的施工地盤。  
Construction site for a service reservoir.



## \$11 billion for mains replacement and rehabilitation projects

Under a 20-year programme, some \$11 billion will be spent on a major plan for the replacement and rehabilitation of our water mains system. A review is also being conducted to accelerate the programme.

Work is progressing well on the first stage of the programme covering 350 kilometres of mains at a cost of \$2.2 billion and scheduled for completion by 2008. Designs have already been completed for a further phase of the work and will continue as the plan progresses.

For public convenience, the trenchless method will be used where possible as work on some 3 000 kilometres of mains is carried out. This will include close-fit linings, cured-in-place pipe, pipe jacking or ramming, as well as pipe-bursting and horizontal directional drilling methods.

### Works reprovisioning

Plans are underway to reprovision the Sha Tin Water Treatment Works – the largest in Hong Kong. In operation for 40 years, it meets some 40 per cent of daily water demand. The present programme is for this work to be done in phases from 2007 for completion



by 2020. An alternative of adopting public private partnership to deliver the project is also being studied.

### In other areas of work –

- a study together with an environmental impact assessment is being undertaken by consultants on doubling the daily treatment capacity of the Siu Ho Wan Water Treatment Works to 300 000 cubic metres. This extension work is planned for completion in 2011 to tie in with the North Lantau development;
- some \$120 million will be spent on construction by 2007 of a fresh water service reservoir at Ping Che. It will serve to support the existing water supply system and provide for the demand

resulting from the developments in the Sheung Shui and Fanling areas;

- remedial work with cost estimated at \$26 million will be carried out in the West Col Dam of High Island Reservoir to prevent further erosion and will be completed by early 2006.

### Newly completed

Stage One of the Tai Po Water Treatment Works together with the related service reservoirs and aqueduct has been in operation since June 2003. The daily capacity of the works, which cost \$3.5 billion, is capable of being expanded from the present 250 000 cubic metres to 1.2 million.

▲ 地盘施工。  
Working at site.



- 本署將為萬宜水庫西面副壩進行修葺工程，以防止該水壩進一步受侵蝕。工程將於二零零六年年初完成，所需費用估計為2,600萬元。

### 新近完成的工程

大埔濾水廠第一期連同相關的配水庫和輸水管道，已於二零零三年六月投入運作。這座濾水廠造價35億元，日產量可由現時的25萬立方米經擴建而提高至120萬立方米。

欣澳食水配水庫(前稱陰澳篤食水配水庫)於二零零三年十一月落成啟用，儲水量為13 000立方米，可應付迪士尼主題公園全部的用水需求。

深水埗、旺角及何文田的新幹管敷設工程已完成，造價為5億元，新敷設的幹管已投入運作。

另一項大型工程是油塘食水配水庫建造工程，現正接近完成，該配水庫總儲水量為5萬立方米。

### 在未來數年完成的工程

將於未來數年內完成的工程計有昂坪供水工程；九龍東南部發展項目的供水基礎設施工程，其中包括鑽石山的食水配水庫工程；大環海水抽水站改善工程；以及在黃大仙和九龍城敷設10.5公里長水管的工程。

### 工程管理

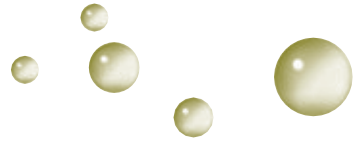
在工程管理方面，我們繼續採取嚴格的監管措施，確保工程按預算造價依時完成。此外，我們亦採用了新電腦程式預測合約工程的開支。

### 資本投資

年內，資本投資超逾17.6億元。這筆開支主要由政府基本工程儲備基金撥付，用於更新、改良及擴建本署供水的基礎設施，以應付新需求及改善供水系統。

▲ 安裝水閥。  
Installation of water valve.

▲ 水管復修。  
Performing mains rehabilitation work.



Work was completed in November 2003 on the Sunny Bay Fresh Water Service Reservoir (previously called Yam O Tuk). Now in operation, it has a storage capacity of 13 000 cubic metres and can meet all the water needs of the Disney Theme Park.

With the completion of the work of laying new trunk mains in Sham Shui Po, Mong Kok and Ho Man Tin, the project has been put into service. It was built at a cost of \$500 million.

Another major project, which is nearing completion, is the construction of the Yau Tong Fresh Water Service Reservoir. It has a total storage capacity of 50 000 cubic metres.

### Due for completion

Projects due for completion in the next few years include – one project for provision of water to Ngong Ping; a supply infrastructure for developments in South East Kowloon, including a fresh water service reservoir at Diamond Hill; uprating of Tai Wan Salt Water Pumping Station, and the laying of 10.5 kilometres of mains in Wong Tai Sin and Kowloon City.

### Project management

In the area of project management, strict controls continue on ensuring



project delivery on time and within budget. A new computer programme for forecasting contract expenditure has been put into use.

### Capital investment

More than \$1,760 million was designated for capital investment

for the year. This came mainly from the government's Capital Works Reserve Fund to renew, upgrade and expand the water supply infrastructure to meet new demand and to improve the supply system.

▲ 水務署負責維修的6 000多個斜坡中其中一個。  
One of the 6 000 slopes for which the WSD is responsible.