



渠務署

Drainage Services Department



港島西雨水排放隧道
Hong Kong West Drainage Tunnel

我們的**抱負**是提供世界級的污水和雨水處理排放服務，以促進香港的可持續發展

Our **VISION** is to provide world-class wastewater and stormwater drainage services enabling the sustainable development of Hong Kong

背景

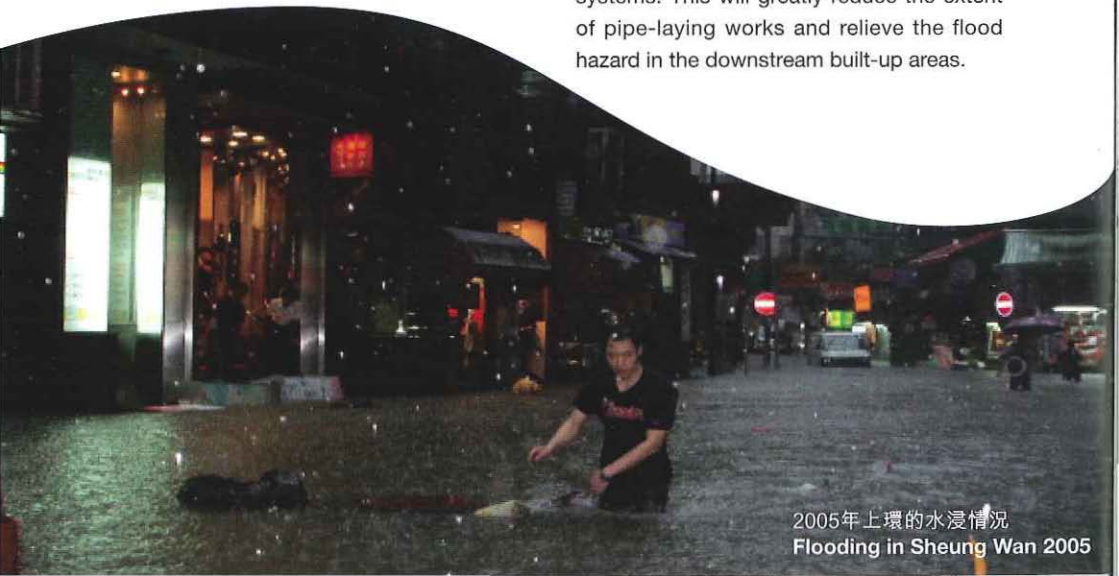
BACKGROUND

現時港島北下游集水區的雨水排放系統，多是數十年前興建，其排洪標準及能力並不足以應付社會急速發展及土地用途改變所帶來的需求。每當暴雨來襲，大量洪水經由路面流向市區的低窪地區，不單引致水浸，更對交通和商業活動造成重大影響。

傳統改善市區雨水排放系統的方法，是擴建現有排水渠系統或安裝新排水渠。然而，這些方法需要封閉一些現時已非常繁忙的街道，而且範圍廣大，將會引致嚴重交通擠塞，也對環境構成滋擾。因此，興建雨水排放隧道會是更可行的方法，因它能攔截從半山而來的地面徑流，直接引導至大海，而無需經過下游的排水管道。這種方法除了能夠縮減鋪設渠管的施工範圍，更能舒緩下游集水區已發展地段的水浸問題。

Most of the existing drainage systems of the lower catchment of Northern Hong Kong Island were built decades ago. The protection standards are no longer adequate to cope with the requirement of rapid urbanization and changes in land use over the years. During heavy rainstorms, huge flows run along paved areas and down to the low-lying urban areas, causing floods and disturbance to traffic and business.

The traditional approach to improve the drainage systems in urbanized areas is to enlarge the existing drainage system or construct additional drains. However, this will require extensive road openings in busy roads causing serious traffic disruptions and environmental nuisances. A drainage tunnel scheme is considered to be a better approach to intercept the surface runoff in mid-hill for discharge into the sea without passing through the downstream drainage systems. This will greatly reduce the extent of pipe-laying works and relieve the flood hazard in the downstream built-up areas.



工程範圍

SCOPE OF WORK

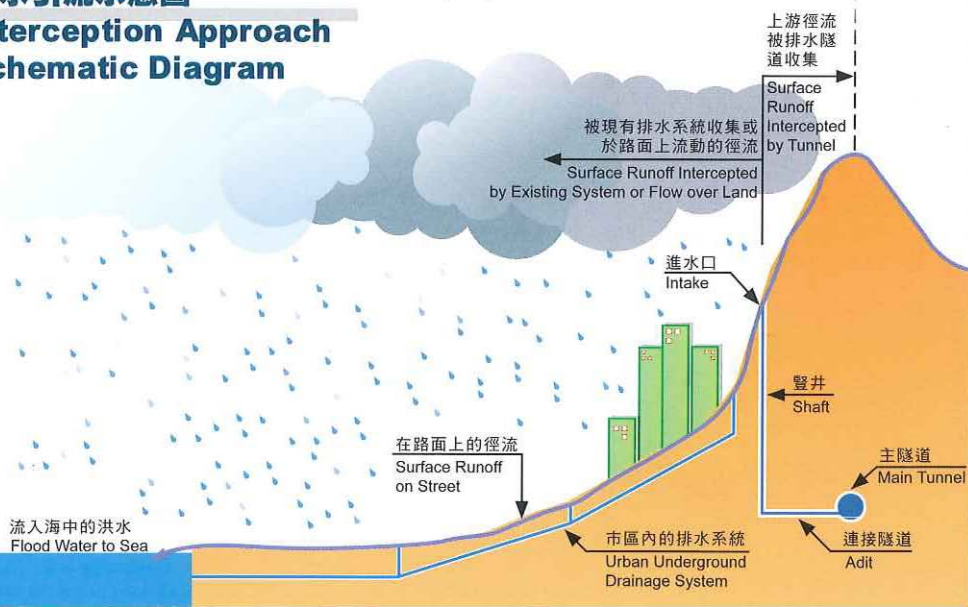


港島西雨水排放隧道工程是政府紓緩港島北部水浸問題的主要改善措施。主隧道建於半山區的深層地底，由計劃中的34個進水口將港島北上游集水區的地面徑流收集，經由大坑至薄扶林排放到港島西數碼港附近海域。

The Hong Kong West Drainage Tunnel is a government's major initiative to relieve the flooding problem in Northern Hong Kong Island. It consists of a main tunnel to be built deep underground in Mid-levels extending from Tai Hang to Pokfulam. It will collect and divert surface runoff from the upper catchment of Northern Hong Kong Island via 34 planned intakes to the sea near Cyberport.

截水引流示意圖

Interception Approach Schematic Diagram

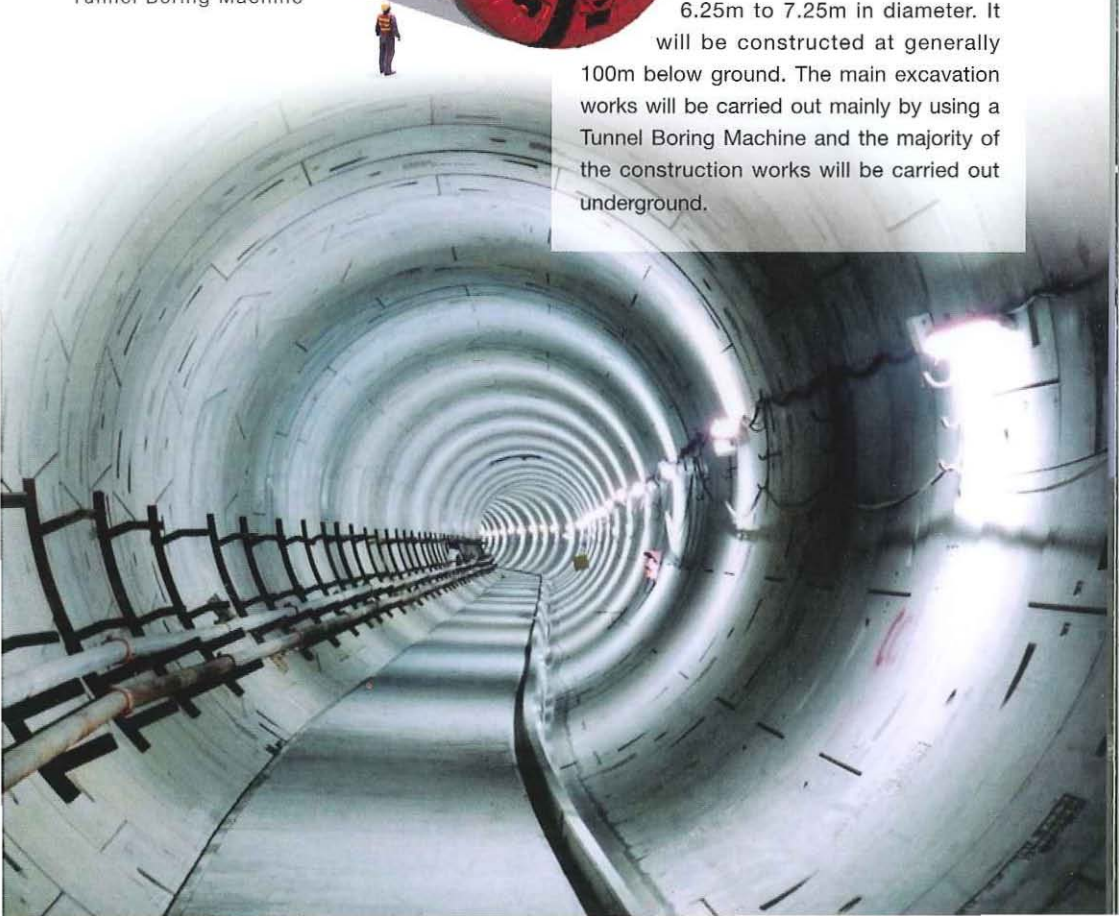


雨水排放主隧道 Main Drainage Tunnel

雨水排放主隧道是一條長約11公里、直徑6.25米至7.25米的隧道；將以隧道鑽挖機於約100米深的地底岩石層中開鑿和建造。主要工程均在地底下進行。

隧道鑽挖機
Tunnel Boring Machine

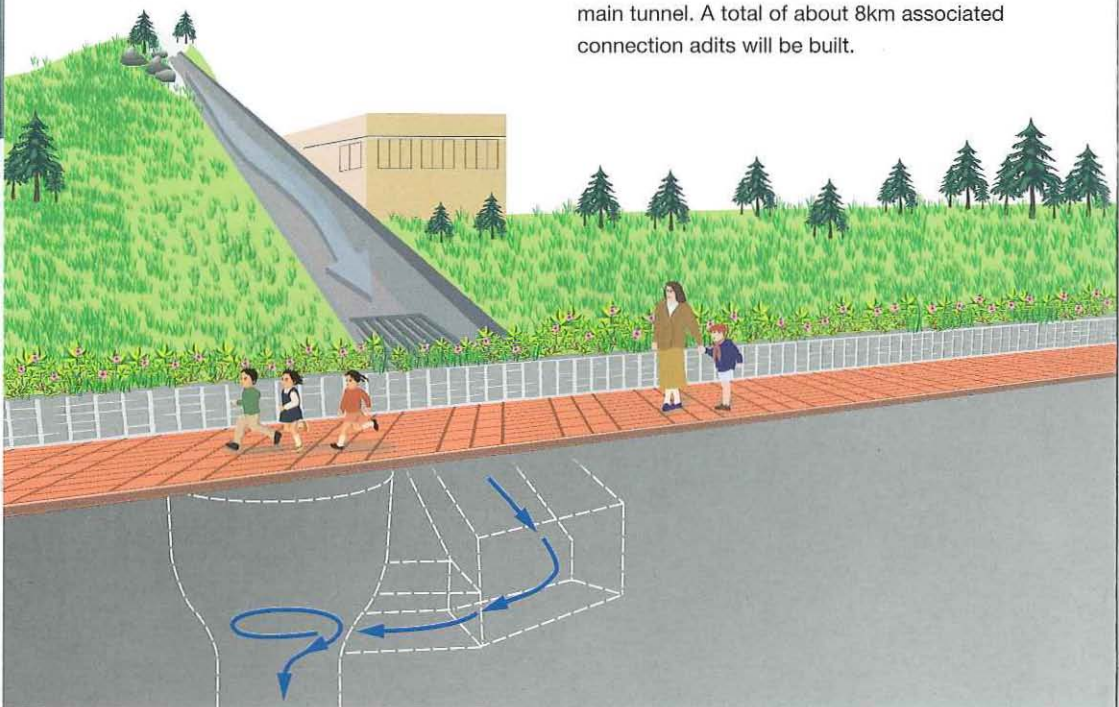
The main drainage tunnel is about 11km in length and 6.25m to 7.25m in diameter. It will be constructed at generally 100m below ground. The main excavation works will be carried out mainly by using a Tunnel Boring Machine and the majority of the construction works will be carried out underground.



進水口 Intake

計劃中的34個進水口沿著雨水排放隧道而建，將會收集從河流及地下排水管引導而來的雨水，透過豎井流向主隧道。隧道的連接管道全長約8公里。

34 intakes are planned along the tunnel catchment area to intercept stormwater flow from major stream courses and/or underground pipes. The intercepted flow is then diverted through drop shafts to the main tunnel. A total of about 8km associated connection adits will be built.



工程開展日期 Project commencement date	: 2007年11月30日 : 30 November 2007	
完工日期 Project completion date	: 2012年 : 2012	
工程項目費用 Project estimate	: 約港幣30億元 : About HK\$3,000 million	
管理分部 Controlling division	:  渠務署 : Drainage Services Department	工程管理部 Project Management Division
工程顧問 Consultant	:  奧雅納工程顧問 : Ove Arup & Partners Hong Kong Ltd	
承建商 Contractor	:   寶嘉西松聯營 : Dragages - Nishimatsu Joint Venture	

成效

MAJOR BENEFITS

- 紓緩港島北水浸問題，尤其鄰近中環、上環及灣仔一帶的低窪地區
- 提高整體防洪水平
- 減低暴雨帶來性命、財物和經濟損失的危機
- 減低施工期間對大眾構成的不便或滋擾
- Relieve the flooding problem in the Northern Hong Kong Island, in particular the low-lying areas along Central, Sheung Wan and Wan Chai
- Raise the overall flood protection level
- Reduce potential risk of damage to life, property and economy during heavy rainstorm
- Minimize disturbance to the public during construction

查詢

ENQUIRY

渠務署網頁 : www.dsd.gov.hk

DSD's Website : www.dsd.gov.hk

工程查詢熱線 : 2671 8600

Project Enquiry Hotline : 2671 8600

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