



## 位置圖 Location Map

前深水埗配水庫位處九龍深水埗區的主教山上。  
The Ex-Sham Shui Po Service Reservoir is located on Mission Hill in Sham Shui Po.

## 虛擬導覽 Virtual Tour

水務署早前推出了前深水埗配水庫的虛擬導覽，讓公眾可以遊覽配水庫和欣賞其內部結構。詳情可瀏覽以下網址：

Water Supplies Department launched a virtual tour of the Ex-Sham Shui Po Service Reservoir which enables the public to tour the service reservoir and appreciate its internal structures. Please access the below link for details:

<https://www.wsd.gov.hk/VirtualTour/index.html>



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# 前深水埗配水庫 Ex-Sham Shui Po Service Reservoir

## 背景 Background

在興建九龍水塘以前，九龍半島供水的特色是依靠調配地下水為主要供水來源。這是香港政府供水歷史上唯一一個以地下水為水源的正式供水系統。但隨著九龍半島人口繼續迅速增長，政府很快便意識到單靠地下水的供應將不敷應用。

政府於是在1902年正式開展九龍重力自流供水計劃，計劃主要包括建造：

- 九龍水塘及引水道
- 大埔道沙濾池
- 前深水埗配水庫(當時稱為九龍塘配水庫)
- 各大小喉管連接九龍水塘至大埔道沙濾池，大埔道沙濾池至前深水埗配水庫、前油蔴地配水庫、油蔴地配水庫及紅磡配水庫。

Before the construction of the Kowloon Reservoir, water supply in the Kowloon Peninsula was characterized by the deployment of underground water as the main source. It was the only formal water supply utilizing underground water in the water supply history of the Hong Kong Government. However, the Government soon realized that the sole reliance on underground water would not be able to cope with the growing demand as a result of the surging population growth in the Kowloon Peninsula.

The Government therefore instigated in 1902 the Kowloon Waterworks Gravitation Scheme which included the construction of:

- Kowloon Reservoir and Catchwaters
- Tai Po Road Filter Beds
- Ex-Sham Shui Po Service Reservoir (Known as "Kowloon Tong Service Reservoir" at that time)
- Water pipes of various sizes connected the Kowloon Reservoir to the Tai Po Road Filter Beds, the Tai Po Road Filter Beds to the Ex-Sham Shui Po Service Reservoir, the Ex-Yaumati Service Reservoir, the Yaumati Service Reservoir and the Hung Hom Service Reservoir.

整個供水計劃將食水輸送至三個配水庫，由於前油蔴地配水庫和紅磡配水庫已在1894年落成，因此這個重力自流計劃只需要興建一個新的配水庫，就是當時的九龍塘配水庫，現稱前深水埗配水庫。它在1904年完工，供應食水給九龍塘／深水埗／大坑東一帶居民。

隨著石硤尾食水配水庫在1970年投入服務，其龐大庫容量(3千萬加侖)能穩定地供水給深水埗一帶的大量居民。而容量相對較小的前深水埗配水庫，其角色已被淡化，並在1970年正式停用。2021年6月，前深水埗配水庫獲古諮詢委員會確認為一級歷史建築。



已封閉的隧道口  
Sealed Tunnel Portal

## 設施簡介 Introduction

前深水埗配水庫為本港第一個以圓形築成的地下配水庫。圓形的特性，是可以以最短的周界達至最大的面積，這樣的話可以節省興建水庫牆身的成本。水庫的直徑為150尺(約46米)，水庫地面至拱頂高22尺6吋(約6.85米)，庫容量為218萬加侖(約9,900立方米)。前深水埗配水庫與前油蔴地配水庫(16萬加侖／740立方米)和已拆卸的紅磡配水庫(9萬加侖／420立方米)這類早期有蓋的磚砌配水庫相比，是相當高且大。亦因為如此，如果依舊採用一般紅磚砌築配水庫的天花和支柱，難度會非常大。所以，這裡的天花是以混凝土現澆築才可達到設計跨度。

The objective of the whole water supply scheme was to deliver fresh water to 3 service reservoirs. Since the Ex-Yaumati Service Reservoir and the Hung Hom Service Reservoir were already in place in 1894, only one more service reservoir was required to be built under this waterworks gravitation scheme, that was the then Kowloon Tong Service Reservoir and now the Ex-Sham Shui Po Service Reservoir. Completed in 1904, it supplied fresh water to the people residing in the areas of Kowloon Tong, Sham Shui Po and Tai Hang Tung since then.

As the Shek Kip Mei Fresh Water Service Reservoir was commissioned in 1970, with its massive storage capacity (30 million gallons), it provided stable water supply to lots of people living in the area of Sham Shui Po. Due to its relatively small storage capacity, the importance of the Ex-Sham Shui Po Service Reservoir faded out and it ceased to operate in the same year. In June 2021, the Ex-Sham Shui Po Service Reservoir was accorded a Grade 1 historic building status by the Antiquities Advisory Board.



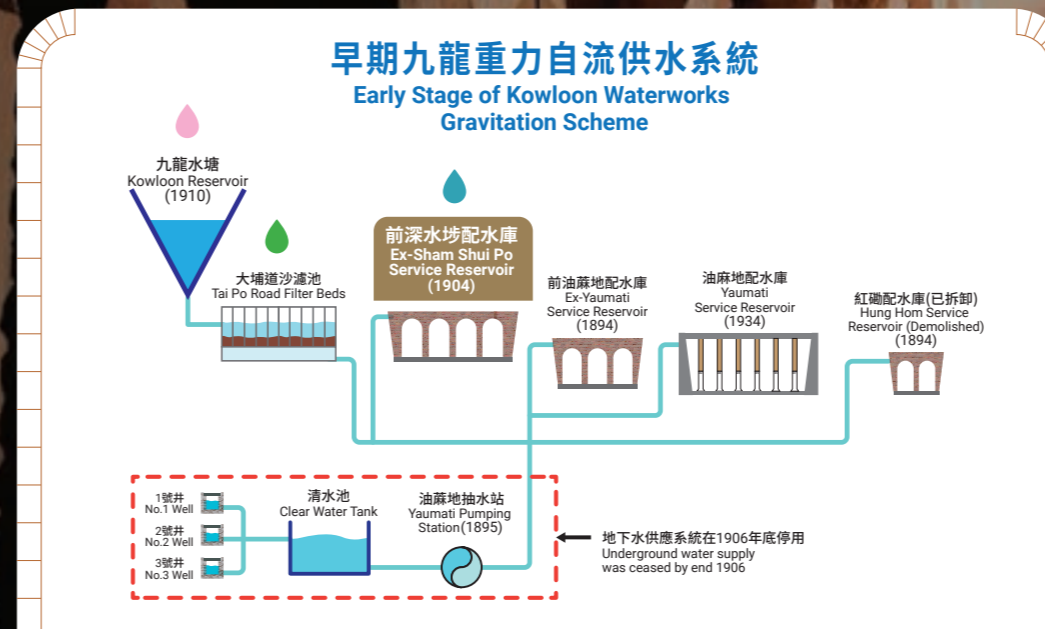
木製塘尺  
Wooden Vertical Staff



紅磚拱券  
Red Brick Arches

# 前深水埗配水庫

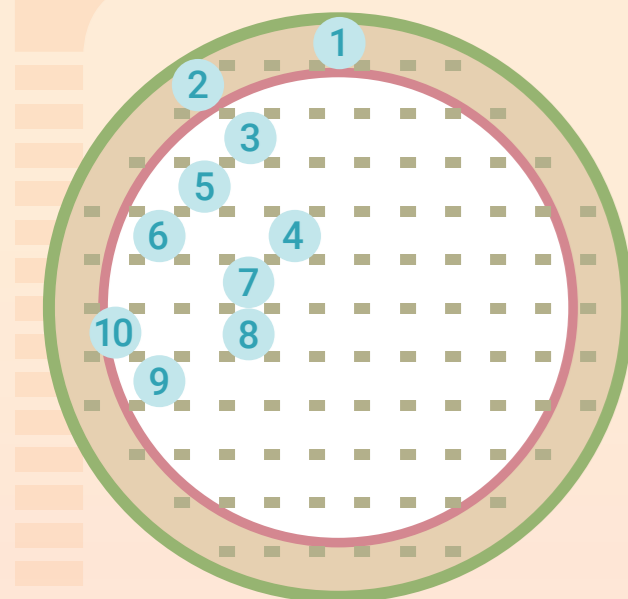
## EX-SHAM SHUI PO SERVICE RESERVOIR



# 主要景點及建築特色

## The Main Scenic Spots and Architectural Styles

### 平面圖 Layout Plan



- 1904年原牆身  
Original Perimeter Wall built in 1904
- 1951年維修工程的後加牆身  
Circumferential Wall for Repair Works commenced in 1951
- 花崗石柱  
Granite Piers
- 水泥結合填料  
Cement-bonded Earth Filling



已封閉的通風井  
Sealed Ventilator



A 原牆身(1904年)  
Original Perimeter Wall built in 1904

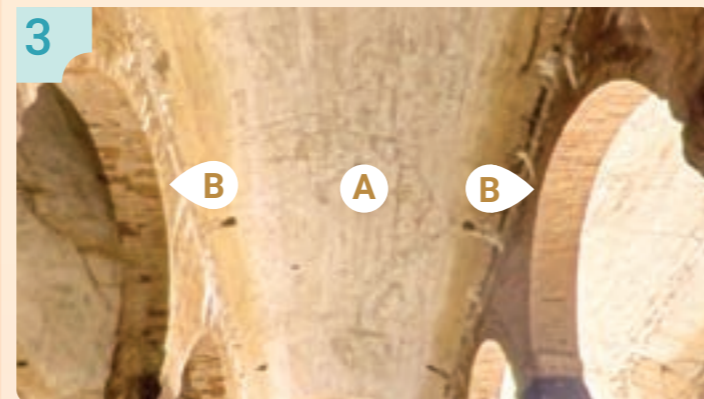
配水庫在1904年落成時的直徑為150尺(約46米)，支柱的間距有13尺(約4米)和12尺(約3.7米)，與前油蔴地配水庫(約16萬加侖/740立方米)和已拆卸的紅磡配水庫(約9萬加侖/420立方米)這類早期有蓋的磚砌配水庫相比，是相當高且大。

At the time of its completion in 1904, the diameter of the service reservoir was 150 feet (approx. 46 metres), the centre-to-centre distances between the stone piers were 13 feet (approx. 4 metres) longitudinally and 12 feet (approx. 3.7 metres) laterally. The size of this service reservoir was huge when compared to other covered brick service reservoirs in early year like the Ex-Yaumati Service Reservoir (approx. 160,000 gallons / 740 cubic metres) and the demolished the Hung Hom Service Reservoir (approx. 90,000 gallons / 420 cubic metres).

B 1951年維修工程的後加牆身  
Circumferential Wall for Repair Works commenced in 1951

由於發現配水庫滲漏，配水庫於1951年開始進行維修，維修後其內圍收窄至直徑124尺(約38米)，庫容量降為107萬加侖(約4,800立方米)。這堵新加6吋厚的牆身是以鋼筋混凝土建成，牆後塗有瀝青防水層，以加強配水庫的防滲功能。後加的牆身與原牆身之間回填已混和英泥的泥土並加壓。

In order to rectify leakage problem, a 6-inch thick reinforced concrete wall backed with bitumen waterproof layer was built inside the service reservoir. With the repair works commenced in 1951, the internal diameter of the service reservoir was reduced to 124 feet (approx. 38 metres) and its storage capacity to 1.07 million gallons (approx. 4,800 cubic metres). The void between the new wall and the original wall was filled and compacted with earth mixed with cement.

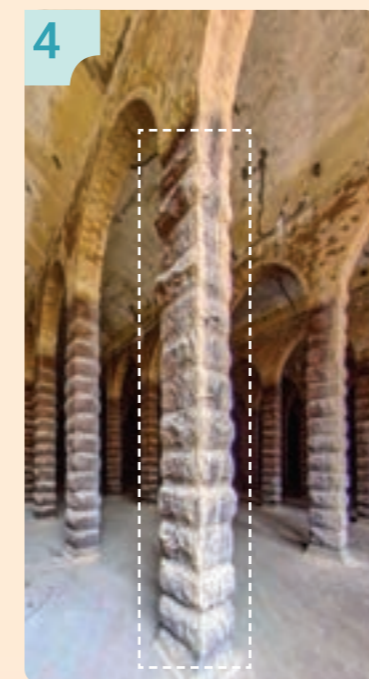


A 混凝土拱形天花  
Concrete Cove Ceiling

混凝土天花自身重量和泥土重量傳達至拱頂兩邊的花崗石板基座，及用紅磚砌成的仿羅馬拱券，再傳達至以花崗岩雕琢層疊而成的長方形石柱，令整體結構可以安全地將重量由上至下達到混凝土建造的地基。

The top soil and the concrete ceiling itself, are supported on pentagonal profile granite spring blocks laid on rows of brick arches which imitate the Roman civil engineering works. The loading subsequently reaches the stone block piers made of rusticated granite blocks, before transmitting to the foundation safely.

B 仿羅馬紅磚拱券  
Red Brick Arches in imitation of Roman Civil Engineering Works



花崗石柱  
Granite Piers

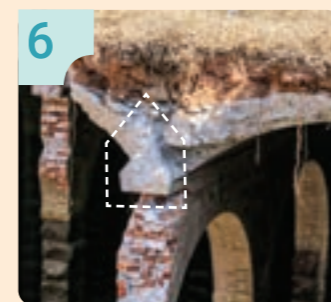
每塊花崗石為2尺長，1尺6吋闊和1尺高，表面為粗琢並中部凸出。每條石柱的基座為混凝土，其上為14塊花崗石。

Every rusticated granite block is 2 feet in length, 1 foot 6 inches in width and 1 foot in height. With the concrete upstand as the base, each pier is topped with 14 granite blocks of the same dimensions.



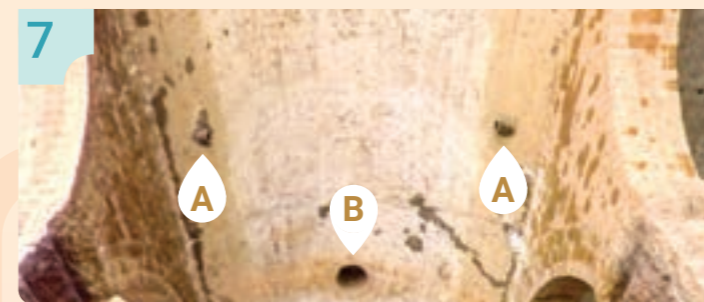
紅磚拱券  
Red Brick Arches

紅磚拱券以歐式砌法砌成。The red brick arches are in Flemish bond.



花崗岩墊石  
Granite Spring Block

五邊形花崗岩墊石承托着混凝土拱形天花。Concrete cove ceiling is supported by these pentagonal profile granite spring blocks.



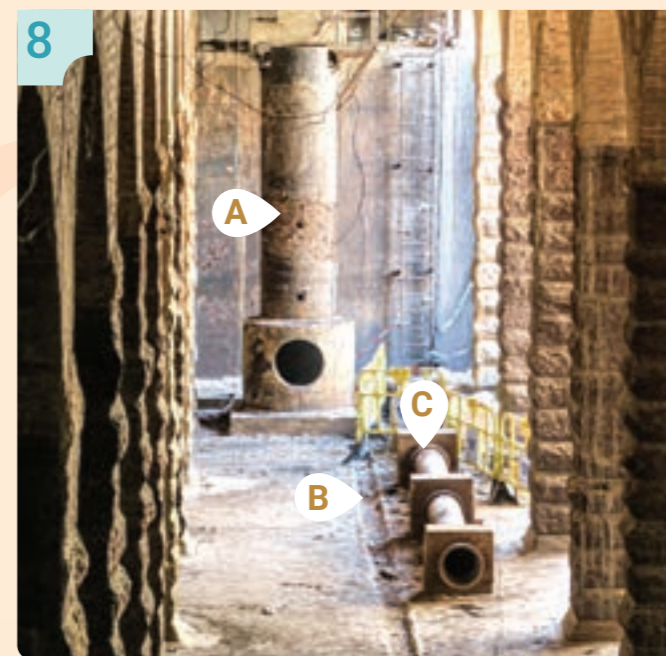
A 牆頂平衡管  
Wall-top Balancing Pipes

圓拱天花底部的陶管為牆頂平衡管，在高水位時可以平衡磚頂兩側的氣壓和水位。Two adjacent cove ceiling are linked with balancing pipes, which can balance the water levels and the pressure when water level is high.

B 天窗和通風井  
Pavement Light Openings and Ventilators

天花頂部曾經有天窗和通風井方便檢查維修，但在配水庫停用後以英泥覆蓋。現場尚可從水庫內望見部分已封閉的天窗(直徑為1尺6吋)和通風井(直徑為6吋)。

There were pavement light openings and ventilators, but they were all sealed by cement concrete since the decommissioning of the service reservoir. Some sealed pavement light openings (1 foot 6 inches in diameter) and ventilators (6 inches in diameter) can still be observed from inside.



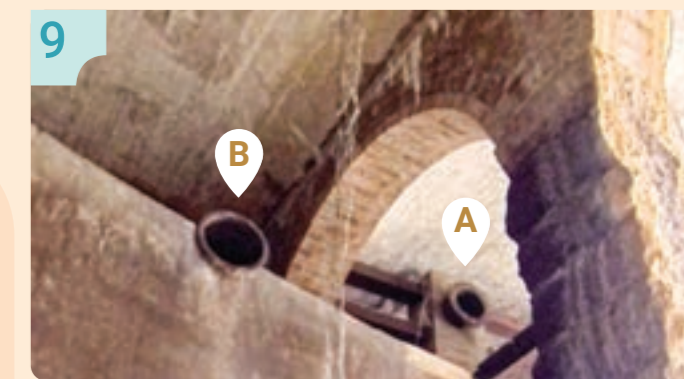
A 靜水井  
Stilling Well

位處入水口下的鐵製靜水井，是用來限制進水浮波閥的浮波上下浮動的位置和上下移動速度。Laid at the bottom of the inlet pipe, there is a steel stilling well. It restricted the vertical movement and the movement speed of a float of the ball float inlet valve.

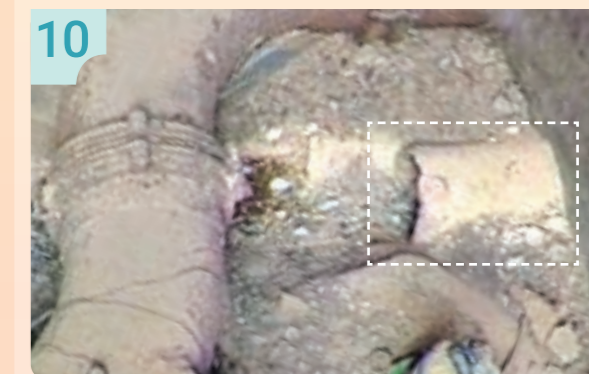
B 半圓去水導坑  
Half Round Channel

在清洗配水庫時，沙泥會被沖洗至半圓導水坑。導水坑連接排水管，沙泥便可沖洗離開配水庫。When cleaning the interior of the service reservoir, the half round channel caught the washed sediments and drained to the washout pipe. The sediments were brought away from the service reservoir.

C 12吋直徑出水管  
12-inch-diameter Outlet Pipe



A 12吋直徑進水管  
12-inch-diameter Inlet Pipe  
B 12吋直徑溢流管  
12-inch-diameter Overflow Pipe



8吋直徑排水管  
8-inch-diameter Washout Pipe

一般運作時排水會關上，只在清洗配水庫時才開啟。It was normally shut but could be opened when cleansing the service reservoir.