Historic Building Appraisal

Shing Mun (Jubilee) Reservoir

(Gorge Dam, Valve Tower, Steel Bridge, Bellmouth Overflow, & Memorial Stone)

Kwai Tsing and Tsuen Wan, New Territories

Historical Interest

Shing Mun (Jubilee) Reservoir 城門(銀禧)水塘 was built **between 1935 and 1937**. It is located in the lowland area known as Shing Mun Valley which nestles between the mountain ranges surrounding Tsuen Wan, Kwai Chung and Shatin. The Reservoir project involved the resettlement of the inhabitants of Shing Mun Valley to elsewhere in the New Territories.

Shing Mun (Jubilee) Reservoir was the core construction of Shing Mun Valley Scheme (城門谷計劃) formulated in the 1920s by Mr. R.M. Henderson, the then Director of Public Works, who studied the possibility of using Shing Mun stream as a source of water supply. The scheme was adopted in 1931, when Messrs. Binnie, Deacon & Gourley, of London were consulted with regard to it.

The major construction of the Reservoir was to build a gigantic dam at the mouth of the gorge to retain rainwater and form a huge reservoir to afford additional supply of water to Hong Kong Island and Kowloon. The reservoir was originally called Shing Mun Reservoir (城門水塘), which was officially renamed Jubilee Reservoir (銀禧水塘) in 1935 to commemorate the Silver Jubilee of King George V.

Architectural Merit

The main dam of the reservoir is called the **Gorge Dam** situated at the southern end of the reservoir. It incorporates several technological advances which were not used in precious dams. The dam consists of reinforced concrete diaphragm wall, a concrete thrust block, an absorbent sand wedge and rock fill on the downstream side. The upstream face of the dam is steeply sloped with a fair-face concrete finish. The downstream side has a slope with a gentle gradient faced with masonry incorporating several berms. A walkway runs along the crest of the dam with solid masonry parapet walls on each side.

On the upstream face of the dam near the northeast end a **Steel Bridge** spans across the water to the **Valve Tower**. The bridge is a bowstring girder bridge with sides formed of segmental top booms and horizontal bottom booms connected by cross-braced lattices. The floor or decking is made up of chequer plate steel sheets. The Valve Tower is an octagonal masonry tower with an ornamental parapet to the flat roof and steel framed windows divided into small glazing squares. The window openings have projecting granite cills and flat arches with wedge-shaped granite voussoirs. The architectural style is reminiscent of castle towers in Europe.

To the north east of the Valve Tower can be seen the **Bellmouth Overflow**.

This is a circular masonry structure in the reservoir surmounted by a masonry footbridge connecting it to the shore. This unusual feature takes the place of the overspill weirs seen at other reservoirs. The overflow bellmouth was designed in 1935 by Geoffrey Binnie of Binnie, Deacon & Gourley and received the Telford Premium Award from the Institution of Civil Engineers.

The **Memorial Stone** is situated at the side of the road at the southwest end of the dam. It is a granite slab built onto the face of a granite retaining wall engraved in English with an inscription recording the year of construction of the reservoir, the names of the designers and engineer and details of the dam.

The Jubilee Dam incorporates some rare features not seen elsewhere and should therefore be regarded as having considerable built heritage value. All the structures do not appear to have been affected by changes or alterations and retain their authentic appearance. ***Rarity, Built Heritage Value & Authenticity***

The social value of the reservoir and its structures lies in the contribution they have made to the development of water supply in Hong Kong. The reservoir is now part of the rural landscape and falls within the Shing Mun Country Park. It attracts many visitors who come to walk the hiking trail and nature trial around the dam, fish in the reservoir, or see the many monkeys who live there. ***Social Value & Local Interest***

The question of adaptive re-use does not arise for the reservoir structures which are purpose-built **Utilitarian** civil engineering waterworks structures which cannot be used for anything else. ***Adaptive Re-use***