

Dight's Falls Pumping Station

In the 1880s, the falls across the Yarra River where Queen's Bridge now stands were blasted out to allow shipping to travel further upstream. This spot therefore no longer marked the division of the Yarra into salt and fresh. Tides could penetrate upriver far past the old pumping station, allowing sewage and salt water to sully formerly fresh water. In the hot summer of 1888, William Guilfoyle, director of the Botanic Gardens, lamented the destruction of the beautiful gardens as they were irrigated with this filthy water. He was joined in his lamentations by people resident near Albert Park lake which had become a poisonous lagoon. The solution was a pumping station further up the Yarra. This was not as straightforward as it seemed at first. Usage rights for the best water power within a reasonable distance – at Dight's Falls – had been granted to a private milling company. Any water taken from above the Falls would involve a fight. Tests were carried out to show that the water above Johnston Street Bridge was not affected by the salt tides, and therefore a site just below the tail race of the mill at Dight's Falls was chosen.

The 150 horsepower engines, supplied by the Austral Otis Engineering Company, were set on a solid bed of concrete, and Worthington pumps were built in next to them. The pumps were planned with a capacity of one million gallons of water per eight hour shift. Mr Thwaites, engineer-in-chief of the Melbourne water supply, was aware of the popularity of the park as a beauty spot, and planned for planting to be carried out both around the pumping station and on the slopes of the embankments necessitated by the creation of a road from Johnston Street Bridge to the pumping station site.

On the crest of the Studley Park hill (near Walmer Street) a basin 220 feet in diameter and 12 feet in depth was constructed with a capacity of 2,880,000 gallons. This reservoir was 60 feet above the highest point of Domain Hill, so once the water was pumped up into it, gravity sufficed for conducting water by an 18 inch main via Richmond to the Botanic Gardens and the Albert Park Lake. En route it passed Studley, Richmond, Flinders, Fawkner and Yarra parks and the Carlton, Fitzroy and Treasury gardens. As an article in *The Argus* (23 August 1890) carolled: "No more dearth of water then in gardens or parks; no more parched lawns or slaughtered

innocents of flowers; no more stinking ponds or fever-breeding mud-flats; no more drain on the city's domestic supply ..."

The cost was estimated to be £28,000 with annual expenses of £1,000, but it was hoped to re-coup some of the expenses by selling excess water. The official opening ceremony took place on 21 May 1891. Record-breaking floods occurred in July 1891, and the water level reached to the roof of the pumping station.

From January 1893 the Melbourne Hydraulic Power Company, which provided high-pressure water for hydraulic lifts in city buildings, began using Dight's Falls water to supply their pumping station in the area which is now North Wharf Road in Docklands (supplemented from 1901 by a second pumping station on the site of today's Melbourne Central). The use of hydraulic lifts transformed Melbourne's skyline, as taller buildings could be constructed.

After 1923 the pumping station came under the jurisdiction of the Metropolitan Board of Works. In the 1950s the Botanic Gardens changed over to mains water supply. Well before this time the majority of city lifts were electric. In 1964, the Dight's Falls Pumping Station, no longer required, was demolished. Its site can easily be located by walkers, in a slightly sunken area immediately above the steeply sloping concrete wall and steps on the Kew side of the Falls.

Notes by Karen Cummings.

Select list of sources and further reading:

The Argus, 23 August 1890, p. 4; 22 May 1891, p. 9; 29 August 1923, p. 9; 9 April 1926, p. 6.

Lamb, Rohan, 'Under pressure: the evolution of the water supply system of the Royal Botanic Gardens', *Victorian Historical Journal*, Vol 67, issue 247, April 1996, pp. 66-82.

Otto, Kristin, *Yarra: a diverting history of Melbourne's murky river*, Text Publishing, 2005.

Pierce, Miles, *The Melbourne Hydraulic Power Company and public hydraulic power systems in Australia*, Institution of Engineers Australia, 2008.

Pixley, Norman, 'John Dight and his descendants', *Royal Historical Society of Queensland Journal*, 1977.

Public Records Office of Victoria, VA 1007 Melbourne Metropolitan Board of Works, VPRS 8609 Historical Records Collection, P23, Unit 7.