MMBW PRESTON RESERVOIRS NOS. 2 AND NO.3

MMBW Preston Reservoir COmplex, High Street, Reservoir

Location

832-34 HIGH STREET, RESERVOIR, DAREBIN CITY

Municipality

DAREBIN CITY

Level of significance

Included in Heritage Overlay

Heritage Overlay Numbers

HO272

Heritage Listing

Darebin City

Statement of Significance

Last updated on - July 21, 2008

What is significant?
The Preston Reservoir complex was established in 1864 as part of the Yan Yean water supply system, which was Melbourne's first engineered water supply system. It originally comprised one reservoir, which is now known as Reservoir No.1, which was designed to regulate the pressure in the pipes, and provided a daily supply close to Melbourne. As Melbourne grew and the Maroondah system came on line additional storage capacity was needed

and two new reservoirs were constructed in the early twentieth century. Preston reservoir No.2, constructed by John Monash's company, the Reinforced Concrete & Monier Pipe Construction Co., was completed in 1909. It measured 476 feet (166.6 metres) by 516 feet (157.4 m) and 17 feet (5.2) deep and had a capacity of 24.5 million gallons (111.5 megalitres). Unlike earth and massed concrete reservoirs, the inner walls were perpendicular, with the outer walls sloping. They were constructed in vertical panels rather than built up horizontally in courses, like puddle core or massed concrete. This meant that the building up of the earth embankment behind the reinforced concrete wall could not proceed evenly as the wall was raised, resulting in more cracking of the concrete than usually occurred with massed concrete. Edgar Ritchie, the Board's Engineer of Water Supply, later gave this as his reason for preferring massed concrete for service reservoirs and this was to be the only service reservoir to be constructed using this method. Preston Reservoir No.3, constructed of massed concrete, was completed in 1913. It measured 516 feet (157.5 m) by 502 feet (153.1 m), with a depth of 17 feet (5.2 m), and capacity of 26.3 million gallons (119.6 megalitres). The cost was £29,190. As the reservoirs were originally uncovered trees, mainly pines and cypresses, were planted around the perimeter to prevent dust and debris from blowing into the water. Both reservoirs have now been covered.

The following elements contribute to the significance of this place:
- Preston Reservoir No.2
- Preston Reservoir No.3
- the Monterey Cypress row along High Street; and
- other mature trees including Pines and Washingtonia palms.

Other infrastructure and features are not significant.

How is it significant?
Reservoir Nos. 2 and 3 at Preston Reservoir complex are of local historic and technical significance to Darebin City.

Why is it significant?
Historically, Reservoir Nos. 2 and 3 at Preston Reservoir complex are significant as representative examples of the service reservoirs associated with the development of the Melbourne's water supply system in the early decades of the twentieth century. The reservoirs form an important part of the Preston Reservoir complex various components of the complex illustrate how the system was developed to improve the quality and quantity of supply and meet the demands of Melbourne as it grew in population. Other features of the complex that are of interest include the trees, which illustrate the use of vegetation to protect the water supply from effects of dust and debris. The reservoirs are important for their associations with the Melbourne Metropolitan Board of Works and provide evidence of the major works carried by the MMBW to secure Melbourne's water supply in the early twentieth century. Reservoir No.2 is also notable as an example of a reservoir constructed by John Monash's Reinforced Concrete & Monier Pipe Construction Co. (AHC criteria A.4, D.2, H.1)

The complex is technically significant for its demonstration of nineteenth and early twentieth century engineering technique and practice and illustrates the increasing use of concrete as a construction material. Reservoir No.2 is particular significance as perhaps the only example of a reinforced concrete service reservoir in Victoria. (AHC criterion F.1)

Heritage Study/Consultant	Darebin - Darebin Heritage Study, Context P/L, 2011;
Construction dates	1909,
Heritage Act Categories	Registered place,
Hermes Number	26598
Property Number	

Physical Description 1

The Preston Reservoir complex comprises three reservoirs, located on either side of High Street, and associated buildings, structures and landscaping. The oldest element extant is the bluestone Valve House, built as part of the original Yan Yean system in 1853-57 and identical to the one in Mill Park. The site contains a mixture of mature exotic, native and indigenous vegetation. Pines and cypresses are used extensively as windbreaks and scattered elsewhere throughout the site. The other building on the site is the Melbourne Water office building, which is a single storey post-war building situated at the end of the entrance driveway.

Surviving historic features associated with the development of the Yan Yean system are:

Valve House
Built as part of the original system in 1853-7 of finely executed rough-faced bluestone, this small tower-like building held one of Jackson's pressure-regulating valves. The building has an arched doorway with double timber doors, a low hipped iron roof above an ashlar cornice, and an arched corrugated galvanized iron cover over the outlet at the back. The valve machinery appears to be still intact. It is in good condition and has a high degree of integrity.

Reservoir No 1
Built in 1864 by excavation and embankment, the reservoir floor is below ground level and lined with bluestone set in cement. There were originally two inlets on the north side - from the Yan Yean system and a pressure-relieving pipe - now joined by a third from the Sugarloaf Reservoir (1981). There is a bluestone bypass (overflow) channel on the north side of the reservoir. There are mature Monterey Cypress (*Cupressus macrocarpa*) windbreaks along the south and east sides. The original outlet tower is gone, replaced by a c.1950 concrete structure at the south end. The reservoir was taken out of commission in 1989, and now is only used occasionally for flushing out the system.

Caretaker's Residence
Built in 1865, this is a hipped-roof brick dwelling with a skillion-roof timber verandah. It has a weatherboard extension to the rear. It stands near the north-west corner of Reservoir No 1, and had extensive gardens, some elements of which survive to the south of the house. Externally intact, the interiors and rear of the building appear to have been modified. It appears to be structurally sound, however, it is currently unoccupied and under threat due to lack of maintenance.

MMBW Office
The Preston office of the MMBW was built next to the Caretaker's House in 1900. It is a tiny brick structure with a gable terracotta-tiled roof and a small timber front porch. It has a high degree of integrity but is in very poor condition due to lack of maintenance.

Reservoir No 2
This reservoir was built in 1909 and is located on the east side of High Street, opposite the No 1 Reservoir. It was built of reinforced concrete to designs by John Monash's Reinforced Concrete & Monier Pipe Construction Co. It was originally an open basin but a cover has since been built over the top

Reservoir No 3
Also on the east side of High Street, No 3 was built in 1913 of mass concrete. It has also been covered over with a roof.