SUBIACO CENTRAL BORE WATER IRON FILTRATION SYSTEM

Article by Elliotts Irrigation

In September 2011, the City of Subiaco commissioned the installation of an iron filtration system at the Subiaco Central Park site. The system was to be capable of filtering the iron out of three bores simultaneously, and depositing the filtered water into the Subiaco central park lake at a flowrate of 108m^3/hr. Elliotts Irrigation was commissioned to undertake the project.

The lake itself is an integral part of the city's irrigation system watering the surrounding parks, gardens and road verges throughout the city itself.

With water conservation being of the highest priority to the council; the lake collects stormwater runoff during precipitation periods for irrigation use along with the contribution from the bores.

The filtration system itself is designed to be 100% recyclable with all the backwash water also being channelled back into the lake for irrigation purposes. The collective iron content from all three bores can be as high as 16.0ppm (mg/l) with the filtration system continuously filtering the water down to below 0.3ppm with low maintenance and ongoing running costs.

The Iron Filter filters the bore water for the nearby lake. The entire structure sits atop of the backwash ponds which overflow back into the lake. Over the last seven years the filtration system has not faulted, with no foreseeable problems or major costs anticipated in the future.

The filtration system is housed in a purposely designed modern art décor building named "The Watershed'. This is a landmark environmental public artwork that references Subiaco's industrial heritage.