

Prospect Water Filter Plant Sydney



Completion
1996

Client
Sydney Water Corporation

Value
\$180 million

Bovis Lend Lease involvement
Design and construction services were provided as part of a build, own, operate and transfer (BOOT) contract



Highlights

- The project was completed six months ahead of schedule
- The cost of water for consumers was not impacted
- Guaranteed improved water quality
- The world's largest drinking-water treatment plant, providing water for 85% of Sydney's population

The brief required that the cost of treatment per litre of water would not impact the existing retail price of water to the community.

Bovis Lend Lease completed a detailed analysis of Sydney Water's requirements and devised an innovative and comprehensive solution.

The solution saw Bovis Lend Lease develop a partnership with a world leader in water treatment technology and investment and researched similar facilities around the world.

In delivering the project Bovis Lend Lease designed a facility that:

- Reduced the number of buildings from thirteen to six
- Reduced access roads by 70%
- Reduced future maintenance and operating costs and extended the life of the plant
- Reduced the size and design of clear water tanks by more accurately analysing storage required and using an earth dam membrane system in lieu of the proposed cast-in-situ concrete system.
- Included state-of-the-art technology for dosing and filtration, able to filter up to 3 billion litres of water a day
- Reduced filter size by 20%
- Reduced the overall project capital cost by \$120 million
- Reduced required construction time by six months
- Improved water quality at customer's taps to meet international standards of water purity
- Provides drinking water to 3.5 million people, representing 85% of Sydney's population.