

Bundeena / Maianbar Water Cycle Management Scheme

PROJECT DETAILS:

Location:	Sydney, New South Wales, Australia
Contract Value:	A\$30 million (2000)
Contract Period:	23 months
Safety Statistics:	Manhours: 408,865 LTIFR: 2.4



CLIENT: Sydney Water Authority

Scope of Work:

In January 2000, the Clough Lucas Joint Venture was awarded a design and construct contract for a new reticulated sewerage system for the unsewered villages of Bundeena and Maianbar, located on the southern shore of the Port Hacking River, approximately 36km south of the centre of Sydney.

The previous systems of effluent disposal for the villages consisted of absorption septic, pumpout and aeration methods. The water supply to the villages consisted of a single source supply from the Loftus Reservoir.

Previously the effluent disposal system failed to operate effectively resulting in contamination of the stormwater system, creeks and waterways and posing a risk to the health of the community as well as the environment. The water supply to Bundeena and Maianbar was operating at full capacity and required augmentation i.e. an additional watermain to supply the existing reservoir at Maianbar.

The scope of work for this contract consisted of approximately 35km of pipelines and seven sewer pumping stations. The collected wastewater is transported to the Caringbah Carrier via two directionally drilled pipelines under the Port Hacking River from Bundeena and Maianbar, then onto Cronulla sewage treatment plant.

The Clough Lucas Joint Venture's design featured an additional directionally drilled line under the Port Hacking River. This mitigated the need to construct a pipeline through an environmentally sensitive national park and was one of the key factors in the award of the project.

The Joint Venture also constructed a water pipeline under the Port Hacking River (from Maianbar) concurrently with the sewer main construction in order to augment the supply required to service the predicted increase in water demand. The construction workscope included one water pumping station at Burraneer Point.

Environmental and community relations were a major component for this contract with the construction activity undertaken adjacent to and within a national park and within existing residential suburbs.

Construction was completed in December 2001, with a maintenance contract awarded for a further twelve months.

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