

West Byron Sewage Treatment Plant Augmentation



Location

Byron Bay, Australia

Client

Byron Shire Council

Project Value

AUD\$21.0 Million

Start Date

July 2004

Completion Date

November 2006

Office Responsible

Cardno, Water Supply & Sewerage

Responsibilities

Process design and detailed civil and mechanical design of the sewage treatment plant as a design and construction contract with John Holland Pty Ltd.

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Project Scope

Increasing population in Byron Bay and stricter environmental standards have required the current West Byron Sewage Treatment Plant (STP) be upgraded to process more sewage and to treat it to a higher quality, providing increased opportunities for recycled water and other by-products of the treatment process to become valuable resources. This means there will be more highly treated sewage entering waterways.

Cardno was design consultant to construction contractor, John Holland, for the design of all process, civil, mechanical, structural and environmental aspects of the project, as well as providing assistance during commission and the plant proving period.

Construction and commissioning of the treatment plant is complete and operating to meet community expectations. Project scope included:

- A new 28,000 EP BNR sewage treatment plant while maintaining the existing West Byron Sewage

Treatment Plant (STP) in operation.

- Upgrade of existing pump station to allow all flow from South Byron STP to be redirected to West Byron STP to permit the closure and decommissioning of South Byron STP.

- A rising main, 7,500 m in length from the upgraded pump station to West Byron STP.

- Tertiary treatment systems at West Byron STP to produce Class A reclaimed water.

- Reclaimed water storage, pump station and 8,000 m reclaimed water pipeline.