



## Black Creek Diversion Channel Project

### Description

Black Creek Diversion Channel is a 3.2km long open channel environmental water management system that was constructed at the Tarong Power Station Site, QLD. Its purpose is to divert 1 in 100 year flows of a peak 98m<sup>3</sup> per second around the facilities of the ash storage dam reducing the potential for the dam to over-flow and cause polluted water to enter nearby waterways. In turn, the project increases the storage capacity of ash and recyclable water in the ash dam thereby extending the service lives of Tarong and Tarong North Power Stations.

Our scope on the project was to construct three large reinforced box culvert spillway structures and combined road and services bridges, all traversing the new channel. Over these crossings IDC Contracting relocated services cut by the new channels' alignment. Services included water, slurry, chemical effluent, communications and low and high voltage power, using both recycled and new components. Staging of construction on this project was critical with structures needing to be completed before channel construction could proceed past. Crucial service relocation works had to be planned carefully and switched in a timely manner so as not to hinder power station operations. In order to perform these works we were required to implement a diverse range of skills held by our own workforce.

### Project Features

- Assembly of precast bridge deck superstructure and 136 large culvert units
- Assembly of structural steelwork for pipe supports over the bridge, culverts and footings on ground
- Installation of conduit, pipework and associated control devices and pits, in trenches and above ground
- Assembly of MSCL, Ductile Steel, Stainless Steel, PE and GRP pipework, ranging from Ø80-915mm
- Fixing, forming and casting over 1500m<sup>3</sup> of in situ concrete for bridge substructures, spillway bases and culvert wing walls, headwalls and aprons
- Transport of 28 tonne 12m long bridge deck units, large box culverts up to 3.6H x 3.6W and large excavation equipment.
- Bored piling for bridges foundations, to depths of 18m, up to Ø1200mm
- Large rock carting, of boulders up to 1m in diameter, total of 24,000 tonnes
- Earthworks, including detailed excavation and backfill

