

# BALLANUP WASTEWATER PUMP STATION #5

Whitby Land Company / Water Corporation

## Location

Piara Waters, WA

## Commencement

Jan 2012

## Completion

July 2012

## Contract Value

\$1.85 million

## Client

Whitby Land Company



## Zero Harm

The project is 100% complete and there have been no lost time injuries.

LTIs: 0

MTIs: 0

## Overview

The Ballanup Wastewater Pump Station #5 is located in the Perth suburb of Piara Waters. The project, which consisted of the pump station, overflow storage, pressure main and gravity sewers, enables new subdivision development to proceed to cater for Perth's growing population.

## Contract Supervision

The contract was managed by A Design Consultant with Cobey as Main Contractor

## Scope

Cobey was awarded the contract for the type 40 wastewater pump station and 1.7km of DN200 sewer pressure main.

The works required were:

- 10mtr deep Excavation & Backfill
- Precast Type 40 wet well and valve pit
- Dewatering & Acid Sulfate Soils Management
- DN1800 overflow storage tanks
- 1.7km of DN200PVC and DN225PE sewer pressure main
- 30m of 7mtr deep DN225PVC gravity sewer
- Directional drilling of PE pressure main
- Access Road construction
- Electrical Installation
- Traffic Management
- Full site reinstatement

## Project challenges

The pump station excavation required strict acid sulphate soils and dewatering management in coffee rock.

MainroadsWA traffic requirements meant that all road crossings were to be bored and that traffic flows be maintained during construction of the pressure main. Microtunnelling of a steel sleeve for PE pressure main under roads avoided HV power, HP Gas and major water mains.

The sewer pressure main alignment was located within an existing road reserve adjacent to existing services and local residents.

Construction of the pumping station and the pipeline sections within the subdivision had to be carried out in close proximity to the major earthworks contractor on site.

### Managing the challenge

After dewatering then excavating the soil, continuous testing was undertaken in accordance with the environmental management plan.

We liaised closely with the Client’s environmental consultant to ensure the dewatering testing was carried out to the required standards. We responded quickly to requests or recommendations from the environmental consultant and Client.

Cobey provided direct and ongoing liaison with local residents before, during and after the pressure main was constructed to ensure minimal disruption. Restoration works followed quickly behind the construction works.

Traffic Management along Armadale Rd was MainRoadsWA Approved and did not substantially affect motorists.

As MainRoadsWA required the pressure main to be installed in a sleeve, Cobey used microtunnelling to ensure the sleeve was accurately installed and avoided existing services.

### Adding Value

We added significant value by pro-active approaches to site works including altering the construction programme to suit other site development works, design changes and delays.

Cobey also worked closely with the Design Consultant & Client on changes to design. This resulted in fast tracked solutions to clashes saving time and money.

Cobey also carried out the pressure main connection in house under Water Corp. supervision to fast track these works.

