



YANNAWA WASTEWATER TREATMENT WORKS

VALUE: £110 million

CLIENT: Bangkok Metropolitan Authority

LOCATIONS: Yannawa, Bangkok

PROBLEM: Brand new plant in heavily populated area on a confined site

CHALLENGES: Site constraints made land available for traditional plant layouts impossible

SOLUTION: "Multi-storied" levels to plant building utilising 8 CASS™ basins on four separate levels

START DATE: Sept 1998

COMPLETION DATE: Mar 2000

PROJECT STATUS: Completed



DESCRIPTION & KEY FEATURES

A new 'multi-storey' sewage treatment works designed for 200,000m³/d DWF and 1,000,000m³/d maximum flow.

The treatment plant comprises 7 No. 260kW fixed speed Flow to Full Treatment Pumps and 8 No. 460kW fixed speed Storm Pumps, coarse and fine screens, screenings handling equipment, grit classifiers, interstage pumping station, CASS™ activated sludge plant, air blower installation, night soil storage, sludge treatment and dewatering, multi-stage wet scrubber odour control plant, building and site services.

The purpose of the Yannawa project is to provide wastewater collection and treatment for the Bangrak, Sathorn, BanKhor Laem and Yannawa districts of Bangkok with a combined area of approximately 2,850 hectares.

Key Features

- The present (1995) contributory population of approximately 500,000 is expected to double to 1,000,000 by the design horizon year of 2020.
- Three phases of construction are anticipated with an available land area of only 32,000m².
- Dry Weather flow 200,000m³/d (Phase 1).
- Maximum flow to the works 1,000,000m³/d (Phase 1)
- Maximum flow to the works 2,000,000m³/d (Ultimate)