



## Country

Cyprus

## Client

Sewerage Board of Nicosia

## Date

2000-2010

## Cost of works

€129m before tax

## Sogreah's services

- ▶ Validation of feasibility studies
- ▶ Preliminary and detailed design studies
- ▶ Tender documents
- ▶ Development of a GIS for sewerage

## Background

Nicosia has grown rapidly in the past thirty years. Designed before the 1974 invasion, the present sewerage system is no longer ideally situated to serve the growing suburbs to the south of the municipality of Nicosia. Premises in these latter areas are largely served by soakaways which, due to the marly clay sub-soil, are prone to overflowing clearly giving rise to potentially harmful health hazards. Furthermore, the effluent from the existing plants is not available for re-use which, in a situation of scarce water resources, would be highly advantageous. To address these problems the Sewerage Board of Nicosia has embarked on an ambitious programme of works.

## Description

The project consists in extending Nicosia's existing sewerage network to collect, convey and treat wastewater from throughout Greater Nicosia (0.3 million inhabitants by 2025, catchment basin measuring 145 km<sup>2</sup>) and building two sewage treatment plants:

- 700 km of gravity sewers: 200 mm to 500 mm diameter PVC pipes, and 600 mm to 900 mm diameter GFRP pipes,
- 40 km of pressurised sewers: 600 mm to 900 mm diameter ductile iron pipes,
- 8 pumping stations with unit capacities of 150 kW to 1300 kW,
- 2 sewage treatment plants with a total capacity of 55,000 m<sup>3</sup>/d.

## Detailed services

- Validation of the results of previous studies including wastewater reuse.
- Detailed design study of the works, including topographical and geotechnical studies; cost estimate.
- Production of tender documents, including technical specifications.
- Assessment of bids.
- Supervision of construction of the works described above in accordance with FIDIC conditions.
- Development of a digital mapping system and a GIS (Geographical Information System) including the updating of existing map data using satellite imagery.
- Environmental impact assessment.