

The Multi Service Group.



Waste Water Treatment Plant Weinheim

Weinheim, Germany



The community Weinheim had to plan an extension to their existing waste water treatment plant due to rising waste water quantities.

Bilfinger Berger Spezialtiefbau GmbH received the contract to construct a new treatment basin with diameter of 51 m and depth of 7 m. The retaining wall consisted of a sheet pile wall down to 13 m below ground.

Due to a very high ground water level, the basin's base slab had to be tied back by vertical ground anchors made of bored piles with diameter of 90 cm. These were placed as CFA (Continuous Flight Auger) piles up to a depth of 16 m.

To minimize the water inflow through the basin's base, a silica gel injection slab was placed with depth of up to 16 m in the basin's center. Due to its parabolic shape, every injection point had to be properly surveyed in elevation during the injection works. This was accomplished by the integration of CAD planning and design with automated laser guidance and control of the drilling rig on site.

Less than 3 l/s water inflow per 1,000 m² wall area was achieved.

Quantities:

2,080 m² Retaining Wall (Sheet Piles)

40 Nos. Bored Piles (CFA with D = 90 cm)

2,100 m² Silica Gel Injection Slab

Contract Value (net):

1.00 Mio EURO

Construction Period:

08/2002 – 10/2002

Client:

Abwasserverband Bergstrasse
Germany

Services:

Cut-Off Wall
Bored Piles
Silica Gel Injection

Contact:

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