

AL-BIREH WASTEWATER TREATMENT PLANT

TECHNICAL REPORT

1. GENERAL

At present the wastewater from the area of Al-Bireh flows to Wadi El-Ein and through it to Wadi Kilt and the Jordan River. The old existing treatment plant in Wadi El-Ein has been abandoned for the last two decades.

In Wadi El-Ein - as the name indicates - there are many springs extant. In order to minimize the possibility of groundwater contamination, the quality of the effluent must be of high standard and should be disinfected.

The location of the existing plant is not adequate anymore because its proximity to the residential area. The new site chosen for the construction of a new plant is 1.5 Km down stream the wadi (see attached map).

2. PHASES OF CONSTRUCTION

The treatment plant will be erected in phases, according to the expected loads and populations served during the design period. Two phases that were studied are: the first phase which will serve an expected sewered population of 20 000, and a second phase, at the end of the design period, which will serve a population of 35 000 people. The second phase may be further subdivided into intermediate phases, according to the actual growth of sewered population.

The estimate for the sewered population was based on a gradual growing rate of development of the sewerage scheme.

The first phase of development will cater to about 75% of the expected population while the final phase will cater to about 85% of the total population. It is assumed that the remainder will be served by private systems.

3. DESIGN LOADS

The projected loads - hydraulic and sanitary - in the treatment plant - according to the phases mentioned above are as follows: