

DESIGN OF RAILWAYS

THE ABUQRIN-BENGHAZI RAILWAY LINE



Client:

Libyan Ministry of Transport

Features:

Length of tracks (including station tracks): 856 km Number of stations and stops: 30

Number of (significant) bridges: 20

Number of buildings: 64

Time of design: 1984-1986

Services:

- Soil investigation
- Land surveying
- Parameter study
- Feasibility study

This 730 km long railway section is a portion of the railway line interconnecting the North-African countries. It is connected to the existing designs of the Tripoli-Abuqrin line section on the west and to the previously designed Benghazi-Amsaad line section on the east. The railway line runs roughly parallel to the coast of the Mediterranean Sea, mostly across flatlands. The main preliminary data used at the design work were as follows: design speed: 160 km/h, axle load: 22 Mp, track gauge: 1,435 mm (standard).

It was suggested to carry out the work by three stages such as: Abuqrin to Sirt, Sirt to Al Brayqah and Al Brayqah to Benghazi. Traffic investigations showed a need for 30 stations and stops. 25 of the proposed stations are standardized (falling under the categories of small, medium and large), while the remaining five stations are individually designed, including branch-off stations and stations with extensive freight traffic.

As agreed with the Client, all of the alignment, substructure and superstructure of the track were designed in accordance with the UIC recommendations.

In addition to the design of the track, the delivered documents included also the designs of water engineering, buildings, electricity supply, contact line, signalling and telecommunication.

A.3.09.AbuqrinBenghazi February 2003