Moula dam

02/04 MFN

Country
Tunisia

Client
Ministère de l'Agriculture, de l'Environnement et des Ressources Hydrauliques

Date
2003-2007

Sogreah's services
- Monitoring of works and commissioning of Kébir and Moula dams and transfer structures
- Moula dam

Background
The aim of the Kébir and Moula schemes is to create two reservoirs to enable water to be transferred to Sidi El Barrak reservoir. The dams are situated near the town of Tabarka. Kébir is 8 km to the south of the town on the wadi Kébir and Moula is on the wadi Bou Terfess, 2.2 km upstream of the point where the GP7 road crosses the wadi. The transfer scheme covers a distance of 30 km.

Civil works
- Main characteristics of the dam:
  Type: roller-compacted concrete in the central part of the valley, earthfill embankment on the right bank.
  Maximum height above bottom of excavations: 81 m
  Crest length: RCC section: 324 m,
  earthfill embankment: 110 m
  Volume of dam body:
  RCC section: 430 000 m³
  Earthfill: 20 000 m³
- Ancillary structures
  - Flood spillway
  Type: ungated surface spillway
  Location: central part of RCC section
  Chute: step-type
  Sill length: 60 m
  Maximum discharge under maximum reservoir level: 430 m³/s
  - Bottom outlet
  Type: steel pipe (1500 mm) embedded in vibrated concrete
  Location: left bank, adjoining the spillway at 60 m CD
  Gates: 1 butterfly guard gate (1500 mm), 1 hollow-jet regulating gate (1200 mm) operated from the downstream chamber
  Maximum discharge: 26 m³/s
  - Intake structure
  Type: 3 intakes at different levels supplying pipes (900 mm)
  Location: intakes embedded in the same vibrated concrete as the left bank bottom outlet
  Number of sluices: 3
  Gates: 3 upstream screens (1.20 m x 1.20 m) replaceable by a stop log, 3 butterfly gates 900 mm in diameter at the downstream ends of the pipes, 1 butterfly gate 900 mm in diameter on the collector at the downstream outlet
  Nominal discharge: 0.6 m³/s.

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