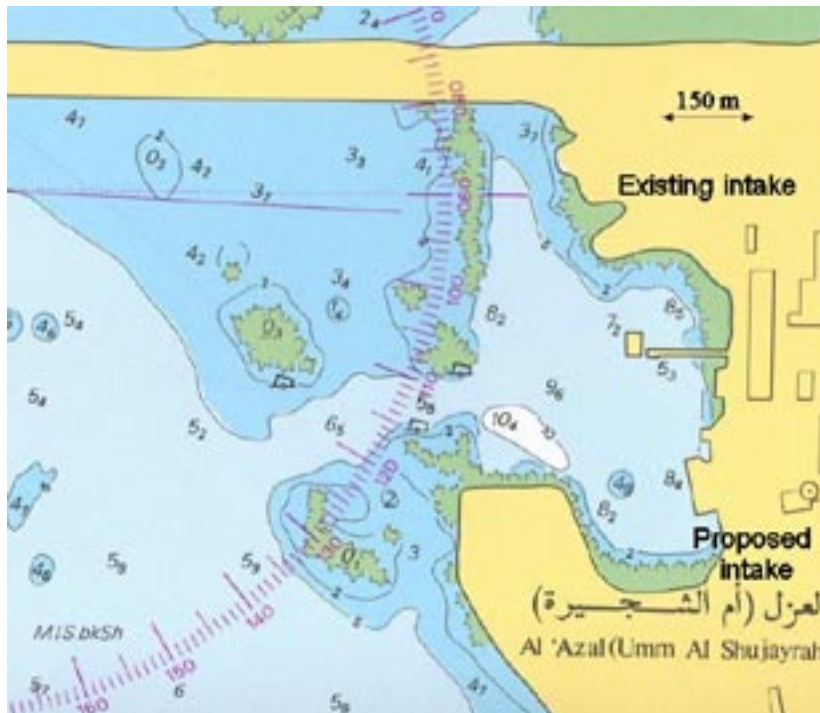


Hydraulic Feasibility Study for Water Intake at Hidd, Bahrain



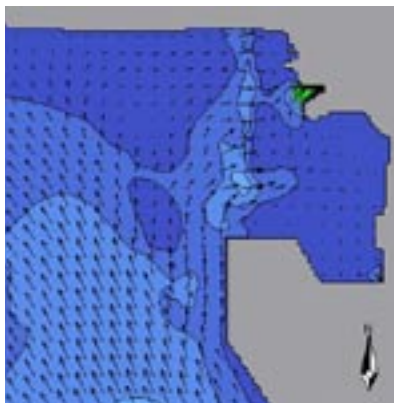
Admiralty chart showing locations of the two intakes

Services:

- Data collection for Design Basis
- Current modelling
- Assessment of hydraulic conditions at intake
- Preliminary hydraulic design of intake

Project period: 2004

Client: Mott McDonald



Instant current speed with two intakes running.



Difference in maximum current for the existing situation and the situation with the new sea-water intake

The project covered the feasibility of placing a new sea-water intake for a power plant close to an existing sea-water intake in Hidd, Bahrain.

The hydrodynamic model, MIKE 21 HD, has been applied for simulating the flow in the bay outside the proposed sea-water intake for different conditions. The conditions included the existing situation and, because of the high level of land reclamation in the area, a situation where future developments were taken into consideration.

The results of the study was analysed with respect to hydraulic conditions at the intake and with respect to the influence on the existing intake. A preliminary design of the intake structures was made as well as an assessment of the hydraulic conditions at the sea-water intake.