

# Transmission Pipelines Associated with QEZ 3 Desalination Plant

## Client

Sinohydro Tianjim Engineering Co. Ltd.

## Scope of Work

Studies  
Preliminary design  
Detailed design

## Location

Doha, Qatar

## Types of Activities

Civil works  
Communications and security systems  
Instrumentation  
Structural

The extensive developments currently under way across the State of Qatar create surging demand for potable water production. Such a fast-growing demand on potable water, as well as emergency potable water, can only be fulfilled through the implementation of water desalination projects.

The Qatar General Electricity & Water Corporation (Kahramaa) has thus planned the construction of a desalination plant at Qatar Economic Zone 3 (QEZ3) south of Al-Wakrah Municipality. Constructed in the form of an Independent Power & Water Plant (IPWP), the prospective

desalination plant has a capacity of 130 million imperial gallons per day. Kahramaa is simultaneously implementing a transmission pipeline to convey water from the desalination plant to identified interconnection points of the Kahramaa central distribution system and Reservoir & Pumping Station (RPS) system.

Kahramaa is also laying two parallel desalinated water transmission pipelines (each 1,600 mm in diameter) to be interconnected, on a one-to-one basis, to two water delivery points extending from the pumping station of the desalination plant.



Transmission Pipelines Associated with QEZ Desalination Plant





This project involves the design of ductile iron pipelines (approximately 71 km long) ranging from 600 mm to 1,600 mm in diameter. The desalinated water transmission pipeline is expected to be completed ahead of the QEZ3 desalination plant.

The project also involves a hydraulic study and a surge analysis of the pipeline's complete piping system and its associated piping (existing).