

Project Management

International

Resistivity and Bathymetric Survey, Seawater Intake and Outlet Pipe Construction

Client: InfraCo Limited
Location: Kpone, near Tema, Ghana
Period: July 2007

Resistivity and Bathymetric Survey, Seawater Intake and Outlet Pipe Construction

For the construction of a seawater intake and outlet pipe, knowledge of the subsoil conditions along the future alignment was required. PMI's proposed method to InfraCo Limited was to execute a bathymetric and resistivity survey.

The survey spanned a 1km wide and 2km long area from the beach through the surfzone, offshore.

The Works

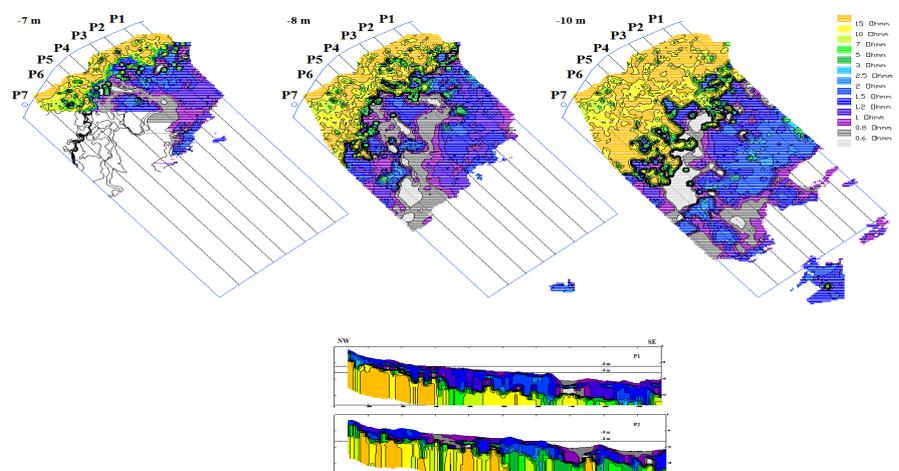
PMI mobilized equipment and personnel both locally and internationally shortly after award of the contract.

Resistivity and bathymetric surveys were carried out simultaneously.

For the resistivity survey, a high resolution geophysical method known as Aquares was used.

A total of twenty-one survey lines perpendicular to the beach and five lines along and close to the beach were run.

A surf zone survey was also carried out at the shallow parts to overlap with the survey lines run with the survey vessel.



A GPS Base Station was set up on a published benchmark at the beach and was used as a fixed point for elevation and easting-northing. A GPS Rover Unit was mounted on the survey vessel. An echo sounder and transducer were also set up and all equipment connected to the survey computer.

Data was relayed from the survey computer to the two other computers used for the resistivity survey.

All data was recorded instantly during the survey and processed after completion of the entire survey.

The full handover report to the Client included detailed description of the surveyed area, benchmarks used, description of subsoil conditions, etc. Full A0 size layout drawings of the bathymetry and horizontal and vertical section drawings from the resistivity survey were included.

The scope of works was completed within the scheduled period and budget and to the Client's satisfaction.

