

Project Management International

KETA LAGOON BULK TERMINAL SITE INVESTIGATIONS

Client: Diamond Cement (Ghana) Ltd
 Location: Keta Lagoon, Ghana
 Period: December 2013 to March 2014

Marine and Terrestrial Geotechnical Investigations, Geophysical, Geospatial, and Metocean Surveys.

Diamond Cement required site investigations for a new bulk products terminal at Keta Lagoon, Ghana. Haskoning DHV was appointed as the Client's Engineer, and PMI were appointed to undertake the site investigations.

Scope of Works

Offshore Geotechnical Investigations: 13no. 5m vibrocores to obtain ground profiles

Onshore Geotechnical Investigations: 7no. boreholes up to 40m depth with sampling and insitu testing.

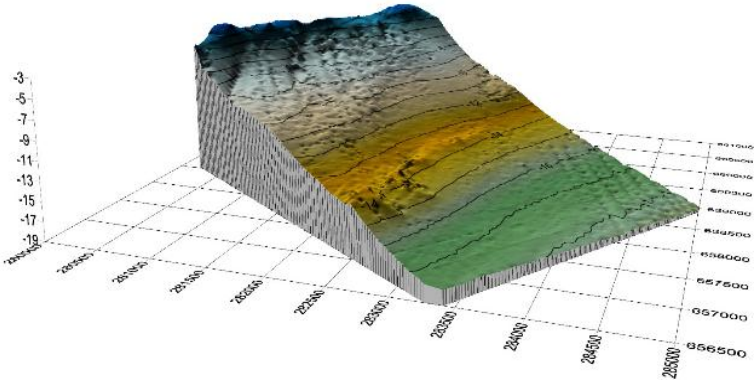
Laboratory Testing: To obtain materials properties of vibrocore and borehole samples.

Offshore Geophysical Surveys: Sub-bottom profiling and Sidescan sonar surveys of a 3km x 4km offshore area.

Bathymetric Surveys: Bathymetric surveys of 3km x 4km area. Jetski survey techniques were used to survey the surf zone.

Topographic Surveys: Detailed topographic plans were developed from land survey of a 3km x 1km area to interface with bathymetric surveys.

Metocean Conditions Surveys: AWAC monitoring buoys were installed at two places for a two month period to obtain local wave, current, tide, and water turbidity properties.



The Works

Vibrocoreing works were executed in December 2013. The remaining works were undertaken in the period January to March 2014.

PMI mobilised teams from Accra Ghana to site. Each discipline was led and reported on by a specialist technician or surveyor. Work on site was executed in close cooperation with the Client and Haskoning DHV Engineer on site.

Standard laboratory testing of samples was undertaken in Ghana. Advanced testing was executed in South African and European laboratories.

Conclusion

The project was completed on time and within budget to the satisfaction of Diamond Cement and Haskoning DHV.

