

# PROJECT MANAGEMENT

## Project Management

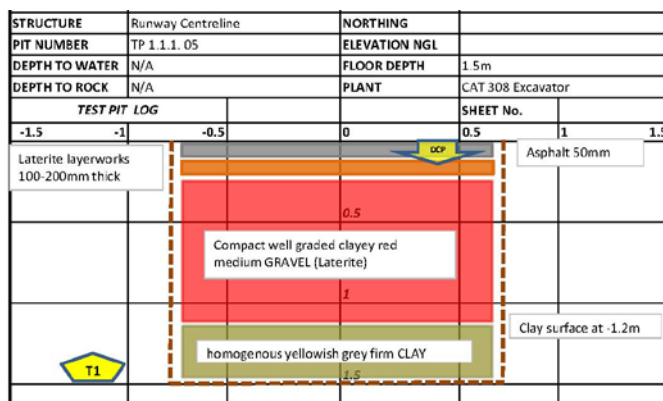
International

### Geotechnical Investigations, Tamale Airport, Ghana

Client: Queiros Galvao  
 Location: Tamale, Ghana  
 Period: January to March 2014

#### Geotechnical Boreholes, Test Pits, Drainage Pits, and Laboratory Testing

Queiros Galvao, a Brazilian infrastructure contractor, is undertaking a project to upgrade the Tamale International Airport, in association with the Government of Ghana. PMI were appointed to undertake geotechnical site investigations of the works in order to obtain information for the design of runway and airport terminal infrastructure upgrades.



#### Scope of Work

The geotechnical site investigations were conducted along the centreline of the existing and extended runway and on the footprint of proposed new airport infrastructure developments.

#### Work included:

- 84no. geotechnical test pits 1.5m to 3m deep, with Nuclear density and Moisture testing, DCP testing and sampling;
- 8no. drainage test pits to 3m depth, including permeability testing;
- 20no. geotechnical boreholes to 10m depth, with SPT testing and sampling;
- Laboratory testing of geotechnical samples;
- Geotechnical logging;
- Project reporting.

#### The Works

The contract commenced in late January 2014, with the geotechnical test pit works. The boreholes were drilled directly after the test pit campaign had been completed. Laboratory samples were transported by road to Accra for testing.

Site work was challenging in that the airport remained live and therefore work was generally limited to the daily

time period of 15h00 to 01h00.

Test pit holes on the runway centreline needed to be reinstated to full runway carrying capacity by 8am on the day following the excavation. This was achieved through close cooperation between PMI and the main contractor.

Detailed geotechnical logging of trial pits and boreholes was undertaken on site as work progressed.

#### Conclusion

The site investigation contract was executed in good time, to the satisfaction of the Client.

