Abstract

It is well known that the adoption of an appropriate construction methodology is critical to quality outcomes for bored piles (drilled shafts). Many case studies have been published documenting quality issues that have arisen due to a range of causes involving ground conditions, ground support, drilling and cleaning techniques, groundwater, concrete properties and concreting methods, amongst other things. Despite the body of published information, pile defects remain common in practice.

The presenter has over 20 years’ experience in the Australian piling industry and has participated in many hundreds of projects involving bored piles in design, construction, testing, and independent expert roles. It is the presenter's experience that many defects are caused by conditions or practices that are known to be problematic, but that are often not recognised or addressed at the time of the works. The presenter will draw upon his own construction experience, published case studies and guidelines, and observations from independent pile testing and review activities, across the Australian piling industry.

The intent of the presentation is to provide a consolidated review of typical industry practices and to highlight key areas in which construction quality can be enhanced.

About Ben Collingwood

Dr Ben Collingwood has been heavily involved in the Australian foundation engineering industry for over 20 years, having held positions in research, consulting and contracting roles.

He completed a Ph.D in 2000 at Monash University on the effects of construction practices on the performance of rock socketed bored piles. In 2010, Ben joined Dr Julian Seidel in establishing Foundation Specialists Group (FSG), which provides specialist consulting advice in relation to deep foundations and geotechnical engineering both nationally and internationally.

Ben has a detailed technical and practical understanding of a broad range of deep foundation systems, as well as retention and ground improvement works.