



Technical Visit to Foundation and Basement Construction of IKEA+MYTOWN, Jalan Cochrane, Kuala Lumpur

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The technical visit to IKEA + MYTOWN Development was organized by the Geotechnical Engineering Technical Division (GETD) on 19 July 2014. A total of 29 participants attended the technical visit.

The project

Prior to the visit, a representative from Bachy Soletanche – BSG Construction Sdn Bhd (the main contractor) briefed the participants on the project. It was pointed out that IKEA Jalan Cochrane and MyTown Development consists of a new IKEA store, a multi storey shopping complex and 3 towers up to 50 storeys with 2 basements of car park.

Construction challenge

The design calls for a global building footprint of 800m x 250m built over Kuala Lumpur Limestone formation. In view of the tight construction schedule, complicated subsoil profile, karstic Limestone features, shallow bedrock and sensitive structures (two MRT tunnels are crossing the project in its center), the project team was made to grapple with geotechnical engineering challenges. Hence Down the Hole Hammer (DTH) method of constructing the foundation system was adopted in this shallow bedrock condition.

Down The Hole Hammer (DTH) method

DTH is a common system used for constructing micropiles up to pile diameter of 300mm for drilling into rock layer. However, 570mm diameter DTH piles were used in this project for the retaining walls and the foundation. With a combination of rock bolt and anchors the design of the retaining wall offered an interesting alternative to the conventional design.



Participants visited the site after the briefing. Rock blasting in control manner was observed.