UNIVERSITI TEKNOLOGI MARA

FACULTY OF CIVIL ENGINEERING

INDUSTRIAL TRAINING REPORT

NURUL FATHIAH BINTI ISMAIL
(2012694662)

MMC - GAMUDA KVMRT (PDP) SDN BHD
A 01 - 05, LEVEL 1,
MENARA GLOMAC,
GLOMAC DAMANSARA,
JALAN DAMANSARA,
60000, KUALA LUMPUR

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Nurul Fathiah Binti Ismail

ABSTRACT

Bored Pile is a method that is able to excavate into soft or hard rock, and also underground obstacles. Casing tub is oscillated and installed by the main body of earth drill and Vibrator Machine until upper rock level. Upper soil from ground to rock is removed by Hammer Grab or Earth Drill Auger (BG Machine). Below the rock excavation is used generally by main BG machine with rock drilling tool or RCD Machine. This method can be used for foundation of large bridge in river, foundation of super structure building, foundation of marine structure, and so on. Indeed, this is a more effective method in removing underground reinforced-concrete structures for redevelopment works.

Bored Pile has a lot of its own specialities. Firstly, it has the ability to maintain a stable shaft. Besides that, it is easy to identify strata type if we use bored pile. Next, bored pile has less any disturbance and subsidence to the surrounding areas. Furthermore, it also produces less noise and vibration. Lastly, it has a high efficiency in Quality Assurance (QA) or Quality Control (QC).

Basically, bored pile is a type of deep foundation. Bored Pile has a lot of application in construction. Among them are, foundation penetrated to hard ground, foundation of buildings, foundation of tank and foundation of bridge abutment and pier. Besides that, bored pile is also used in the removal of underground structure like concrete block.

The construction of bored pile started with surveying the point where bored pile is to be held. Next, equipment is carried in and set up. Then, casing is installed and when the drilling machine has been set up, drilling is started. After drilling, slime needs to be removed. After that, the point will be inspected and if it is passed then rebar cage can be installed. Next, slime is removed for the second time before concreting can be done with tremie pipe. After concreting, the tremie pipe and casing is removed. Finally, toe grouting or cutting off can be done and the bored pile is complete.

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