

## **Foundation and embankment construction in peat: an overview**

### **ABSTRACT**

This paper has discussed on the various methods of foundation and embankment construction over peat under two major construction aspects; peat removal and peat left in place. Peat removal means doing away with the peat soil prior to the construction and the methods under this aspect have been categorized as avoidance, peat excavation, peat replacement and peat displacement. On the other hand, peat left in place entails all the constructions that are undertaken directly on peat deposit in order to avoid bulk earthworks and the methods under this aspect have been categorized into methods of accelerating consolidation, ground improvement techniques to reduce deformation, load modification, stabilization and piling methods. All the techniques under these methods have been explained fully. Finally, the paper presented a potential research area of using air pressure and lightweight materials for foundation construction over peat.

**Keyword:** Peat; Floating foundation; Embankment; Construction