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A Study on Finite Element Modelling of Earth Retaining Wall Anchored by Deadman Anchor

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Abstract : In this paper, the earth retaining wall anchored by discrete deadman anchor to support excavations in sand is modelled and analysed by finite element analysis. A study is conducted to examine how deadman anchorage system helps in reducing the deflection of earth retaining wall. A simplified numerical model is suggested in order to reduce the simulation duration. A comparison between 3-D and 2-D finite element analyses is illustrated.

Keywords: finite element, earth retaining wall, deadman anchor, sand

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