KINERJA GALIAN DALAM DI TANAH SANGAT LUNAK DENGAN MENGGUNAKAN DINDING SILANG: STUDI KASUS PROYEK APARTEMEN DI JALAN KEBUN SIRIH JAKARTA

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In urban areas, a lot of deep excavation is carried out for construction of basement. Excavation in areas with very soft clay deposits that are deep enough, we need a good retaining system. Using the diapraghm wall as a retaining system for deep excavation is a good choice. The use of diapraghm walls is expected to limit the movement that occurs in the walls and avoid leaks that occur in retaining walls, this is necessary to minimize damage to adjacent buildings. Top down excavation method which is quite complicated implementation can be done. In this research cross walls will be used to as a lateral resistance on the retaining wall. Analysis 2D of finite element using the 2D Plaxis software was carried out to investigate the performance of soil retaining system. The results of the analysis shows that using a cross wall at a location below the raft pile can reduce the movement that occurs in the retaining wall and excavation stage can be reduced.

Keywords very soft clay, deep excavation, diapraghm wall, deformation, lateral support, cross wall