

**Centrifugal Model Test and Design Method for Temporary Retaining Wall
Using Soil Buttress as Displacement Suppressing**

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It is important to suppress displacement of the temporary retaining wall when excavating in the urban area nearby existing structures. Soil buttresses have economic advantages compared to struts, such as in large-scale excavation works. On the other hand, an issue in designing such temporary retaining walls is that displacement suppressing mechanisms need to be considered by FEM and so on. In this paper, we clarified the displacement suppressing mechanism of soil buttresses by centrifuge model tests with excavation. Cutout shaped soil buttresses were proposed based on the test knowledge. Furthermore, we proposed the design method of temporary retaining wall using soil buttresses as displacement suppressing.