## Research about new assessment method of bearing capacity characteristics of foundation at the time of earthquake

## [ Point ]

A load test of model pile was conducted by using various types of loading methods, for the purpose of recognizing pile bearing capacity characteristics at the time of earthquake and studying the assessment method of dynamic bearing capacity at the time of earthquake from the bearing capacity characteristics obtained from static load test of the traditional pile. In addition, analytical examination was conducted on the impact of bearing capacity characteristics obtained in the test, on the bearing force of pile foundation.

As a result, compared to surrounding resisting force property obtained by generally conducted push-in test, it was revealed that surrounding resisting force of pile that received positive and negative alternate load was significantly lowered, and that relatively significant dynamic resisting force was demonstrated for loading speed lower than that of rapid load test. Furthermore, it was revealed that the former characteristics had a significant impact on the bearing force of foundation.

Keywords: pile foundation, dynamic bearing capacity characteristics, vertical load test of pile, positive and negative alternate load, rate effect