Research Report of NILIM No.76 January 2025

建築物と地盤に係る構造規定の合理化による都市の再生と強靱化に資する技術開発

建築研究部・都市研究部

Research and Development for Regeneration and Resilience of Cities by the Rationalization of Structural Regulation Related to Buildings and Ground

Building Department
Urban Planning Department

概要

近年では都市の再生・活性化が要請される中で、既存宅地の有効活用と建築物の更新の機運が高まり、また地震に対する都市の強靱化も求められている。本研究では、建築物の更新時に支障となる従前建築物の杭の有効活用や既存宅地 擁壁の耐震化を促進する設計法等を検討し、都市の再生と強靱化及びその設計・施工に係る生産性向上に資するための技術開発を行った。

キーワード: 既存杭、既存宅地擁壁、設計法、耐震補強

Synopsis

In recent years, with the demand for urban regeneration and revitalization, there has been a growing momentum for the effective use of existing residential site and the renewal of buildings, and there is also a demand for cities to be more resilient against earthquakes. In this study, we investigated design methods that promote the effective use of piles from previous buildings, which would be an obstacle when renovating buildings, and the seismic resistance of retaining walls on existing residential site. These design methods are aimed to lead to the regeneration and resilience of cities and to improve the productivity of their design and construction.

Key Words : Existing Pile, Existing Retaining Wall, Design Method, Seismic Reinforcement