

Zuha Island

Dubai, UAE

Keller successfully performed ground improvement works using the Vibro Compaction technique and improved the in-situ soil up to a depth of 18m below the working platform level.



The project

Zuha Islands by Zaya is a collection of 30 ultra-luxury waterfront villas on a private island in Dubai, United Arab Emirates.

As part of construction Zuha Island at world island – Dubai – UAE, Keller carried out Ground Improvement work by using Vibro Compaction for the full island area in order to improve the in-situ weak soil, prior to the start of the villa's construction.

The challenge

The project presented several key challenges, including complex offshore logistics and executing ground improvement work in close proximity to existing slopes.

The solution

Managing offshore logistics required meticulous planning and coordination to ensure the seamless transportation of equipment, materials, and personnel while minimizing delays. Additionally, conducting ground improvement near slopes posed technical challenges, demanding precise execution to maintain slope stability and prevent any structural impact. Keller’s expertise in geotechnical solutions enabled the team to successfully navigate these challenges, ensuring the project’s smooth progression while adhering to the highest safety and quality standards.

Project facts

Owner(s)

Zaya Development

Keller business unit(s)

Keller Foundations Contracting

Main contractor(s)

Keller Foundations Contracting

Solutions

Ground improvement

Markets

Residential

Techniques

Vibro compaction