

Subsurface Constructors

Ground Improvement

The Edge at Cleveland State University



Installing ground improvement for student housing at CSU

[The Edge at Cleveland State University \(CSU\)](#) is an 11-story premium student housing complex located a block away from Playhouse Square in Downtown Cleveland, Ohio. The building provides 240 residential suites, a 163-car parking garage and various other amenities. Subsurface Constructors, Inc. designed and installed 640 [vibro stone columns](#) and 160 grouted uplift anchors in order to reinforce the urban fill and the underlying very loose to dense sands. The [ground improvement design](#) provided a 5,000 pounds per square foot (psf) post-treatment bearing pressures and 45 kip per ground anchor uplift capacity.

Project details:

Owner: Cleveland State University

Geotechnical Engineer: Professional Service Industries, Inc. (PSI) – Cleveland

General Contractor: Clayco

Structural Engineer: Alper Audi, Inc. and Crux Engineering

Services Provided: Vibro stone columns, grouted uplift anchors

Year: 2017

Location: Cleveland, Ohio