



# SUBSURFACE CONSTRUCTORS, INC.

Full Service Geotechnical Contractors and Ground Improvement Specialists

## Vibro Stone Columns



IL Rte. 7, Orland Park, IL - Vibro Stone Columns for MSE Wall Foundation Stabilization

### **PROJECT DESCRIPTION**

Reconstruction of the Southwest Highway (IL Rte. 7) over LaGrange Road interchange consisted of a bridge replacement, new roadway, and MSE walls. The MSE wall foundations were underlain by two layers of stiff clay sandwiching a layer of very soft, organic clay. A ground improvement systems consisting of vibro stone columns was designed by Geo Services, Inc. in order to mitigate the soft clay layer. Subsurface Constructors was the successful bidder for the required ground improvement system.

Ground improvement consisted of installing vibro stone columns using both bottom-feed and top-feed column installation in predrilled holes. Subsurface installed 420 stone columns in approximately 21 working days.

### **PROJECT TEAM**

Owner:	Illinois DOT	Geotechnical Engineer:	Geo Services, Inc. / Illinois DOT
Structural Engineer:	Illinois DOT	General Contractor:	Dunnet Bay
Ground Improvement Design/Builder:	Subsurface Constructors, Inc.		