



SUBSURFACE CONSTRUCTORS, INC.

Full Service Geotechnical Contractors and Ground Improvement Specialists

Micropile



St. Louis Zoo Fragile Forest, St. Louis, MO – Micropile for Underpinning Existing Building

PROJECT DESCRIPTION

This project involved construction of a new basement level below the existing slab-on-grade floor of the St. Louis Zoo Ape House. The new basement would be used to house animal enclosures and allow access for the animals to the new outdoor areas of the Fragile Forest complex.

In order to underpin the existing building walls, Subsurface Constructors was contracted to install 31 - 7.625" diameter micropile alongside the interior and exterior walls and utilized cantilevered steel brackets welded to the micropile to carry the wall loads. The micropile were founded in hard shale approximately 40 feet below existing grade. As the new basement was excavated below the walls, Subsurface installed soil nails and shotcrete to support the excavation.

PROJECT TEAM

Owner:	St. Louis Zoo	Geotechnical Engineer:	URS Corporation
Foundation Contractor:	Subsurface Constructors, Inc.	General Contractor:	Helmkamp Construction