



LANDSLIDE STABILIZATION | TIEBACKS | MICROPILES

INTERSTATE 40 LANDSLIDE REPAIR HAYWOOD COUNTY, NORTH CAROLINA

Interstate 40 is a vital artery that links the industry of the Midwest with the business centers of the Southeast Coast. It was constructed in the early 20th Century by blasting through the mountains and using the subsequent shot rock as roadway fill. In a remote area of western North Carolina, I-40 parallels the Little Pigeon River.

In September 2004, Hurricanes Frances and Ivan set a torrent of rain on the mountains of western North Carolina. The resulting raging flood waters of the Pigeon River eroded the embankment below Interstate 40 and sent one of the eastbound lanes along with the roadway shoulder into its depths. In this emergency situation, Schnabel Geotechnical Design & Construction was contracted to design and build a repair that would keep this important highway open.

This was no easy task as there was no room to work. The remaining lanes of I-40 had to remain open and the final product had to be virtually maintenance free and last at least 100 years. Schnabel was able to accomplish the feat and satisfy the criteria by constructing two tied-back micropile walls. The system used 102 micropiles, 115 tiebacks, and 1,215 linear feet of concrete wales to support the 705 foot long landslide without disruption to the remaining lanes of I-40. This logistically and technically difficult project was finished safely and on schedule.

Owner: **North Carolina DOT**

General Contractor: **Phillips & Jordan**

Design/Build Specialty Contractor:

Schnabel Geotechnical Design & Construction



For more information on this project or any other of our projects please contact Schnabel at:

(703) 742-0020 or visit our website at www.schnabel.com

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