

Warren Schlatter, Defiance County Engineer, Wins International NOVA Award

Bob Barrett, retired from the Colorado Department of Transportation and Soil Nail Launcher, Inc; Mike Adams of FHWA; and Warren Schlatter of Defiance County, Ohio were presented the international NOVA award for 2009 by the Construction Innovation Forum from a list of 36 innovations. This award was for the concept of geosynthetically reinforced soil (GRS) bridge abutments. The technology is also trademarked by Barrett as geosynthetically confined soil (GCS™).

GCS™ retaining walls and abutments are differentiated from other soil reinforcing concepts by the use of light inclusions on close spacing. University, state, FHWA and USFS researchers have shown this design approach to be perhaps 20 times stronger than the MSE concept of heavy reinforcements on wide spacing (quasi-tieback designs). FHWA and NCHRP research indicates that the service life of these structures should exceed that of any traditional wall or abutment choices.

Mr. Schlatter's group has built 16 bridges on GCS™ abutments. They have demonstrated significant cost and time savings, and eliminated the need for expansion joints - no "bump" on Schlatter's bridges. Barrett demonstrated that bridges and boxes can be built in a single day with this revolutionary technology. Detours can be avoided in some cases, resulting in tremendous savings at some locations.

Mr. Adams' recent research project at FHWA shows that the bearing capacity of his GRS abutments can exceed 20 tons per square foot - equal to sandstone bedrock. FHWA is reportedly upgrading their MSE design guidelines to include Mr. Adams' comprehensive GRS research at their Turner Fairbank Highway Research Center.

More information can be found at www.gcswall.com