Electrical Imaging Resistivity Fence Diagram of Profiles Showing Relationships of Subsurface Features at Location of Subsiding Bridge

Analysis indicates that a significant joint or fracture zone crosses the creek as shown resulting in several sinkholes and water loss further driving karst development. Deeper limestone bedrock has probably suffered a high degree of void development and skelletonization. Further karst development in and around the creek is likely to continue.

Orientations are approximate. Bedrock bedding strike is roughly ENE to WSW.

The northbound bridge piers began subsiding due to sinkhole activity along the stream forcing closure of the northbound roadway. SuperSting resistivity geophysics showed that most of the carbonate bedrock underlying the bridges to at least 200 feet was severely weathered except where the rock was dolomitic. Numerous test borings confirmed the findings of the geophysics.

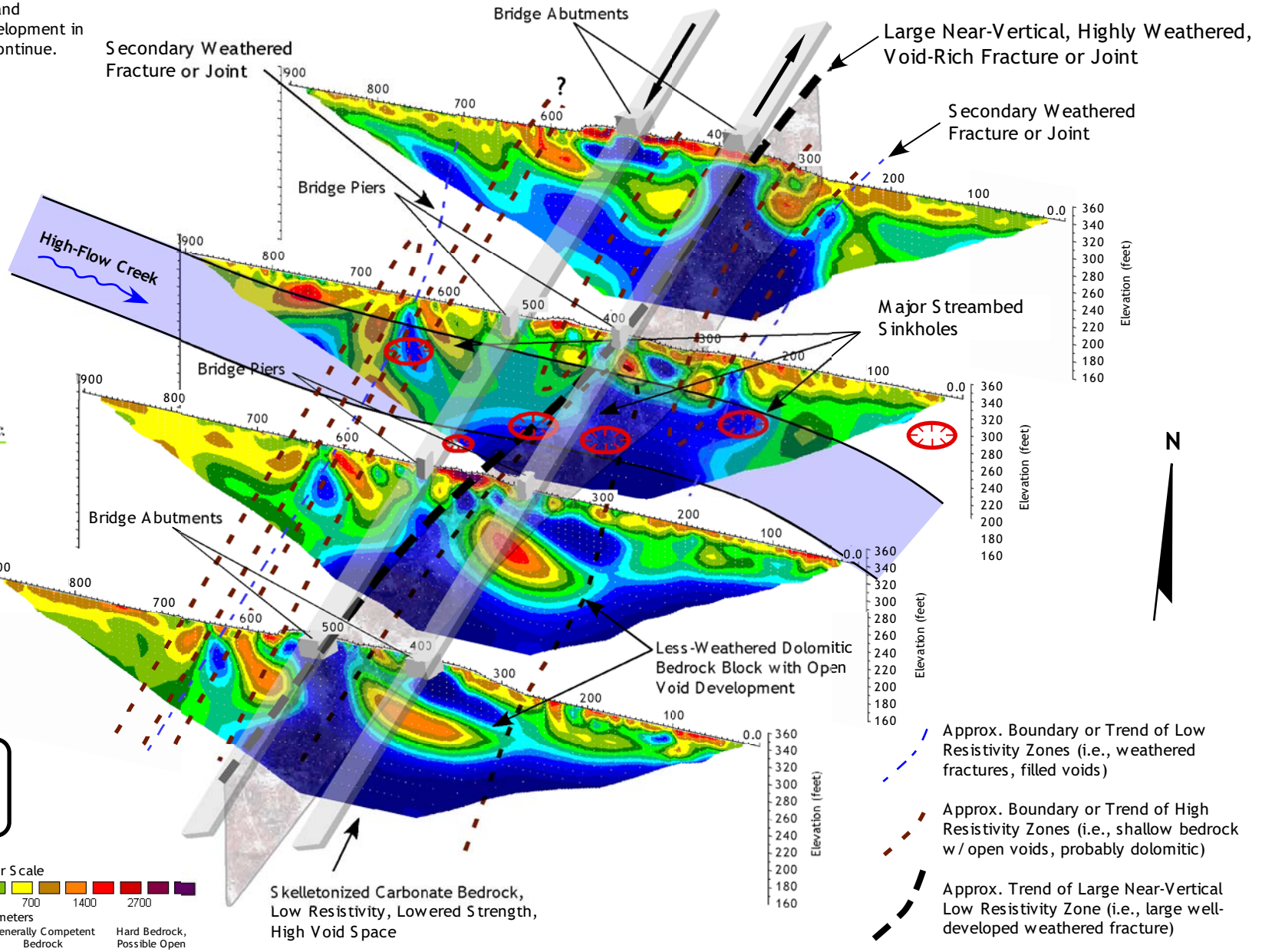
The SuperSting R8/IP from:

AGI Advanced Geosciences, Inc.

Tel: +1 (512) 335-3338
Fax: +1 (512) 258-9958
E-mail: sales@agiusa.com
Web: http://www.agiusa.com

Case history courtesy of

GTS TECHNOLOGIES



Resistivity Contour Scale

20.0 45.0 90.0 190 360 700 1400 2700

Resistivity in ohmmeters

Wet, Unconsolidated Materials, Weathered Bedrock | Drier, Unconsolidated Materials, Somewhat Weathered Bedrock | Generally Competent Bedrock | Hard Bedrock, Possible Open Voids

Approx. Boundary or Trend of Low Resistivity Zones (i.e., weathered fractures, filled voids)

Approx. Boundary or Trend of High Resistivity Zones (i.e., shallow bedrock w/ open voids, probably dolomitic)

Approx. Trend of Large Near-Vertical Low Resistivity Zone (i.e., large well-developed weathered fracture)