US 231 MP 301.7
Morgan County, Alabama
Kaye Chancellor Davis, P.E.
Deputy Materials & Tests Engineer

February 2019

US 231 Slide Repair Project Overview
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Geology & Road Construction

• Side hill cut along Brindley Mountain
• Sandstone & Shale overlying Limestone
• Original 2 lane roadway built in 1945
• Built bifurcated 4 lane in 1967

Exploration Program

• 2019 – 5 borings - no piezometers - 3 inclinometers
• 2-3/2020 - 42 Borings - 6 piezometers 9 inclinometers
• 6/2020 - 32 Borings between letting and contractor mobilization, 6 inclinometers

Why Dan Brown & Associates?

• Very Young/Inexperienced ALDOT Staff
• Very complex slope stability analysis
• Experience with the DBA team

Accelerated Innovation Deployment Grant

• Invest in new technologies
  • Shape Arrays
  • HoloLens
• Training on these technologies
  • Virtual reality 3D model development using information from UAV, Electrical Resistivity, borings, inclinometers, Shape Arrays, etc.