

SR 115/US 129 “The Dragon” Slide

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Map of area/setting

Maryville, TN - Google Maps - Windows Internet Explorer

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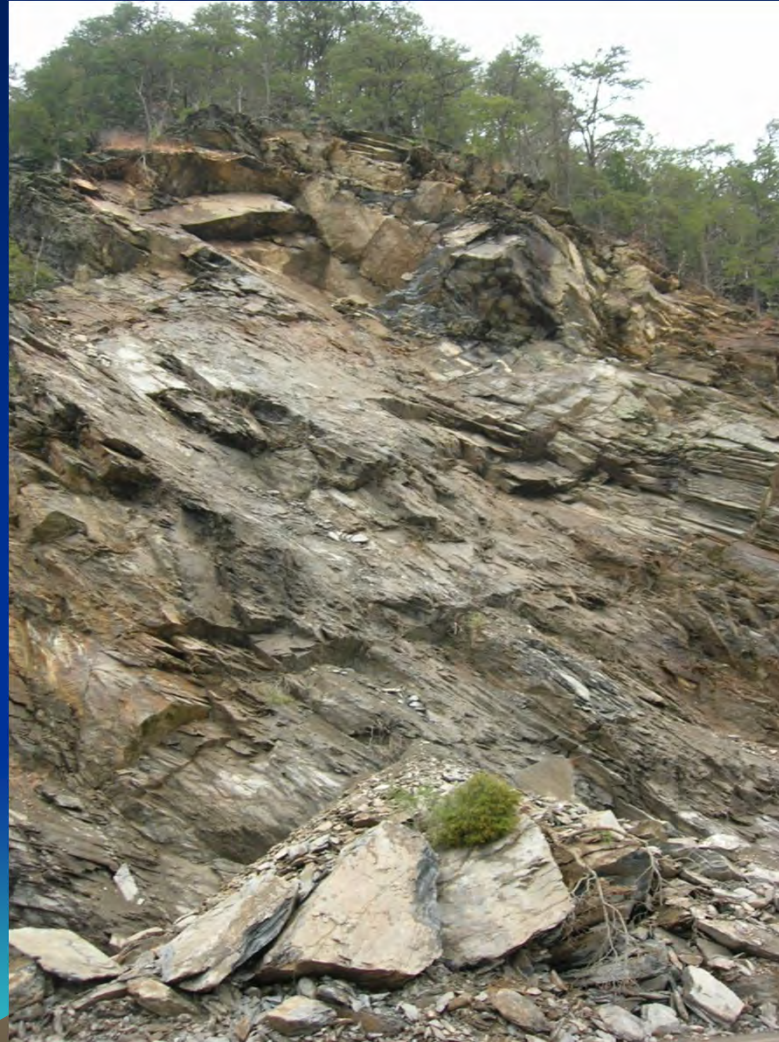
Satellite Traffic

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Done

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Slope deemed unsafe for traffic after inspection



Aerial view on March 19, 2010



Aerial view on March 19, 2010



The small stuff can also be disconcerting



Photo by Harry Moore
Golder Associates

Remedial Measures

Often used in combination

- Removal – Blasting, scaling, trimming
- Restraint – High capacity anchors, rock bolts, anchored wire mesh, retaining walls
- Control – Draped wire mesh
- Containment – High energy fencing
- Widening of ditch/catchment area



Trimming and Scaling underway, shown on April 11, 2010



More trimming and scaling



Cleaning portions of the slope with compressed air



Pacific Blasting Scaling Crew



View of slope showing debris used as berm along lake



View from top of slope



House of cards, originally to be trimmed and scaled, to be removed



Drilling for blasting



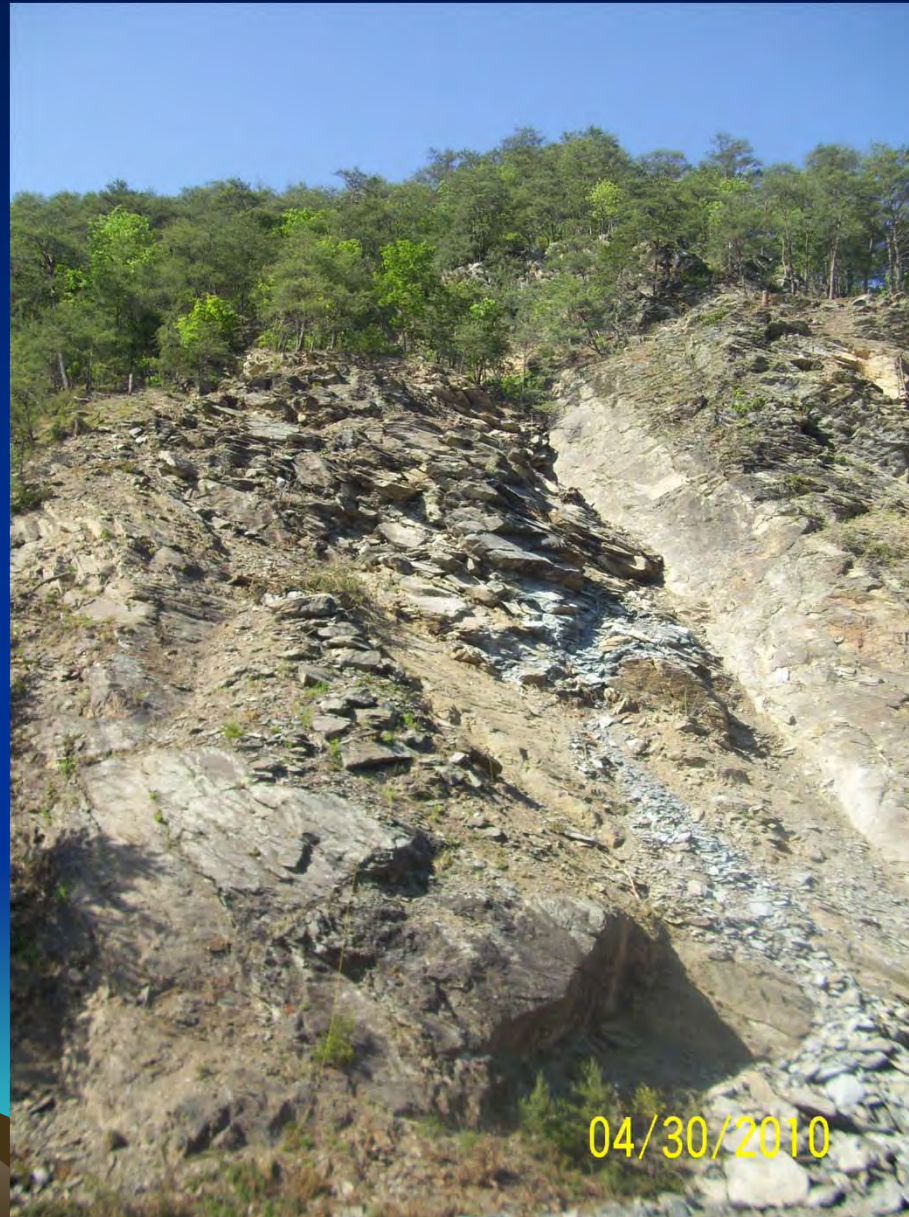
More drilling



House of cards before 1st shot



House of cards after 1st shot



House of cards after 2nd shot



View from Ox Blue camera location



Remote Camera



Anchors prepared for installation



Anchors/dowels prior to grouting



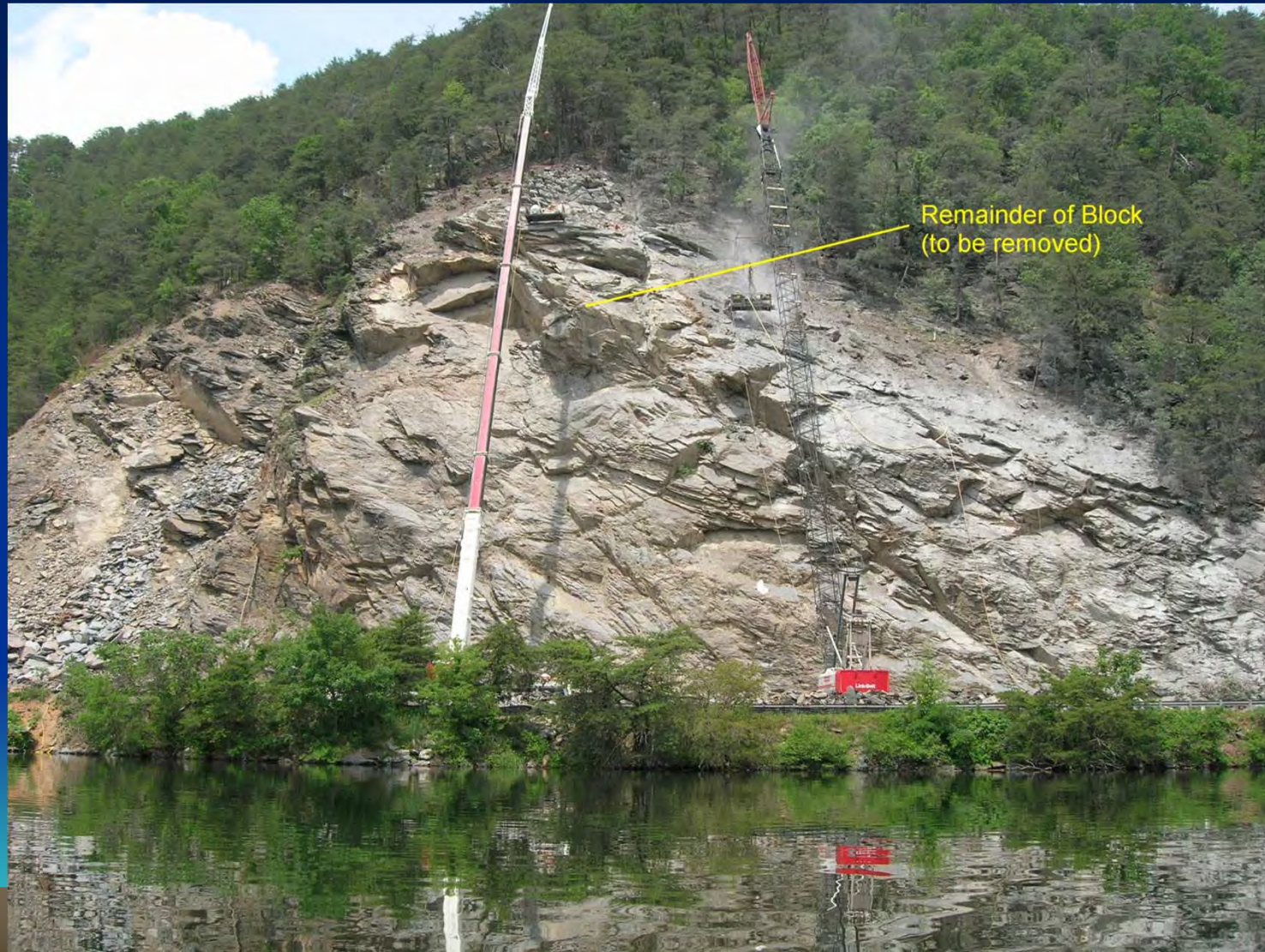
Closely spaced anchors on ledge



View of slope from Chilhowee Lake



Slope on May 14, 2011



Trim Blasting



More trim blasting



Slope before and after trim shot on May 18th



Trim shot on May 21st



Before and after trim shot on May 21st



Adding to water to assist gravity



Tracking movement of House of Cards on June 7th



Drilling for anchors on slope face



Installing wire mesh and drilling for anchors



Preparing to install wire mesh



Hanging wire mesh



Weaving mesh together



Attempting to drill for one more shot



Beats climbing up a rope (for most of us)



One last shot on June 26th



A lot of rubble, but rock remains



Excavating rubble



Wire mesh drape curtain in place



Road and ditch below wire mesh curtain



April of 2011, time for some debris removal



Challenges

- Developing/selecting the most cost-effective remedial measures (maintaining traffic is a critical factor).
- Producing construction plans/contract documents
- Funding
- Keeping database up-to-date

