

Sam Billingsley, PLS

Director, Reality Capture Group

Portfolio

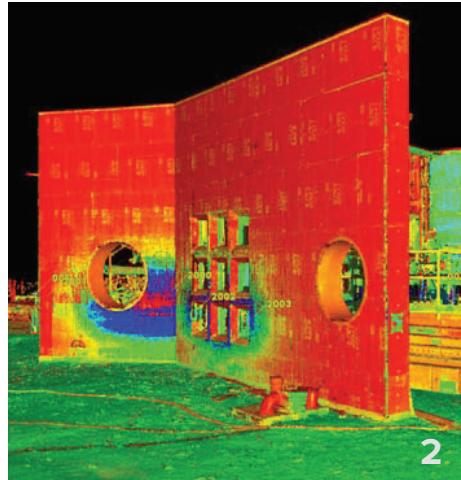
1. Forza Motorsport

Project manager tasked with developing the best methodology to capture racing circuits for use in the Forza Motor-sport Title for Xbox One. Subsequently tasked with data capture worldwide.



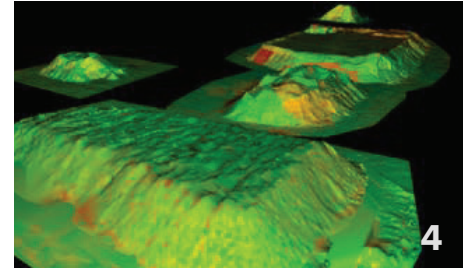
2. TFC Canopy

Developed a methodology for quantifying deviation of as-built structures vs. design for a metal envelope construction fabricator. This method is now standard practice for this firm. This method was highlighted in Metal Construction News, Feb 2015.



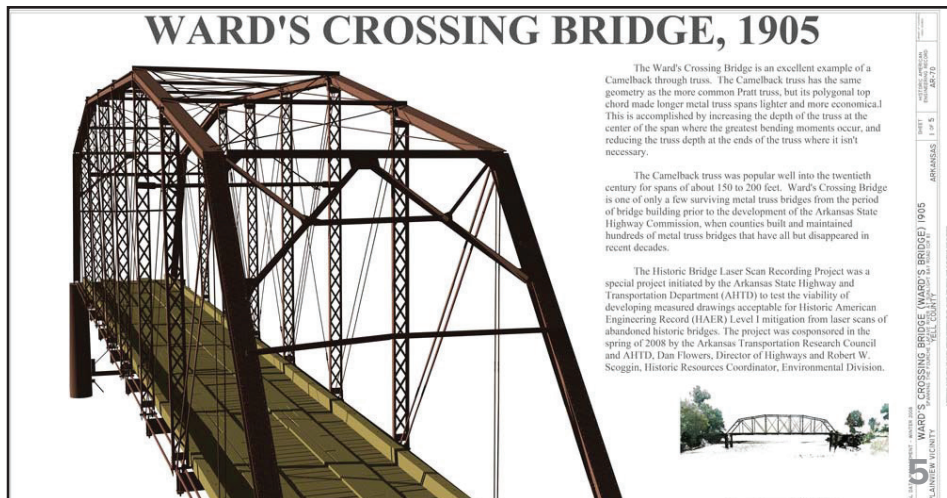
3. Jack Daniels Distillery

Originally tasked with quantifying movement in their oldest barrel house, this project became a VDC test for multiple contractors once they realized that they could QA/QC designs using our point cloud data and Revit models.



4. Volumetric Scans

Account manager for multiple mining contracts where quarterly to yearly product volume surveys were needed. Responsible for shifting to laser scanning for increased speed & accuracy.



5. HABS/HAER

Lead modeler on this project creating HABS/HAER documents for the Arkansas State Highway and Transportation Department from point cloud data. A set of these drawings won 2nd place at Leica's HDS User Conference in 2009.

WARD'S CROSSING BRIDGE, 1905

The Ward's Crossing Bridge is an excellent example of a Camelback through truss. The Camelback truss has the same geometry as the more common Pratt truss, but its polygonal top chord made longer metal truss spans lighter and more economical. This is accomplished by increasing the depth of the truss at the center of the span where the greatest bending moments occur, and reducing the truss depth at the ends of the truss where it isn't necessary.

The Camelback truss was popular well into the twentieth century for spans of about 150 to 200 feet. Ward's Crossing Bridge is one of only a few surviving metal truss bridges from the period of bridge building prior to the development of the Arkansas State Highway Commission, when counties built and maintained hundreds of metal truss bridges that have all but disappeared in recent decades.

The Historic Bridge Laser Scan Recording Project was a special project initiated by the Arkansas State Highway and Transportation Department (AHTD) to test the viability of developing measured drawings acceptable for Historic American Engineering Record (HAER) Level I mitigation from laser scans of abandoned historic bridges. The project was cosponsored in the spring of 2008 by the Arkansas Transportation Research Council and AHTD, Dan Flowers, Director of Highways and Robert W. Scoggin, Historic Resources Coordinator, Environmental Division.

