

## Two men and a wrench Charlotte Highway Bridge Update (February 18, 2007)

Vern Mesler, Project Manager for the restoration of historic bridges for Calhoun County Historic Bridge Park

At the end of a recent Calhoun County Road Commission meeting, Dennis Randolph, Managing Director, enthusiastically invited those attending to the Historic Bridge Park. "You have to see the work being done on the bridge in the park. It's literally being put together by two men and a wrench." The two men Randolph was referring to are Wayne Conklin and Rob Denniston, who have worked for the Calhoun County Historic Bridge Park doing the restoration and assembly of most of the historic bridges in the park. With a gin pole, come-a-long, pry bar, hydraulic jacks, and winches, Conklin and Denniston maneuvered every restored member of the Charlotte Highway Bridge with the minimum of heavy equipment. From the day the floor beams were set to the day the final bridge pin was put in place, Conklin and Denniston often stood back in amazement at the work they had completed on this amazing 1886 wrought iron bridge.



Wayne Conklin and Rob Denniston tighten a top chord bridge pin during one of the coldest days in January.



Wayne Conklin

Wayne Conklin has lived and worked in Battle Creek, Michigan, most of his life except for three and a half years working in Indianapolis, Indiana. Conklin worked for three years at the Battle Creek Enquirer newspaper just before he was hired at the Calhoun County Historic Bridge Restoration Shop. Conklin replaced John Lewis, another dedicated bridge restorer, who had to leave for medical reasons. The first historic bridge Conklin worked on was the 20-Mile Road Bridge, the second bridge placed in the park, an all-riveted pony truss. Conklin developed his skill as a riveter helping to drive over 2,000 rivets in the restoration of the 20-Mile Road Bridge. In 2000, Conklin passed his AWS welding certification test. All welding that he performs on historic metal truss bridges is done to AWS standards and restoration standards developed at the Bridge Restoration Shop for welding historic steel and wrought iron. Conklin completed an industrial safety course before hiring in at the Bridge Restoration Shop and is known for his approach to good safety practices.



Bridge Dog

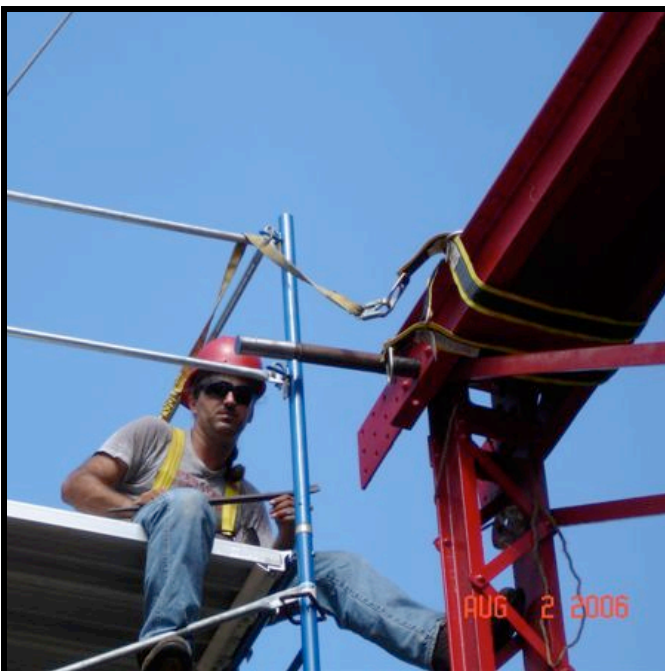
During the yearly Living History Demonstration at the Bridge Park, Conklin's mother, sister, and other family members come to watch his riveting demonstration, often telling Dennis Randolph how proud they are of the work he is doing in preserving historic metal truss bridges in the park. Conklin enjoys the craftsmanship and historic aspects of bridge restoration. During the riveting of the replicated floor beams for the Charlotte Highway Bridge, he handled the No. 90 rivet hammer as true as any craftsman and drove a rivet as sound as any riveter.

Conklin has a bit of a soft spot for stray dogs. During the summer of 2006, a mutt of unknown pedigree decided to take up residence under the Charlotte Highway Bridge. The dog was a friendly mutt, thin with sore feet from doing a lot of walking, no identification. After work, Conklin brought the dog food, water, and bedding. During a weekend visit Conklin met a couple who was walking through the park and talked them into adopting the dog. The bridge dog happily followed the couple home.



Rob Denniston

Rob Denniston grew up in Sherwood, Michigan, and attended Athens schools. He took classes in agriculture mechanics and carpentry at a local vocational education center. Denniston and his wife Leesha have three children and live in Union City. The first historic bridge Denniston worked on was the Gale Road Bridge. The Gale Road Bridge was the first historic bridge that was assembled in the park with a gin pole. Denniston is quick with suggestions whenever we encounter problems during bridge restoration or assembly. Many of his suggestions end up being used. Denniston enjoys working on the historic bridges and during the riveting of the replicated floor beams for the Charlotte Highway Bridge he demonstrated skills of a professional heater. The heater is an important member of any rivet crew and key to the success of a riveted connection. "Heating the rivets does not depend so much upon the kind of fire or fuel as upon the rivet heater. Given a good, willing heater, and no matter how adverse the conditions are, he is always there with a good hot rivet and the work goes swinging along." These are the words of James Crombie, Foreman Boilermaker of Sawyer & Massey Co. Limited, Hamilton, Canada, who was awarded first prize in the 1907 Champion Rivet contest "How to heat and drive steel rivets."



During the lifting of a heavy top chord, Denniston would quickly climb the 24-foot high scaffolding as the top chord neared the top of the bridge. After attaching his safety line, he would use his pry bar, hammer, feet and hands to guide the top chord section into place. A dome-shaped nut, called a pilot nut, was screwed at one end of the bridge pin to protect the threads, a hammer nut at the other end, and the pin was driven through the pin holes. Recessed nuts specially designed for chord pins were threaded on the bridge pins. Denniston often brings his kids to the Historic Bridge Park to see the work their dad has done on restoring bridges.





The Charlotte Highway Bridge is a pin connected truss bridge, Once all the pins are installed, the bridge is ready to span the abutments.

Excitement grew as the final inclined end post was set place and preparation began to bring the last set of eye bars together so the final bridge pin could be driven. With a combination of come-alongs, hydraulic jacks, and heavy pry bars, the last set of eye bars was slowly aligned. The pilot nut and hammer nut were screwed upon the ends of the pin to protect the threads, and the pin was driven through the last pin holes successfully. Recessed nuts were attached to the chord pins, completing the assembly of the Charlotte Highway Bridge. The bridge crew is now tightening all the turnbuckles and bolted connections and will soon begin fabricating the bridge handrail.



Wayne Conklin and Rob Denniston



Vern Mesler, Rob Denniston, Wayne Conklin, and Dennis Randolph

For more information on obtaining copies of the soon-to-be published book by MSU Press “A Bridge Worth Saving: A Community Guide to Historic Bridge Preservation” please contact Dennis Randolph, Managing Director of Calhoun County Road Commission, 800 781 5512 or [drandolph@cccd.net](mailto:drandolph@cccd.net)