

## **FMA Case Study:** **Covered Bridge at Hardin Valley**

### **{Situation}**

When John Huber started thinking about a bridge for the Hardin Valley subdivision in Knox County, Tennessee, that he was developing, he realized he had a formidable problem on his hands. The bridge would be the centerpiece of the subdivision's main entrance, but the stream it would cross had a flood plain of ninety feet. After reviewing different designs and plans and vetting several very expensive estimates, John went searching for a more creative and less costly solution. He got in touch with FMA.

### **{Solution}**

FMA began by modeling the flood plain, performing trial and error scenarios, and identifying ways to reduce the ninety-foot span. The first big win came in the form of a bridge with a span of only 16 feet. FMA next introduced the idea of a pre-engineered covered bridge, which would further reduce the cost and construction times. After finding this more economical solution, FMA and John Huber then decided to increase the span and enhance its aesthetic appeal.

### **{Success}**

FEMA and Knox County Engineering and Public Works approved the bridge, and it soon became the development's centerpiece. The Hubers saved \$290,000 and shaved weeks off of their construction schedule.

**“We needed a creative and aesthetically appealing solution for our bridge. FMA exceeded our expectations. From our very first meeting with them, they told us what we could expect and what the process would look like...they were right.”**

~ John Huber, Owner