



Old Hurricane Deck Bridge Demolition December 6, 2013

CONTRACTOR FACTS:

- The prime contractor on the \$32 million Hurricane Deck Bridge replacement project is American Bridge Company, Inc.
- The blasting subcontractor is Duane Houkom, Inc.

BRIDGE BLAST FACTS:

- The old Hurricane Deck Bridge, spanning the Lake of the Ozarks near Sunrise Beach, Mo., is eight spans long. Three spans are concrete girders and five spans are steel truss girders. Only the steel truss spans will be removed by blasting.
- The steel truss spans will be removed in three blasts on three separate dates. The first blast will take place on Dec. 6. The second blast will be scheduled two weeks after the first blast, and the third blast will take place approximately two weeks after the second blast, weather permitting.
- The first blast will remove the north steel truss span. The second blast will remove the south steel truss span. The third blast will remove the center steel truss span.
- The total length of the truss spans to be blasted is 2,180 feet.
 - First blast = about 740 feet
 - Second blast = about 740 feet
 - Third blast = about 700 feet
- The blasting subcontractor is using a total of 111.72 pounds of explosives for all three blasts.
 - First blast = 31.16 pounds of explosives
 - Second blast = 33.44 pounds of explosives
 - Third blast = 47.12 pounds of explosives.
- Explosives used in the blasts are linear shaped charges specifically designed to cut steel.
- For the first blast, the detonating velocity is about 27,000 feet per second. The whole shot, from the push of the plunger to the detonation of the last charge, will take place in thirty-two thousandths of a second.
- The decibel level for each of the three blasts will be anywhere from 130-140 decibels. This is roughly equal to the sound of a 200-piece marching band or a military-grade aircraft takeoff.
- Approximately 3.26 million pounds of steel will be dropped into the lake during the three blasts. About 1 million pounds of steel will drop into the lake from blasts one and two. Approximately 1.28 million pounds of steel will drop into the lake from the third blast.
- The three blasts will slice the bridge into 38 pieces. The pieces, which will be 23 feet wide, will range in length from 28 feet long to 59 feet long.
- The steel will be taken from the water by crane and lifted onto a barge. It will take about one to two weeks to fish the steel out of the lake for each span blasted. The steel will be salvaged and recycled.

Totals from all three blasts are:

- Total length of truss spans dropped = 2180 feet
- Total pounds of steel = 3.26 million
- Total pounds of explosives used = 111.72 pounds