

SOMETHING OLD, SOMETHING NEW New Bridge Built from Recycled Steel

**St. Louis County Bridge
Cherry Township, Minnesota**



BRIDGE FACTS

LOCATION:

Cherry Township, MN

OWNER:

St. Louis County, MN

LENGTH: 83 feet

TYPE: Steel beam span/timber deck

At first glance, Bridge 69647 in Cherry Township, Minnesota is a simple 83-foot, steel beam span bridge with a timber deck built to cross the West Two River.

While this bridge typically experiences relatively low traffic volumes, it is an important local connector between the outlying communities. Unfortunately, the old bridge had begun to deteriorate due to weather and regular ice removal (salting) that occurs throughout the long Minnesota winter.

In 2002, the St. Louis County Public Works Department looked to replace the bridge. With many other bridges in the county needing regular maintenance and inspection, county bridge engineers sought a low-cost fix with long-term life cycle benefits. Recycled steel provided the answer.

The engineers opted to re-use 30-year old, 36-inch steel I-beams taken from another bridge that was previously removed from service. In 2003, in-house maintenance crews sandblasted and

corrosion-treated the old steel beams, and then used a small crane to build the new bridge on County Road 452.

Jon Stordahl, St. Louis County engineer technician senior (or is he a senior engineer technician?), says, “The nice thing about steel beams is that they are recyclable. Added to this, our county crews built the entire bridge. Crews were able to use a small crane to maneuver the steel beams and other bridge elements into place. The combination of recycled steel and in-house construction saved the county many dollars on this one bridge.”

Bridge 69647 is designed to support legal loads over a 70-year or longer life-span.

About the Short Span Steel Bridge Alliance

The Short Span Steel Bridge Alliance (SSSBA) is the industry resource for information related to short span steel bridges in North America. SSSBA’s objective is to provide essential information to bridge owners and designers on the unique benefits, innovative designs, cost competitiveness, and performance related to using steel in short span installations up to 140 feet in length. Alliance members include bridge and culvert industry leaders, including manufacturers, fabricators and representatives of related associations and government organizations. To learn more visit www.shortspansteelbridges.org or email sssba@steel.org.

