



# **Balls Bridge: Truly Rare, Truly Significant**

## ***Preservation For History, Beauty, and Community***

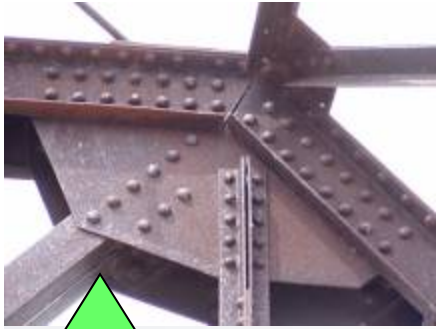






The metal truss bridge features a network of metal beams arranged in a pattern based on triangles that work to support the bridge.





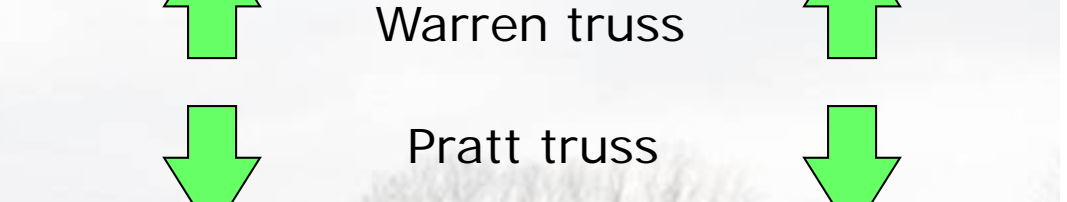
Riveted connections



Pinned connections



Warren truss



Pratt truss



Through Truss

Pony Truss



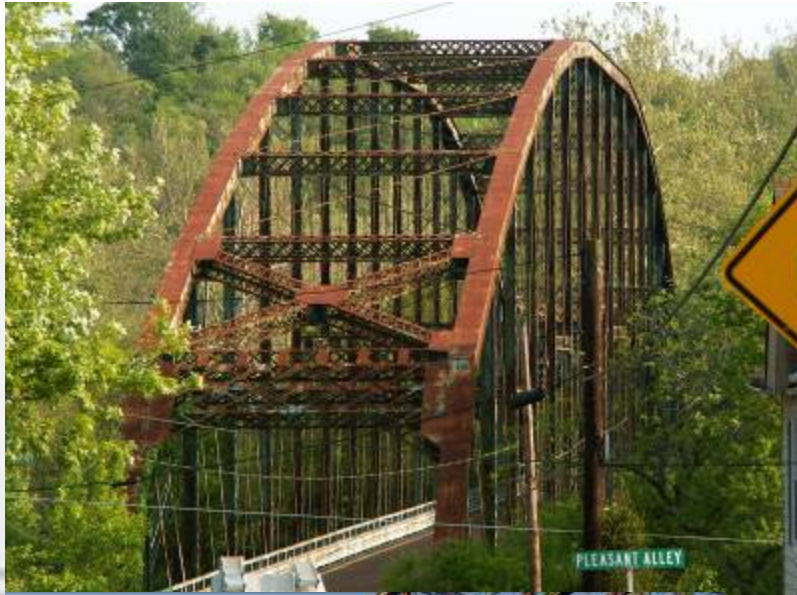
Some of the most basic elements of a truss bridge that are used to classify them are arrangement of diagonals, connections, and overhead bracing.





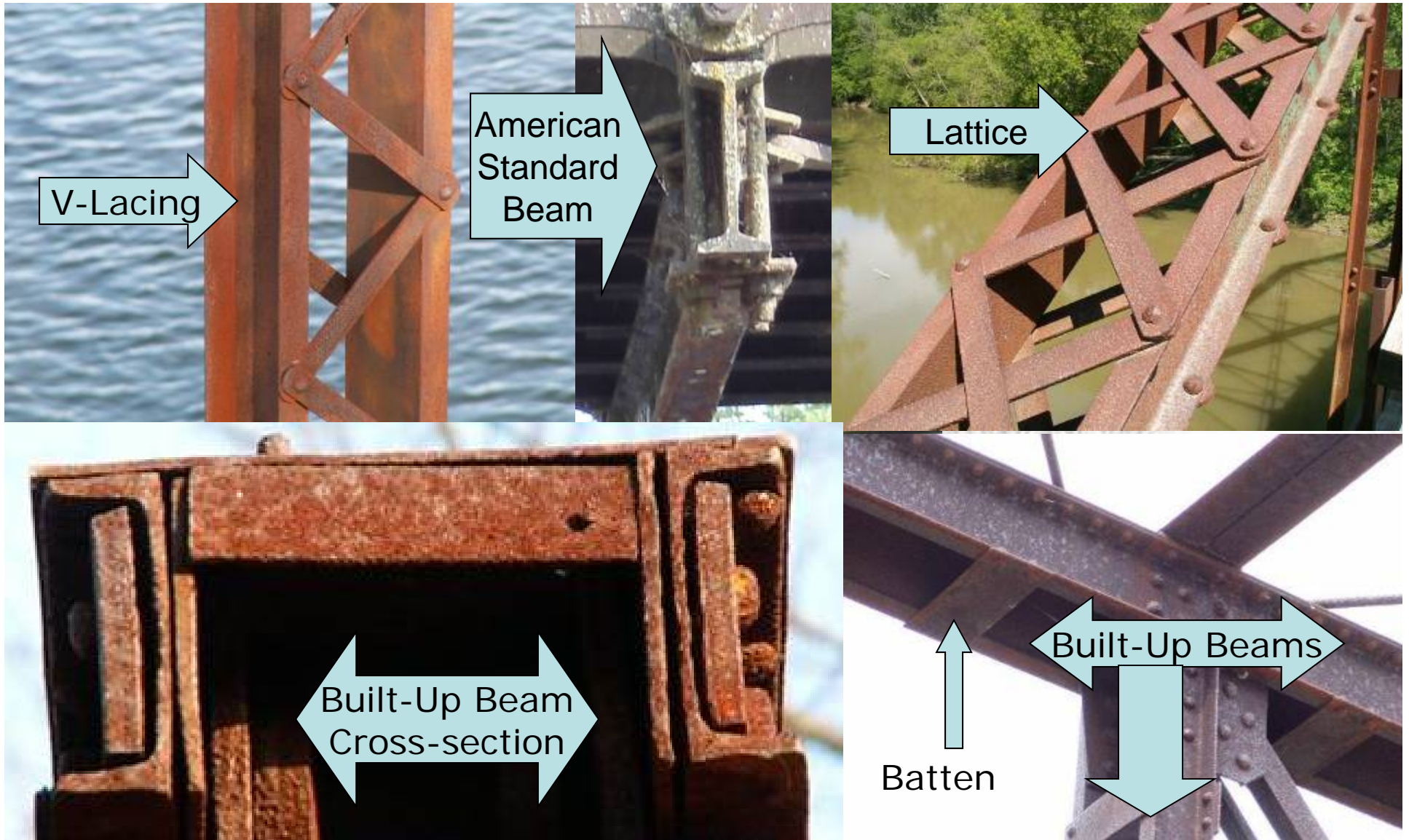
Today, the metal truss bridges that remain on today's roads face a complex and often-tragic situation. Most owners of these bridges see an old metal truss bridge as a structure that has been around on a road for far too long and usually recommend their replacement.





Over the past decades the number of remaining historic metal truss bridges in North America has declined at an alarming rate, and even today they continue to decline. Despite its rare and impressive size, beauty, and historic significance, and location  $\frac{1}{4}$  mile away from its replacement, the Blue Rock Road Bridge in Hamilton County Ohio was demolished October 11, 2006.





Pin-connected truss bridges are also a snapshot of materials used in the period. Most truss bridges make use of built-up beams that feature rivets and v-lacing, lattice, or battens which hold metal parts together to form a larger, complete beam. They also may have old-fashioned i-beams called American Standard Beams.

Specifically, there are elements that make an individual truss bridge such as Balls Bridge historic as well.

### Historic Importance

- 1885 Construction date - very old!
- Excellent degree of historic integrity remains.
- Length is 2 span - Multi-span truss bridges are much rarer and more technologically significant than single span structures.
- Traditional period design, including American Standard Beams, built-up beams, and pinned connections.
- A great example of an increasingly rare structure type.



**An official review might read like this:**

***Balls Bridge is a traditionally composed two-span pin connected truss bridge constructed in 1885. Among Southwestern Ontario's remaining metal truss bridges, Balls Bridge stands out as a complete, early, and long multi-span example of an increasingly rare structure type. It is historically and technologically significant.***



In Ontario, historic bridge studies take into consideration the aesthetic value of the structure. Truss bridges have a beautiful geometric art that is repeated in no other bridge type. Although they may look large and impressive, they at the same time blend in with and minimally obstruct the view of the river they are crossing. Balls Bridge is no exception to this, with its large and complex design, yet lightweight members and narrow design.

*The below Michigan bridge perhaps illustrates this most clearly, although this idea holds true for Balls Bridge as well.*

This bridge is impressive and noticeable... ...yet blends right into the trees.







In conclusion, there is one more asset that Balls Bridge has that offers further reason to preserve it - community support. Demolition of historic bridges in rural areas occurs all too frequently because few people live near the bridge, know about the bridge, or understand why it is important. Balls Bridge is a special case where, despite the bridge's rural location, there is significant community awareness and concern regarding the bridge. For history, for beauty, and for community, Balls Bridge deserves a full restoration!





**Historic Bridges**

**of  
Michigan and Elsewhere**

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*Promoting the preservation of our transportation heritage.*

**For more information on this  
bridge, please visit my website at  
[www.historicbridges.org](http://www.historicbridges.org).**