

When the bridge and the roadway approaches are a small obstruction to the flow, and the bridge opening is not acting like a pressurized orifice, the energy-based method should be used.

The beam elements are used to model the bridge superstructure in the longitudinal direction and the bridge bents/piers in the transverse direction. Its analysis is based on the linear elastic small ...

Probably the most famous Pauli truss, better known as the lenticular truss -- named because of the lens shape, is Pittsburgh's Smithfield Street ...

After reading this article you will learn about the design of curved bridges. Curved bridges are normally provided for viaducts and interchanges where divergent traffic lanes are converted into a multilane ...

This project utilized remote acquisition capabilities for instruments on two structures in the Interstate 99 corridor: a horizontally curved, steel, I-girder bridge, and a skewed, pre-stressed, ...

There are 2 applications of embankments used by SCDOT: bridge and roadway (defined in Chapter 2). All embankments regardless of type of embankment (i.e., unreinforced slope, RSS, etc.) shall have ...

Though the deck may be curved in accordance with the highway alignment, the girders may be straight or curved between skewed supports. Straight girders require less steel and have lower fabrication ...

The process is illustrated by considering the case of a system consisting of two curved girders continuous over one interior pier connected by uniformly-spaced, full-depth cross-frames under ...

In beam bridge design, the load from traffic and the deck is transferred downward, creating bending (flexural stresses) and shear forces, which are then carried safely into the supports.

This design allows for a graceful, curved appearance while maintaining the strength and durability of a traditional arch bridge. The Lupu Bridge in Shanghai is a notable example of this type ...

PT = Point of curve to tangent - Ending point of the circular curve, where the horizontal alignment leaves the circular curve and follows the ahead baseline tangent

This paper summarizes the current practice of horizontally curved bridge construction. A curved, precast, pretensioned concrete I-girder has the potential to become the most cost-effective system ...

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