

 **Bridges****Reference Details:**

Owner City of Milwaukee, Milwaukee, Wisconsin, USA +++

Design-Build Team Milwaukee Gateway Partners, Waukesha, Wisconsin, USA +++

General Contractor Howard Needles Tammen & Bergendoff (HNTB), New York, New York, USA +++

Consulting Engineers DSI USA, Stay Cable Engineering and Testing

DSI Services Supply and installation of 75.7 t strands for stay cables, type DYNA Grip; Supply of 938 4-0.6" DYWIDAG Tendons, 2 tendons 9-0.6" and 48 tendons 19-0.6" as well as 142.5 t post-tension strands; Technical assistance of post-tension material installation, stressing and grouting.



Bridges built for the future - Sixth Street Bridges, Milwaukee, USA

DYNA Grip Stay Cables for the Sixth Street Bridges, Milwaukee, Wisconsin, USA

Since its construction in 1908 the Sixth Street Viaduct has been Milwaukee's visible sign of economic growth.

As a bridge between cultures, it has in its long history not only carried workers to their jobs at meatpacking plants and tanneries in the Menomonee Valley but also crossed social divides, by connecting Milwaukee's downtown to traditionally ethnic neighborhoods on the near south side.

After 93 years of use the bridge was in an advanced stage of deterioration. Traffic had been restricted to two of the former four lanes. In addition, a weight limit was imposed on the bridge.

Another reason for building the new bridge is to provide better access to the Menomonee River Valley, which is a key area for the region's future economic development.

The Sixth Street Bridges form part of an ambitious project consisting of several bridges and elevated structures, meeting the city's needs for future growth while creating a new important connection to the Menomonee River Valley.

The Sixth Street Bridges are the first cable-stayed bridges built in Wisconsin. Each bridge has a pair of pylons to anchor the stay cables and two spans of 60 and 35 m.

The 42.7 m high pylons, which are sloped backwards, are stark contemporary features in the old historic area of Milwaukee. The stay cables were DSI DYNA Grip type 37-0.6" with a maximum length of 62.5 m. The strands were anchored using the DYWIDAG DYNA Grip Stay Cable System. For the prestressing of the cables the ConTen method in combination with gradient jacks was used. The whole project was successfully completed in fall 2002.