

Blough Avenue Bridge

Navarre, Ohio, over the old Ohio-Erie Canal; 1998

Bridge & Highway



“Hot-dip galvanizing will allow residents to enjoy the relaxed pace of bygone years in this recaptured historical space.”



Subject

This bridge is 237 feet long and composed of two 118'6" spans. It is only 16 feet above the water, has a 4° horizontal curvature, and is one of the longest galvanized curved span bridges in the country. The bridge girders were designed to carry pipe supports and brackets for water and sewer lines beneath the deck. Hot-dip galvanizing was used on the entire structure, including welded plate girders, splice plates, cross-frames and hardware, expansion joints, utility brackets, and bearing plates.

Environment

A well-traveled suburban area, with bike/footpath underneath. Exposed to frequent application of de-icing salts following winter storms.

Details

As the river and the canal's old tow path, now part of a bike/footpath, are used for recreational purposes, officials wished to avoid future disruption for maintenance and chose to hot-dip galvanize the entire bridge. The county also did not want bridge piers to be placed mid-stream, so it was necessary to galvanize 80-foot-long plate girders for this construction. Additionally, each of the 15 bridge beams was constructed with a horizontal curvature, which necessitated special handling and lifting devices for the galvanizing process. All galvanizing requirements were given careful attention. For now, and well into the future, hot-dip galvanizing will allow Stark County residents to enjoy the relaxed pace of bygone years in this recaptured historical space.

