



FLEIS & VANDENBRINK

ENGINEERING, INC.

Offices in Michigan and Indiana

Blue Star Highway Bridge over the Kalamazoo River

Scope of Rehabilitation Improvements

- Pier Cap Replacement (the large concrete beams that span between the vertical concrete columns coming out of the water)
- Steel girder end repair and cleaning/coating (the 4 lines of powder blue riveted steel beams)
- Deck drain extension and realignment
- Rocker/bearing realignment (the steel supports that carry the girders)
- Span realignment (time has allowed the steel girders to "walk" as they expand/contract)
- Joint replacement (the expansion joints at the deck surface that allow the structure to expand/contract)
- Slope protection repair (the concrete and stone riprap beneath the structure between the river and abutments)
- Railing upgrades (looking at adding a traffic railing between the sidewalk and road and upgrading the existing railing to meet pedestrian requirements)
- Approach sidewalk replacement (improve slopes and replace walks to counteract settlement issues)
- Dolphin and cribbing replacement (the timber structures around and upstream/downstream of the pier columns that protect them from ice and boat traffic)
- Lighting improvements

