



STATE ROUTE 54 BRIDGE REPLACEMENTS

CHALLENGE

DUE TO ENVIRONMENTAL REGULATIONS, TWO BRIDGE REPLACEMENTS IN INDIANA NEEDED INNOVATIVE SOLUTIONS.

SERVICES

- Road Engineering Design
- Bridge Design
- Traffic Maintenance Design
- Right-of-Way Plans
- Utility Coordination
- Permitting

STATE ROUTE 54 BRIDGE REPLACEMENTS

ms consultants performed the road and bridge design, traffic maintenance design and permitting assistance for the replacement of the two existing bridges located on S.R. 54 in Greene County, Indiana.

The new bridge over Ritter Ditch, just east of U.S. 231, is a 3-span continuous reinforced concrete slab bridge. It is 74'-6" long with a 38'-0" clear roadway. The project length is 756 feet.

The second bridge, over the unnamed tributary of Richland Creek, is a 3-span continuous reinforced concrete slab bridge. It is 71'-6" long with a 38'-0" clear roadway. The project length is 762 feet.

ENVIRONMENTAL CHALLENGES

Due to Indiana Department of Natural Resources mussel restrictions, ms was asked to eliminate the planned channel relocation of nearby Ritter Ditch and completely re-design the maintenance of traffic from temporary runarounds to single-lane signalized phased construction.

In addition, the bridge over Ritter Ditch had to be resized due to a change in the skew angle. The wetland mitigation plans also had to be incorporated into the plans and permitting procedures.