



CHALLENGE

A WELL-TRAVELED ROUTE IN THE MIDWEST NEEDED MULTIPLE UPGRADES AND ADJUSTMENTS.

SERVICES

- Roadway Design
- Intersection Design
- Right-of-Way Plans
- Culvert Design
- Stream Relocation Design
- Maintenance of Traffic Plans
- Bridge Design
- Utility Relocation

U.S. 35 WIDENING

U.S. Route 35 runs northwest-southeast for more than 400 miles from northern Indiana into West Virginia, where it connects to Interstate 64. Most of the portion

that runs through Ohio has already been upgraded to a four-lane highway/freeway, starting west of Dayton all the way to the West Virginia state line.

EXPANDING THE ROADWAY

In West Virginia, from the Ohio River to Interstate 64, U.S. 35 is currently being expanded to a four-lane expressway. Currently the route is four lanes from I-64 to the junction with the bridge to Buffalo, and continues as a two-lane roadway for 12 miles to another four lane section of eight miles (6 km) to the Ohio River.

ms consultants prepared construction plans, specifications, construction cost estimates and right-of-way plans for the construction of a three and eight tenths mile section of U.S. 35, just west of C.R. 40 in Mason County, WV. The project starts with a high speed connector tying into old U.S. 35 (now designated

WV 817), which transitions into a four lane divided highway with a 46-foot median. The new alignment

extends northwest, tying into another section of this new highway.

HIGH SPEED CONNECTOR ALTERNATIVES

ms was asked to study various alternates for a high speed connector to link this section of U.S. 35 with the existing, two lane U.S. 35. This one-mile connector includes a 78-foot single span, pre-cast arched

culvert with approximately 65 feet of fill. An at-grade intersection is provided at CR 17/3 without impacting the stream that runs parallel to the CR 17/3.

RIGHT-OF-WAY PLANS

The scope of services included right-of-way plans that involved more than 30 parcels. The high-speed connector ran adjacent to various small residential parcels, including driveways, utilities and septic tanks. Due to the fast-track nature of this project, the property

was acquired even before the roadway plans. Various revisions and accommodations were made during the acquisition process to satisfy local residents. Many utilities needed to be relocated for this project.

PROPOSED BRIDGE

A two span, 304-foot bridge at CR 38 was proposed. Part of this bridge is on a spiral and part on a curve. Curved steel plate girders are provided with a concrete deck, cap and column piers on piles, and a combination of integral and semi-integral abutments on spread footings and piles. This bridge spans Lower Ninemile Creek and CR 38. Ten major culverts were included with this project and approximately 3,500 feet of the channel was relocated using Natural Stream Design procedures.

The remaining 12 mile gap of U.S. 35 that is still two lanes is currently unfunded.