

Brownsville Bridge, Mon-Fayette Expressway

Unionville, PA



In 2006, construction began on a 17-mile (27 km) "Uniontown-to-Brownsville Project". Due to limited funding, construction on this section was split into two phases. The first phase involved construction of an 8-mile (13 km) section of expressway running parallel to a hazardous stretch of U.S. Route 40 between Brownsville and Uniontown and this road was opened on October 23, 2008 at a cost of \$380 million.

As a sub-consultant to fellow engineering firm HDR, Inc., GAI completed foundation designs for five bridges including the two-span State Route 51 bridge over State Route 119, the dual single-span State Route 43 bridge over State Route 4029, and the dual three-span State Route 119 bridge over Redstone Creek and the Penn Central railroad. Foundation designs focused upon spread footings and driven piles, and also included the need to address various mining-related issues. Epoxy-coated reinforcing steel (ECR rebar) was used because of its corrosion protection.

The project was selected for the Outstanding Highway Engineering Project Award, Category B, by the American Society of Highway Engineers – Pittsburgh Section.

Team

Owner:

Pennsylvania Turnpike Commission

General Contractor:

New Enterprise Stone & Lime Co. from New Enterprise, PA

Design Criteria:

- To provide for safer and more efficient vehicular travel.
- Improve access, address future capacity requirements.
- Drawing traffic (especially trucks) off U.S. Route 40 and onto a more modern facility.

Total Project Cost:

\$380 million

Epoxy-coated Reinforcing Steel:

1,404 tons