

Reconstruction of Bridge #16044, Valley Road over Pohatcong Creek

Township of Mansfield | Warren County, NJ



Van Cleef was contracted by Warren County for Construction Management and Inspection for the Reconstruction of Warren County Bridge #16044. The superstructure of the existing bridge was composed of a concrete box beam with an asphalt overlay. The substructure was comprised of concrete – footings, abutments, and wingwalls. All of which was demolished with a backhoe mounted hydraulic hammer. The proposed design of the new structure is a typical concrete substructure similar to the existing and reinforced with galvanized rebar. Protection and maintenance of the stream flow was achieved through of 42” HDPE By-Pass Pipeline which was routed behind the east abutment during construction. The substructure is protected from scour with steel sheet piling driven to an elevation 20 feet below the tops of the footings. All exposed concrete is protected from the elements by a catalytic sealer. The superstructure is made up of 7 glue laminated beams tied together with underdeck stiffeners and pinned down to the abutments with 1” threaded rod connections.

The guide rail posts and elements are also glue laminated. The glue laminated beams will receive an asphalt overlay with a waterproofing membrane sandwiched the base and surface courses. The bridge approach work is limited and is tied into the existing super-elevated roadways at both ends of the bridge. Standard NJDOT guide rail protects the approaches and the corners of the new structure.

CLIENT CONTACT

County of Warren
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PROJECT HIGHLIGHTS

- ☞ NJDOT Clients- Local Aid & Warren County
- ☞ New Superstructure
- ☞ New Substructure
- ☞ Footings & Wingwalls
- ☞ Abutments
- ☞ Roadway Construction
- ☞ Road Safety Improvements
- ☞ MPT Plans
- ☞ Guiderail
- ☞ Paving