

In Depth Inspection of 32 Railroad Bridges and Culverts & the Development of a Railroad Bridge Management Program

Various Locations | Morris County, NJ



Van Cleef was contracted to perform in-depth structural inspections, load capacity ratings, condition evaluations, underwater inspections where applicable and make maintenance/repair recommendations with associated costs for 32 railway bridges and culverts on three (3) Morris County owned Dover & Rockaway River Railroad (Operator) lines located in various municipalities in Morris County.

The Scope of work included:

- ☛ Initial Cycle 1 in-depth structural inspections of 23 bridges (7) and culverts (16), Routine Cycle 2 inspections of the nine (9) previously inspected bridges.
- ☛ Performed first-cycle and updated load ratings for all bridges Load ratings performed for the Equivalent Cooper E Loading.
- ☛ Prepared Bridge Survey Evaluation Reports following NJDOT/AREMA guidelines, including condition evaluation, maintenance/repair recommendations with associated costs, sketches, sounding plans/cross sections, load rating calculations and field notes.
- ☛ Work followed AREMA, NJDOT, and NBIS inspection and load rating requirements.
- ☛ Responsible for manual development of an SI&A sheet for each bridge/culvert in accordance with the NJDOT and FHWA coding guides, reflecting the actual field conditions and physical features, to be used for future inspections.
- ☛ Responsible for updating and formatting the County's Railroad Bridge Management Program in accordance with the FRA Title 49 CFR Part 237, using the findings and reports developed for this project.

Many of the bridges were never inspected before, and first-cycle inspections and reports were required. Directly worked with County to develop an inventory and management system for the current and future NBIS inspections.

CLIENT CONTACT

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PROJECT HIGHLIGHTS

- ☛ NJDOT Standards
- ☛ FCM Inspections and FPD Details
- ☛ Stress Load Ratings for Cooper-E loads per AREMA
- ☛ Coordination for Railroad Flagging & Access Restrictions
- ☛ SI&A Creation / Updates
- ☛ Waterway Crossings
- ☛ Rating Calculations