



# COFFIN BROOK ROAD BRIDGE NO. 165/121 Alton, NH

## CLIENT

State of New Hampshire  
Department of Transportation  
Bureau of Bridge Design  
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## PROJECT COMPLETION

June 2011

## DESCRIPTION

The Town of Alton requested funds for a cost-effective bridge replacement of this red-listed Town bridge under the Municipal Bridge Aid Program. The Town elected to have NHDOT manage the project. CLD was hired as a consultant to complete all facets of the project design, including coordination with Town and NHDOT staff, to make the process more cost-efficient.

The existing bridge was posted for six tons and was located on a rural Town road that passed through a very large swamp. The roadway was a “corduroy” road, meaning logs were placed in the mud when the road was originally constructed to support the base. Any raise in profile or widening of the road could create settlement problems due to the muck below.

The proposed structure incorporated solid precast concrete slabs to minimize the structural depth, therefore keeping the same vertical clearance to the water without raising the profile. The use of precast members also reduced construction time and duration of road closure. Pile-supported stub abutments were designed to be placed behind the existing abutments to reduce wetland impacts and maintain stream flow during construction. The project was combined with another small bridge project about one mile down the road, saving over \$100,000 from the original NHDOT estimates for the two projects.



- Complete Bridge Replacement Services
- Survey
- Environmental Permitting
- Right-of-Way and Easement Plan
- Construction Inspection