



STAGE ROAD OVER LITTLE SUGAR RIVER

Unity, NH

CLIENT

Town of Unity
13 Center Road
Charlestown, NH 03603
(603) 542-9665
Contact: Willard Hathaway, Selectman

PROJECT COMPLETION

July 2008

COST

\$650,000

DESCRIPTION

The Town of Unity, in cooperation with the NH Department of Transportation and Federal Emergency Management Agency, replaced a corrugated steel plate arch structure, which carried Stage Road over the Little Sugar River.

During the floods of October 2005, this 30-foot metal pipe arch structure was completely washed out. The road was closed to traffic and re-routed to an undesirable detour route. The Town chose CLD to provide preliminary engineering, prepare contract plans and administer and inspect the construction.

CLD developed the Engineering Study including a hydraulic analysis, bridge type study, and roadway alignment improvements. The replacement bridge is a single 90-foot span steel girder bridge on cast-in-place concrete abutments.

The result of the hydraulic study for this project indicated that a bridge with stub abutments was the only option that provided sufficient freeboard in a 100-year flood. The proposed alignment alternative follows the existing roadway rather closely along the bridge and terminates at a four-way intersection with a stop sign. This option resulted in fewer slope impacts outside the bridge crossing and was the more cost-effective option. CLD completed final design of the recommended alternative and prepared construction plans/contract documents for advertising. CLD administered the construction which was completed in July of 2008.



- Engineering Study
- Survey
- Hydraulic Analysis
- Public Participation
- Section 106 Cultural Resources
- Preliminary Plans
- Roadway Alignment Improvements
- Utility Coordination
- Right-of-Way
- Environmental Permitting
- Contract Plans and Documents
- Construction Inspection and Administration