



side. The cables snapped. Five people were killed and dozens injured. The families of the deceased and injured sued Cleburne County on the basis that the County violated the victims rights to due process and that the County and adjacent landowners were negligent in warning tourists of the hazards of the 77-year-old bridge. The suit included the diner where the tourist bus parked, although no tourist even purchased any food at the diner. Eventually in 1996 the Circuit Court of Appeals ruled in favor of the defendants.

- N.J.S.A. 2A:53A-7 would not prevent improper suits from being filed to which the engineer as a private individual would have to answer to, nor does it provide resources with which to prepare a defense. An innocent person could be bankrupted while a suit is pending.
- Proceeding with the project based on N.J.S.A. 2A:53A-7 would have resulted in a peculiar reversal of the roles. The public-private partnership was based on the NY-NJ Trail Conference providing volunteer technical, administrative, and construction peoplepower to the NJDEP Division of Parks and Forestry in order to assist the NJDEP in closing a missing link in the Appalachian Trail corridor. The bridge is a State structure on State land fulfilling a responsibility of the State. It was not the responsibility of the non-profit NY-NJ Trail Conference to insure a State project.

The 1994 autumn construction season passed by without this dilemma being resolved. No construction took place. With the 1995 construction season rapidly approaching, a solution was needed. To resolve the problem, the volunteer engineer and the firm of Conklin Associates, with whom Mr. Latincsics is employed, was retained by the DBC at the request of the Division of Parks and Forestry to perform as project engineer. A requirement to bid on the engineering of the project was having a one million dollar liability insurance policy. Conklin Associates received a professional fee for their services.

Project Engineering

From 1991 to early 1995, the author served as project engineer in a volunteer capacity. Much of the site assessment, research, field inventory, design, and legwork resulting in the Pochuck Quagmire Bridge was performed in this time period. In late May 1995, Conklin Associates, the firm with whom the author is employed, was retained by the DBC at the request of the Division of Parks and Forestry to finalize the project design and permits. The DBC contract specified a 45-day time limit to ensure the project would meet the short late summer construction window in the quagmire. Among the engineering, survey, and project administration services Conklin Associates performed in this 45 days were the following:

- Finalize geotechnical investigations.
- Three-mile double rod bench run to establish a benchmark in USGS 1929 Datum on the site.
- Verify that the bridge site is in the trail corridor by survey.
- Survey stakeout of the foundation, towers, and anchors.
- Basic hydrologic investigation.
- Foundation and anchorage design.
- Suspension bridge design and plans.
- Detailed material list by quantity and cost.



- NJDEP Stream Encroachment Permit.
- NJDEP Wetlands General Permit #17.
- DBC permit.
- Army Corps of Engineers permit.
- Soil Conservation District waiver.
- Threatened and Endangered Species review.
- Attendance at project meetings.
- Purchasing agent responsibilities.
- Project administration.

The project went to construction immediately after all permits and approvals were granted. During construction, Conklin Associates was retained to provide the following professional services:

- Construction survey support.
- Inspection and acceptance of material.
- Construction supervision and inspection.
- Assistance in project administration to Mr. Powers.
- Cable saddle shop drawings.
- Certification of finished bridge.

The author found the bridge construction to be most enjoyable.

Long-Term Maintenance

The routine maintenance of the bridge consists of treating the CCA lumber with Thompsons Wood Preservative on an annual basis. Another important maintenance task is the annual lubrication of the main catenary cables and suspenders with Prelube 19 HV. This is a high viscosity preservative, wire rope lubricant, and protector. An important characteristic is that it is environmentally sensitive. It is biodegradable, nonhazardous, and nontoxic. Appalachian Trail Committee policy on large bridges is that they should be periodically inspected by the landowning agency partner, Appalachian Trail Committee, or their designees. In this particular case the NJDEP Division of Parks and Forestry is responsible to have the bridge inspected by a P.E. with expertise in suspension bridges. With proper maintenance and inspections, the bridge will serve its 25-year design life.

Project Value Accounting

A detailed breakdown of peoplepower, material, and equipment, as well as summaries of the same, are provided. The purpose of this is two-fold. The first is to document the final cost and secondly from where the peoplepower and funding came. This accounting is valuable information for future projects because it provides an indicator as to the resources that must be dedicated to a suspension bridge of this style and span.