Considerations for Restoring Structural Integrity of Covered Bridge Members

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Target audience?
Condition assessment

- Where to look
- How to look
Engineering analysis
General Theory of Bridge Construction: Containing Demonstrations of the Principles of the Art and Their Application to Practice; Furnishing the Means of Calculating the Strains Upon the Chords, Ties, Braces, Counter-braces, and Other Parts of a Bridge

Herman Haupt
Repairs

- Rehabilitation
- Load upgrades
Construction details
Heritage provides us with a sense of place, a connectedness to that place, to the land, traditions, customs, and family.
Repairs

- Replace in-kind
- Timber augmentation
Load upgrades

- Augment with stronger materials
- Glulam chords
- Add arches
STRENGTHENING HISTORIC COVERED BRIDGES TO CARRY MODERN TRAFFIC

Martin B. Reece

Transportation Infrastructure - Roads, Highways, Bridges, Airports and Mass Transit Series

Technical manual about new and rehabilitated bridges

Weyerhaeuser glulam wood bridge systems
Repairs

• Traditional repairs – Gilpin’s Falls Bridge (Tim Andrews)
• In-place preservative treatment (Stan Lebow)
• Combination repairs – Goodpasture Bridge (OBEC)
Repair logistics

- Shoring and cribbing
- Moving the bridge