WESTVACO NATURAL RESOURCE CENTER TIMBER BRIDGE, Preston County, West Virginia



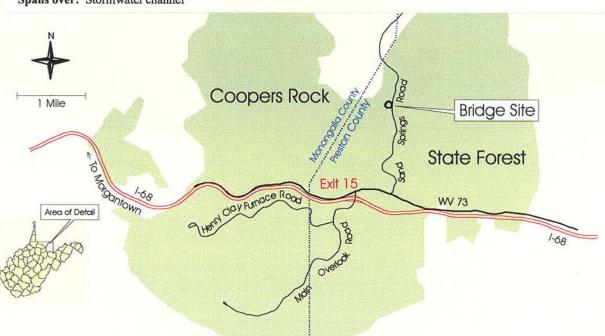
Type: Dowel-laminated Parallam® panel w/cover

Bridge length: 30'-0"
Roadway width: 14'-1 1/2"
Spans over: Stormwater channel

County: Preston

Owner: West Virgnia University

Engineer: Ronald Benson, Erickson Engineering, Inc.



Directions: From Morgantown travel 7 miles east on I-68. Exit the highway at the Coopers Rock Exit (Exit 15). Turn left and cross the interstate and at the intersection turn right onto WV 73. Go 0.5 miles to the intersection of WV 73 and Sand Spring Road. Turn left onto Sand Springs Road and travel 1.4 miles to the Westvaco Natural Resource Center and the bridge site.



USDA Forest Service

The National Wood In Transportation Program



GEOMETRY

Number of spans: 1 Out-to-out length: 30'-0" Center-of-bearing length: 29'-0"

Skew: 0 degrees Number of lanes: 1

Out-to-out-width: 16'-0 1/2" Curb-to-curb width: 14'-1 1/2" Number of beams and spacing: None Superstructure square footage: 424

Design load: HS-20

Design by: Erickson Engineering Abutment material: Driven steel pilings

w/wood backing

Total wood quantity: 15,034 bf Total project cost: \$197,600 Total superstructure cost: \$65,100 Total superstructure cost/sq. Ft.: \$153.54

MATERIAL

DECK

Material: Parallel strand lumber Species: Yellow-poplar Sizes used: 3 1/2" x 14"

Quantity: 3 pre-fab panels (2 widths) Preservative treatment: Creosote

TRANSVERSE STIFFNER BEAMS

Material: Parallel strand lumber Species: Yellow-poplar Sizes used: 6" x 12" x 16'-0"

Quantity: 2

Preservative treatment: Creosote

GUIDERAIL POSTS

Material: Wood Grade: No. 2 Species: Douglas-fir Sizes used: 6" x 12" x 14'-8"

Quantity: 12

Preservative treatment: Creosote

GUIDERAIL CURB

Material: Wood Grade: No. 1 Species: Douglas-fir Sizes used: 6" x 12" x 30'

Quantity: 2

Preservative treatment: Creosote

GUIDERAIL

Material: Glulam Species: Douglas-fir Sizes used: 6" x 10 3/4" x 30'

Quantity: 2

Preservative treatment: Creosote

STRESSING STEEL (none)

LOCAL IMPACT: The bridge provides secondary access to the West Virginia University, Division of Forestry, Westvaco Natural Resource Center. The experimental bridge is the first dowel-laminated bridge using yellow-poplar parallel strand lumber in the Country. The performance of the bridge will be monitored for two years.

BRIDGE PERFORMANCE: The bridge is performing as anticipated.

FUNDING SOURCES: USDA Forest Service: \$30,000; Balance of funding from West Virginia University.

LOCAL CONTACT:

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Information provided by Larry Osborn, West Virginia University, Appalachian Hardwood Center

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