



LITTLEROCK DAM, 1924. (L) Buttresses on the downstream side, 24 feet on center, create a "hollow dam." Spillway is at far right. (R) The upstream face consists of 29 arches angled at 45°, supported by the buttresses. Spillway is in the foreground. Donald C. Jackson photographs for HAER.

HISTORIC DAM FOUND SAFE

In a study co-sponsored by the Natl. Trust for Historic Preservation and the Citizens' Committee to Save the Littlerock Dam (CCSLD), Glenn L. Enke, former prof. of civil engineering at Brigham Young Univ. and an ASCE Fellow, reported that the 54year-old Littlerock Dam in Los Angeles County, Calif. [NR] is a stable structure that threatens no one's safety. This finding conflicts with allegations by the Calif. Divn. of Dam Safety, Dept. of Water Resources [DWR] that the 175-ft.-high, reinforced-concrete, multiple-arch dam is unsafe, on the basis of which DWR has tried legally to force its demolition. The farmers who own the dam and depend upon its impounded water to irrigate their peach and pear orchards are strongly opposed to the State's actions. They have formed the CCSLD to fight the DWR attempts to destroy the dam. Designed by John S. Eastwood, builder in 1908-09 of the world's first reinforced-concrete multiple-arch dam, the Littlerock Dam was the tallest of this type in the U.S. when built and tallest of the 17 dams built to his designs.

Mrs Hobart Bosworth, Director of the CCSLD's Historic

THE ELM ST. BRIDGE SAGA

Compromise Gone Quite Silly

In a state where covered wooden bridges fare rather nicely, thank you, their iron counterparts still are in obvious trouble. For more than six years now the town of Woodstock, Vt. has been trying to replace the Elm St. Bridge which carries Rt. 12 over the Ottaquechee River. A funding source was sought several years ago through the Fedl. Bridges Replacement Program. The Vt. Dept. of Highways drew up plans for a new steel and concrete structure to meet the specifications for funding under the program.

When the new proposal was made public, trouble broke out almost immediately on two fronts. First: the existing bridge's 18-ft.

Preservation Task Force, commented on the State's actions and the importance of Dr Enke's study: "For 54 years, the dam has withstood everything nature could muster and it still functions perfectly. During the tremendous floods of March 1938, the original siphon spillway became clogged with debris and water poured over the entire dam at a depth of 1-3 feet for almost 24 hours and the dam stood strong. It has withstood numerous earthquake shocks without impairment. There has never been a multiple-arch dam in the U.S. which failed and in any way caused loss of life or property."

The State is planning to order the dam permanently breached this spring, when they finally complete an environmental impact statement, but Scott O. Smith, CCSLD attorney, says that the State is going to have to prove in court that the dam is unsafe before they can breach it and that because of Dr Enke's report they will find this very difficult, if not impossible. Mrs Bosworth stated, "The farmers of Littlerock aren't going to be trampled by the mindless bureaucracy of the State. The State wants to replace our present structure with an earthfill dam . . . at a cost of over \$4 million to the farmers. We will fight this to the Supreme Court! Long Live the Dam!" D.C.J.

width and its crooked, narrow approach formed just enough of a bottleneck to slow traffic entering the town. The result was a remarkably pleasant mix of automobile and pedestrian. The new bridge, over twice the width, threatened to destroy that mix. Second: the town suddenly found that a good many people rather fancied the old bridge, and were reluctant to give it up for so banal a replacement.

The present bridge is an 1870 [pre-patent] Parker truss; a single 110-ft. span. It was constructed to replace the last of a series of seven wood structures that had traversed the river for an admirable total of 75 years. The Parker Truss was somewhat of a hero in Woodstock and, after 100 years' service, seemed to fit in quite neatly. Continued

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