WJE

Jewell Elementary School

Roof Collapse Evaluation and Design and Construction Administration | Bend, OR



CLIENT

Bend-La Pine School District

BACKGROUND

A historic snowstorm in January 2017 caused the collapse of numerous private, commercial, and educational structures throughout Oregon. WJE was called upon to investigate the safety and stability of dozens of structures as well as to provide repairs. Regional heavy snow accumulation resulted in structural impairment of several buildings, including the gymnasium at Jewell Elementary School, which featured heavy timber roof trusses. Another engineering firm designed temporary repairs and shoring but concluded that permanent repair could not be accomplished.



SOLUTION

WJE opined that the trusses were repairable, recognizing that there was a significant cost difference between removal and replacement compared to repairing in place. WJE engineers were ultimately hired to design repairs and conduct full-scale load testing to verify that the repaired trusses could support intended design loads. This approach saved significant time and money and resulted in improved trusses compared to their condition prior to the snow.

WJE

ENGINEERS Architects Materials scientists