



PROJECT PROFILE

Guy West Pedestrian Bridge

Bridge Inspection | Sacramento, CA



CLIENT

Quincy Engineering/
City of Sacramento

BACKGROUND

The Guy West Pedestrian Bridge is a suspension bridge over the American River that is intended for use by pedestrians and bicyclists on the Sacramento State University Campus. The bridge originally opened in 1966 and was modeled after the famed Golden Gate Bridge and San Francisco Bridge. The bridge has a main suspended span of 600 feet and two simply supported trusses that approach spans of 72 feet each. The main cables consist of four parallel wire ropes. The original suspenders showed signs of local fatigue approximately twenty years after construction and were replaced in 1989.

WJE was retained to inspect and evaluate the condition of the structure.

SOLUTION

Based on WJE's inspection, a series of recommendations were developed that included the addition of a clamp to main cables in order to reduce wind-induced resonance and cable fatigue at saddles, a Fractographic examination of broken wires found in one of the main suspension cables, repairs to the handrail system, and replacement of the elastomeric bearing pads. The bridge was repainted, and a regular inspection program was implemented.

WJE was able to provide the owner with a thorough condition assessment that allowed programming of regular maintenance and/or service upgrades for the structure.

