Hickman Road over Tuolumne River Bridge Replacement

Hickman Road is a rural county road in the eastern part of Stanislaus County near Waterford that travels in the north/south direction. The bridge is located approximately 0.15 miles south of State Route 132 and serves as a major collector into Stanislaus County. Additionally, the bridge is an essential route into the City of Waterford as it serves 8,000 vehicles per day with 1 in 5 of these vehicles being trucks. The amount of truck traffic on the bridge is 50% higher than the average truck traffic on county roads. The Hickman Road over Tuolumne River Bridge was built in 1964. The current structure allows for two travel lanes with no shoulder on either side. The sufficiency rating of this bridge is 64.7, on a scale of 100 based on Caltrans' bridge inspection report dated October 8, 2013. In addition the bridge has a status of “Structurally Deficient” and is a “Scour Critical” bridge due to seismic vulnerability concerns and observed scouring at the bridge foundations. A "Scour Critical" bridge means the ground and soils at and around the foundation of the bridge supports is eroding or failing.

The replacement bridge will provide two 12-foot-wide travel lanes and two 8-foot wide shoulders to meet both AASHTO and County design standards. It will be constructed immediately adjacent to the existing structure, in order to keep the existing road and bridge open to public during construction. The proposed structure type is a five span, Cast-In-Place Post Tensioned Box Girder Bridge supported on large diameter drilled shafts. This structure type on the upstream (east) road alignment is the most cost efficient option, has the least environmental impacts, and minimizes future maintenance costs.