Caltrans District 1

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Salmon Creek Bridge Improvement Project

DEFICIENCIES OF THE EXISTING BRIDGE

① Functionally Obsolete - the deck geometry only provides for 1 foot shoulders.

② Fracture Critical - lack of redundancy in the steel deck truss and steel floor beam members so failure of one member could cause collapse of the bridge.

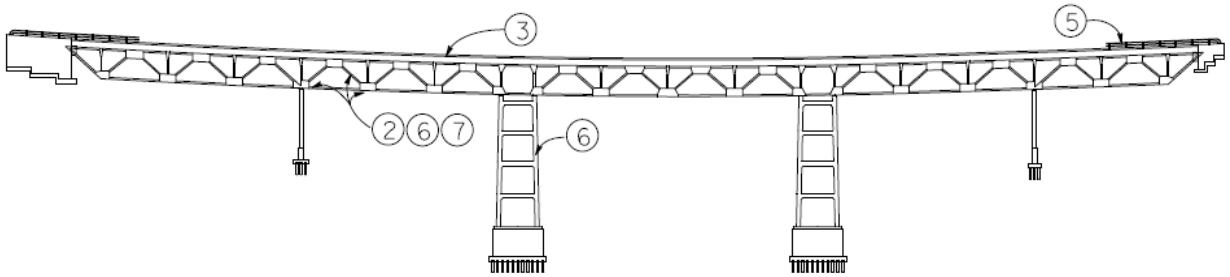
③ Structurally Deficient – the bridge deck is in poor condition.

④ Low Load Rating – larger permit trucks are not allowed on the bridge.

⑤ Deficient Rail – the existing bridge rail does not meet current design standards.

⑥ Costly Maintenance – various members have severe corrosion and section loss, painting is required every 4 to 5 years to protect the steel at a cost of $2.5 million each time the bridge is painted. Spalls and delamination in the concrete bridge deck and substructure also need to be repaired.

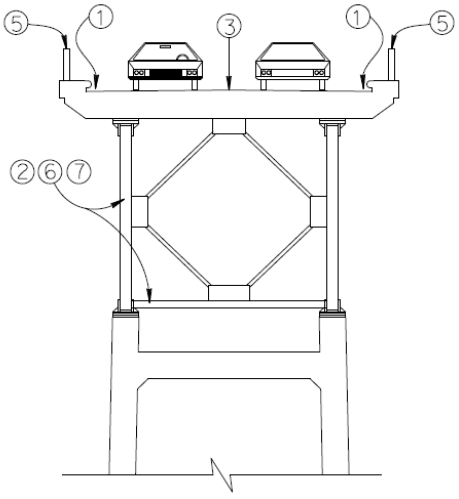
⑦ Seismically Deficient – the bridge needs to be retrofitted to prevent collapse in a seismic event.



ELEVATION

Condition of Deck and Steel Members

③	⑥
	
Spalling in Bridge Deck	Rusting in Steel Members



TYPICAL SECTION