

# ROAD 224 BRIDGE

## OVER DEER CREEK



### PROJECT TEAM

**Chief Engineer:** Kuna Muthusamy, Tulare County  
**Engineering Manager:** Benjamin Ruiz Jr., Tulare County  
**Project Manager:** Jason Vivian, Tulare County  
**Project Engineer:** Sukhjinder Brar, Tulare County  
**Hydraulics Engineer:** Cathy Avila, Avila and Associates  
**Geotechnical Engineer:** Martin McIlroy, Taber Consultants  
**Environmental Consultant:** Sarah Holm, Dokken Engineering  
**Regulatory Agency Permitting:** Aaron Bock, Tulare County



Road 224 at Deer Creek has an extensive history of washing out during heavy rains and flooding, and most recently, washed out during the heavy rain events of 2010. The design and construction of this project will be entirely funded through the Federal Highway Administration's Highway Bridge Program (100% federally funded with no local fund participation). The new structure will consist of an approximately 450-foot long, ten-span reinforced concrete flat slab bridge supported on concrete pile foundations. The bridge will carry two 12-foot lanes with 3-foot shoulders and open type concrete bridge barriers with protective metal beam guard railing meeting current traffic impact standards. The profile of the bridge will be raised slightly to improve channel hydraulics, therefore approach roadways will need repaving and in a few locations, adjacent property access driveways will need to be realigned to facilitate access. Currently, the County's consultants are helping to define the proper bridge length to convey 100-year flood flows, establish an appropriate foundation type and prepare technical environmental studies. Road 224 will remain closed to through traffic during construction and construction is expected to take approximately 4-5 months.

### KEY FEATURES

- Reinforced Concrete Flat Slab
- Designed for 100-year Flood
- Long Term Solution to Ongoing Problem
- 100% Federally Funded

### BRIDGE DATA

Bridge Type: Concrete Flat Slab  
Span Config: 10@ 44-ft  
Length: 450-feet  
Width: 33.5-feet

### PROJECT FUNDING

HBP: \$3,586,000  
Toll Credits: \$464,000

### SCHEDULE

Preliminary Engineering:  
Fall 2011 - Fall 2014  
  
Construction:  
Spring 2015 - Summer 2015

