

East Bidwell Street/Iron Point & US50 Onramp Improvements



Existing Conditions



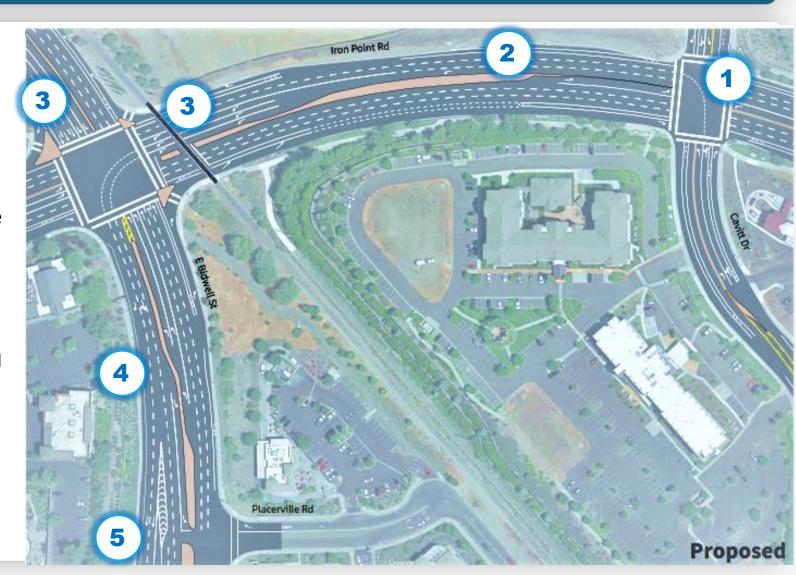
- 3 Through Lanes, with 2 Left Turn Lanes (235' of storage in each lane)
- Westbound Left Turn serves 550-650 vehicles per hour in Peak Hour.
- Queueing routinely backs up >350', sometimes up to Cavitt Drive, leading to driver frustration, queue cutting, red light running, etc.
- Origin/Destination study found that 37% of left turning vehicles used the Westbound US50 Onramp.
- As a result of prohibiting northbound U-turns, providing an eastbound right-turn overlap phase, and optimizing signal timings, the East Bidwell Street/Iron Point Road intersection now operates at LOS D during the PM peak hour (whereas it had operated at LOS E during the planning study).



Proposed Project



- 1. Restripe Cavitt Drive and Iron Point Rd. Inner most left turn lane can go into #1 or #2 Westbound Lane
- 2. Add Striping and Signage to #1 Westbound lane, indicating lane must turn left at East Bidwell.
- Pavement Legends installed New #3 left turn lane will have "Westbound US50 Only" markings, Middle #2 Lane will have "EB or WB US50" markings.
 Southbound East Bidwell markings will be supplemented with "ONLY" in #3 lane and #2 lane with have "EB or WB US50" added.
- 4. Modify Striping and signage between Iron Point and WB US50 Onramp to make #3 lane an on-ramp only lane and #2 lane to have option of WB US50 or continue south.
- 5. Convert #1 WB US50 HOV lane to metered lane (requires Caltrans policy exemption).



Benefits of Proposed Project



- Modeling shows a reduction of the Westbound left turn queuing distance to 250' for left turns and a reduction for northbound East Bidwell queue by 75'.
- The project would improve the East Bidwell Street/Iron Point Road intersection from LOS D to C during the AM peak hour. The average PM peak hour delay would increase by 3 seconds although the LOS would remain at D.
- The westbound approach delay would improve from 50 to 38 seconds (-24%) with the conversion of a through lane to a left turn lane.
- Majority of project is striping changes, significantly reducing costs from the originally conceived project, and can be changed back when Empire Ranch Road Interchange project is completed.



Project Timeline



- Currently in PS&E phase.
- Working with Caltrans to obtain Ramp Metering Policy Exception and the design of on-ramp operations.
- Anticipated construction award date -TBD due to Caltrans HQ approval required.
- Anticipated Cost <\$650,000

