



*The east end of the 3.3-mile project to improve State Route 36 that leads to Lassen Volcanic National Park is shown as the highway was being readied for a new, straighter alignment. The Lassen Lodge Safety Realignment Project was completed in 121 days, in time for summer visitors to the park.*

## Fewer Twists and Turns on Trips to Lassen

### Project Makes SR 36 Safer for Volcanic Park Visitors and Nevada-Bound Truckers

Some had their doubts that realigning 3.3 miles of twisting, busy highway between Red Bluff and Lassen Volcanic National Park could be done in one construction season. But the Lassen Lodge Safety Realignment Project was delivered ahead of schedule, with minimal impact on travelers and using construction methods that protected and preserved natural resources.

The stretch of State Route 36 is traveled by more than 500,000 outdoor enthusiasts who annually visit Lassen to enjoy its natural beauty and fascinating geological history. The realignment project addressed safety issues and improved the roadway for inter-regional freight movement between the Sacramento Valley and northern Nevada.

Caltrans District 2 and contractor Tullis Inc. rebuilt the section of SR 36 in Tehama County near the community of Mineral. The Lassen Lodge project began in May 2017 and was completed that November, before the end of the construction season when weather typically closes in on the area. Construction took only 121 days, considered quite a

feat since 200,000 cubic yards of rock and soil were moved.

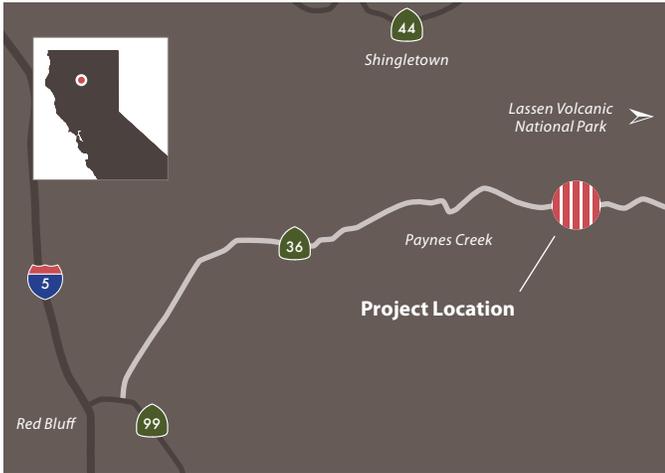
The project was designed to reduce the frequency and severity of accidents by straightening some of its curvy features and strengthening the roadbed. The total accident rate along this stretch of highway was more than three times higher than the statewide average for similar routes. This three-mile-plus segment of roadway consisted of a series of tight curves with designated speeds as low as 20 mph.

The project features an alignment that now meets current federal large truck design standards (although the California Legal Truck length designation will not change until several other issues are addressed along the corridor).

The improved roadway geometrics, and wider shoulders (four feet to eight feet) increase sight distance and provide a larger recovery area for motorists. Other project benefits include increased sun exposure to help melt snow and ice, improved culverts and drainage facilities, and new guardrail.

It's also anticipated that the wider, consistent

## Project Spotlight



Looking east from the newly repaved SR 36 at the summit of Lassen Lodge. The historic route continues to Highway 395 near Susanville.

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shoulder widths and snow/rockfall catchment areas will enhance safety for Caltrans maintenance crews while reducing disruptions to travelers.

The construction incorporated important sustainability elements. Native materials were used to reduce potential erosion and improve overall stability of the embankments in the steep terrain. Available rocky

material from specified cuts was used to fortify embankments. The contractor crushed rock on site for all rock slope protection and drain rock material.

In addition, old asphalt was recycled into roadway base rock, and mulch derived from vegetation removed for the project was spread over the flatter slopes to reduce surface erosion. Processing materials on site had the added benefit of reducing truck trips and emissions.

The \$9.5 million project was paid for with state and federal funds. **MM**

Source: Lupita Franco, public information officer, Caltrans District 2



Construction crews fortified this embankment along SR 36 on the east end of the project. The contractor used rock from the work site for slope protection and drainage basins, eliminating the need to haul in material from other places, saving time, money and reducing air pollution.