

HWY 174 PROJECT

We are here because the State of California Department of Transportation has not designed the project in accordance with Federal Laws, California State laws and has not followed California Department of Transportation policies.

As a result the **Project is NOT planned in a manner that is most compatible with the greatest public good and the least private injury.**

County Government

Nevada County Board of Supervisors and Nevada County Transportation Commission have asked Caltrans to complete 13 items regarding the project design and process. Two of the items have been partially addressed.

Section Index:

3a.- c. Nevada County Board of Supervisors Resolution

3d.- e. Nevada County Transportation Commission Letter to Caltrans

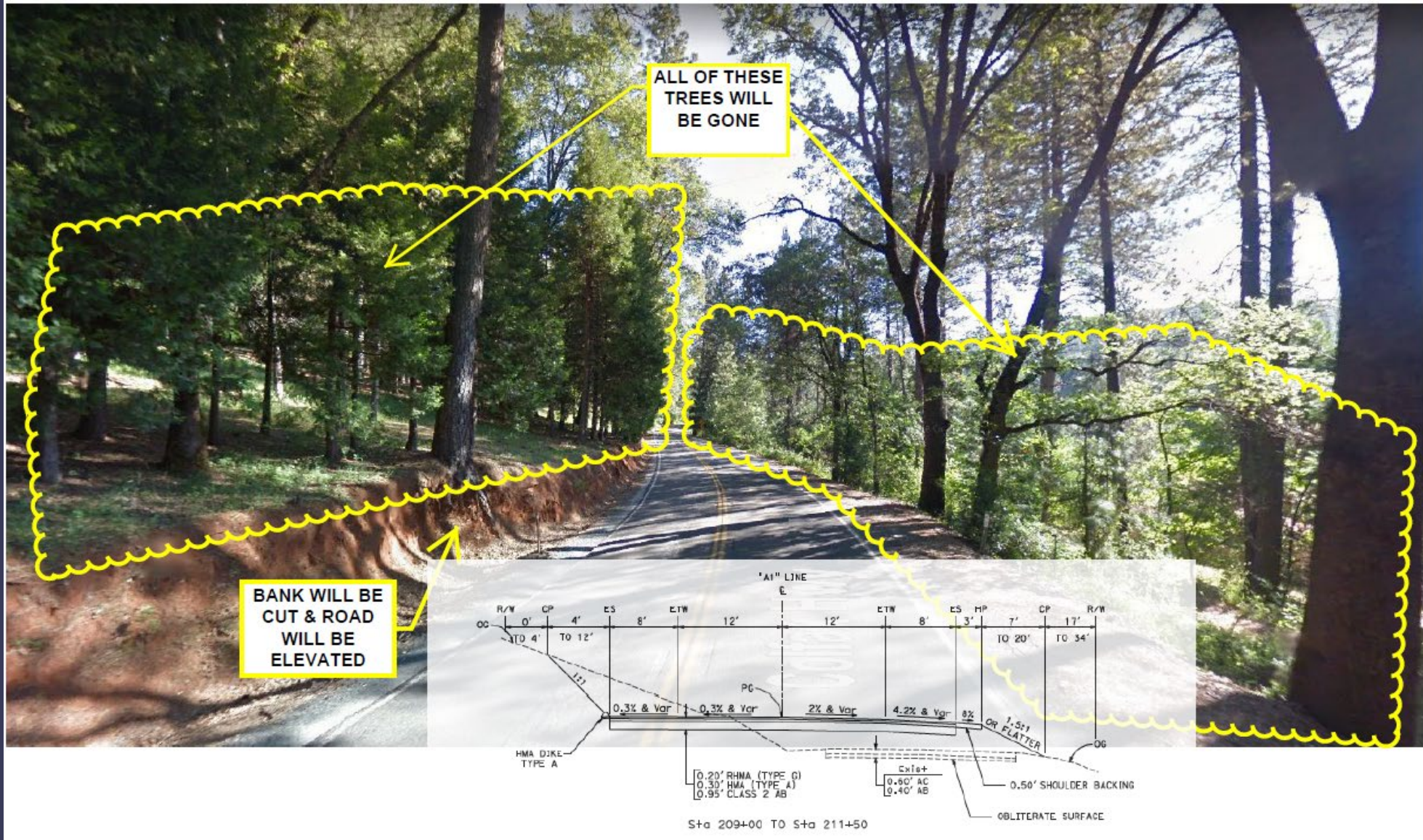
VISUAL IMPACT / SCENIC CORRIDOR

HWY 174 is recognized as one of the most scenic and historically rich highways in the Sierra Nevada Foothills and is designated a County Scenic Corridor and “Eligible” State Scenic Highway

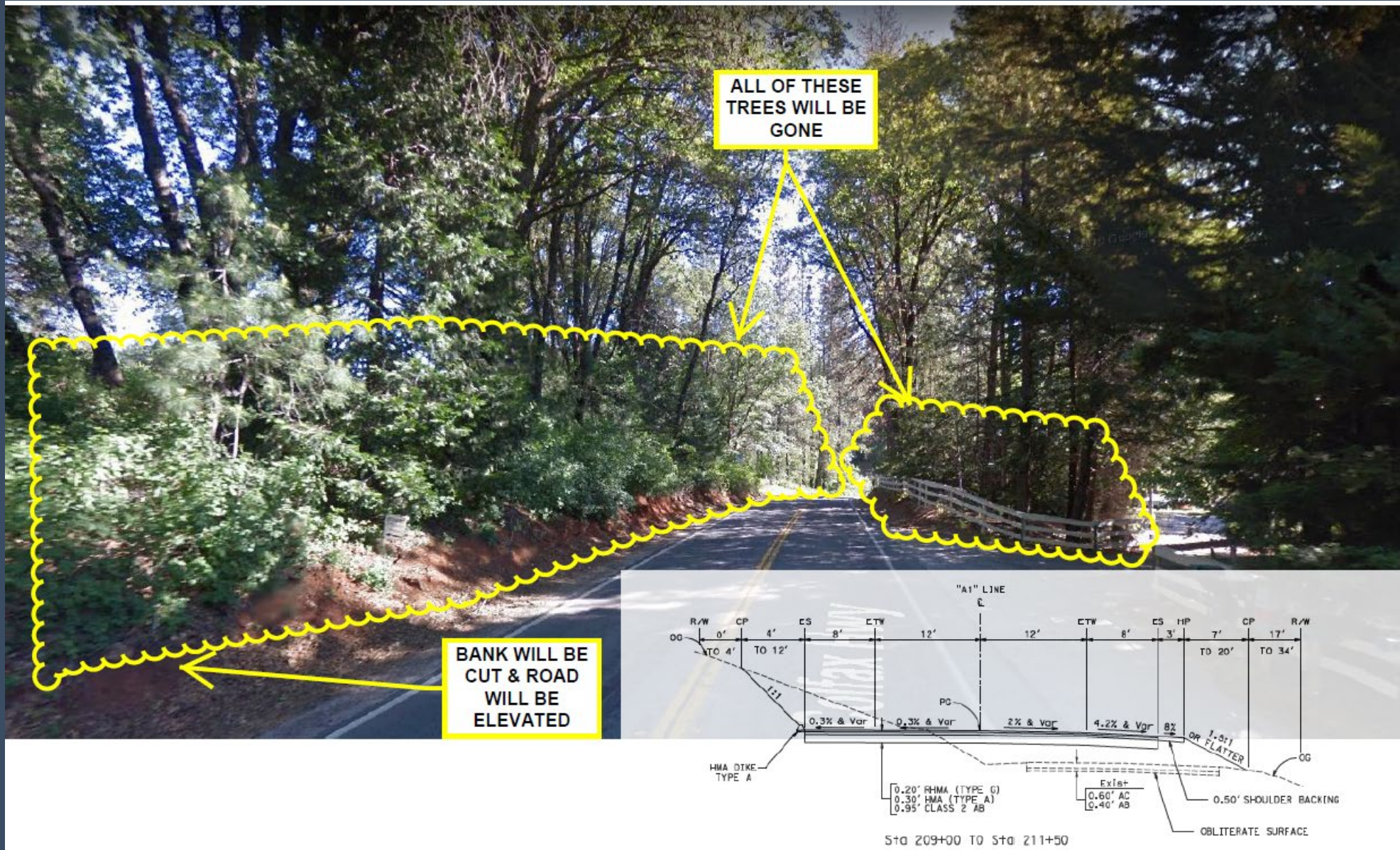
Section Index:

- 4a. Scenic Photo between 7 Cedars and Jewett Ln
- 4b. Impact Photo between 7 Cedars and Jewett Ln
- 4c. Scenic Photo right before Jewett Ln
- 4d. Impact Photo right before Jewett Ln
- 4e. Hwy 174 Photo between Quail Point Ln & You Bet
- 4f. Impact Photo between Quail Point Ln & You Bet

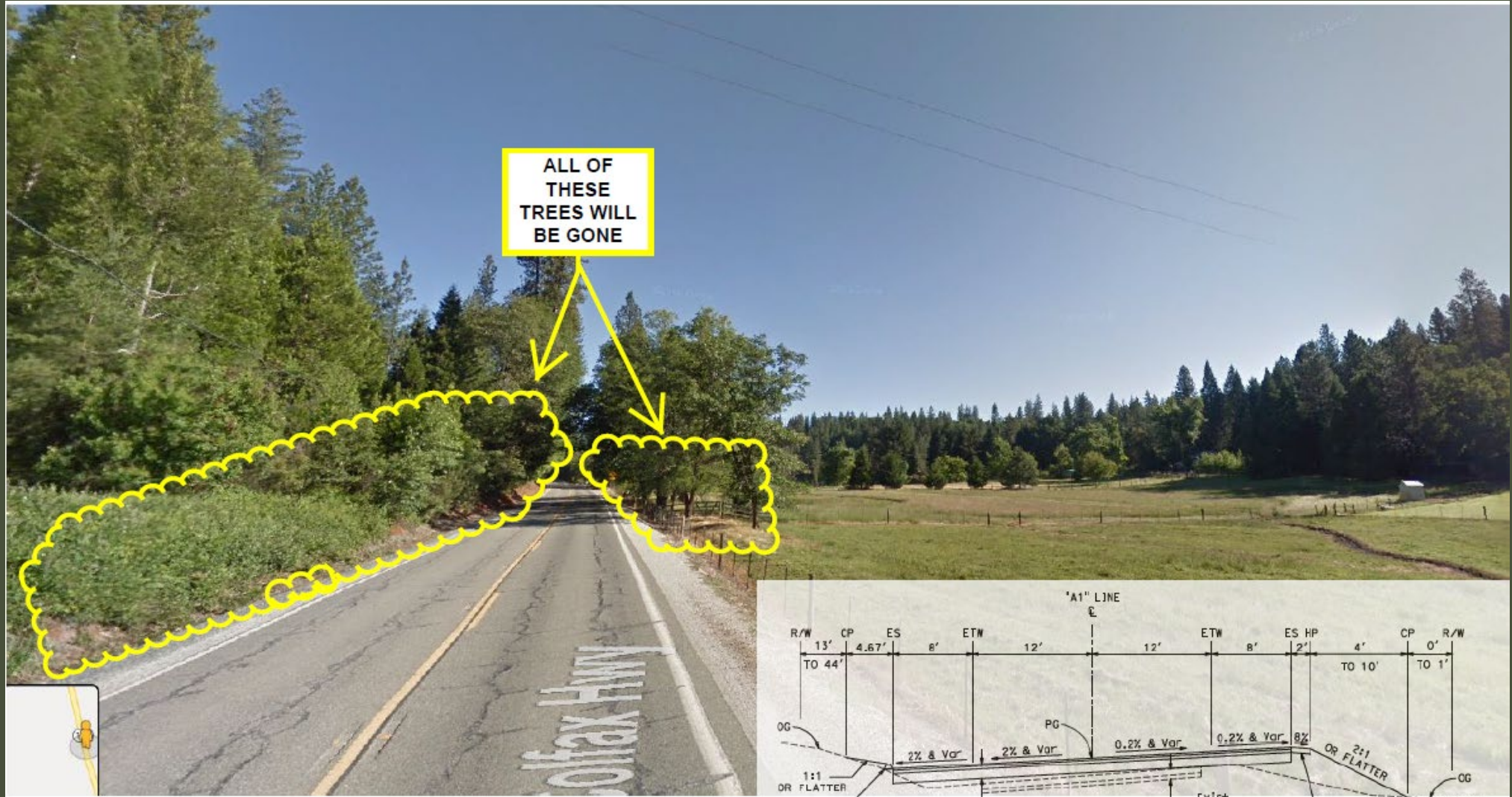




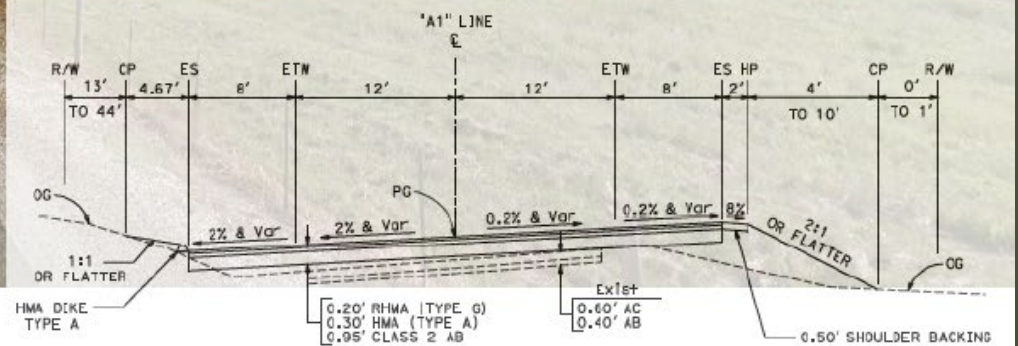








ALL OF THESE TREES WILL BE GONE



174

Sta 228+00 TO Sta 236+00

Noise

Caltrans has incorrectly categorized the project as a Type III project. Type III projects require no environmental impact and do not require a noise analysis study.

Moving the road 25'+ onto our property and adjacent property will increase noise at our home.

Section Index:

- 5a. Code of Federal Regulations
- 5b. Excerpts from Initial Study
- 5c. Email from Federal Highway Administration
- 5d. Shielding – Removal of dense vegetation

Section 23 of Code of Federal Regulations (CFR) define Type I, II and III projects

Type I Project.

- (1) The construction of a highway on new location; or,
- (2) The physical alteration of an existing highway where there is either:
 - (i) Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,
 - (ii) Substantial Vertical Alteration. A project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor; or,

Type II Project. A Federal or Federal-aid highway project for noise abatement on an existing highway. For a Type II project to be eligible for Federal-aid funding, the highway agency must develop and implement a Type II program in accordance with section 772.7(e).

Type III Project. A Federal or Federal-aid highway project that does not meet the classifications of a Type I or Type II project. Type III projects do not require a noise analysis.

Dist	COUNTY	RD
03	NEW	1
REGISTERED CIVIL		
PLAN'S APPROVAL		
<small>THE STATE OF CALIFORNIA BY AGENTS SMALL PRINT THE SECRETARY OF TRANSPORTATION CORRECTED BY THIS PLAN</small>		

LEGEND

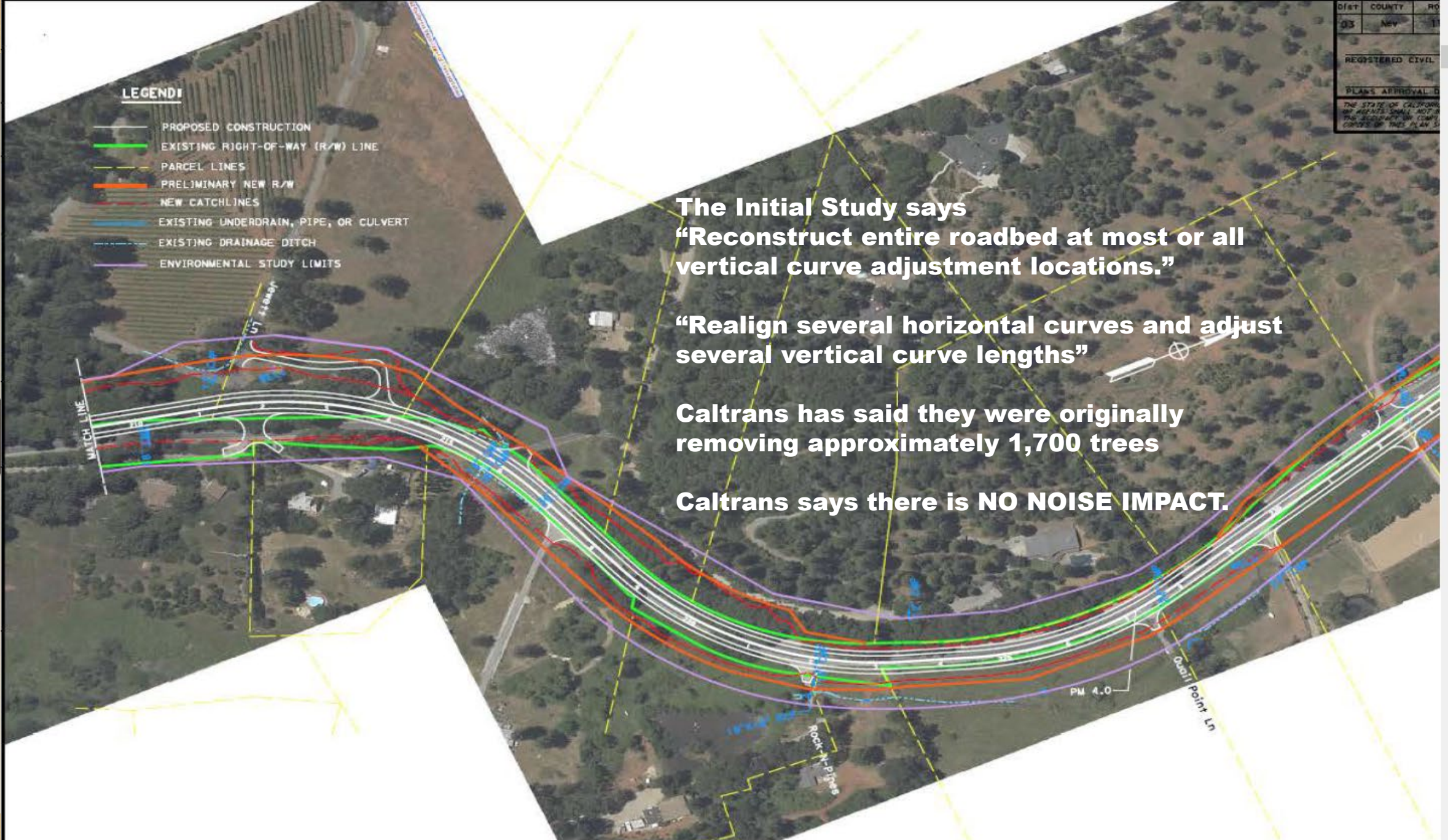
- PROPOSED CONSTRUCTION
- EXISTING RIGHT-OF-WAY (R/W) LINE
- PARCEL LINES
- PRELIMINARY NEW R/W
- NEW CATCHLINES
- EXISTING UNDERDRAIN, PIPE, OR CULVERT
- EXISTING DRAINAGE DITCH
- ENVIRONMENTAL STUDY LIMITS

**The Initial Study says
“Reconstruct entire roadbed at most or all
vertical curve adjustment locations.”**

**“Realign several horizontal curves and adjust
several vertical curve lengths”**

**Caltrans has said they were originally
removing approximately 1,700 trees**

Caltrans says there is NO NOISE IMPACT.



From: "Ho, Cecilia (FHWA)" <Cecilia.Ho@dot.gov>

Date: July 30, 2019 at 11:53:41 AM PDT

To: Rachel Corona <coronarachel@yahoo.com>

Cc: "Varela-Margolles, Aileen (FHWA)" <a.varela-margolles@dot.gov>, "Roberts, Mike (FHWA)" <Michael.Roberts@dot.gov>

Subject: RE: Examples for 23 CFR 772.5 Type III Projects

Hi, Rachel-- Here are the answers to your questions. Hope they help clarify the issues.

1.Can you tell me what is considered "shielding" as referenced in the definition of a Type I project.

a. One way a project may be considered as a Type 1 project is that it removes the shielding between the noise source and a receptor (say a house). Shielding can be removed by elevating a roadway, by removing a hill or other structure such that the result is "line of sight" between the traffic and the receptor. Generally, blocking the line of sight provides about 5 dB reduction in noise levels. There is a caveat to this: vegetation removal generally does not qualify a project as Type 1 because there is rarely sufficient vegetative density between the roadway and a receptor so that the vegetative cover would provide (visual or acoustic) shielding.

2. Can you provide some examples of Type III projects or project activities?

a. Type III projects are not expected to have a noise impact on nearby receptors. Examples of Type III projects include installing sidewalks, or bike paths (whether new or by restriping pavement), construction of all electronic tolling where vehicles do not slow or stop, construction of a turn lane, operational changes such as adding a stop light in place of a stop sign.

Cecilia

Cecilia Ho | FHWA

Team Leader, Air Quality and Noise
Office of Natural Environment

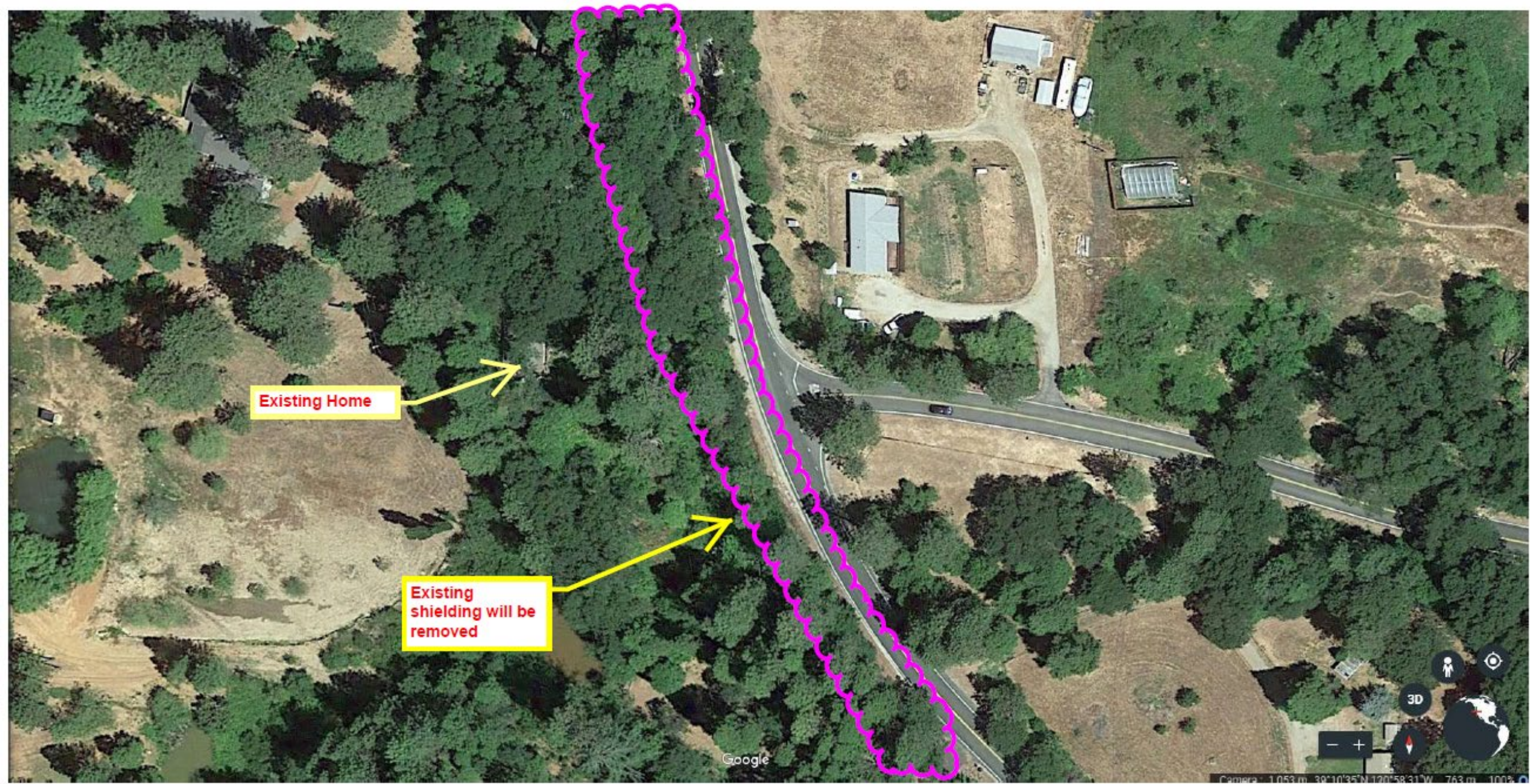
☎: 202-366-9862

✉: cecilia.ho@dot.gov

📍: 1200 New Jersey Avenue SE Washington DC 20590

https://www.fhwa.dot.gov/environment/air_quality/

<https://www.fhwa.dot.gov/environment/noise/>



Existing Home

Existing shielding will be removed

Off-Site Drainage

The project adversely impacts off-site drainage on our property

Section Index:

- 6a. Letter from MacKay & Somps Engineering
- 6b. Aerial view
- 6c. Existing Condition Photo

8-12-2019

Rachel Corona
16130 State Hwy
Grass Valley, CA 95945

Re: State of California DOT SR-174 Improvements: Quail Pointe Lane Driveway Culvert

Rachel,

MacKay and Soms (M&S) has reviewed the State of California DOT Drainage Report for State Route 174 – SR-174 Safety Improvement Project (Drainage Report), December 2018 and the State of California DOT Quail Pointe Lane Driveway Culvert Memo (QPLD Memo). Following are comments regarding the calculations and findings:

Peak Flow Calculations:

The calculations presented in the Quail Pointe Lane Driveway Culvert Memo are adequate to determine a peak increase in flow due to change in watershed area and impervious areas. The primary change to the post construction conditions at the driveway culvert, as noted in the memo, is a small increase in watershed and an increase in impervious area due to the horizontal curve widening. The memo, however, does not address potential loss of storage upstream (West) of State Route 174. The design layouts printed February 15, 2019 note that the driveway is located at 232+26.12 and the Drainage Report notes an existing 24" CMP culvert at 232+59.29. The culvert at 232+59.29 is a cross culvert and is proposed to be upsized to two 18" HDPE pipes (shown on the plans to be 21" x 15" oval culverts). The 24" pipe currently discharges just upstream of the Quail Pointe Lane Driveway. Due to the upsizing to dual HDPE pipes, there will likely be an increase in flow across SR-174, which could change the amount of ponding upstream (west of SR-174, the inlet side of the culvert). The QPLD Memo does not address any potential increase in flow to the property resulting from increasing the conveyance across SR-174. Without addressing the loss of upstream storage on the West side of SR-174, it is difficult to determine the total impacts on the property and driveway.

Property Impacts:

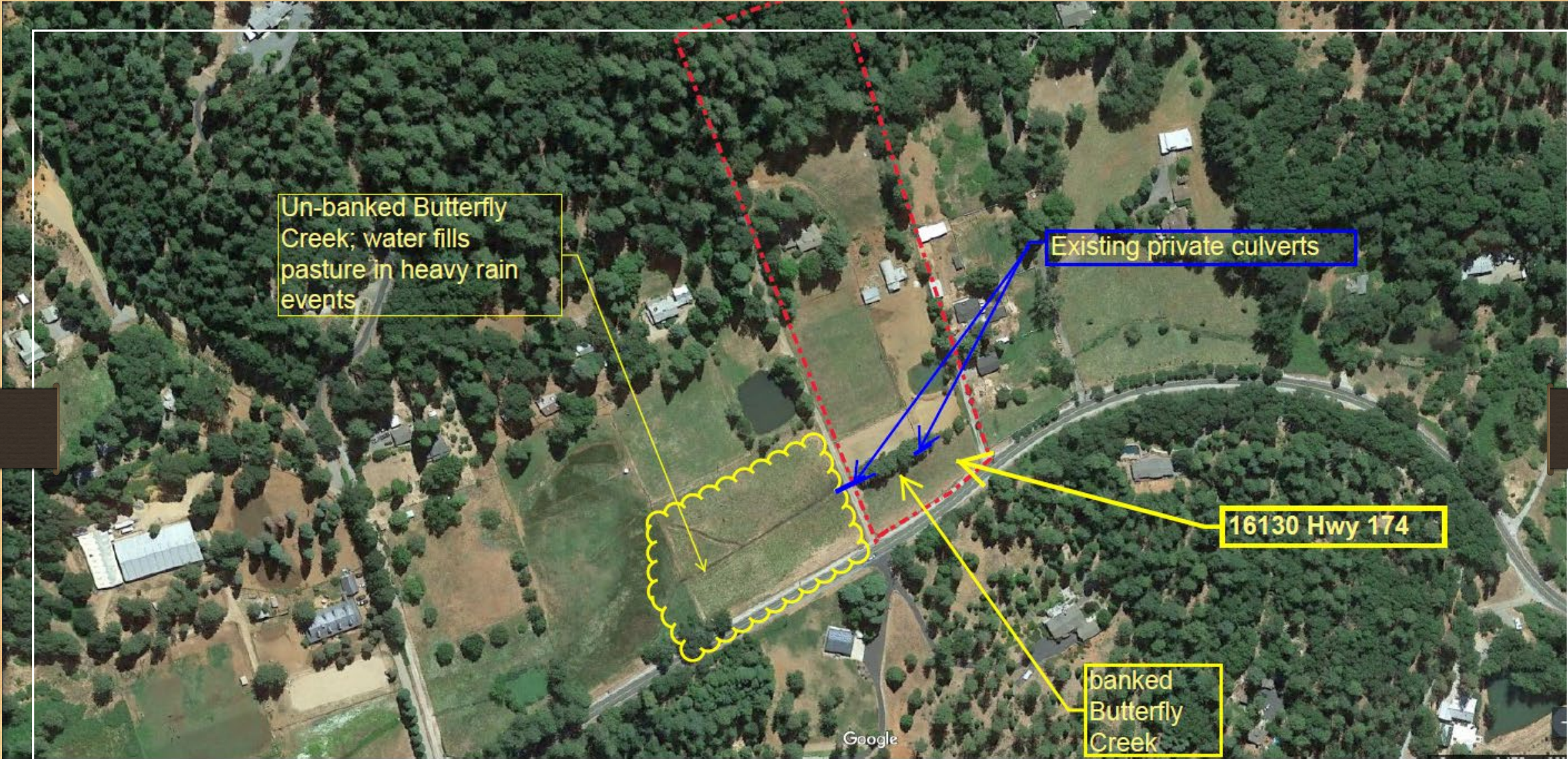
The Quail Pointe Lane Driveway Culvert Memo notes a "...very minor increase in flow for these storm events" on the driveway crossing. The driveway currently experiences upstream ponding with occasional inundation during storm events. Although the impact is minor, any increase in peak flow on the driveway crossing will increase the frequency that the driveway will overtop and experience weir flow. This adverse impact should be mitigated for prior to discharging to a neighboring property.

Sincerely,



Stephen D. Smith P.E.

CC: Brian Hamner



Un-banked Butterfly Creek; water fills pasture in heavy rain events

Existing private culverts

16130 Hwy 174

banked Butterfly Creek



NORTH

DRAINAGE

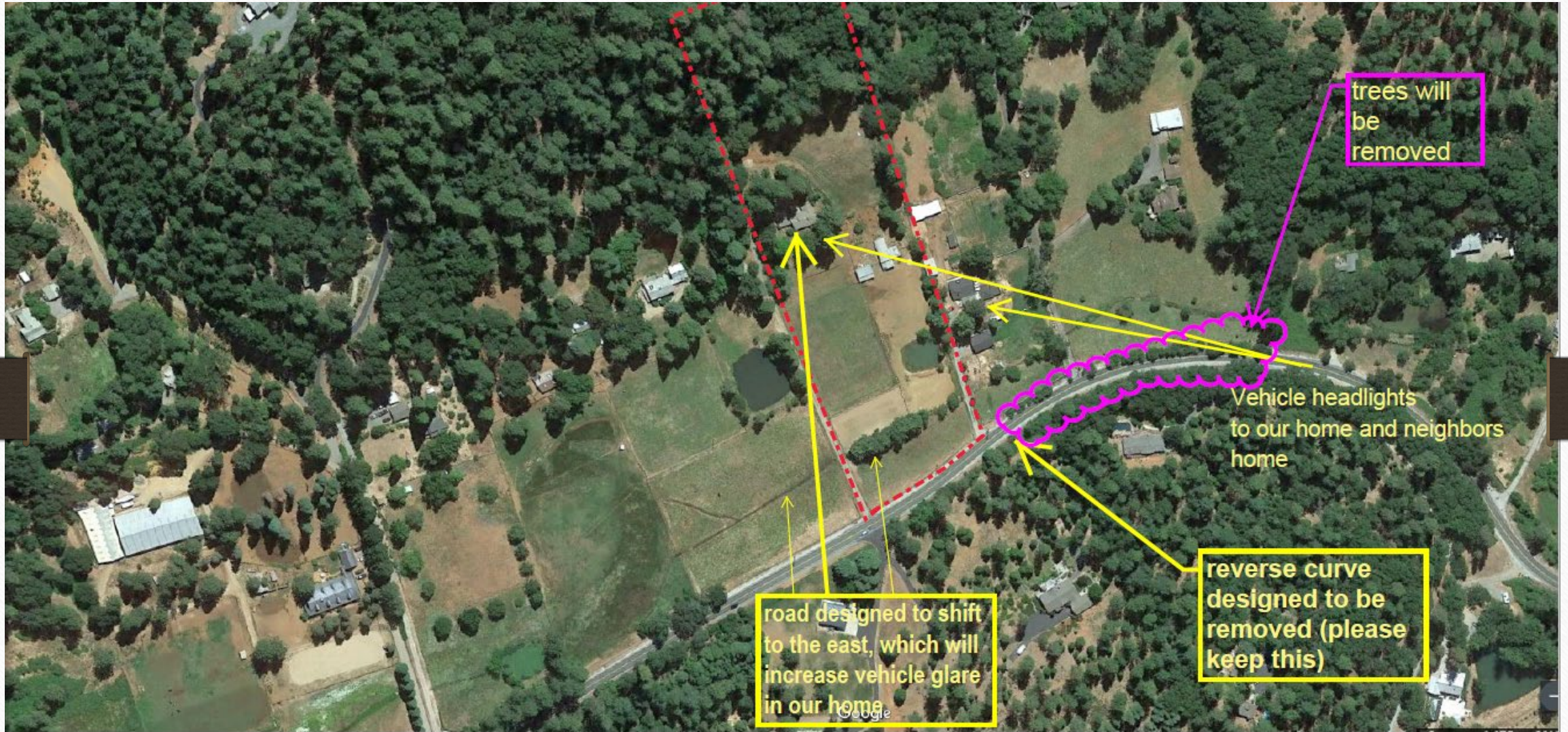


Visual Glare

The road is being realigned closer to homes which will require the removal of existing tree and vegetation shielding

Section Index:

- 7a. Aerial photo of our home and neighbor
- 7b. Aerial photo of neighbor at Greenhorn Access Rd



road designed to shift to the east, which will increase vehicle glare in our home

trees will be removed

reverse curve designed to be removed (please keep this)

Vehicle headlights to our home and neighbors home

NORTH

VISUAL / VEHICLE GLARE - EXHIBIT A



Existing Home

Existing shielding will be removed

Google

Camera: 1.053 m 39°10'35"N 120°58'31"W 763 m 100%

Safety Data for Highway 174 Justification

From 2001 to 2013 there were 13 fatality accidents on the entirety of Hwy 174, of which only two occurred in the 1.9 mile studied segment.

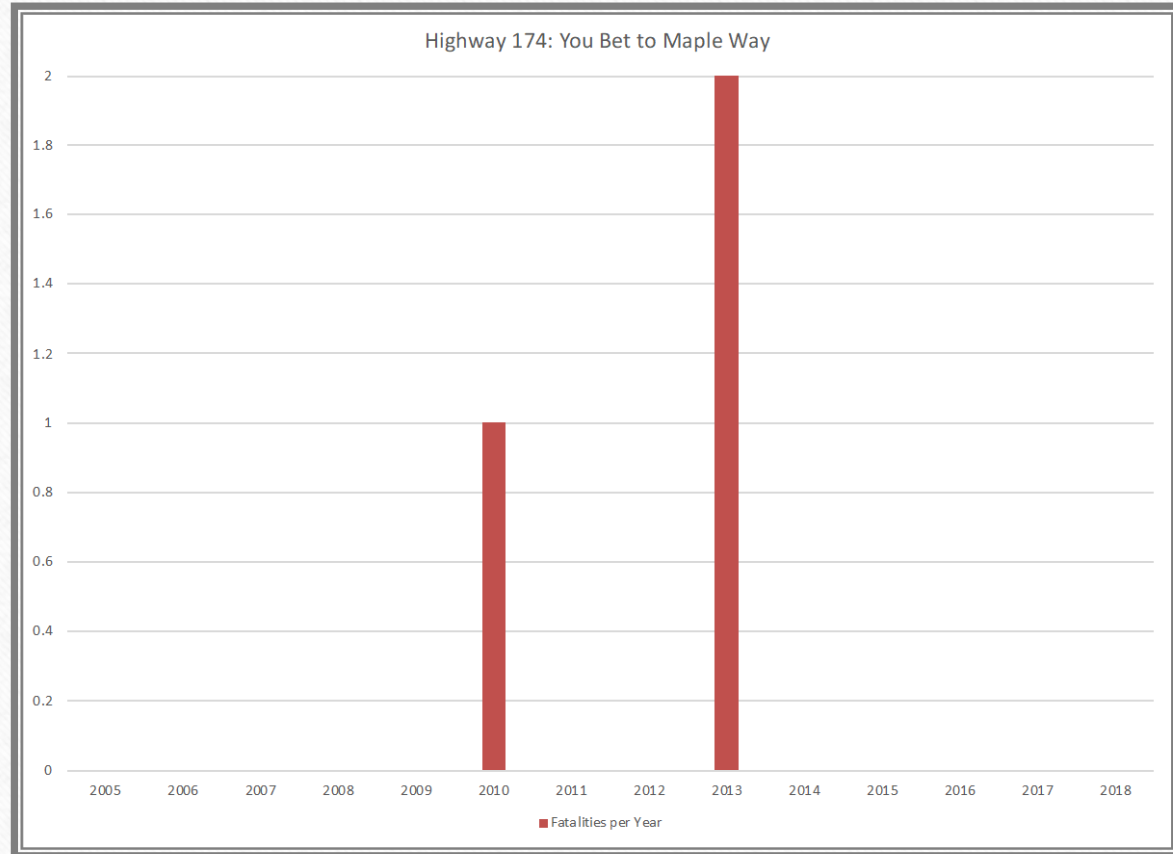
There have been no fatalities since March of 2013.

Section Index:

- 8a. Caltrans Justification Data
- 8b. Caltrans Conflicting Data
- 8c. FHWA Recommendation for Safety Audit

Data For Highway 174 Justification

- Caltrans looked at data from 1 April 2010 through 31 March 2013
 - The only three fatalities in a 20-year period occurred during those 36 months



Further evidence that three years of data isn't enough to make firm conclusions was unwittingly provided by Caltrans;

- Caltrans looked at data from 1 July 2013 through 30 June 2016 as part of a speed survey of roads in the area
 - July 2018 Conclusions:
 - Level of safety is adequate (close to state averages)
 - Recommendation: increase speed to 50 mph, even with no changes to road
- One organization came to two different conclusions
 - Road is so dangerous that it needs to be drastically altered
 - Road is safe enough, as it is, that the speed limit can be increased
 - Note: second conclusion was discarded to allow project to proceed

- The Federal Highway Administration recommends a safety audit
 - What is causing collisions and fatalities?
 - Road: bad pavement, poor visibility, tight turns, overhanging rocks and trees
 - Animals
 - Weather
 - Drivers: speeding, DUI, judgment mistakes
 - Both fatal collisions on Highway 174 were caused by drivers intoxicated with both drugs and alcohol
 - Unsafe turn and hit object; unsafe speed and lost control
 - Instead of a one-size-fits-all, widening, straightening, and flattening of the highway, Caltrans should conduct a safety audit to see where the problems are and what is causing them
 - Caltrans should then look at alternatives to solve each type of problem
 - You can't solve a problem you don't understand
 - You don't need to change the whole road if only a few spots have problems

Traffic Speed

If the road is widened, flattened, and straightened, the speeds people drive will almost certainly increase and the speed limit will ultimately be increased to reflect that.

This road traverses a neighborhood, many owners haul horse, cattle, and equipment trailers.

Section Index:

- 9a. Caltrans Traffic Speed Study
- 9b. FHWA Guidance and Caltrans Guidance

Memorandum

To: FERNANDO RIVERA, CHIEF
Traffic Safety Branch

Date: May 29, 2018

File: 03-Rev-174
P.M. 1.00 – 6.62
Colfax
Increase Speed 50 MPH

From: Mary Bokova, PE
Traffic Operations Engineer



Signature: _____

Subject: SPEED ZONE JUSTIFICATION

The 5.52 mile long 45 mph speed zone traverses a scattered residential area. The highway is a two-lane conventional in mountainous terrain.

85th Percentile Speeds - Northbound: 44 to 53 mph
Southbound: 44 to 55 mph

District Collision Records - There were 60 accidents (no fatalities) in the three-year period from July 1, 2013 to June 30, 2016. The actual collision rate is 1.49 ACC/MVM (accidents per million vehicle miles) and the statewide average rate is 1.16 ACC/MVM.

Conditions Not Readily Apparent to the Driver - None

Summary - State collision records show that the average actual accident rate is 1.28 times the average accident rate and above the statewide average rate.

Beginning at PM 1.00 the 85th and 50th percentile speeds begin to increase to above 45 mph and begin to decrease to below 50 mph at PM 6.62. In addition to analyzing the collision data for the proposed 50 mph speed zone, the collision data between locations where the speed data was collected within the zone was also analyzed. The average actual accident rate at half of those locations was lower than the statewide average. At the locations where the average actual accident rate was higher than the statewide average, the primary collision factors were improper turn and failure to yield. The alignment through this section of the roadway is mostly straight, the sight distance is long, and there is limited pedestrian traffic. Based on this information and our engineering

judgement, the 45 mph speed zone will be increased to 50 mph beginning at P.M. 1.00 and ending at PM 6.62.

The Federal Highway Administration's guidelines say that roads should be wider on the outside of the curves and don't need to be wider on the inside of curves and on straightaways.

Caltrans Design Information Bulletin (DIB) 79-03 includes *Alternative Countermeasures to Reconstruction for Safety Improvements*. The bulletin also says in some cases reconstruction measures to enhance safety are impractical and alternative measures may be taken.