



City of Redding  
Public Works Department  
Traffic Operations

## Engineering and Traffic Survey of Quartz Hill Road

Survey Date: 2/25/2015  
7-year Expiration: 2/25/2022

For the determination of safe and reasonable speed zoning as required by Sections 22358 and 40802 of the California Vehicle Code (CVC), as defined by Section 627 of the CVC and in accordance with Section 2B.13 of the California Manual on Uniform Traffic Control Devices, this Engineering and Traffic Survey (E&TS) was initiated to verify or modify speed zones on Quartz Hill Road.

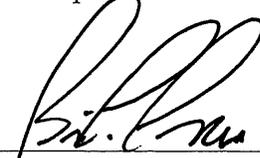
Based on the results of this E&TS and adoption of Ordinance Number 2548 by the City Council of the City of Redding, amending Redding Municipal Code Section 11.12.010, the following speed zone(s) on Quartz Hill Road is / are established:

- 25 mph from SR273 to 250 feet east of the U.P. Railroad Trestle
- 35 mph from 250 feet east of the U.P Railroad Trestle to Snow Lane
- 40 mph from Snow Lane to Terra Nova Drive
- 45 mph from Terra Nova Drive to the City Limit
- 30 mph from Lake Boulevard to the City Limit

In accordance with Redding Municipal Code 11.08.010, appropriate signs giving notice of the above speed zoning shall be placed and the stated speed limit(s) shall be effective upon the placement of such signs.

  
John C. Abshier, P.E. Date  
Traffic Operations Manager



  
Brian Crane, P. E. Date  
Director of Public Works

ATTEST:

  
PAMELA MIZE, City Clerk



## Quartz Hill Road

<b>SPEED ZONE BOUNDARY</b>	SR 273 to 250 ft east of the U.P. Railroad Trestle	250 ft east of the U.P. Railroad Trestle to Snow Lane	Snow Lane to Terra Nova Drive	Terra Nova Drive to City limits
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### ROADSIDE CONDITIONS

Land Use District	Playground / Residential	Business/Residential	Rural Residential	Rural Residential
Pedestrian Use	Numerous	Moderate	Few	Few
Percent Sidewalks	60%	80%	10%	30%
Bike Lane or Bike Route	Yes	Yes	Yes	Yes
Driveways Present	Several	Few	Few	Few

### ROADWAY GEOMETRY

Roadway Segment Length, Ft	2,700	1,860	3,904	4,775
Number of Thru Lanes	2	3 to 4	2 to 4	2
Width, Ft	68	53-76	24-76	24-60
Median Type	Concr Island/Turn Lane	Dble Yellow/Ctr Turn Lane	Double Yellow Stripe	Dble Yellow/Ctr Turn Lane
Horizontal Alignment	Curvilinear	Curvilinear	Curvilinear	Curvilinear
Vertical Alignment	Flat	Flat	Vertical Curves	Flat

### TRAFFIC CONDITIONS

Average Daily Traffic (ADT)	4,265	4,806	4,417	3,841
Collisions in the Last 2 Years	4	5	0	0
Collision Rate	2.51 Coll/MVM	1.43 Coll/MV	0 Coll/MVM	0 Coll/MVM
City-Wide Average Rate	1.86 Coll/MVM	1.64 Coll/MV	1.86 Coll/MVM	1.86 Coll/MVM
10 mph Pace Range, mph	-	29-39	33-43	42-52
Vehicles Within Pace, %	-	74%	73%	74%
Median Speed (50%), mph	-	34	39	46
Existing Posted Speed, mph	30	30	40	45
Prevailing Speed (85%), mph	-	38	44	50
Nearest 5-mph Increment, mph	-	40	45	50

### 5-MPH REDUCTION OPTION per CA-MUTCD 2B.13 Option 1

Conditions that justify a 5-mph reduction below the nearest 5-mph increment of the prevailing speed:

Traffic Safety	-	-	-	-
Safety of Pedestrians	-	-	-	-
Safety of Cyclists	-	-	-	Yes
Residential Density	-	-	-	-
5-mph Reduction Recommended	-	No	No	Yes

### ROUNDING DOWN OPTION per CVC 21400 (b)

Where the nearest 5 mph increment would require rounding *up* from the prevailing speed, the posted speed limit may be rounded *down* from the prevailing speed, with no further reduction for any reason.

Rounding Down Recommended	-	Yes	Yes	No
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### RECOMMENDATION

POST SPEED LIMIT	25 mph *	35 mph	40 mph	45 mph
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\* Caldwell Park is adjacent to Quartz Hill Road, including a playground, picnic areas, multiple play fields, a basketball court, a skateboard park, a youth aquatic center, and walking trails. The area is used by numerous children, cyclists, and pedestrians daily. A prima facie 25 mph speed limit in accordance with CVC 22357.1 is justified.



City of Redding  
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Traffic Operations

## Quartz Hill Road

SPEED ZONE BOUNDARY	City Limits to Lake Blvd
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### ROADSIDE CONDITIONS

Land Use District	Rural Residential
Pedestrian Use	Few
Percent Sidewalks	5%
Bike Lane or Bike Route	Yes
Driveways Present	Numerous

### ROADWAY GEOMETRY

Roadway Segment Length, Ft	3,243
Number of Thru Lanes	2
Width, Ft	20-42
Median Type	Double Yellow Stripe
Horizontal Alignment	Curvilinear
Vertical Alignment	Vertical Curves

### TRAFFIC CONDITIONS

Average Daily Traffic (ADT)	945
Collisions in the Last 2 Years	0
Collision Rate	0 Coll/MVM
City-Wide Average Rate	1.86 Coll/MVM
10 mph Pace Range, mph	25-35
Vehicles Within Pace, %	78%
Median Speed (50%), mph	29
Existing Posted Speed, mph	25
Prevailing Speed (85%), mph	34
Nearest 5-mph Increment, mph	35

### 5-MPH REDUCTION OPTION

per CA-MUTCD 2B.13 Option 1

Traffic Safety	-
Safety of Pedestrians	Yes
Safety of Cyclists	Yes
Residential Density	Yes
5-mph Reduction Recommended	Yes

### ROUNDING DOWN OPTION

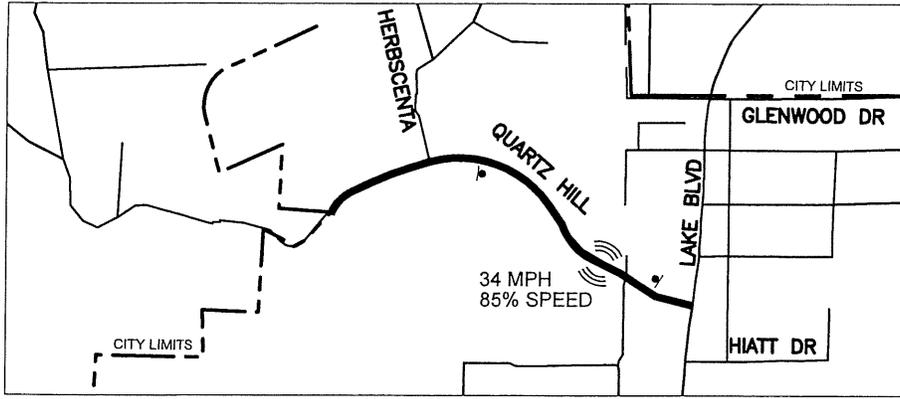
per CVC 21400 (b)

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Rounding Down Recommended	No
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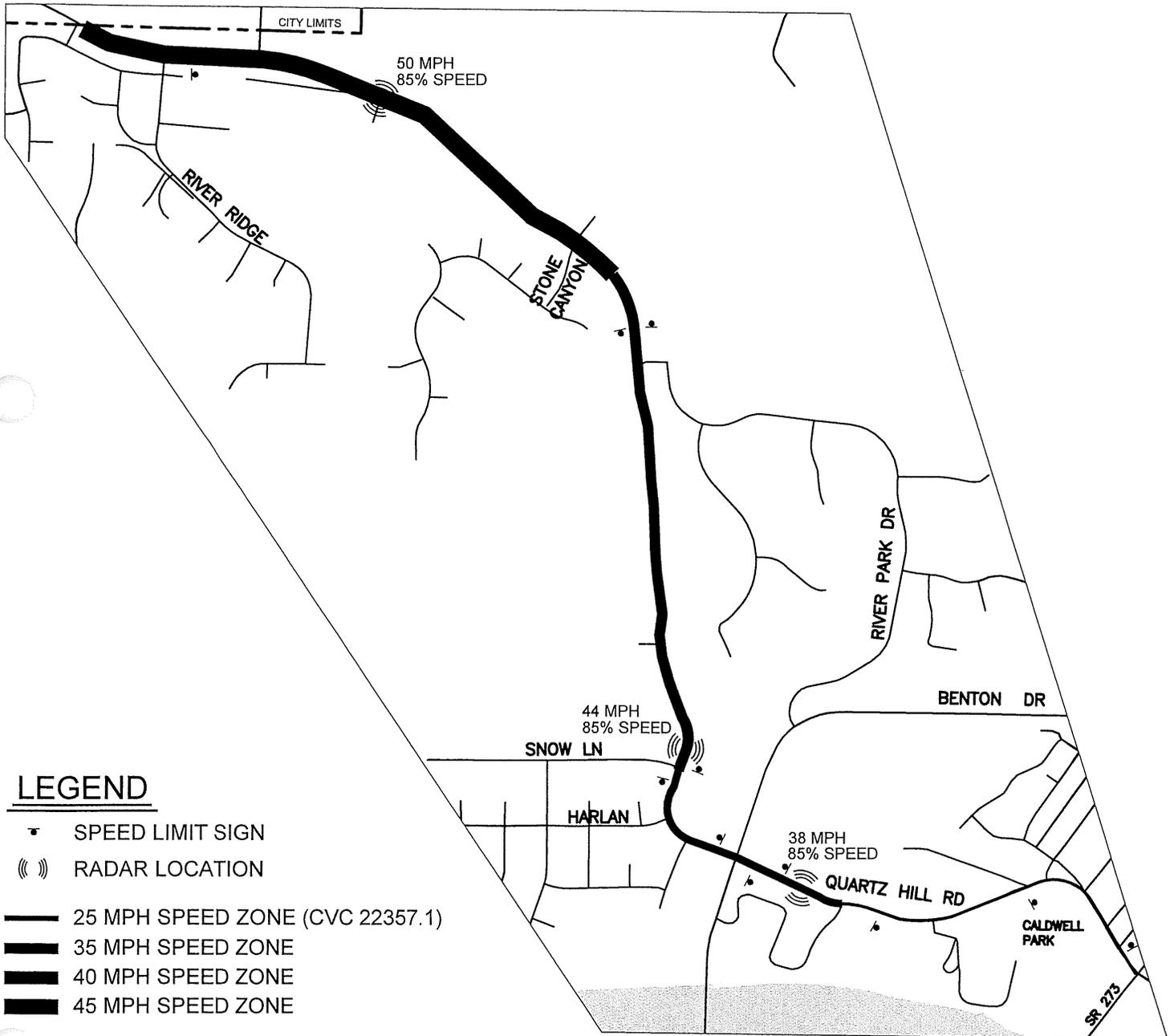
### RECOMMENDATION

POST SPEED LIMIT	30 mph
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### LEGEND

- SPEED LIMIT SIGN
- (( )) RADAR LOCATION
- 30 MPH SPEED ZONE



### LEGEND

- SPEED LIMIT SIGN
- (( )) RADAR LOCATION
- 25 MPH SPEED ZONE (CVC 22357.1)
- 35 MPH SPEED ZONE
- 40 MPH SPEED ZONE
- 45 MPH SPEED ZONE

CITY OF REDDING PUBLIC WORKS DEPARTMENT

# QUARTZ HILL ROAD ENGINEERING & TRAFFIC SURVEY

SR 273 to City Limits and Lake Blvd to City Limits

