



**CITY OF REDDING  
ENGINEERING AND TRAFFIC SURVEY  
OF  
SOUTH BONNYVIEW ROAD**


**JULY 31, 2010**

**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 (ETS) was initiated to verify or modify speed zones on South Bonnyview Road.**

**Based on the results of this ETS (attached) and adoption of Ordinance Number 2465 by the City Council of the City of Redding amending Redding Municipal Code Section 11.12.010, the following speed zones on South Bonnyview Road are established;**

- 40 MPH from SR 273 to East Bonnyview Road.**
- 50 MPH from East Bonnyview Road to Bechelli Lane.**
- 35 MPH from Bechelli Lane to Churn Creek Road.**

**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.**

  
3/28/2013  
**Brian Crane, P. E.**  
**Director of Public Works**

**ATTEST:**

  
**PAMELA MIZE, City Clerk**

**City of Redding**  
**So. Bonnyview Road**  
**Engineering and Traffic Survey (ETS) for Speed Zoning**

	Speed Zone Limits	Speed Zone Limits	Speed Zone Limits
	SR 273 TO E. BONNYVIEW RD	E. BONNYVIEW RD TO BECHELLI LN	BECHELLI LN TO CHURN CREEK RD

**ROADSIDE CONDITIONS**

LAND USE DISTRICT	BUSINESS - RESIDENTIAL	RESIDENTIAL	BUSINESS
PEDESTRIANS USE	FEW	NUMEROUS	FEW
PERCENT SIDEWALKS	100%	60%	70%
BIKE LANE or ROUTE	YES	YES	NO
DRIVEWAYS PRESENT	FEW	NONE	FEW

**ROADWAY GEOMETRY**

LENGTH OF ROADWAY SEGMENT (FEET)	2,750	6,200	1,200
NUMBER OF THRU LANES	4 (2 EB, 2 WB)	4 (2 EB, 2 WB)	4 (2 EB, 2 WB)
WIDTH (FEET)	VARIES 70 - 100	VARIES 70 - 82	VARIES 74 - 98
MEDIAN TYPE	CONCRETE	CONCRETE & DBL YELLOW STRIPE	CONCRETE & TURN LANE
HORIZONTAL ALIGNMENT	STRAIGHT	STRAIGHT	STRAIGHT
VISIBILITY	GOOD	GOOD	GOOD
VERTICAL ALIGNMENT	FLAT	GENTLE SLOPE	FLAT

**OBSERVED TRAFFIC CONDITIONS**

DATE OF RADAR SURVEY	November 17, 2009	November 17, 2009	January 14, 2009
AVERAGE DAILY TRAFFIC (ADT)	21,000	28,000	23,470
EXISTING POSTED SPEED	40 MPH	45 MPH	35 MPH
CRITICAL SPEED (85th PERCENTILE)	46 MPH	53 MPH	38 MPH
MEDIAN SPEED (50th PERCENTILE)	41 MPH	48 MPH	35 MPH
10 MPH PACE RANGE	35 - 45 MPH	43 - 53 MPH	30 - 40 MPH
TOTAL COLLISIONS IN 2 YEARS	30	25	30
COLLISIONS PER MILLION VEHICLE MILES (MVM)	3.74 PER MVM	1.04 PER MVM	7.61 PER MVM
ROUNDING APPLIED TO OBSERVED CRITICAL SPEED (85th PERCENTILE) PER GUIDANCE OF MUTCD SECTION 2B.13	45 MPH	55 MPH	40 MPH

**RECOMMENDATION**

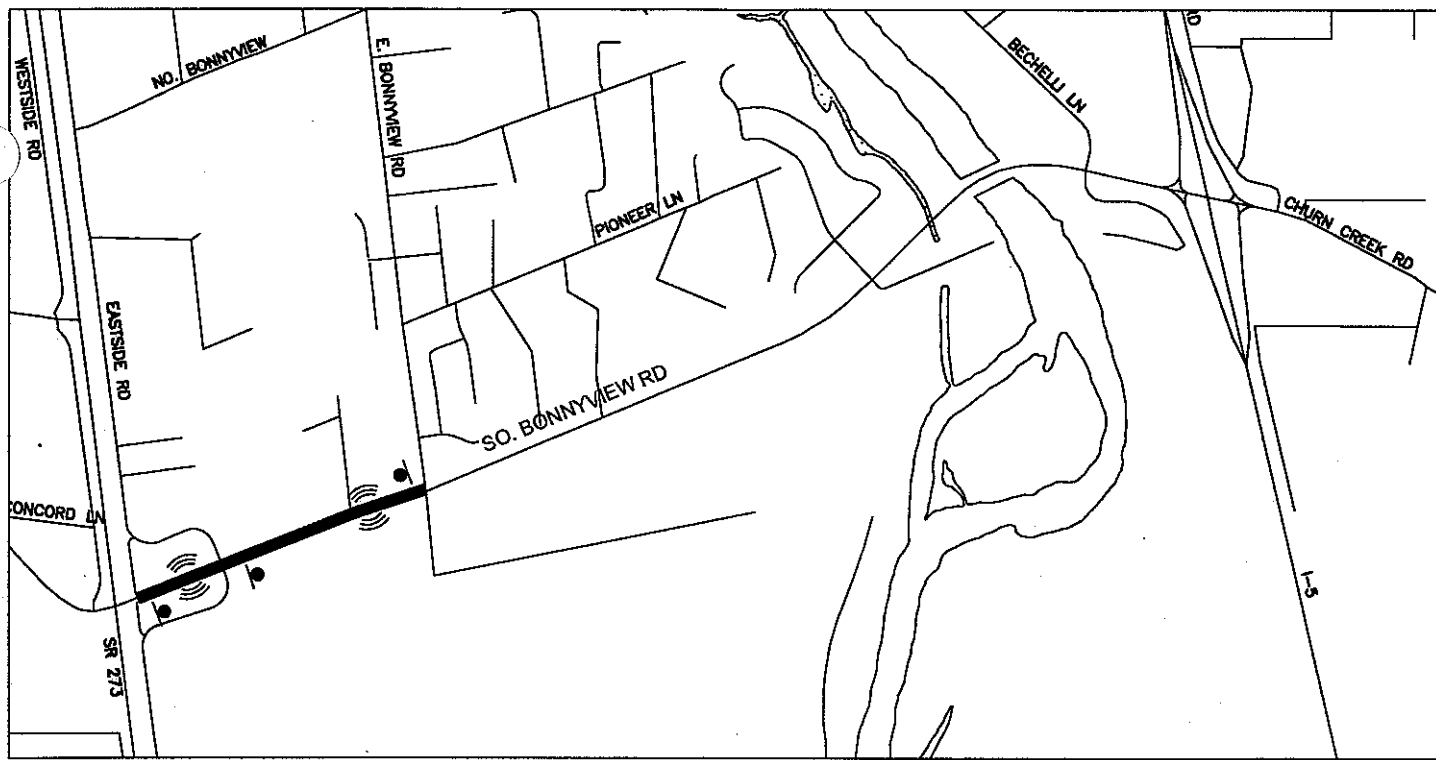
POST SPEED LIMIT	40 MPH	50 MPH	35 MPH
JUSTIFICATION FOR ESTABLISHING SPEED LIMIT 5 MPH BELOW CRITICAL SPEED (85th PERCENTILE)	THE COLLISION RATE AND NUMBER OF COLLISIONS OF THE ROADWAY ARE NOT READILY APPARENT TO THE DRIVER. POSTING THE SPEED LIMIT 5 MPH LOWER IS JUSTIFIED.	THE COLLISION RATE AND NUMBER OF COLLISIONS OF THE ROADWAY ARE NOT READILY APPARENT TO THE DRIVER. FREQUENT USE BY BICYCLISTS AND PEDESTRIANS HAS BEEN OBSERVED ON THIS SEGMENT OF ROADWAY. POSTING THE SPEED LIMIT 5 MPH LOWER IS JUSTIFIED.	THE COLLISION RATE AND NUMBER OF COLLISIONS OF THE ROADWAY ARE NOT READILY APPARENT TO THE DRIVER. POSTING THE SPEED LIMIT 5 MPH LOWER IS JUSTIFIED.

  
 REGISTERED CIVIL ENGINEER

7/7/10  
 DATE






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Posted Speed: 40		Day: Monday & Tuesday	
Weather: Overcast/Sunny-Dry		Date: 11/16/09 & 11/17/09	
Observer: Rogue		Time: 8:15 - 11:50 AM	
		Calcs: Otremba	
Critical Speed :	46	mph	
Average Speed :	40.1	mph	
Median Speed :	41	mph	
Standard Deviation:	6.0	mph	
Pace Range :	35 - 45	mph	
Percent in Pace :	58.0%		
Total # Vehicles:	317		
MPH	# of Veh.	Both Directions	%
64			100.0%
63			100.0%
62	1	*	100.0%
61	1	*	99.7%
60			99.4%
59			99.4%
58			99.4%
57			99.4%
56			99.4%
55			99.4%
54			99.4%
53	4	****	99.4%
52	2	**	98.1%
51	2	**	97.5%
50	2	**	96.8%
49	7	*****	96.2%
48	11	*****	94.0%
47	13	*****	90.5%
46	19	*****	86.4%
45	12	*****	90.4%
44	13	*****	76.7%
43	35	*****	72.6%
42	22	*****	61.5%
41	18	*****	54.6%
40	14	*****	43.5%
39	17	*****	39.1%
37	11	*****	33.8%
36	16	*****	30.3%
35	21	*****	25.2%
34	10	*****	16.6%
33	13	*****	15.5%
32	10	*****	11.4%
31	9	*****	8.2%
30	7	*****	5.4%
29	6	*****	3.2%
28	2	**	1.3%
27	1	*	0.5%
26			0.3%
25			0.3%
24	1	*	0.3%
23			0.0%

**LEGEND**

-  SPEED LIMIT SIGN
-  RADAR LOCATION
-  40 MPH SPEED ZONE

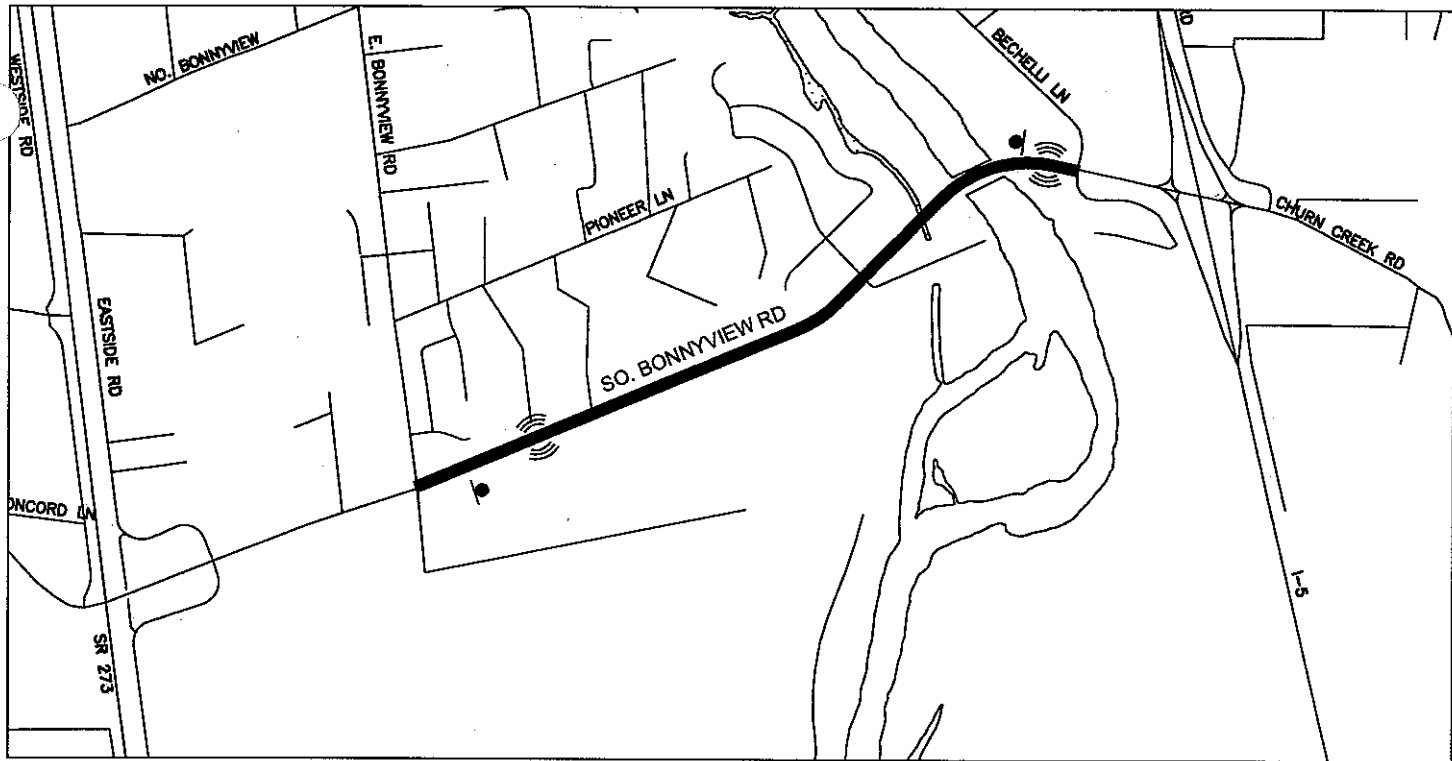
CITY OF REDDING PUBLIC WORKS DEPARTMENT

MAY 2010

**SO. BONNYVIEW RD SPEED STUDY**  
**SR 273 TO E. BONNYVIEW RD**



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Posted Speed: 45		Day: Monday & Tuesday	
Weather: Overcast-Sunny & Dry		Date: 11/16/09 & 11/17/09	
Observer: Hogue		Time: 10:25 - 11:25 AM	
Critical Speed : 53 mph		Calcs: Otremba	
Average Speed : 48.2 mph			
Median Speed : 48 mph			
Standard Deviation: 5.1 mph			
Pace Range : 43 - 53 mph			
Percent in Pace : 70.6%			
Total # Vehicles: 361			
MPH	# of Veh.	Both Directions	%
64			100.0%
63	2	♦♦	100.0%
62	2	♦♦	99.4%
61	2	♦♦	98.9%
60	2	♦♦	98.3%
59	3	♦♦♦	97.8%
58	5	♦♦♦♦	97.0%
57	4	♦♦♦♦	95.6%
56	10	♦♦♦♦♦♦♦♦	94.5%
55	9	♦♦♦♦♦♦♦	91.7%
54	14	♦♦♦♦♦♦♦♦♦♦	89.2%
53	11	♦♦♦♦♦♦♦♦	85.3%
52	22	♦♦♦♦♦♦♦♦♦♦♦♦	82.3%
51	30	♦♦♦♦♦♦♦♦♦♦♦♦♦♦	76.2%
50	22	♦♦♦♦♦♦♦♦♦♦♦♦	67.9%
49	28	♦♦♦♦♦♦♦♦♦♦♦♦♦♦	61.8%
47	36	♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦	46.3%
46	18	♦♦♦♦♦♦♦♦♦♦♦♦	36.3%
45	30	♦♦♦♦♦♦♦♦♦♦♦♦♦♦	31.3%
44	18	♦♦♦♦♦♦♦♦♦♦♦♦	23.0%
43	23	♦♦♦♦♦♦♦♦♦♦♦♦♦	18.0%
42	15	♦♦♦♦♦♦♦♦♦♦	11.6%
41	11	♦♦♦♦♦♦♦♦	7.5%
40	5	♦♦♦♦	4.4%
39	4	♦♦♦♦	3.0%
38	1	♦	1.9%
37	1	♦	1.7%
36			1.4%
35	1	♦	1.4%
34	3	♦♦♦	1.1%
33	1	♦	0.3%
32			0.0%

**LEGEND**

- SPEED LIMIT SIGN
- RADAR LOCATION
- 50 MPH SPEED ZONE

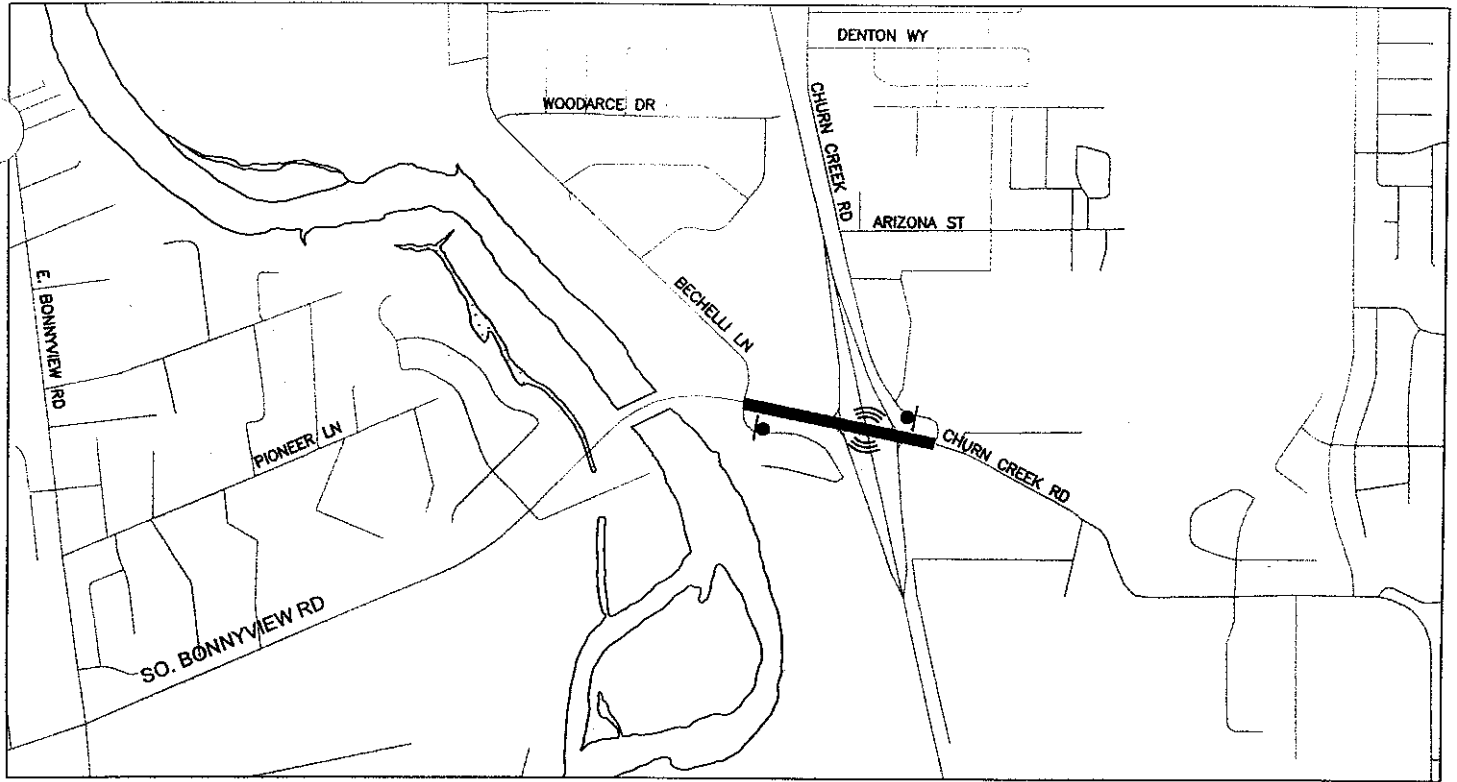
CITY OF REDDING PUBLIC WORKS DEPARTMENT

MAY 2010

**SO. BONNYVIEW RD SPEED STUDY**  
**E. BONNYVIEW RD TO BECHELLI LN**






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Posted Speed: 40		Day: Wednesday	
Weather: Clear & Dry		Date: 1/15/09	
Observer: Hogue		Time: 10:08 - 11:00 AM	
		Calcs: Otremba	
Critical Speed :	38	mph	
Average Speed :	34.7	mph	
Median Speed :	35	mph	
Standard Deviation:	4.6	mph	
Pace Range :	30 - 40	mph	
Percent in Pace :	82.6%		
Total # Vehicles :	143		
MPH	# of Veh.	Both Directions	%
58			100.0%
57			100.0%
56	1	♦	100.0%
55			99.3%
54			99.3%
53			99.3%
52			99.3%
51			99.3%
50			99.3%
49	1	♦	99.3%
48	1	♦	98.6%
47	1	♦	97.9%
46	1	♦	97.2%
45			96.5%
44			96.5%
43	3	♦♦♦	96.5%
42	1	♦	94.4%
41	3	♦♦♦	93.7%
40	2	♦♦	91.6%
39	7	♦♦♦♦♦♦♦	90.2%
37	7	♦♦♦♦♦♦♦	83.3%
36	17	♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦	75.5%
34	10	♦♦♦♦♦♦♦♦♦♦	47.5%
33	11	♦♦♦♦♦♦♦♦♦♦♦	40.6%
32	10	♦♦♦♦♦♦♦♦♦♦	32.9%
31	12	♦♦♦♦♦♦♦♦♦♦♦♦	25.9%
30	14	♦♦♦♦♦♦♦♦♦♦♦♦♦♦	17.5%
29	4	♦♦♦♦	7.7%
28	4	♦♦♦♦	4.9%
27	1	♦	2.1%
26			1.4%
25	2	♦♦	1.4%
24			0.0%

**LEGEND**

-  SPEED LIMIT SIGN
-  RADAR LOCATION
-  40 MPH SPEED ZONE

CITY OF REDDING PUBLIC WORKS DEPARTMENT

MAY 2010

**SO. BONNYVIEW RD SPEED STUDY**  
**BEHELLI LN TO CHURN CREEK RD**

