



**CITY OF REDDING
ENGINEERING AND TRAFFIC SURVEY
OF
OASIS ROAD**

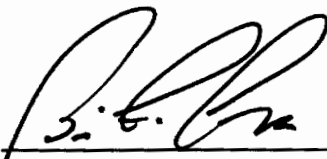
JULY 31, 2010

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 Oasis 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 Oasis Road are established;

- **50 MPH from Lake Boulevard to east of Daut Road.**
- **40 MPH from Baier Road to Twin View Boulevard.**
- **50 MPH from Twin View Boulevard to Old Oregon Trail.**

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.


3/26/2012

Brian Crane, P. E.
Director of Public Works

ATTEST:



PAMELA MIZE, City Clerk

City of Redding
Oasis Road
Engineering and Traffic Survey (ETS) for Speed Zoning

	Speed Zone Limits	Speed Zone Limits	Speed Zone Limits
	LAKE BLVD TO EAST OF DAUT ROAD	BAIER RD TO TWIN VIEW BLVD	TWIN VIEW BLVD TO OLD OREGON TRAIL

ROADSIDE CONDITIONS

LAND USE DISTRICT	RURAL RESIDENTIAL	RURAL BUSINESS	RURAL RESIDENTIAL
PEDESTRIANS USE	SELDOM	FEW	SELDOM
PERCENT SIDEWALKS	NONE	15%	NONE
BIKE LANE or ROUTE	NONE	YES	YES
DRIVEWAYS PRESENT	FEW	FEW	FEW

ROADWAY GEOMETRY


LENGTH OF ROADWAY SEGMENT (FEET)	7,000	1,750	8,500
NUMBER OF THRU LANES	2 (1 EB, 1 WB)	2 (1 EB, 1 WB)	2 (1 EB, 1 WB)
WIDTH (FEET)	VARIES 28 - 62	VARIES 28 - 58	VARIES 28 - 54
MEDIAN TYPE	DBL YELLOW	DBL YELLOW	DBL YELLOW
HORIZONTAL ALIGNMENT	GENTLE CURVES	STRAIGHT	GENTLE CURVES
VISIBILITY	GOOD	FAIR	GOOD
VERTICAL ALIGNMENT	FLAT	GENTLE SLOPE	GENTLE SLOPE

OBSERVED TRAFFIC CONDITIONS

DATE OF RADAR SURVEY	December 5, 2008	January 14, 2009	December 5, 2008
AVERAGE DAILY TRAFFIC (ADT)	4,500	9,400	5,800
EXISTING POSTED SPEED	45 MPH	40 MPH	50 MPH
CRITICAL SPEED (85th PERCENTILE)	51 MPH	40 MPH	55 MPH
MEDIAN SPEED (50th PERCENTILE)	45 MPH	37 MPH	50 MPH
10 MPH PACE RANGE	39 - 49 MPH	33 - 43 MPH	46 - 56 MPH
TOTAL COLLISIONS IN 2 YEARS	8	10	9 (1 fatal)
COLLISIONS PER MILLION VEHICLE MILES (MVM)	1.85 PER MVM	4.40 PER MVM	1.32 PER MVM
ROUNDING APPLIED TO OBSERVED CRITICAL SPEED (85th PERCENTILE) PER GUIDANCE OF MUTCD SECTION 2B.13	50 MPH	40 MPH	55 MPH

RECOMMENDATION

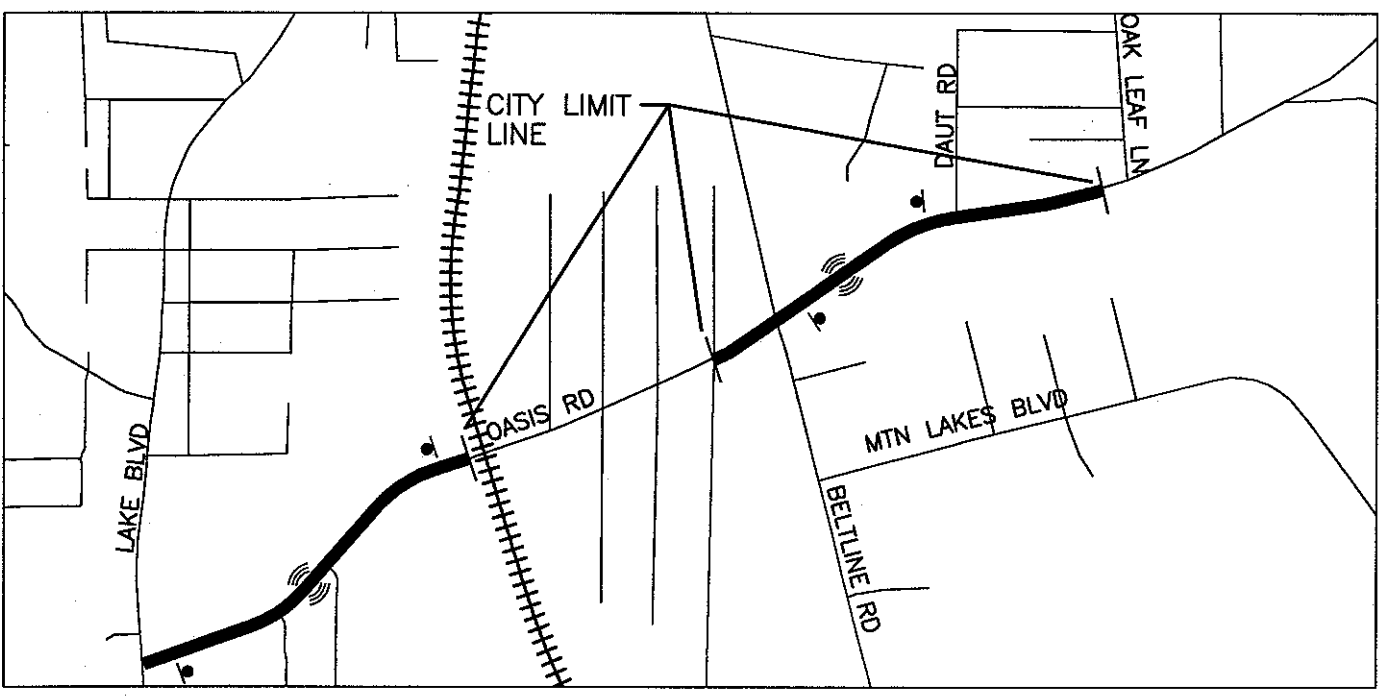
POST SPEED LIMIT	50 MPH	40 MPH	50 MPH
JUSTIFICATION FOR ESTABLISHING SPEED LIMIT 5 MPH BELOW CRITICAL SPEED (85th PERCENTILE)	N/A	N/A	THE COLLISION RATE AND THE SEVERITY OF COLLISIONS INDICATE THAT THE CONDITIONS OF THE ROADWAY ARE NOT READILY APPARENT TO THE DRIVER. POSTING THE SPEED LIMIT 5 MPH LOWER IS JUSTIFIED.


 REGISTERED CIVIL ENGINEER

7/7/10
 DATE



L:\Traffic Operations\Speed Surveys 2009\New Vol 1\Drawings 2009\Drawings With Inserts\Oasis - Lake to Oak Leaf 10.dwg, 09/09/2010 3:06:55 PM



Posted Speed: 45		Day: Friday	
Weather: Clear & Dry		Date: 12/5/08	
Observer: Lackey		Time: 9:20 - 10:50 AM	
Critical Speed: 51 mph		Calcs: Otremba	
Average Speed: 45.2 mph			
Median Speed: 45 mph			
Standard Deviation: 5.6 mph			
Pace Range: 39 - 49 mph			
Percent in Pace: 64.2%			
Total # Vehicles: 201			
MPH	# of Veh.	Both Directions	%
66			100.0%
65	1	*	100.0%
64			99.5%
63			99.0%
62			98.5%
61			98.0%
60	1	*	98.5%
59			98.0%
58	2	**	96.0%
57	2	**	94.0%
56	5	*****	97.0%
55	1	*	94.5%
54	4	****	94.0%
53	3	***	92.0%
52	10	*****	90.5%
51	5	*****	85.6%
50	11	*****	83.1%
49	6	*****	77.6%
48	12	*****	74.6%
47	7	*****	68.7%
46	12	*****	65.2%
44	17	*****	47.8%
43	10	*****	39.3%
42	18	*****	34.3%
41	9	*****	25.4%
40	12	*****	20.9%
39	9	*****	14.9%
38	9	*****	10.4%
37	5	*****	6.0%
36	1	*	3.0%
35	3	***	3.0%
34	2	**	1.5%
33			0.5%
32			0.5%
31			0.5%
30	1	*	0.5%
29			0.0%

LEGEND

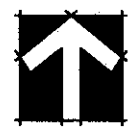
- SPEED LIMIT SIGN
- RADAR LOCATION

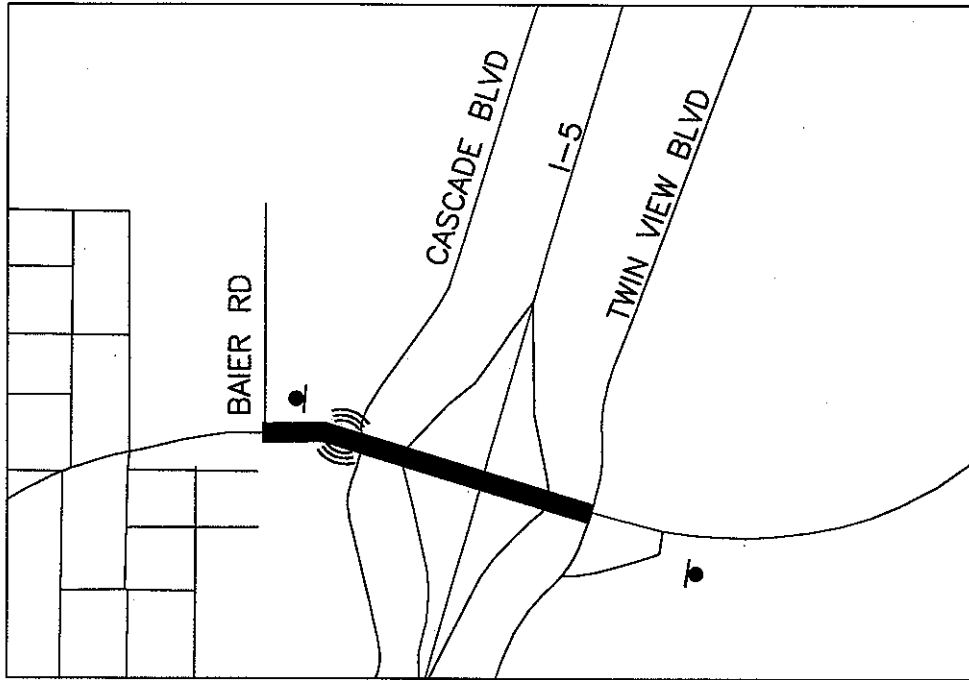
50 MPH SPEED ZONE

CITY OF REDDING PUBLIC WORKS DEPARTMENT

MAY 2010




OASIS RD SPEED STUDY
LAKE BLVD TO E/ DAUT RD





Posted Speed: 40		Day: Wednesday		
Weather: Clear & Dry		Date: 1/14/09		
Observer: Hogue		Time: 10:35 - 11:35 AM		
Critical Speed : 40		Calcs: Otremba		
Average Speed : 36.7		mph		
Median Speed : 37		mph		
Standard Deviation: 4.1		mph		
Pace Range : 33 - 43		mph		
Percent in Pace : 80.7%				
Total # Vehicles : 114				
MPH	# of Veh.	Both Directions		%
49				100.0%
48				100.0%
47	2	♦♦		100.0%
46	2	♦♦		98.2%
45				96.5%
44	2	♦♦		96.5%
43	3	♦♦♦		94.7%
42	5	♦♦♦♦♦		92.1%
41	3	♦♦♦		87.7%
40	7	♦♦♦♦♦♦♦		85.1%
39	12	♦♦♦♦♦♦♦♦♦♦		78.9%
38	11	♦♦♦♦♦♦♦♦♦♦		68.4%
36	10	♦♦♦♦♦♦♦♦♦♦		47.4%
35	14	♦♦♦♦♦♦♦♦♦♦♦♦		38.6%
34	8	♦♦♦♦♦♦♦♦		28.3%
33	9	♦♦♦♦♦♦♦♦		19.3%
32	3	♦♦♦		11.4%
31	3	♦♦♦		8.8%
30	1	♦		6.1%
29	3	♦♦♦		5.3%
28				2.6%
27				2.6%
26	2	♦♦		2.6%
25	1	♦		0.9%
24				0.0%

LEGEND

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

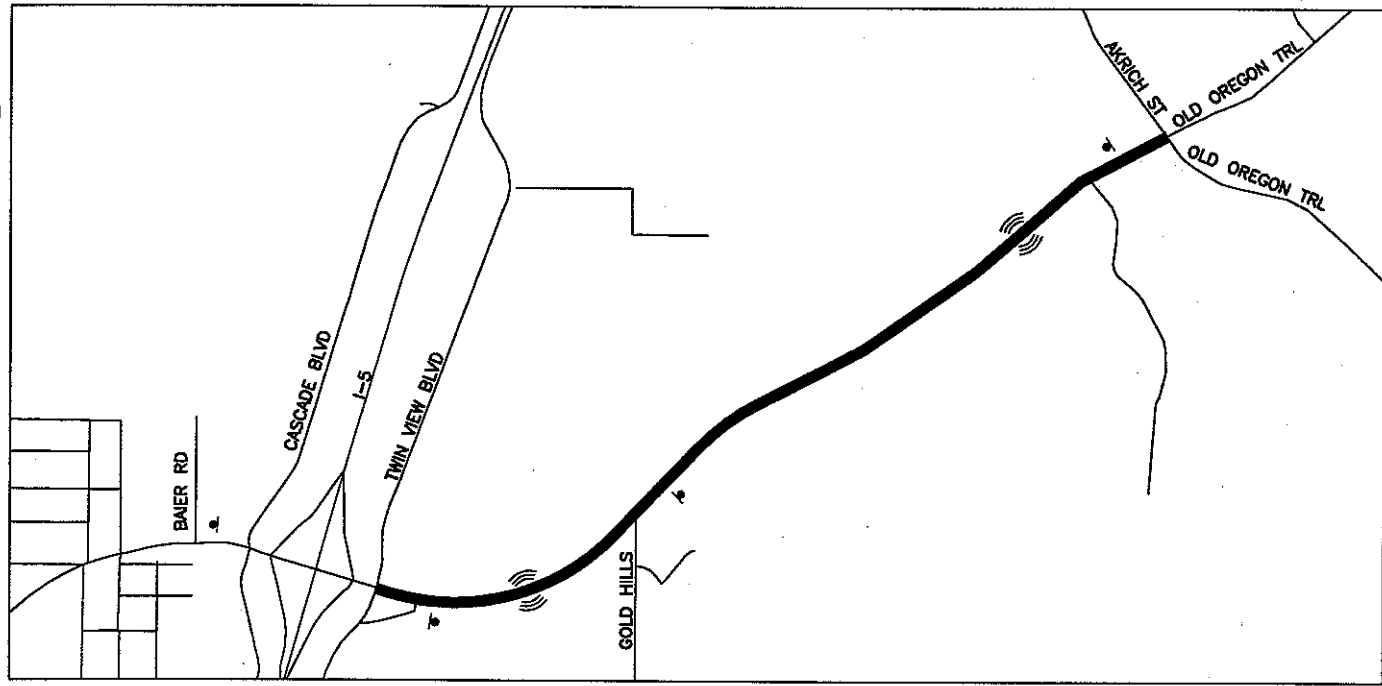
CITY OF REDDING PUBLIC WORKS DEPARTMENT

MAY 2010

OASIS RD SPEED STUDY
BAIER RD TO TWIN VIEW BLVD



L:\Traffic Operations\Speed Surveys 2009\2009 New Vol 1\Drawings 2009\Drawings With Inserts\Oasis - Twin View to Old Oregon Trl 10.dwg, 09/09/2010 3:08:42 PM



Posted Speed: 50		Day: Thursday & Friday	
Weather: Clear & Dry		Date: 12/4/08 & 12/5/08	
Observer: Lackey		Calcs: Otremba	
Critical Speed :	56	mph	
Average Speed :	50.5	mph	
Median Speed :	50	mph	
Standard Deviation:	5.1	mph	
Pace Range :	46 - 66	mph	
Percent in Pace :	70.7%		
Total # Vehicles :	215		
MPH	# of Veh.	Both Directions	%
71			100.0%
70	1	♦	100.0%
69			99.5%
68	1	♦	99.5%
67			99.1%
66			99.1%
65			99.1%
64			99.1%
63	2	♦♦	99.1%
62	1	♦	98.1%
61			97.7%
60	4	♦♦♦♦	97.7%
59	3	♦♦♦	95.8%
58	6	♦♦♦♦♦♦	94.4%
57	3	♦♦♦	91.6%
56	9	♦♦♦♦♦♦♦♦	90.2%
55	10	♦♦♦♦♦♦♦♦♦♦	86.0%
54	15	♦♦♦♦♦♦♦♦♦♦♦♦	81.4%
53	12	♦♦♦♦♦♦♦♦♦♦♦	74.4%
52	23	♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦	68.8%
51	16	♦♦♦♦♦♦♦♦♦♦♦♦♦♦	58.1%
50			
49	15	♦♦♦♦♦♦♦♦♦♦♦♦♦♦	40.5%
48	13	♦♦♦♦♦♦♦♦♦♦♦♦♦	33.5%
47	14	♦♦♦♦♦♦♦♦♦♦♦♦♦	27.4%
46	12	♦♦♦♦♦♦♦♦♦♦♦♦	20.9%
45	3	♦♦♦	15.3%
44	11	♦♦♦♦♦♦♦♦♦♦	14.0%
43	3	♦♦♦	8.8%
42	2	♦♦	7.4%
41	13	♦♦♦♦♦♦♦♦♦♦♦♦	6.5%
40	1	♦	0.5%
39			0.0%

LEGEND

- ♦ SPEED LIMIT SIGN
- (()) RADAR LOCATION
- 50 MPH SPEED ZONE

CITY OF REDDING PUBLIC WORKS DEPARTMENT

MAY 2010

OASIS RD SPEED STUDY

TWIN VIEW BLVD TO OLD OREGON TRL

