



County of Santa Cruz

DEPARTMENT OF PUBLIC WORKS

701 OCEAN STREET, ROOM 410, SANTA CRUZ, CA 95060-4070
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THOMAS L. BOLICH
DIRECTOR OF PUBLIC WORKS

TRAFFIC AND ENGINEERING REPORT

MARCH 2009



County of Santa Cruz

DEPARTMENT OF PUBLIC WORKS

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THOMAS L. BOLICH
DIRECTOR OF PUBLIC WORKS

March 11, 2009

SUBJECT: TRAFFIC AND ENGINEERING REPORT MARCH 2009

To Whom It May Concern:

This traffic and engineering report was prepared in accordance with Vehicle Code Section 40803 to allow the use of radar for speed enforcement purposes. The recommended safe speeds were determined utilizing the prevailing 85th percentile speeds combined with traffic engineering judgment to match existing conditions with the traffic safety needs of the community. Accident statistics indicate that unsafe speed is the highest single primary collision factor on roadways, and adherence to safe speeds should result in a substantial reduction in vehicle accidents.

Yours truly,

THOMAS L. BOLICH
Director of Public Works

RR:mh

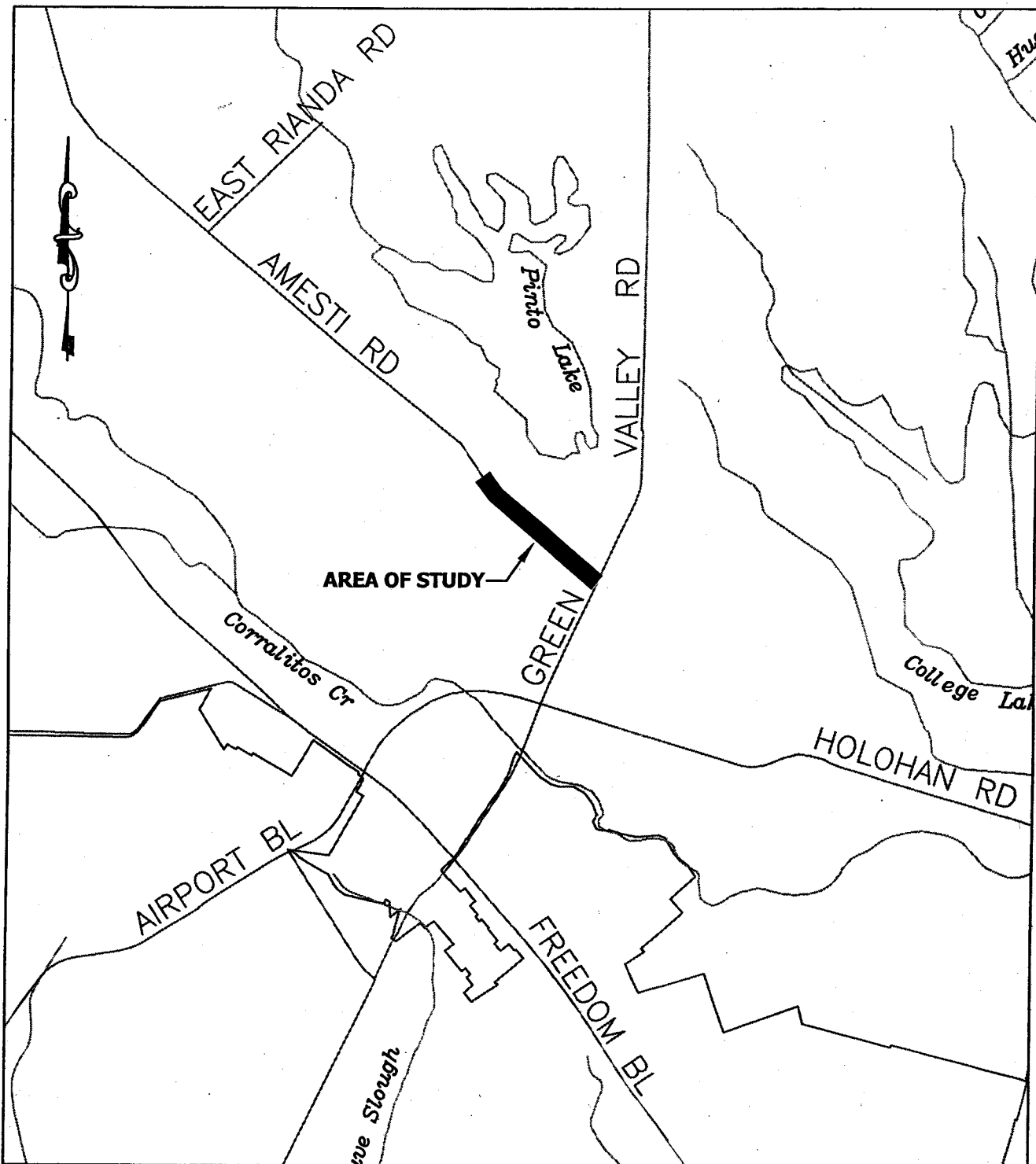
Attachment

TRAFFIC AND ENGINEERING REPORT

March, 2009

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**SANTA CRUZ COUNTY TRAFFIC ENGINEERING
RADAR SPEED SURVEY
AMESTI ROAD
GREEN VALLEY ROAD TO 0.4 MILES NORTH**

MARCH 2009

TRAFFIC AND ENGINEERING REPORT
MARCH 2009

PURPOSE:

This survey is performed in accordance with Vehicle Code Section 40803 to allow the use of radar for enforcement purposes.

LOCATION:

Amesti Road between Green Valley Road and 0.4 miles northwesterly. (Speed Data collected at Amesti Elementary School).

PREVAILING SPEED DATA:

The existing posted speed limit is 25 MPH and is radar enforced.

The prevailing speeds are:

Direction	Westbound	Eastbound
85 th Percentile	31 mph	31 mph
Pace Speed	22-32 mph	22-32 mph
Average Speed	27.11 mph	27.01 mph

ANALYSIS:

The prevailing 85th percentile speeds are 31 MPH in both directions of travel. The safe speed is established at or near the average 85th percentile which is calculated to be 30 MPH. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment as provided for in the California Manual on Uniform Traffic Control Devices indicates a further reduction of five miles per hour to 25 MPH. The factors justifying a further reduction are a prima facie 25 MPH residential district, adjacent to an elementary school and numerous driveways. It is recommended that the existing 25 MPH speed limit remain with enforcement activity taking place at speeds above the safe speed.

RADAR SPEED SURVEY

		<u>MPH</u>	<u># of Vehicles</u>		<u>Percentage</u>
Route:	Amesti Road				
From:	Green Valley Rd.	35	1	◆	100.0%
To:	0.4 miles northwesterly	34	1	◆	98.7%
Direction:	Westbound	33	1	◆	97.4%
Weather:	Sunny/Cloudy	32	6	◆◆◆◆◆◆	96.1%
Posted Speed:	25	31	8	◆◆◆◆◆◆◆◆	88.2%
Begin time:	2:10 PM	30	4	◆◆◆◆	77.6%
End time:	3:00 PM	29	4	◆◆◆◆	72.4%
		28	5	◆◆◆◆◆	67.1%
		27	12	◆◆◆◆◆◆◆◆◆◆◆◆	60.5%
		26	7	◆◆◆◆◆◆◆	44.7%
		25	8	◆◆◆◆◆◆◆◆	35.5%
		24	8	◆◆◆◆◆◆◆◆	25.0%
		23	3	◆◆◆	14.5%
		22	7	◆◆◆◆◆◆◆	10.5%
		21	1	◆	1.3%
CRITICAL SPEED	31	20	0		0.0%
AVERAGE SPEED	27.11	19	0		0.0%
MEDIAN SPEED	27.0	18	0		0.0%
STANDARD DEVIATION	3.37	17	0		0.0%
PACE RANGE	22 - 32	16	0		0.0%
PERCENTAGE IN PACE	86.8%	15	0		0.0%
TOTAL # OF AUTOS	76				

RADAR SPEED SURVEY

		<u>MPH</u>	<u># of Vehicles</u>		<u>Percentage</u>
Route:	Arnesti Road				
From:	0.4 miles northwesterly	38	1	◆	100.0%
To:	Green Valley Rd.	37	0		98.7%
Direction:	Eastbound	36	0		98.7%
Weather:	Sunny/Cloudy	35	3	◆◆◆	98.7%
Posted Speed:	25	34	1	◆	94.8%
Begin time:	2:10 PM	33	2	◆◆	93.5%
End time:	3:00 PM	32	2	◆◆	90.9%
		31	7	◆◆◆◆◆◆◆	88.3%
		30	3	◆◆◆	79.2%
		29	6	◆◆◆◆◆◆	75.3%
		28	7	◆◆◆◆◆◆◆	67.5%
		27	7	◆◆◆◆◆◆◆	58.4%
		26	6	◆◆◆◆◆◆	49.4%
		25	11	◆◆◆◆◆◆◆◆◆◆◆	41.6%
		24	6	◆◆◆◆◆◆	27.3%
CRITICAL SPEED	31	23	6	◆◆◆◆◆◆	19.5%
AVERAGE SPEED	27.01	22	5	◆◆◆◆◆	11.7%
MEDIAN SPEED	27.0	21	4	◆◆◆◆◆	5.2%
STANDARD DEVIATION	3.84	20	0		0.0%
PACE RANGE	22 - 32	19	0		0.0%
PERCENTAGE IN PACE	83.1%	18	0		0.0%
TOTAL # OF AUTOS	77	17	0		0.0%
		16	0		0.0%
		15	0		0.0%

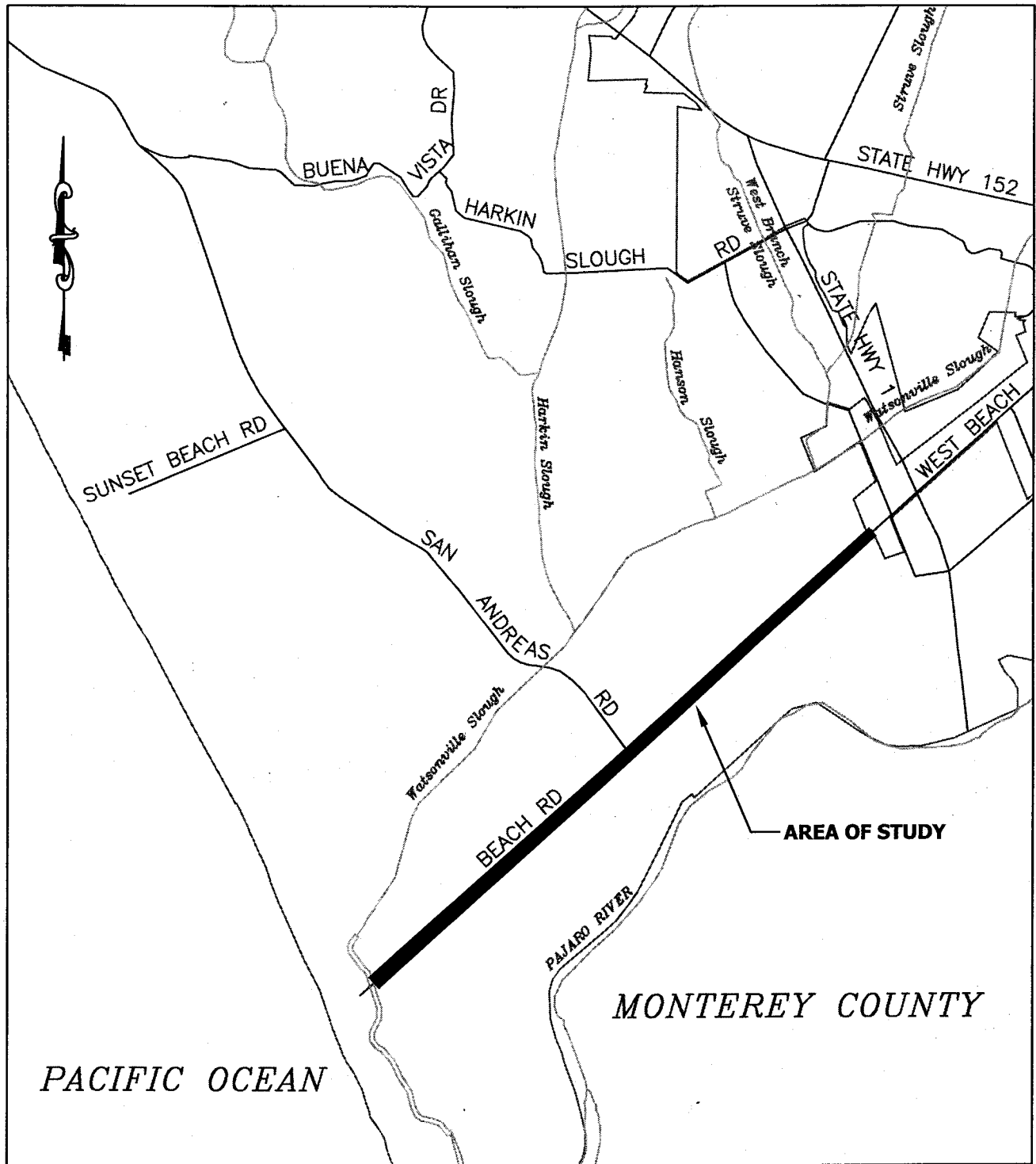
RADAR SPEED SURVEY
Santa Cruz County
Department of Public Works

LOCATION AMESTI ROAD (@ AMESTI ELEM. SCHOOL) BY JGL
 ROAD NO _____ DATE 9.15.08 DAY MONDAY BEGIN 2:10 END 3:00
 POSTED SPEED 25 MPH WEATHER SUNNY / CLOUDY
 NUMBER OF LANES 2 GRADE FLAT CALIBRATED ✓

NUMBER OF VEHICLES

MPH	DIRECTION		TOTAL OF EACH SPEED	DIRECTION		TOTAL OF EACH SPEED
	EAST →	TO GREEN VALLEY		WEST ←	FROM GREEN VALLEY	
60						
59						
58						
57						
56						
55						
54						
53						
52						
51						
50						
49						
48						
47						
46						
45						
44						
43						
42						
41						
40						
39						
38			1			
37			0			
36			0			
35			3			1
34			1			1
33			2			1
32			2	 		6
31	 -		7	 -		8
30			3	 		4
29	 -		6	 		4
28	 -		7	 		5
27	 -		7	 -		12
26	 -		6	 -		7
25	 - -		11	 -		8
24	 -		6	 -		8
23	 		5	 		3
22	 		4	 -		7
21						1
20						
TOTAL			77	TOTAL		76





**SANTA CRUZ COUNTY TRAFFIC ENGINEERING
 RADAR SPEED SURVEY
 BEACH ROAD
 WATSONVILLE CITY LIMITS TO THE END
 AT SUNSET BEACH**

MARCH 2009

TRAFFIC AND ENGINEERING REPORT
MARCH 2009

PURPOSE:

This survey is performed in accordance with Vehicle Code Section 40803 to allow the use of radar for enforcement purposes.

LOCATION:

Beach Road from the Watsonville City Limit to the end at Sunset Beach. (Speed Data collected at Thurwachter Road).

PREVAILING SPEED DATA:

The existing posted speed limit is 45 mph and is radar enforced.

The prevailing speeds are:

Direction	Westbound	Eastbound
85 th Percentile	47 mph	46 mph
Pace Speed	38-48 mph	34-44 mph
Average Speed	41.87 mph	39.93 mph

ANALYSIS:

The prevailing 85th percentile speeds are 47 MPH and 46 MPH depending on the direction of travel. The safe speed is established at or near the average 85th percentile which is calculated to be 45 MPH. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment as provided for in the California Manual on Uniform Traffic Control Devices indicates a further reduction of five miles per hour to 40 MPH. The factors justifying a further reduction are tourist area with State Park beaches, an agricultural area with farm equipment and produce trucks, and bicycle traffic without bike lanes or shoulders. It is recommended that the existing 45 MPH speed limit be decreased to 40 MPH with enforcement activity taking place at speeds above the safe speed.

RADAR SPEED SURVEY

Route: Beach Road
From: Watsonville City Limits
To: End of Beach Road
Direction: Eastbound
Weather: Cloudy
Posted Speed: 45 MPH
Begin time: 9:00AM
End time: 10:15 AM

CRITICAL SPEED
AVERAGE SPEED
MEDIAN SPEED
STANDARD DEVIATION
PACE RANGE
PERCENTAGE IN PACE
TOTAL # OF AUTOS

46
 39.93
 40.0
 5.28
 34 - 44
 67.4%
 86

<u>MPH</u>	<u># of Vehicles</u>	<u>Percentage</u>
52	1 ♦	100.0%
51	1 ♦	98.8%
50	1 ♦	97.7%
49	2 ♦♦	96.5%
48	3 ♦♦♦	94.2%
47	3 ♦♦♦	90.7%
46	3 ♦♦♦	87.2%
45	1 ♦	83.7%
44	5 ♦♦♦♦♦	82.6%
43	8 ♦♦♦♦♦♦♦♦	76.7%
42	9 ♦♦♦♦♦♦♦♦♦	67.4%
41	5 ♦♦♦♦♦	57.0%
40	2 ♦♦	51.2%
39	4 ♦♦♦♦	48.8%
38	7 ♦♦♦♦♦♦♦	44.2%
37	7 ♦♦♦♦♦♦♦	36.0%
36	5 ♦♦♦♦♦	27.9%
35	4 ♦♦♦♦	22.1%
34	7 ♦♦♦♦♦♦♦	17.4%
33	3 ♦♦♦	9.3%
32	1 ♦	5.8%
31	0	4.7%
30	3 ♦♦♦	4.7%
29	0	1.2%
28	1 ♦	1.2%

RADAR SPEED SURVEY

Route: Beach Road
From: Watsonville City Limits
To: End of Beach Road
Direction: Westbound
Weather: Cloudy
Posted Speed: 45 MPH
Begin time: 9:00AM
End time: 10:15 AM

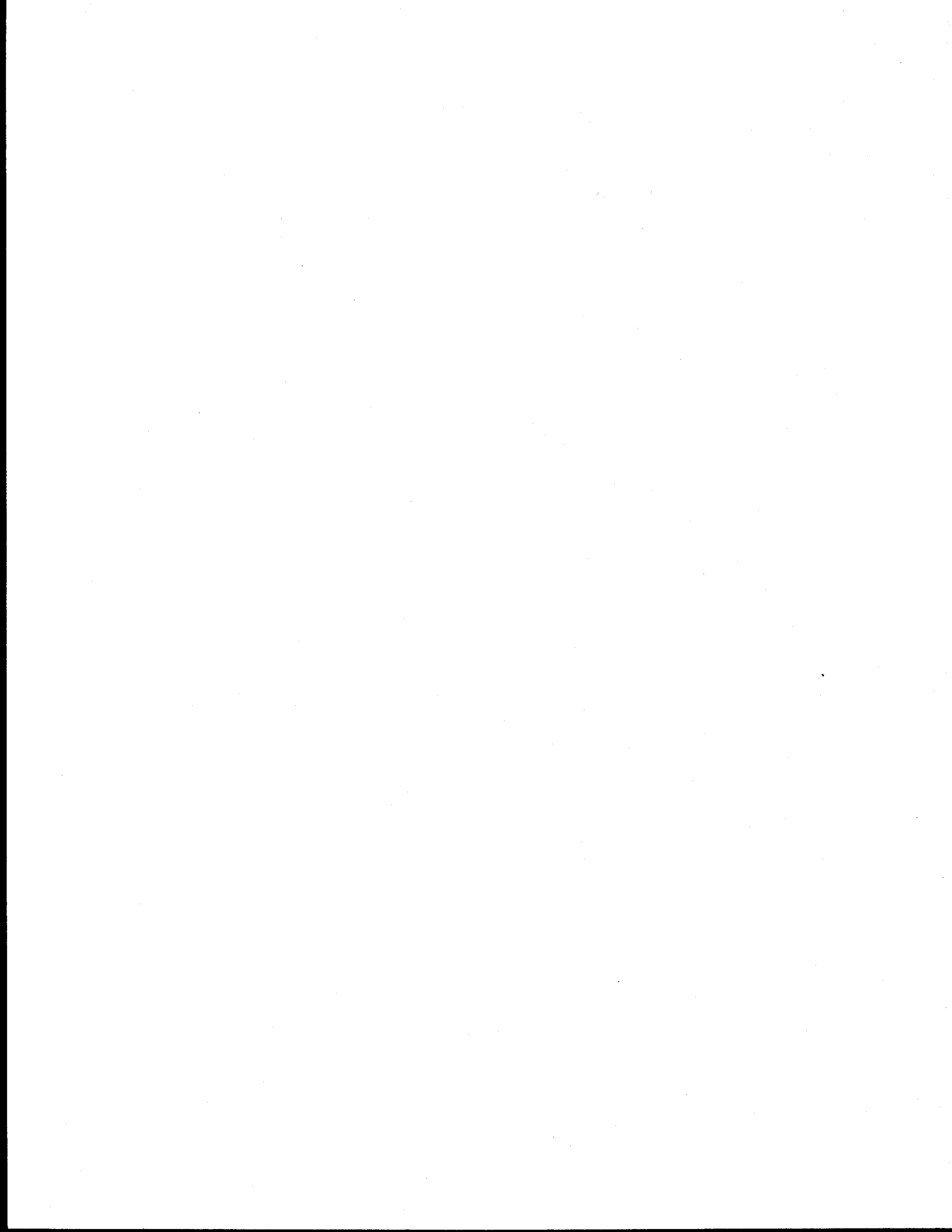
		<u>MPH</u>	<u># of Vehicles</u>	<u>Percentage</u>
		54	1 ♦	100.0%
		53	0	98.7%
		52	0	98.7%
		51	1 ♦	98.7%
		50	2 ♦♦	97.3%
		49	3 ♦♦♦	94.7%
		48	4 ♦♦♦♦	90.7%
		47	4 ♦♦♦♦	85.3%
		46	4 ♦♦♦♦	80.0%
		45	6 ♦♦♦♦♦♦	74.7%
		44	7 ♦♦♦♦♦♦♦	66.7%
		43	3 ♦♦♦	57.3%
		42	4 ♦♦♦♦	53.3%
		41	4 ♦♦♦♦	48.0%
		40	7 ♦♦♦♦♦♦♦	42.7%
CRITICAL SPEED	47	39	5 ♦♦♦♦♦	33.3%
AVERAGE SPEED	41.87	38	6 ♦♦♦♦♦♦	26.7%
MEDIAN SPEED	42.0	37	1 ♦	18.7%
STANDARD DEVIATION	5.07	36	2 ♦♦	17.3%
PACE RANGE	38 - 48	35	4 ♦♦♦♦	14.7%
PERCENTAGE IN PACE	66.7%	34	5 ♦♦♦♦♦	9.3%
TOTAL # OF AUTOS	75	33	0	2.7%
		32	1 ♦	2.7%
		31	1 ♦	1.3%

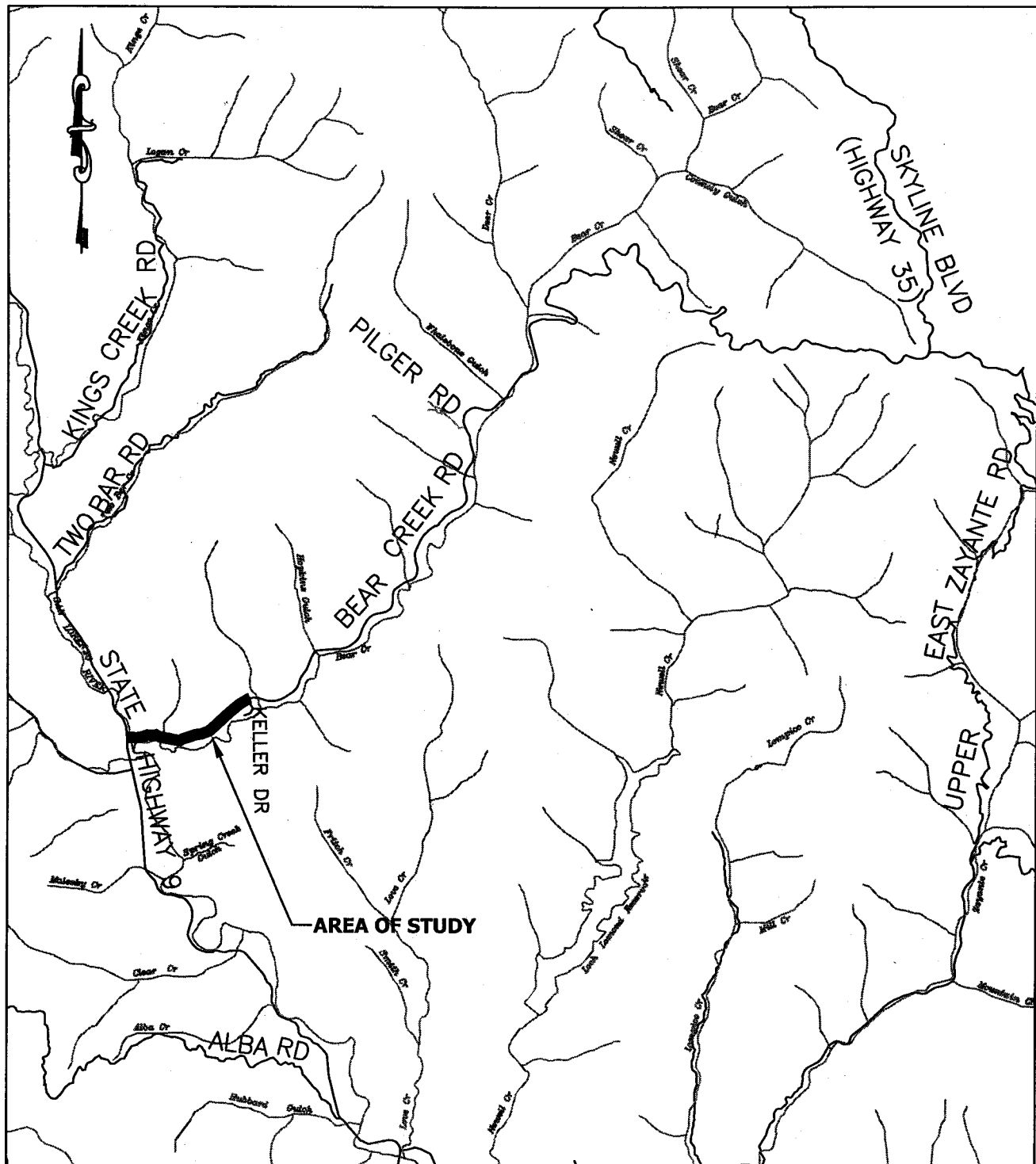
RADAR SPEED SURVEY
 Santa Cruz County
 Department of Public Works

LOCATION BEACH RD (@ THURWACHTER RD) BY JGL
 ROAD NO _____ DATE 6-9-08 DAY WED BEGIN 9:00 AM END 10:15 AM
 POSTED SPEED 45 MPH WEATHER CLOUDY
 NUMBER OF LANES 2 GRADE FLAT CALIBRATED

NUMBER OF VEHICLES

MPH	DIRECTION W ← TO SAN ANDREAS	TOTAL OF EACH SPEED	DIRECTION TO WATSONVILLE → E	TOTAL OF EACH SPEED
60				
59				
58				
57				
56				
55				
54				
53		1		
52		0		
51		0		1
50		1		1
49		2		1
48		3		2
47		4		3
46		4		3
45		4		3
44		6		1
43		7		5
42		3		8
41		4		9
40		4		5
39		7		2
38		5		4
37		6		7
36		1		7
35		2		5
34		4		4
33		2		7
32		0		3
31		1		1
30		1		0
29				3
28				0
27				1
26				
25				
24				
23				
22				
21				
20				
TOTAL		75	TOTAL	86





SANTA CRUZ COUNTY TRAFFIC ENGINEERING
RADAR SPEED SURVEY
BEAR CREEK ROAD
STATE HIGHWAY 9 TO KELLER DRIVE

MARCH 2009

TRAFFIC AND ENGINEERING REPORT
MARCH 2009

PURPOSE:

This survey is performed in accordance with Vehicle Code Section 40803 to allow the use of radar for enforcement purposes.

LOCATION:

Bear Creek Road from Highway 9 to Keller Drive (west).
(Speed Data collected at Huckleberry Lane intersection).

PREVAILING SPEED DATA:

The existing speed limit is 30 MPH and is radar enforced.

The prevailing speeds are:

Direction	Northbound	Southbound
85 th Percentile	33 mph	36 mph
Pace Speed	25-35 mph	27-37 mph
Average Speed	29.33 mph	32.79 mph

ANALYSIS:

The prevailing 85th percentile speeds are 36 MPH and 33 MPH depending on the direction of travel. The safe speed is established at or near the average 85th percentile which is calculated to be 35 MPH. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment as provided for in the California Manual on Uniform Traffic Control Devices indicates a further reduction of five miles per hour to 30 MPH. The factors justifying a further reduction are recent accident record, safe stopping sight distance, commute route, major arterial, intersection configurations and shoulder conditions with school children and other pedestrian traffic in the roadway without sidewalks. It is recommended that the existing 30 MPH speed limit remain with enforcement activity taking place at speeds above the safe speed.

RADAR SPEED SURVEY

Route: Bear Creek Rd
From: Hwy 9
To: Keller Dr
Direction: Northbound
Weather: Sunny
Posted Speed: 30 MPH
Begin time: 9:45 AM
End time: 10:15 AM

CRITICAL SPEED 33
AVERAGE SPEED 29.33
MEDIAN SPEED 29.0
STANDARD DEVIATION 2.95
PACE RANGE 25 - 35
PERCENTAGE IN PACE 92.7%
TOTAL # OF AUTOS 55

<u>MPH</u>	<u># of Vehicles</u>		<u>Percentage</u>
37	1	◆	100.0%
36	0		98.2%
35	2	◆◆	98.2%
34	0		94.5%
33	6	◆◆◆◆◆◆	94.5%
32	5	◆◆◆◆◆	83.6%
31	4	◆◆◆◆	74.5%
30	7	◆◆◆◆◆◆◆	67.3%
29	8	◆◆◆◆◆◆◆◆	54.5%
28	5	◆◆◆◆◆	40.0%
27	6	◆◆◆◆◆◆	30.9%
26	7	◆◆◆◆◆◆◆	20.0%
25	3	◆◆◆	7.3%
24	0		1.8%
23	1	◆	1.8%
22	0		0.0%
21	0		0.0%
20	0		0.0%
19	0		0.0%
18	0		0.0%
17	0		0.0%
16	0		0.0%
15	0		0.0%
14	0		0.0%

RADAR SPEED SURVEY

Route: Bear Creek Rd
From: Hwy 9
To: Keller Dr
Direction: Southbound
Weather: Sunny
Posted Speed: 30 MPH
Begin time: 9:45 AM
End time: 10:15 AM

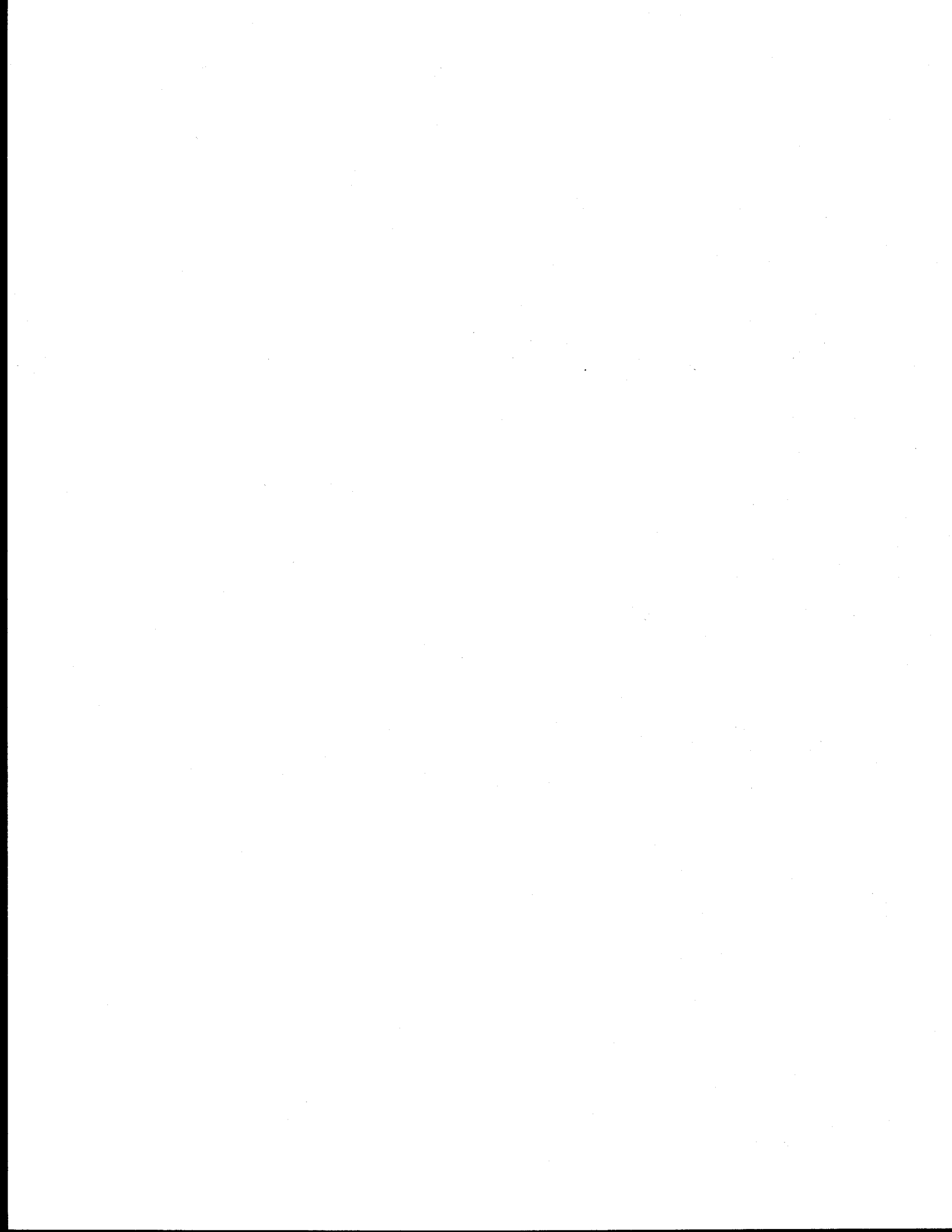
		<u>MPH</u>	<u># of Vehicles</u>		<u>Percentage</u>
		39	1	◆	100.0%
		38	2	◆◆	98.1%
		37	1	◆	94.2%
		36	7	◆◆◆◆◆◆◆	92.3%
		35	3	◆◆◆	78.8%
		34	9	◆◆◆◆◆◆◆◆◆	73.1%
		33	3	◆◆◆	55.8%
		32	9	◆◆◆◆◆◆◆◆◆	50.0%
		31	9	◆◆◆◆◆◆◆◆◆	32.7%
		30	2	◆◆	15.4%
		29	2	◆◆	11.5%
		28	0		7.7%
		27	2	◆◆	7.7%
		26	2	◆◆	3.8%
		25	0		0.0%
CRITICAL SPEED	36	24	0		0.0%
AVERAGE SPEED	32.79	23	0		0.0%
MEDIAN SPEED	32.5	22	0		0.0%
STANDARD DEVIATION	2.97	21	0		0.0%
PACE RANGE	27 - 37	20	0		0.0%
PERCENTAGE IN PACE	88.5%	19	0		0.0%
TOTAL # OF AUTOS	52	18	0		0.0%
		17	0		0.0%
		16	0		0.0%

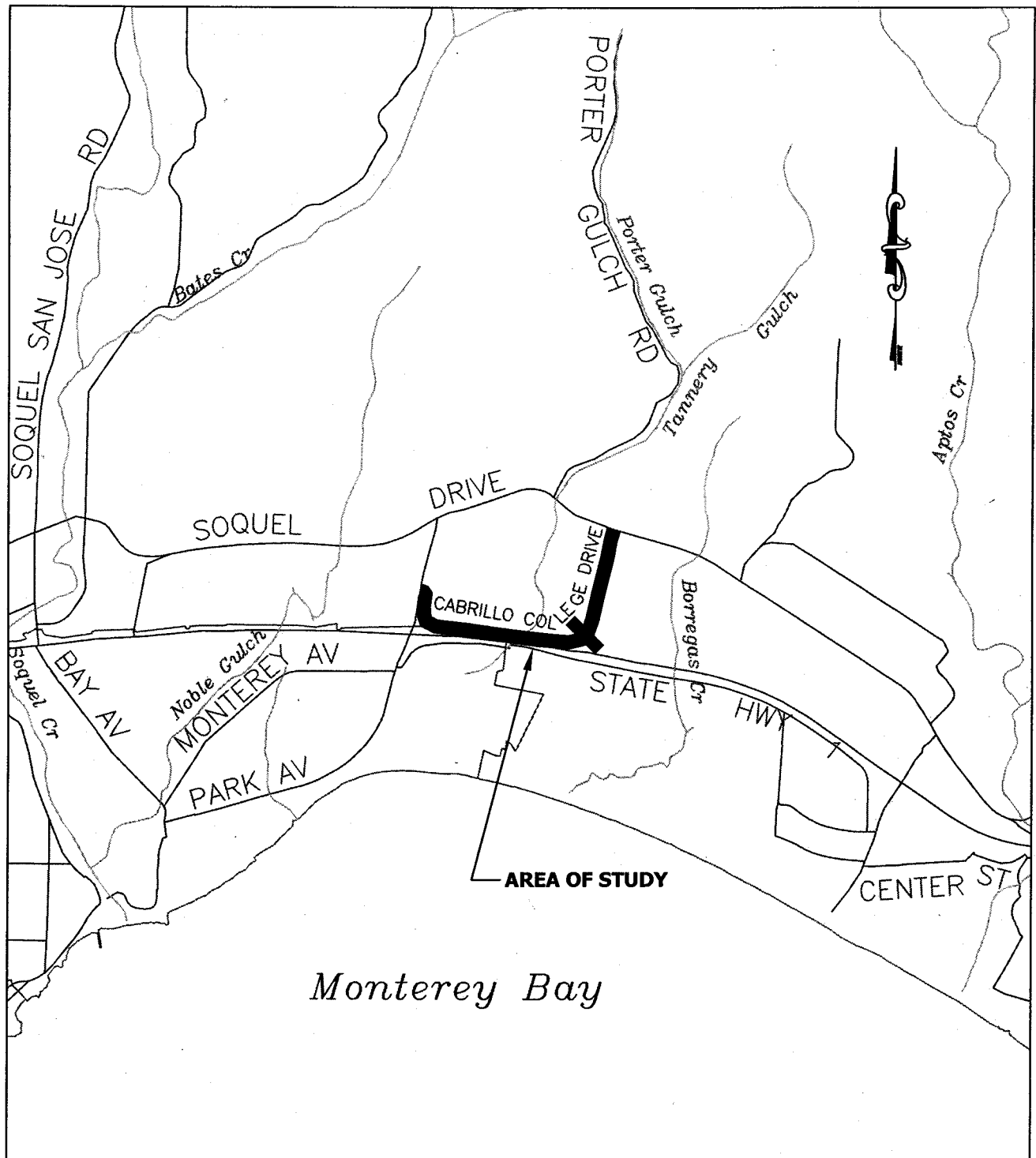
RADAR SPEED SURVEY
 Santa Cruz County
 Department of Public Works

LOCATION Bear Creek Rd @ Huckleberry Ln BY A-M
 ROAD NO _____ DATE 2/2/09 DAY Mon BEGIN 9:45 AM END 10:15 AM
 POSTED SPEED 30 mph WEATHER SUNNY - Clear
 NUMBER OF LANES 2 GRADE 2 % CALIBRATED ✓

NUMBER OF VEHICLES

MPH	DIRECTION <u>South (To Highway 9)</u>	TOTAL OF EACH SPEED	DIRECTION <u>North (To Keller Dr.)</u>	TOTAL OF EACH SPEED
51				
50				
49				
48				
47				
46				
45				
44				
43				
42				
41				
40				
39		1		
38		2		
37		1		1
36	 	7		0
35		3		2
34	 	9		0
33		3	 	6
32	 	9	 	5
31	 	9		4
30		2	 	7
29		2	 	8
28		0	 	5
27		2	 	6
26		2	 	7
25				3
24				0
23				1
22				
21				
20				
19				
18				
17				
16				
15				
14				
13				
12				
11				
	TOTAL	52	TOTAL	55





**SANTA CRUZ COUNTY TRAFFIC ENGINEERING
 RADAR SPEED SURVEY
 CABRILLO COLLEGE DRIVE
 PARK AVENUE TO SOQUEL DRIVE**

MARCH 2009

TRAFFIC AND ENGINEERING REPORT
MARCH 2009

PURPOSE:

This survey is performed in accordance with Vehicle Code Section 40803 to allow the use of radar for enforcement purposes.

LOCATION:

Cabrillo College Drive from Park Avenue a distance of 0.66 miles south easterly. (Speed Data collected at 2505 Cabrillo College Drive).

PREVAILING SPEED DATA:

The existing posted speed limit is 35 MPH and is radar enforced.

The prevailing speeds are:

Direction	Westbound	Eastbound
85 th Percentile	45 mph	39 mph
Pace Speed	35-45 mph	30-40 mph
Average Speed	39.36 mph	35.20 mph

ANALYSIS:

The prevailing 85th percentile speeds are 45 MPH and 39 MPH depending on the direction of travel. The safe speed is established at or near the average 85th percentile which is calculated to be 40 MPH. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment as provided for in the California Manual on Uniform Traffic Control Devices indicates a further reduction of five miles per hour to 35 MPH. The factors justifying a further reduction are recent accident record, route serving a community college with bicycle traffic without bike lanes and shoulder conditions with pedestrians in the roadway without sidewalks. It is recommended that the existing 35 MPH speed limit remain with enforcement activity taking place at speeds above the safe speed.

RADAR SPEED SURVEY

Route: Cabrillo College Drive
 From: Park Avenue
 To: South a distance of 0.66 miles
 Direction: Westbound
 Weather: Sunny
 Posted Speed: 35 MPH
 Begin time: 10:25 AM
 End time: 11:55 AM

CRITICAL SPEED 45
 AVERAGE SPEED 39.36
 MEDIAN SPEED 39.0
 STANDARD DEVIATION 4.55
 PACE RANGE 35 - 45
 PERCENTAGE IN PACE 73.6%
 TOTAL # OF AUTOS 53

<u>MPH</u>	<u># of Vehicles</u>	<u>Percentage</u>
48	1 ♦	100.0%
47	5 ♦♦♦♦♦	98.1%
46	0	88.7%
45	3 ♦♦♦	88.7%
44	3 ♦♦♦	83.0%
43	1 ♦	77.4%
42	4 ♦♦♦♦	75.5%
41	2 ♦♦	67.9%
40	6 ♦♦♦♦♦♦	64.2%
39	6 ♦♦♦♦♦♦	52.8%
38	1 ♦	41.5%
37	3 ♦♦♦	39.6%
36	4 ♦♦♦♦	34.0%
35	9 ♦♦♦♦♦♦♦♦♦	26.4%
34	1 ♦	9.4%
33	1 ♦	7.5%
32	1 ♦	5.7%
31	2 ♦♦	3.8%
30	0	0.0%
29	0	0.0%
28	0	0.0%
27	0	0.0%
26	0	0.0%
25	0	0.0%
24	0	0.0%
23	0	0.0%
22	0	0.0%
21	0	0.0%

RADAR SPEED SURVEY

		<u>MPH</u>	<u># of Vehicles</u>		<u>Percentage</u>
Route:	Cabrillo College Drive				
From:	Park Avenue	49	1	◆	100.0%
To:	South a distance of 0.66 miles	48	0		98.2%
Direction:	Eastbound	47	0		98.2%
Weather:	Sunny	46	0		98.2%
Posted Speed:	35 MPH	45	1	◆	98.2%
Begin time:	10:25 AM	44	0		96.4%
End time:	11:55 AM	43	3	◆◆◆	96.4%
		42	1	◆	91.1%
		41	1	◆	89.3%
		40	1	◆	87.5%
		39	3	◆◆◆	85.7%
		38	2	◆◆	80.4%
		37	7	◆◆◆◆◆◆◆	76.8%
		36	6	◆◆◆◆◆◆	64.3%
		35	2	◆◆	53.6%
CRITICAL SPEED	39	34	6	◆◆◆◆◆◆	50.0%
AVERAGE SPEED	35.20	33	7	◆◆◆◆◆◆◆	39.3%
MEDIAN SPEED	34.5	32	3	◆◆◆	26.8%
STANDARD DEVIATION	4.52	31	5	◆◆◆◆◆	21.4%
PACE RANGE	30 - 40	30	2	◆◆	12.5%
PERCENTAGE IN PACE	76.8%	29	3	◆◆◆	8.9%
TOTAL # OF AUTOS	56	28	1	◆	3.6%
		27	0		1.8%
		26	1	◆	1.8%
		25	0		0.0%

RADAR SPEED SURVEY
 Santa Cruz County
 Department of Public Works

LOCATION Cabrillo College Dr, Park Ave to .66 mi SE, RT 2505 BY A-M
 ROAD NO _____ DATE 6/27/08 DAY Friday BEGIN 10:25 AM END 11:55 AM
 POSTED SPEED 35 mph WEATHER cloudy
 NUMBER OF LANES 2 GRADE 2% CALIBRATED L

NUMBER OF VEHICLES

MPH	DIRECTION → W	TOTAL OF EACH SPEED	DIRECTION E ←	TOTAL OF EACH SPEED
	60			
59				
58				
57				
56				
55				
54				
53				
52				
51				
50				
49			1	1
48	1	1		0
47	 	5		0
46		0		0
45		3	1	1
44		3		0
43	1	1		3
42		4	1	1
41		2	1	1
40	 1	6	1	1
39	 1	6		3
38	1	1		2
37		3	 	7
36		4	 1	6
35	 	9	1	2
34	1	1	 1	6
33	1	1	 	7
32	1	1		3
31		2	 	5
30				2
29				3
28			1	1
27				0
26			1	1
25				
24				
23				
22				
21				
20-				
TOTAL		53	TOTAL 56	

TRAFFIC AND ENGINEERING REPORT
MARCH 2009

PURPOSE:

This survey is performed in accordance with Vehicle Code Section 40803 to allow the use of radar for enforcement purposes.

LOCATION:

Cabrillo College Drive from Soquel Drive to a location south a distance of 0.34 mile. (Speed Data collected at football field).

PREVAILING SPEED DATA:

The existing posted speed limit is 30 MPH and is radar enforced.

The prevailing speeds are:

Direction	Northbound	Southbound
85 th Percentile	35 mph	37 mph
Pace Speed	26-36 mph	28-38 mph
Average Speed	31.66 mph	32.24 mph

ANALYSIS:

The prevailing 85th percentile speeds are 37 MPH and 35 MPH depending on the direction of travel. The safe speed is established at or near the average 85th percentile which is calculated to be 35 MPH. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment as provided for in the California Manual on Uniform Traffic Control Devices indicates a further reduction of five miles per hour to 30 MPH. The factors justifying a further reduction are recent accident record, route serving a community college with bicycle traffic without bike lanes and shoulder conditions with pedestrians in the roadway without sidewalks. It is recommended that the existing 30 MPH speed limit remain with enforcement activity taking place at speeds above the safe speed.

RADAR SPEED SURVEY

		<u>MPH</u>	<u># of Vehicles</u>	<u>Percentage</u>
Route:	Cabrillo College Drive			
From:	Soquel Drive	39	1 ♦	100.0%
To:	South a distance of 0.34 miles	38	1 ♦	98.4%
Direction:	Northbound	37	4 ♦♦♦♦	96.9%
Weather:	Sunny	36	2 ♦♦	90.6%
Posted Speed:	30 MPH	35	3 ♦♦♦	87.5%
Begin time:	11:40 AM	34	9 ♦♦♦♦♦♦♦♦♦	82.8%
End time:	1:00 PM	33	10 ♦♦♦♦♦♦♦♦♦♦	68.8%
		32	5 ♦♦♦♦♦	53.1%
		31	6 ♦♦♦♦♦♦	45.3%
		30	5 ♦♦♦♦♦	35.9%
		29	5 ♦♦♦♦♦	28.1%
		28	4 ♦♦♦♦	20.3%
		27	3 ♦♦♦	14.1%
		26	4 ♦♦♦♦	9.4%
		25	2 ♦♦	3.1%
CRITICAL SPEED	35	24	0	0.0%
AVERAGE SPEED	31.66	23	0	0.0%
MEDIAN SPEED	32.0	22	0	0.0%
STANDARD DEVIATION	3.41	21	0	0.0%
PACE RANGE	26 - 36	20	0	0.0%
PERCENTAGE IN PACE	84.4%	19	0	0.0%
TOTAL # OF AUTOS	64	18	0	0.0%

RADAR SPEED SURVEY

		<u>MPH</u>	<u># of Vehicles</u>	<u>Percentage</u>
Route:	Cabrillo College Drive			
From:	Soquel Drive	43	1 ♦	100.0%
To:	South a distance of 0.34 miles	42	0	98.7%
Direction:	Southbound	41	1 ♦	98.7%
Weather:	Sunny	40	3 ♦♦♦	97.5%
Posted Speed:	30 MPH	39	2 ♦♦	93.7%
Begin time:	11:40 AM	38	2 ♦♦	91.1%
End time:	1:00 PM	37	4 ♦♦♦♦	88.6%
		36	5 ♦♦♦♦♦	83.5%
		35	3 ♦♦♦	77.2%
		34	8 ♦♦♦♦♦♦♦♦	73.4%
		33	11 ♦♦♦♦♦♦♦♦♦♦♦	63.3%
		32	7 ♦♦♦♦♦♦♦	49.4%
		31	6 ♦♦♦♦♦♦	40.5%
		30	3 ♦♦♦	32.9%
		29	6 ♦♦♦♦♦♦	29.1%
		28	6 ♦♦♦♦♦♦	21.5%
CRITICAL SPEED	37			
AVERAGE SPEED	32.24	27	2 ♦♦	13.9%
MEDIAN SPEED	33.0	26	3 ♦♦♦	11.4%
STANDARD DEVIATION	4.35	25	4 ♦♦♦♦	7.6%
PACE RANGE	28 - 38	24	1 ♦	2.5%
PERCENTAGE IN PACE	74.7%	23	1 ♦	1.3%
TOTAL # OF AUTOS	79	22	0	0.0%

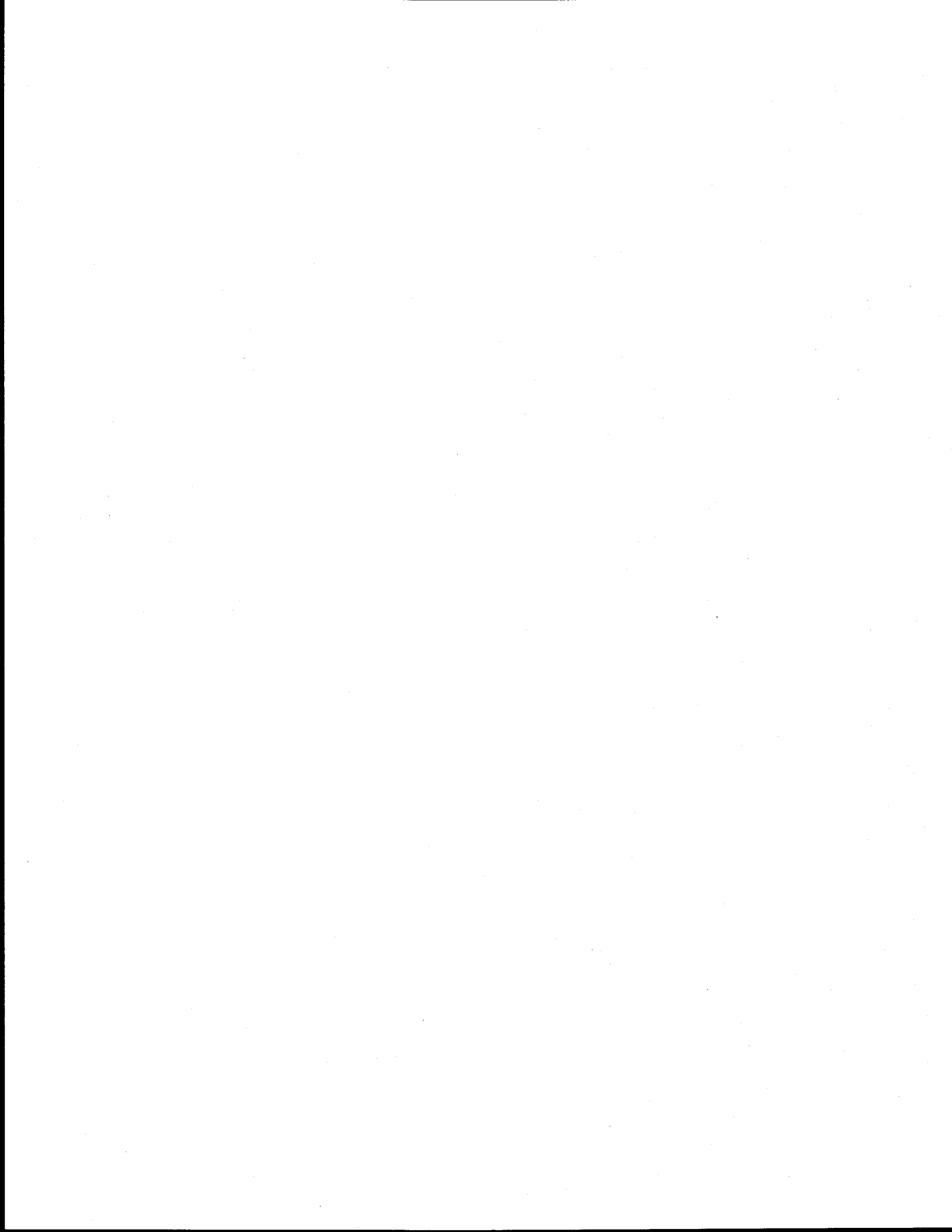
RADAR SPEED SURVEY
 Santa Cruz County
 Department of Public Works

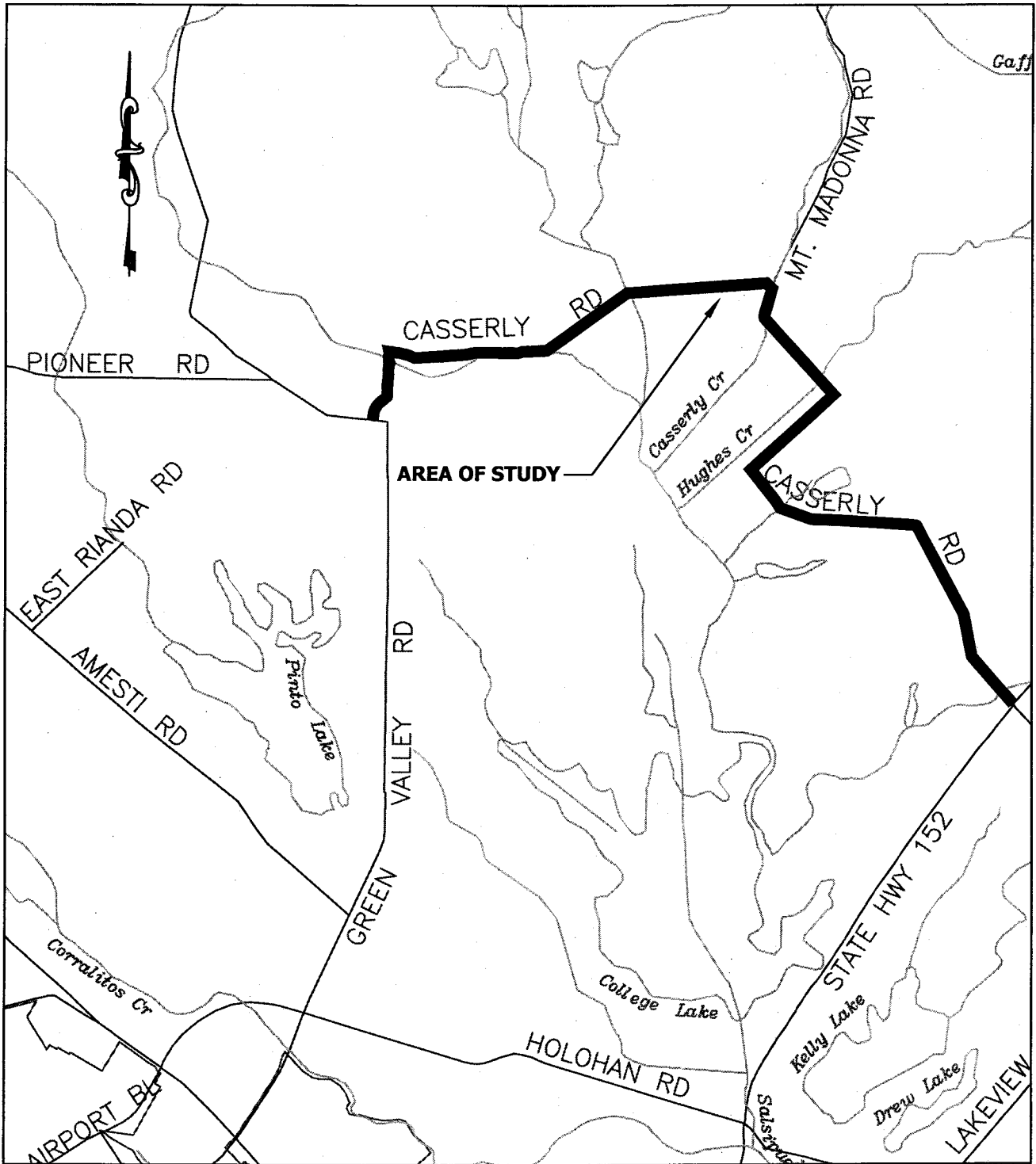
LOCATION CARMEL COLLEGE DRIVE (ACROSS SHERIFFS OFFICE - OUTPOST) BY JGL
 ROAD NO _____ DATE 6-11-08 DAY WED BEGIN 1140 END 1:00 PM
 POSTED SPEED 30 WEATHER SUNNY
 NUMBER OF LANES 2 GRADE 2% CALIBRATED

NUMBER OF VEHICLES

MPH	DIRECTION <u>NE ←</u>	TOTAL OF EACH SPEED	DIRECTION <u>→ SW</u>	TOTAL OF EACH SPEED
60				
59				
58				
57				
56				
55				
54				
53				
52				
51				
50				
49				
48				
47				
46				
45				
44				
43				1
42				0
41				1
40				3
39		1		2
38		1		2
37		4		4
36		2		5
35		3		3
34	-	9	-	8
33	-	10	- - 1	11
32		5	- 1	7
31	- 1	6	- 1	6
30		5		3
29		5	- 1	6
28		4	- 1	6
27		3		2
26		4		3
25		2		4
24				1
23				1
22				
21				
20				
TOTAL		64	TOTAL	

24





**SANTA CRUZ COUNTY TRAFFIC ENGINEERING
 RADAR SPEED SURVEY
 CASSERLY ROAD
 GREEN VALLEY ROAD TO STATE HIGHWAY 152**

MARCH 2009

TRAFFIC AND ENGINEERING REPORT
MARCH 2009

PURPOSE:

This survey is performed in accordance with Vehicle Code Section 40803 to allow the use of radar for enforcement purposes.

LOCATION:

Casserly Road from Green Valley Road to State Highway 152. (Speed Data collected at 466 Casserly Road).

PREVAILING SPEED DATA:

The existing posted speed limit is 35 MPH and is radar enforced.

The prevailing speeds are:

Direction	Northbound	Southbound
85 th Percentile	40 mph	41 mph
Pace Speed	29-39 mph	33-43 mph
Average Speed	33.41 mph	35.94 mph

ANALYSIS:

The prevailing 85th percentile speeds are 41 MPH and 40 MPH depending on the direction of travel. The safe speed is established at or near the average 85th percentile which is calculated to be 40 MPH. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment as provided for in the California Manual on Uniform Traffic Control Devices indicates a further reduction of five miles per hour to 35 MPH. The factors justifying a further reduction are a major agricultural area with a high volume of truck traffic, farm equipment, and field workers in addition to bicycle and pedestrian traffic in the roadway without bike lanes or pedestrian facilities. It is recommended that the existing 35 MPH speed limit remain with enforcement activity taking place at speeds above the safe speed.

RADAR SPEED SURVEY

		<u>MPH</u>	<u># of Vehicles</u>	<u>Percentage</u>
Route:	Cassery Road			
From:	Green Valley Road	47	1	◆
To:	State Highway 152	46	1	◆
Direction:	Northbound	45	1	◆
Weather:	Cloudy	44	0	
Posted Speed:	35 MPH	43	2	◆◆
Begin time:	9:00AM	42	1	◆
End time:	10:40 AM	41	2	◆◆
		40	1	◆
		39	1	◆
		38	3	◆◆◆
		37	3	◆◆◆
		36	3	◆◆◆
		35	1	◆
		34	3	◆◆◆
		33	5	◆◆◆◆◆
CRITICAL SPEED	40	32	4	◆◆◆◆
AVERAGE SPEED	33.41	31	4	◆◆◆◆
MEDIAN SPEED	32.5	30	6	◆◆◆◆◆◆
STANDARD DEVIATION	5.75	29	6	◆◆◆◆◆◆
PACE RANGE	29 - 39	28	2	◆◆
PERCENTAGE IN PACE	67.9%	27	1	◆
TOTAL # OF AUTOS	56	26	0	
		25	3	◆◆◆
		24	0	
		23	1	◆
		22	1	◆

RADAR SPEED SURVEY

		<u>MPH</u>	<u># of Vehicles</u>		<u>Percentage</u>
Route:	Cassery Road				
From:	Green Valley Road	50	1	◆	100.0%
To:	State Highway 152	49	1	◆	98.6%
Direction:	Southbound	48	2	◆◆	97.1%
Weather:	Cloudy	47	0		94.2%
Posted Speed:	35 MPH	46	2	◆◆	94.2%
Begin time:	9:00AM	45	0		91.3%
End time:	10:40 AM	44	0		91.3%
		43	1	◆	91.3%
		42	1	◆	89.9%
		41	4	◆◆◆◆	88.4%
		40	3	◆◆◆	82.6%
		39	5	◆◆◆◆◆	78.3%
		38	7	◆◆◆◆◆◆◆	71.0%
		37	3	◆◆◆	60.9%
		36	9	◆◆◆◆◆◆◆◆◆	56.5%
CRITICAL SPEED	41	35	6	◆◆◆◆◆◆	43.5%
AVERAGE SPEED	35.94	34	5	◆◆◆◆◆	34.8%
MEDIAN SPEED	36.0	33	2	◆◆	27.5%
STANDARD DEVIATION	5.82	32	0		24.6%
PACE RANGE	33 - 43	31	4	◆◆◆◆	24.6%
PERCENTAGE IN PACE	65.2%	30	4	◆◆◆◆	18.8%
TOTAL # OF AUTOS	69	29	2	◆◆	13.0%
		28	1	◆	10.1%
		27	2	◆◆	8.7%
		26	0		5.8%
		25	3	◆◆◆	5.8%
		24	0		1.4%
		23	1	◆	1.4%