### DEPARTMENT OF TRANSPORTATION

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December 10, 2014

4-SM-001-PM 34.60/37.12

### **ENGINEERING AND TRAFFIC SURVEY REPORT**

### I. SURVEY ORIGIN AND CONTENT

In an email dated August 13, 2014, Captain Mike Maskarich, CHP Area Commander for the Redwood City Area, requested a current speed zone survey be provided for State Route 1, Cabrillo Highway, in San Mateo County between post miles 34.60 and 37.12, so that radar enforcement may be utilized. The request is in accordance with Vehicle Code Section 22354.

This survey includes:

- Analysis and recommendations For each speed zone studied, an analysis of prevailing speeds, accident data, and roadway conditions not readily apparent to the driver was performed, and the appropriate speed limits recommended.
- Enforcement jurisdiction and attitude
- Summary of recommendations

### II. ANALYSIS AND RECOMMENDATIONS

## A. Between PM 34.60 at 150 feet south of Etheldore Street and PM 36.13 at 600 feet south of 9th Street

- 1. Analysis
  - a. Prevailing Speed Data

The existing speed limit is 50 mph.

The prevailing speed checks are as follows:

	Northbound		Southbound	
Critical Speed	-	54.0 mph	50.8 mph	
Pace Speed	-	44.5-54.5 mph	41.3-51.3 mph	
Average Speed	-	49.6 mph	46.7 mph	

The speed data is consistent with retention of the existing speed limit.

### b. Accident Data

The accident rates within this highway segment are as follows:

	Actual Rate	<u>s</u>	Average Rat	Average Rates	
	Fatal & Injury	<b>Total</b>	Fatal & Injury	Total	
07/01/09-06/30/10	0.74	1.24	0.44	1.09	
07/01/10-06/30/11	0.49	0.86	0.44	1.09	
07/01/11-06/30/12	0.75	1.38	0.44	1.09	

The three-year accident history analyses between 07/01/09 and 06/30/12 indicates that there are 28 accidents. The primary collision factors are as follows: Influence of Alcohol - 7 percent, Failure to Yield - 29 percent, Improper Turn - 14 percent, Speeding - 32 percent and Other Violations - 18 percent.

Fifty percent of the accidents were intersection related.

The types of collisions are as follows: Sideswipe -4 percent, Rear-End -28 percent, Broadside -39 percent, Hit Object -14 percent, Auto-pedestrian -11 percent and Other -4 percent.

Analysis of the accident data indicates that the present speed limit is appropriate.

## c. Highway, Traffic, and Roadside Conditions Not Readily Apparent to the Driver

None.

#### 2. Recommendations

Retain the existing speed limit of 50 mph.

# B. Between PM 36.13 at 600 feet south of 9th Street and PM 37.12 at 2850 feet north of 2nd Street

### 1. Analysis

### a. Prevailing Speed Data

The existing speed limit is 45 mph.

The prevailing speed checks are as follows:

		Northbound	Southbound
Critical Speed	-	52.0 mph	48.7 mph
Pace Speed	-	42.0-52.0 mph	40.0-50.0 mph
Average Speed	-	46.9 mph	44.9 mph

The speed data is consistent with retention of the existing speed limit.

### b. Accident Data

The accident rates within this highway segment are as follows:

	Actual Rates	<u>S</u>	Average Rat	Average Rates	
	Fatal & Injury	<b>Total</b>	Fatal & Injury	Total	
07/01/09-06/30/10	0.00	0.39	0.44	1.09	
07/01/10-06/30/11	0.95	1.52	0.44	1.09	
07/01/11-06/30/12	0.19	0.58	0.44	1.09	

The three-year accident history analyses between 07/01/09 and 06/30/12 indicates that there are 13 accidents. The primary collision factors are as follows: Influence of Alcohol – 8 percent, Failure to Yield – 31 percent, Improper Turn – 23 percent, Speeding – 15 percent, Other Violations – 8 percent and Other Than Driver – 15 percent.

Twenty-three percent of the accidents were intersection related.

The types of collisions are as follows: Head-on - 8 percent, Sideswipe - 8 percent, Rear-end - 15 percent, Broadside - 38 percent, Hit-Object - 15 percent, Auto-pedestrian - 8 percent and Other - 8 percent.

Analysis of the accident data indicates that the present speed limit is appropriate.

c. Highway, Traffic, and Roadside Conditions Not Readily Apparent to the Driver

None.

### 2. Recommendations

Retain the existing speed limit of 45 mph.

## III. ENFORCEMENT JURISDICTION AND ATTITUDE

The California Highway Patrol concurs with the recommendations in this report.

## IV. SUMMARY OF RECOMMENDATIONS

- A. Retain the existing 50 mph speed limit between PM 34.60 and PM 36.13.
- B. Retain the existing 45 mph speed limit between PM 36.13 and PM 37.12.

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