



# **SR 85 Express Lanes**

## **Technical Memorandum**

### **Existing Conditions Traffic Operational Analysis**

*Prepared for:*

***Santa Clara Valley Transportation Authority (VTA)***

December 7, 2011

*Prepared by:*

**URS**

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## **1. INTRODUCTION**

This technical memorandum summarizes the existing traffic volumes, ramp metering rates and speeds for the State Route (SR) 85 Express Lanes project that proposes to convert entire length of the existing directional 24 miles of carpool lanes on SR 85 from US 101 in Mountain View to US 101 in south San Jose to Express Lanes operations for both directions of the freeway. The proposed project also proposes to add an additional express lane in both direction of SR 85 between SR 87 and Interstate 280. **Figure 1** illustrates the corridor and the project limits.

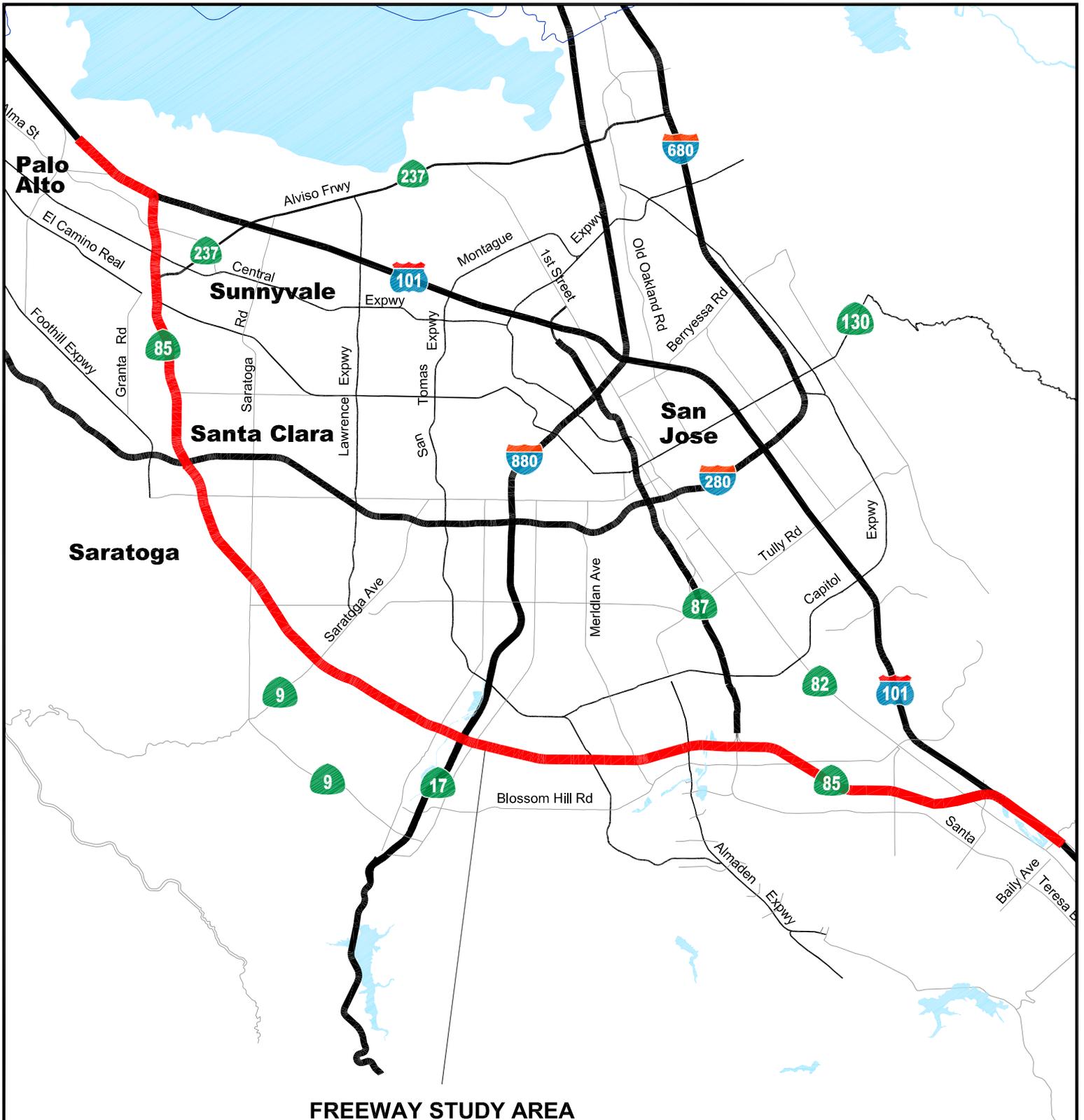
Express Lanes would serve as a demand management tool using variable tolls (dynamic pricing) to maximize the throughput of travelers while maintaining free flow traffic conditions within the facility. Express Lanes are expected to offer continuous and reliable mobility to prospective users. Only Single Occupant Vehicles (SOVs) will be tolled using FasTrak, the electronic technology that is currently used on the Bay Area Toll Bridges. Work on the development of SR 85 Express Lanes has been on-going since 2007. The proposed project is anticipated to open to traffic by Fall 2014. This important project is a recipient of American Recovery and Reinvestment Act (ARRA) funds for the PA/ED phase and final design to progress the project towards early implementation.

Assembly Bill 2032, provides legislative authority for Santa Clara Valley Transportation Authority (VTA) to implement and operate two corridors of High Occupancy Toll (HOT) lanes (referred to as Express Lanes) within Santa Clara County. These Express Lanes, a form of roadway pricing, essentially allow solo commuters for a fee to use lanes that ordinarily would have been available for only carpoolers, transit, motorcycles, and vehicles with clean air stickers. The fees would change dynamically in response to existing congestion levels and available capacity in the carpool lanes. VTA has begun efforts as granted by AB 2032 to develop the Silicon Valley Express Lanes Program.

## **2. EXISTING GEOMETRIC, TRAFFIC AND TRAVEL TIME DATA**

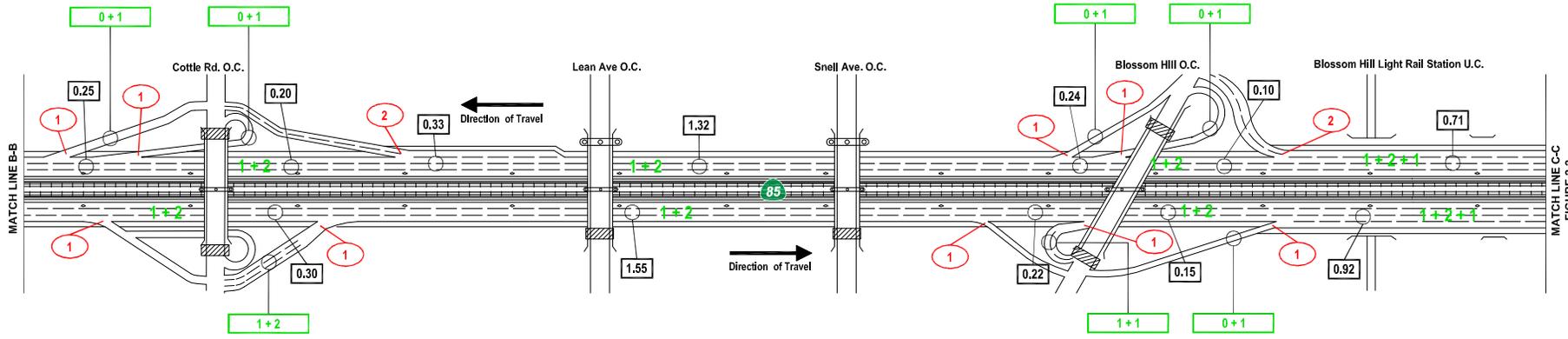
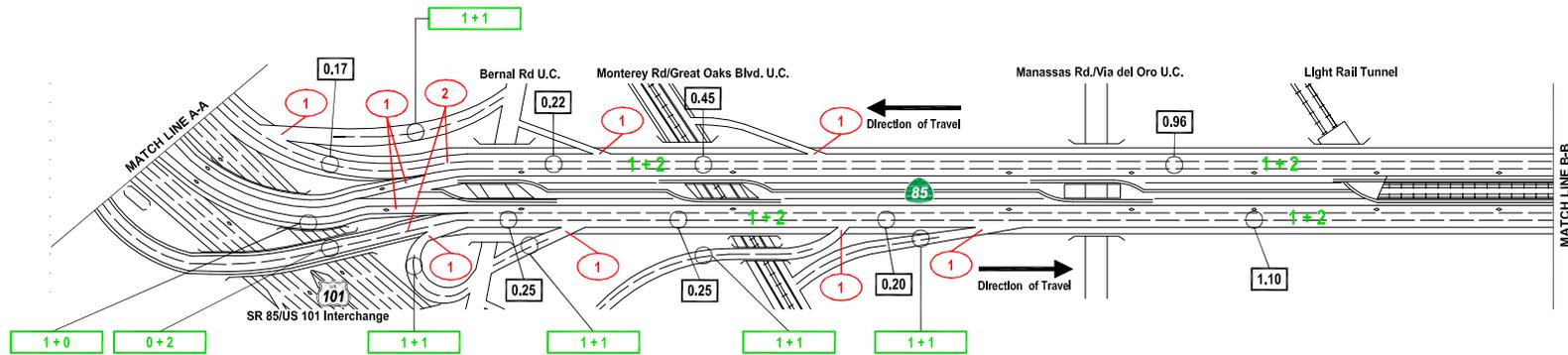
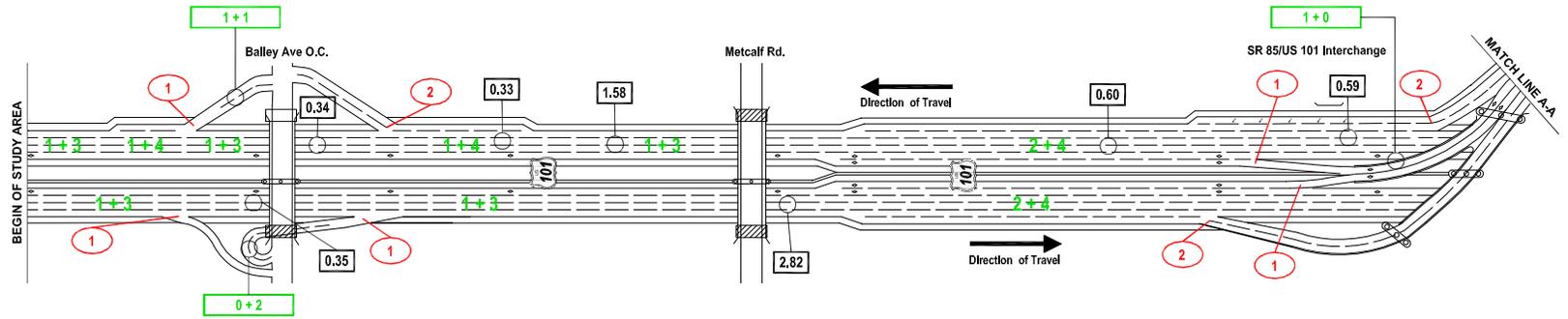
### **2.1 Geometrics and Lane Configurations**

Existing roadway geometric data, traffic volumes and speed along the mainline study segments and ramps were collected as part of the data collection task. Existing roadway geometric data was collected using aerial photographs, as-built drawings and field observations. **Figure 2** illustrates the lane configurations along the freeway mainline and on/off-ramps within the study limits and approximate distances between off- and on-ramps; and on- and off-ramps throughout the study corridor. SR 85 under existing conditions has one high occupancy vehicle (HOV) lane, two mixed flow lanes (general purpose lanes) with auxiliary lanes between the following interchanges:



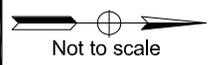
**FREEWAY STUDY AREA**

 = Study Corridor



**Legend:**

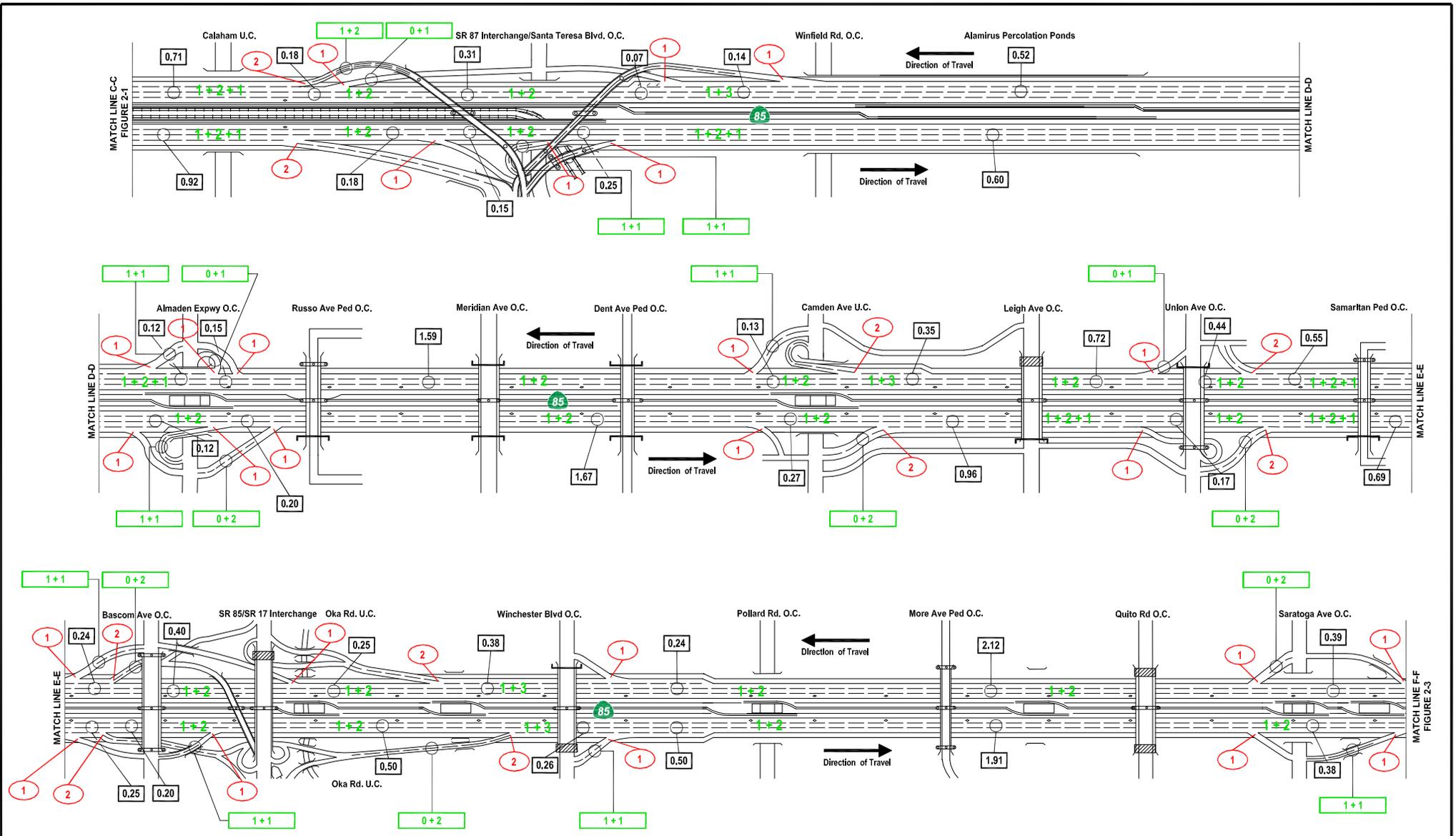
- X + X + X = HOV + MIXED FLOW (MF) LANE(S) + AUXILIARY LANE(S)
- XX = DISTANCE BETWEEN ON-RAMPS & OFF-RAMPS
- x = NO. OF LANES MERGING OR EXITING THE FREEWAY
- HOV + MF Lanes on ramp = NO. OF LANES ON THE ON-RAMP ARE BEFORE THE LIMIT LINE



**SR 85 EXPRESS LANES**

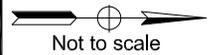
Existing Lane Configuration

**Figure 2-1**



**Legend:**

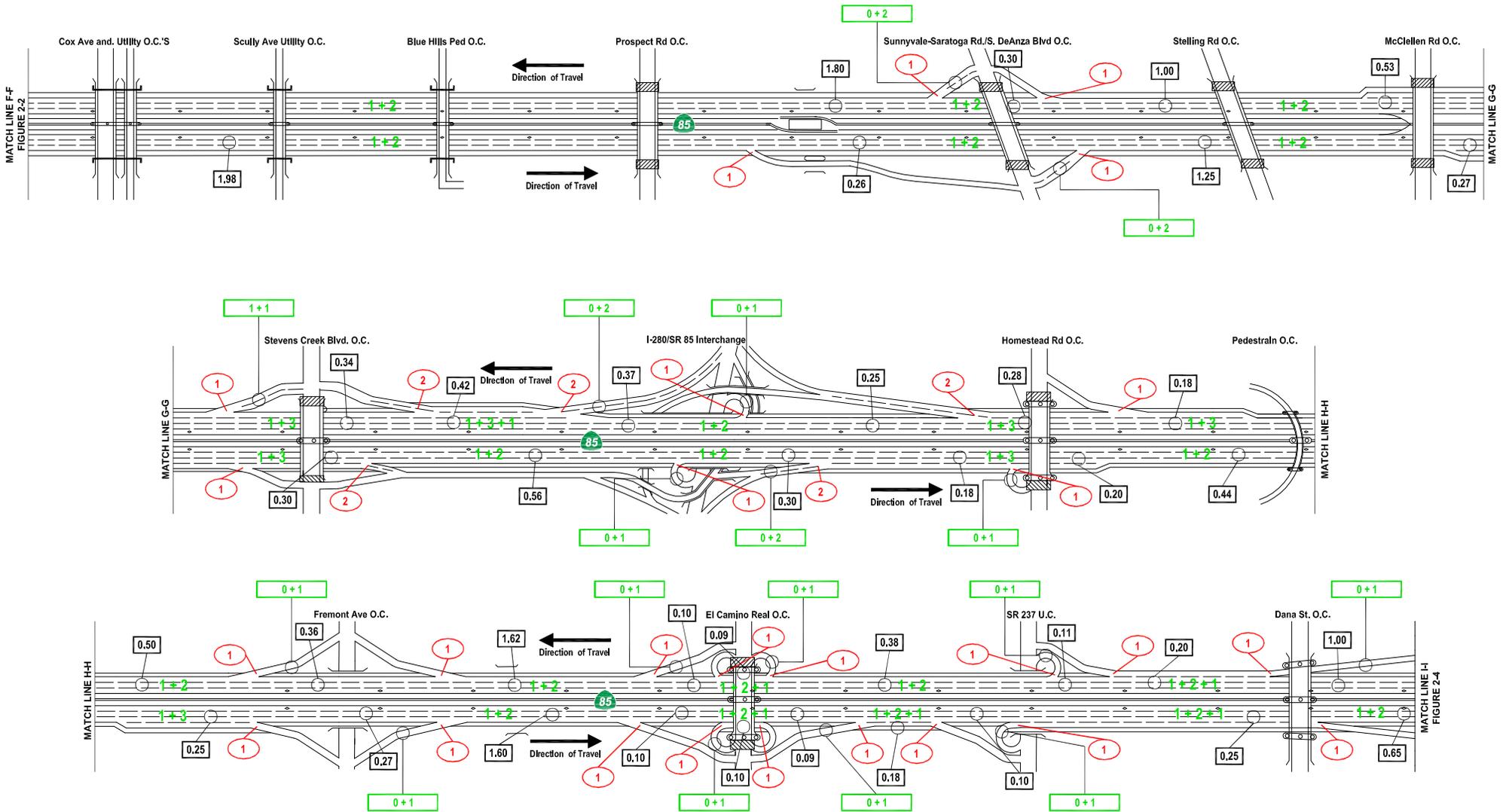
- X + X + X = HOV + MIXED FLOW (MF) LANE(S) + AUXILIARY LANE(S)
- XX = DISTANCE BETWEEN ON-RAMPS & OFF-RAMPS
- x = NO. OF LANES MERGING OR EXITING THE FREEWAY
- HOV + MF Lanes on ramp = NO. OF LANES ON THE ON-RAMP ARE BEFORE THE LIMIT LINE



**SR 85 EXPRESS LANES**

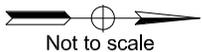
Existing Lane Configuration

**Figure 2-2**



**Legend:**

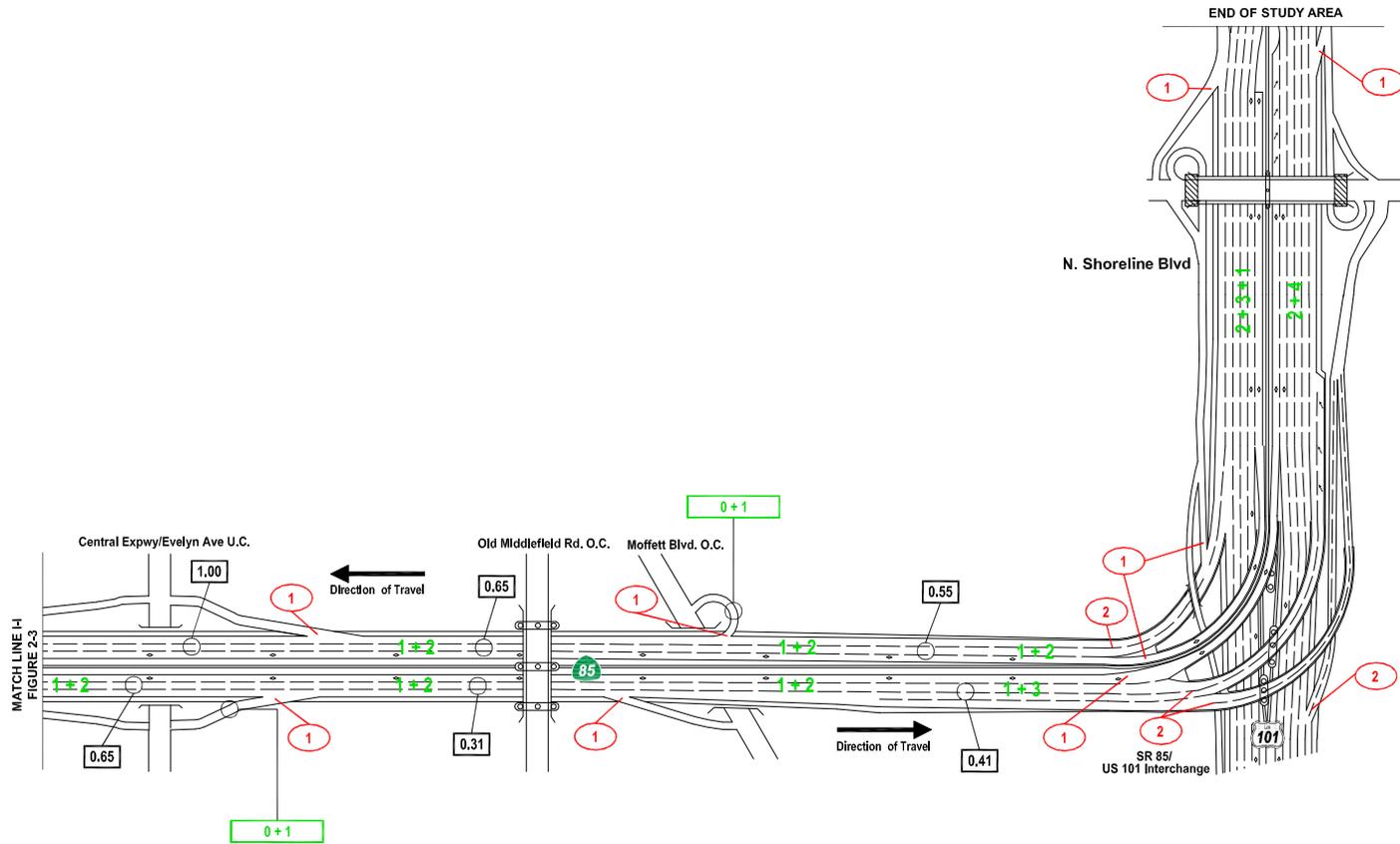
- X + X + X = HOV + MIXED FLOW (MF) LANE(S) + AUXILIARY LANE(S)
- XX = DISTANCE BETWEEN ON-RAMPS & OFF-RAMPS
- x = NO. OF LANES MERGING OR EXITING THE FREEWAY
- 0+2 = NO. OF LANES ON THE ON-RAMP ARE BEFORE THE LIMIT LINE



**SR 85 EXPRESS LANES**

Existing Lane Configuration

**Figure 2-3**



**Legend:**

- X + X + X = HOV + MIXED FLOW (MF) LANE(S) + AUXILIARY LANE(S)
- XX = DISTANCE BETWEEN ON-RAMPS & OFF-RAMPS
- x = NO. OF LANES MERGING OR EXITING THE FREEWAY
- HOV + MF Lanes on ramp = NO. OF LANES ON THE ON-RAMP ARE BEFORE THE LIMIT LINE



**SR 85 EXPRESS LANES**

Existing Lane Configuration

**Figure 2-4**

**Northbound Direction**

- Blossom Hill Road to SR 87
- SR 87 to Almaden Expressway
- Camden Avenue to Union Avenue
- Union Avenue to SR 17
- El Camino Real to SR 237
- SR 237 to Evelyn Avenue

**Southbound Direction**

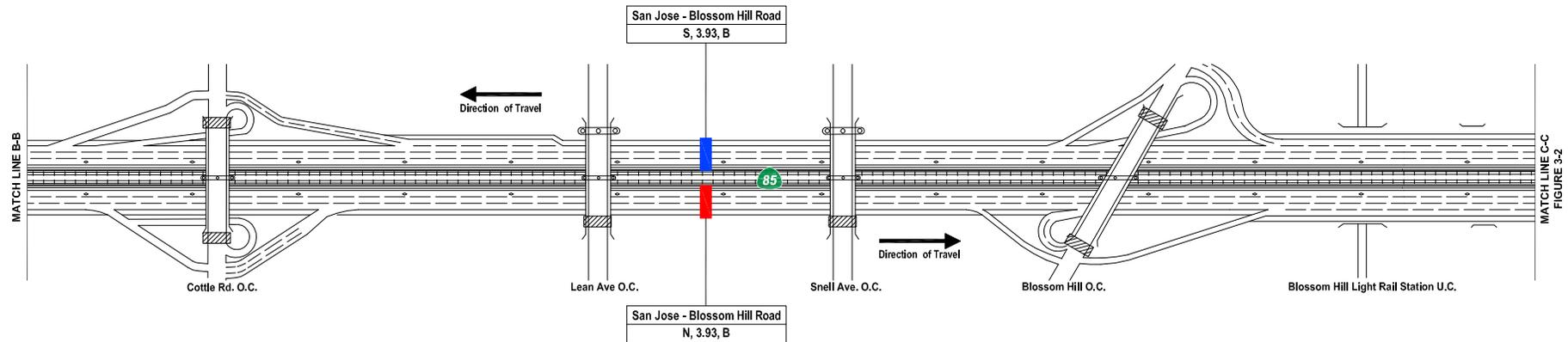
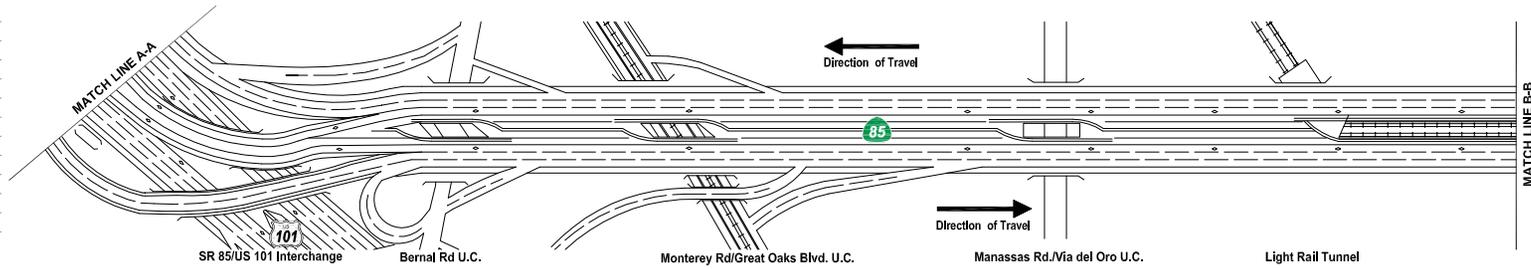
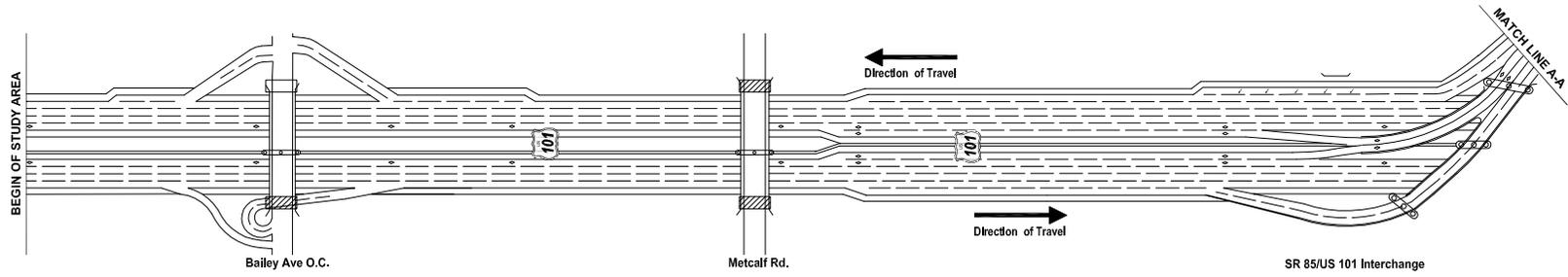
- Evelyn Avenue to SR 237
- Interstate 280 to Stevens Creek Boulevard
- SR 17 to Union Avenue
- Almaden Expressway to SR 87
- SR 87 to Blossom Hill Road

**2.2 Traffic Flow Data**

Traffic flow data collection included the following data:

- Caltrans provided 24-hour traffic volumes for the freeway mainline and at the ramps along the study corridor. Traffic volumes for the peak period along the freeway mainline and ramps were derived based on the 24-hour traffic volumes. The 24-hour traffic volumes for the freeway mainline and at the on/off-ramps for Year 2007 were used as the base for developing existing conditions traffic profile;
- Vehicle fleet composition (HOV vehicles and SOV's) was collected from Caltrans, 2007 HOV Report and Caltrans Performance Maintenance System (PeMS);
- Travel time runs for the a.m. and p.m. peak period conducted in Year 2008 were provided by Caltrans; and
- Additional traffic volume counts to determine the throughput of existing bottlenecks during the peak hours were conducted in May 2010.

Caltrans provided 24-hour traffic volumes that included traffic data collected during 2007/2008. Traffic volumes for the freeway mainline and ramps were averaged for Tuesday, Wednesday and Thursday. **Figure 3** illustrates the location of existing Caltrans freeway mainline counters. The ramps that are metered and their metering rates for AM and PM peak periods are illustrated in **Figures 4** through **7**. Based on the analysis and review of the existing traffic volumes, the a.m. peak period occurs between 6:00 a.m. and 9:00 a.m. with peak hour between 7:00 a.m.-8:00 a.m.; and the p.m. peak period occurs between 3:00 p.m. and 7:00 p.m. with peak hour between 5:00 p.m. to 6:00 p.m. The 24-Hour traffic volumes provided by Caltrans are attached in **Appendix A**. Additional traffic volume collected by URS Corporation in May 2010 to determine the throughput of some of the existing bottlenecks is also attached in **Appendix A**.



**Legend:**

Discription of Mainline Counter  
 Direction, Post Mile, Leg

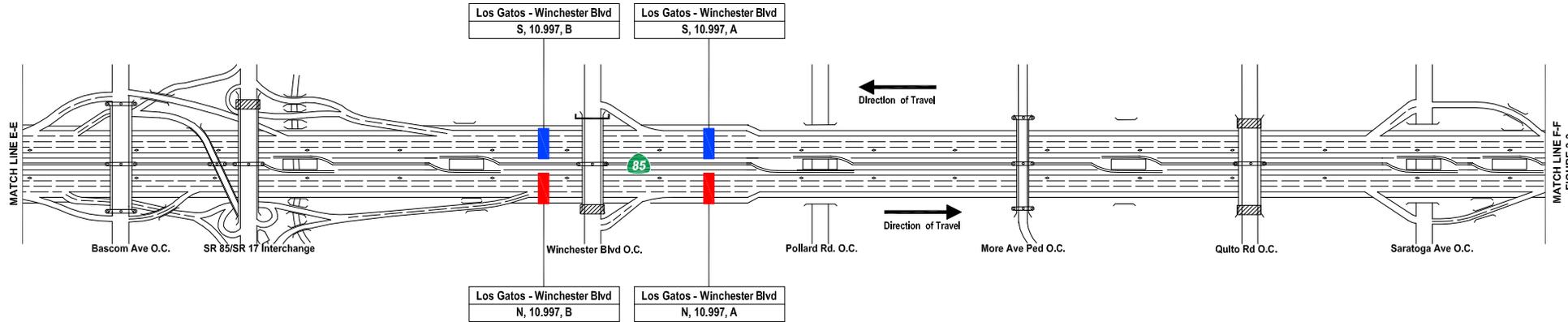
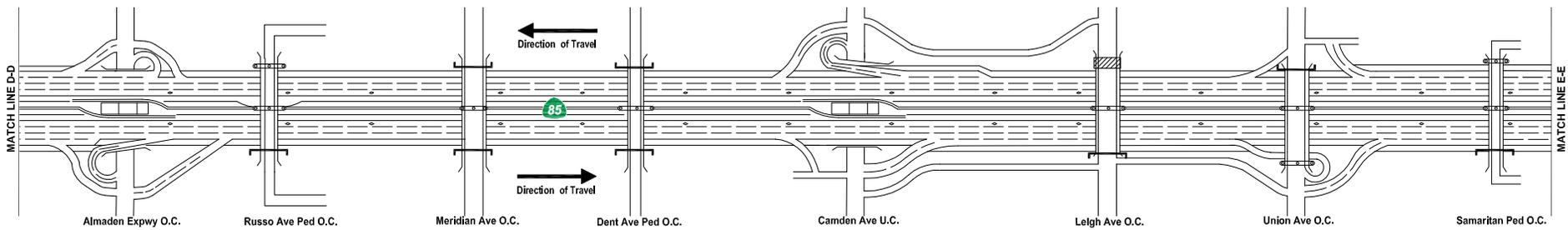
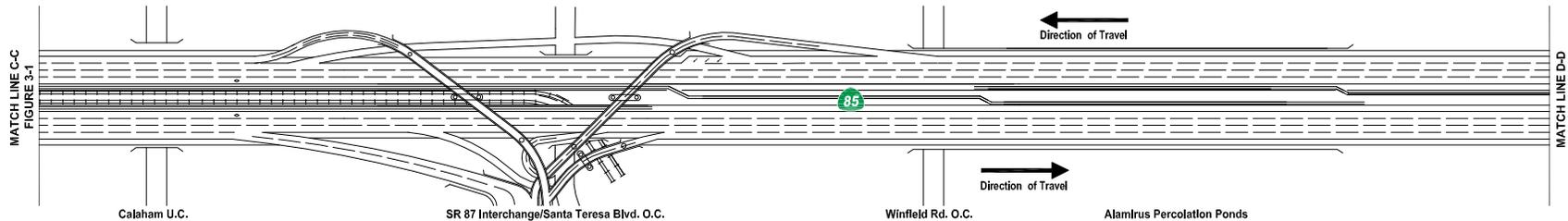
- █ = Northbound Mainline Counter
- █ = Southbound Mainline Counter



**SR 85 EXPRESS LANES**

Existing Mainline Counter Locations

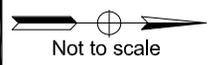
**Figure 3-1**



**Legend:**

Discription of Mainline Counter  
 Direction, Post Mile, Leg

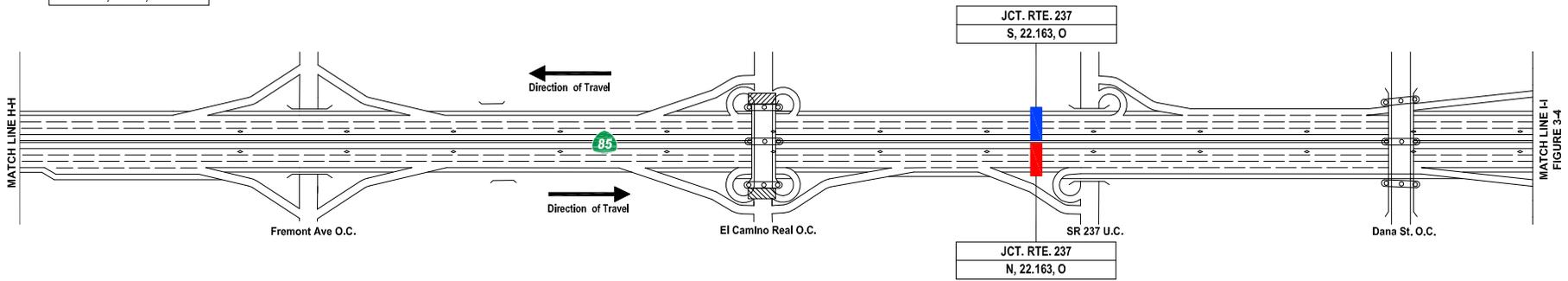
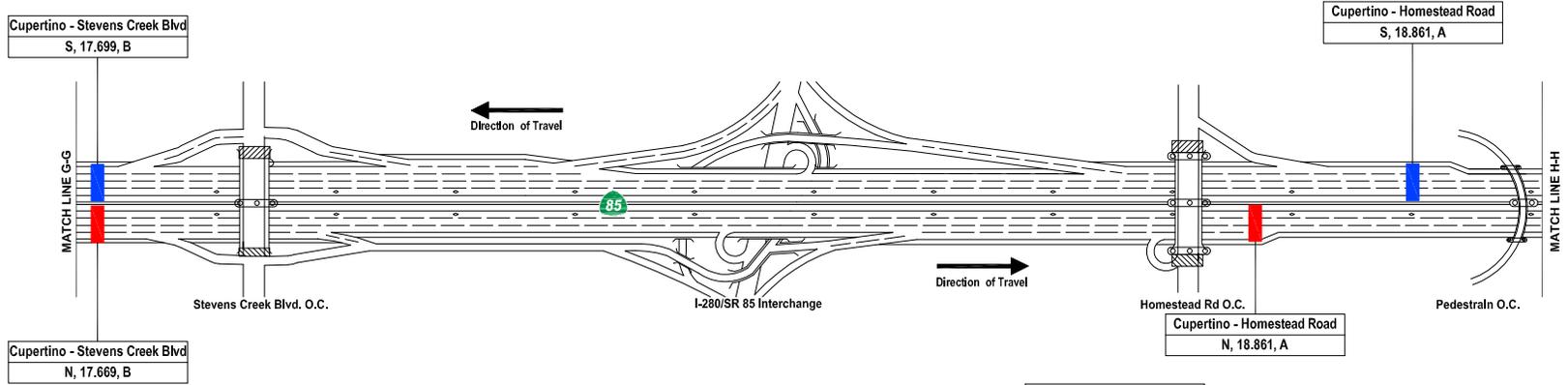
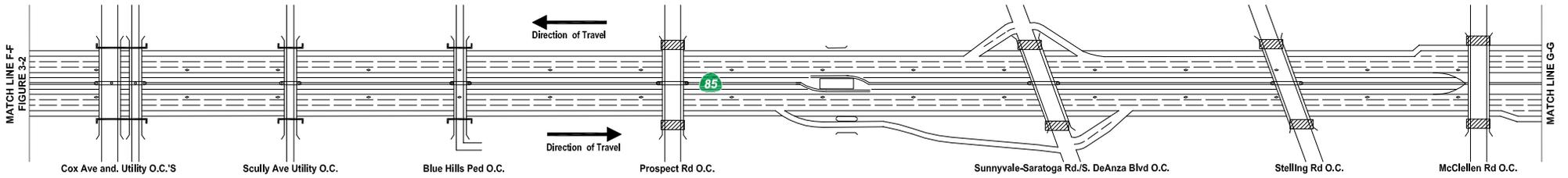
- █ = Northbound Mainline Counter
- █ = Southbound Mainline Counter



**SR 85 EXPRESS LANES**

Existing Mainline Counter Locations

**Figure 3-2**



**Legend:**

Discription of Mainline Counter  
 Direction, Post Mile, Leg

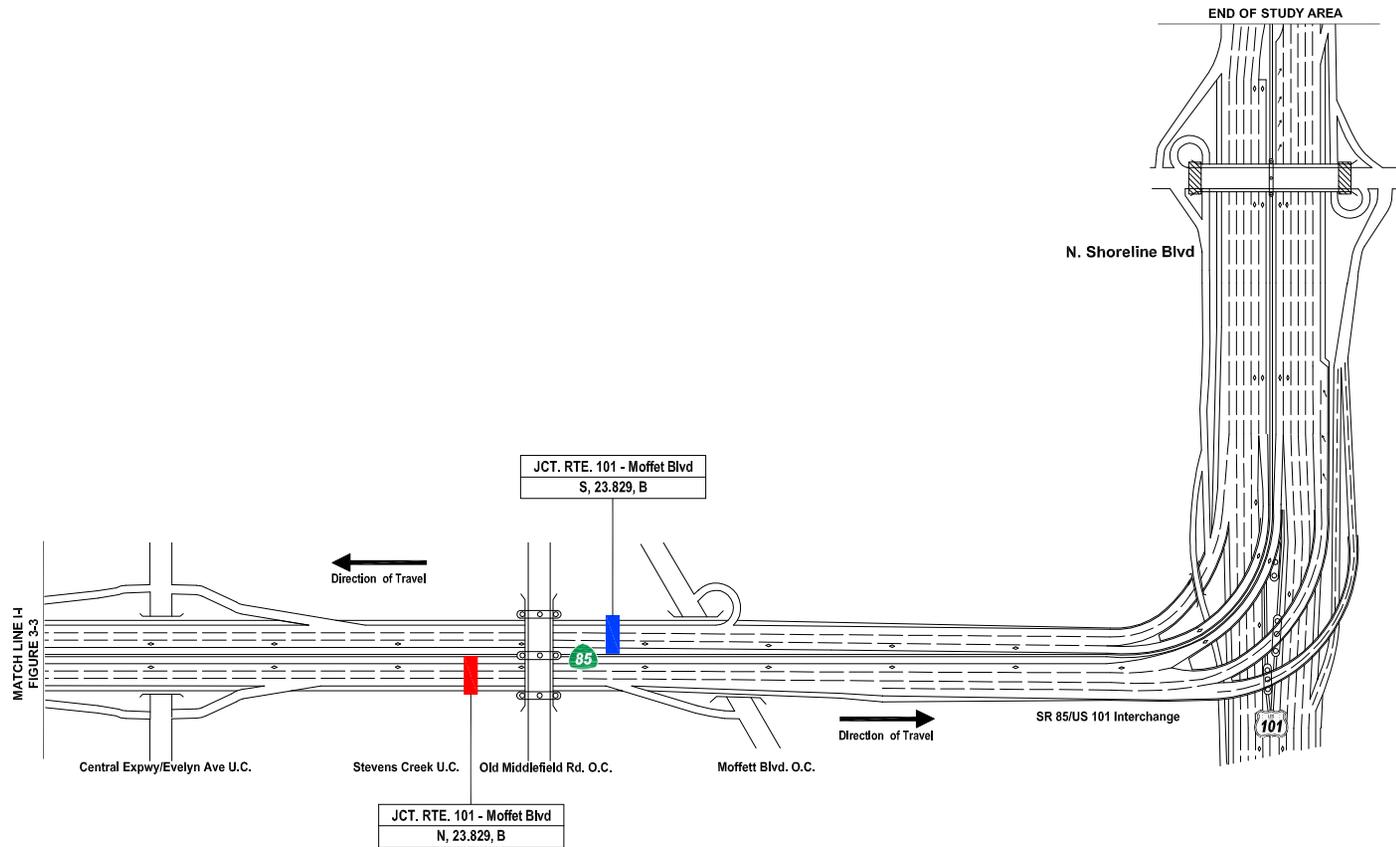
- █ = Northbound Mainline Counter
- █ = Southbound Mainline Counter



**SR 85 EXPRESS LANES**

Existing Mainline Counter Locations

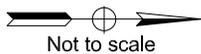
**Figure 3-3**



**Legend:**

Discription of Mainline Counter  
 Direction, Post Mile, Leg

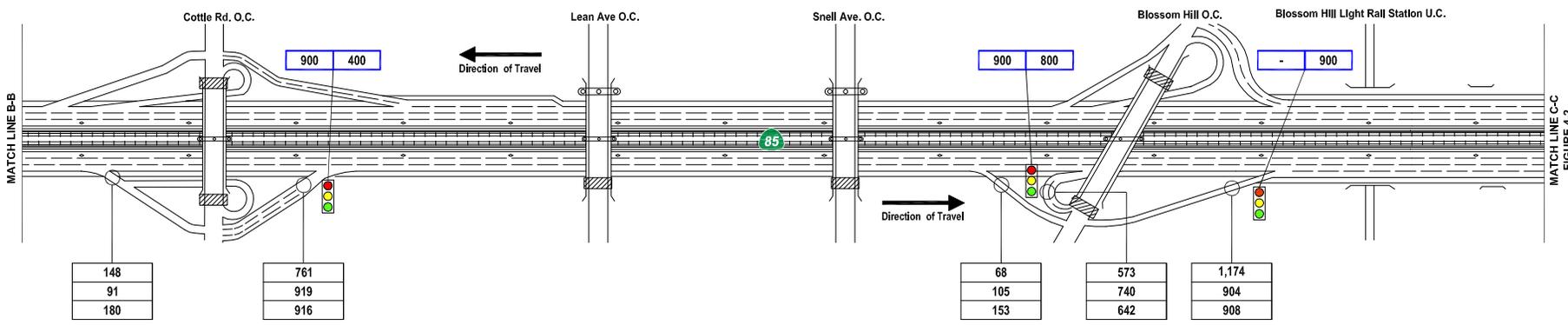
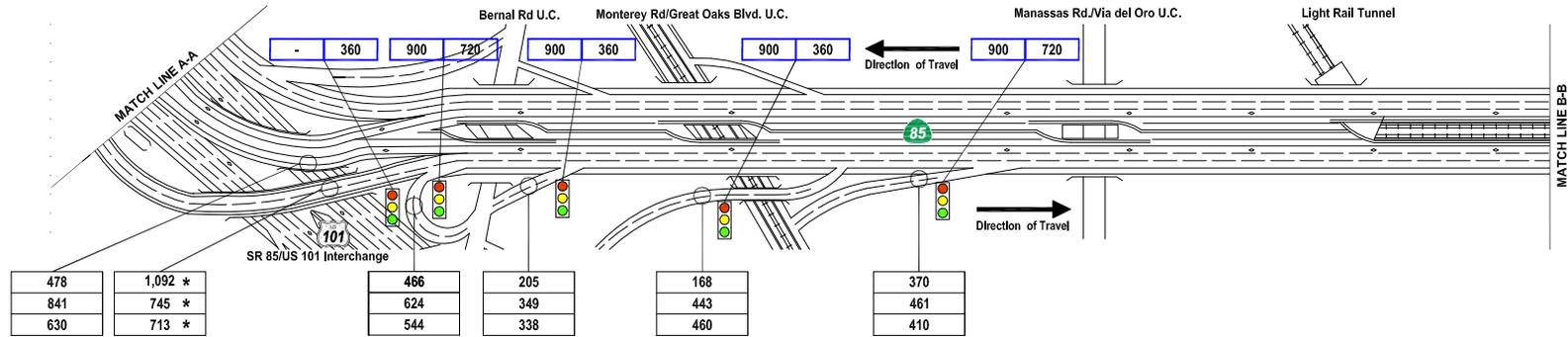
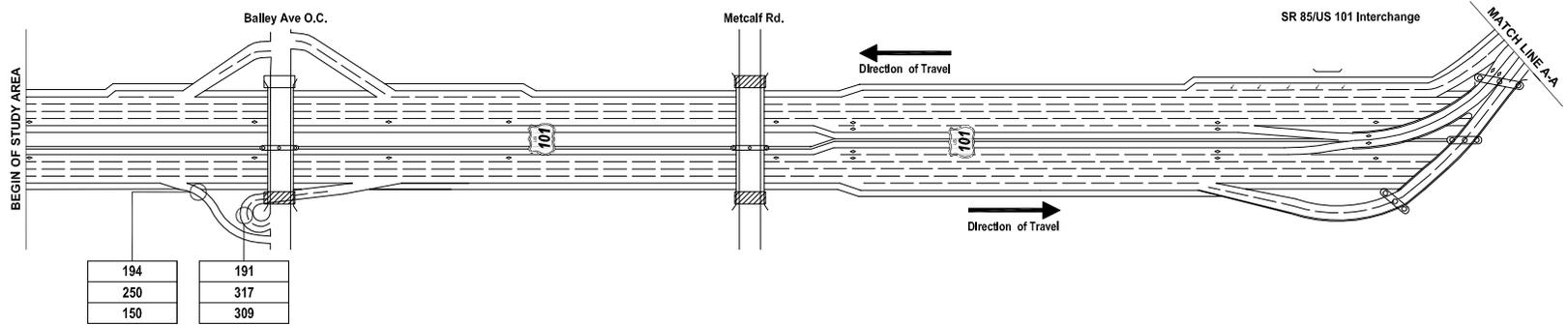
- █ = Northbound Mainline Counter
- █ = Southbound Mainline Counter



**SR 85 EXPRESS LANES**

Existing Mainline Counter Locations

**Figure 3-4**



**Legend:**

RAMP VOLUMES

6:00 AM - 7:00 AM	HOV	SOV
7:00 AM - 8:00 AM	xx	xx
8:00 AM - 9:00 AM		

= Ramp Metering Rate (vphpl)

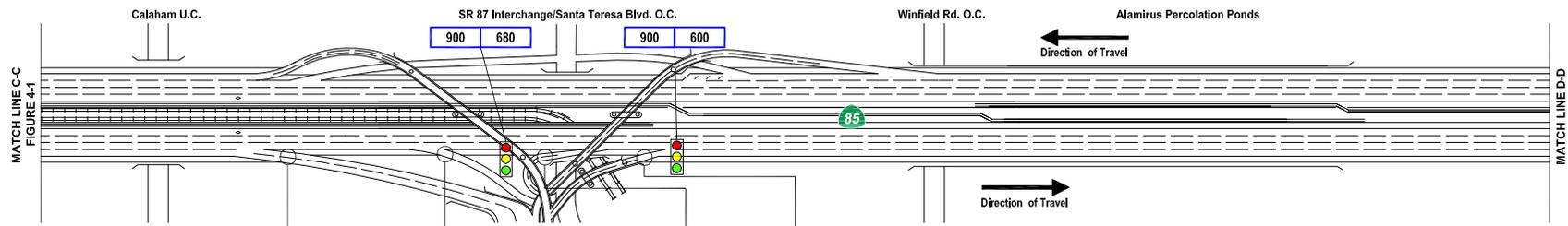
= Ramp Metering Locations (2007)    \* = Flow observed downstream of Ramp Meters Limit Line



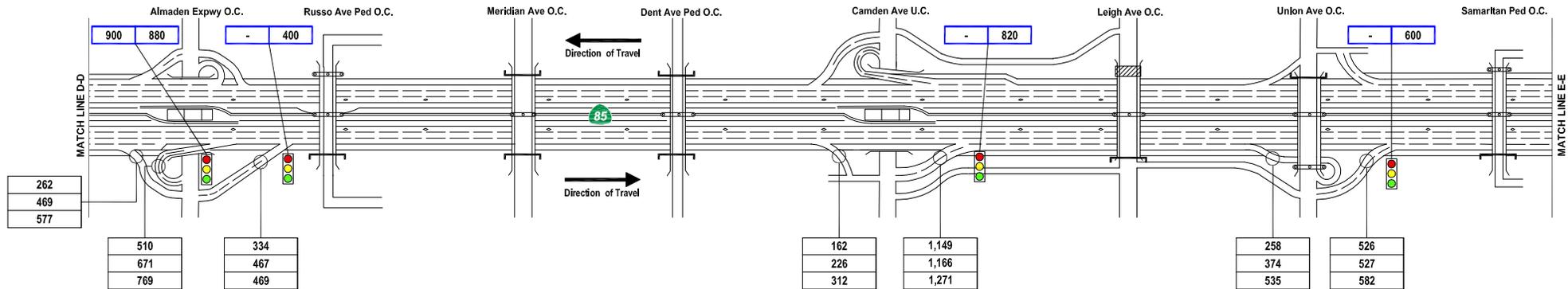
**SR 85 EXPRESS LANES**

Existing AM Northbound Ramp  
Volumes & Ramp Metering Locations

Figure  
4-1



2,092	81	347	561
2,122	116	506	880
1,709	174	421	995

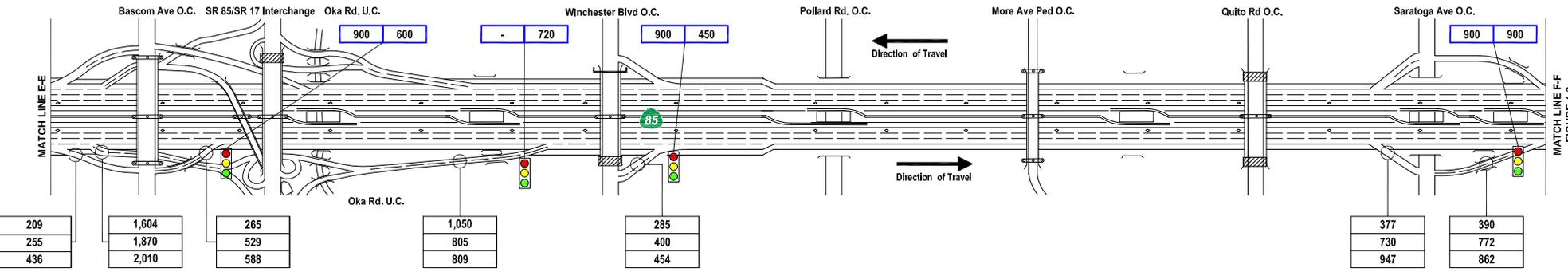


262
469
577

510	334
671	467
769	469

162	1,149
226	1,166
312	1,271

258	526
374	527
535	582



209
255
436

1,604	265
1,870	529
2,010	588

1,050
805
809

285	400
	454

377	390
730	772
947	862

**Legend:**

RAMP VOLUMES

6:00 AM - 7:00 AM
7:00 AM - 8:00 AM
8:00 AM - 9:00 AM

HOV SOV  

xx	xx
----	----

 = Ramp Metering Rate (vphpl)

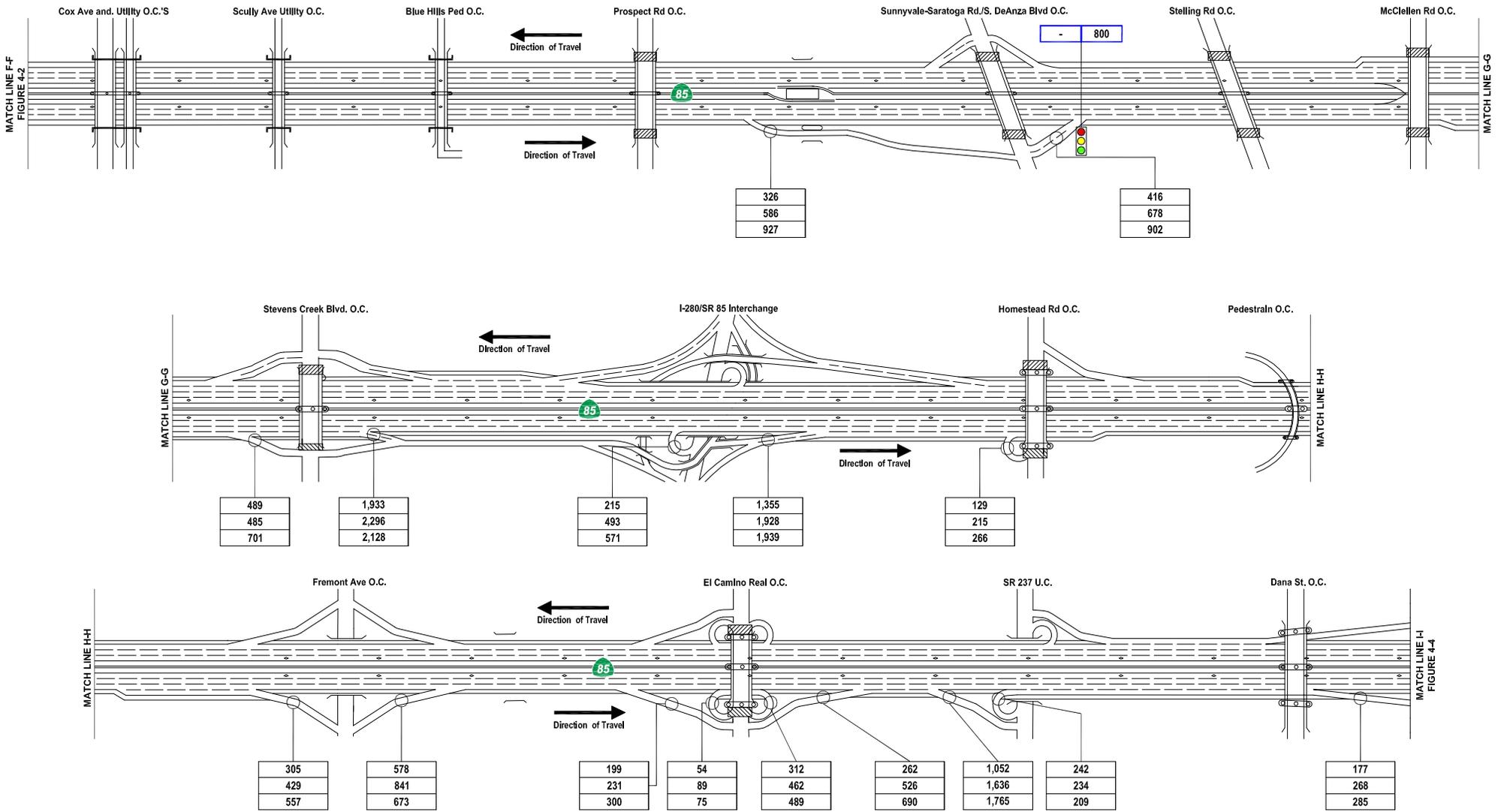
= Ramp Metering Locations (2007)



**SR 85 EXPRESS LANES**

Existing AM Northbound Ramp  
 Volumes & Ramp Metering Locations

**Figure  
 4-2**



**Legend:**

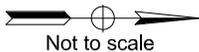
**RAMP VOLUMES**

6:00 AM - 7:00 AM
7:00 AM - 8:00 AM
8:00 AM - 9:00 AM

HOV	SOV
xx	xx

= Ramp Metering Rate (vphpl)

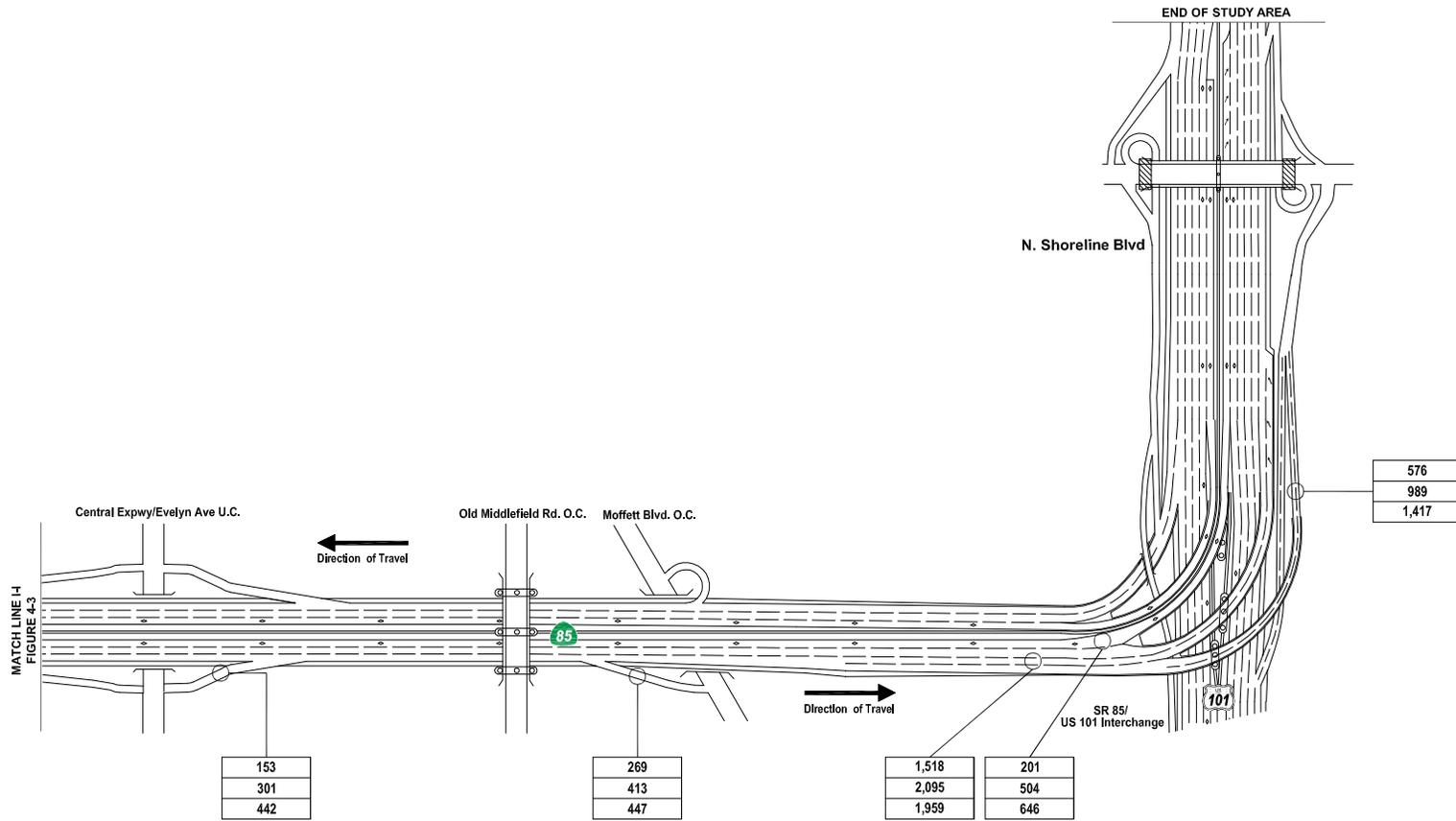
= Ramp Metering Locations (2007)



**SR 85 EXPRESS LANES**

**Existing AM Northbound Ramp  
Volumes & Ramp Metering Locations**

**Figure  
4-3**



**Legend:**

**RAMP VOLUMES**

6:00 AM - 7:00 AM
7:00 AM - 8:00 AM
8:00 AM - 9:00 AM

HOV SOV

xx	xx
----	----

= Ramp Metering Rate (vphpl)



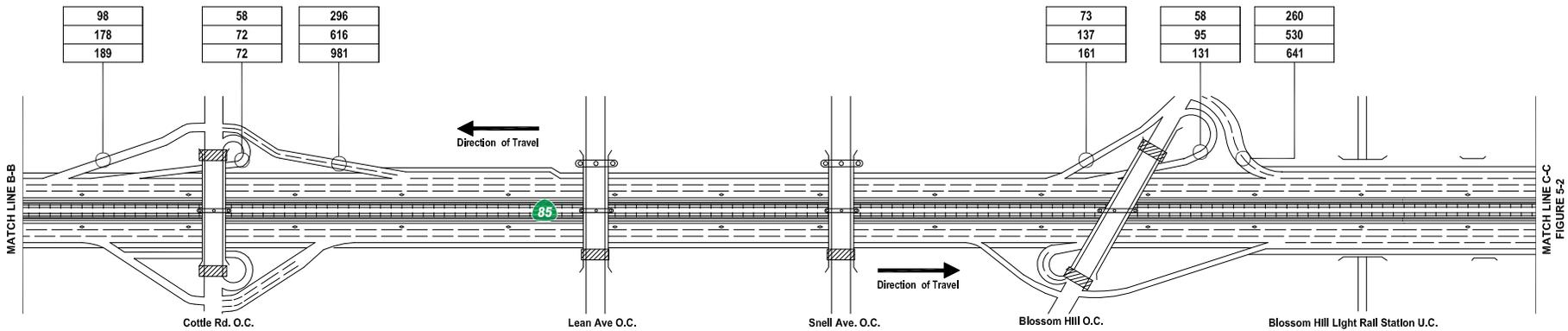
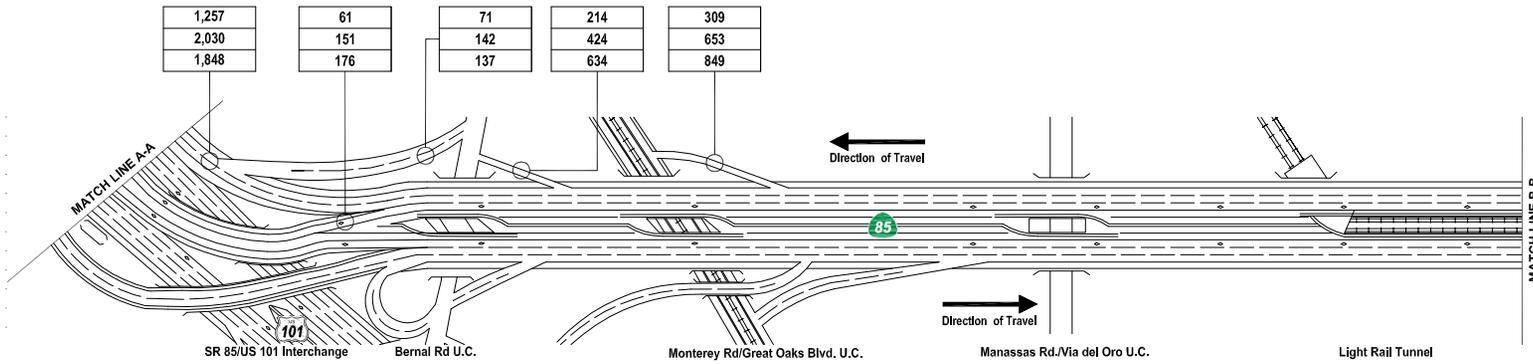
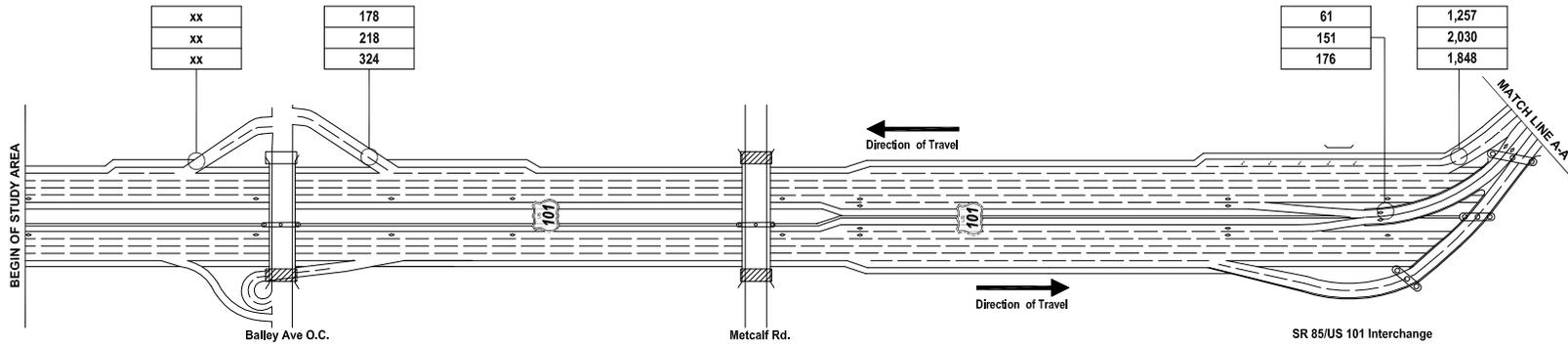
= Ramp Metering Locations (2007)



**SR 85 EXPRESS LANES**

Existing AM Northbound Ramp  
Volumes & Ramp Metering Locations

**Figure  
4-4**



**Legend:**

RAMP VOLUMES

Time Period	HOV	SOV
6:00 AM - 7:00 AM	xx	xx
7:00 AM - 8:00 AM	xx	xx
8:00 AM - 9:00 AM	xx	xx

= Ramp Metering Rate (vphpl)

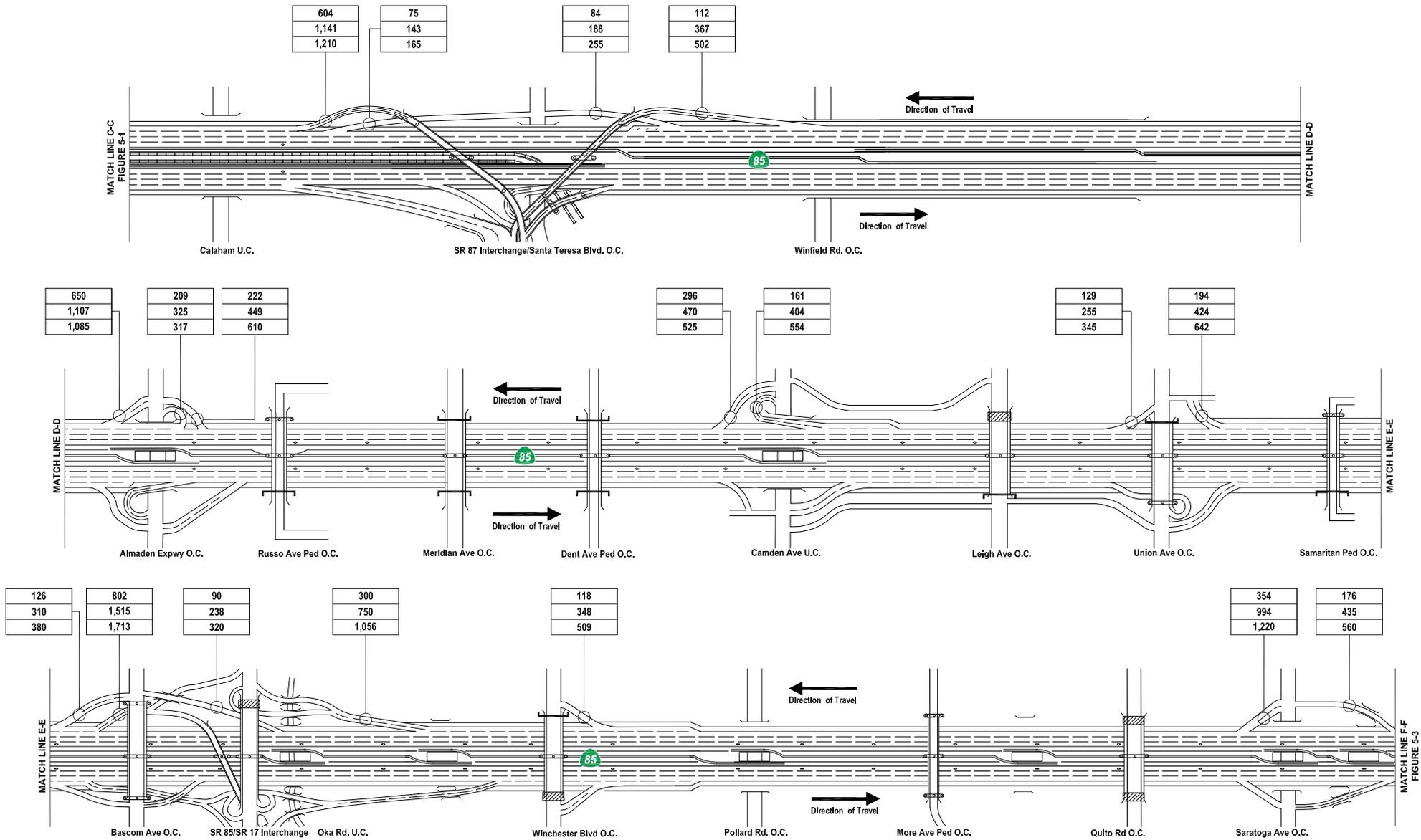
 = Ramp Metering Locations (2007)



**SR 85 EXPRESS LANES**

Existing AM Southbound Ramp  
Volumes & Ramp Metering Locations

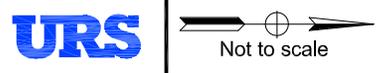
Figure  
5-1



**Legend:**

RAMP VOLUMES		HOV	SOV	= Ramp Metering Rate (vphpl)
6:00 AM - 7:00 AM		xx	xx	
7:00 AM - 8:00 AM		xx	xx	
8:00 AM - 9:00 AM				

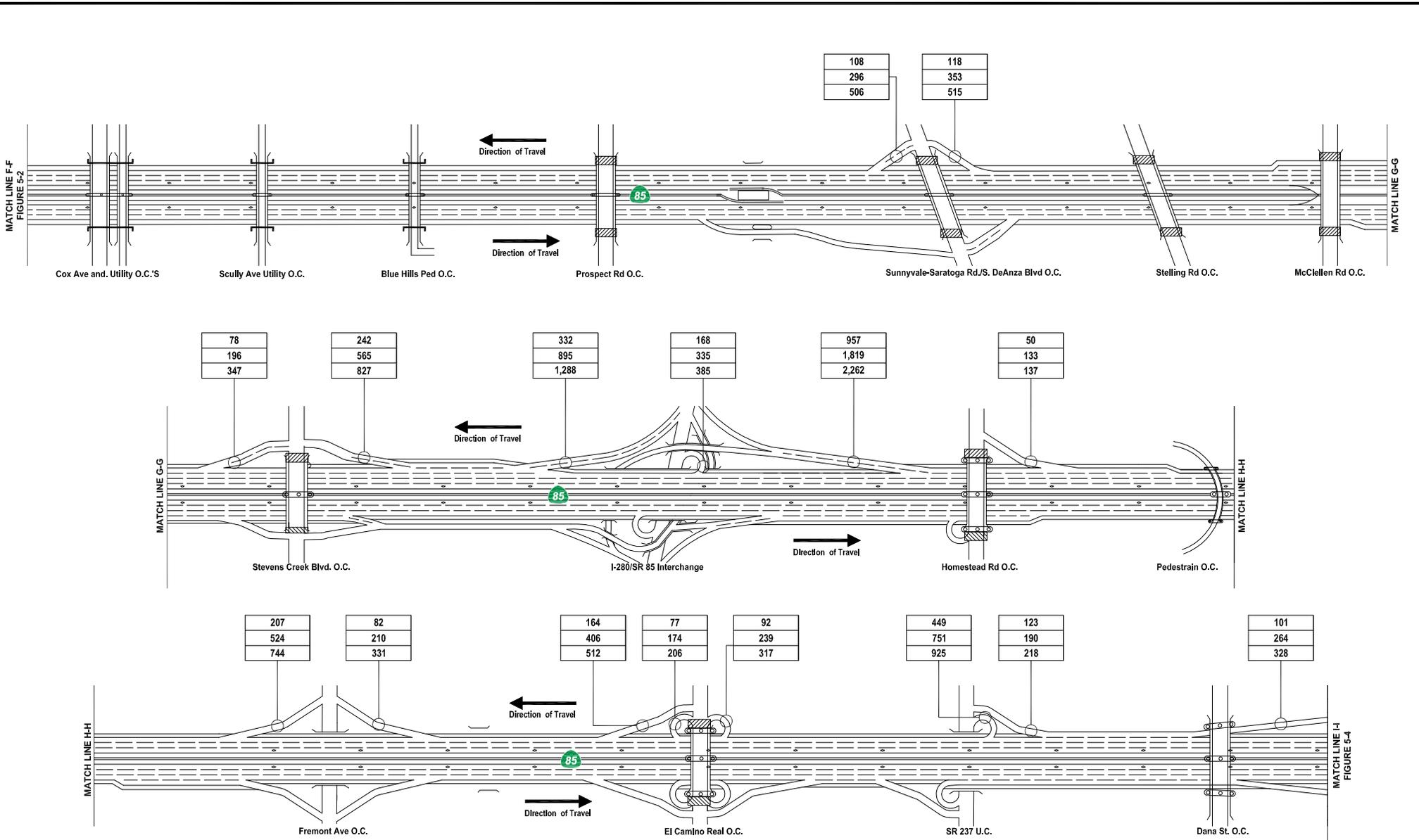
= Ramp Metering Locations (2007)



**SR 85 EXPRESS LANES**

Existing AM Southbound Ramp Volumes & Ramp Metering Locations

**Figure 5-2**



**Legend:**

RAMP VOLUMES

6:00 AM - 7:00 AM
7:00 AM - 8:00 AM
8:00 AM - 9:00 AM

HOV	SOV
xx	xx

= Ramp Metering Rate (vphpl)

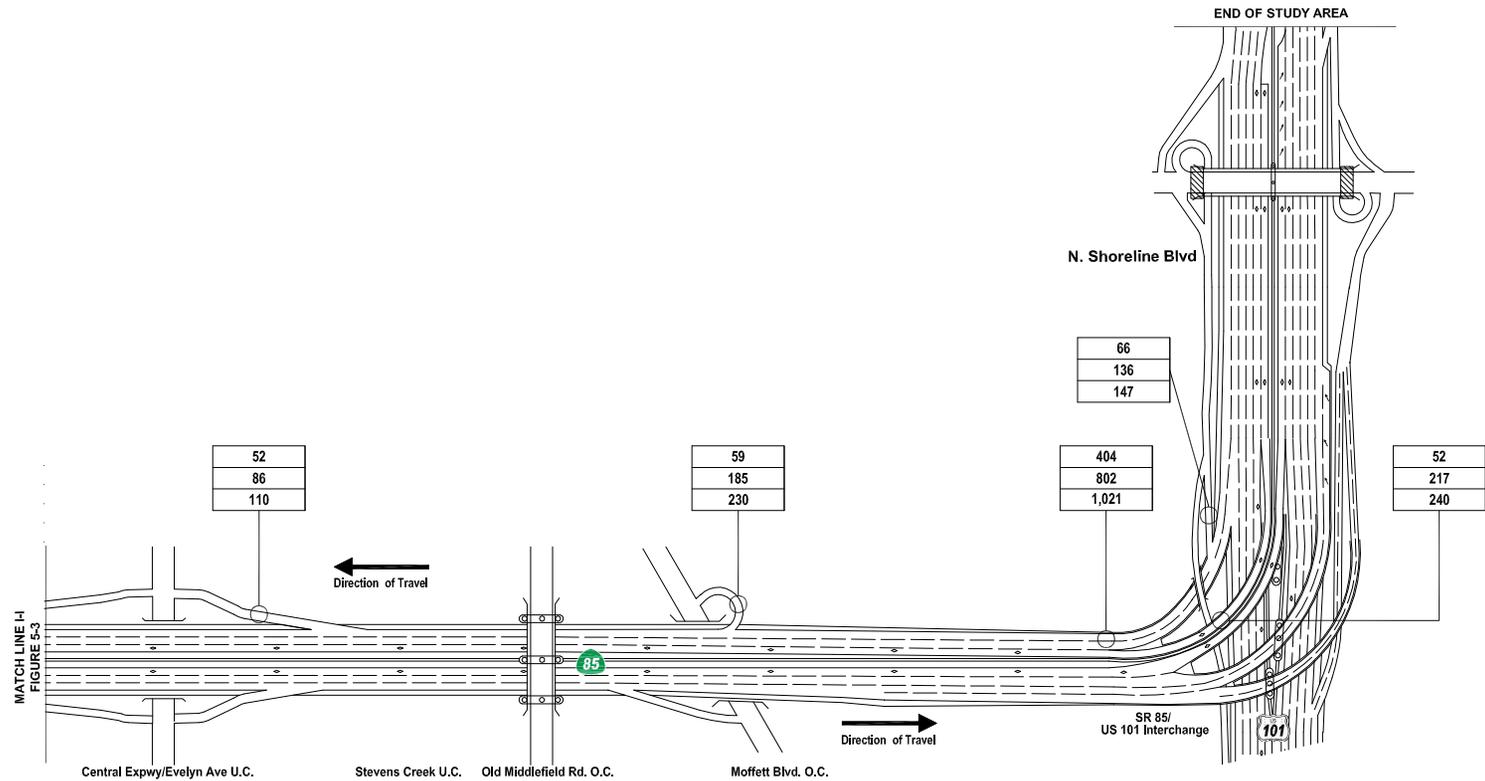
= Ramp Metering Locations (2007)



**SR 85 EXPRESS LANES**

Existing AM Southbound Ramp  
Volumes & Ramp Metering Locations

**Figure  
5-3**



### Legend:

#### RAMP VOLUMES

6:00 AM - 7:00 AM

7:00 AM - 8:00 AM

8:00 AM - 9:00 AM

HOV SOV

xx xx

= Ramp Metering Rate (vphpl)



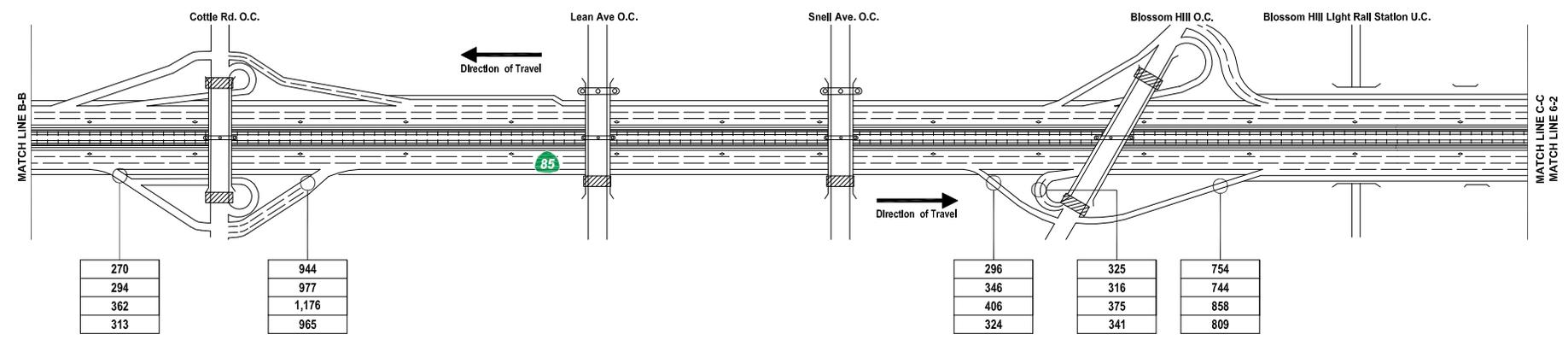
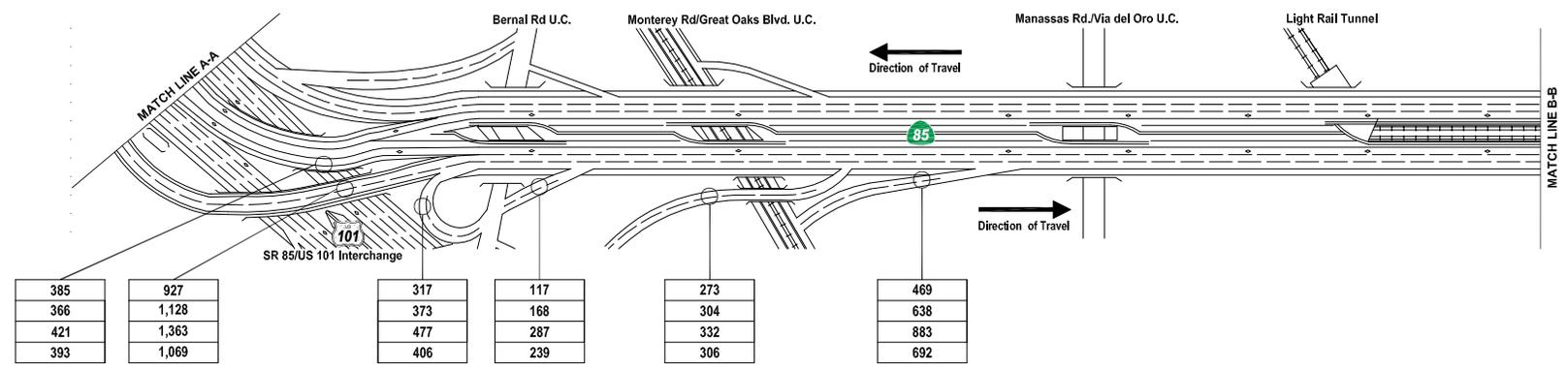
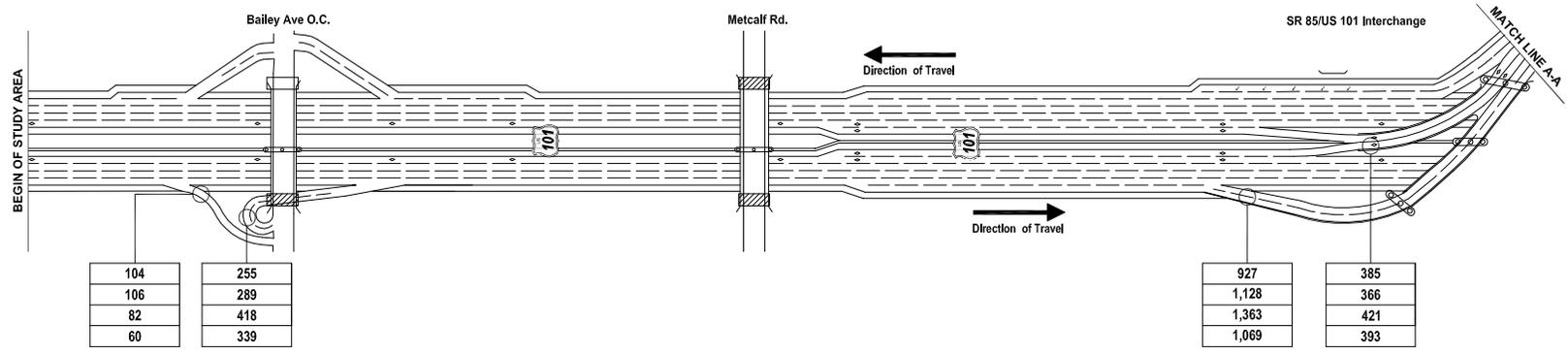
= Ramp Metering Locations (2007)



## SR 85 EXPRESS LANES

Existing AM Southbound Ramp  
Volumes & Ramp Metering Locations

Figure  
5-4



**Legend:**

RAMP VOLUMES

3:00 PM - 4:00 PM
4:00 PM - 5:00 PM
5:00 PM - 6:00 PM
6:00 PM - 7:00 PM

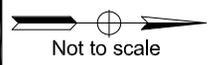
HOV SOV

xx	xx
----	----

= Ramp Metering Rate (vphpl)



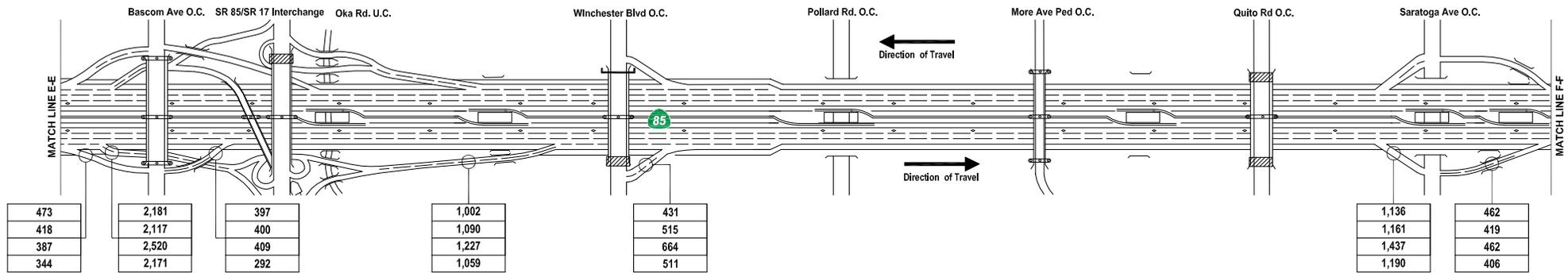
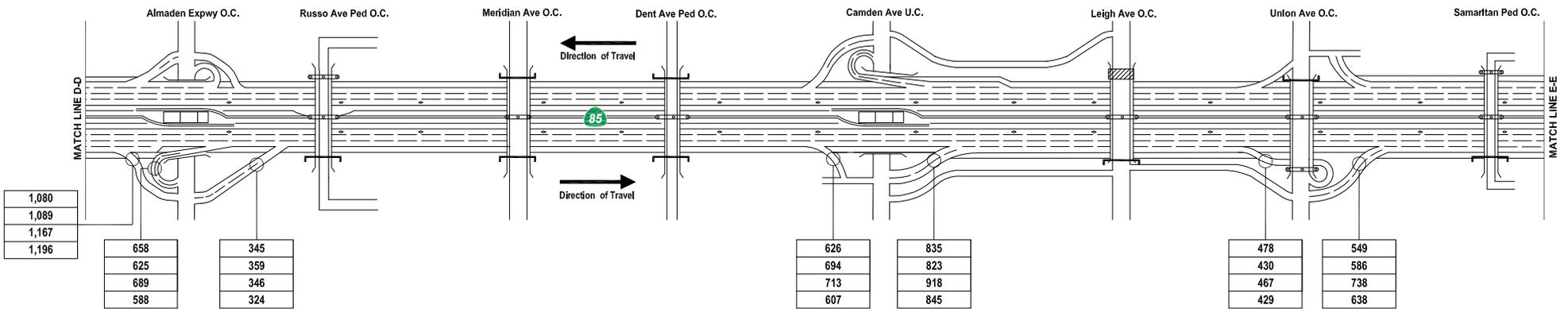
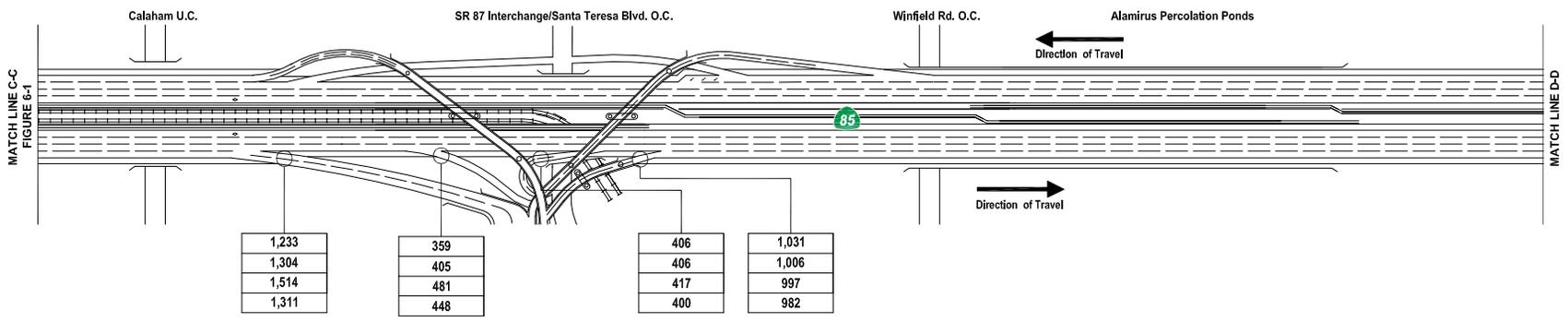
= Ramp Metering Location (2007)



**SR 85 EXPRESS LANES**

Existing PM Northbound Ramp  
Volumes & Ramp Metering Locations

**Figure  
6-1**



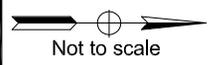
**Legend:**

RAMP VOLUMES

3:00 PM - 4:00 PM
4:00 PM - 5:00 PM
5:00 PM - 6:00 PM
6:00 PM - 7:00 PM

HOV SOV  
xx xx = Ramp Metering Rate (vphpl)

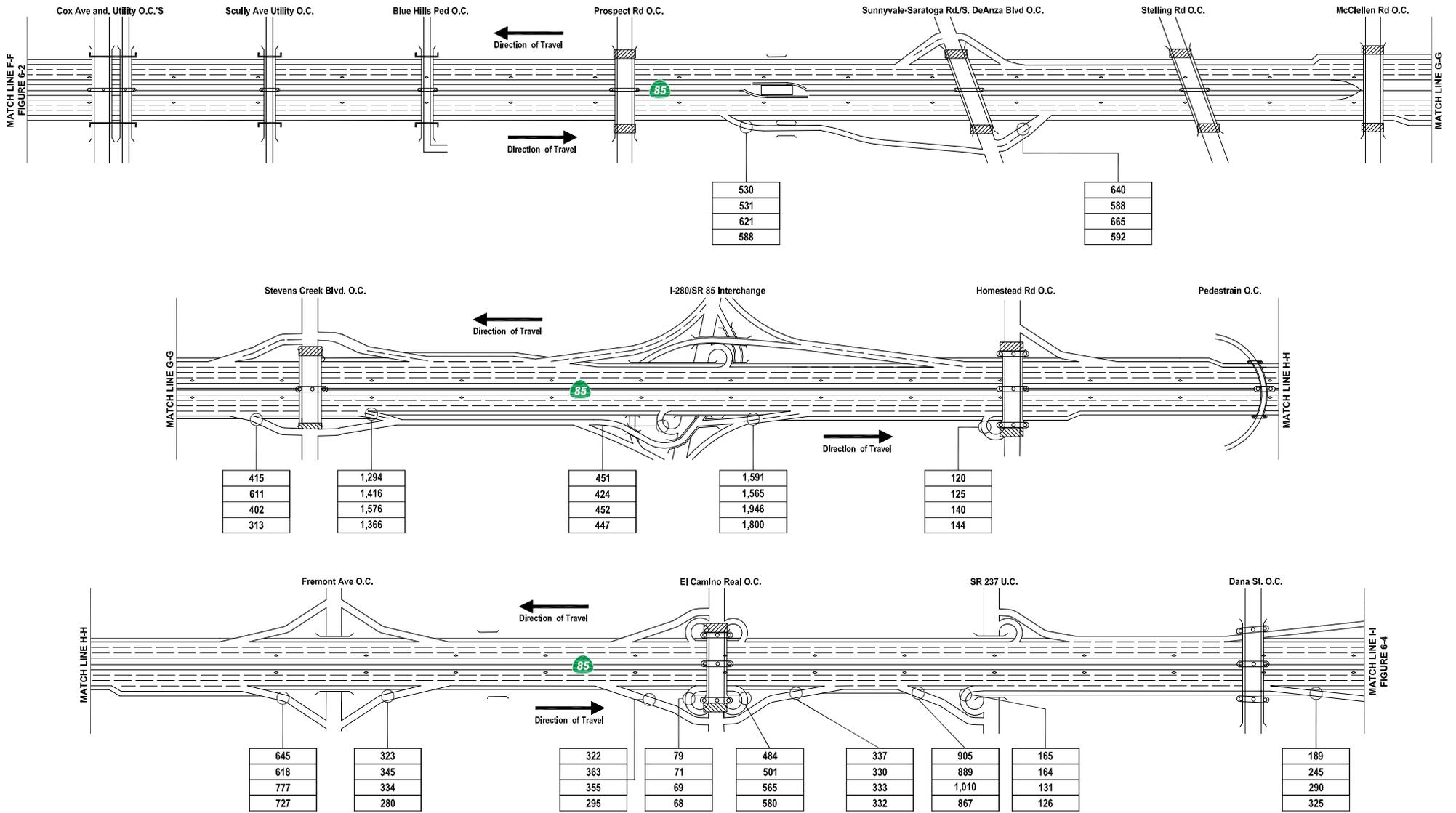
= Ramp Metering Location (2007)



**SR 85 EXPRESS LANES**

Existing PM Northbound Ramp  
Volumes & Ramp Metering Locations

**Figure  
6-2**



**Legend:**

**RAMP VOLUMES**

3:00 PM - 4:00 PM
4:00 PM - 5:00 PM
5:00 PM - 6:00 PM
6:00 PM - 7:00 PM

HOV    SOV  
 xx    xx = Ramp Metering Rate (vphpl)

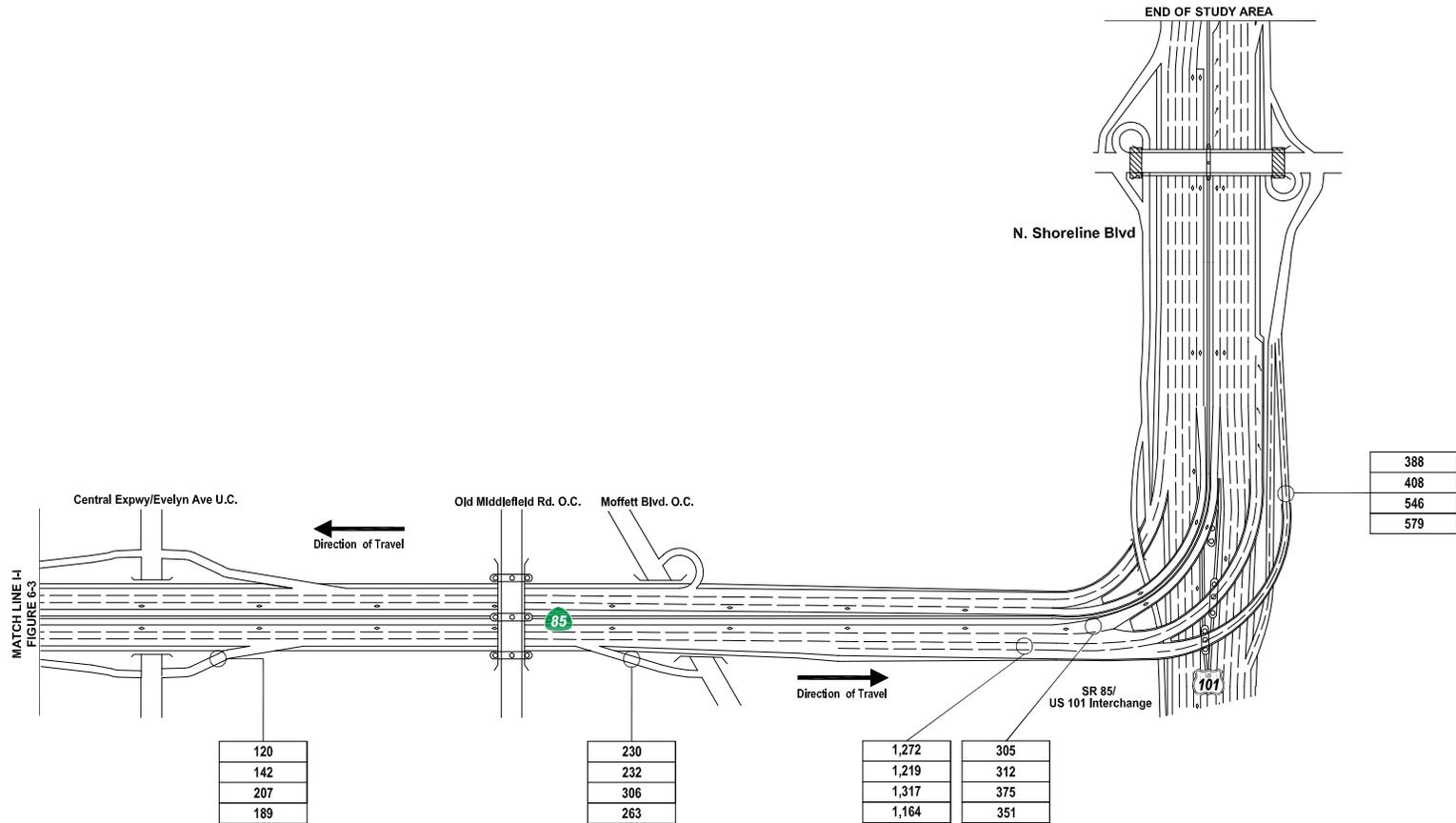
= Ramp Metering Location (2007)



**SR 85 EXPRESS LANES**

Existing PM Northbound Ramp  
 Volumes & Ramp Metering Locations

**Figure 6-3**



**Legend:**

RAMP VOLUMES

3:00 PM - 4:00 PM
4:00 PM - 5:00 PM
5:00 PM - 6:00 PM
6:00 PM - 7:00 PM

HOV    SOV  
xx    xx = Ramp Metering Rate (vphpl)

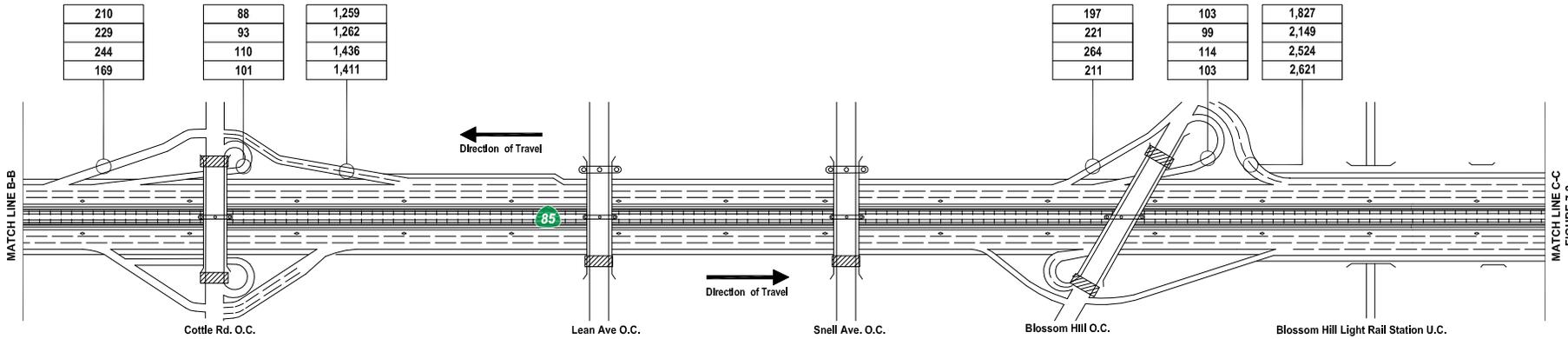
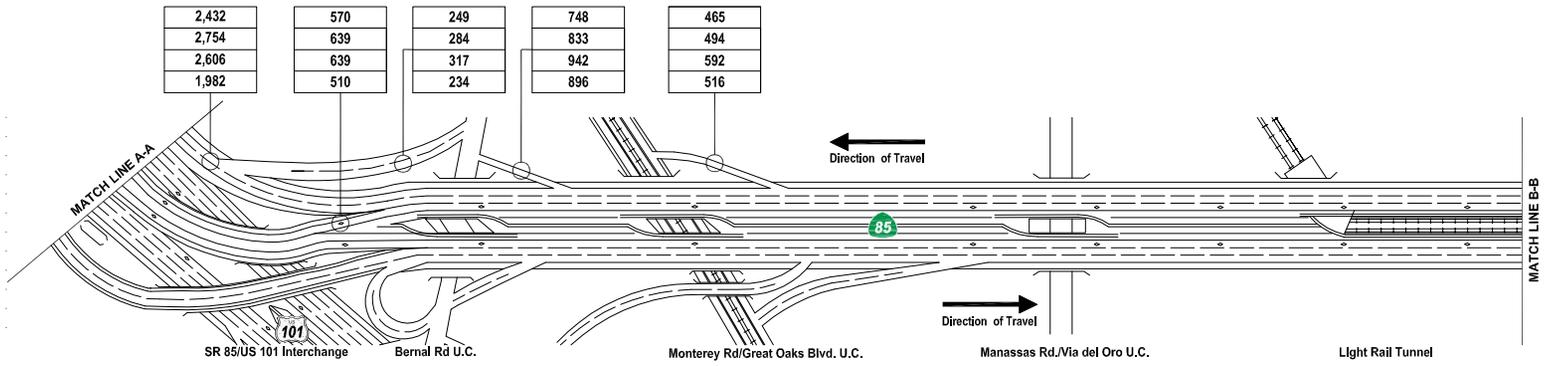
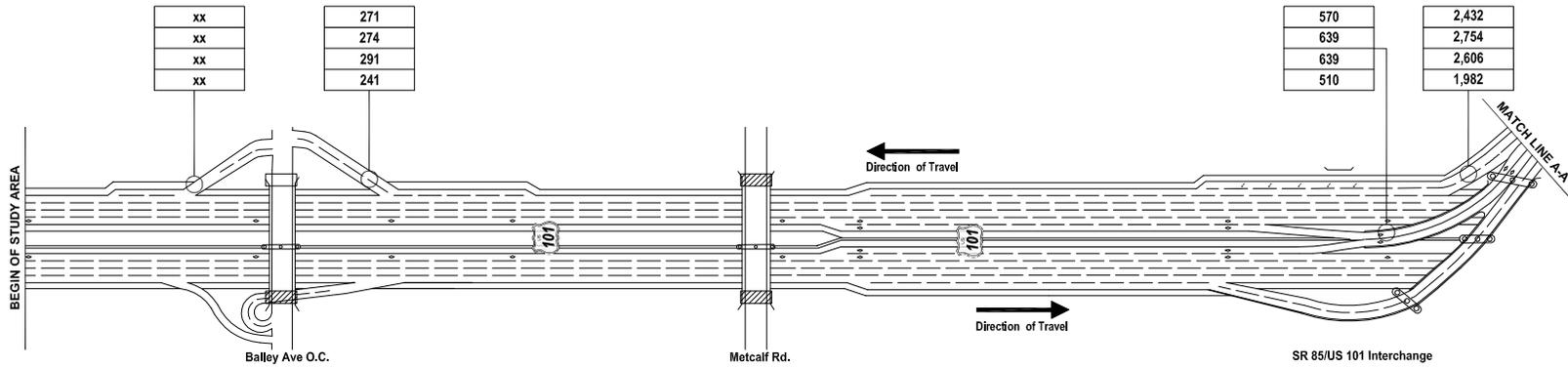
 = Ramp Metering Location (2007)



**SR 85 EXPRESS LANES**

Existing PM Northbound Ramp  
 Volumes & Ramp Metering Locations

**Figure  
 6-4**



**Legend:**

RAMP VOLUMES

3:00 PM - 4:00 PM
4:00 PM - 5:00 PM
5:00 PM - 6:00 PM
6:00 PM - 7:00 PM

HOV SOV  
xx xx = Ramp Metering Rate (vphpl)

= Ramp Metering Location (2007)

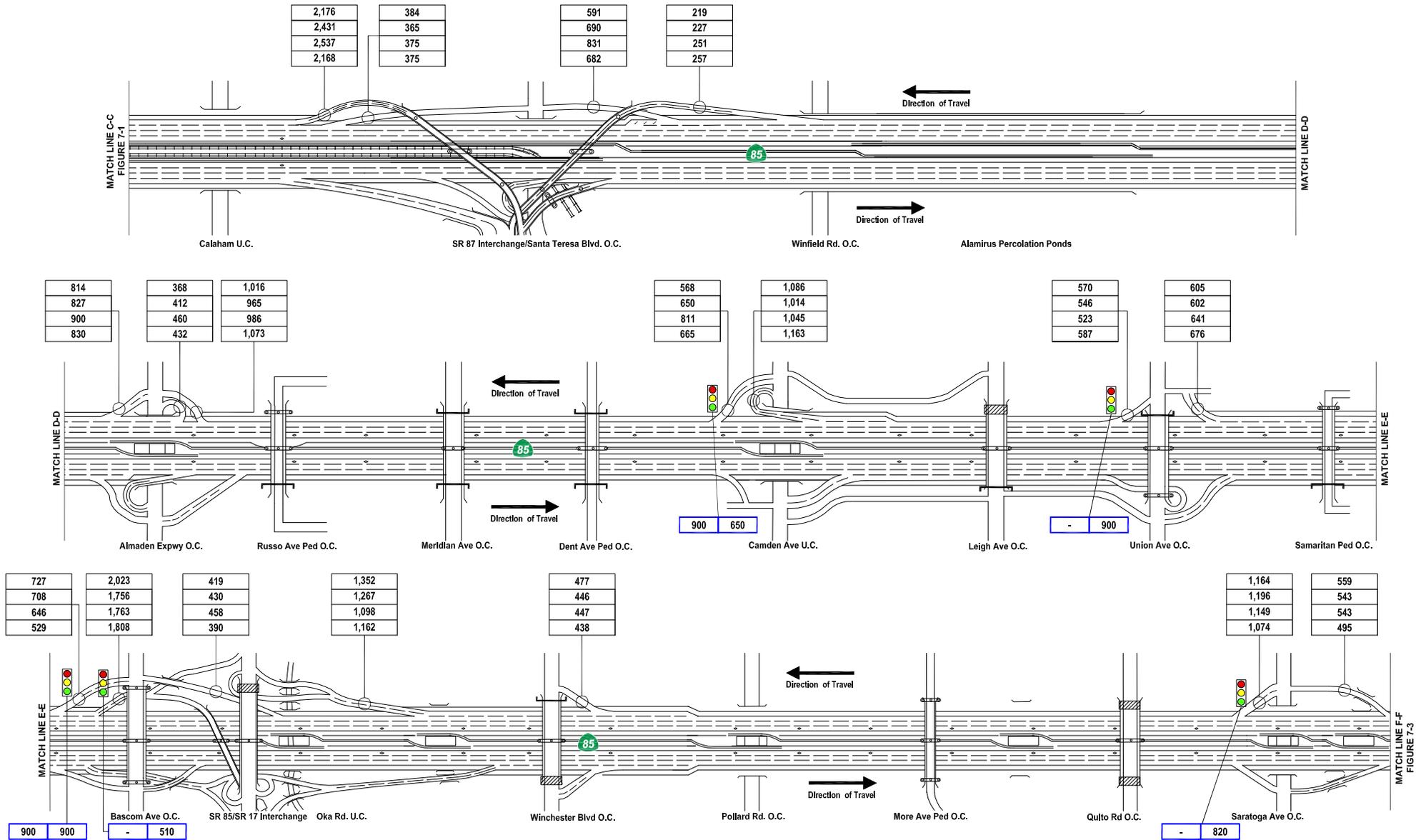


Not to scale

**SR 85 EXPRESS LANES**

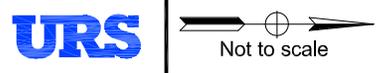
Existing PM Southbound Ramp  
Volumes & Ramp Metering Locations

Figure  
7-1



**Legend:**

- RAMP VOLUMES**
- 3:00 PM - 4:00 PM
  - 4:00 PM - 5:00 PM
  - 5:00 PM - 6:00 PM
  - 6:00 PM - 7:00 PM
- HOV SOV**
- xx xx = Ramp Metering Rate (vphpl)**
- 🚦 = Ramp Metering Location (2007)**

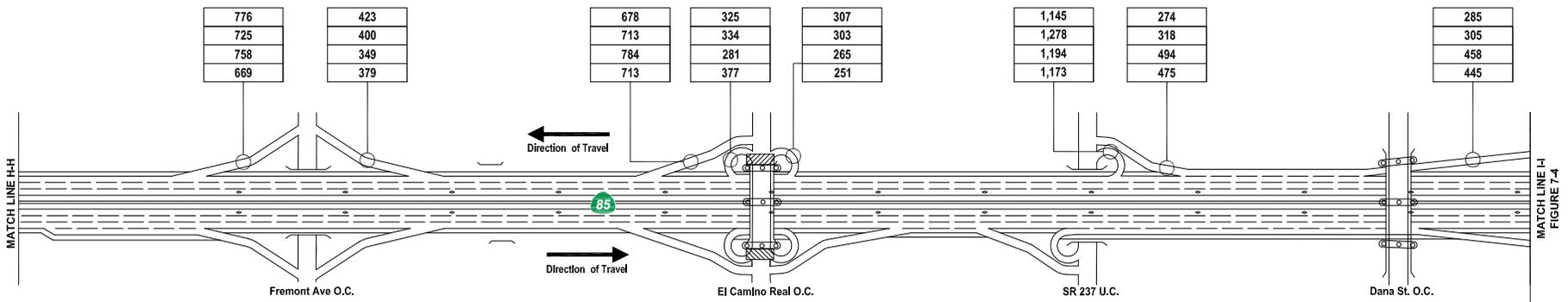
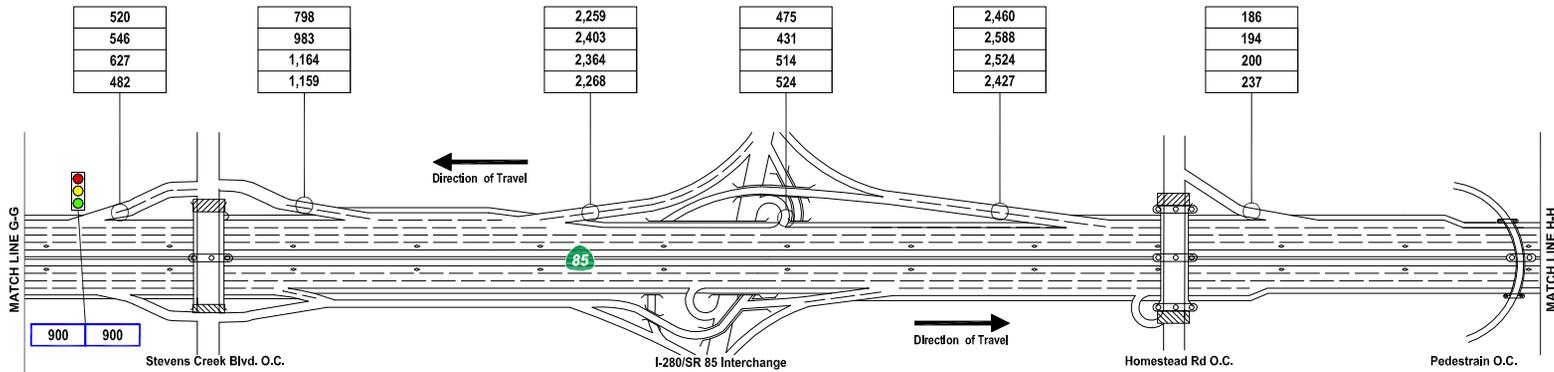
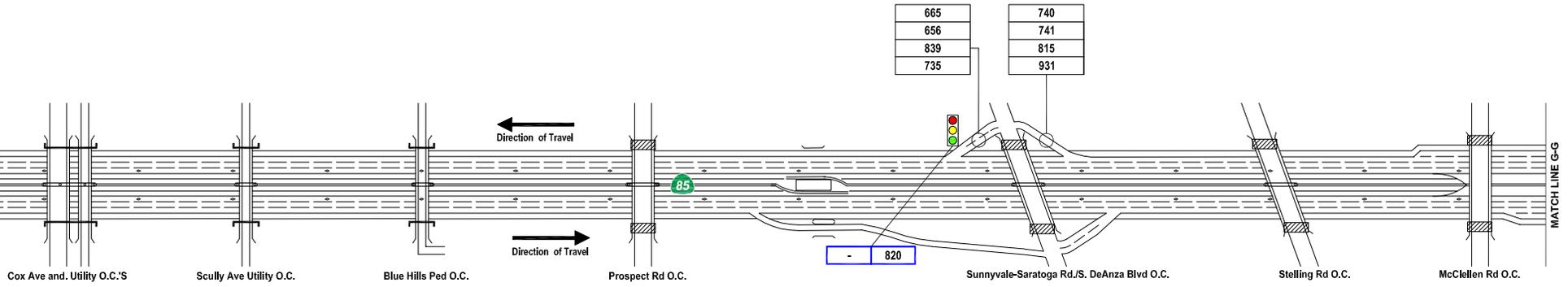


**SR 85 EXPRESS LANES**

**Existing PM Southbound Ramp Volumes & Ramp Metering Locations**

**Figure 7-2**

MATCH LINE F-F  
FIGURE 7-2



**Legend:**

RAMP VOLUMES

3:00 PM - 4:00 PM
4:00 PM - 5:00 PM
5:00 PM - 6:00 PM
6:00 PM - 7:00 PM

HOV SOV  
xx xx = Ramp Metering Rate (vphpl)

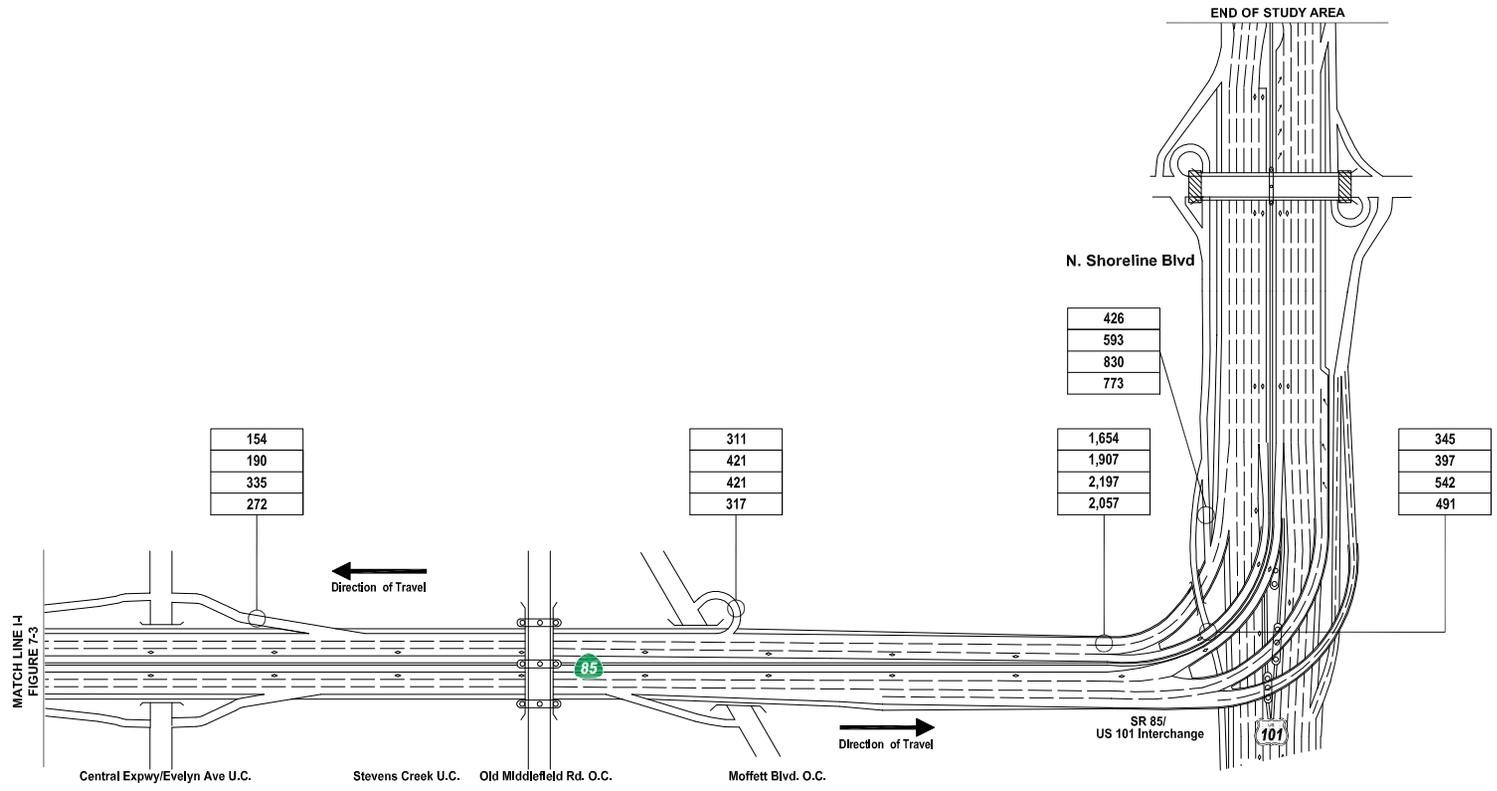
= Ramp Metering Location (2007)



**SR 85 EXPRESS LANES**

Existing PM Southbound Ramp  
Volumes & Ramp Metering Locations

**Figure  
7-3**



**Legend:**

**RAMP VOLUMES**

Time Period	HOV	SOV
3:00 PM - 4:00 PM	xx	xx
4:00 PM - 5:00 PM	xx	xx
5:00 PM - 6:00 PM	xx	xx
6:00 PM - 7:00 PM	xx	xx

xx xx = Ramp Metering Rate (vphpl)

☑ = Ramp Metering Location (2007)



**SR 85 EXPRESS LANES**

**Existing PM Southbound Ramp Volumes & Ramp Metering Locations**

**Figure 7-4**

*Existing Conditions Traffic Operational Analysis*

**Table 1** summarizes the peak period traffic volumes at the on/off-ramps. **Table 2** summarizes the existing HOV percentages based on Caltrans 2007 HOV Report.

**Table 1: Peak Period Traffic Volumes at the On/Off Ramps**

ON/OFF RAMP	AM PEAK PERIOD			PM PEAK PERIOD			
	6-7	7-8	8-9	15-16	16-17	17-18	18-19
<b>NORTHBOUND</b>							
Bailey Rd. on-ramp	191	317	309	255	289	418	339
NB SR 85 off-ramp (GP)	1,092	745	713	927	1,128	1,363	1,069
NB SR 85 off-ramp (HOV)	478	841	630	385	366	421	393
Bernal Rd. loop on-ramp	466	624	544	317	373	477	406
Bernal Rd. diagonal on-ramp	205	349	338	117	168	287	239
SB 101 on-ramp	168	443	460	273	304	332	306
Great Oaks Blvd. on-ramp	370	461	410	469	638	883	692
Cottle Rd. off-ramp	148	91	180	270	294	362	313
Cottle Rd. on-ramp	761	919	916	944	977	1,176	965
Blossom Hill Rd. off-ramp	68	105	153	296	346	406	324
Blossom Hill Rd. loop on-ramp	573	740	642	325	316	375	341
Blossom Hill Rd. diagonal on-ramp	1,174	904	908	754	744	858	809
NB SR 87 off-ramp	2,092	2,122	1,709	1,233	1,304	1,514	1,311
Santa Teresa off-ramp	81	116	174	359	405	481	448
Santa Teresa on-ramp	347	506	421	406	406	417	400
SB SR 87 on-ramp	561	880	995	1,031	1,006	997	982
Almaden Expwy. off-ramp	262	469	577	1,080	1,089	1,167	1,196
Almaden Expwy. loop on-ramp	510	671	769	658	625	689	588
Almaden Expwy. diagonal on-ramp	334	467	469	345	359	346	324
Camden Ave. off-ramp	162	226	312	626	694	713	607
Camden Ave. on-ramp	1,149	1,166	1,271	835	823	918	845
Union Ave. off-ramp	258	374	535	478	430	467	429
Union Ave. on-ramp	526	527	582	549	586	738	638
Bascom Ave. off-ramp	209	255	436	473	418	387	344
SR 17 off-ramp	1,604	1,870	2,010	2,181	2,117	2,520	2,171
Bascom Ave. on-ramp	265	529	588	397	400	409	292
SR 17 on-ramp	1,050	805	809	1,002	1,090	1,227	1,059
Winchester Blvd. on-ramp	285	400	454	431	515	664	511
Saratoga Ave. off-ramp	377	730	947	1,136	1,161	1,437	1,190
Saratoga Ave. on-ramp	390	772	862	462	419	462	406
Sunnyvale Saratoga Rd. off-ramp	326	586	927	530	531	621	588
Sunnyvale Saratoga Rd. on-ramp	416	678	902	640	588	665	592
Stevens Creek Blvd. off-ramp	489	485	701	415	611	402	313
I- 280 off-ramp	1,933	2,296	2,128	1,294	1,416	1,576	1,366
SB I- 280 loop on-ramp	215	493	571	451	424	452	447
NB I-280 & Stevens Creek Blvd. diagonal on-ramp	1,355	2,050	1,939	1,591	1,565	1,946	1,800

*Existing Conditions Traffic Operational Analysis*

ON/OFF RAMP	AM PEAK PERIOD			PM PEAK PERIOD			
	6-7	7-8	8-9	15-16	16-17	17-18	18-19
Homestead Rd. on-ramp	129	215	266	120	125	140	144
Fremont Ave. off-ramp	305	429	557	645	618	777	727
Fremont Ave. on-ramp	578	841	673	323	345	334	280
SB Rte. 82 off-ramp	199	231	300	322	363	355	295
SB Rte. 82 on-ramp	54	89	75	79	71	69	68
NB Rte. 82 off-ramp	312	462	489	484	501	565	580
NB Rte. 82 on-ramp	262	526	690	337	330	333	332
EB Rte. 237 off-ramp	1,052	1,636	1,765	905	889	1,010	867
EB Rte. 237 loop on-ramp	242	234	209	165	164	131	126
Evelyn Ave. off-ramp	177	268	285	189	245	290	325
Central Expwy. on-ramp	153	301	442	120	142	207	189
Moffett Blvd. off-ramp	269	413	447	230	232	306	263
Shoreline Blvd. off-ramp	576	989	1,417	388	408	546	579
NB 101 (GP) off-ramp	1,518	2,095	1,959	1,272	1,219	1,317	1,164
NB 101 (HOV) off-ramp	201	504	646	305	312	375	351
<b>SOUTHBOUND</b>							
SB Rte. 85 (GP) off-ramp	338	666	874	1,228	1,314	1,367	1,285
SB Rte. 85 (HOV) off-ramp	52	226	212	345	397	542	491
Shoreline Blvd. on-ramp	66	136	147	426	593	830	773
Moffett Blvd. on-ramp	59	185	230	311	421	421	317
Central Expwy. off-ramp	52	86	110	154	190	335	272
Evelyn Ave. on-ramp	101	264	328	285	305	458	445
WB Rte. 237 off-ramp	123	190	218	274	318	494	475
WB Rte. 237 loop on-ramp	449	751	925	1,145	1,278	1,194	1,173
NB Rte. 82 on-ramp	92	239	317	307	303	265	251
SB Rte. 82 off-ramp	77	174	206	325	334	281	377
SB Rte. 82 on-ramp	164	406	512	678	713	784	713
Fremont Ave. off-ramp	82	210	331	423	400	349	379
Fremont Ave. on-ramp	207	524	744	776	725	758	669
Homestead Rd. off-ramp	50	133	137	186	194	200	237
I- 280 off-ramp	957	1,819	2,262	2,460	2,588	2,524	2,427
NB I- 280 loop on-ramp	168	335	385	475	431	514	524
SB I- 280 on-ramp	332	895	1,288	2,259	2,403	2,364	2,268
Stevens Creek off-ramp	242	565	827	798	983	1,164	1,159
Stevens Creek on-ramp	78	196	347	520	546	627	482
Sunnyvale Saratoga Rd. off-ramp.	118	353	515	740	741	815	931
Sunnyvale Saratoga/ Rd. on-ramp.	108	296	506	665	656	839	735
Saratoga Ave. off-ramp	176	435	560	559	543	543	495
Saratoga Ave. on-ramp	354	994	1,220	1,164	1,196	1,149	1,074
Winchester Blvd. off-ramp.	118	348	509	477	446	447	438
SR 17 off-ramp	300	750	1,056	1,352	1,267	1,098	1,162

*Existing Conditions Traffic Operational Analysis*

ON/OFF RAMP	AM PEAK PERIOD			PM PEAK PERIOD			
	6-7	7-8	8-9	15-16	16-17	17-18	18-19
Bascom Ave. off-ramp	90	238	320	419	430	458	390
SR 17 on-ramp	802	1,515	1,713	2,023	1,756	1,763	1,808
Bascom Ave. on-ramp	126	310	380	727	708	646	529
Union Ave.\Samaritan Dr. off-ramp	194	424	642	605	602	641	676
Union Ave. on-ramp	129	255	345	570	546	523	587
Camden Ave. off-ramp	161	404	554	1,086	1,014	1,045	1,163
Camden Ave. on-ramp	296	470	525	568	650	811	665
Almaden Expwy. off-ramp	222	449	610	1,016	965	986	1,073
Almaden Expwy loop on-ramp	209	325	317	368	412	460	432
Almaden Expwy diagonal on-ramp	650	1,107	1,085	814	827	900	830
<b>NB SR 87 off-ramp</b>	<b>112</b>	<b>367</b>	<b>502</b>	<b>219</b>	<b>227</b>	<b>251</b>	<b>257</b>
Santa Teresa off-ramp	84	188	255	591	690	831	682
Santa Teresa on-ramp	75	143	165	384	365	375	375
SR 87 on-ramp*	604	1,141	1,210	2,176	2,431	2,537	2,168
Blossom Hill Rd. off-ramp	260	530	641	1,827	2,149	2,524	2,621
WB Blossom Hill Rd. on-ramp	58	95	131	103	99	114	103
EB Blossom Hill Rd. on-ramp	73	137	161	197	221	264	211
Cottle Rd. off-ramp	296	616	981	1,259	1,262	1,436	1,411
SB Cottle Rd. on-ramp	58	72	72	88	93	110	101
NB Cottle Rd. on-ramp.	98	178	189	210	229	244	169
Great Oaks Blvd. off-ramp	309	653	849	465	494	592	516
Bernal Rd. off-ramp	214	424	634	748	833	942	896
SB SR 85/Bernal Rd. on-ramp	1,257	2,030	1,848	2,432	2,754	2,606	1,982
<b>SB 101 (HOV) off-ramp</b>	<b>61</b>	<b>151</b>	<b>176</b>	<b>570</b>	<b>639</b>	<b>639</b>	<b>510</b>
Bailey Rd. off-ramp	178	218	324	271	274	291	241

Source: Caltrans 24-Hour Traffic Volumes

Note: \* = In consultation with Caltrans Highway Operations, flow volume at this on-ramp was adjusted to better replicate queues in the micro-simulation model.

Legend:

	2004 Counts
	2007 Counts
	2009 Counts
	2010 Counts

**Table 2: Existing HOV Percentages**

<b>SR 85 - Northbound - AM Peak Hour</b>	
I-280 to US 101(Mountain View)	18%
Almaden Expressway to I-280	23%
US 101 (So. San Jose) to Almaden Expressway	17%
<b>SR 85 - Southbound - PM Peak Hour</b>	
US 101 (Mountain View) to I-280	26%
I-280 to Almaden Expressway	21%
Almaden Expressway to US 101 (So. San Jose)	15%

Source: Caltrans 2007 HOV Report

### **2.3 Travel Times**

Travel time runs conducted in 2008 were provided by Caltrans and are attached in **Appendix B**.

The average travel speed along the study corridor varies between 15 mph and 65 mph in the northbound direction during the a.m. peak hour and in the southbound direction during the p.m. peak hour. The travel time data indicates that traffic conditions during the a.m. peak hour are congested in the northbound direction on the segments between:

- SR 87 and Union Avenue
- Bascom Avenue and lane drop downstream of Winchester Boulevard on-ramp
- Saratoga Avenue and Sunnyvale Saratoga/DeAnza Boulevard
- Interstate 280 and Fremont Avenue
- Fremont Avenue and SR 237

Traffic conditions during the p.m. peak hour are congested in the southbound direction on the segments between:

- Evelyn Avenue and Fremont Avenue
- Stevens Creek Boulevard and Saratoga Avenue
- SR 17 and Union Avenue
- SR 87 and Blossom Hill Road

Travel time data for the HOV lane indicates that traffic conditions during the a.m. peak hour in the northbound direction are congested on the following segments between:

- SR 87 and Union Avenue

- Lane add near Saratoga Avenue Off-Ramp and Bascom Avenue

## **2.4 Bottleneck Locations**

Review of the travel time data and field observations revealed that several bottlenecks exist in the study area. During a.m. peak hour in the northbound direction the following bottleneck locations were observed:

1. Segment between Almaden Expressway Diagonal On-Ramp and Camden Avenue Off-Ramp – the queue from this bottleneck was observed to extend between Almaden Expressway off-ramp and SR 87 on-ramp
2. Segment between Union Avenue Off-Ramp and On-Ramp - the queue from this bottleneck was observed to extend between Camden Avenue on-ramp and off-ramp
3. Segment between Winchester Boulevard lane drop and Saratoga Avenue Off-Ramp - the queue from this bottleneck was observed to extend between SR 17 on-ramp and Bascom Avenue on-ramp
4. Segment between Sunnyvale Saratoga/DeAnza Boulevard On-Ramp and Lane add near Stevens Creek Boulevard Off-Ramp - the queue from this bottleneck was observed to extend beyond Sunnyvale Saratoga/DeAnza Boulevard off-ramp
5. Segment between Fremont Avenue On-Ramp and El Camino Real Off-Ramp - the queue from this bottleneck extends beyond I-280 Interchange.
6. Segment between El Camino Real On-Ramp and SR 237 Off-Ramp - during field observations it was noticed that this bottleneck happens due to right-lane overload (traffic exiting for SR 237)

During field observations it was observed that during a.m. peak hour in the northbound direction the following HOV segments were congested:

1. Segment between Almaden Expressway On-Ramp and Camden Avenue Off-Ramp;
2. Segment between Union Avenue Off-Ramp and On-Ramp
3. Segment between Winchester Boulevard lane drop and Saratoga Avenue Off-Ramp
4. Segment between Sunnyvale Saratoga Road/DeAnza Boulevard and Stevens Creek Boulevard
5. Segment between Fremont Avenue On-Ramp and El Camino Real Off-Ramp (travel speeds within this segment drops approximately 10 miles per hour, compared to free flow speed)

Field observations indicated that congestion in the HOV lane is not due to the demand exceeding the capacity in these segments, but it is due to traffic exiting the HOV lane trying to merge in the mixed flow lanes which are congested. The merging of HOV's into and out of the HOV lane is reducing the effective capacity of HOV lane in these sections. Field observations also indicated that congestion along the freeway mainline segment between Blossom Hill Road Diagonal on-ramp and SR 87 off-ramp exists due to merge and diverge of heavy demands and right lane overload.

*Existing Conditions Traffic Operational Analysis*

During p.m. peak hour in the southbound direction the following bottleneck locations were observed:

1. Segment between Fremont Avenue On-Ramp and Lane add near Homestead Road Off-Ramp - the queue from this bottleneck was observed to extend beyond Evelyn Avenue On-Ramp
2. Segment between El Camino Real On-Ramp and Fremont Avenue Off-Ramp (secondary bottleneck)
3. Segment between lane drop near Sunnyvale Saratoga Road/DeAnza Boulevard Off-Ramp and Sunnyvale Saratoga Road/DeAnza Boulevard Off-Ramp - the queue from this bottleneck was observed to extend up to Stevens Creek Boulevard On-Ramp
4. Segment between Saratoga Avenue On-Ramp and Winchester Boulevard Off-Ramp - the queue from this bottleneck was observed to extend approximately upto Sunnyvale Saratoga Road/DeAnza Boulevard On-Ramp
5. Segment between Union Avenue On-Ramp and lane add near Camden Avenue – the queue from this bottleneck was observed to extend approximately to the SR 17 Junction
6. Segment between SR 87 On-Ramp and Blossom Hill Road Off-Ramp - the queue from this bottleneck was observed to extend beyond SR 87 On-Ramp

During field observations it was observed that during the p.m. peak hour in the southbound direction the following HOV segments were congested:

1. Segment between Moffett Boulevard On-Ramp and Fremont Avenue Off-Ramp (travel speeds reduce by approximately 10 mph in this segments, compared to free flow speed)
2. Segment between SR 17 On-Ramp and Union Avenue Off-Ramp (travel speeds reduce by approximately 10 mph in this segments, compared to free flow speed)
3. Segment between SR 87 Off-Ramp and Santa Teresa Boulevard Off-Ramp (travel speeds reduce by approximately 15 mph, compared to free flow speed)

Field observations indicated that congestion in the HOV lane is not due to the demand exceeding the capacity in these segments, but it is due to traffic exiting the HOV lane trying to merge in the mixed flow lanes that are congested. The merging of HOV's into and out of the HOV lane is reducing the effective capacity of HOV lane in these sections.

### **3. TRAFFIC OPERATIONAL MODEL**

VISSIM micro-simulation model will be used to conduct traffic operational analysis for the proposed SR 85 Express Lanes Project. Developing the VISSIM model involves three main steps: (1) setup, (2) calibration, and (3) validation, which were organized as part of an integrated modeling process.

### 3.1 Model Setup Process

Model setup required the input of geometric and traffic flow data for the study corridor under existing conditions. The VISSIM model was set up for the a.m. peak period between 6:00 a.m. – 9:00 a.m. and for the p.m. peak period between 3:00 p.m. – 7:00 p.m. Field observations were conducted during the a.m. and p.m. peak hour. Based on an analysis of existing conditions traffic volumes, the VISSIM model was calibrated and validated for peak periods. The results reported in this memorandum are for 7:00 a.m. – 8:00 a.m. (the a.m. peak hour) and 5:00 p.m. – 6:00 p.m. (p.m. peak hour) peak hours only.

The VISSIM model was set up with the values shown in **Table 3** for vehicle fleet composition.

**Table 3: Vehicle Fleet Composition**

Category	Parameter	Adjusted Value
Vehicle Fleet Composition	Passenger Cars	Based on traffic data collected and PeMS
	HOV	Based on traffic data collected and PeMS
Note: HOV percentages are based on Caltrans 2007 HOV Report and PeMS.		

Under existing conditions, heavy trucks are restricted on SR 85 between Interstate 280 and US 101 in the south. Trucks are allowed on SR 85 between Interstate 280 and US 101 in the north, however based on Caltrans 2009 Annual Average Daily Truck Traffic data, during peak hours heavy vehicle (that would have significant impact on the traffic operations) composition in the traffic mix is negligible and as a result were not included in the vehicle composition of the micro-simulation model.

### 3.2 Model Calibration

Geometric and traffic flow data were entered into the VISSIM model. Traffic demands were entered into the VISSIM model to replicate the flow volumes observed out in the field. The traffic demands entered into the VISSIM model are attached in **Appendix C**. Unique model components that must be adjusted in the VISSIM model include driver behavior, driver performance, vehicle fleet mix, and vehicle performance. The following VISSIM model parameters are subject to adjustment.

- Vehicle fleet composition (passenger cars, HOV vehicles, buses and recreational vehicles, and heavy trucks)
- Vehicle headway
- Distance between stopped vehicles

- Driver behavior when changing lanes
- Driver behavior in congested locations (e.g., ramp merge and diverge, weaving sections)

The default values in the VISSIM model such as vehicle fleet composition and lane changing behavior were adjusted during the validation step to refine the VISSIM model. The parameters affecting capacity on the freeway links were adjusted so that the observed traffic conditions could be replicated in the VISSIM model. Adjustments to the default values such as average headway, anticipatory lane change distance to prevent last-minute lane changes at freeway off-ramps were made to replicate field conditions.

In addition flow volumes at SR 87 On-Ramp in the southbound direction during p.m. peak period were adjusted in consultation with Caltrans Highway Operations to better replicate queuing, speed and density in the vicinity of the on-ramp.

### **3.3 Comparison to Validation Criteria**

During validation, the VISSIM model output was compared with field data to determine if the output was within acceptable levels. The FHWA and Caltrans suggest the following validation criteria for micro-simulation models (Guidelines for Applying Traffic Micro-simulation Modeling Software, California Department of Transportation, 2002; Volume III – Guidelines for Applying Traffic Micro-simulation Modeling Software, Federal Highway Administration, 2003).

- Link volumes for more than 85 percent of cases meet the following criteria:
  - For volumes less than 700 vph, within 100 vph
  - For volumes between 700 and 2,700 vph, within 15 percent
  - For volumes greater than 2,700 vph, within 400 vph
- Link volumes for more than 85 percent of cases have GEH statistic less than 5 (GEH Statistic is an empirical formula used in traffic engineering, traffic forecasting and traffic modeling to compare two sets of traffic volumes)
- Sum of link volumes within 5 percent
- Sum of link volumes have a GEH statistic less than 4
- Average travel times within 15 percent (or one minute, if higher) for more than 85 percent of cases
- Individual link speeds have a visually acceptable speed-flow relationship
- Bottlenecks create visually acceptable queuing

In consultation with Caltrans District 4 – Highway Operations, the following additional thresholds were agreed upon:

- Throughput through the bottleneck shall be within 100 vehicles during the peak hour as primary threshold; and

*Existing Conditions Traffic Operational Analysis*

- Queuing and Travel time would be secondary measure.

**Table 4** summarizes validation criteria for micro-simulation models. Micro-simulation models rely upon random numbers to generate vehicles, select vehicle destinations and routes, and to determine their behavior as they move through the network. No single simulation run can be expected to reflect any specific condition. It is necessary to run the model several times with different random number seeds in order to get useful output. Six model runs with different random number seeds were conducted for a.m. and p.m. peak periods. The results from the six model runs during both peak periods were averaged and reported for validation and calibration purposes as well as reporting density and speeds.

**Table 4: Validation Criteria Thresholds Comparison**

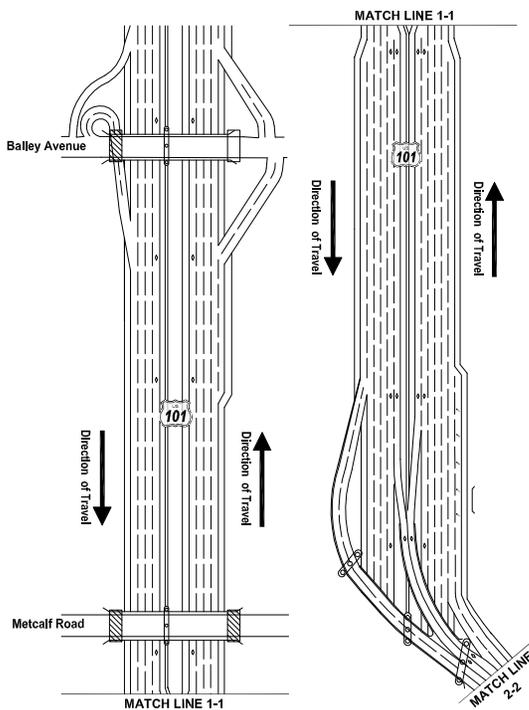
Criteria	Criteria Threshold	% Met Target	A.M. Peak Hour (Northbound Direction)		P.M. Peak Hour (Southbound Direction)	
			% Met	Pass/Fail	% Met	Pass/Fail
<b>Primary Thresholds</b>						
<b>Link Volumes</b>						
< 700 vph	100 vph	> 85%	100%	Pass	100%	Pass
Between 700 vph and 2,700 vph	15%	> 85%	100%	Pass	100%	Pass
> 2,700 vph	400 vph	> 85%	⊘	⊘	100%	Pass
GEH Statistic	5	> 85%	100%	Pass	100%	Pass
<b>Sum of Link Volumes</b>						
Sum of All Links	5%	-	-2%	Pass	-1%	Pass
GEH Statistic	4	-	3	Pass	1	Pass
<b>Secondary Thresholds</b>						
<b>Travel Time</b>						
Travel Paths	15% or 1 minute	>85%	92%	Pass	92%	Pass
<b>Visual Inspection</b>						
Travel Speeds	Match Observations	-	-	Pass	-	Pass
Queuing	Match Observations	-	-	Pass	-	Pass

*Existing Conditions Traffic Operational Analysis*

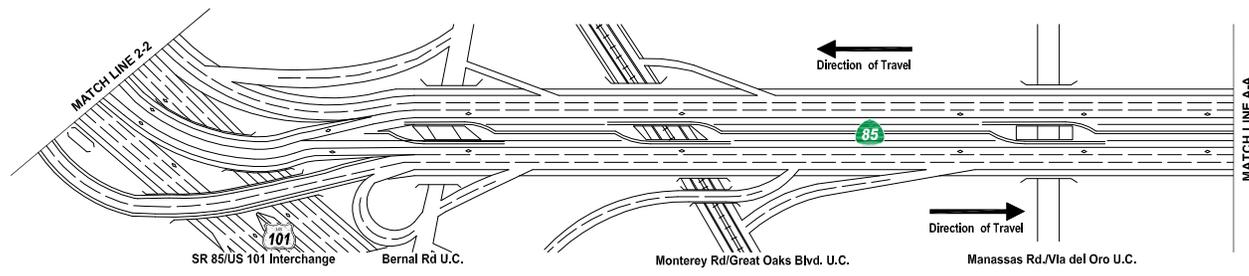
Note: \* - No links with volume greater than 2,700 vph.

**Table 4** shows that the existing conditions VISSIM model for the a.m. and p.m. peak hours met all of the validation criteria thresholds recommended in the guidelines provide by the FHWA and Caltrans in the peak direction of travel. The link volumes for all freeway sections met the criteria thresholds. The GEH statistic for all links met the thresholds. Travel times for all selected routes met the 15 percent or one minute threshold for 85 percent of the travel paths. The speed-flow relationships and queuing at bottlenecks were visually inspected and found to be acceptable compared to existing conditions. It should be noted that within the traffic operational model, vehicles that are traveling under or at speed of 35 miles per hour (mph) are counted to be in queue.

Since the link volumes, GEH statistic for individual links, sum of all link volumes and travel times met the thresholds documented in **Table 4**, it can be concluded that the micro-simulation model is validated and calibrated to replicate existing conditions in the a.m. and p.m. peak direction of travel during peak hour and peak periods. **Figures 8** and **9** illustrate the peak hour model input volumes and output volumes along the freeway mainline and ramp locations. Figures also illustrate the travel time, average speeds, bottleneck locations and queues extending from the bottlenecks. Detailed validation summary is attached in **Appendix C**.



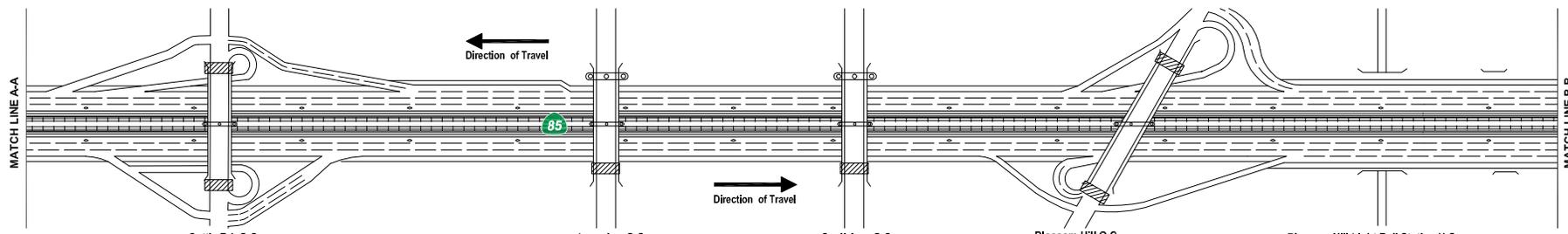
	SR 85/US101 Interchange	Bernal Ave.		Monterey Rd/Great Oaks Blvd.	
		Off	Off	Off	Off
Distance (miles)	0.22		0.45		0.96
No. of Lanes	1 + 2	1	1 + 2	1	1 + 2
Demand (vph)	2,775	424	3,199	653	3,852
Model Output (vph)	3,201	412	3,613	625	4,238
Travel Times (min:sec)		1:49			
Bottleneck Location					
Max. Queue Length					



	On	On	On	On	On	On	On
Distance (miles)	0.55	0.25	0.25	0.25	0.20	1.10	
No. of Lanes	1 + 2	1	1 + 2	1	1 + 2	1	1 + 2
Demand (vph)	1,586	624	2,211	349	2,559	443	3,003
Bottleneck Capacity							
Model Output (vph)	1,560	611	2,171	341	2,512	418	2,930
Travel Times (min:sec)						1:57	
Bottleneck Location							
Max. Queue Length							

Note: Queue due to ramp metering

	Cottle Rd.						Blossom Hill Rd.					
	On	On	Off	On	On	Off	On	On	Off	On	On	Off
Distance (miles)	1	0.25	0.20	1 + 2	2	0.33	1.32	0.24	0.10	2	0.71	
No. of Lanes	1 + 2	1	1 + 2	2	1 + 3	1 + 2	1 + 2	1	1 + 2	2	1 + 2 + 1	
Demand (vph)	178	3,674	72	3,602	616	4,218	4,218	137	4,081	95	3,986	530
Model Output (vph)	178	4,060	72	3,988	601	4,589	4,589	137	4,452	95	4,357	471
Travel Times (min:sec)	1:49			2:05						1:22		
Bottleneck Location												
Max. Queue Length												



	Off	On	On	On	Off	On	On	On	
Distance (miles)	1	0.30	1	1.55	0.22	0.15	0.92		
No. of Lanes	1 + 2	1 + 2	1	1 + 2	1 + 2	1 + 2	1 + 2 + 1		
Demand (vph)	91	3,373	919	4,292	105	4,187	5,831		
Bottleneck Capacity									
Model Output (vph)	90	3,297	918	4,215	98	4,117	5,745		
Travel Times (min:sec)	1:57			1:51					
Bottleneck Location									
Max. Queue Length									

Note: Bottleneck Locations & Queue Lengths are based on Traffic Operation Model.

**Legend:** No. of Lanes   = Approximate Queue Length  
 HOV + SOV + Aux   = Bottleneck Location

**URS** Not to scale

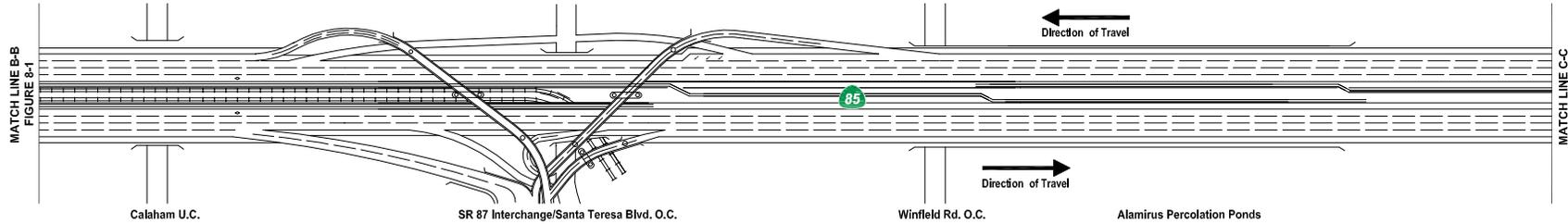
**SR 85 EXPRESS LANES**

**Existing Condition AM Peak Hour**

**Figure 8-1**

Highway 87/Santa Teresa Blvd.

	On		On		Off			Off		
Distance (miles)	0.71	0.18			0.31	0.07	0.14			0.52
No. of Lanes	1 + 2 + 1	2	1 + 2	1	1 + 2	1 + 3	1 + 3	1		1 + 3
Demand (vph)	4,516	1,141	3,375	143	3,232	3,232	188	3,420	367	3,787
Model Output (vph)	4,828	1,144	3,684	143	3,541	3,541	182	3,723	304	4,027
Travel Times (min:sec)	1:22					0:29				
Bottleneck Location										
Max. Queue Length										



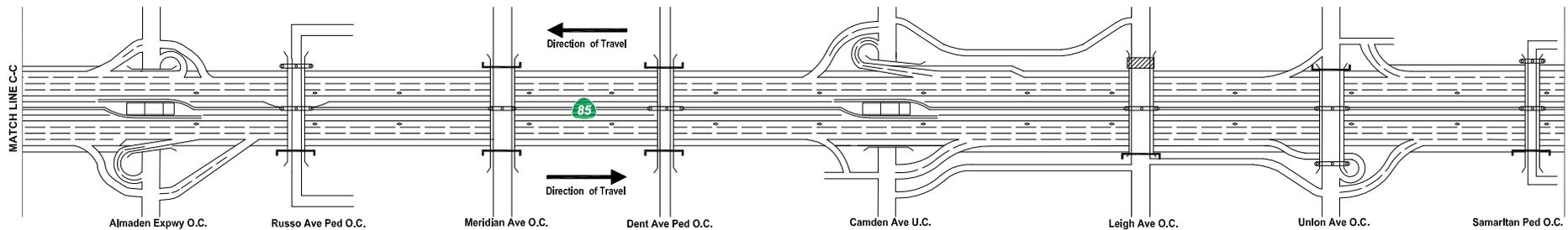
	Off		Off		On		On			
Distance (miles)	0.92	0.18			0.15	0.25			0.60	
No. of Lanes	1 + 2 + 1	2	1 + 2	1	1 + 2	1	1 + 2	1	1 + 2 + 1	
Demand (vph)	5,831	2,122	3,708	116	3,593	506	4,099	880	4,979	
Bottleneck Capacity										
Model Output (vph)	5,745	2,046	3,699	108	3,591	501	4,092	871	4,963	
Travel Times (min:sec)	0:54				0:33				1:02	
Bottleneck Location										
Max. Queue Length										

Almaden Expwy.

Camden Ave.

Union Ave.

	On		On		Off		On			Off		On		Off	
Distance (miles)	1	0.12	1	0.15	1		1.59	0.13	0.35	0.72	1	0.44	2	0.55	
No. of Lanes	1	1 + 3	1	1 + 2	1		1 + 2	1	1 + 2	1 + 2	1	1 + 2	2	1 + 2 + 1	
Demand (vph)	1,107	2,680	325	2,355	449		2,804	470	2,334	404	2,738	2,738	255	2,483	
Model Output (vph)	1,105	2,922	325	2,597	438		3,035	469	2,566	403	2,969	2,969	254	2,715	
Travel Times (min:sec)	1:45					1:18					1:42				
Bottleneck Location															
Max. Queue Length															

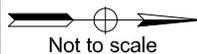


	Off		On		On		On			Off		On		Off		On	
Distance (miles)	0.12	0.20					1.67	0.27	0.96	0.17	0.69						
No. of Lanes	1	1 + 2	1	1 + 2	1		1 + 2	1	1 + 2	2	1 + 2 + 1	1	1 + 2	2	1 + 2 + 1		
Demand (vph)	469	4,510	671	5,181	467		5,647	230	5,417	1,166	6,583	379	6,204	527	6,731		
Bottleneck Capacity																	
Model Output (vph)	449	4,326 (4,514)	663	4,989	464		5,453	222	5,231	1,166	6,331 (6,397)	380	5,951	526	6,477		
Travel Times (min:sec)	1:02					2:07					1:18					2:11	
Bottleneck Location																	
Max. Queue Length																	

Note: Bottleneck Locations & Queue Lengths are based on Traffic Operation Model.

Legend: No. of Lanes  
 HOV + SOV + Aux

Yellow box = Approximate Queue Length  
 Red box = Bottleneck Location



SR 85 EXPRESS LANES

Existing Condition AM Peak Hour

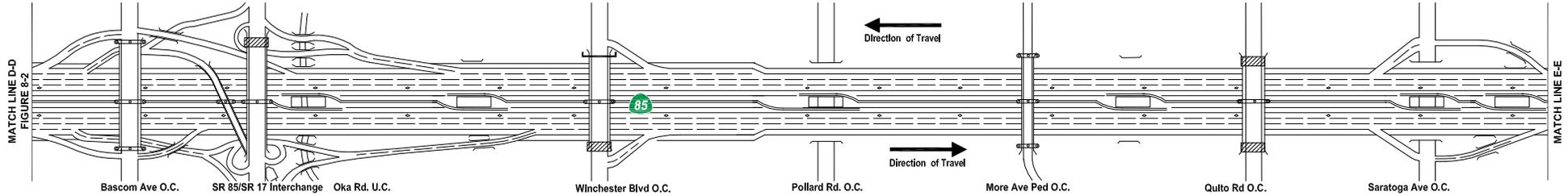
Figure 8-2

**Bascom Ave/SH 17 Interchange**

**Winchester Blvd.**

**Saratoga Ave.**

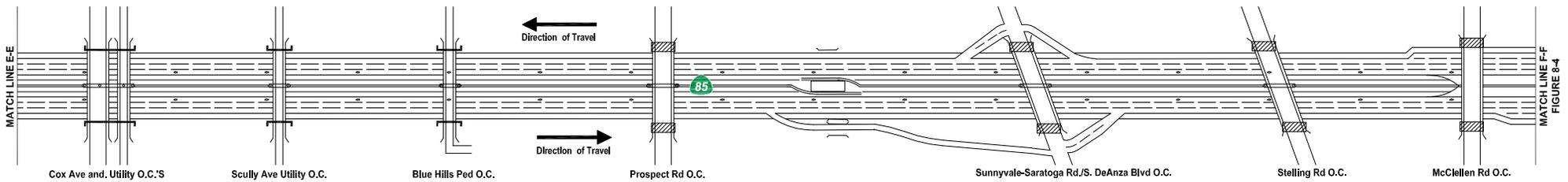
	On		On		Off		Off		Off		On		Off	
Distance (miles)		0.24		0.40		0.25		0.38		0.24		2.12		0.39
No. of Lanes	1	1 + 2 + 1	2	1 + 2	1	1 + 2	2	1 + 3	1	1 + 3		1 + 2	1	1 + 2
Demand (vph)	310	2,597	1,515	1,082	238	1,320	750	2,070	348	2,418		2,418	994	1,424
Model Output (vph)	308	2,770	1,514	1,256	226	1,482	708	2,190	329	2,519		2,519	992	1,527
Travel Times (min:sec)			1:42								4:32			
Bottleneck Location														
Max. Queue Length														



	Off		Off		On		On		On		Off		On	
Distance (miles)		0.25		0.20		0.50		0.26		0.50		1.91		0.38
No. of Lanes	1	1 + 2 + 1	2	1 + 2	1	1 + 2	2	1 + 3	1	1 + 3		1 + 2	1	1 + 2
Demand (vph)	260	6,471	1,911	4,560	529	5,089	805	5,894	400	6,295		6,295	823	5,471
Bottleneck Capacity												5,580		
Model Output (vph)	242	6,235	1,819	4,416	527	4,472 (4,943)	793	5,265	399	5,664		5,664	729	4,935
Travel Times (min:sec)			2:11									12:52		764
Bottleneck Location														
Max. Queue Length														

**Sunnyvale-Saratoga Rd/DeAnza Blvd.**

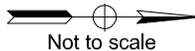
	On		Off		On		Off	
Distance (miles)		0.30		1.00		0.53		
No. of Lanes		1 + 2		1 + 2		1 + 3		
Demand (vph)		296		1,563		353		1,916
Model Output (vph)		296		1,652		348		2,000
Travel Times (min:sec)			4:32				2:55	
Bottleneck Location								
Max. Queue Length								



	Off		On		On		On	
Distance (miles)		1.98		0.26		1.25		0.27
No. of Lanes		1 + 2		1 + 2		1 + 2		1 + 3
Demand (vph)		6,243		5,592		678		6,270
Bottleneck Capacity						5,480		
Model Output (vph)		5,441 (5,699)		563		4,878		677
Travel Times (min:sec)			12:52				2:19	
Bottleneck Location								
Max. Queue Length								

Note: Bottleneck Locations & Queue Lengths are based on Traffic Operation Model.

**Legend:** No. of Lanes   = Approximate Queue Length  
 HOV + SOV + Aux   = Bottleneck Location

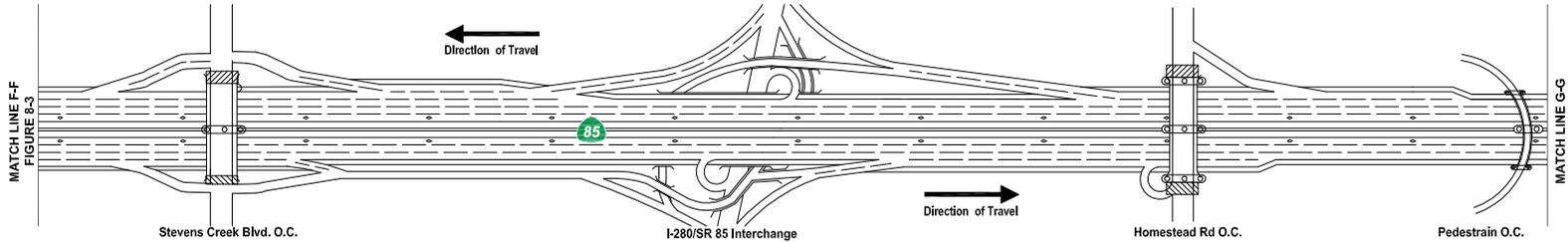


**SR 85 EXPRESS LANES**

**Existing Condition AM Peak Hour**

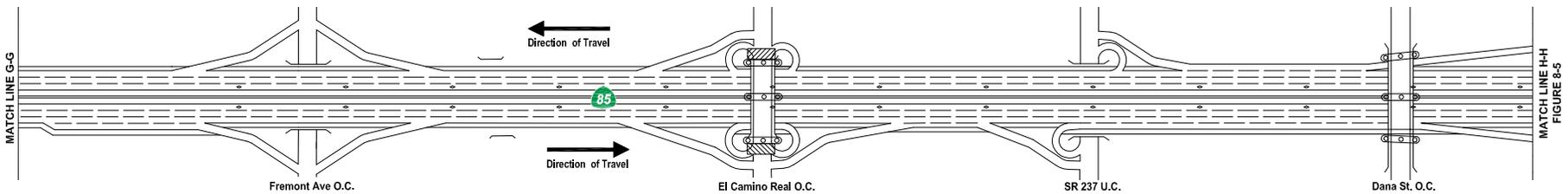
**Figure 8-3**

	Stevens Creek Blvd.				I-280 Interchange				Homestead Rd.			
	On		Off		On		Off		On		Off	
Distance (miles)		0.34		0.42		0.37		0.25		0.28		0.18
No. of Lanes	1	1+3	2	1+3+1	2	1+2	1	1+2	2	1+3	1	1+3
Demand (vph)	196	1,720	565	2,285	895	1,390	335	1,055	1,819	2,874	133	3,007
Model Output (vph)	189	1,811	552	2,363	894	1,469	334	1,135	1,792	2,927	131	3,058
Travel Times (min:sec)	2:55						0:57					
Bottleneck Location												
Max. Queue Length												



	Off		On		On		On		On		On	
Distance (miles)		0.30		0.56		0.30		0.18		0.20		0.44
No. of Lanes	1	1+3	2	1+2	1	1+2	2	1+3	1	1+3	1	1+2
Demand (vph)	555	5,715	2,627	3,088	493	3,581	1,928	5,509	215	5,724	5,724	
Bottleneck Capacity												
Model Output (vph)	490	5,065	2,321	2,744	492	3,236	1,977	4,726 (5,213)	214	4,940	4,940	
Travel Times (min:sec)	2:19			0:49			7:07					
Bottleneck Location												
Max. Queue Length												

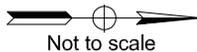
	Fremont Ave.				El Camino Real				SR 237				Central Expwy/Evelyn Ave.			
	On		Off		On		Off		On		On		Off		On	
Distance (miles)	0.50	0.36		1.62		0.10		0.09		0.38		0.11		0.20		1.00
No. of Lanes	1+2	1	1+2	1	1+2	1	1+2+1	1	1+2	1	1+2	1	1+2+1	1	1+2	1+2
Demand (vph)	3,007	524	2,483	210	2,693	406	2,287	174	2,461	239	2,222	751	1,471	190	1,661	264
Model Output (vph)	3,058	522	2,536	200	2,736	406	2,330	157	2,487	238	2,249	751	1,498	157	1,655	264
Travel Times (min:sec)	0:57		1:49								2:49					
Bottleneck Location																
Max. Queue Length																



	Off		On		Off		On		Off		On		Off		On	
Distance (miles)		0.27		1.60		0.10		0.10		0.09		0.18		0.10		0.25
No. of Lanes	1	1+2	1	1+2	1	1+2	1	1+2+1	1	1+2	1	1+2+1	1	1+2	1	1+2+1
Demand (vph)	5,724	461	5,263	841	6,104	261	5,844	89	5,933	519	5,414	526	5,940	1,855	4,085	234
Bottleneck Capacity																
Model Output (vph)	4,940	400	4,540	830	5,370	204	5,146 (5,166)	89	5,235	393	4,842	526	5,368	1,611	3,757	234
Travel Times (min:sec)	7:07															
Bottleneck Location	1:00															
Max. Queue Length																

Note: Bottleneck Locations & Queue Lengths are based on Traffic Operation Model.

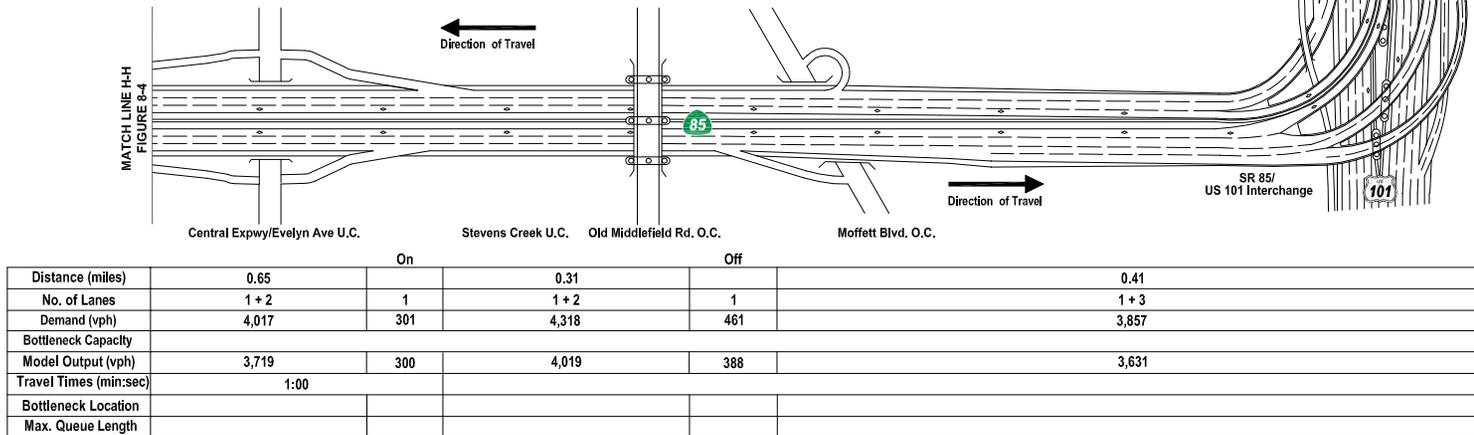
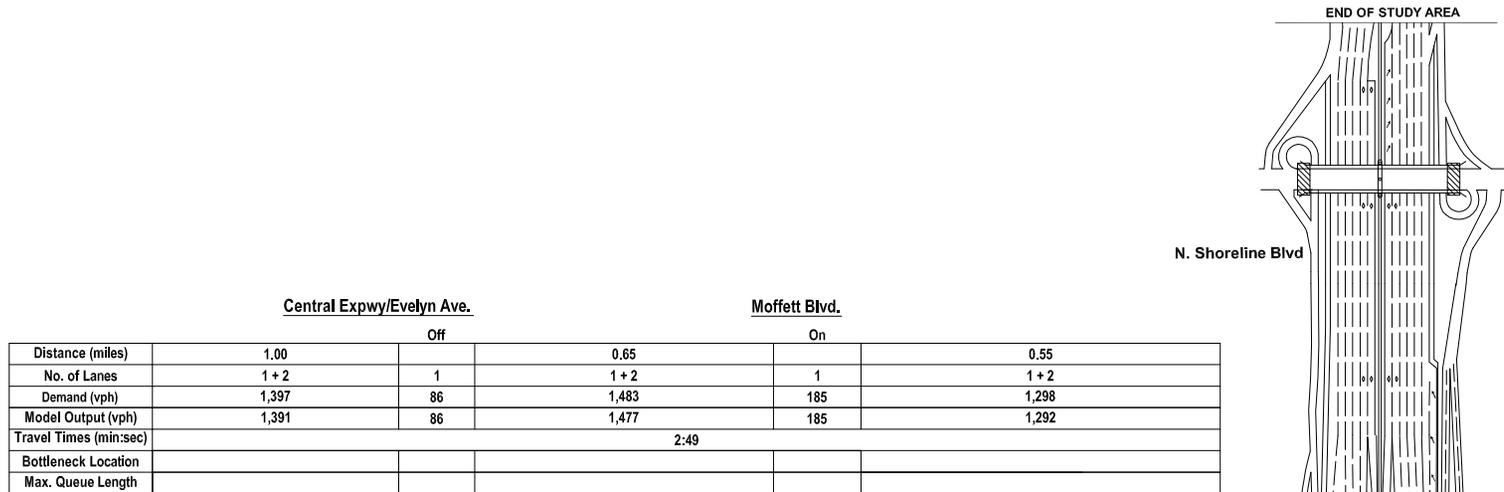
Legend: No. of Lanes  
 HOV + SOV + Aux  
 = Approximate Queue Length  
 = Bottleneck Location



SR 85 EXPRESS LANES

Existing Condition AM Peak Hour

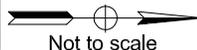
Figure 8-4



Note: Bottleneck Locations & Queue Lengths are based on Traffic Operation Model.

**Legend:** No. of Lanes  
 HOV + SOV + Aux

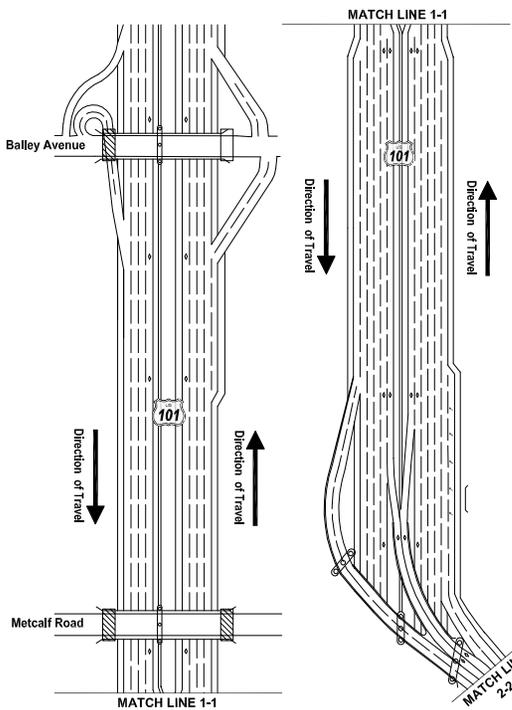
Yellow box = Approximate Queue Length  
 Red box = Bottleneck Location



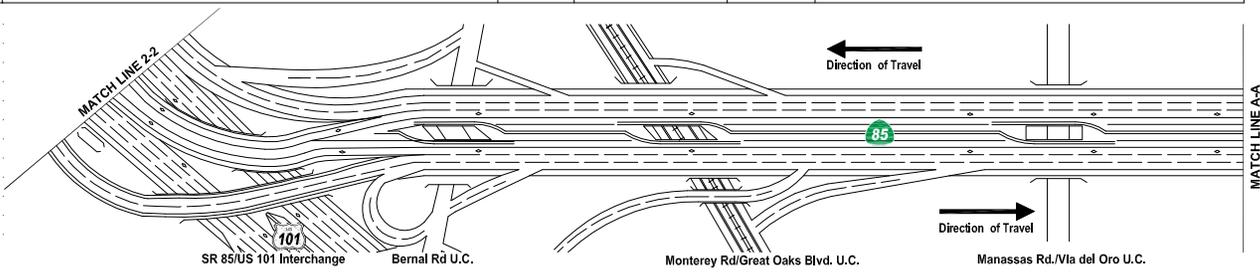
SR 85 EXPRESS LANES

Existing Condition AM Peak  
 Hour

Figure  
 8-5

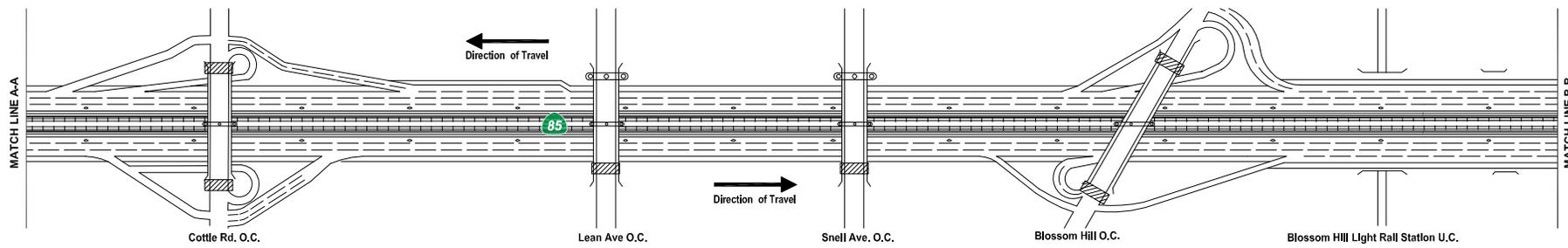


	SR 85/US101 Interchange	Bernal Ave. Off	Monterey Rd/Great Oaks Blvd. Off	
Distance (miles)	0.22	0.45		0.96
No. of Lanes	1 + 2	1	1 + 2	1 + 2
Demand (vph)	2,754	1,022	3,776	4,419
Bottleneck Capacity				
Model Output (vph)	2,518	951	3,469	4,061
Travel Times (min:sec)		1:50		
Bottleneck Location				
Max. Queue Length				



	SR 85/US 101 Interchange	Bernal Rd U.C.	Monterey Rd/Great Oaks Blvd. U.C.	Manassas Rd./Via del Oro U.C.
Distance (miles)	0.55	0.25	0.25	0.20
No. of Lanes	1 + 2	1 + 2	1 + 2	1 + 2
Demand (vph)	1,785	477	2,262	287
Model Output (vph)	1,778	471	2,249	281
Travel Times (min:sec)				1:31
Bottleneck Location				
Max. Queue Length				

	Cottle Rd.						Blossom Hill Rd.						
	On	0.25	On	0.20	Off	0.33	1.32	On	0.24	On	0.10	Off	0.71
Distance (miles)													
No. of Lanes	1	1 + 2	1	1 + 2	2	1 + 3	1 + 2	1	1 + 2	1	1 + 2	2	1 + 2 + 1
Demand (vph)	244	4,174	110	4,065	1,569	5,634	5,634	264	5,370	114	5,256	2,778	8,034
Bottleneck Capacity													7,300
Model Output (vph)	244	3,817	110	3,707	1,443	5,150	5,150	264	4,886	116	4,770	2,507	7,277
Travel Times (min:sec)							2:07						1:59
Bottleneck Location													
Max. Queue Length													



	Off	On	1.55	Off	On	On
Distance (miles)		0.30			0.22	0.15
No. of Lanes	1	1 + 2	1 + 2	1	1 + 2	1 + 2
Demand (vph)	362	3,403	1,176	4,579	4,173	4,548
Model Output (vph)	338	3,372	1,168	4,540	375	4,519
Travel Times (min:sec)		1:31			1:54	
Bottleneck Location						
Max. Queue Length						

Note: Bottleneck Locations & Queue Lengths are based on Traffic Operation Model.

Legend: No. of Lanes  
 = Approximate Queue Length  
 = Bottleneck Location  
 HOV + SOV + Aux



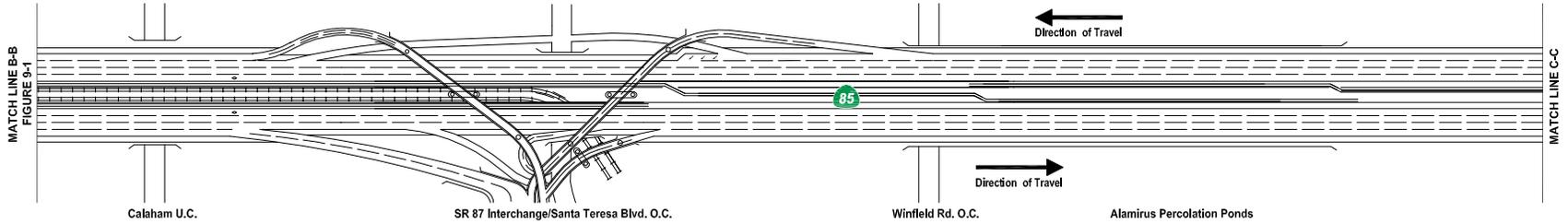
SR 85 EXPRESS LANES

Existing Condition PM Peak Hour

Figure 9-1

Highway 87/Santa Teresa Blvd.

	On		On		Off		Off		
Distance (miles)	0.71	0.18	0.31	0.07	0.14	0.52			
No. of Lanes	1 + 2 + 1	2	1 + 2	1	1 + 2	1 + 3	1	1 + 3	
Demand (vph)	8,034	2,537	5,497	375	5,122	5,122	894	6,016	270
Bottleneck Capacity	7,300								
Model Output (vph)	7,277	2,248	5,029	375	4,654	4,654	825	5,479 (5,644)	248
Travel Times (min:sec)	1:59					0:38			
Bottleneck Location									
Max. Queue Length									



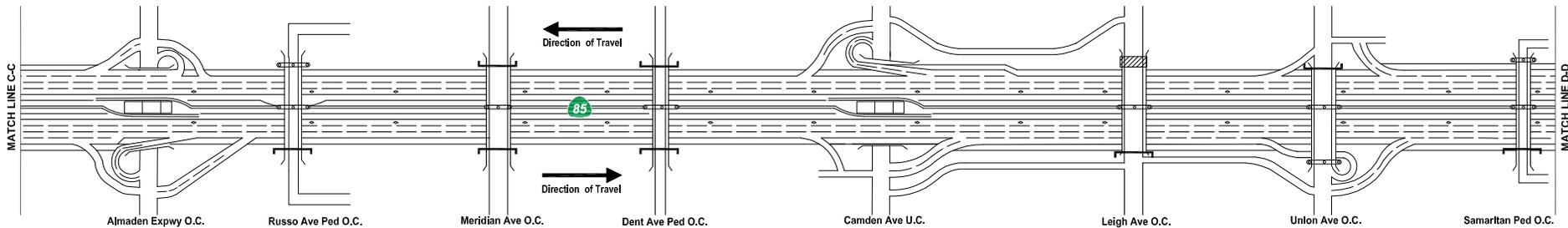
	Off		Off		On		On		
Distance (miles)	0.92	0.18	0.15	0.25	0.60				
No. of Lanes	1 + 2 + 1	2	1 + 2	1	1 + 2	1	1 + 2	1	1 + 2 + 1
Demand (vph)	5,406	1,514	3,891	481	3,410	417	3,828	997	4,824
Model Output (vph)	5,377	1,473	3,904	452	3,452	416	3,868	988	4,856
Travel Times (min:sec)	0:53				0:35				0:59
Bottleneck Location									
Max. Queue Length									

Almaden Expy.

Camden Ave.

Unlon Ave.

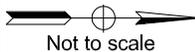
	On		On		Off		On		Off		On		Off		
Distance (miles)	0.12	0.15	1.59	0.13	0.35	0.72	0.44	0.55							
No. of Lanes	1	1 + 3	1	1 + 2	1	1 + 2	2	1 + 3	1 + 2	1	1 + 2	2	1 + 2 + 1		
Demand (vph)	900	5,385	460	4,925	1,084	6,009	811	5,199	1,167	6,365	6,365	523	5,842	673	6,515
Bottleneck Capacity											5,700				
Model Output (vph)	899	4,993	460	4,533	1,027	5,560	808	4,752	1,047	5,799	5,799	523	5,276	635	5,911
Travel Times (min:sec)	0:38				1:55				1:14				5:24		
Bottleneck Location															
Max. Queue Length															



	Off		On		On		Off		On		Off		On	
Distance (miles)	0.12	0.20	1.67	0.27	0.96	0.17	0.69							
No. of Lanes	1	1 + 2	1	1 + 2	1	1 + 2	2	1 + 2 + 1	1	1 + 2	2	1 + 2 + 1		
Demand (vph)	1,167	3,658	689	4,346	346	4,693	713	3,980	918	4,898	467	4,430	738	5,168
Model Output (vph)	1,129	3,727	688	4,415	345	4,760	684	4,076	918	4,994	473	4,521	739	5,260
Travel Times (min:sec)	0:59				1:52				1:04				1:32	
Bottleneck Location														
Max. Queue Length														

Note: Bottleneck Locations & Queue Lengths are based on Traffic Operation Model.

Legend: No. of Lanes  
  = Approximate Queue Length  
  = Bottleneck Location  
 HOV + SOV + Aux



SR 85 EXPRESS LANES

Existing Condition PM Peak Hour

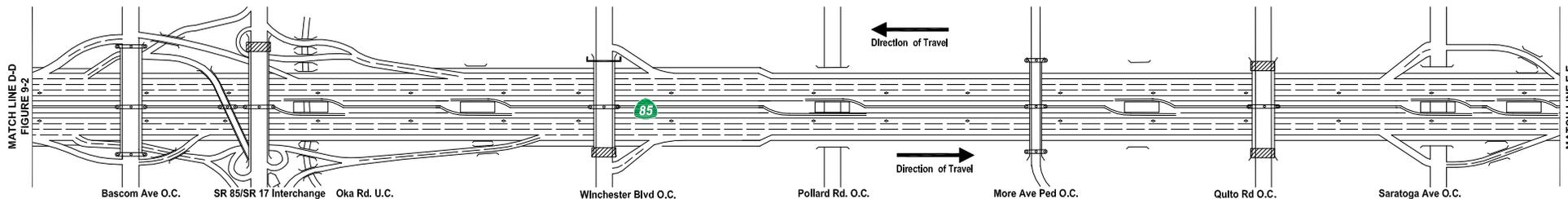
Figure 9-2

Bascom Ave/SH 17 Interchange

Winchester Blvd.

Saratoga Ave.

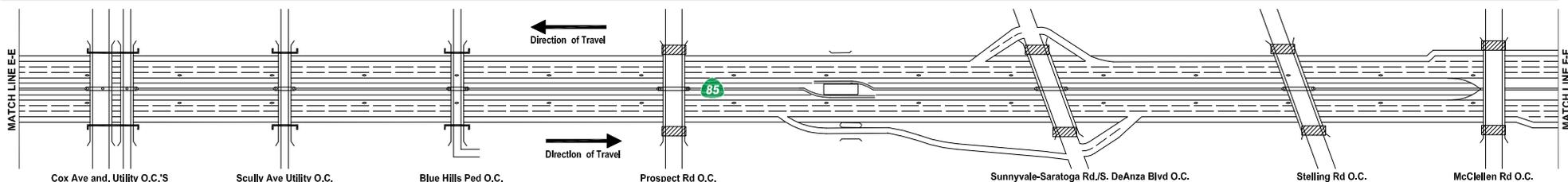
	On		On		Off		Off		Off		On			Off		
Distance (miles)		0.24		0.40		0.25		0.38		0.24		2.12		0.39		
No. of Lanes	1	1 + 2 + 1	2	1 + 2	1	1 + 2	2	1 + 2	1	1 + 3		1 + 2	1	1 + 2	1	
Demand (vph)	646	5,868	1,763	4,105	495	4,601	1,187	5,788	483	6,271		6,271	1,149	5,123	569	
Bottleneck Capacity												5,800				
Model Output (vph)	639	5,272 (5,426)	1,622	3,804	464	4,268	1,134	5,402	448	5,850		5,850	1,139	4,711 (4,852)	548	
Travel Times (min:sec)		5:24									5:41					
Bottleneck Location																
Max. Queue Length																



	Off		On		On		On		On		Off			On		
Distance (miles)		0.25		0.20		0.50		0.26		0.50		1.91		0.38		
No. of Lanes		1 + 2 + 1	2	1 + 2	1	1 + 2	2	1 + 3	1	1 + 3		1 + 2	1	1 + 2	1	
Demand (vph)	387	4,781	2,520	2,261	409	2,670	1,227	3,897	664	4,561		4,561	1,437	3,124	462	
Model Output (vph)	371	4,889	2,461	2,428	409	2,837	1,226	4,063	663	4,726		4,726	1,401	3,325	462	
Travel Times (min:sec)		1:32									2:53					
Bottleneck Location																
Max. Queue Length																

Sunnyvale-Saratoga Rd/DeAnza Blvd.

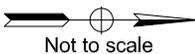
	On		Off		On		On		
Distance (miles)		1.80		0.30		1.00		0.53	
No. of Lanes		1 + 2		1 + 2		1 + 2		1 + 3	
Demand (vph)		5,692		839		4,853		862	
Bottleneck Capacity						5,400		5,400	
Model Output (vph)		5,400		837		4,563		810	
Travel Times (min:sec)		5:41			3:51				
Bottleneck Location									
Max. Queue Length									



	Off		On		On		On		
Distance (miles)		1.98		0.26		1.25		0.27	
No. of Lanes		1 + 2		1 + 2		1 + 2		1 + 3	
Demand (vph)		3,586		621		2,965		665	
Model Output (vph)		3,787		603		3,184		665	
Travel Times (min:sec)		2:06			1:43				
Bottleneck Location									
Max. Queue Length									

Note: Bottleneck Locations & Queue Lengths are based on Traffic Operation Model.

Legend: No. of Lanes  
 HOV + SOV + Aux  
 = Approximate Queue Length  
 = Bottleneck Location

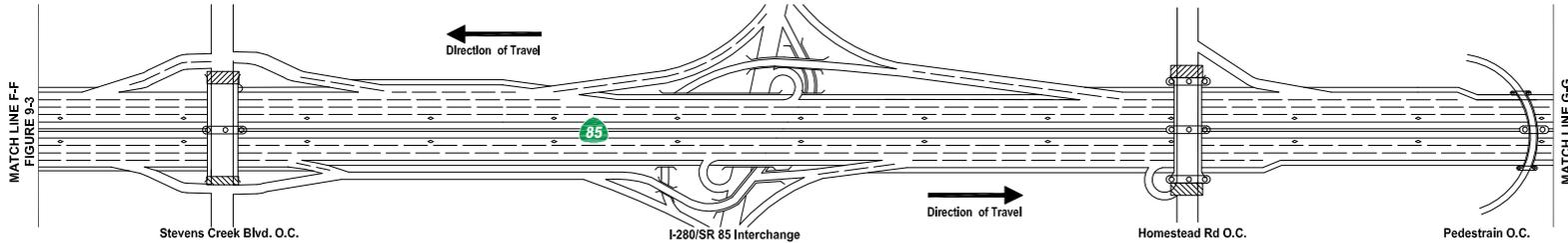


SR 85 EXPRESS LANES

Existing Condition PM Peak  
 Hour

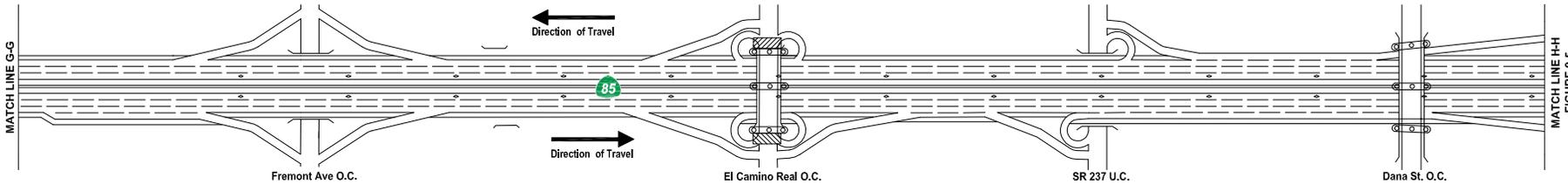
Figure  
 9-3

Stevens Creek Blvd.				I-280 Interchange				Homestead Rd.			
	On	Off		On	On		Off	Off		Off	
Distance (miles)		0.34		0.42		0.37		0.25		0.28	0.18
No. of Lanes	1	1 + 3	2	1 + 3 + 1	2	1 + 2	1	1 + 2	2	1 + 3	1 + 3
Demand (vph)	627	5,088	1,206	6,294	2,364	3,929	514	3,415	2,697	6,112	6,326
Bottleneck Capacity											5,920
Model Output (vph)	620	4,753 (4,881)	1,155	6,036	2,365	3,671	514	3,157	2,523	5,680	5,876
Travel Times (min:sec)				3:51							1:13
Bottleneck Location											
Max. Queue Length											



	Off	Off		On	On		On	On	On	On	On
Distance (miles)		0.30		0.56		0.30		0.18		0.20	0.44
No. of Lanes	1	1 + 3	2	1 + 2	1	1 + 2	2	1 + 3	1	1 + 3	1 + 2
Demand (vph)	402	3,227	1,576	1,651	452	2,103	1,946	4,049	140	4,189	4,189
Model Output (vph)	402	3,447	1,527	1,920	452	2,372	1,945	4,317	140	4,457	4,457
Travel Times (min:sec)		1:43			0:47					3:22	
Bottleneck Location											
Max. Queue Length											

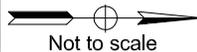
Fremont Ave.				El Camino Real				SR 237				Central Expwy/Evelyn Ave.					
	On	Off		On	Off		On	On	On	Off	Off	On	On	On			
Distance (miles)	0.50	0.36		1.62	0.10	0.09		0.38		0.11		0.20		1.00			
No. of Lanes	1 + 2	1	1 + 2	1	1 + 2	1	1 + 2 + 1	1	1 + 2	1	1 + 2	1	1 + 2 + 1	1 + 2			
Demand (vph)	6,326	758	5,568	362	5,930	784	5,146	293	5,439	265	5,174	1,194	3,980	523	4,503	458	4,046
Bottleneck Capacity	5,920			5,720													
Model Output (vph)	5,876	758	5,118 (5,376)	325	5,701	784	4,917	263	5,180	265	4,915	1,136	3,779	491	4,270	458	3,812 (4,014)
Travel Times (min:sec)	1:13		2:39								8:49						
Bottleneck Location																	
Max. Queue Length																	



	Off	On		Off	On		Off	On	Off	On	Off	On	Off	On	Off		
Distance (miles)		0.27		1.60	0.10	0.10		0.09		0.18		0.10		0.25	0.65		
No. of Lanes	1 + 3	1	1 + 2	1	1 + 2	1	1 + 2 + 1	1	1 + 2	1	1 + 2 + 1	1	1 + 2	1	1 + 2		
Demand (vph)	4,189	777	3,413	334	3,747	355	3,392	69	3,461	565	2,896	333	3,230	1,010	2,351	290	2,061
Model Output (vph)	4,457	756	3,701	334	4,035	301	3,734	69	3,803	477	3,326	333	3,659	1,044	2,615	132	2,747
Travel Times (min:sec)					3:22										0:55		
Bottleneck Location																	
Max. Queue Length																	

Note: Bottleneck Locations & Queue Lengths are based on Traffic Operation Model.

**Legend:** No. of Lanes   = Approximate Queue Length  
  = Bottleneck Location  
 HOV + SOV + Aux



SR 85 EXPRESS LANES

Existing Condition PM Peak  
Hour

Figure  
9-4

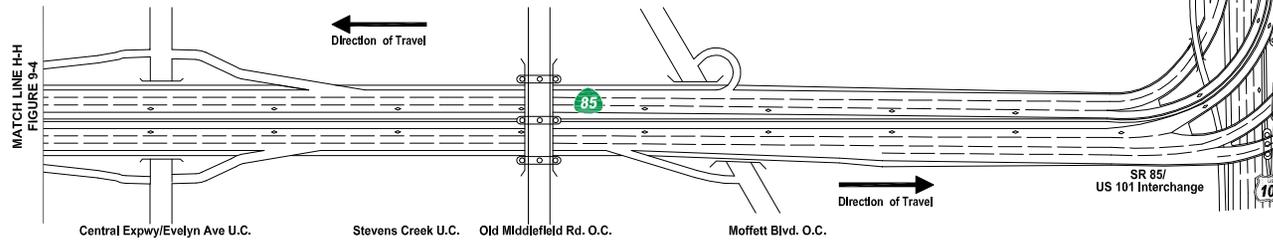
END OF STUDY AREA

N. Shoreline Blvd

Central Expwy/Evelyn Ave.

Moffett Blvd.

	Off		On		
Distance (miles)	1.00		0.65		0.55
No. of Lanes	1 + 2	1	1 + 2	1	1 + 2
Demand (vph)	4,046	335	4,381	421	3,960
Bottleneck Capacity					
Model Output (vph)	4,014	314	4,328	415	3,913
Travel Times (min:sec)	8:49				
Bottleneck Location					
Max. Queue Length					

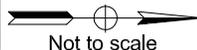


	On		Off		
Distance (miles)	0.65		0.31		0.41
No. of Lanes	1 + 2	1	1 + 2	1	1 + 3
Demand (vph)	2,061	207	2,269	306	1,963
Model Output (vph)	2,472	207	2,679	268	2,411
Travel Times (min:sec)	0:55				
Bottleneck Location					
Max. Queue Length					

Note: Bottleneck Locations & Queue Lengths are based on Traffic Operation Model.

Legend: No. of Lanes  
 HOV + SOV + Aux

Yellow box = Approximate Queue Length  
 Red box = Bottleneck Location



SR 85 EXPRESS LANES

Existing Condition PM Peak Hour

Figure 9-5

### 3.4 Validation of Bottleneck Locations

Existing bottleneck locations along the study corridor during the peak period were validated in the traffic operational model to replicate the bottlenecks, throughput through the bottlenecks and associated queues. **Tables 5** and **6** summarize result of the traffic operational model calibration at the bottleneck locations for the northbound and southbound directions during the a.m. and p.m. peak hour respectively. **Tables 5** and **6** illustrate throughput through the bottlenecks, associated queues and average delay at the bottlenecks. Tables also summarize extents of queues from bottleneck locations based on tach runs and model. Detailed summary of demands, model output, throughput through the bottlenecks in the northbound and southbound direction are attached in **Appendix C**.

Traffic operational model replicates the output flow at 1) the bottleneck between Almaden Expressway On-Ramp and Camden Avenue Off-Ramp; and 2) Union Avenue Off-Ramp and On-Ramp. The queues at these bottlenecks however occur momentarily during the peak hour and not throughout the peak. The minimum average speed upstream of this bottleneck during the peak hour is:

- Average minimum speed is approximately 24 mph between Almaden Expressway On-Ramp and Santa Teresa Boulevard On-Ramp
- Average minimum speed is approximately 30 mph between Union Avenue Off-Ramp and Camden Avenue Off-Ramp

It should be also noted that the traffic operational model in the northbound direction during the a.m. peak period is constraining the flow at Interstate 280 Diagonal On-Ramp and showing queuing on the on-ramp instead of the mainline.

**Tables 7** and **8** summarize the comparison for the travel time along the study corridor during peak hour. It should be noted that travel times along the mainline segments in the northbound direction are replicated for 92 percent of the study segments, whereas in the southbound direction are replicated for 92 percent of the study segments as travel time from traffic operational model is based on the average of travel time on all lanes, compared to the data collected in the center lane only while conducting tach runs. It should be noted that some of the HOV lane segments experience congestion due to operational problems and not demand exceeding the capacity of the HOV lane.

As illustrated in **Tables 5** and **6**, the bottleneck locations are calibrated within the traffic operational model to replicate existing conditions. **Tables 7** and **8** illustrate that the traffic operational model is calibrated to replicate the travel times along the study corridor during the peak hour in the peak direction of travel.

**Table 5: Bottleneck Validation Summary for Northbound Direction (AM Peak Hour)**

Bottle-neck Locations	Type of Lane	Capacity (vehicles per hour)	Average from Model (vehicles per hour)	Queues		Speed Reduction		Delay (seconds/vehicle)
				Based on Caltrans Tach Runs	Based on Model (from Bottle-neck locations)	Based on Caltrans Tach Runs	Based on Calibrated Model	Based on Calibrated Model
Segment between Almaden Expressway On-Ramp and Camden Avenue Off-Ramp	HOV	1,500	1,512	-	-	between Almaden Expressway Off-Ramp to SR 87 On-Ramp	Almaden Expressway Loop On-Ramp and Camden Avenue Off-Ramp. Average speed drops by approximately 10 mph	
	Mixed-Flow	4,050	3,941	extends north of SR 87 On-Ramp	Upto Almaden Expressway Off-Ramp	-	-	11 seconds/vehicle
	Total Throughput		5,453					
Segment between Union Off-Ramp and On-Ramp	HOV	1,460	1,471	-	-	between Union Avenue Off-Ramp and Camden Avenue On-Ramp	Union Avenue On-Ramp and Off-Ramp. Average speed drops by approximately 10 mph.	
	Mixed-Flow	4,600	4,480	extends upto Camden Ave Off-Ramp	beyond Union Avenue Off-Ramp	-	-	16 seconds/vehicle
	Total Throughput		5,951					
Segment between Winchester Boulevard Lane Drop and Saratoga Avenue Off-Ramp	HOV	1,480	1,467	-	-	between SR 17 On-Ramp and Lane Drop	between SR 17 On-Ramp and Lane drop near Winchester Boulevard On-Ramp. Average speed drops by approximately 10 mph.	
	Mixed-Flow	4,100	4,197	between Bascom Avenue On-Ramp and Lane Drop	beyond SR 17 On-Ramp	-	-	174 seconds/vehicle
	Total Throughput		5,664					
Segment between Sunnyvale Saratoga On-Ramp and Stevens Creek Boulevard Off-Ramp	HOV	1,330	1,350	-	-	between Sunnyvale Saratoga/DeAnza Boulevard On-Ramp and Stevens Creek Boulevard Off-Ramp	between Saratoga Avenue On-Ramp and Stevens Creek Boulevard Off-Ramp. Average speed drops by approximately 10 mph.	
	Mixed-Flow	4,150	4,205	extends upto Saratoga Avenue On-Ramp	beyond Sunnyvale Saratoga/DeAnza Boulevard Off-Ramp	-	-	187 seconds/vehicle

Bottle-neck Locations	Type of Lane	Capacity (vehicles per hour)	Average from Model (vehicles per hour)	Queues		Speed Reduction		Delay (seconds/vehicle)
				Based on Caltrans Tach Runs	Based on Model (from Bottle-neck locations)	Based on Caltrans Tach Runs	Based on Calibrated Model	Based on Calibrated Model
	Total Throughput		5,555					
Segment between Fremont Avenue On-Ramp and El Camino Real Off-Ramp	HOV	1,070	971	-	-	between Fremont Avenue Off-Ramp and I-280 On-Ramp	between Homestead Road On-Ramp and SB Route 82 Off-Ramp . Average speed drops by approximately 10 mph.	
	Mixed-Flow	4,350	4,399	extends north of I-280 Off-Ramp	extends upto Homestead Road On-Ramp	-	-	91 seconds/vehicle
	Total Throughput		5,370					
Segment between El Camino Real On-Ramp and SR 237 Off-Ramp	HOV	890	1,056	-	-	-	-	-
	Mixed-Flow	4,350	4,312	extends upto El Camino Real Off-Ramp	beyond El Camino Real Loop On-Ramp	-	-	5 seconds/vehicle
	Total Throughput		5,368					

Note: There are no existing bottleneck locations within the HOV lane, however congestion and delay is experienced at the locations identified due to HOV vehicles trying to merge into mixed-flow lanes which are within a queue. HOV Lane volumes are flow volumes. The capacity of HOV lane is 1,650 vehicles per hour.

**Table 6: Bottleneck Validation Summary for Southbound Direction (PM Peak Hour)**

Bottle-neck Locations	Type of Lane	Capacity (vehicles per hour)	Average from Model (vehicles per hour)	Queues		Speed Reduction		Delay (seconds/vehicle)
				Based on Caltrans Tach Runs	Based on Model	Based on Caltrans Tach Runs	Based on Calibrated Model	Based on Calibrated Model
Segment between El Camino Real On-Ramp and Fremont Avenue Off-Ramp	HOV	1,520	1,428	-	-	-	between Moffett Boulevard On-Ramp to Fremont Avenue Off-Ramp. Average speed drops by approximately 10 mph.	
	Mixed-Flow	4,200	4,273	extends upto Evelyn Avenue On-Ramp	beyond Evelyn Avenue On-Ramp	-	-	189 seconds/vehicle
	Total Throughput		5,701					
Segment between Fremont Avenue On-Ramp and Homestead Road Off-Ramp	HOV	1,520	1,435	-	-	-	-	-
	Mixed-Flow	4,400	4,440	extends upto Fremont Avenue Off-Ramp	upto Fremont Avenue Off-Ramp	-	-	34 seconds/vehicle
	Total Throughput		5,876					
Segment between Lane Drop and DeAnza Boulevard/Sunnyvale Saratoga Off-Ramp	HOV	1,500	1,427	-	-	-	-	-
	Mixed-Flow	3,900	3,946	extends upto Stevens Creek Boulevard Off-Ramp	beyond Stevens Creek Boulevard On-Ramp	-	-	21 seconds/vehicle
	Total Throughput		5,373					
Segment between Saratoga Avenue On-Ramp and Winchester Boulevard Off-Ramp	HOV	1,500	1,578	-	-	-	-	-
	Mixed-Flow	4,300	4,272	extends upto Saratoga Avenue Off-Ramp	beyond Saratoga Avenue On-Ramp	-	-	27 seconds/vehicle
	Total Throughput		5,850					

Bottle-neck Locations	Type of Lane	Capacity (vehicles per hour)	Average from Model (vehicles per hour)	Queues		Speed Reduction		Delay (seconds/vehicle)
				Based on Caltrans Tach Runs	Based on Model	Based on Caltrans Tach Runs	Based on Calibrated Model	Based on Calibrated Model
Segment between Union Avenue On-Ramp and Camden Avenue Off-Ramp	HOV	1,400	1,404	-	-	-	between SR 17 On-Ramp and Union Avenue Off-Ramp. Average speed drops by approximately 20 mph.	
	Mixed-Flow	4,300	4,395	extends upto SR 17 Interchange	extends upto SR 17 Interchange	-	-	200 seconds/vehicle
	Total Throughput		5,799					
Segment between SR 87 On-Ramp and Blossom Hill Road Off-Ramp	HOV	1,000	968	-	-	-	between SR 87 Off-Ramp and Santa Teresa Boulevard Off-Ramp. Average speed drops by approximately 20 mph.	
	Mixed-Flow	6,300	6,308	extends beyond Santa Teresa Boulevard Off-Ramp	beyond Santa Teresa Boulevard Off-Ramp	-	-	31 seconds/vehicle
	Total Throughput		7,277					

Note: There are no existing bottleneck locations within the HOV lane, however congestion and delay is experienced at the locations identified due to HOV vehicles trying to merge into mixed-flow lanes which are within a queue. HOV Lane volumes are flow volumes. The capacity of HOV lane is 1,650 vehicles per hour.

**Table 7: Travel Time Comparison for Northbound Direction (AM Peak Hour)**

No.	Travel Time Segments	Distance in Miles	Caltrans Travel Time Runs	Model	Difference	Validation Criteria Met
			Travel Time in Seconds	Travel Time in Seconds		
1	US 101 Southbound On-Ramp - Cottle Road On-Ramp	1.60	81	88	7	Yes
2	Cottle Road On-Ramp - Blossom Hill Road On-Ramp	1.92	109	111	2	Yes
3	Blossom Hill Road On-Ramp - SR 87 Off-Ramp	0.92	51	54	3	Yes
4	SR 87 Off-Ramp - SR 87 On-Ramp	0.58	39	33	-6	Yes
5	SR 87 On-Ramp - Almaden Expressway On-Ramp	0.92	50	62	12	Yes
6	Almaden Expressway On-Ramp - Camden Avenue On-Ramp	1.94	124	127	3	Yes
7	Camden Avenue On-Ramp - Union Avenue On-Ramp	1.13	141	82	-59	Yes
8	Union Avenue On-Ramp - Route 17 On-Ramp	1.64	192	133	-59	Yes
9	Route 17 On-Ramp - Sunnyvale Saratoga Road On-Ramp	5.29	690	715	25	Yes
10	Sunnyvale Saratoga Road On-Ramp - Route 280 Off-Ramp	1.82	174	139	-35	Yes
11	Route 280 Off-Ramp - Route 280 On-Ramp	0.86	94	49	-45	Yes
12	Route 280 On-Ramp - Route 237 Off-Ramp	3.41	410	319	-91	No
13	Route 237 Off-Ramp - Evelyn Avenue On-Ramp	1.00	56	60	4	Yes
Total Travel Time for the Corridor		23.03	2,211	1,972	-239	Yes

**Table 8: Travel Time Comparison for Southbound Direction (PM Peak Hour)**

No.	Travel Time Segments	Distance in Miles	Caltrans Travel Time Runs	Model	Difference	Validation Criteria Met
			Travel Time in Seconds	Travel Time in Seconds		
1	Begin of Study Area - El Camino Real SB On-Ramp	3.08	488	529	41	Yes
2	El Camino Real SB On-Ramp- Fremont Avenue On-Ramp	1.98	216	159	-57	Yes
3	Fremont Avenue On-Ramp- I-280 Off-Ramp	0.96	107	73	-34	Yes
4	I-280 Off-Ramp- Sunnyvale Saratoga Road On-Ramp	3.21	291	231	-60	Yes
5	Sunnyvale Saratoga Road On-Ramp - SR 17 Off-Ramp	4.93	401	341	-60	Yes
6	SR 17 Off-Ramp - Union Avenue On-Ramp	1.88	279	324	45	Yes
7	Union Avenue On-Ramp - Camden Avenue On-Ramp	1.20	90	74	-16	Yes
8	Camden Avenue On-Ramp - Almaden Expressway Loop On-Ramp	1.86	135	115	-20	Yes
9	Almaden Expressway Loop On-Ramp- SR 87 Off-Ramp	0.52	31	38	7	Yes
10	SR 87 Off-Ramp- Blossom Hill Road Off-Ramp	1.41	180	119	-61	No
11	Blossom Hill Road Off-Ramp - Cottle Road Diagonal On-Ramp	2.19	120	127	7	Yes
12	Cottle Road Diagonal On-Ramp- End of Study Limits	1.88	100	110	10	Yes
Total Travel Time for the Corridor		25.10	2,511	2,239	-272	Yes

## 4. ANALYSIS METHODOLOGY AND TRAFFIC OPERATIONS EVALUATION CRITERIA

### 4.1 Freeway Mainline

The freeway mainline segments and ramp junction traffic operations were analyzed using the VISSIM micro-simulation model. The traffic operations along the mainline sections were reported in a descriptive term known as Level of Service (LOS). LOS is a measure of traffic operating conditions and the designated levels vary from LOS A to LOS F. **Table 9** describes the LOS thresholds from the Highway Capacity Manual 2000 for freeway sections.

**Table 9: Freeway Mainline Section LOS Thresholds**

Level of Service	Description	Density (vplpm)
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 11
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	> 11 to 18
C	Flow with speeds at or near free-flow speeds. Freedom to maneuver with the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	> 18 to 26
D	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	> 26 to 35
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	> 35 to 45
F	Represents a breakdown in flow.	> 45

Note: Density is reported in vehicles per lane per mile (vplpm).

Source: *Highway Capacity Manual* (Transportation Research Board, 2000).

### 4.2 Existing Traffic Operational Conditions

Traffic operational analysis along the study corridor for existing conditions was conducted using the calibrated and validated VISSIM model. **Tables 10** through **13** summarize the results of the analysis for the northbound and southbound direction during the a.m. and p.m. peak hour.

**Table 10: LOS Summary for Northbound Direction – AM Peak Hour**

No.	SEGMENT	AM PEAK HOUR			
		HOV		Mixed-Flow Lanes	
		Density	LOS	Density	LOS
1	NB Bernal Rd. On - Ramp and SB Bernal Rd. On - Ramp	9.53	A	11.22	B
2	SB Bernal Rd. On - Ramp and SB US 101 On - Ramp	10.83	A	14.03	B
3	SB US 101 On - Ramp and Great Oaks Blvd. On - Ramp	10.92	A	16.52	B
4	Great Oaks Blvd. On – Ramp and Cottle Rd. Off - Ramp	12.53	B	18.85	C
5	Cottle Rd. Off - Ramp and Cottle Rd. On - Ramp	13.02	B	17.73	B
6	Cottle Rd. On - Ramp and Blossom Hill Off - Ramp	16.98	B	23.95	C
7	Blossom Hill Off - Ramp and EB Blossom Hill On - Ramp	16.71	B	22.30	C
8	EB Blossom Hill On - Ramp and WB Blossom Hill On - Ramp	18.47	C	29.89	D
9	WB Blossom Hill On - Ramp and SR 87 Off - Ramp	14.92	B	28.57	D
10	SR 87 Off - Ramp and Santa Teresa Blvd Off - Ramp	14.58	B	20.06	C
11	Santa Teresa Blvd Off – Ramp and Santa Teresa Blvd On - Ramp	14.13	B	19.34	C
12	Santa Teresa Blvd On – Ramp and SR 87 On - Ramp	15.01	B	23.32	C
13	SR 87 On - Ramp and Almaden Expwy Off - Ramp	14.54	B	20.39	C
14	Almaden Expwy Off - Ramp and NB Almaden Expwy On - Ramp	16.94	B	38.67	E
15	NB Almaden Expwy On - Ramp and SB Almaden Expwy On - Ramp	26.59	D	45.29	F
16	SB Almaden Expwy On - Ramp and Camden Ave Off - Ramp	24.07	C	36.36	E
17	Camden Ave Off - Ramp and Camden Ave On - Ramp	20.54	C	29.13	D
18	Camden Ave On - Ramp and Union Ave. Off - Ramp	21.08	C	41.02	E
19	Union Ave. Off - Ramp and Union Ave. On - Ramp	28.70	D	44.83	E

*Existing Conditions Traffic Operational Analysis*

No.	SEGMENT	AM PEAK HOUR			
		HOV		Mixed-Flow Lanes	
		Density	LOS	Density	LOS
20	Union Ave. On - Ramp and Bascom Ave Off - Ramp	19.14	C	33.38	D
21	Bascom Ave Off - Ramp and SR 17 Off - Ramp	15.33	B	34.53	D
22	SR 17 Off - Ramp and Bascom Ave On - Ramp	17.29	B	36.79	E
23	Bascom Ave On - Ramp and SR 17 On - Ramp	21.82	C	61.52	F
24	SR 17 On - Ramp and Winchester Blvd On - Ramp	30.13	D	124.23	F
25A	Winchester Blvd On - Ramp and –Lane Drop	31.53	D	144.44	F
25B	Lane Drop and Saratoga Ave. Off-Ramp	22.85	C	37.01	E
26	Saratoga Ave. Off - Ramp and Saratoga Ave. On - Ramp	22.04	C	41.29	E
27	Saratoga Ave. On - Ramp and Sunnyvale Saratoga Off - Ramp	32.01	D	84.11	F
28	Sunnyvale Saratoga Rd Off - Ramp and Sunnyvale Saratoga Rd On - Ramp	29.92	D	108.07	F
29	Sunnyvale Saratoga Rd On - Ramp and Stevens Creek Blvd Off - Ramp	29.18	D	44.26	E
30	Stevens Creek Blvd Off - Ramp and I -280 Off - Ramp	11.55	B	28.57	D
31	I - 280 Off - Ramp and SB I - 280 On - Ramp	10.14	A	15.59	B
32	SB I - 280 On - Ramp and I - 280/Stevens Creek Blvd. On - Ramp	11.17	B	20.00	C
33	I - 280/Stevens Creek Blvd. On - Ramp and Homestead On - Ramp	11.27	B	21.84	C
34	Homestead Rd On - Ramp and Fremont Off - Ramp	23.37	C	59.56	F
35	Fremont Off - Ramp and Fremont On - Ramp	21.67	C	87.45	F
36	Fremont On - Ramp and SB Route 82 Off - Ramp	23.57	C	41.06	E
37	SB Route 82 Off - Ramp and SB Route 82 On - Ramp	15.90	B	44.37	E
38	SB Route 82 On - Ramp and NB Route 82 Off - Ramp	15.44	B	42.25	E

*Existing Conditions Traffic Operational Analysis*

No.	SEGMENT	AM PEAK HOUR			
		HOV		Mixed-Flow Lanes	
		Density	LOS	Density	LOS
39	NB Route 82 Off - Ramp and Route 82 On - Ramp	15.58	B	38.92	E
40	Route 82 On - Ramp and EB SR 237 Off - Ramp	16.62	B	42.26	E
41	EB SR 237 Off - Ramp and EB SR 237 On - Ramp	14.99	B	23.70	C
42	EB SR 237 On - Ramp and Evelyn Ave Off - Ramp	13.66	B	24.38	C
43	Evelyn Ave Off - Ramp and Central Expwy On - Ramp	12.51	B	23.11	C
44	Central Expwy On - Ramp and Moffet Blvd. Off - Ramp	14.61	B	28.93	D
45	Moffet Blvd. Off - Ramp and Shoreline Blvd. Off - Ramp /NB SR 85 & NB US 101 Connector	11.15	B	20.01	C

Note: Density is in vehicles per lane per hour.

**Table 11: LOS Summary for Northbound Direction – PM Peak Hour**

No.	SEGMENT	PM PEAK HOUR			
		HOV		Mixed-Flow Lanes	
		Density	LOS	Density	LOS
1	NB Bernal Rd. On - Ramp and SB Bernal Rd. On - Ramp	5.47	A	13.87	B
2	SB Bernal Rd. On - Ramp and SB US 101 on - Ramp	6.54	A	16.31	B
3	SB US 101 On -Ramp and Great Oaks Blvd. On - Ramp	7.07	A	17.83	B
4	Great Oaks Blvd. On – Ramp and Cottle Rd. Off - Ramp	9.94	A	23.51	C
5	Cottle Rd. Off - Ramp and Cottle Rd. On - Ramp	10.21	A	20.16	C
6	Cottle Rd. On - Ramp and Blossom Hill Off - Ramp	14.99	B	28.89	D

*Existing Conditions Traffic Operational Analysis*

No.	SEGMENT	PM PEAK HOUR			
		HOV		Mixed-Flow Lanes	
		Density	LOS	Density	LOS
7	Blossom Hill Off - Ramp and EB Blossom Hill On - Ramp	14.09	B	24.30	C
8	EB Blossom Hill On - Ramp and WB Blossom Hill On - Ramp	14.47	B	27.62	D
9	WB Blossom Hill On - Ramp and SR 87 Off - Ramp	12.83	B	28.13	D
10	SR 87 Off - Ramp and Santa Teresa Blvd Off - Ramp	14.29	B	25.01	C
11	Santa Teresa Blvd Off – Ramp and Santa Teresa Blvd On - Ramp	12.65	B	20.62	C
12	Santa Teresa Blvd On – Ramp and SR 87 On - Ramp	12.64	B	22.87	C
13	SR 87 On - Ramp and Almaden Expwy Off - Ramp	11.61	B	21.11	C
14	Almaden Expwy Off - Ramp and NB Almaden Expwy On - Ramp	12.62	B	22.18	C
15	NB Almaden Expwy On - Ramp and SB Almaden Expwy On - Ramp	18.28	C	34.80	D
16	SB Almaden Expwy On - Ramp and Camden Ave Off - Ramp	16.11	B	28.33	D
17	Camden Ave Off - Ramp and Camden Ave On - Ramp	14.13	B	21.92	C
18	Camden Ave On - Ramp and Union Ave. Off - Ramp	13.50	B	24.65	C
19	Union Ave. Off - Ramp and Union Ave. On - Ramp	14.89	B	25.55	C
20	Union Ave. On - Ramp and Bascom Ave Off - Ramp	11.38	B	26.13	D
21	Bascom Ave Off - Ramp and SR 17 Off - Ramp	7.35	A	24.21	C
22	SR 17 Off - Ramp and Bascom Ave On - Ramp	7.50	A	12.90	B
23	Bascom Ave On - Ramp and SR 17 On - Ramp	8.32	A	15.68	B
24	SR 17 On - Ramp and Winchester Blvd On - Ramp	8.65	A	15.72	B
25	Winchester Blvd On - Ramp and Saratoga Ave. Off - Ramp	10.25	A	24.52	C
26	Saratoga Ave. Off - Ramp and Saratoga Ave. On - Ramp	12.70	B	16.61	B

*Existing Conditions Traffic Operational Analysis*

No.	SEGMENT	PM PEAK HOUR			
		HOV		Mixed-Flow Lanes	
		Density	LOS	Density	LOS
27	Saratoga Ave. On - Ramp and Sunnyvale Saratoga Off - Ramp	12.04	B	20.85	C
28	Sunnyvale Saratoga Off - Ramp and Sunnyvale Saratoga On - Ramp	10.74	A	16.47	B
29	Sunnyvale Saratoga On - Ramp and Stevens Creek Off - Ramp	12.29	B	21.05	C
30	Stevens Creek Off - Ramp and I -280 Off - Ramp	6.66	A	17.55	B
31	I - 280 Off - Ramp and SB I - 280 On - Ramp	6.10	A	8.82	A
32	SB I - 280 On - Ramp and I - 280/Stevens Creek Blvd. On - Ramp	6.87	A	12.32	B
33	I - 280/Stevens Creek Blvd. On - Ramp and Homestead On - Ramp	7.26	A	15.30	B
34	Homestead On - Ramp and Fremont Off - Ramp	15.18	B	26.32	D
35	Fremont Off - Ramp and Fremont On - Ramp	12.71	B	19.43	C
36	Fremont On - Ramp and SB Route 82 Off - Ramp	11.15	B	22.39	C
37	SB Route 82 Off - Ramp and SB Route 82 On - Ramp	17.88	B	17.88	B
38	SB Route 82 On - Ramp and NB Route 82 Off - Ramp	8.22	A	22.96	C
39	NB Route 82 Off - Ramp and Route 82 On - Ramp	8.33	A	19.74	C
40	Route 82 On - Ramp and EB SR 237 Off - Ramp	8.43	A	16.50	B
41	EB SR 237 Off - Ramp and EB SR 237 On - Ramp	8.33	A	12.19	B
42	EB SR 237 On - Ramp and Evelyn Ave Off - Ramp	7.66	A	12.31	B
43	Evelyn Ave Off - Ramp and Central Expwy On - Ramp	6.97	A	11.49	B
44	Central Expwy On - Ramp and Moffet Blvd. Off - Ramp	6.84	A	14.22	B
45	Moffet Blvd. Off - Ramp and Shoreline Blvd. Off - Ramp /NB SR 85 & NB US 101 Connector	6.74	A	10.23	A

Note: Density is in vehicles per lane per hour.

**Table 12: LOS Summary for Southbound Direction – AM Peak Hour**

No.	SEGMENT	AM PEAK HOUR			
		HOV		Mixed-Flow Lanes	
		Density	LOS	Density	LOS
1	SR 85 Connector /Shoreline On - Ramp and Moffet Blvd. On - Ramp	5.91	A	6.48	A
2	Moffet Blvd. On - Ramp and Central Expwy. Off - Ramp	5.12	A	8.30	A
3	Central Expwy. Off - Ramp and Evelyn Ave. On - Ramp	4.68	A	7.83	A
4	Evelyn Ave. On - Ramp and SR 237 Off - Ramp	4.30	A	8.83	A
5	SR 237 Off - Ramp and SR 237 On - Ramp	4.32	A	8.79	A
6	SR 237 On - Ramp and NB Route 82 On - Ramp	4.56	A	14.50	B
7	NB Route 82 On - Ramp and Route 82 Off - Ramp	4.85	A	16.31	B
8	Route 82 Off - Ramp and SB Route 82 On - Ramp	5.51	A	15.05	B
9	SB Route 82 On - Ramp and Fremont Off - Ramp	8.07	A	15.95	B
10	Fremont Off - Ramp and Fremont On - Ramp	7.28	A	15.14	B
11	Fremont On - Ramp and Homestead Off - Ramp	5.56	A	21.87	C
12	Homestead Off - Ramp and I - 280 Off - Ramp	3.26	A	14.61	B
13	I - 280 Off - Ramp and NB I - 280 On - Ramp	3.32	A	5.98	A
14	NB I - 280 On - Ramp and SB I - 280 On - Ramp	3.58	A	8.39	A
15	SB I - 280 On - Ramp and Stevens Creek Blvd. Off - Ramp	3.04	A	8.36	A
16	Stevens Creek Blvd. Off - Ramp and Stevens Creek Blvd. On - Ramp	3.04	A	7.05	A
17	Stevens Creek Blvd. On - Ramp and De Anza Blvd. Off - Ramp	5.07	A	11.35	B
18	De Anza Blvd. Off - Ramp and De Anza Blvd. On - Ramp	4.99	A	8.58	A

*Existing Conditions Traffic Operational Analysis*

No.	SEGMENT	AM PEAK HOUR			
		HOV		Mixed-Flow Lanes	
		Density	LOS	Density	LOS
19	De Anza Blvd. On - Ramp and Saratoga Ave. Off - Ramp	5.65	A	10.44	A
20	Saratoga Ave. Off - Ramp and Saratoga Ave. On - Ramp	4.66	A	7.59	A
21	Saratoga Ave. On – Ramp and Winchester Blvd. Off - Ramp	7.54	A	13.49	B
22	Winchester Blvd. Off - Ramp and SR 17 Off - Ramp	5.07	A	10.83	A
23	SR 17 Off - Ramp and Bascom Ave. Off - Ramp	3.76	A	7.24	A
24	Bascom Ave. Off – Ramp and SR 17 On - Ramp	3.45	A	5.61	A
25	SR 17 On - Ramp and Bascom Ave. On - Ramp	3.36	A	8.38	A
26	Bascom Ave. On – Ramp and Union Ave./Samartin Dr. Off - Ramp	4.27	A	16.82	B
27	Union Ave./Samartin Dr. Off - Ramp and Union Ave. On - Ramp	5.97	A	15.24	B
28	Union Ave. On - Ramp and Camden Ave. Off - Ramp	7.61	A	19.71	C
29	Camden Ave. Off – Ramp and Camden Ave. On - Ramp	6.98	A	13.37	B
30	Camden Ave. On – Ramp and Almaden Expwy. Off - Ramp	7.48	A	17.19	B
31	Almaden Expwy. Off - Ramp and SB Almaden Expwy. On - Ramp	6.34	A	13.86	B
32	SB Almaden Expwy. On - Ramp and NB Almaden Expwy. On - Ramp	6.17	A	13.79	B
33	NB Almaden Expwy. On - Ramp and SR 87 Off - Ramp	6.06	A	16.18	B
34	SR 87 Off - Ramp and Santa Teresa Blvd. Off - Ramp	5.88	A	15.58	B
35	Santa Teresa Blvd. Off - Ramp and Santa Teresa Blvd. On - Ramp	6.55	A	20.98	C
36	Santa Teresa Blvd. On - Ramp and SR 87 On - Ramp	7.19	A	22.08	C
37	SR 87 On - Ramp and Blossom Hill Rd. Off - Ramp	8.33	A	27.86	D
38	Blossom Hill Rd. Off - Ramp and WB Blossom Hill Rd. On - Ramp	8.43	A	26.36	D

*Existing Conditions Traffic Operational Analysis*

No.	SEGMENT	AM PEAK HOUR			
		HOV		Mixed-Flow Lanes	
		Density	LOS	Density	LOS
39	WB Blossom Hill Rd. On - Ramp and EB Blossom Hill Rd. On - Ramp	8.63	A	27.57	D
40	EB Blossom Hill Rd. On - Ramp and Cottle Rd. Off - Ramp	7.72	A	25.98	C
41	Cottle Rd. Off - Ramp and SB Cottle Rd. On - Ramp	7.69	A	23.48	C
42	SB Cottle Rd. On - Ramp and NB Cottle Rd. On - Ramp	7.71	A	24.24	C
43	NB Cottle Rd. On - Ramp and Great Oaks Blvd Off - Ramp	7.18	A	26.28	D
44	Great Oaks Blvd Off - Ramp and Bernal Rd. Off - Ramp	5.83	A	21.25	C
45	Bernal Rd. Off - Ramp and SR 85 Split	6.32	A	17.45	B

Note: Density is in vehicles per lane per hour.

**Table 13: LOS Summary for Southbound Direction – PM Peak Hour**

No.	SEGMENT	PM PEAK HOUR			
		HOV		Mixed-Flow Lanes	
		Density	LOS	Density	LOS
1	SR 85 Connector /Shoreline Blvd. On - Ramp and Moffet Blvd. On - Ramp	15.53	B	31.24	D
2	Moffet Blvd. On - Ramp and Central Expwy. Off - Ramp	19.04	C	40.50	E
3	Central Expwy. Off - Ramp and Evelyn Ave. On - Ramp	18.17	C	93.31	F
4	Evelyn Ave. On - Ramp and SR 237 Off - Ramp	19.28	C	120.70	F
5	SR 237 Off - Ramp and SR 237 On - Ramp	19.24	C	124.34	F
6	SR 237 On - Ramp and NB Route 82 On - Ramp	21.86	C	102.81	F

*Existing Conditions Traffic Operational Analysis*

No.	SEGMENT	PM PEAK HOUR			
		HOV		Mixed-Flow Lanes	
		Density	LOS	Density	LOS
7	NB Route 82 On - Ramp and Route 82 Off - Ramp	18.74	C	91.06	F
8	Route 82 Off - Ramp and SB Route 82 On - Ramp	19.04	C	79.42	F
9	SB Route 82 On - Ramp and Fremont Ave. Off - Ramp	23.97	C	35.92	E
10	Fremont Ave. Off - Ramp and Fremont Ave. On - Ramp	22.14	C	82.38	F
11	Fremont Ave. On - Ramp and Homestead Rd. Off - Ramp	23.18	C	44.92	E
12	Homestead Rd. Off - Ramp and I - 280 Off - Ramp	11.26	B	33.04	D
13	I - 280 Off - Ramp and NB I - 280 On - Ramp	11.04	B	18.17	C
14	NB I - 280 On - Ramp and SB I - 280 On - Ramp	11.77	B	22.44	C
15	SB I - 280 On - Ramp and Stevens Creek Blvd. Off - Ramp	10.82	A	28.06	D
16	Stevens Creek Blvd. Off - Ramp and Stevens Creek Blvd. On - Ramp	18.33	C	21.48	C
17A	Stevens Creek Blvd. On - Ramp and Lane Drop	18.05	C	44.47	E
17B	Lane Drop and De Anza Blvd. Off-Ramp	19.82	C	43.63	E
18	De Anza Blvd. Off - Ramp and De Anza Blvd. On - Ramp	17.98	B	28.18	D
19	De Anza Blvd. On - Ramp and Saratoga Ave. Off - Ramp	20.73	C	35.64	E
20	Saratoga Ave. Off - Ramp and Saratoga Ave. On - Ramp	23.30	C	56.58	F
21	Saratoga Ave. On - Ramp and Winchester Blvd. Off - Ramp	21.27	C	35.39	E
22	Winchester Blvd. Off - Ramp and SR 17 Off - Ramp	17.15	B	27.08	D
23	SR 17 Off - Ramp and Bascom Ave. Off - Ramp	15.68	B	27.55	D
24	Bascom Ave. Off - Ramp and SR 17 On - Ramp	15.08	B	29.89	D
25	SR 17 On - Ramp and Bascom Ave. On - Ramp	30.03	D	132.66	F

*Existing Conditions Traffic Operational Analysis*

No.	SEGMENT	PM PEAK HOUR			
		HOV		Mixed-Flow Lanes	
		Density	LOS	Density	LOS
26	Bascom Ave. On – Ramp and Union Ave./Samartin Dr. Off - Ramp	28.37	D	113.34	F
27	Union Ave./Samartin Dr. Off - Ramp and Union Ave. On - Ramp	22.86	C	83.56	F
28	Union Ave. On - Ramp and Camden Ave. Off - Ramp	17.53	B	35.29	E
29	Camden Ave. Off – Ramp and Camden Ave. On - Ramp	17.17	B	34.25	D
30	Camden Ave. On – Ramp and Almaden Expwy. Off - Ramp	19.47	C	37.01	E
31	Almaden Expwy. Off - Ramp and SB Almaden Expwy. On - Ramp	14.79	B	27.75	D
32	SB Almaden Expwy. On - Ramp and NB Almaden Expwy. On - Ramp	13.98	B	27.51	D
33	NB Almaden Expwy. On - Ramp and SR 87 Off - Ramp	14.09	B	37.30	E
34	SR 87 Off - Ramp and Santa Teresa Blvd. Off - Ramp	16.52	B	62.65	F
35	Santa Teresa Blvd. Off - Ramp and Santa Teresa Blvd. On - Ramp	13.62	B	46.64	F
36	Santa Teresa Blvd. On - Ramp and SR 87 On - Ramp	15.17	B	57.50	F
37	SR 87 On - Ramp and Blossom Hill Rd. Off - Ramp	13.51	B	44.49	E
38	Blossom Hill Rd. Off - Ramp and WB Blossom Hill Rd. On - Ramp	12.39	B	31.67	D
39	WB Blossom Hill Rd. On - Ramp and EB Blossom Hill Rd. On - Ramp	12.43	B	33.98	D
40	EB Blossom Hill Rd. On - Ramp and Cottle Rd. Off - Ramp	9.69	A	30.27	D
41	Cottle Rd. Off - Ramp and SB Cottle Rd. On - Ramp	9.33	A	24.00	C
42	SB Cottle Rd. On – Ramp and NB Cottle Rd. On - Ramp	9.23	A	25.45	C
43	NB Cottle Rd. On – Ramp and Great Oaks Blvd. Off - Ramp	8.75	A	28.10	D
44	Great Oaks Blvd Off - Ramp and Bernal Rd. Off - Ramp	6.56	A	24.86	C
45	Bernal Rd. Off - Ramp and SR 85 Split	6.90	A	16.06	B

Note: Density is in vehicles per lane per hour.

*Existing Conditions Traffic Operational Analysis*

As illustrated in **Table 10**, twenty one of the mixed-flow mainline segments in the northbound direction during a.m. peak hour are operating at LOS E or higher. All of the HOV lane segments in the northbound direction during the a.m. peak hour are operating at LOS D or better. As illustrated in **Table 11**, all of the HOV and mainline segments in the northbound direction during the p.m. peak hour are operating at LOS D or better. As illustrated in **Table 12**, all of the HOV and mixed-flow mainline segments are operating at LOS D or better during the a.m. peak hour in the southbound direction. As illustrated in **Table 13**, twenty five of the mixed-flow lanes segments in southbound direction during the p.m. peak hour are operating at LOS E or higher. All of the HOV lane segments in the southbound direction during the p.m. peak hour are operating at LOS D or better. Detailed summary of density and speed is attached in **Appendix D**.

Review of average speed in the HOV lane revealed that the average speed in the following segments drops due to operational problems resulting from merge/diverge of HOV vehicles in/out of the HOV lane and not due to demand exceeding capacity of this segments. HOV segments in which the average speed drops by approximately 10 mph or more are:

**Northbound AM Peak Hour**

- between Almaden Expressway Loop On-Ramp and Camden Avenue Off-Ramp
- between Union Avenue Off-Ramp and On-Ramp
- between SR 17 On-Ramp and Lane drop near Winchester Boulevard On-Ramp
- between Saratoga Avenue On-Ramp and Stevens Creek Boulevard Off-Ramp
- between Homestead Road On-Ramp and Southbound Route 82 Off-Ramp

**Southbound PM Peak Hour**

- between Moffett Boulevard On-Ramp to Fremont Avenue Off-Ramp
- between SR 17 On-Ramp and Union Avenue Off-Ramp
- between SR 87 Off-Ramp and Santa Teresa Boulevard Off-Ramp

# APPENDIX A

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## MAINLINE COUNTS

# BayMetrics

## VEHICLE VOLUME SUMMARY

<b>PROJECT:</b> VTA 85 EXPRESS LANE		<b>SURVEY DATE:</b> 5/26/2010				<b>DAY:</b> WEDNESDAY								
<b>N-S Approach:</b> SR-85 NORTHBOUND		<b>SURVEY TIME:</b> 6:30 AM TO 9:30 AM												
<b>E-W Approach:</b> SR-85 SOUTHBOUND		<b>CITY:</b> SANTA CLARA COUNTY				<b>FILE:</b> 3005037-AM								
<b>NORTHBOUND:</b>				<b>SOUTHBOUND:</b>										
1. Between Cottle Road Off-Ramp and On-Ramp 2. Between Almaden Expressway On-Ramp and Camden Avenue Off-Ramp 3. Between Union Avenue On-Ramp and Bascom Avenue Off-Ramp 4. Between Lane Drop north of Winchester Blvd and Saratoga Avenue Off-Ramp 5. Between El Camino Real Off-Ramp and On-Ramp				6. Between Fremont Avenue On-Ramp and Homestead Road Off-Ramp 7. Between Saratoga-Sunnyvale Road Off-Ramp and On-Ramp 8. Between Lane Add before Winchester Blvd and Winchest Blvd Off-Ramp 9. Between Union Avenue On-Ramp and Camden Avenue Off-Ramp 10. Between Blossom Hill Road Off-Ramp and Loop On-Ramp										
<b>PEAK HOUR:</b> 07:45 AM TO 08:45 AM														
<b>DIRECTION LOCATION # of Vehicles</b>		<b>NORTHBOUND</b>					<b>SOUTHBOUND</b>					<b>NB &amp; SB COMBINED</b>		
		1	2	3	4	5	<b>TOTAL</b>	6	7	8	9	10	<b>TOTAL</b>	<b>41,451</b>
		3,114	5,319	6,061	4,980	5,361	24,835	3,926	2,295	3,359	3,699	3,337	16,616	
		<b>NORTHBOUND</b>					<b>SOUTHBOUND</b>					<b>NB &amp; SB COMBINED</b>		
<b>From</b>	<b>To</b>	1	2	3	4	5	<b>TOTAL</b>	6	7	8	9	10	<b>TOTAL</b>	<b>COMBINED</b>
<b>SURVEY DATA</b>														
06:30 AM	----- 06:45 AM	568	1,098	1,297	1,130	931	5,024	355	183	250	339	384	1,511	6,535
06:45 AM	----- 07:00 AM	1,275	2,344	2,698	2,435	2,085	10,837	799	418	595	807	822	3,441	14,278
07:00 AM	----- 07:15 AM	2,029	3,593	4,180	3,700	3,240	16,742	1,395	747	1,003	1,311	1,278	5,734	22,476
07:15 AM	----- 07:30 AM	2,878	4,953	5,782	5,030	4,435	23,078	2,114	1,152	1,566	1,985	1,914	8,731	31,809
07:30 AM	----- 07:45 AM	3,821	6,261	7,200	6,370	5,794	29,446	3,025	1,737	2,239	2,846	2,655	12,502	41,948
07:45 AM	----- 08:00 AM	4,726	7,683	8,715	7,630	7,200	35,954	4,016	2,199	3,033	3,841	3,516	16,605	52,559
08:00 AM	----- 08:15 AM	5,522	9,073	10,237	8,840	8,531	42,203	4,915	2,783	3,876	4,679	4,306	20,559	62,762
08:15 AM	----- 08:30 AM	6,222	10,340	11,768	10,090	9,871	48,291	5,977	3,372	4,733	5,602	5,166	24,850	73,141
08:30 AM	----- 08:45 AM	6,935	11,580	13,261	11,350	11,155	54,281	6,951	4,032	5,598	6,545	5,992	29,118	83,399
08:45 AM	----- 09:00 AM	7,590	12,832	14,766	12,510	12,493	60,191	7,997	4,723	6,613	7,452	6,799	33,584	93,775
09:00 AM	----- 09:15 AM	8,268	14,060	16,223	13,870	13,869	66,290	8,896	5,330	7,418	8,200	7,483	37,327	103,617
09:15 AM	----- 09:30 AM	8,919	15,190	17,802	15,020	15,221	72,152	9,844	5,799	8,203	8,956	8,108	40,910	113,062
<b>TOTAL BY PERIOD</b>														
06:30 AM	----- 06:45 AM	568	1,098	1,297	1,130	931	5,024	355	183	250	339	384	1,511	6,535
06:45 AM	----- 07:00 AM	707	1,246	1,401	1,305	1,154	5,813	444	235	345	468	438	1,930	7,743
07:00 AM	----- 07:15 AM	754	1,249	1,482	1,265	1,155	5,905	596	329	408	504	456	2,293	8,198
07:15 AM	----- 07:30 AM	849	1,360	1,602	1,330	1,195	6,336	719	405	563	674	636	2,997	9,333
07:30 AM	----- 07:45 AM	943	1,308	1,418	1,340	1,359	6,368	911	585	673	861	741	3,771	10,139
07:45 AM	----- 08:00 AM	905	1,422	1,515	1,260	1,406	6,508	991	462	794	995	861	4,103	10,611
08:00 AM	----- 08:15 AM	796	1,390	1,522	1,210	1,331	6,249	899	584	843	838	790	3,954	10,203
08:15 AM	----- 08:30 AM	700	1,267	1,531	1,250	1,340	6,088	1,062	589	857	923	860	4,291	10,379
08:30 AM	----- 08:45 AM	713	1,240	1,493	1,260	1,284	5,990	974	660	865	943	826	4,268	10,258
08:45 AM	----- 09:00 AM	655	1,252	1,505	1,160	1,338	5,910	1,046	691	1,015	907	807	4,466	10,376
09:00 AM	----- 09:15 AM	678	1,228	1,457	1,360	1,376	6,099	899	607	805	748	684	3,743	9,842
09:15 AM	----- 09:30 AM	651	1,130	1,579	1,150	1,352	5,862	948	469	785	756	625	3,583	9,445
<b>HOURLY TOTALS</b>														
06:30 AM	----- 07:30 AM	2,878	4,953	5,782	5,030	4,435	23,078	2,114	1,152	1,566	1,985	1,914	8,731	31,809
06:45 AM	----- 07:45 AM	3,253	5,163	5,903	5,240	4,863	24,422	2,670	1,554	1,989	2,507	2,271	10,991	35,413
07:00 AM	----- 08:00 AM	3,451	5,339	6,017	5,195	5,115	25,117	3,217	1,781	2,438	3,034	2,694	13,164	38,281
07:15 AM	----- 08:15 AM	3,493	5,480	6,057	5,140	5,291	25,461	3,520	2,036	2,873	3,368	3,028	14,825	40,286
07:30 AM	----- 08:30 AM	3,344	5,387	5,986	5,060	5,436	25,213	3,863	2,220	3,167	3,617	3,252	16,119	41,332
07:45 AM	----- 08:45 AM	3,114	5,319	6,061	4,980	5,361	24,835	3,926	2,295	3,359	3,699	3,337	16,616	41,451
08:00 AM	----- 09:00 AM	2,864	5,149	6,051	4,880	5,293	24,237	3,981	2,524	3,580	3,611	3,283	16,979	41,216
08:15 AM	----- 09:15 AM	2,746	4,987	5,986	5,030	5,338	24,087	3,981	2,547	3,542	3,521	3,177	16,768	40,855
08:30 AM	----- 09:30 AM	2,697	4,850	6,034	4,930	5,350	23,861	3,867	2,427	3,470	3,354	2,942	16,060	39,921
<b>TEL: (510) 232-1271 FAX: (510) 232-1272</b>														

# BayMetrics

## VEHICLE VOLUME SUMMARY

PROJECT: VTA 85 EXPRESS LANE		SURVEY DATE: 5/27/2010				DAY: THURSDAY								
N-S Approach: SR-85 NORTHBOUND		SURVEY TIME: 4:00 PM TO 7:00 PM												
E-W Approach: SR-85 SOUTHBOUND		CITY: SANTA CLARA COUNTY				FILE: 3005037-PM								
<b>NORTHBOUND:</b> 1. Between Cottle Road Off-Ramp and On-Ramp 2. Between Almaden Expressway On-Ramp and Camden Avenue Off-Ramp 3. Between Union Avenue On-Ramp and Bascom Avenue Off-Ramp 4. Between Lane Drop north of Winchester Blvd and Saratoga Avenue Off-Ramp 5. Between El Camino Real Off-Ramp and On-Ramp					<b>SOUTHBOUND:</b> 6. Between Fremont Avenue On-Ramp and Homeslead Road Off-Ramp 7. Between Saratoga-Sunnyvale Road Off-Ramp and On-Ramp 8. Between Lane Add before Winchester Blvd and Winchest Blvd Off-Ramp 9. Between Union Avenue On-Ramp and Camden Avenue Off-Ramp 10. Between Blossom Hill Road Off-Ramp and Loop On-Ramp									
<p style="font-size: 1.2em; margin: 0;"><b>← Loop Diagonal</b></p>														
PEAK HOUR: 05:00 PM TO 06:00 PM														
DIRECTION LOCATION # of Vehicles	NORTHBOUND					SOUTHBOUND					NB & SB COMBINED			
	1	2	3	4	5	TOTAL	6	7	8	9	10	TOTAL	44,826	
	2,950	4,378	4,864	4,178	3,136	19,506	5,241	4,982	4,905	5,496	4,696	25,320		
From	To	NORTHBOUND					SOUTHBOUND					NB & SB COMBINED		
		1	2	3	4	5	TOTAL	6	7	8	9	10	TOTAL	
<b>SURVEY DATA</b>														
04:00 PM	04:15 PM	729	1,048	1,107	710	711	4,305	1,232	1,114	1,240	1,370	1,100	6,056	10,361
04:15 PM	04:30 PM	1,438	2,068	2,144	1,572	1,404	8,626	2,468	2,287	2,462	2,753	2,194	12,164	20,790
04:30 PM	04:45 PM	2,152	3,095	3,218	2,425	2,065	12,955	3,692	3,394	3,740	4,170	3,285	18,281	31,236
04:45 PM	05:00 PM	2,872	4,128	4,286	3,352	2,761	17,399	4,956	4,501	5,052	5,588	4,372	24,469	41,868
05:00 PM	05:15 PM	3,572	5,189	5,466	4,400	3,522	22,149	6,255	5,822	6,328	7,004	5,651	31,060	53,209
05:15 PM	05:30 PM	4,327	6,348	6,685	5,450	4,353	27,163	7,600	7,105	7,502	8,422	6,756	37,385	64,548
05:30 PM	05:45 PM	5,109	7,537	7,994	6,490	5,034	32,164	8,910	8,365	8,708	9,858	7,968	43,809	75,973
05:45 PM	06:00 PM	5,822	8,506	9,150	7,530	5,897	36,905	10,197	9,483	9,957	11,084	9,068	49,789	86,694
06:00 PM	06:15 PM	6,471	9,501	10,312	8,580	6,665	41,529	11,537	10,550	11,143	12,382	10,056	55,668	97,197
06:15 PM	06:30 PM	7,029	10,477	11,431	9,560	7,498	45,995	12,760	11,565	12,277	13,705	11,050	61,457	107,452
06:30 PM	06:45 PM	7,627	11,292	12,339	10,430	8,277	49,965	13,987	12,682	13,456	15,047	11,993	67,165	117,130
06:45 PM	07:00 PM	8,157	13,100	13,262	11,182	8,996	54,697	15,184	13,699	14,558	16,415	12,948	72,804	127,501
<b>TOTAL BY PERIOD</b>														
04:00 PM	04:15 PM	729	1,048	1,107	710	711	4,305	1,232	1,114	1,240	1,370	1,100	6,056	10,361
04:15 PM	04:30 PM	709	1,020	1,037	862	693	4,321	1,236	1,173	1,222	1,383	1,094	6,108	10,429
04:30 PM	04:45 PM	714	1,027	1,074	853	661	4,329	1,224	1,107	1,278	1,417	1,091	6,117	10,446
04:45 PM	05:00 PM	720	1,033	1,068	927	696	4,444	1,264	1,107	1,312	1,418	1,087	6,188	10,632
05:00 PM	05:15 PM	700	1,061	1,180	1,048	761	4,750	1,299	1,321	1,276	1,416	1,279	6,591	11,341
05:15 PM	05:30 PM	755	1,159	1,219	1,050	831	5,014	1,345	1,283	1,174	1,418	1,105	6,325	11,339
05:30 PM	05:45 PM	782	1,189	1,309	1,040	681	5,001	1,310	1,260	1,206	1,436	1,212	6,424	11,425
05:45 PM	06:00 PM	713	969	1,156	1,040	863	4,741	1,287	1,118	1,249	1,226	1,100	5,980	10,721
06:00 PM	06:15 PM	649	995	1,162	1,050	768	4,624	1,340	1,067	1,186	1,298	988	5,879	10,503
06:15 PM	06:30 PM	558	976	1,119	980	833	4,466	1,223	1,115	1,134	1,323	994	5,789	10,255
06:30 PM	06:45 PM	598	815	908	870	779	3,970	1,227	1,017	1,179	1,342	943	5,708	9,678
06:45 PM	07:00 PM	530	1,808	923	752	719	4,732	1,197	1,017	1,102	1,368	955	5,639	10,371
<b>HOURLY TOTALS</b>														
04:00 PM	05:00 PM	2,872	4,128	4,286	3,352	2,761	17,399	4,956	4,501	5,052	5,588	4,372	24,469	41,868
04:15 PM	05:15 PM	2,843	4,141	4,359	3,690	2,811	17,844	5,023	4,708	5,088	5,634	4,551	25,004	42,848
04:30 PM	05:30 PM	2,889	4,280	4,541	3,878	2,949	18,537	5,132	4,818	5,040	5,669	4,562	25,221	43,758
04:45 PM	05:45 PM	2,957	4,442	4,776	4,065	2,969	19,209	5,218	4,971	4,968	5,688	4,683	25,528	44,737
05:00 PM	06:00 PM	2,950	4,378	4,864	4,178	3,136	19,506	5,241	4,982	4,905	5,496	4,696	25,320	44,826
05:15 PM	06:15 PM	2,899	4,312	4,846	4,180	3,143	19,380	5,282	4,728	4,815	5,378	4,405	24,608	43,988
05:30 PM	06:30 PM	2,702	4,129	4,746	4,110	3,145	18,832	5,160	4,560	4,775	5,283	4,294	24,072	42,904
05:45 PM	06:45 PM	2,518	3,755	4,345	3,940	3,243	17,801	5,077	4,317	4,748	5,189	4,025	23,356	41,157
06:00 PM	07:00 PM	2,335	4,594	4,112	3,652	3,099	17,792	4,987	4,216	4,601	5,331	3,880	23,015	40,807

TEL: (510) 232-1271

FAX: (510) 232-1272

# Bay Metrics

## VEHICLE VOLUME SUMMARY

PROJECT: VTA 85 EXPRESS LANE SURVEY DATE: 6 / 10 / 2010 DAY: THURSDAY  
 N-S Approach: SR-85 NORTHBOUND SURVEY TIME: 8:45 AM TO 9:45 AM  
 CITY: SANTA CLARA COUNTY FILE: 3005037-AM

**NORTHBOUND:**  
 3. Between Union Avenue On-Ramp and Bascom Avenue Off-Ramp  
 4. Between Lane Drop north of Winchester Blvd and Saratoga Avenue Off-Ramp  
 5. Between El Camino Real Off-Ramp and On-Ramp  


PEAK HOUR: 07:45 AM TO 08:45 AM

DIRECTION	NORTHBOUND:				NORTHBOUND:				NORTHBOUND:						
LOCATION	3				4				5						
LANE #	HOV	#2	#3	#4	TOTAL	HOV	#2	#3	#4	TOTAL	HOV	#2	#3	#4	TOTAL
# of Vehicles	1,105	1,755	1,859	1,739	6,458	1,483	2,027	1,843	1,404	4,005	943	2,116	2,263	5,322	

From	To	NORTHBOUND				NORTHBOUND				NORTHBOUND						
		HOV	#2	#3	#4	TOTAL	HOV	#2	#3	#4	TOTAL	HOV	#2	#3	#4	TOTAL
07:45 AM	08:00 AM	311	421	461	437	1,630	388	479	468	468	1,335	245	530	534	534	1,309
08:00 AM	08:15 AM	628	875	940	862	3,305	750	956	923	923	2,629	461	1,042	1,108	1,108	2,611
08:15 AM	08:30 AM	873	1,334	1,392	1,293	4,892	1,113	1,488	1,404	1,404	4,005	683	1,539	1,671	1,671	3,893
08:30 AM	08:45 AM	1,105	1,755	1,859	1,739	6,458	1,483	2,027	1,843	1,843	5,353	943	2,116	2,263	2,263	5,322

**TOTAL BY PERIOD**

07:45 AM	08:00 AM	311	421	461	437	1,630	388	479	468	468	1,335	245	530	534	534	1,309
08:00 AM	08:15 AM	317	454	479	425	1,675	362	477	455	455	1,294	216	512	574	574	1,302
08:15 AM	08:30 AM	245	459	452	431	1,587	363	532	481	481	1,376	222	497	563	563	1,282
08:30 AM	08:45 AM	232	421	467	446	1,566	370	539	439	439	1,348	260	577	592	592	1,429

**HOURLY TOTALS**

07:45 AM	08:45 AM	1,105	1,755	1,859	1,739	6,458	1,483	2,027	1,843	1,843	5,353	943	2,116	2,263	2,263	5,322
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TEL: (510) 232-1271 FAX: (510) 232-1272

# Bay Metrics

## VEHICLE VOLUME SUMMARY

**PROJECT:** VTA 85 EXPRESS LANE      **SURVEY DATE:** 6/10/2010      **DAY:** THURSDAY  
**N-S Approach:** SR-85 SOUTHBOUND      **SURVEY TIME:** 5:00 PM TO 6:00 PM  
**CITY:** SANTA CLARA COUNTY      **FILE:** 3005037-PM

**SOUTHBOUND:**

- 6. Between Fremont Avenue On-Ramp and Homestead Road Off-Ramp
- 7. Between Saratoga-Sunnyvale Road Off-Ramp and On-Ramp
- 8. Between Lane Add before Winchester Blvd and Winchest Blvd Off-Ramp

**PEAK HOUR:** 05:00 PM TO 06:00 PM

**DIRECTION**

**LOCATION**

**LANE #**

**# of Vehicles**

**SOUTHBOUND:**

HOV	#2	#3	#4	TOTAL
1,393	2,040	1,220		4,653

**SOUTHBOUND:**

HOV	#2	#3	TOTAL
1,367	1,932	2,076	5,375

**From To SOUTHBOUND: #2 #3 #4 TOTAL**

From	To	HOV	#2	#3	#4	TOTAL
05:00 PM	05:15 PM	296	459	377	301	1,433
05:15 PM	05:30 PM	607	898	800	592	2,897
05:30 PM	05:45 PM	908	1,296	1,167	872	4,243
05:45 PM	06:00 PM	1,195	1,711	1,521	1,181	5,608

**SURVEY DATA**

From	To	HOV	#2	#3	#4	TOTAL
05:00 PM	05:15 PM	321	493	540		1,354
05:15 PM	05:30 PM	652	983	1,054		2,689
05:30 PM	05:45 PM	985	1,466	1,575		4,026
05:45 PM	06:00 PM	1,367	1,932	2,076		5,375

**TOTAL BY PERIOD**

From	To	HOV	#2	#3	#4	TOTAL
05:00 PM	05:15 PM	296	459	377	301	1,433
05:15 PM	05:30 PM	311	439	423	291	1,464
05:30 PM	05:45 PM	301	398	367	280	1,346
05:45 PM	06:00 PM	287	415	354	309	1,365

**HOURLY TOTALS**

From	To	HOV	#2	#3	#4	TOTAL
05:00 PM	06:00 PM	1,195	1,711	1,521	1,181	5,608
		1,393	2,040	1,220		4,653
		1,367	1,932	2,076		5,375

TEL: (510) 232-1271

FAX: (510) 232-1272

# 24-HOUR TRAFFIC VOLUMES

**Traffic Volumes Counts**

24 hour Period Hourly Counts - Northbound SR 85

Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	SCL	101	R	26.237	F	N	NB OFF TO NB RTE 85 (GP)	10/29/2009	THU	35	24	18	21	74	566	1,089	742	704	599	550	507	493	550	650	960	1,127	1,325	1,061	491				12,408	
4	SCL	101	R	26.237	F	N	NB OFF TO NB RTE 85 (GP)	10/28/2009	WED	36	24	21	30	80	555	1,093	750	714	617	500	514	515	534	654	945	1,156	1,474	1,124	466				12,551	
4	SCL	101	R	26.237	F	N	NB OFF TO NB RTE 85 (GP)	10/27/2009	TUE	40	31	16	30	83	583	1,094	744	722	546	519	462	517	522	613	875	1,102	1,291	1,022	423				11,898	
4	SCL	101	R	26.237	F	N	NB OFF TO NB RTE 85 (GP)			37	26	18	27	79	568	1,092	745	713	587	523	494	508	535	639	927	1,128	1,363	1,069	460				12286	
4	SCL	101	R	26.237	F	N	NB OFF TO NB RTE 85 (HOV)	4/1/2010	THU						150	502	860	642	1,045	821				687	374	363	445	483	479					
4	SCL	101	R	26.237	F	N	NB OFF TO NB RTE 85 (HOV)	3/31/2010	WED						158	449	830	605	1,010	816				673	400	397	451	358	454					
4	SCL	101	R	26.237	F	N	NB OFF TO NB RTE 85 (HOV)	3/30/2010	TUE						176	482	834	644	992	717				714	382	338	368	338	400					
4	SCL	101	R	26.237	F	N	NB OFF TO NB RTE 85 (HOV)								161	478	841	630	1,016	785				691	385	366	421	393	444					
4	SCL	85		0.145	N	N	NB ON FR NB BERNAL	7/31/2007	TUE	30	21	13	12	34	133	439	549	507	378	311	311	328	345	347	297	408	492	424	361	316	242	136	73	6507
4	SCL	85		0.145	N	N	NB ON FR NB BERNAL	8/1/2007	WED	56	35	19	21	47	183	515	702	590	446	351	359	386	366	337	313	370	462	384	317	328	192	131	71	6981
4	SCL	85		0.145	N	N	NB ON FR NB BERNAL	8/2/2007	THU	36	24	17	17	43	153	443	622	534	455	371	329	335	332	317	341	342	478	409	296	342	227	154	85	6702
4	SCL	85		0.145	N	N	NB ON FR NB BERNAL			41	27	16	17	41	156	466	624	544	426	344	333	350	348	334	317	373	477	406	325	329	220	140	76	6,730
4	SCL	85		0.36	N	N	NB ON FR SB BERNAL RD.	7/31/2007	TUE	12		3		6	27	190	343	342	148	98	113	153	113	122	111	150	274	238	144	93	60	31	26	2797
4	SCL	85		0.36	N	N	NB ON FR SB BERNAL RD.	8/1/2007	WED	12	1	1	3	5	27	216	354	349	124	102	130	176	99	107	119	169	304	239	133	112	58	48	29	2917
4	SCL	85		0.36	N	N	NB ON FR SB BERNAL RD.	8/2/2007	THU	7	4	1	4	3	30	210	349	323	138	98	167	172	94	88	121	185	282	241	153	74	47	30	16	2837
4	SCL	85		0.36	N	N	NB ON FR SB BERNAL RD.			10	3	2	4	5	28	205	349	338	137	99	137	167	102	106	117	168	287	239	143	93	55	36	24	2850
4	SCL	85			N	N	NB ON FROM SB 101	7/13/2010	TUE							181	409	482							283	259	297	275						
4	SCL	85			N	N	NB ON FROM SB 101	7/14/2010	WED							169	455	435							289	326	350	338						
4	SCL	85			N	N	NB ON FROM SB 101	7/15/2010	THU							153	466	462							246	327	350	305						
4	SCL	85			N	N	NB ON FROM SB 101									168	443	460							273	304	332	306						
4	SCL	85		0.811	N	N	NB ON FR GREAT OAKS BL	7/31/2007	TUE	36	25	10	15	38	110	362	462	426	305	317	488	511	394	342	440	642	900	674	448	218	148	104	87	7502
4	SCL	85		0.811	N	N	NB ON FR GREAT OAKS BL	8/1/2007	WED	32	29	16	8	38	104	357	464	416	333	328	521	573	348	350	500	641	860	680	400	235	122	102	89	7546
4	SCL	85		0.811	N	N	NB ON FR GREAT OAKS BL	8/2/2007	THU	33	36	10	15	34	114	391	458	389	314	282	541	518	392	353	466	630	890	723	442	242	140	81	67	7561
4	SCL	85		0.811	N	N	NB ON FR GREAT OAKS BL			34	30	12	13	37	109	370	461	410	317	309	517	534	378	348	469	638	883	692	430	232	137	96	81	7536
4	SCL	85		1.757	F	N	NB OFF TO COTTLE RD	7/25/2007	WED	24	36	7	10	12	53	147	88	173	205	189	235	269	250	251	252	259	363	292	227	152	129	94	74	3791
4	SCL	85		1.757	F	N	NB OFF TO COTTLE RD	7/26/2007	THU	36	30	16	6	20	54	147	95	173	211	204	235	280	272	234	273	302	344	294	227	179	121	104	64	3921
4	SCL	85		1.757	F	N	NB OFF TO COTTLE RD	7/31/2007	TUE	47	27	9	5	10	36	150	91	193	321	305	352	353	288	262	285	321	378	353	231	200	135	118	72	4542
4	SCL	85		1.757	F	N	NB OFF TO COTTLE RD			36	31	11	7	14	48	148	91	180	246	233	274	301	270	249	270	294	362	313	228	177	128	105	70	4085
4	SCL	85		2.114	N	N	NB ON FR COTTLE AVE	7/31/2007	TUE	92	69	36	45	105	335	759	924	907	1,052	969	1,003	984	863	930	988	979	1,151	967	745	587	410	285	207	15392
4	SCL	85		2.114	N	N	NB ON FR COTTLE AVE	8/1/2007	WED	99	52	41	44	105	342	758	918	932	1,110	961	920	1,017	880	935	898	974	1,179	935	759	550	397	312	212	15330
4	SCL	85		2.114	N	N	NB ON FR COTTLE AVE	8/2/2007	THU	96	62	39	44	97	334	766	916	909	1,045	965	984	965	823	956	946	979	1,198	992	789	593	438	305	221	15462
4	SCL	85		2.114	N	N	NB ON FR COTTLE AVE			96	61	39	44	102	337	761	919	916	1,069	965	969	989	855	940	944	977	1,176	965	764	577	415	301	213	15395
4	SCL	85		3.647	F	N	NB OFF TO BLOSSOM HILL	7/31/2007	TUE	30	27	2	14	19	40	69	110	154	227	213	312	296	235	271	289	364	427	322	271	207	148	83	62	4192
4	SCL	85		3.647	F	N	NB OFF TO BLOSSOM HILL	8/1/2007	WED	39	18	16	14	22	35	68	97	156	220	227	285	359	274	271	300	324	386	341	233	190	152	104	73	4204
4	SCL	85		3.647	F	N	NB OFF TO BLOSSOM HILL	8/2/2007	THU	32	22	17	12	23	39	68	109	150	217	208	292	309	246	267	299	351	405	309	278	201	149	104	65	4172
4	SCL	85		3.647	F	N	NB OFF TO BLOSSOM HILL			34	22	12	13	21	38	68	105	153	221	216	296	321	252	270	296	346	406	324	261	199	150	97	67	4189
4	SCL	85		3.837	N	N	NB ON FR EB BLOSSOM HILL	7/31/2007	TUE	40	19	16	31	87	237	570	750	635	464	433	333	390	360	339	321	327	384	347	278	240	197	152	67	7017
4	SCL	85		3.837	N	N	NB ON FR EB BLOSSOM HILL	8/1/2007	WED	28	26	21	20	85	243	576	736	686	505	347	353	365	363	311	339	308	364	347	318	234	188	122	86	6971
4	SCL	85		3.837	N	N	NB ON FR EB BLOSSOM HILL	8/2/2007	THU	37	19	18	34	82	247	573	735	604	472	345	314	338	365	321	316	312	377	329	303	266	212	151	82	6852
4	SCL	85		3.837	N	N	NB ON FR EB BLOSSOM HILL			35	21	18	28	85	242	573	740	642	480	375	333	364	363	324	325	316	375	341	300	247	199	142	78	6947
4	SCL	85		3.93	B</																													

**Traffic Volumes Counts**

24 hour Period Hourly Counts - Northbound SR 85

Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	SCL	85		5.178	N	N	NB ON FR SANTA TERESA	7/25/2007	WED	59	21	25	6	44	125	353	513	405	408	384	371	429	424	401	412	399	425	380	358	350	296	179	92	6859
4	SCL	85		5.178	N	N	NB ON FR SANTA TERESA	7/26/2007	THU	55	28	20	11	35	119	343	503	432	424	394	387	415	454	468	407	406	411	419	316	342	374	189	124	7076
4	SCL	85		5.178	N	N	NB ON FR SANTA TERESA	7/31/2007	TUE	48	29	16	10	35	120	344	502	427	401	360	371	455	426	430	400	414	416	400	311	293	286	166	127	6787
4	SCL	85		5.178	N	N	NB ON FR SANTA TERESA			54	26	20	9	38	121	347	506	421	411	379	376	433	435	433	406	406	417	400	328	328	319	178	114	6907
4	SCL	85			N	N	NB ON FR SB RTE 87	7/13/2010	TUE							568	880	987							1,040	1,028	1,028	905						
4	SCL	85			N	N	NB ON FR SB RTE 87	7/14/2010	WED							570	897	1,007							1,034	1,003	908	1,018						
4	SCL	85			N	N	NB ON FR SB RTE 87	7/15/2010	THU							546	864	992							1,020	986	1,054	1,024						
4	SCL	85			N	N	NB ON FR SB RTE 87									561	880	995							1,031	1,006	997	982						
4	SCL	85		5.969	F	N	NB OFF TO ALMADEN EXPWY	7/25/2007	WED	118	62	35	44	59	137	266	440	544	741	800	1,001	973	985	983	1,074	1,095	1,096	1,180	1,139	868	651	411	224	14926
4	SCL	85		5.969	F	N	NB OFF TO ALMADEN EXPWY	7/26/2007	THU	119	69	47	54	62	135	259	468	601	937	732	934	1,035	954	1,011	1,056	1,077	1,160	1,165	1,240	866	626	481	277	15365
4	SCL	85		5.969	F	N	NB OFF TO ALMADEN EXPWY	7/31/2007	TUE	104	62	39	27	71	132	262	499	586	776	895	933	1,029	948	968	1,110	1,095	1,244	1,244	1,135	837	551	389	235	15171
4	SCL	85		5.969	F	N	NB OFF TO ALMADEN EXPWY			114	64	40	42	64	135	262	469	577	818	809	956	1,012	962	987	1,080	1,089	1,167	1,196	1171	857	609	427	245	15154
4	SCL	85		6.135	N	N	NBON FR NB ALAMADEN EXP	8/15/2007	WED	69	22	22	12	44	202	508	624	783	760	754	727	741	739	739	694	632	687	570	502	461	312	196	106	10906
4	SCL	85		6.135	N	N	NBON FR NB ALAMADEN EXP	8/16/2007	THU	64	23	24	7	42	194	477	707	783	746	718	760	743	699	683	634	650	687	580	522	467	316	264	97	10887
4	SCL	85		6.135	N	N	NBON FR NB ALAMADEN EXP	8/21/2007	TUE	53	22	14	15	47	201	544	681	740	779	748	720	727	711	699	647	593	692	615	518	484	284	159	90	10783
4	SCL	85		6.135	N	N	NBON FR NB ALAMADEN EXP			62	22	20	11	44	199	510	671	769	762	740	736	737	716	707	658	625	689	588	514	471	304	206	98	10859
4	SCL	85		6.335	N	N	NBON FR SB ALAMADEN EXP	7/25/2007	WED	31	23	19	12	37	141	332	466	434	457	355	408	339	327	359	336	336	331	325	255	229	154	114	60	5880
4	SCL	85		6.335	N	N	NBON FR SB ALAMADEN EXP	7/26/2007	THU	40	36	18	17	32	136	347	462	494	442	381	397	359	390	365	353	375	342	308	248	233	173	136	71	6155
4	SCL	85		6.335	N	N	NBON FR SB ALAMADEN EXP	7/31/2007	TUE	43	24	8	13	32	135	324	472	478	356	347	375	353	373	358	345	366	366	339	265	225	182	103	50	5932
4	SCL	85		6.335	N	N	NBON FR SB ALAMADEN EXP			38	28	15	14	34	137	334	467	469	418	361	393	350	363	361	345	359	346	324	256	229	170	118	60	5989
4	SCL	85		7.958	F	N	NBOFF TO CAMBEN AVENUE	7/25/2007	WED	91	46	29	25	34	89	170	233	334	399	387	517	549	550	547	593	670	678	629	546	481	426	240	145	8408
4	SCL	85		7.958	F	N	NBOFF TO CAMBEN AVENUE	7/26/2007	THU	87	51	21	19	32	84	170	220	285	363	414	499	550	585	582	618	717	705	622	563	468	433	265	172	8525
4	SCL	85		7.958	F	N	NBOFF TO CAMBEN AVENUE	7/31/2007	TUE	93	39	29	17	39	83	146	225	316	364	452	532	642	657	628	666	696	756	570	531	479	393	242	188	8783
4	SCL	85		7.958	F	N	NBOFF TO CAMBEN AVENUE			90	45	26	20	35	85	162	226	312	375	418	516	580	597	586	626	694	713	607	547	476	417	249	168	8572
4	SCL	85		8.234	N	N	NB ON FR CAMDEN AVE	7/25/2007	WED	87	49	34	37	150	550	1,192	1,188	1,304	1,399	1,199	1,034	1,043	1,064	894	811	857	915	860	699	546	520	297	154	16883
4	SCL	85		8.234	N	N	NB ON FR CAMDEN AVE	7/26/2007	THU	82	38	29	50	144	532	1,141	1,158	1,279	1,393	1,169	1,108	1,067	1,040	1,011	844	793	902	887	714	623	489	365	153	17011
4	SCL	85		8.234	N	N	NB ON FR CAMDEN AVE	7/31/2007	TUE	79	54	28	50	121	578	1,114	1,151	1,229	1,279	1,160	1,009	946	993	888	851	820	937	788	732	529	463	321	177	16297
4	SCL	85		8.234	N	N	NB ON FR CAMDEN AVE			83	47	30	46	138	553	1,149	1,166	1,271	1,357	1,176	1,050	1,019	1,032	931	835	823	918	845	715	566	491	328	161	16730
4	SCL	85		9.246	F	N	NB OFF TO UNION AVE	7/25/2007	WED	39	14	28	8	26	70	249	362	550	495	460	406	461	483	449	480	416	498	408	272	259	252	150	74	6909
4	SCL	85		9.246	F	N	NB OFF TO UNION AVE	7/26/2007	THU	58	18	14	13	27	78	262	389	539	580	460	452	470	536	436	496	438	449	445	323	294	210	133	85	7205
4	SCL	85		9.246	F	N	NB OFF TO UNION AVE	7/31/2007	TUE	40	23	13	12	19	80	263	370	515	723	423	399	440	482	424	457	437	455	435	296	268	238	174	97	7083
4	SCL	85		9.246	F	N	NB OFF TO UNION AVE			46	18	18	11	24	76	258	374	535	599	448	419	457	500	436	478	430	467	429	297	274	233	152	85	7066

**Traffic Volumes Counts**

24 hour Period Hourly Counts - Northbound SR 85

Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	SCL	85		9.434	N	N	NBON FR UNION AVENUE	7/25/2007	WED	38	20	20	21	68	225	545	528	575	771	669	611	709	556	523	557	575	762	662	447	312	210	160	95	9659
4	SCL	85		9.434	N	N	NBON FR UNION AVENUE	7/26/2007	THU	50	24	22	25	63	250	511	527	576	747	638	686	698	529	560	575	608	706	657	417	305	233	171	88	9666
4	SCL	85		9.434	N	N	NBON FR UNION AVENUE	7/31/2007	TUE	38	15	21	20	73	251	523	527	594	729	554	634	625	535	499	516	576	745	594	436	257	228	128	85	9203
4	SCL	85		9.434	N	N	NBON FR UNION AVENUE			42	20	21	22	68	242	526	527	582	749	620	644	677	540	527	549	586	738	638	433	291	224	153	89	9509
4	SCL	85		10.085	F	N	NBOFF TO BASCOM AVENUE	7/25/2007	WED	27	24	14	21	25	84	218	268	418	525	550	495	458	462	526	457	425	391	350	271	208	161	109	62	6549
4	SCL	85		10.085	F	N	NBOFF TO BASCOM AVENUE	7/26/2007	THU	33	13	16	17	27	93	213	249	460	560	564	497	462	509	547	491	429	371	334	296	207	176	134	63	6761
4	SCL	85		10.085	F	N	NBOFF TO BASCOM AVENUE	7/31/2007	TUE	31	14	12	20	20	65	195	247	430	566	566	519	423	584	481	472	401	398	348	275	194	157	102	61	6581
4	SCL	85		10.085	F	N	NBOFF TO BASCOM AVENUE			30	17	14	19	24	81	209	255	436	550	560	504	448	518	518	473	418	387	344	281	203	165	115	62	6630
4	SCL	85		10.312	F	N	NB OFF TO RTE 17	7/25/2007	WED	239	131	96	67	193	730	1,668	1,844	1,989	2,503	2,253	2,171	2,222	2,054	2,015	2,028	2,024	2,396	2,067	1,677	1,302	1,164	787	417	34037
4	SCL	85		10.312	F	N	NB OFF TO RTE 17	7/26/2007	THU	210	128	86	90	179	699	1,562	1,922	1,986	2,478	2,357	2,232	2,212	2,092	2,073	2,158	2,015	2,334	2,080	1,707	1,417	1,198	886	456	34557
4	SCL	85		10.312	F	N	NB OFF TO RTE 17	7/31/2007	TUE	232	153	77	92	179	743	1,581	1,844	2,055	2,639	2,416	2,458	2,393	2,381	2,287	2,356	2,313	2,831	2,366	1,924	1,295	1,145	790	441	36991
4	SCL	85		10.312	F	N	NB OFF TO RTE 17			227	137	86	83	184	724	1,604	1,870	2,010	2,540	2,342	2,287	2,276	2,176	2,125	2,181	2,117	2,520	2,171	1,769	1,338	1,169	821	438	35195
4	SCL	85 R		10.466	N	N	NB ON FR BASCOM AVE	7/31/2007	TUE	19	10	3	8	15	85	270	539	595	502	446	415	379	346	419	381	395	423	304	227	144	128	77	33	6163
4	SCL	85 R		10.466	N	N	NB ON FR BASCOM AVE	8/1/2007	WED	20	9	5	4	19	76	277	528	592	484	435	405	401	329	364	407	414	382	300	213	151	117	73	44	6049
4	SCL	85 R		10.466	N	N	NB ON FR BASCOM AVE	8/2/2007	THU	22	13	1	5	21	72	247	520	576	502	471	458	439	367	404	402	392	422	273	235	166	135	85	55	6283
4	SCL	85 R		10.466	N	N	NB ON FR BASCOM AVE			20	11	3	6	18	78	265	529	588	496	451	426	406	347	396	397	400	409	292	225	154	127	78	44	6165
4	SCL	85 R		10.875	N	N	NB ON FR RTE 17	7/17/2007	TUE	72	37	29	40	142	490	1,075	792	805	1,313	1,158	1,055	1,008	965	893	981	1,081	1,186	992	776	580	522	387	196	16575
4	SCL	85 R		10.875	N	N	NB ON FR RTE 17	7/18/2007	WED	103	48	31	48	142	489	1,030	845	929	1,282	1,183	1,054	1,044	930	907	948	1,040	1,210	1,061	752	590	549	411	209	16835
4	SCL	85 R		10.875	N	N	NB ON FR RTE 17	7/19/2007	THU	77	44	44	47	126	510	1,044	778	693	1,369	1,216	1,041	1,074	1,003	989	1,077	1,149	1,285	1,125	890	662	542	420	253	17458
4	SCL	85 R		10.875	N	N	NB ON FR RTE 17			84	43	35	45	137	496	1,050	805	809	1,321	1,186	1,050	1,042	966	930	1,002	1,090	1,227	1,059	806	611	538	406	219	16956
4	SCL	85 R		11.156	N	N	NB ON FR WINCHESTER BLVD	7/13/2010	THU	32	17	6	14	23	96	292	406	452	486	413	429	435	359	377	445	520	648	461	271	211	130	95	75	6,411
4	SCL	85 R		11.156	N	N	NB ON FR WINCHESTER BLVD	7/14/2010	WED	18	15	12	10	35	103	268	387	459	457	392	450	399	370	379	434	518	648	535	268	248	168	106	70	6,560
4	SCL	85 R		11.156	N	N	NB ON FR WINCHESTER BLVD	7/15/2010	TUE	23	12	8	16	34	95	295	408	450	436	421	415	403	343	385	415	508	696	538	271	191	150	84	58	6,335
4	SCL	85 R		11.156	N	N	NB ON FR WINCHESTER BLVD			24	15	9	13	31	98	285	400	454	460	409	431	412	357	380	431	515	664	511	270	216.67	149.33	95	67.667	6435.33333
4	SCL	85 R		10.997	A	N	LOS GATOS- WINCHESTER BLVD.	7/10/2007	TUE	260	134	85	137	455	1,881	4,649	5,660	5,577	5,662	4,255	3,754	3,669	3,447	3,418	3,341	3,728	4,307	3,890	2,505	1,704	1,458	997	509	65482
4	SCL	85 R		10.997	A	N	LOS GATOS- WINCHESTER BLVD.	7/11/2007	WED	250	132	135	164	457	1,863	4,607	5,534	5,494	5,747	4,325	3,653	3,734	3,286	3,297	3,347	3,663	4,537	3,598	2,708	1,994	1,547	1,072	630	65774
4	SCL	85 R		10.997	A	N	LOS GATOS- WINCHESTER BLVD.	7/12/2007	THU	331	145	97	140	434	1,886	4,677	5,299	5,345	5,807	4,523	3,796	3,811	3,440	3,424	3,518	3,695	4,633	3,906	2,824	2,053	1,535	1,203	646	67168
4	SCL	85 R		10.997	A	N	LOS GATOS- WINCHESTER BLVD.			280	137	106	147	449	1877	4,644	5,498	5,472	5,739	4,368	3,734	3,738	3,391	3,380	3,402	3,695	4,492	3,798	2679	1917	1513	1091	595	66141
4	SCL	85 R		10.997	B	N	LOS GATOS- WINCHESTER BLVD.	7/10/2007	TUE	241	121	78	126	425	1,777	4,383	5,417	5,123	5,044	3,871	3,331	3,273	3,076	3,047	2,957	3,307	3,968	3,236	2,198	1,538	1,321	908	466	59232
4	SCL	85 R		10.997	B	N	LOS GATOS- WINCHESTER BLVD.	7/11/2007	WED	231	112	128	147	422	1,745	4,397	5,194	5,100	5,057	3,925	3,272	3,266	2,926	2,947	2,983	3,207	3,973	3,191	2,398	1,774	1,406	991	586	59378
4	SCL	85 R		10.997	B	N	LOS GATOS- WINCHESTER BLVD.	7/12/2007	THU	305	131	87	128	398	1,756	4,565	5,023	4,810	5,281	3,983	3,368	3,384	3,102	3,065	3,133	3,276	4,053	3,466	2,524	1,834	1,376	1,098	600	60746
4	SCL	85 R		10.997	B	N	LOS GATOS- WINCHESTER BLVD.			259	121	98	134	415	1759	4,448	5,211	5,011	5,127	3,926	3,324	3,308	3,035	3,020	3,024	3,263	3,998	3,298	2373	1715	1368	999	551	59785
4	SCL	85 R		13.465	F	N	NB OFF TO SARATOGA AVE	7/17/2007	TUE	91	45	23	21	46	180	360	702	972	1,083	1,121	1,145	1,120	1,057	1,033	1,149	1,154	1,480	1,079	874	639	474	301	172	16321
4	SCL	85 R		13.465	F	N	NB OFF TO SARATOGA AVE	7/18/2007	WED	81	51	28	33	49	164	385	769	961	1,005	1,169	1,079	1,144	938	937	1,121	1,230	1,378	1,214	899	590	467	335	180	16207
4	SCL	85 R		13.465	F	N	NB OFF TO SARATOGA AVE	7/19/2007	THU	88	62	32	31	48	172	387	719	909	1,043	1,112	1,133	1,208	1,088	1,055	1,138	1,099	1,453	1,277	972	712	499	397	178	16812
4	SCL	85 R		13.465	F	N	NB OFF TO SARATOGA AVE			87	53	28	28	48	172	377	730	947	1,044	1,134	1,119	1,157	1,028	1,008	1,136	1,161	1,437	1,190	915	647	480	344	177	16447
4	SCL	85 R		13.928	N																													

**Traffic Volumes Counts**

24 hour Period Hourly Counts - Northbound SR 85

Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	SCL	85	R	17.843	F	N	NB OFF TO RTE 280	7/31/2007	TUE	91	44	31	41	126	643	1,942	2,233	2,079	2,292	1,680	1,326	1,242	1,244	1,222	1,270	1,379	1,558	1,354	890	607	533	437	171	24435
4	SCL	85	R	17.843	F	N	NB OFF TO RTE 280	8/1/2007	WED	90	44	30	38	144	618	1,937	2,330	2,244	2,255	1,669	1,386	1,313	1,214	1,172	1,232	1,398	1,553	1,339	911	727	552	446	210	24852
4	SCL	85	R	17.843	F	N	NB OFF TO RTE 280	8/2/2007	THU	85	47	27	43	139	624	1,920	2,325	2,061	2,249	1,810	1,482	1,403	1,284	1,534	1,379	1,470	1,618	1,405	983	690	607	440	289	25914
4	SCL	85	R	17.843	F	N	NB OFF TO RTE 280			89	45	29	41	136	628	1,933	2,296	2,128	2,265	1,720	1,398	1,319	1,247	1,309	1,294	1,416	1,576	1,366	928	675	564	441	223	25067
4	SCL	85	R	18.377	N	N	DUM NB ON FR SB RTE 280	7/31/2007	TUE	16	14	21	33	29	70	215	490	583	614	544	389	459	389	409	455	443	483	426	278	207	146	105	51	6869
4	SCL	85	R	18.377	N	N	DUM NB ON FR SB RTE 280	8/1/2007	WED	13	26	14	17	26	68	219	496	552	580	455	438	389	388	400	400	382	436	464	402	229	143	86	64	6687
4	SCL	85	R	18.377	N	N	DUM NB ON FR SB RTE 280	8/2/2007	THU	18	17	16	26	23	69	211	493	579	642	546	458	435	427	416	499	446	437	452	329	234	153	87	76	7089
4	SCL	85	R	18.377	N	N	DUM NB ON FR SB RTE 280			16	19	17	25	26	69	215	493	571	612	515	428	428	401	408	451	424	452	447	336	223	147	93	64	6882
4	SCL	85	R	18.667	N	N	NBON FRNB280&STEVENS CR	7/31/2007	TUE	166	97	74	58	161	588	1,337	1,680	1,515	2,190	1,872	1,728	1,747	1,747	1,648	1,614	1,551	1,923	1,742	1,488	1,267	1,021	687	332	28233
4	SCL	85	R	18.667	N	N	NBON FRNB280&STEVENS CR	8/1/2007	WED	183	100	63	62	147	594	1,373	2,069	2,225	2,210	1,841	1,727	1,740	1,748	1,737	1,497	1,585	2,020	1,917	1,500	1,218	1,087	716	433	29792
4	SCL	85	R	18.667	N	N	NBON FRNB280&STEVENS CR	8/2/2007	THU	176	107	64	57	154	584	1,354	2,036	2,078	2,234	1,824	1,771	1,809	1,888	1,688	1,661	1,559	1,896	1,741	1,462	1,329	1,240	767	394	29873
4	SCL	85	R	18.667	N	N	NBON FRNB280&STEVENS CR			175	101	67	59	154	589	1,355	1,928	1,939	2,211	1,846	1,742	1,765	1,794	1,691	1,591	1,565	1,946	1,800	1483	1271	1116	723	386	29299

**Traffic Volumes Counts**

24 hour Period Hourly Counts - Northbound SR 85

Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	SCL	85	R	18.854	N	N	NB ON FR HOMESTEAD	7/31/2007	TUE	15	7	3	8	13	47	130	223	292	256	198	145	143	166	127	129	134	125	139	106	115	77	48	42	2688
4	SCL	85	R	18.854	N	N	NB ON FR HOMESTEAD	8/1/2007	WED	20	9	4	6	22	42	138	205	239	272	212	158	185	176	162	126	148	163	186	125	108	80	49	43	2878
4	SCL	85	R	18.854	N	N	NB ON FR HOMESTEAD	8/2/2007	THU	19	14	1	9	14	57	119	216	267	290	197	161	109	145	129	106	92	133	107	95	68	60	30	26	2464
4	SCL	85	R	18.854	N	N	NB ON FR HOMESTEAD			18	10	3	8	16	49	129	215	266	273	202	155	146	162	139	120	125	140	144	109	97	72	42	37	2677
4	SCL	85	R	18.861	A	N	CUPERTINO- HOMESTEAD ROAD	7/10/2007	TUE	304	163	129	153	436	1,719	4,208	5,414	5,652	6,147	4,464	3,823	3,854	3,888	3,500	3,491	3,503	4,048	3,595	2,817	2,256	1,997	1,410	697	67668
4	SCL	85	R	18.861	A	N	CUPERTINO- HOMESTEAD ROAD	7/11/2007	WED	340	177	245	173	465	1,701	4,148	5,199	5,404	6,040	4,405	3,873	3,823	3,686	3,599	3,444	3,561	4,055	3,553	2,881	2,410	2,239	1,439	798	67658
4	SCL	85	R	18.861	A	N	CUPERTINO- HOMESTEAD ROAD	7/12/2007	THU	382	198	129	151	450	1,733	4,129	5,284	5,365	6,051	4,610	4,074	3,835	3,834	3,601	3,422	3,367	3,988	3,865	3,014	2,478	2,240	1,543	820	68563
4	SCL	85	R	18.861	A	N	CUPERTINO- HOMESTEAD ROAD			342	179	168	159	450	1718	4,162	5,299	5,474	6,079	4,493	3,923	3,837	3,803	3,567	3,452	3,477	4,030	3,671	2904	2381	2159	1464	772	67963
4	SCL	85	R	19.734	F	N	NB OFF TO FREMONT	7/31/2007	TUE	55	31	14	12	30	88	304	402	443	579	527	564	545	568	575	653	604	816	706	504	415	307	232	110	9084
4	SCL	85	R	19.734	F	N	NB OFF TO FREMONT	8/1/2007	WED	74	25	14	8	26	101	317	424	642	650	570	603	564	582	634	610	640	760	740	489	399	312	258	92	9534
4	SCL	85	R	19.734	F	N	NB OFF TO FREMONT	8/2/2007	THU	56	26	16	15	29	98	293	462	585	548	532	608	633	597	586	672	610	754	736	537	436	376	247	139	9591
4	SCL	85	R	19.734	F	N	NB OFF TO FREMONT			62	27	15	12	28	96	305	429	557	592	543	592	581	582	598	645	618	777	727	510	417	332	246	114	9403
4	SCL	85	R	20.034	N	N	NB ON FROM FREMONT AVE	7/31/2007	TUE	16	12	8	32	110	279	590	908	720	477	484	439	443	369	364	329	321	313	267	221	180	109	53	27	7071
4	SCL	85	R	20.034	N	N	NB ON FROM FREMONT AVE	8/1/2007	WED	14	8	7	31	102	283	557	815	617	488	465	398	452	335	363	306	351	356	280	221	160	116	75	23	6823
4	SCL	85	R	20.034	N	N	NB ON FROM FREMONT AVE	8/2/2007	THU	12	8	9	34	118	255	588	800	681	540	491	478	469	402	397	334	362	333	293	251	193	132	78	44	7302
4	SCL	85	R	20.034	N	N	NB ON FROM FREMONT AVE			14	9	8	32	110	272	578	841	673	502	480	438	455	369	375	323	345	334	280	231	178	119	69	31	7065
4	SCL	85	R	21.604	F	N	NB OFF TO SB RTE 82	7/31/2007	TUE	22	14	10	14	38	133	186	199	315	323	351	328	340	369	288	342	383	339	275	231	213	136	60	37	4946
4	SCL	85	R	21.604	F	N	NB OFF TO SB RTE 82	8/1/2007	WED	24	8	15	16	35	129	216	246	275	332	327	353	344	354	328	308	386	356	312	233	186	147	83	40	5053
4	SCL	85	R	21.604	F	N	NB OFF TO SB RTE 82	8/2/2007	THU	24	13	7	20	36	123	194	249	309	324	327	320	344	351	337	316	320	369	297	220	193	143	78	47	4961
4	SCL	85	R	21.604	F	N	NB OFF TO SB RTE 82			23	12	11	17	36	128	199	231	300	326	335	334	343	358	318	322	363	355	295	228	197	142	74	41	4987
4	SCL	85	R	21.694	N	N	NB ON FR SB RTE 82	7/31/2007	TUE	7	9	7	12	18	27	56	82	68	79	93	127	122	98	89	77	64	59	71	55	60	28	15	16	1339
4	SCL	85	R	21.694	N	N	NB ON FR SB RTE 82	8/1/2007	WED	1	4	2	7	20	31	47	104	79	87	95	102	126	113	104	65	76	70	66	70	42	38	33	11	1393
4	SCL	85	R	21.694	N	N	NB ON FR SB RTE 82	8/2/2007	THU	6	5	4	8	19	24	59	81	77	96	96	160	147	103	106	94	72	79	67	56	61	40	24	20	1504
4	SCL	85	R	21.694	N	N	NB ON FR SB RTE 82			5	6	4	9	19	27	54	89	75	87	95	130	132	105	100	79	71	69	68	60	54	35	24	16	1412
4	SCL	85	R	21.784	F	N	NB OFF TO NB RTE 82	7/31/2007	TUE	48	27	28	16	44	103	304	428	442	612	586	576	535	524	518	469	489	539	561	433	347	276	192	116	8213
4	SCL	85	R	21.784	F	N	NB OFF TO NB RTE 82	8/1/2007	WED	57	31	17	17	34	89	319	469	498	509	566	536	516	551	480	489	502	582	598	464	314	293	209	133	8273
4	SCL	85	R	21.784	F	N	NB OFF TO NB RTE 82	8/2/2007	THU	49	31	21	19	47	101	314	488	528	545	593	595	571	498	503	495	512	574	580	429	381	292	196	131	8493
4	SCL	85	R	21.784	F	N	NB OFF TO NB RTE 82			51	30	22	17	42	98	312	462	489	555	582	569	541	524	500	484	501	565	580	442	347	287	199	127	8326
4	SCL	85	R	21.864	N	N	NB ON FR RTE 82	7/31/2007	TUE	47	16	25	23	33	124	248	536	712	671	530	375	426	429	328	347	313	353	325	309	250	229	175	81	6905
4	SCL	85	R	21.864	N	N	NB ON FR RTE 82	8/1/2007	WED	47	25	30	13	44	128	262	532	665	688	501	414	393	423	379	362	341	329	355	283	248	243	171	74	6950
4	SCL	85	R	21.864	N	N	NB ON FR RTE 82	8/2/2007	THU	42	25	35	15	41	120	275	510	693	705	494	345	457	443	391	303	336	318	316	343	233	235	187	92	6954
4	SCL	85	R	21.864	N	N	NB ON FR RTE 82			45	22	30	17	39	124	262	526	690	688	508	378	425	432	366	337	330	333	332	312	244	236	178	82	6936
4	SCL	85	R	22.024	F	N	NB OFF TO EB RTE 237	8/14/2007	TUE	84	54	50	36	91	436	1,037	1,630	1,862	2,077	1,576	1,051	1,034	1,147	966	866	857	1,017	826	695	509	460	286	193	18840
4	SCL	85	R	22.024	F	N	NB OFF TO EB RTE 237	8/15/2007	WED	88	32	34	23	111	411	1,069	1,655	1,923	2,074	1,661	1,048	1,098	1,174	967	876	902	1,010	882	757	547	440	283	182	19247
4	SCL	85	R	22.024	F	N	NB OFF TO EB RTE 237	8/16/2007	THU	84	38	40	45	111	416	1,050	1,624	1,511	2,085	1,688	1,135	1,113	1,211	1,004	972	909	1,002	893	733	571	467	344	204	19250
4	SCL	85	R	22.024	F	N	NB OFF TO EB RTE 237			85	41	41	35	104	421	1,052	1,636	1,765	2,079	1,642	1,078	1,082	1,177	979	905	889	1,010	867	728	542	456	304	193	19112
4	SCL	85	R	22.13	N	N	DUM NB ON FR EB RTE 237	7/31/2007	TUE	5	10	34	57	97	204	255	239	209	194	224	223	209	214	187	152	176	144	136	105	69	44	18	12	3217
4	SCL	85	R	22.13	N	N	DUM NB ON FR EB RTE 237	8/1/2007	WED	7	4	33	50	123	176	248	228	249	224	214	163	182	205	186	191	175</								

**Traffic Volumes Counts**

24 hour Period Hourly Counts - Northbound SR 85

Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total	
4	SCL	85	R	23.829	B	N	JCT RTE 101; MOFFETT BOULEVARD	7/10/2007	TUE	142	66	71	64	234	849	1,817	2,894	3,177	3,263	2,402	1,828	1,747	1,746	1,586	1,464	1,318	1,441	1,525	1,283	1,041	989	647	373	31967	
4	SCL	85	R	23.829	B	N	JCT RTE 101; MOFFETT BOULEVARD	7/11/2007	WED	148	91	87	98	240	840	1,802	2,820	3,211	3,229	2,352	1,840	1,744	1,694	1,545	1,445	1,395	1,574	1,479	1,301	1,083	1,028	711	382	32139	
4	SCL	85	R	23.829	B	N	JCT RTE 101; MOFFETT BOULEVARD	7/12/2007	THU	184	90	78	91	228	863	1,809	2,809	3,305	3,157	2,436	1,976	1,796	1,762	1,559	1,451	1,428	1,455	1,523	1,348	1,137	1,028	744	396	32653	
4	SCL	85	R	23.829	B	N	JCT RTE 101; MOFFETT BOULEVARD			158	82	79	84	234	851	1,809	2,841	3,231	3,216	2,397	1,881	1,762	1,734	1,563	1,453	1,380	1,490	1,509	1311	1087	1015	701	384	32253	
4	SCL	85	R			N	NB OFF TO SHORELINE BLVD.	7/13/2010	TUE							581	1,017	1,447							384	384	473	639							
4	SCL	85	R			N	NB OFF TO SHORELINE BLVD.	7/14/2010	WED							586	1,028	1,403							375	390	593	573							
4	SCL	85	R			N	NB OFF TO SHORELINE BLVD.	7/15/2010	THU							562	923	1,401							404	451	573	524							
4	SCL	85	R			N	NB OFF TO SHORELINE BLVD.									576	989	1,417							388	408	546	579							
4	SCL	101		48.301	N	N	DUM NB ON FR NB RTE 85	1/28/2010	THU	83	60	55	52	159	721	1514	2122	2004	1654	1307	1014	1010	971	1041	1316	1217	1316	1127	773	654	528	410	218	21,326	
4	SCL	101		48.301	N	N	DUM NB ON FR NB RTE 85	1/27/2010	WED	77	52	39	61	151	683	1556	2074	2028	1676	1273	1057	1079	1054	1040	1239	1253	1334	1174	758	620	548	371	195	21,392	
4	SCL	101		48.301	N	N	DUM NB ON FR NB RTE 85	1/26/2010	TUE	79	46	36	63	154	707	1483	2088	1846	1542	1230	1060	946	941	998	1260	1186	1301	1190	771	576	477	297	186	20,463	
4	SCL	101		48.301	N	N	DUM NB ON FR NB RTE 85			80	53	43	59	155	704	1518	2095	1959	1624	1270	1044	1012	989	1026	1272	1219	1317	1164	767	617	518	359	200	21060	
4	SCL	85	R			N	NB 85 OFF TO NB 101 (HOV)	3/30/2010	TUE							103	198	495	659	1,071	898				604	299	303	342	332	516					
4	SCL	85	R			N	NB 85 OFF TO NB 101 (HOV)	3/31/2010	WED							101	200	491	624	1,024	1,076				602	281	308	397	342	461					
4	SCL	85	R			N	NB 85 OFF TO NB 101 (HOV)	4/1/2010	THU							111	206	525	655	1,071	1,002				710	335	326	387	380	540					
4	SCL	85	R			N	NB 85 OFF TO NB 101 (HOV)									105	201	504	646	1,055	992				639	305	312	375	351	506					

**Traffic Volumes Counts**

24 hour Period Hourly Counts - Southbound SR 85

Dist	Cnty	Rte	Pref	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total	
4	SCL	101		48.201	F	S	DUM SB OFF TO SB RTE 85 (GP)	7/13/2010	TUE							328	633	905							1,216	1,305	1,392	1,277							
4	SCL	101		48.201	F	S	DUM SB OFF TO SB RTE 85 (GP)	7/14/2010	WED							345	692	863							1,229	1,341	1,284	1,305							
4	SCL	101		48.201	F	S	DUM SB OFF TO SB RTE 85 (GP)	7/15/2010	THU							340	674	855							1,240	1,296	1,424	1,272							
4	SCL	101		48.201	F	S	DUM SB OFF TO SB RTE 85 (GP)									338	666	874							1,228	1,314	1,367	1,285							
4	SCL	101		48.201	F	S	DUM SB OFF TO SB RTE 85 (HOV)	5/20/2010	THU							12	52	245	218	301	276				546	355	418	529	499						
4	SCL	101		48.201	F	S	DUM SB OFF TO SB RTE 85 (HOV)	5/19/2010	WED							14	53	228	214	321	298				800	346	391	563	474						
4	SCL	101		48.201	F	S	DUM SB OFF TO SB RTE 85 (HOV)	5/18/2010	TUE							14	51	206	204	311	301				505	333	382	535	500						
4	SCL	101		48.201	F	S	DUM SB OFF TO SB RTE 85 (HOV)									13	52	226	212	311	292				617	345	397	542	491						
4	SCL	85				S	ON RAMP FROM SHORELINE BLVD.	7/13/2010	TUE							63	141	130							420	619	838	804							
4	SCL	85				S	ON RAMP FROM SHORELINE BLVD.	7/14/2010	WED							66	124	153							446	611	814	749							
4	SCL	85				S	ON RAMP FROM SHORELINE BLVD.	7/15/2010	THU							70	143	157							411	549	838	765							
4	SCL	85				S	ON RAMP FROM SHORELINE BLVD.									66	136	147							426	593	830	773							
4	SCL	85 R		23.829	B	S	JCT RTE 101; MOFFETT BOULEVARD	7/10/2007	TUE	379	225	116	72	94	252	655	1,385	1,570	1,552	1,512	1,771	1,942	2,041	2,515	2,690	3,053	3,476	3,149	2,622	1,867	1,793	1,360	745	36836	
4	SCL	85 R		23.829	B	S	JCT RTE 101; MOFFETT BOULEVARD	7/11/2007	WED	452	216	206	142	96	249	702	1,445	1,535	1,555	1,578	1,764	2,036	2,002	2,479	2,707	3,007	3,262	3,033	2,892	2,012	1,787	1,323	864	37344	
4	SCL	85 R		23.829	B	S	JCT RTE 101; MOFFETT BOULEVARD	7/12/2007	THU	488	210	138	108	93	250	702	1,388	1,511	1,666	1,674	1,885	2,040	1,997	2,388	2,732	2,996	3,224	3,113	2,911	1,928	1,822	1,334	849	37447	
4	SCL	85 R		23.829	B	S	JCT RTE 101; MOFFETT BOULEVARD			440	217	153	107	94	250	686	1,406	1,539	1,591	1,588	1,807	2,006	2,013	2,461	2,710	3,019	3,321	3,098	2,808	1,936	1,801	1,339	819	37,209	
4	SCL	85 R		23.481	N	S	SB ON FR MOFFETT BLVD.	8/14/2007	TUE	22	13	4	4	7	20	65	178	245	181	143	215	192	203	234	294	418	448	315	240	154	81	75	26	3777	
4	SCL	85 R		23.481	N	S	SB ON FR MOFFETT BLVD.	8/15/2007	WED	18	12	4	3	8	23	57	195	238	199	158	200	212	210	235	306	427	386	326	241	133	106	83	45	3825	
4	SCL	85 R		23.481	N	S	SB ON FR MOFFETT BLVD.	8/16/2007	THU	21	13	7	2	7	26	55	181	207	197	168	236	219	210	239	332	417	428	311	239	133	110	72	47	3877	
4	SCL	85 R		23.481	N	S	SB ON FR MOFFETT BLVD.			20	13	5	3	7	23	59	185	230	192	156	217	208	208	236	311	421	421	317	240	140	99	77	39	3,826	
4	SCL	85 R		22.861	F	S	SB OFF TO CENTRAL EXPWY.	8/14/2007	TUE	13	13	2	5	6	16	50	90	110	121	95	105	117	113	125	141	171	333	286	179	145	92	79	49	2456	
4	SCL	85 R		22.861	F	S	SB OFF TO CENTRAL EXPWY.	8/15/2007	WED	26	17	10	2	5	16	56	84	114	132	130	107	162	122	129	150	195	352	251	185	149	102	84	57	2637	
4	SCL	85 R		22.861	F	S	SB OFF TO CENTRAL EXPWY.	8/16/2007	THU	28	12	7	4	6	17	51	83	106	149	90	106	116	109	112	172	204	319	279	229	153	109	66	58	2585	
4	SCL	85 R		22.861	F	S	SB OFF TO CENTRAL EXPWY.			22	14	6	4	6	16	52	86	110	134	105	106	132	115	122	154	190	335	272	198	149	101	76	55	2,559	
4	SCL	85 R		22.491	N	S	SB ON FR EVELYN AVE	8/14/2007	TUE	36	14	13	10	14	21	92	270	368	311	217	222	235	248	309	291	301	484	469	370	232	254	181	109	5071	
4	SCL	85 R		22.491	N	S	SB ON FR EVELYN AVE	8/15/2007	WED	39	20	11	5	5	33	99	269	314	284	244	234	264	318	332	338	309	492	457	415	312	289	205	76	5364	
4	SCL	85 R		22.491	N	S	SB ON FR EVELYN AVE	8/16/2007	THU	43	20	20	13	6	23	111	254	303	288	210	216	207	273	262	227	304	397	409	345	241	241	159	97	4669	
4	SCL	85 R		22.491	N	S	SB ON FR EVELYN AVE			39	18	15	9	8	26	101	264	328	294	224	224	235	280	301	285	305	458	445	377	262	261	182	94	5,035	
4	SCL	85 R		22.311	F	S	SB OFF TO WB RTE 237	8/14/2007	TUE	29	18	3	2	20	30	129	192	207	210	246	268	321	253	274	262	277	511	504	257	193	146	110	58	4520	
4	SCL	85 R		22.311	F	S	SB OFF TO WB RTE 237	8/15/2007	WED	31	18	7	6	20	44	106	205	230	224	244	284	290	257	295	293	375	489	455	267	222	163	124	77	4726	
4	SCL	85 R		22.311	F	S	SB OFF TO WB RTE 237	8/16/2007	THU	34	18	8	6	16	36	134	172	216	255	263	284	293	283	282	267	303	483	465	248	194	140	108	66	4574	
4	SCL	85 R		22.311	F	S	SB OFF TO WB RTE 237			31	18	6	5	19	37	123	190	218	230	251	279	301	264	284	274	318	494	475	257	203	150	114	67	4,607	
4	SCL	85 R		22.197	N	S	DUM SB ON FR WB RTE 237	8/14/2007	TUE	93	51	39	34	63	160	433	739	860	805	656	899	980	819	914	1,101	1,291	1,271	1,156	1,600	974	574	389	227	16128	
4	SCL	85 R		22.197	N	S	DUM SB ON FR WB RTE 237	8/15/2007	WED	103	52	53	33	72	149	437	722	942	777	797	914	953	846	990	1,181	1,250	1,119	1,129	1,585	930	606	395	196	16231	
4	SCL	85 R		22.197	N	S	DUM SB ON FR WB RTE 237	8/16/2007	THU	132	61	56	37	55	174	477	793	973	918	716	910	1,105	846	999	1,154	1,293	1,192	1,234	1,548	919	553	391	255	16791	
4	SCL	85 R		22.197	N	S	DUM SB ON FR WB RTE 237			109	55	49	35	63	161	449	751	925	833	723	908	1,013	837	968	1,145	1,278	1,194	1,173	1,578	941	578	392	226	16,383	
4	SCL	85 R		22.163	O	S	JCT. RTE. 237	7/10/2007	TUE	407	223	116	64	79	233	612	1,469	1,715	1,656	1,508	1,744	1,992	2,016	2,537	2,790	3,178	3,125	3,094	2,814	1,933	1,868	1,491	781	37445	
4	SCL	85 R		22.163	O	S	JCT. RTE. 237	7/11/2007	WED	454	215	174	143	83	222	678	1,532	1,723	1,620	1,527	1,741	2,004	2,029	2,457	2,819	3,083	3,033	2,975	2,960	2,069	1,854	1,403	868	37666	
4	SCL	85 R		22.163	O	S	JCT. RTE. 237	7/12/2007	THU	472	215	135	93	89	232	639	1,524	1,672	1,803	1,638	1,854	2,025	2,028	2,476	2,785	3,077	2,970	2,991	2,983	1,971	1,846	1,431	903	37852	
4	SCL	85 R		22.163	O	S	JCT. RTE. 237			444	218	142	100	84</																					

**Traffic Volumes Counts**

24 hour Period Hourly Counts - Southbound SR 85

Dist	Cnty	Rte	Pref	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	SCL	85	R	19.731	N	S	SB ON FR FREMONT AVE.	8/14/2007	TUE	58	17	16	9	16	66	191	519	745	676	562	595	620	556	584	770	713	746	675	507	335	285	156	132	9549
4	SCL	85	R	19.731	N	S	SB ON FR FREMONT AVE.	8/15/2007	WED	47	24	15	6	23	63	208	521	737	668	602	583	653	621	635	813	763	776	677	533	394	278	181	120	9941
4	SCL	85	R	19.731	N	S	SB ON FR FREMONT AVE.	8/16/2007	THU	47	27	13	17	21	61	221	532	751	666	592	618	621	579	656	744	700	752	655	550	358	266	159	122	9728
4	SCL	85	R	19.731	N	S	SB ON FR FREMONT AVE.			51	23	15	11	20	63	207	524	744	670	585	599	631	585	625	776	725	758	669	530	362	276	165	125	9,739
4	SCL	85	R	19.071	F	S	SB OFF TO HOMESTEAD RD	8/14/2007	TUE	22	13	5	8	9	19	46	122	132	145	133	215	216	176	221	201	192	193	234	291	207	163	134	61	3158
4	SCL	85	R	19.071	F	S	SB OFF TO HOMESTEAD RD	8/15/2007	WED	30	18	16	9	10	17	52	128	135	136	136	203	218	173	189	189	198	217	233	265	226	168	130	51	3147
4	SCL	85	R	19.071	F	S	SB OFF TO HOMESTEAD RD	8/16/2007	THU	30	13	8	16	10	23	53	150	143	130	124	170	239	178	206	169	191	190	244	254	211	157	113	80	3102
4	SCL	85	R	19.071	F	S	SB OFF TO HOMESTEAD RD			27	15	10	11	10	20	50	133	137	137	131	196	224	176	205	186	194	200	237	270	215	163	126	64	3,136
4	SCL	85	R	18.861	A	S	CUPERTINO- HOMESTEAD ROAD	7/10/2007	TUE	526	282	156	117	142	516	1,314	3,203	3,817	3,542	2,956	3,259	3,849	3,732	4,419	4,976	5,315	5,578	5,249	5,039	3,158	2,725	1,970	1,066	66906
4	SCL	85	R	18.861	A	S	CUPERTINO- HOMESTEAD ROAD	7/11/2007	WED	569	296	236	192	158	497	1,418	3,101	3,916	3,483	2,993	3,252	3,874	3,641	4,415	4,921	5,143	5,464	5,112	5,081	3,415	2,843	1,964	1,216	67200
4	SCL	85	R	18.861	A	S	CUPERTINO- HOMESTEAD ROAD	7/12/2007	THU	595	318	167	137	171	527	1,422	3,222	3,830	3,615	3,092	3,555	3,869	3,850	4,399	4,860	5,087	5,361	5,235	5,179	3,323	2,850	2,075	1,246	67985
4	SCL	85	R	18.861	A	S	CUPERTINO- HOMESTEAD ROAD			563	299	186	149	157	513	1,385	3,175	3,854	3,547	3,014	3,355	3,864	3,741	4,411	4,919	5,182	5,468	5,199	5,100	3,299	2,806	2,003	1,176	67,364
4	SCL	85	R	18.781	F	S	SB OFF TO RTE 280	8/14/2007	TUE	213	135	109	62	112	329	893	1,741	2,237	2,039	1,779	2,054	2,072	2,043	2,225	2,468	2,668	2,572	2,425	2,199	1,542	1,183	881	537	34518
4	SCL	85	R	18.781	F	S	SB OFF TO RTE 280	8/15/2007	WED	260	143	99	89	126	311	992	1,799	2,283	1,945	1,898	1,990	2,117	2,098	2,321	2,531	2,597	2,501	2,493	2,317	1,525	1,273	922	573	35203
4	SCL	85	R	18.781	F	S	SB OFF TO RTE 280	8/16/2007	THU	281	129	125	74	108	339	986	1,918	2,267	2,056	1,821	1,940	1,980	2,047	2,119	2,381	2,498	2,498	2,362	2,231	1,487	1,179	914	528	34268
4	SCL	85	R	18.781	F	S	SB OFF TO RTE 280			251	136	111	75	115	326	957	1,819	2,262	2,013	1,833	1,995	2,056	2,063	2,222	2,460	2,588	2,524	2,427	2,249	1,518	1,212	906	546	34,663
4	SCL	85	R	18.538	N	S	DUM SB ON FR NB RTE 280	8/21/2007	TUE	50	27	13	10	24	70	169	312	360	418	352	358	427	458	465	501	424	532	526	408	344	282	193	100	6823
4	SCL	85	R	18.538	N	S	DUM SB ON FR NB RTE 280	8/22/2007	WED	51	18	18	18	18	62	163	325	328	401	334	369	409	428	463	468	444	494	519	457	353	295	173	107	6715
4	SCL	85	R	18.538	N	S	DUM SB ON FR NB RTE 280	8/23/2007	THU	49	29	20	11	18	78	171	367	468	360	335	385	474	488	522	455	425	516	528	420	368	333	207	104	7131
4	SCL	85	R	18.538	N	S	DUM SB ON FR NB RTE 280			50	25	17	13	20	70	168	335	385	393	340	371	437	458	483	475	431	514	524	428	355	303	191	104	6,890
4	SCL	85	R	18.227	N	S	DUM SB ON FR SB RTE 280	8/14/2007	TUE	119	56	31	18	21	100	361	850	1,244	1,218	1,117	1,229	1,195	1,185	1,592	2,188	2,464	2,342	2,195	1,495	970	710	486	280	23466
4	SCL	85	R	18.227	N	S	DUM SB ON FR SB RTE 280	8/15/2007	WED	133	55	23	22	30	79	318	921	1,297	1,279	1,135	1,236	1,198	1,376	1,676	2,296	2,358	2,367	2,202	1,534	995	759	484	321	24094
4	SCL	85	R	18.227	N	S	DUM SB ON FR SB RTE 280	8/16/2007	THU	148	73	35	25	25	101	317	915	1,324	1,288	1,238	1,282	1,293	1,321	1,707	2,292	2,386	2,384	2,408	1,614	1,083	770	520	337	24886
4	SCL	85	R	18.227	N	S	DUM SB ON FR SB RTE 280			133	61	30	22	25	93	332	895	1,288	1,262	1,163	1,249	1,229	1,294	1,658	2,259	2,403	2,364	2,268	1,548	1,016	746	497	313	24,149
4	SCL	85	R	17.877	F	S	SB OFF TO STEVENS CREEK	8/14/2007	TUE	69	34	19	14	26	109	262	577	760	716	660	732	814	849	778	785	1,104	1,105	1,083	950	659	436	284	140	12965
4	SCL	85	R	17.877	F	S	SB OFF TO STEVENS CREEK	8/15/2007	WED	81	39	25	15	40	91	241	559	816	709	661	830	833	821	764	757	813	1,133	1,293	918	655	515	288	157	13054
4	SCL	85	R	17.877	F	S	SB OFF TO STEVENS CREEK	8/16/2007	THU	103	40	33	18	26	104	224	558	906	1,150	825	861	1,122	912	942	852	1,033	1,253	1,101	999	722	557	337	177	14855
4	SCL	85	R	17.877	F	S	SB OFF TO STEVENS CREEK			84	38	26	16	31	101	242	565	827	858	715	808	923	861	828	798	983	1,164	1,159	956	679	503	303	158	13,625
4	SCL	85	R	17.699	B	S	CUPERTINO- STEVENS CREEK BOUL	7/10/2007	TUE	425	200	137	68	86	309	880	2,137	2,899	2,708	2,545	2,642	3,122	3,099	4,093	4,790	5,168	5,300	4,842	4,237	2,745	2,429	1,872	894	57627
4	SCL	85	R	17.699	B	S	CUPERTINO- STEVENS CREEK BOUL	7/11/2007	WED	480	209	145	126	87	276	878	2,122	2,973	2,762	2,536	2,671	3,260	3,124	4,128	4,830	5,046	4,920	4,799	4,261	2,896	2,454	1,677	944	57604
4	SCL	85	R	17.699	B	S	CUPERTINO- STEVENS CREEK BOUL	7/12/2007	THU	480	237	153	83	99	291	907	2,223	2,946	2,856	2,541	2,818	3,291	3,225	4,179	4,757	4,662	4,659	4,915	4,527	2,883	2,484	1,782	1,007	58005
4	SCL	85	R	17.699	B	S	CUPERTINO- STEVENS CREEK BOULE			462	215	145	92	91	292	888	2,161	2,939	2,775	2,541	2,710	3,224	3,149	4,133	4,792	4,959	4,960	4,852	4,342	2,841	2,456	1,777	948	57,745
4	SCL	85	R	17.493	N	S	SB ON FR STEVENS CREEK BLVD	7/14/2004	WED	30	14	15	3	10	33	70	204	344	356	350	401	547	408	519	496	546	586	446	370	478	374	194	89	6,883
4	SCL	85	R	17.493	N	S	SB ON FR STEVENS CREEK BLVD	7/13/2004	TUE	27	16	11	4	9	30	77	193	336	394	357	416	682	633	516	580	557	655	485	464	440	396	186	78	7,542
4	SCL	85	R	17.493	N	S	SB ON FR STEVENS CREEK BLVD	7/8/2004	THU	29	13	11	6	8	30	86	192	361	382	360	378	565	438	502	485	536	639	515	438	456	294	196	109	7,029
4	SCL	85	R	17.493	N	S	SB ON FR STEVENS CREEK BLVD			29	14	12	4	9	31	78	196	347	377	356	398	598	493	512	520	546	627	482	424	458	355	192	92	7,151
4	SCL	85																																

**Traffic Volumes Counts**

24 hour Period Hourly Counts - Southbound SR 85

Dist	Cnty	Rte	Pref	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	SCL	85	R	10.997	A	S	LOS GATOS- WINCHESTER BLVD.	7/10/2007	TUE	398	205	142	89	126	449	1,162	2,768	3,738	3,410	2,944	3,098	3,616	3,706	4,571	4,503	4,762	4,863	4,480	3,892	2,825	2,430	1,915	912	61004
4	SCL	85	R	10.997	A	S	LOS GATOS- WINCHESTER BLVD.	7/11/2007	WED	467	218	225	136	132	370	1,126	2,753	3,820	3,477	3,171	3,041	3,769	3,735	4,535	4,388	4,508	4,720	4,490	4,116	2,944	2,603	1,646	940	61330
4	SCL	85	R	10.997	A	S	LOS GATOS- WINCHESTER BLVD.	7/12/2007	THU	497	259	172	83	130	404	1,192	2,825	3,807	3,596	3,066	3,244	3,834	3,810	4,710	3,991	4,257	4,655	4,694	4,398	2,893	2,649	1,944	997	62107
4	SCL	85	R	10.997	A	S	LOS GATOS- WINCHESTER BLVD.			454	227	180	103	129	408	1,160	2,782	3,788	3,494	3,060	3,128	3,740	3,750	4,605	4,294	4,509	4,746	4,555	4,135	2,887	2,561	1,835	950	61,480
4	SCL	85	R	10.823	F	S	SB OFF RTE 17	8/22/2007	WED	152	50	46	27	32	119	291	721	1,041	1,076	1,046	1,124	1,102	1,120	1,285	1,300	1,269	1,120	1,207	1,214	798	669	533	375	17717
4	SCL	85	R	10.823	F	S	SB OFF RTE 17	8/23/2007	THU	136	58	39	23	47	130	290	739	1,029	1,097	1,011	1,132	1,068	1,134	1,330	1,443	1,271	1,138	1,137	1,304	814	639	520	302	17831
4	SCL	85	R	10.823	F	S	SB OFF RTE 17	8/28/2007	TUE	103	62	36	17	39	147	320	790	1,097	1,019	922	1,011	1,044	1,103	1,316	1,312	1,261	1,036	1,141	1,235	803	652	483	332	17281
4	SCL	85	R	10.823	F	S	SB OFF RTE 17			130	57	40	22	39	132	300	750	1,056	1,064	993	1,089	1,071	1,119	1,310	1,352	1,267	1,098	1,162	1,251	805	653	512	336	17,610
4	SCL	85	R	10.559	F	S	SB OFF TO BASCOM AVE.	8/22/2007	WED	28	18	7	4	2	22	85	227	321	284	265	309	266	318	342	460	480	495	376	265	155	146	84	59	5018
4	SCL	85	R	10.559	F	S	SB OFF TO BASCOM AVE.	8/23/2007	THU	25	11	9	3	9	15	90	233	323	293	262	282	282	316	374	405	388	487	383	278	169	137	90	54	4918
4	SCL	85	R	10.559	F	S	SB OFF TO BASCOM AVE.	8/28/2007	TUE	22	18	6	5	9	11	96	255	316	311	323	285	284	339	393	393	423	392	411	287	176	116	79	56	5006
4	SCL	85	R	10.559	F	S	SB OFF TO BASCOM AVE.			25	16	7	4	7	16	90	238	320	296	283	292	277	324	370	419	430	458	390	277	167	133	84	56	4,981
4	SCL	85		10.294	N	S	SB ON FR RTE 17	8/14/2007	TUE	325	169	88	65	104	294	778	1,562	1,698	1,530	1,442	1,632	1,881	2,042	2,256	1,988	1,743	1,741	1,847	2,261	1,929	1,718	1,236	709	31038
4	SCL	85		10.294	N	S	SB ON FR RTE 17	8/15/2007	WED	349	160	111	79	99	288	834	1,492	1,767	1,561	1,420	1,660	1,849	2,017	2,307	2,042	1,774	1,772	1,794	2,257	2,038	1,680	1,226	727	31303
4	SCL	85		10.294	N	S	SB ON FR RTE 17	8/16/2007	THU	424	241	107	86	102	329	794	1,492	1,675	1,570	1,485	1,710	1,981	2,066	2,301	2,039	1,750	1,776	1,783	2,207	1,977	1,898	1,283	791	31867
4	SCL	85		10.294	N	S	SB ON FR RTE 17			366	190	102	77	102	304	802	1,515	1,713	1,554	1,449	1,667	1,904	2,042	2,288	2,023	1,756	1,763	1,808	2,242	1,981	1,765	1,248	742	31,403
4	SCL	85		10.065	N	S	SB ON FR BASCOM AVE.	8/22/2007	WED	55	30	13	11	21	54	118	283	399	466	574	662	693	546	676	726	702	630	515	446	338	281	175	114	8528
4	SCL	85		10.065	N	S	SB ON FR BASCOM AVE.	8/23/2007	THU	51	35	9	11	20	44	127	318	362	459	574	656	688	549	693	747	695	665	512	462	348	290	159	104	8578
4	SCL	85		10.065	N	S	SB ON FR BASCOM AVE.	8/28/2007	TUE	47	26	15	21	10	49	133	330	380	421	581	597	603	613	668	707	726	644	560	464	367	312	156	93	8523
4	SCL	85		10.065	N	S	SB ON FR BASCOM AVE.			51	30	12	14	17	49	126	310	380	449	576	638	661	569	679	727	708	646	529	457	351	294	163	104	8,543
4	SCL	85		9.542	F	S	SB OFF TO UNION/SAMARITN	8/14/2007	TUE	87	38	34	13	13	41	199	431	645	581	433	477	561	618	638	583	620	653	675	611	468	411	300	187	9317
4	SCL	85		9.542	F	S	SB OFF TO UNION/SAMARITN	8/15/2007	WED	83	50	29	23	17	46	191	416	652	538	409	469	505	654	624	604	568	625	644	683	537	398	314	169	9248
4	SCL	85		9.542	F	S	SB OFF TO UNION/SAMARITN	8/16/2007	THU	85	61	27	17	16	42	192	424	628	593	428	506	601	619	637	629	617	644	709	613	500	438	288	194	9508
4	SCL	85		9.542	F	S	SB OFF TO UNION/SAMARITN			85	50	30	18	15	43	194	424	642	571	423	484	556	630	633	605	602	641	676	636	502	416	301	183	9,358
4	SCL	85		9.101	N	S	SB ON FR UNION AVE.	8/14/2007	TUE	48	23	16	16	21	48	116	251	334	352	354	471	465	457	483	599	519	533	597	418	303	252	150	116	6942
4	SCL	85		9.101	N	S	SB ON FR UNION AVE.	8/15/2007	WED	52	27	23	11	18	48	131	250	345	351	340	456	507	408	505	562	564	517	583	461	350	252	169	99	7029
4	SCL	85		9.101	N	S	SB ON FR UNION AVE.	8/16/2007	THU	63	27	14	13	21	48	141	263	357	353	381	421	491	419	462	550	556	519	580	459	299	264	168	113	6982
4	SCL	85		9.101	N	S	SB ON FR UNION AVE.			54	26	18	13	20	48	129	255	345	352	358	449	488	428	483	570	546	523	587	446	317	256	162	109	6,984
4	SCL	85		8.119	F	S	SB OFF TO CAMDEN AVE	8/14/2007	TUE	173	103	43	32	40	61	157	422	525	575	617	796	938	974	1,061	1,048	1,018	1,053	1,194	1,322	1,058	827	620	366	15023
4	SCL	85		8.119	F	S	SB OFF TO CAMDEN AVE	8/15/2007	WED	183	94	53	29	36	66	162	418	580	602	637	790	919	903	1,032	1,096	1,068	1,023	1,147	1,352	1,050	870	590	381	15081
4	SCL	85		8.119	F	S	SB OFF TO CAMDEN AVE	8/16/2007	THU	199	103	61	36	44	77	163	373	558	561	709	789	985	938	1,050	1,114	955	1,058	1,149	1,287	1,067	914	684	404	15278
4	SCL	85		8.119	F	S	SB OFF TO CAMDEN AVE			185	100	52	32	40	68	161	404	554	579	654	792	947	938	1,048	1,086	1,014	1,045	1,163	1,320	1,058	870	631	384	15,127
4	SCL	85		7.969	N	S	SB ON FR CAMDEN AVE.	8/14/2007	TUE	58	24	14	25	38	144	296	476	524	504	469	443	526	496	458	582	624	779	642	573	453	336	216	116	8816
4	SCL	85		7.969	N	S	SB ON FR CAMDEN AVE.	8/15/2007	WED	47	28	30	21	39	149	299	467	539	483	472	486	528	494	515	559	648	829	664	600	441	370	209	113	9030
4	SCL	85		7.969	N	S	SB ON FR CAMDEN AVE.	8/16/2007	THU	72	36	27	31	40	161	293	467	513	511	440	496	514	488	500	563	678	824	690	520	431	349	221	139	9004
4	SCL	85		7.969	N	S	SB ON FR CAMDEN AVE.			59	29	24	26	39	151	296	470	525	499	460	475	523	493	491	568	650	811	665	564	442	352	215	123	8,950
4	SCL	85		6.382	F	S	SB OFF TO ALMADEN EXPWY.	8/14/2007	TUE	123	46	35	25	28	72	208	438	593	678	770	897	953	961	1,053	999	911	972	1,078						

**Traffic Volumes Counts**

24 hour Period Hourly Counts - Southbound SR 85

Dist	Cnty	Rte	Pref	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	SCL	85		5.049	N	S	SB ON FR SANTA TERESA	8/15/2007	WED	50	21	18	11	8	23	74	143	177	171	204	220	298	402	399	379	391	360	367	382	416	355	204	81	5154
4	SCL	85		5.049	N	S	SB ON FR SANTA TERESA	8/16/2007	THU	55	22	17	10	12	24	72	136	171	178	183	240	337	379	349	396	334	389	371	399	389	413	218	85	5179
4	SCL	85		5.049	N	S	SB ON FR SANTA TERESA	8/21/2007	TUE	48	24	16	9	10	21	80	150	148	152	216	227	292	389	367	378	371	376	388	353	399	317	155	81	4967
4	SCL	85		5.049	N	S	SB ON FR SANTA TERESA			51	22	17	10	10	23	75	143	165	167	201	229	309	390	372	384	365	375	375	378	401	362	192	82	5,100
4	SCL	85		4.868	N	S	SB ON FR RTE 87	8/23/2007	THU	268	159	112	79	100	239	606	1,083	1,149	997	942	944	1,186	1,353	1,547	2,166	2,419	2,518	2,131	1,571	1,359	1,116	803	450	25297
4	SCL	85		4.868	N	S	SB ON FR RTE 87	8/28/2007	TUE	230	126	85	50	78	241	609	1,131	1,225	934	927	1,028	1,141	1,332	1,642	2,189	2,424	2,589	2,124	1,668	1,322	1,057	666	479	25297
4	SCL	85		4.868	N	S	SB ON FR RTE 87	8/29/2007	WED	188	133	90	47	76	223	596	1,209	1,257	1,017	908	996	1,133	1,355	1,677	2,173	2,450	2,505	2,250	1,625	1,308	1,169	715	432	25532
4	SCL	85		4.868	N	S	SB ON FR RTE 87			229	139	96	59	85	234	604	1,141	1,210	983	926	989	1,153	1,347	1,622	2,176	2,431	2,537	2,168	1,621	1,330	1,114	728	454	25,375
4	SCL	85		4.189	F	S	SB OFF TO BLOSSOM HILL	8/15/2007	WED	259	134	100	37	45	109	278	499	609	649	734	929	1,073	1,056	1,399	1,824	2,134	2,538	2,762	1,871	1,555	1,305	908	515	23322
4	SCL	85		4.189	F	S	SB OFF TO BLOSSOM HILL	8/16/2007	THU	290	177	95	51	38	98	265	503	639	701	723	970	1,068	1,084	1,334	1,880	2,039	2,367	2,421	1,899	1,472	1,262	863	554	22793
4	SCL	85		4.189	F	S	SB OFF TO BLOSSOM HILL	8/21/2007	TUE	263	136	96	55	55	117	237	587	676	645	776	859	1,054	1,088	1,350	1,776	2,275	2,667	2,679	1,929	1,469	1,154	831	500	23274
4	SCL	85		4.189	F	S	SB OFF TO BLOSSOM HILL			271	149	97	48	46	108	260	530	641	665	744	919	1,065	1,076	1,361	1,827	2,149	2,524	2,621	1,900	1,499	1,240	867	523	23,130
4	SCL	85		4.043	N	S	SB ON FR WB BLOSSOM HILL	8/15/2007	WED	11	7	6	8	15	33	59	96	128	80	74	86	140	116	102	89	94	115	98	78	73	71	44	21	1644
4	SCL	85		4.043	N	S	SB ON FR WB BLOSSOM HILL	8/16/2007	THU	14	8	10	5	16	36	57	90	132	92	75	78	120	121	123	108	105	116	110	87	85	74	46	23	1731
4	SCL	85		4.043	N	S	SB ON FR WB BLOSSOM HILL	8/21/2007	TUE	9	12	4	8	10	33	57	98	133	100	81	81	127	122	103	111	97	110	102	90	78	64	34	28	1692
4	SCL	85		4.043	N	S	SB ON FR WB BLOSSOM HILL			11	9	7	7	14	34	58	95	131	91	77	82	129	120	109	103	99	114	103	85	79	70	41	24	1,689
4	SCL	85		3.93	B	S	SAN JOSE- BLOSSOM HILL ROAD	7/10/2007	TUE	385	204	134	100	186	618	1,584	2,843	3,739	3,001	2,515	2,405	3,030	3,263	3,599	4,534	5,152	5,018	4,516	3,239	2,531	2,127	1,461	791	56975
4	SCL	85		3.93	B	S	SAN JOSE- BLOSSOM HILL ROAD	7/11/2007	WED	390	214	248	125	173	632	1,541	2,920	3,797	3,092	2,535	2,509	2,959	3,317	3,714	4,539	4,914	4,995	4,304	3,278	2,745	2,371	1,534	867	57713
4	SCL	85		3.93	B	S	SAN JOSE- BLOSSOM HILL ROAD	7/12/2007	THU	454	249	148	113	162	674	1,606	3,043	3,757	3,079	2,609	2,687	2,993	3,400	3,803	4,585	4,998	5,073	4,479	3,579	2,724	2,434	1,660	936	59245
4	SCL	85		3.93	B	S	SAN JOSE- BLOSSOM HILL ROAD			410	222	177	113	174	641	1,577	2,935	3,764	3,057	2,553	2,534	2,994	3,327	3,705	4,553	5,021	5,029	4,433	3,365	2,667	2,311	1,552	865	57,978
4	SCL	85		3.796	N	S	SB ON FR EB BLOSSOM HILL	8/15/2007	WED	21	12	8	6	8	39	75	137	168	161	145	153	204	227	189	200	238	243	221	173	176	133	80	35	3052
4	SCL	85		3.796	N	S	SB ON FR EB BLOSSOM HILL	8/16/2007	THU	28	11	12	8	9	36	69	122	164	172	135	149	195	227	178	192	234	291	215	214	151	131	78	36	3057
4	SCL	85		3.796	N	S	SB ON FR EB BLOSSOM HILL	8/21/2007	TUE	13	14	12	6	9	37	76	151	152	144	125	157	182	197	188	198	191	259	197	194	157	118	63	38	2878
4	SCL	85		3.796	N	S	SB ON FR EB BLOSSOM HILL			21	12	11	7	9	37	73	137	161	159	135	153	194	217	185	197	221	264	211	194	161	127	74	36	2,996
4	SCL	85		2.19	F	S	SB OFF TO COTTLE RD	8/15/2007	WED	161	71	45	37	48	105	302	571	975	821	720	795	868	1,051	1,149	1,230	1,301	1,429	1,413	1,178	980	792	549	292	16883
4	SCL	85		2.19	F	S	SB OFF TO COTTLE RD	8/16/2007	THU	167	70	48	34	46	103	311	603	942	819	734	737	868	1,018	1,131	1,249	1,159	1,400	1,366	1,128	935	851	578	305	16602
4	SCL	85		2.19	F	S	SB OFF TO COTTLE RD	8/21/2007	TUE	143	92	47	34	42	106	276	673	1,025	773	748	766	896	1,022	1,076	1,298	1,325	1,478	1,454	1,192	970	753	495	307	16991
4	SCL	85		2.19	F	S	SB OFF TO COTTLE RD			157	78	47	35	45	105	296	616	981	804	734	766	877	1,030	1,119	1,259	1,262	1,436	1,411	1,166	962	799	541	301	16,825
4	SCL	85		1.997	N	S	SB ON FR SB COTTLE RD	8/21/2007	TUE	2	1	3	2	6	32	50	72	75	83	47	71	116	120	79	86	92	120	101	87	47	32	22	17	1363
4	SCL	85		1.997	N	S	SB ON FR SB COTTLE RD	8/22/2007	WED	6	1	1	2	8	31	61	77	75	67	69	64	117	108	93	83	98	100	93	67	46	40	30	13	1350
4	SCL	85		1.997	N	S	SB ON FR SB COTTLE RD	8/23/2007	THU	4	7	4	1	10	28	62	68	65	72	85	64	113	120	67	94	90	109	110	81	54	38	20	8	1374
4	SCL	85		1.997	N	S	SB ON FR SB COTTLE RD			4	3	3	2	8	30	58	72	72	74	67	66	115	116	80	88	93	110	101	78	49	37	24	13	1,362
4	SCL	85		1.737	N	S	SB ON FR NB COTTLE RD.	8/21/2007	TUE	27	22	15	6	12	45	100	181	182	156	144	137	178	150	139	218	230	247	156	113	119	75	56	56	2764
4	SCL	85		1.737	N	S	SB ON FR NB COTTLE RD.	8/22/2007	WED	25	8	13	11	18	46	96	198	200	155	143	159	168	152	164	201	245	266	170	141	131	72	65	57	2904
4	SCL	85		1.737	N	S	SB ON FR NB COTTLE RD.	8/23/2007	THU	30	14	13	11	14	54	98	155	186	145	162	140	188	173	181	212	212	220	182	141	121	90	66	44	2852
4	SCL	85		1.737	N	S	SB ON FR NB COTTLE RD.			27	15	14	9	15	48	98	178	189	152	150	145	178	158	161	210	229	244	169	132	124	79	62	52	2,840
4	SCL	85		0.785	F	S	SB OFF TO GREAT OAKS	8/21/2007	TUE	45	26	27	23	38	120	300	685	842	646	346	346	477	559	434	495	485	583	514	364	302	202	140	92	8091
4	SCL	85		0.785	F	S	SB OFF TO GREAT OAKS	8/22/2007	WED	52	30	20	21	39	132	308	658																	

## APPENDIX B

SR 85 Existing Conditions Peak Hour Travel Speed																				
Route	Segment	Distance (miles)	Distance from PM	Speed & Travel Time Run Profile	Average Travel Speed (mph)															
					Peak Period	Tach Run														
				6:00		6:30		7:00		7:30		8:00		8:30		9:00		9:30		
Northbound				Runs	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
85	NB SR 85 On-Ramp - Bernal Rd. Loop On-Ramp	0.55	0.77	32	65					65										
85	Bernal Rd. Loop On-Ramp - Bernal Rd. Diagonal On-Ramp	0.25		45	65					65										
85	Bernal Rd. Diagonal On-Ramp - US 101 SB On-Ramp	0.25	3.63	65	65					65										
85	US 101 SB On-Ramp - Great Oaks Blvd. On-Ramp	0.20	1.37	65	65					65										
85	Great Oaks Blvd. On-Ramp - Cottle Rd. Off-Ramp	1.10		65	65					65										
85	Cottle Rd. Off-Ramp - Cottle Rd. On-Ramp	0.30		65	65					65										
85	Cottle Rd. On-Ramp - Blossom Hill Rd. Off-Ramp	1.55	2.02	65	65					65										
85	Blossom Hill Rd. Off-Ramp - Blossom Hill Rd. Loop On-Ramp	0.22		65	65					65										
85	Blossom Hill Rd. Loop On-Ramp - Blossom Hill Rd. Diagonal On-Ramp	0.15		65	65		57			65										
85	Blossom Hill Rd. Diagonal On-Ramp - SR 87 Off-Ramp	0.92	0.82	60	65		57		65	60	55			55	65	49			65	65
85	SR 87 Off-Ramp - Santa Teresa Blvd. Off-Ramp	0.18	0.58	52	65		57		65	60	65			55	65	11			65	65
85	Santa Teresa Blvd. Off-Ramp - Santa Teresa Blvd. On-Ramp	0.15		31	65		57		65	57	65			55	65	11			65	65
85	Santa Teresa Blvd. On-Ramp - SR 87 On-Ramp	0.25		15	65		57		65	57	65			55	65	11			65	65
85	SR 87 On-Ramp - Almaden Expy. Off-Ramp	0.60	0.58	15	65		57		65	50	65			18	62	11			50	65
85	Almaden Expy. Off-Ramp - Almaden Expy. Loop On-Ramp	0.12	0.92	23	65		61		25		65			62		11			55	65
85	Almaden Expy. Loop On-Ramp - Almaden Expy. Diagonal On-Ramp	0.20		23	65		64		25		65			53		15			35	65
85	Almaden Expy. Diagonal On-Ramp - Camden Ave. Off-Ramp	1.67	1.91	34	65		63		45		56			38		39			40	65
85	Camden Ave. Off-Ramp - Camden Ave. On-Ramp	0.27		40	65		59		53		39			65		18			47	65
85	Camden Ave. On-Ramp - Union Ave. Off-Ramp	0.96	1.19	31	65		59		46		33			53		25			37	45
85	Union Ave. Off-Ramp - Union Ave. On-Ramp	0.17		40	65		55		48		40			40		40			37	50
85	Union Ave. On-Ramp - Bascom Ave. Off-Ramp	0.69	1.61	38	65		55		55		47			38		47			50	58
85	Bascom Ave. Off-Ramp - SR 17 Off-Ramp	0.25		54	65		62		62		60			18		55			62	65
85	SR 17 Off-Ramp - Bascom Ave. On-Ramp	0.20		60	65		62		50		27			15		34			62	65
85	Bascom Ave. On-Ramp - SR 17 On-Ramp	0.50		43	65		62		18		15			15		15			48	65
85	SR 17 On-Ramp - Winchester Blvd. On-Ramp	0.26	1.30	16	63		25		13		10			15		15			30	65
85	Winchester Blvd. On-Ramp - Lane Drop	0.50		25	65		25		24		20			22		29			21	51
85	Lane Drop - Saratoga Ave. Off-Ramp	1.91	1.73	50	65		57		54		43			34		53			60	62
85	Saratoga Ave. Off-Ramp - Saratoga Ave. On-Ramp	0.38		60	65		60		60		46			29		54			60	62
85	Saratoga Ave. On-Ramp - Saratoga Sunnyvale Rd. Off-Ramp	1.98	2.14	55	63	65	62	65	50	60	23	60	36	60	59	41	65	40	62	62
85	Saratoga Sunnyvale Rd. Off-Ramp - Saratoga Sunnyvale Rd. On-Ramp	0.26		55	65		59	62	18	55	22	60	43	65	40	54	65	45	48	60
85	Saratoga Sunnyvale Rd. On-Ramp - Lane Add	1.25	1.79	53	65		60	65	30	55	31	57	47	62	43	32	55	45	51	60
85	Lane Add - Stevens Creek Blvd. Off-Ramp	0.27		60	65		62	65	55	62	55	62	52	62	62	20	60	65	64	60
85	Stevens Creek Blvd. Off-Ramp - I-280 Off-Ramp	0.30		65	65		63	65	62	65	62	62	53	40	60	5	65	65	64	60
85	I-280 Off-Ramp - I-280 Loop On-Ramp	0.56	0.82	35	65		65	65	65	65	65	65	45	5	58	5	65	30	35	30
85	I-280 Loop On-Ramp - I-280 Diagonal On-Ramp	0.30		8	65		65	65	65	65	34	33	10	5	22	5	65	15	10	15
85	I-280 Diagonal On-Ramp - Homestead Rd. On-Ramp	0.18	1.11	11	65		62	65	65	65	10	15	10	10	15	5	34	25	10	15

**SR 85 Existing Conditions Peak Hour Travel Speed**

Route	Segment	Distance (miles)	Distance from PM	Average Travel Speed (mph)																
				Speed & Travel Time Run Profile	Tach Run															
					Peak Period	6:00		6:30		7:00		7:30		8:00		8:30		9:00		9:30
	<b>Northbound</b>			<b>Runs</b>	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>
85	Homestead Rd. On-Ramp - Lane Drop	0.20		18	62	65	62	65	60	62	20	15	25	15	15	10	15	25	20	15
85	Lane Drop - Lane Add	0.44		18	60	65	62	65	51	60	25	15	38	10	28	20	30	42	40	30
85	Lane Add - Fremont Ave. Off-Ramp	0.25		18	55	65	55	65	43	60	40	15	48	10	49	20	45	42	45	15
85	Fremont Ave. Off-Ramp - Fremont Ave. On-Ramp	0.27	2.19	20	55	65	65		60		15		10		20		40		15	
85	Fremont Ave. On-Ramp - El Camino Real SB Off-Ramp	1.60	2.00	46	65		62		59		45		35		42		47		30	
85	El Camino Real SB Off-Ramp - El Camino Real SB On-Ramp	0.10		58	65		60		65		62		60		55		46		30	
85	El Camino Real SB On-Ramp - El Camino Real NB Off-Ramp	0.10		65	65		60		65		62		65		50		46		38	
85	El Camino Real NB Off-Ramp - El Camino Real NB On-Ramp	0.09		60	65		58		65		60		65		45		50		28	
85	El Camino Real NB On-Ramp - SR 237 Off-Ramp	0.18		60	65		58		65		60		65		45		60		42	
85	SR 237 Off-Ramp - SR 237 On-Ramp	0.10	1.00	60	65		60		65		62		65		50		60		55	
85	SR 237 On-Ramp - Evelyn Ave. Off-Ramp	0.25		65	65		60		65		65		65		60		60		65	
85	Evelyn Ave. Off-Ramp - Central Expy. On-Ramp	0.65		65	65		62		65		65		65		65		60		65	
85	Central Expy. On-Ramp - Moffett Blvd. Off-Ramp	0.31	1.02	65	65		65		65		65		65		65		60		62	
85	Moffett Blvd. Off-Ramp - US 101 NB	0.41		65	65		65		50	62	18	60	20	62		65	62	50	65	62
85	US 101 NB - N. Shoreline Blvd. Off-Ramp	0.00	0.70	65	65				39		15		21				60		65	

**SR 85 Existing Conditions Peak Hour Travel Speed**

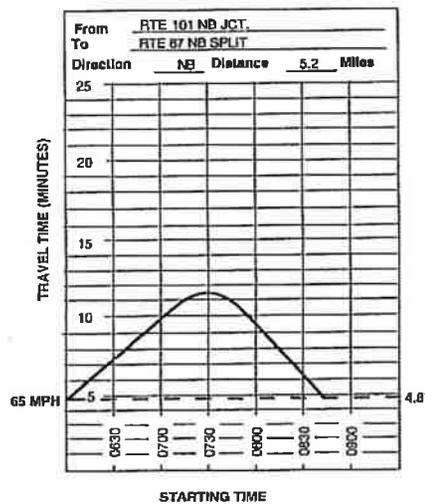
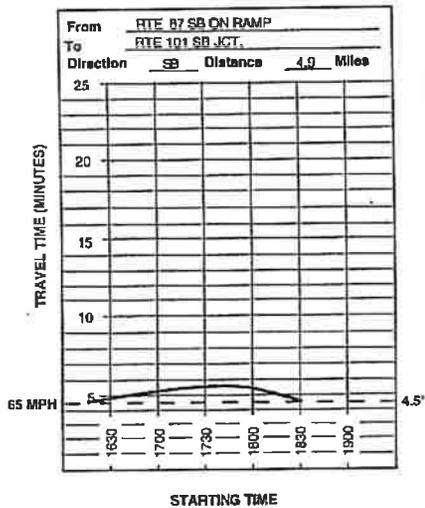
Route	Segment	Distance (miles)	Distance from PM	Average Travel Speed (mph)																			
				Speed & Travel Time Run Profile	Tach Run																		
					Peak Period	15:00		15:30		16:00		16:30		17:00		17:30		18:00		18:30		19:00	
<b>Southbound</b>				<i>Runs</i>	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	
85	SR 85 SB On-Ramp - Moffett Blvd. On-Ramp	0.55	1.53	58	65		62		58				60		55		65		55		52		
85	Moffett Blvd. On-Ramp - Central Expy. Off-Ramp	0.65		35	65		62		60				60		32.5		65		62		55		
85	Central Expy. Off-Ramp - Evelyn Ave. On-Ramp	1.00		10	65		30		39				38		10		43		62		62		
85	Evelyn Ave. On-Ramp - SR 237 Off-Ramp	0.20	0.89	7	62		10		12				10		10		10		62		65		
85	SR 237 Off-Ramp - SR 237 On-Ramp	0.11		8	62		10		12				10		10		10		34		65		
85	SR 237 On-Ramp - El Camino Real NB On-Ramp	0.38		13	62		10		12				10		10		20		15		65		
85	El Camino Real NB On-Ramp - El Camino Real SB Off-Ramp	0.09		15	62		10		12				10		10		25		25		65		
85	El Camino Real SB Off-Ramp - El Camino Real SB On-Ramp	0.10		18	62		10		12				10		10		25		16		65		
85	El Camino Real SB On-Ramp - Fremont Ave. Off-Ramp	1.62	1.87	22	56		31		33				33		29		41		24		47		
85	Fremont Ave. Off-Ramp - Fremont Ave. On-Ramp	0.36		18	65		55		62				39		15		27		22		35		
85	Fremont Ave. On-Ramp - Lane Add	0.50	1.48	35	65		39		50				30		35		36		40		40		
85	Lane Add - Homestead Rd. Off-Ramp	0.18		60	65		62		62				51		50		50		58		54		
85	Homestead Rd. Off-Ramp - I-280 Off-Ramp	0.28		60	65	65	62	65	62	65	55		62		59	50	59	62	60	52	58	65	
85	I-280 Off-Ramp - I-280 NB On-Ramp	0.25		60	65	65	65	65	65	65	62		62		62	59	61	57	62	55	62	62	
85	I-280 NB On-Ramp - I-280 SB On-Ramp	0.37		60	65	65	65	65	65	65	62		62		58	58	60	62	58	60	65	65	
85	I-280 SB On-Ramp - Stevens Creek Blvd. Off-Ramp	0.42	0.73	38	65	65	65	65	65	65	62		62		44	57	51	62	60	65	65	65	
85	Stevens Creek Blvd. Off-Ramp - Stevens Creek Blvd. On-Ramp	0.34		30	65	65	68	65	52	65	62		43		10	60	13	65	28	68	65	65	
85	Stevens Creek Blvd. On-Ramp - Lane Drop	0.53	1.83	23	65	65	67	65	19	65	62		15		15	60	15	62	14	60	65	65	
85	Lane Drop - Saratoga Sunnyvale Rd. Off-Ramp	1.00		40	65	65	60	62	35	65	47		27		34	50	26	53	36	62	65	65	
85	Saratoga Sunnyvale Rd. Off-Ramp - Saratoga Sunnyvale Rd. On-Ramp	0.30		40	65	65	46	55	41	65	62		20		32	58	15	65	62	65	65	65	
85	Saratoga Sunnyvale Rd. On-Ramp - Saratoga Ave. Off-Ramp	1.80	1.79	22	65	65	39	55	25	65	53		32		30	36	29	42	57	30	58	65	
85	Saratoga Ave. Off-Ramp - Saratoga Ave. On-Ramp	0.39		18		65		55		60	57					32		33		12		65	
85	Saratoga Ave. On-Ramp - Lane Add	2.12	2.76	30		56		55		47	41					31		34		28		54	
85	Lane Add - Winchester Blvd. Off-Ramp	0.24		62		65		55		60	60					60		58		65		60	
85	Winchester Blvd. Off-Ramp - SR 17 Off-Ramp	0.38		56		65		55		55	62					62		62		65		60	
85	SR 17 Off-Ramp - Bascom Ave. Off-Ramp	0.25	0.64	37		65		62		55	62					65		65		68		62	
85	Bascom Ave. Off-Ramp - SR 17 On-Ramp	0.40		22		65		58		62	54					41		65		65		65	
85	SR 17 On-Ramp - Bascom Ave. On-Ramp	0.24	1.26	25		62		55		48	33					15		37		59		65	
85	Bascom Ave. On-Ramp - Union Ave. Off-Ramp	0.55		25		53		55		28	25					22		20		45		65	
85	Union Ave. Off-Ramp - Union Ave. On-Ramp	0.44		28		50		55		29	24					45		39		32		65	
85	Union Ave. On-Ramp - Lane Add	0.72	1.10	50		48		46		43	37					41		32		40		65	
85	Lane Add - Camden Ave. Off-Ramp	0.35		50		62		55		48	49					52		53		55		65	
85	Camden Ave. Off-Ramp - Camden Ave. On-Ramp	0.13		55		62		60		52	55					57		59		52		65	
85	Camden Ave. On-Ramp - Almaden Expy. Off-Ramp	1.59	1.90	60		65	62	62	64	58	60	62	62		62	51	62	56	65	57		62	
85	Almaden Expy. Off-Ramp - Almaden Expy. Loop On-Ramp	0.15		58		65	62	60	62		58	58	60	62		62	55	58	58	65	52		65

**SR 85 Existing Conditions Peak Hour Travel Speed**

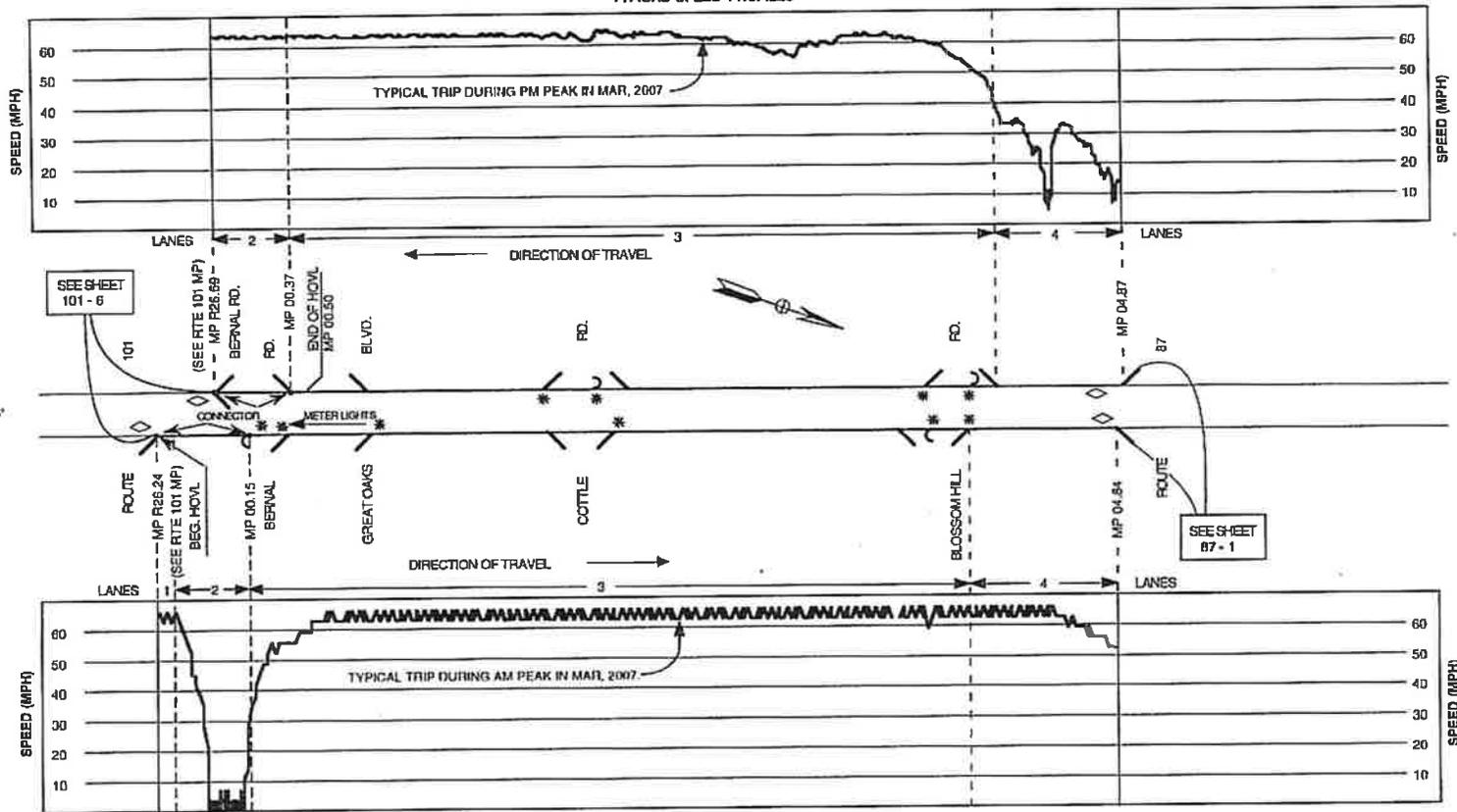
Route	Segment	Distance (miles)	Distance from PM	Average Travel Speed (mph)																				
				Speed & Travel Time Run Profile	Tach Run																			
					Peak Period	15:00		15:30		16:00		16:30		17:00		17:30		18:00		18:30		19:00		
						Runs	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
	<b>Southbound</b>																							
85	Almaden Expy. Loop On-Ramp - Almaden Expy. Diagonal On-Ramp	0.12		60	65	65	60	62		54	58	60	65		58	55	60	65	65	55		65		
85	Almaden Expy. Diagonal On-Ramp - SR 87 Off-Ramp	0.52	0.50	55	65	65	60	62		62	62	65	55		60	58	62	65	65	63		65		
85	SR 87 Off-Ramp - Santa Teresa Blvd. Off-Ramp	0.14	1.40	55	65	65	58	62		62	65	65	65		62	58	62	65	65	65		65		
85	Santa Teresa Blvd. Off-Ramp - Lane Drop	0.07		50	65	65	58	62		62	65	65	65		62	55	63	65	65	65		65		
85	Lane Drop - Santa Teresa Blvd. On-Ramp	0.31		18	65	65	58	62		62	65	65	65		62	21	65	40	65	65		65		
85	Santa Teresa Blvd. On-Ramp - SR 87 On-Ramp	0.18		15	65	60	58	62		62	65	62	65		60	17	65	20	65	62		65		
85	SR 87 On-Ramp - Blossom Hill Rd. Off-Ramp	0.71		20	57	48	41	49		48	45	42	57		43	23	42	31	65	50		38		
85	Blossom Hill Rd. Off-Ramp - Blossom Hill Rd. Loop On-Ramp	0.10	1.09	48	54	37	52					54	58		54		55		65					
85	Blossom Hill Rd. Loop On-Ramp - Blossom Hill Rd. Diagonal On-Ramp	0.24		55	62		62					60	56		58		62		65					
85	Blossom Hill Rd. Diagonal On-Ramp - Lane Add	1.32	1.97	65	65		65					62	58		60		65		65					
85	Lane Add - Cottle Rd. Off-Ramp	0.33		65	65		62					65	63		62		65		65					
85	Cottle Rd. Off-Ramp - Cottle Rd. Loop On-Ramp	0.20		65	65		62					65	58		62		65		65					
85	Cottle Rd. Loop On-Ramp - Cottle Rd. Diagonal On-Ramp	0.25		65	65		62					65	65		63		65		65					
85	Cottle Rd. Diagonal On-Ramp - Great Oaks Blvd. Off-Ramp	0.96	1.75	65	65		62					65	65		65		65		65					
85	Great Oaks Blvd. Off-Ramp - Bernal Rd. Off-Ramp	0.45		65	65		60					62	62		62		65		65					
85	Bernal Rd. Off-Ramp - SB US 101	0.22		65	65		60					62	62		62		65		65					

# TRAVEL TIME RUNS

**OBSERVED TRAVEL TIMES**



**TYPICAL SPEED PROFILES**

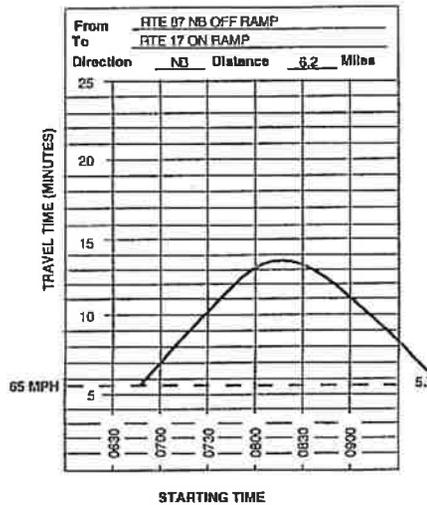
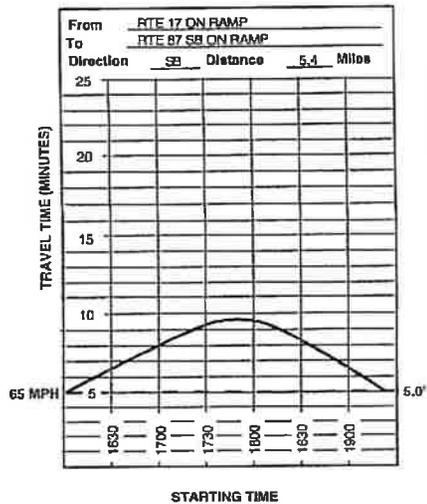


HORIZ. SCALE : 1" = 1 MILE

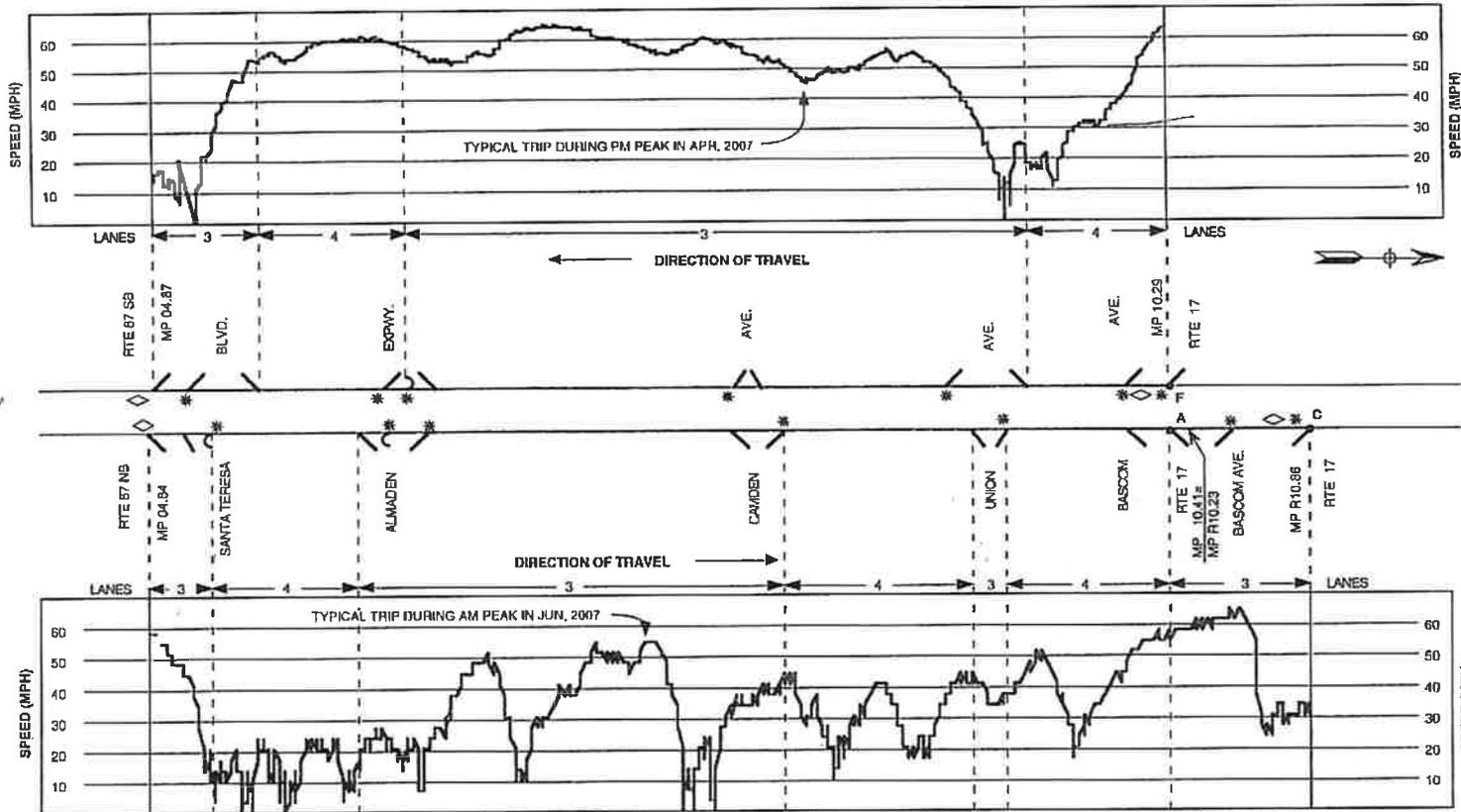
- Notes
- 1.- Unless otherwise indicated, travel times at all other hours are normally delay free.
  - 2.- ◇ Left lane HOV lane. (Carpools & buses only) 5-9 AM & 3-7 PM, M-F. NB & SB.
  - 3.- \* Denotes metered ramps.

TRAVEL TIME AND SPEED	
ROUTE:	<b>SCL 85</b>
LIMITS:	RTE 101 I/C TO RTE 87 I/C
SHEET No:	85 - 1
DATE:	MAR 08
CALTRANS DIST. 04 OFFICE OF HIGHWAY OPERATIONS	

**OBSERVED TRAVEL TIMES**



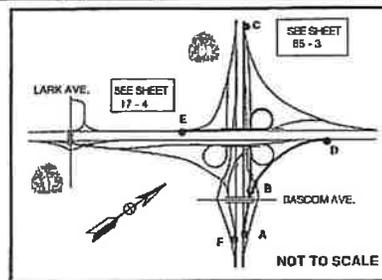
**TYPICAL SPEED PROFILES**



HORIZ. SCALE : 1" = 1 MILE

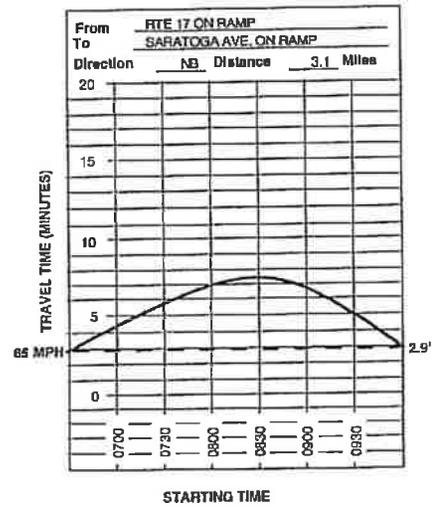
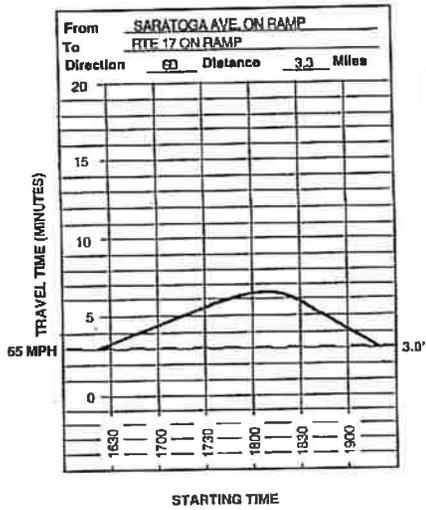
**Notes**

- 1.- Unless otherwise indicated, travel times at all other hours are normally delay free.
- 2.- ◊ Left lane HOV lane. (Carpools & buses only) 5-9 AM & 3-7 PM, M-F. NB & SB.
- 3.- \* Denotes metered ramps.

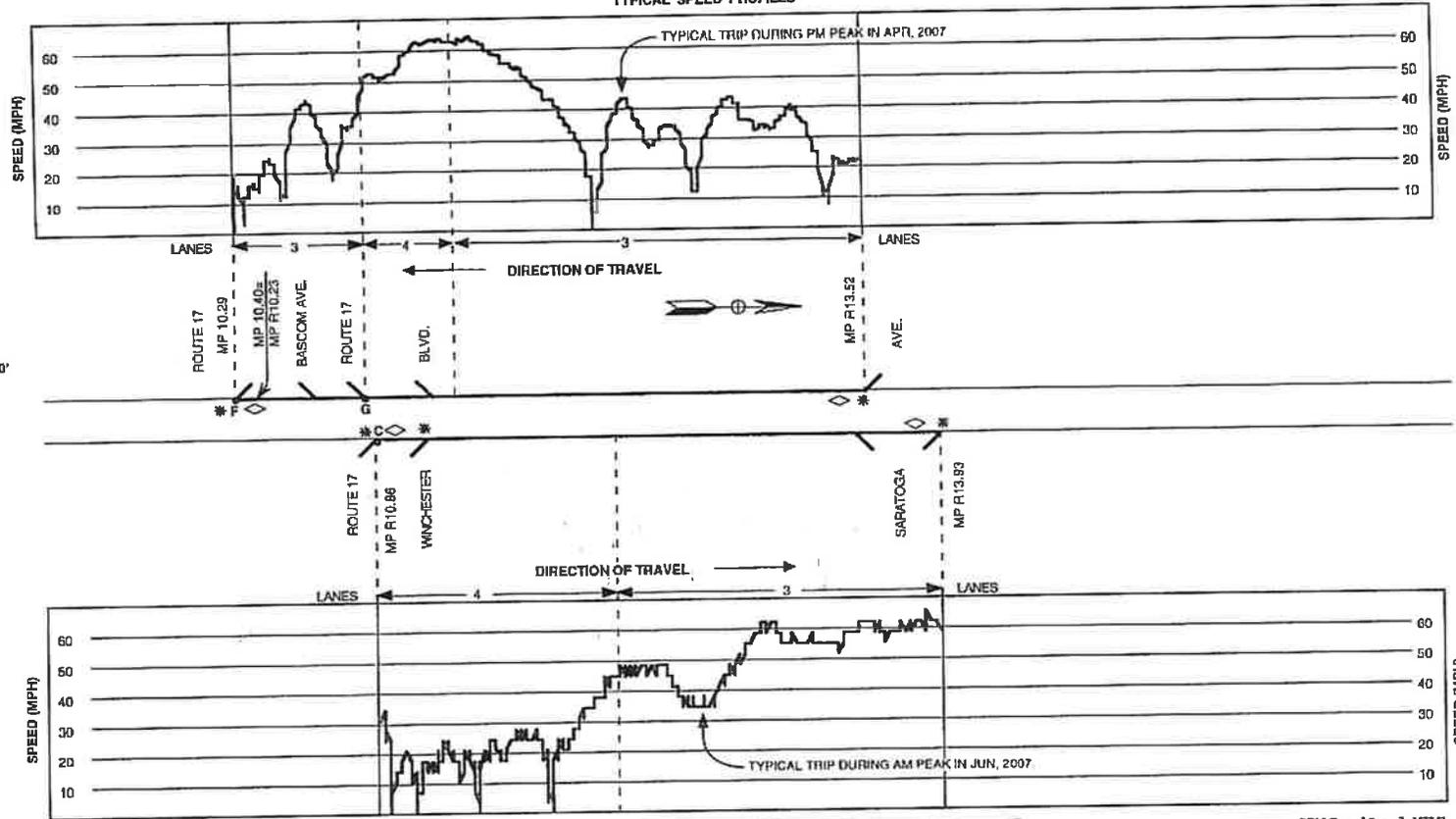


TRAVEL TIME AND SPEED	
ROUTE:	<b>SCL 85</b>
LIMITS:	RTE 87 I/C TO RTE 17 I/C
SHEET No:	85 - 2
DATE:	MAR 08
CALTRANS DIST. 04 OFFICE OF HIGHWAY OPERATIONS	

**OBSERVED TRAVEL TIMES**

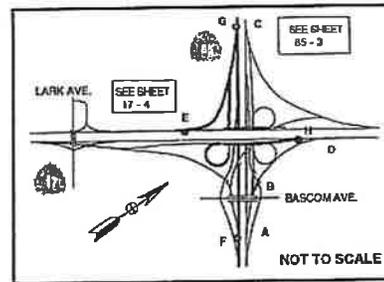


**TYPICAL SPEED PROFILES**



**Notes**

- 1.- Unless otherwise indicated, travel times at all other hours are normally delay free.
- 2.- ◇ Left lane HOV lane. (Carpools & buses only) 5-9 AM & 3-7 PM, M-F, NB & SB.
- 3.- \* Denotes metered ramps.

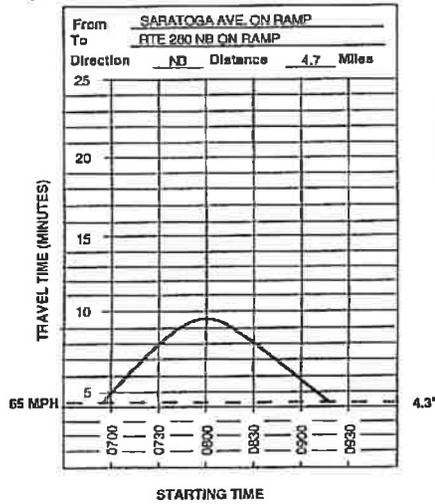
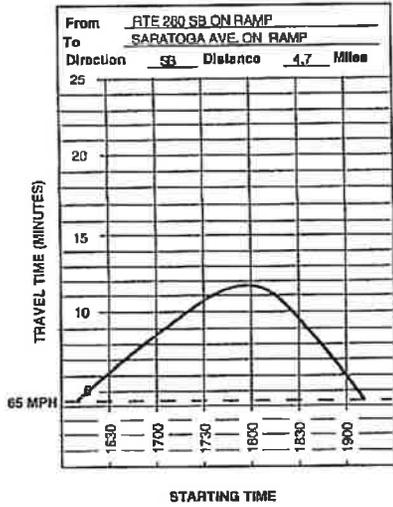


HORIZ. SCALE : 1" = 1 MILE

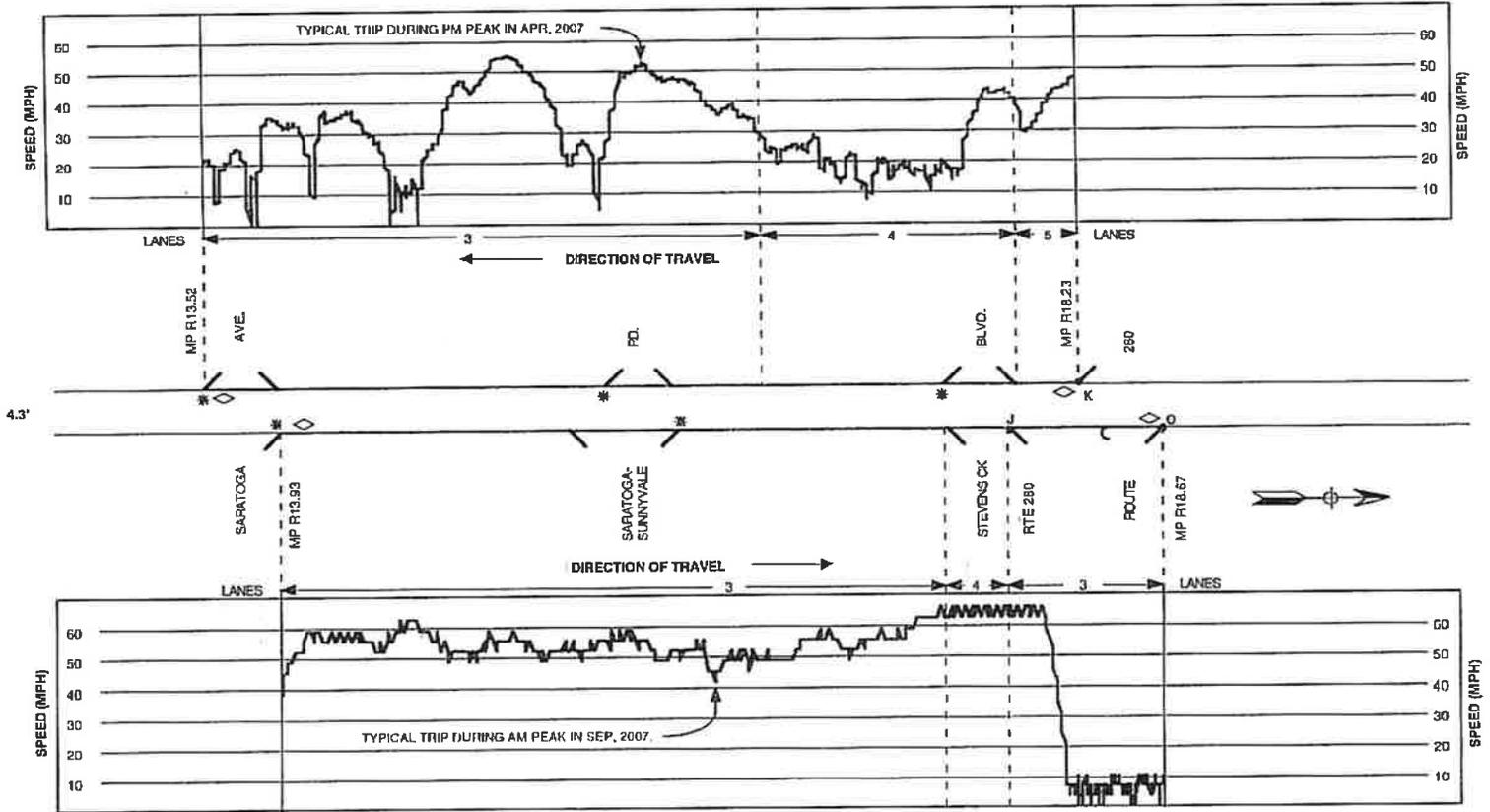
**TRAVEL TIME AND SPEED**

ROUTE: **SCL 85**  
 LIMITS: RTE 17 TO SARATOGA AVE.  
 SHEET No: 05 - 3      DATE: MAR 08

**OBSERVED TRAVEL TIMES**

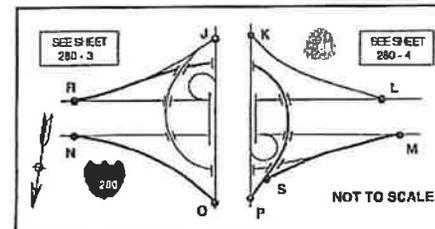


**TYPICAL SPEED PROFILES**



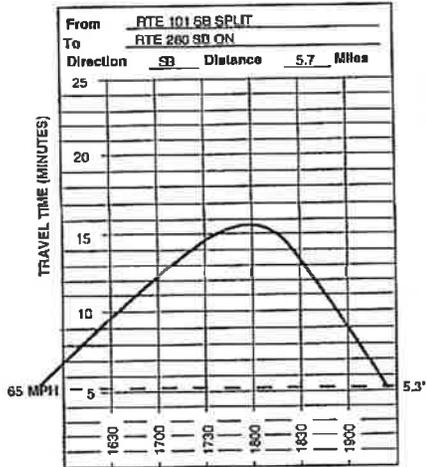
HORIZ. SCALE : 1" = 1 MILE

- Notes
- 1.- Unless otherwise indicated, travel times at all other hours are normally delay free.
  - 2.- ◊ Left lane HOV lane. (Carpools & buses only) 5-9 AM & 3-7 PM, M-F, NB & SB.
  - 3.- \* Denotes metered ramps.

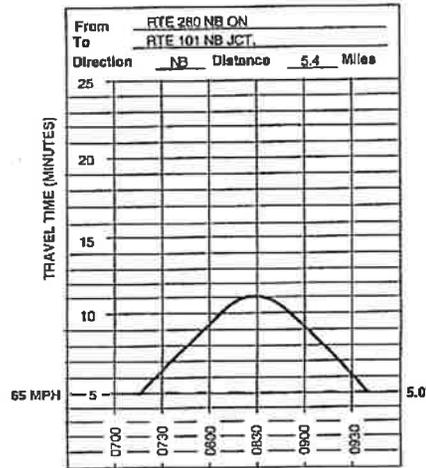


TRAVEL TIME AND SPEED	
ROUTE:	<b>SCL 85</b>
LIMITS:	SARATOGA AVE TO RTE 280 I/C
SHEET No:	85 - 4
DATE:	MAR 08
CALTRANS DIST. 04 OFFICE OF HIGHWAY OPERATIONS	

**OBSERVED TRAVEL TIMES**

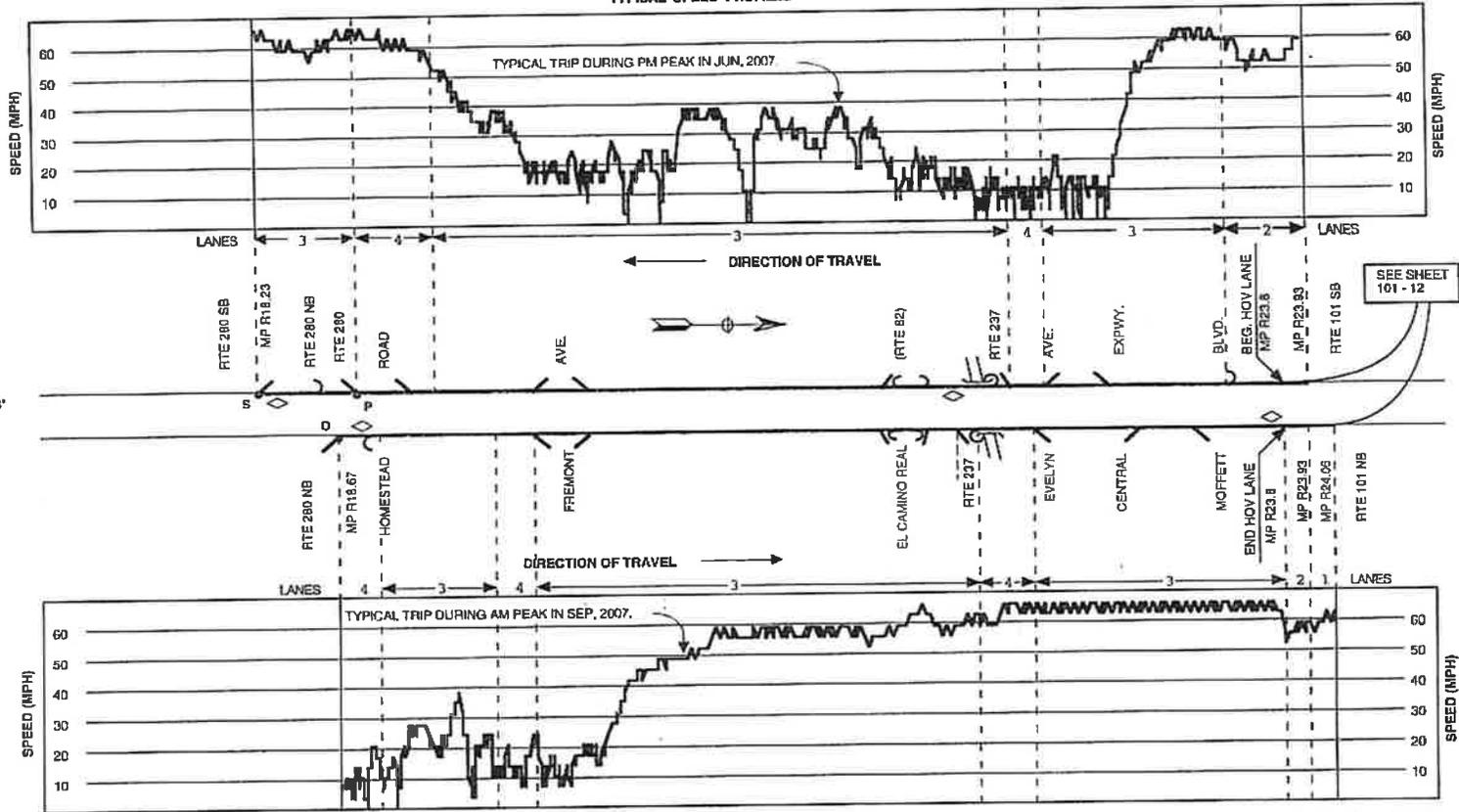


STARTING TIME



STARTING TIME

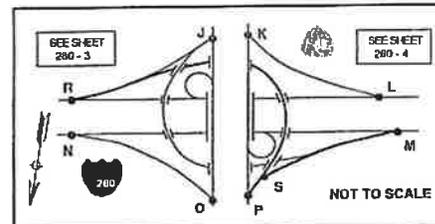
**TYPICAL SPEED PROFILES**



HORIZ. SCALE : 1" = 1 MILE

**Notes**

- Unless otherwise indicated, travel times at all other hours are normally delay free.
- ◊ Left lane HOV lane. (Carpools & buses only) 5-9 AM & 3-7 PM, M-F, NB & SB.



TRAVEL TIME AND SPEED	
ROUTE:	<b>SCL 85</b>
LIMITS:	RTE 280 TO RTE 101
SHEET No:	85 - 5
DATE:	MAR 08
CALTRANS DIST. 04 OFFICE OF HIGHWAY OPERATIONS	

# TACH RUNS

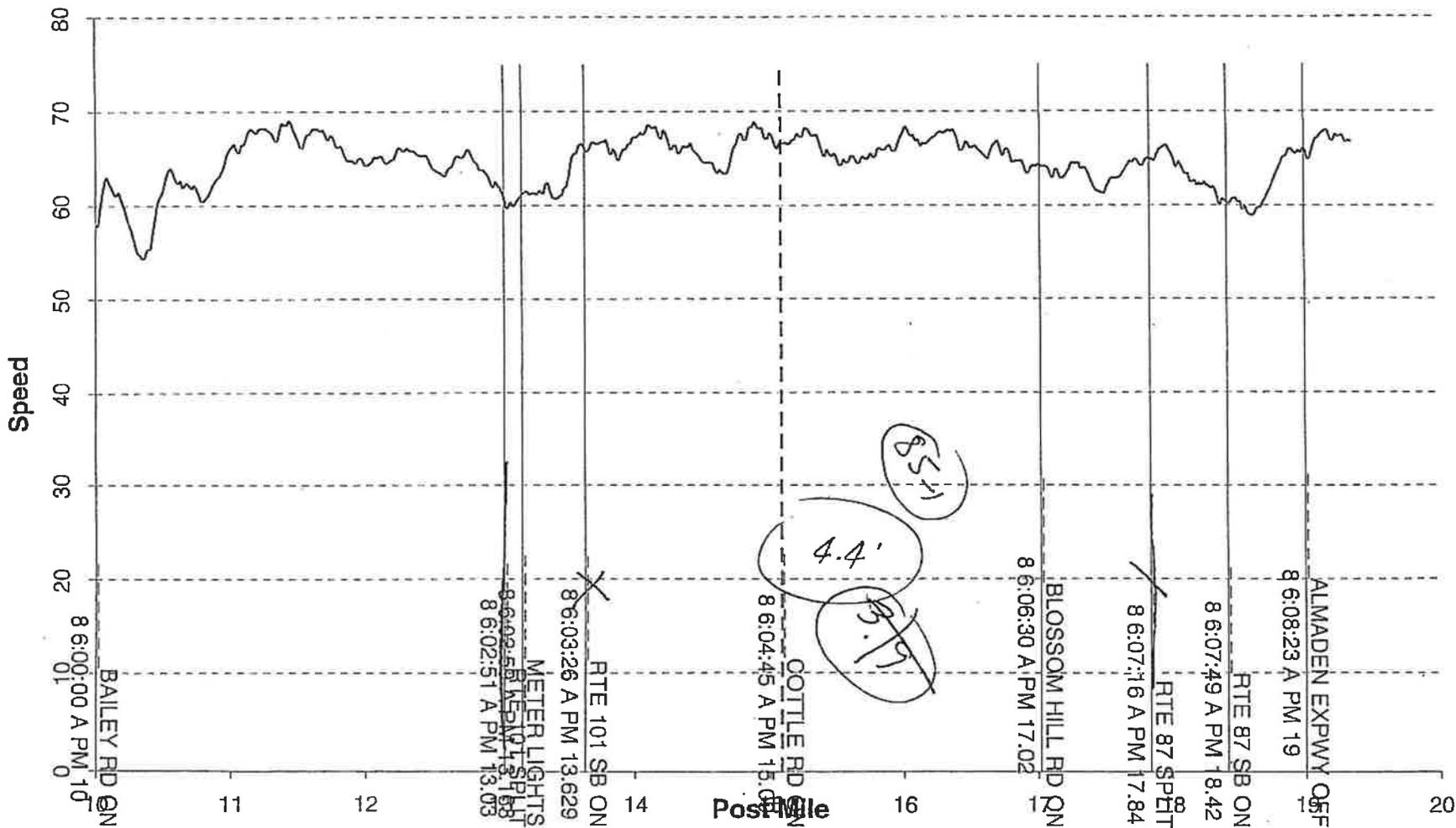
# MIXED FLOW

# TACHOGRAPH PLOT

Code: n08501h  
Driver: MARIA CASTRO

Date: 10/22/2008 - Wed  
Location: SCL-85-10/0

Set: 01  
Run: 1

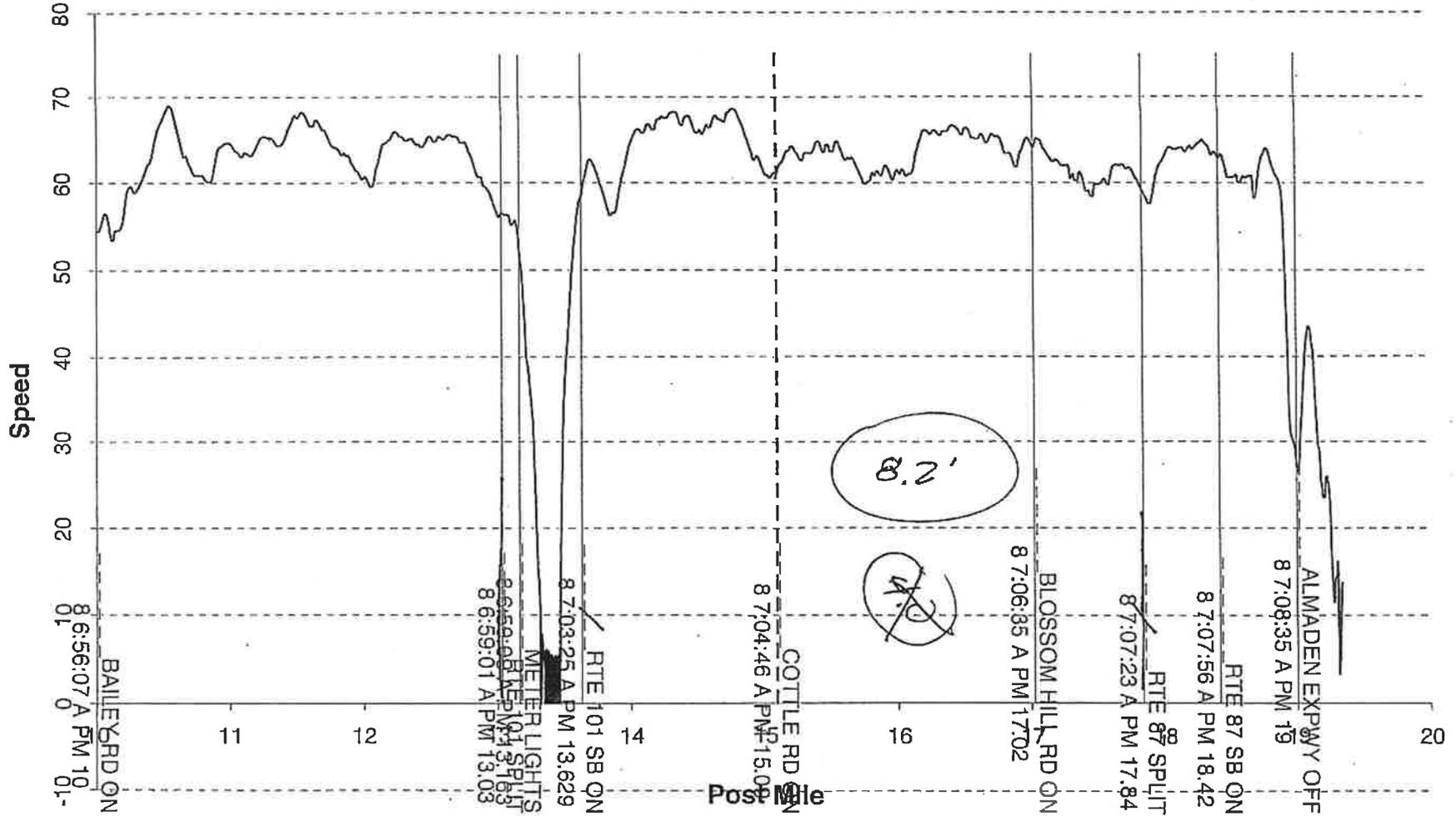


# TACHOGRAPH PLOT

Code: n08501h  
Driver: MARIA CASTRO

Date: 10/22/2008 - Wed      Set: 02  
Location: SCL-85-10/0

Run: 1

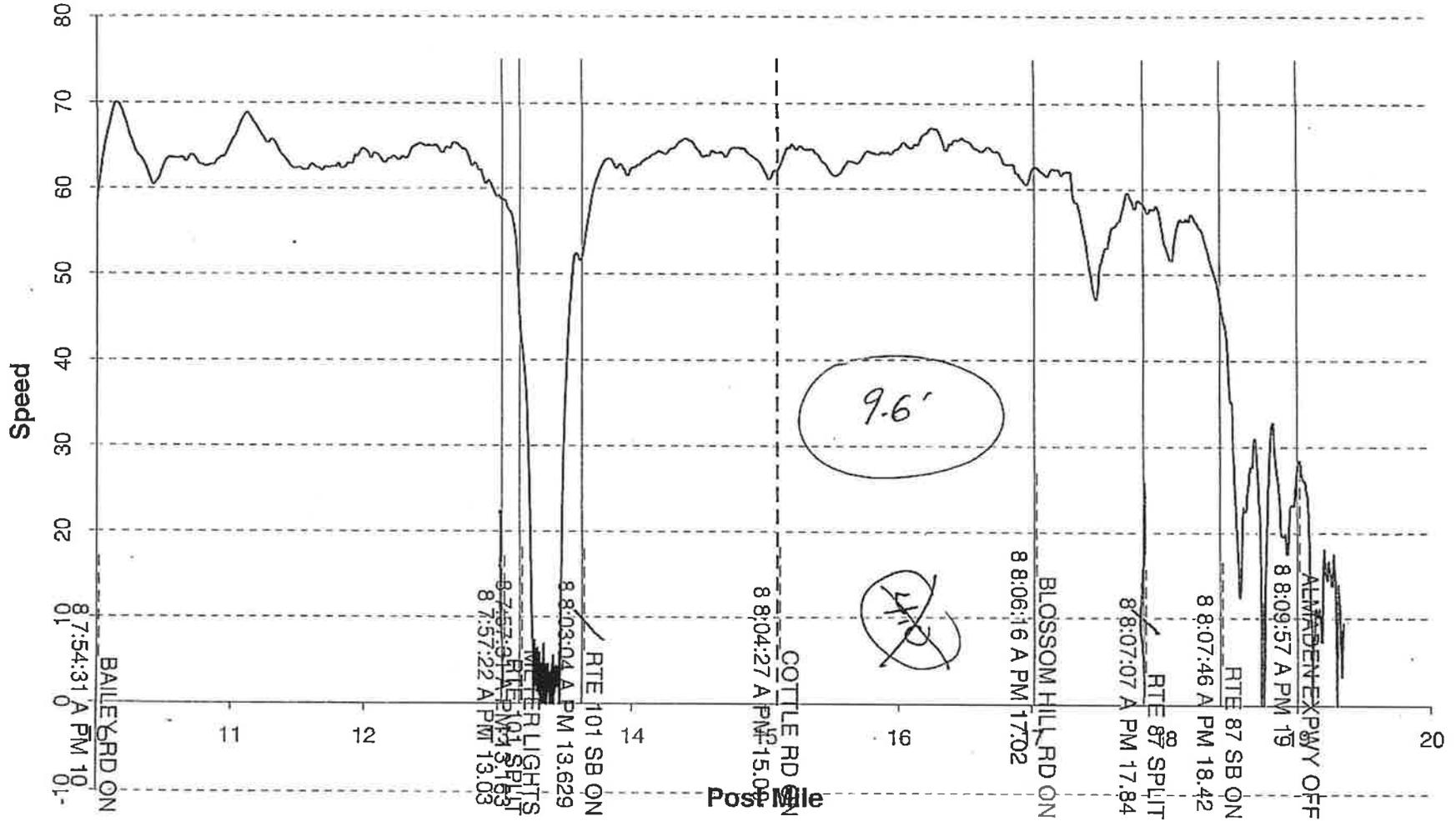


# TACHOGRAPH PLOT

Code: n08501h  
Driver: MARIA CASTRO

Date: 10/22/2008 - Wed Set: 03  
Location: SCL-85-10/0

Run: 1



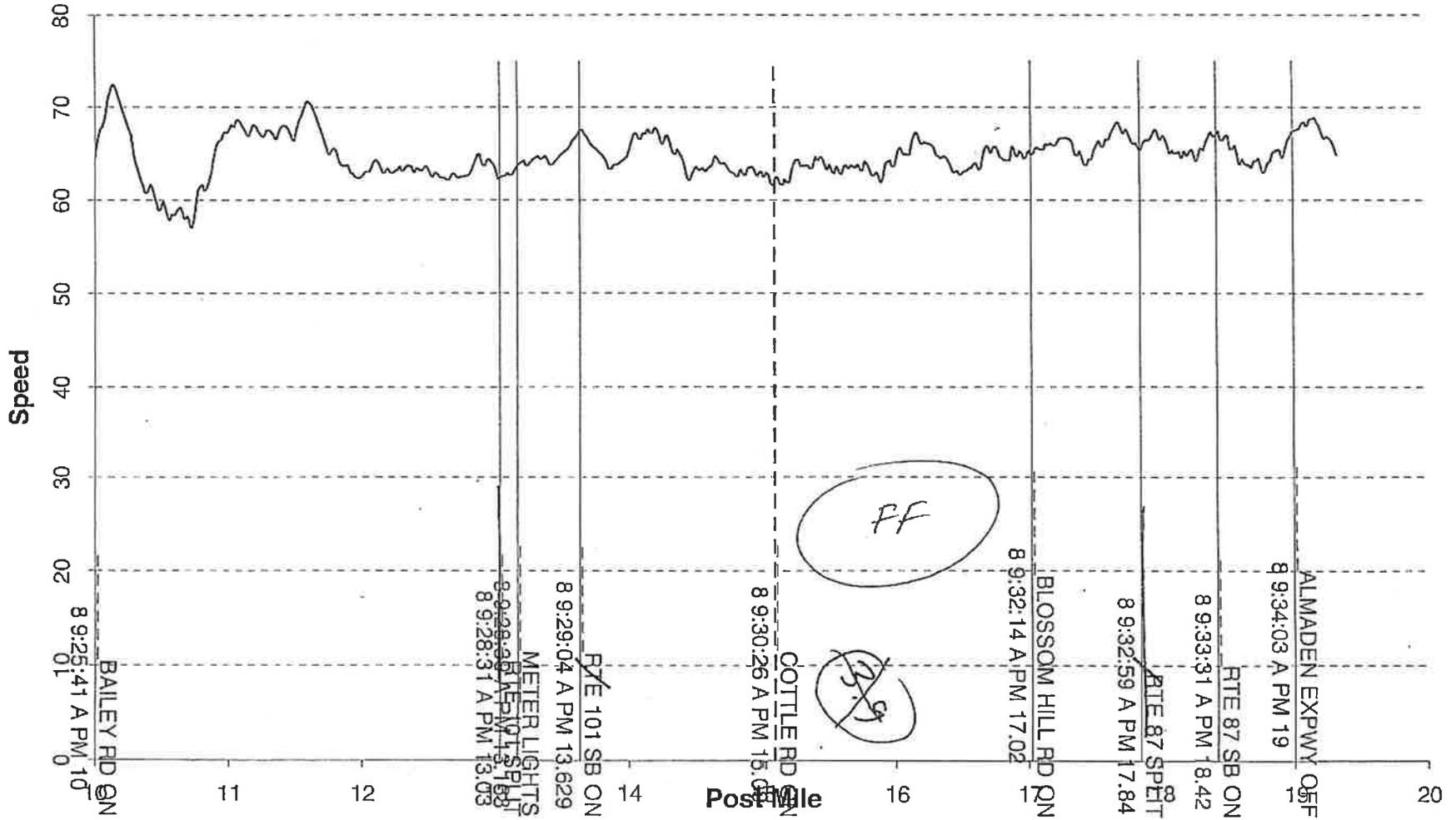


# TACHOGRAPH PLOT

Code: n08501h  
Driver: MARIA CASTRO

Date: 10/22/2008 - Wed  
Location: SCL-85-10/0

Set: 05  
Run: 1

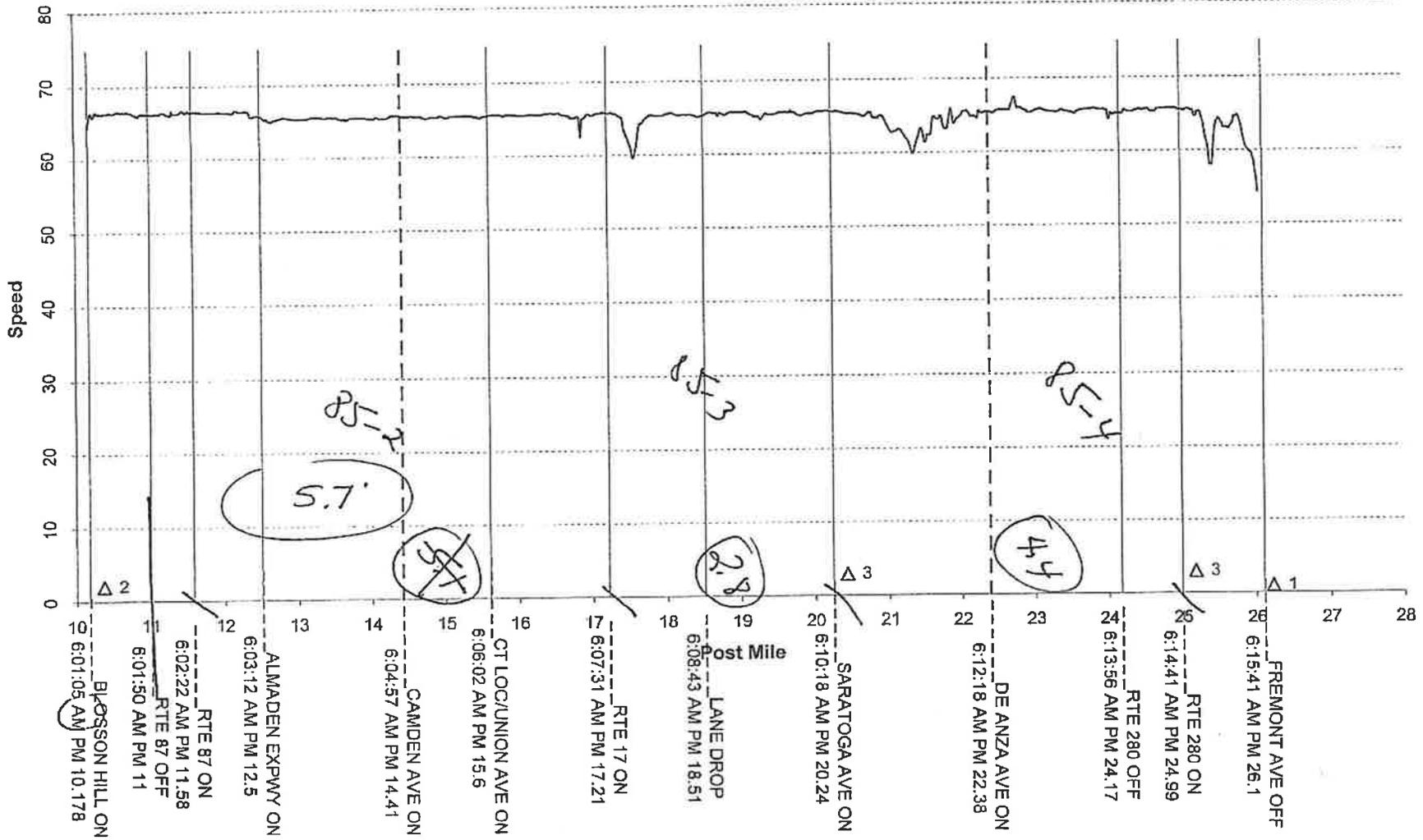


# TACHOGRAPH PLOT

Code: N08501H6 **AM**  
Driver: ADOLFO ZEPEDA

Date: 12/2/2008 - Tues Set: 01  
Location: SCL-85-10.178/0

Run: 1



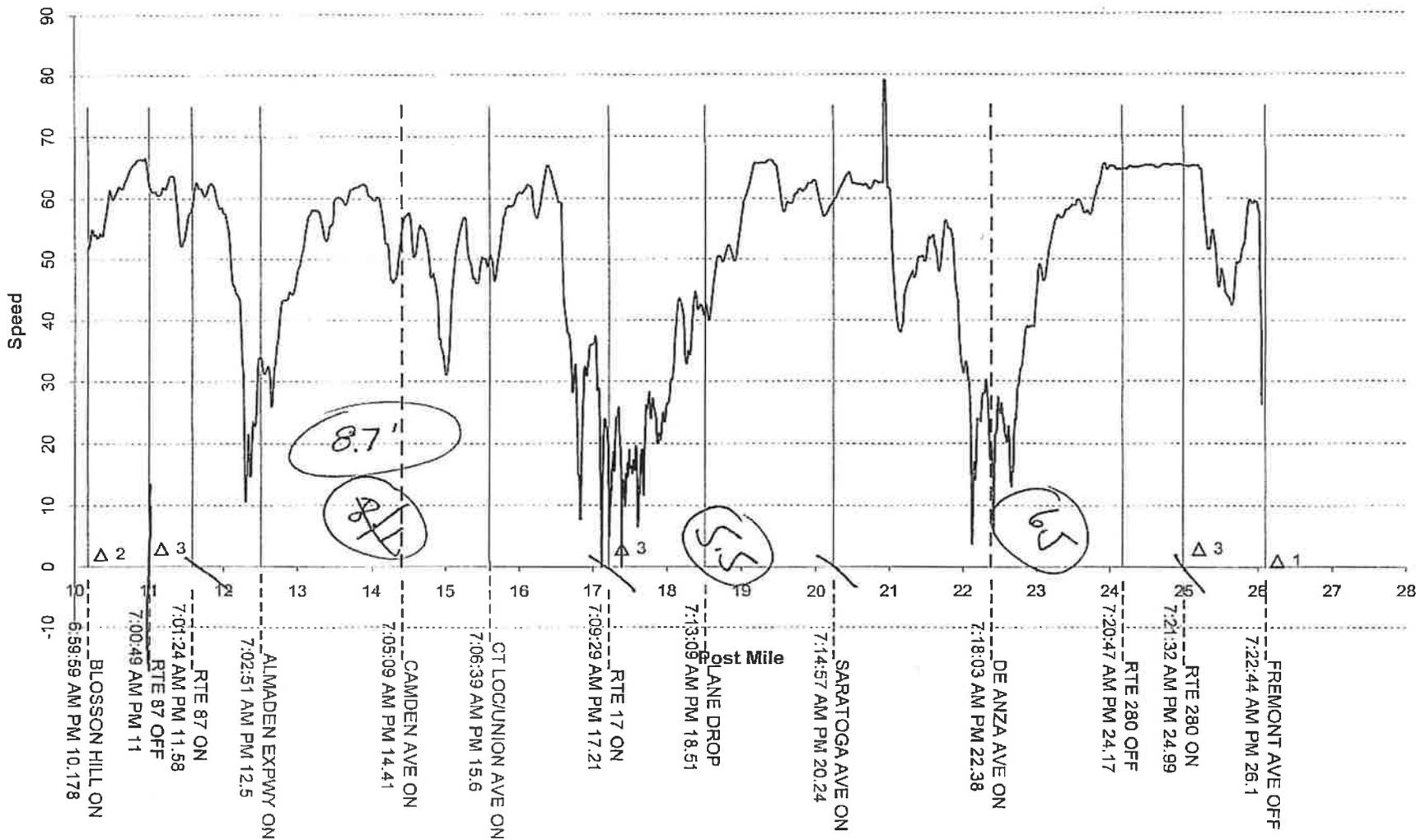


# TACHOGRAPH PLOT

Code: N08501H6  
 Driver: ADOLFO ZEPEDA

Date: 12/2/2008 - Tues Set: 02  
 Location: SCL-85-10.178/0

Run: 1

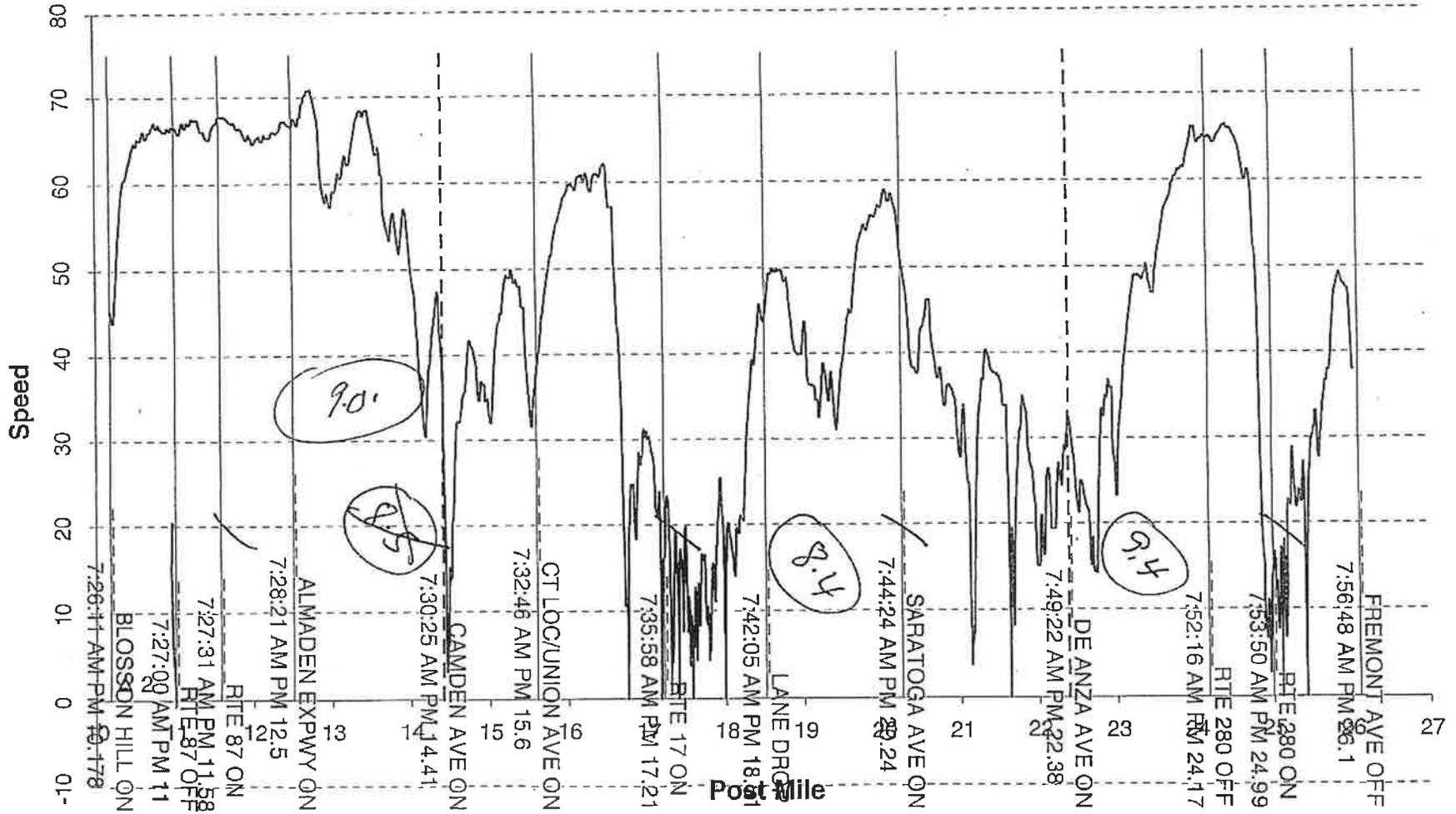


# TACHOGRAPH PLOT

Code: N08501H7  
 Driver: MARIA CASTRO

Date: 12/2/2008 - Tues Set: 02  
 Location: SCL-85-10.178/0

Run: 1

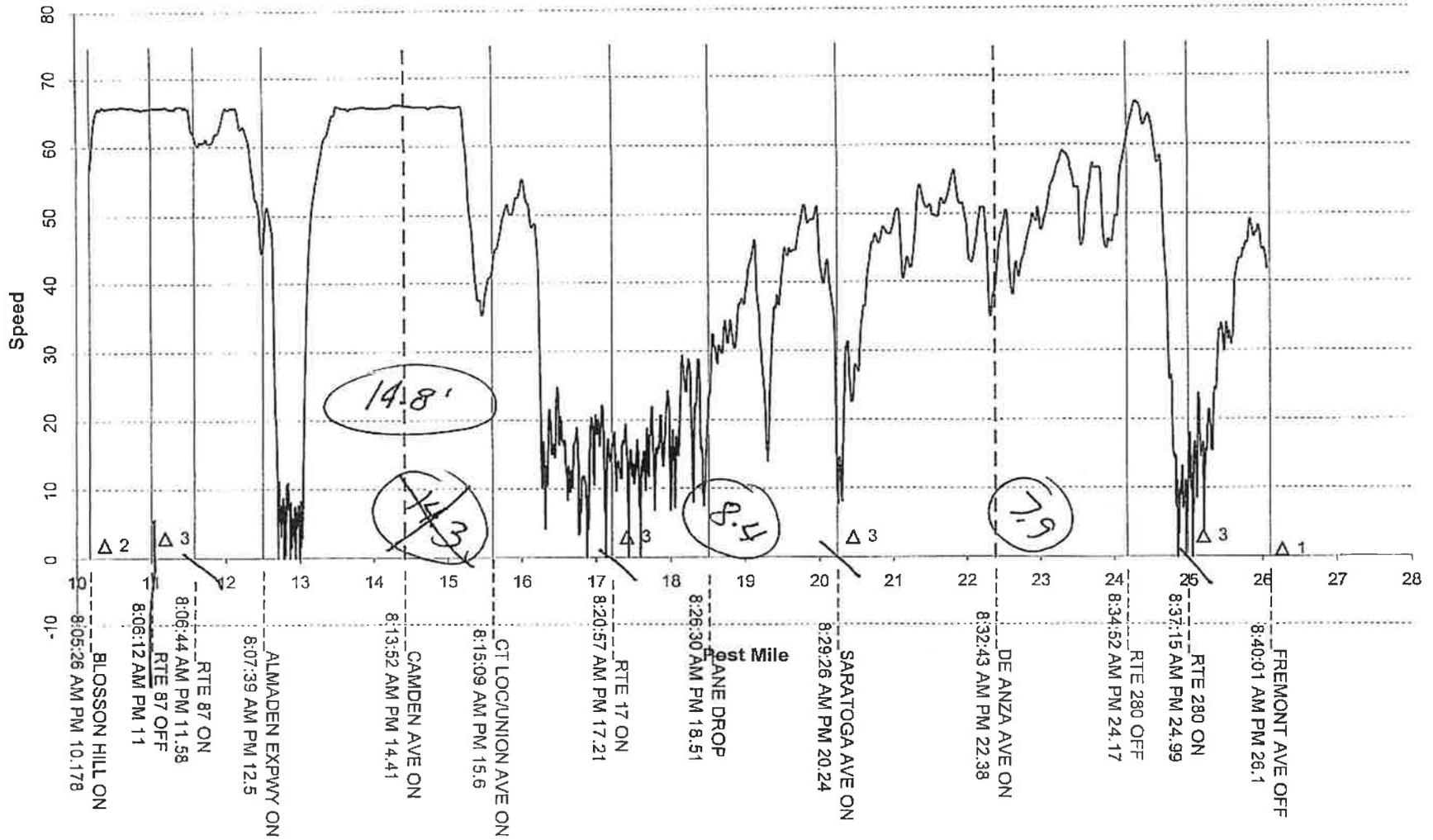


# TACHOGRAPH PLOT

Code: N08501H6  
 Driver: ADOLFO ZEPEDA

Date: 12/2/2008 - Tues Set: 03  
 Location: SCL-85-10.178/0

Run: 1

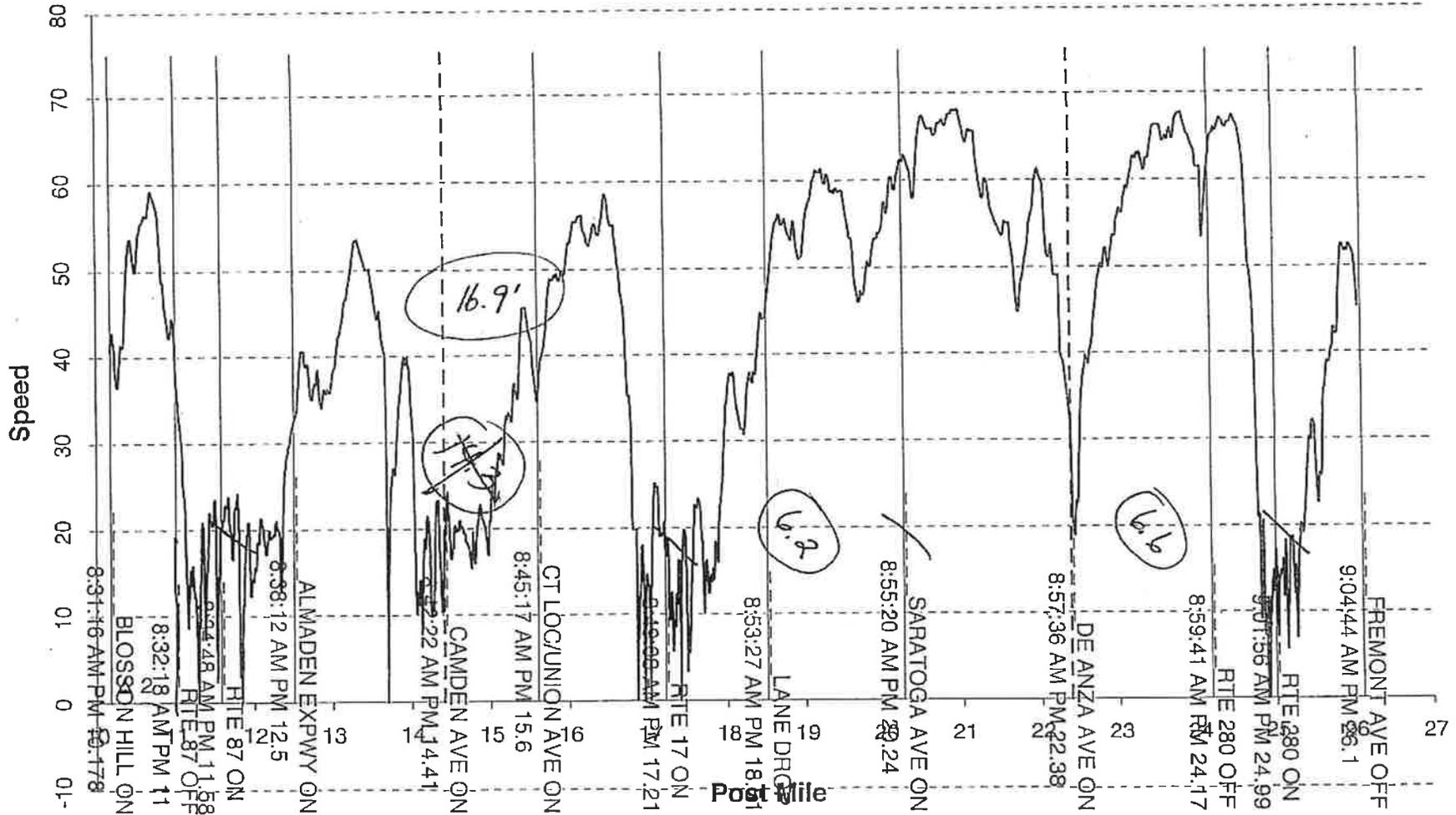


# TACHOGRAPH PLOT

Code: N08501H7  
 Driver: MARIA CASTRO

Date: 12/2/2008 - Tues Set: 03  
 Location: SCL-85-10.178/0

Run: 1

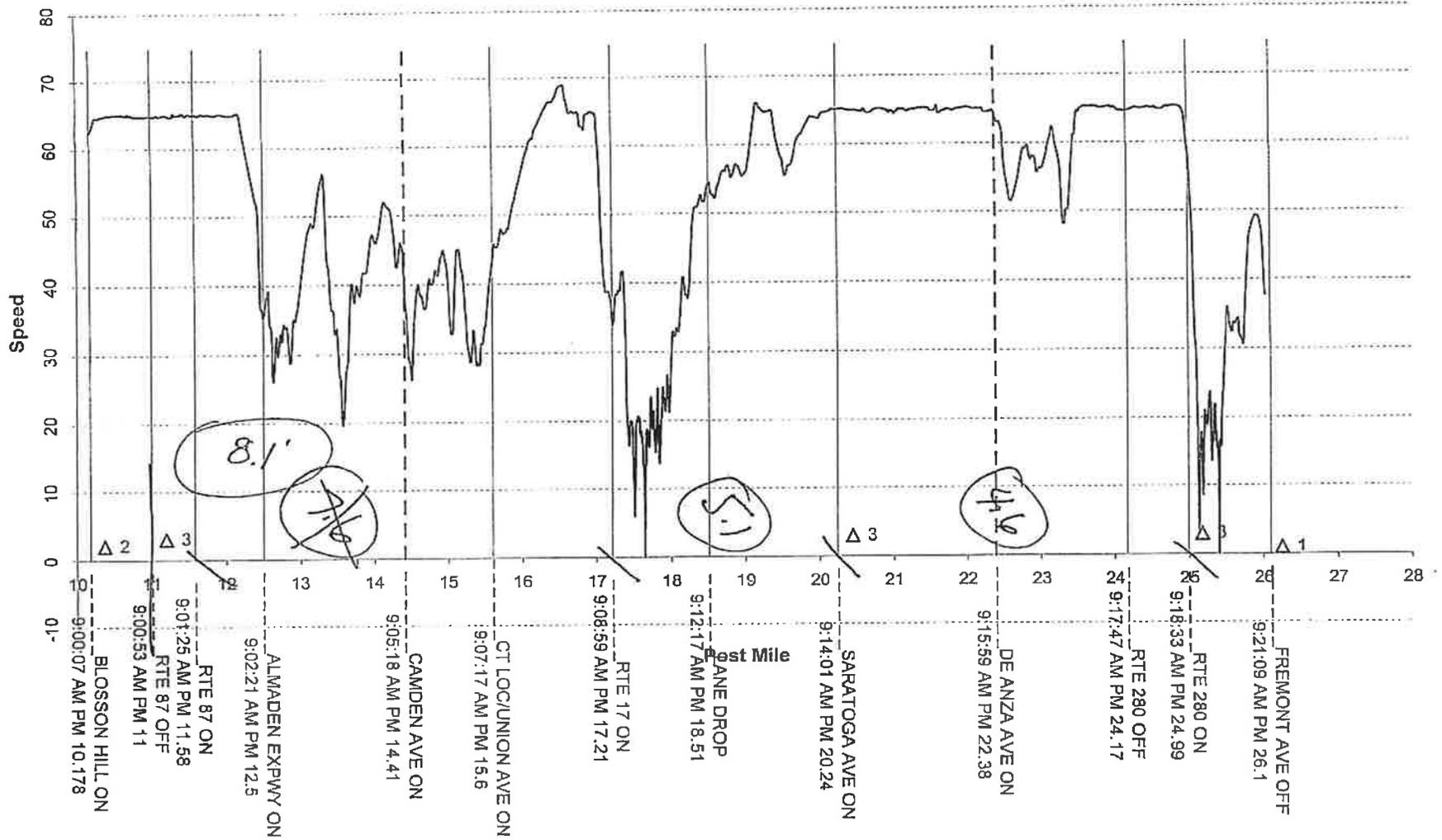


# TACHOGRAPH PLOT

Code: N08501H6  
Driver: ADOLFO ZEPEDA

Date: 12/2/2008 - Tues Set: 04  
Location: SCL-85-10.178/0

Run: 1

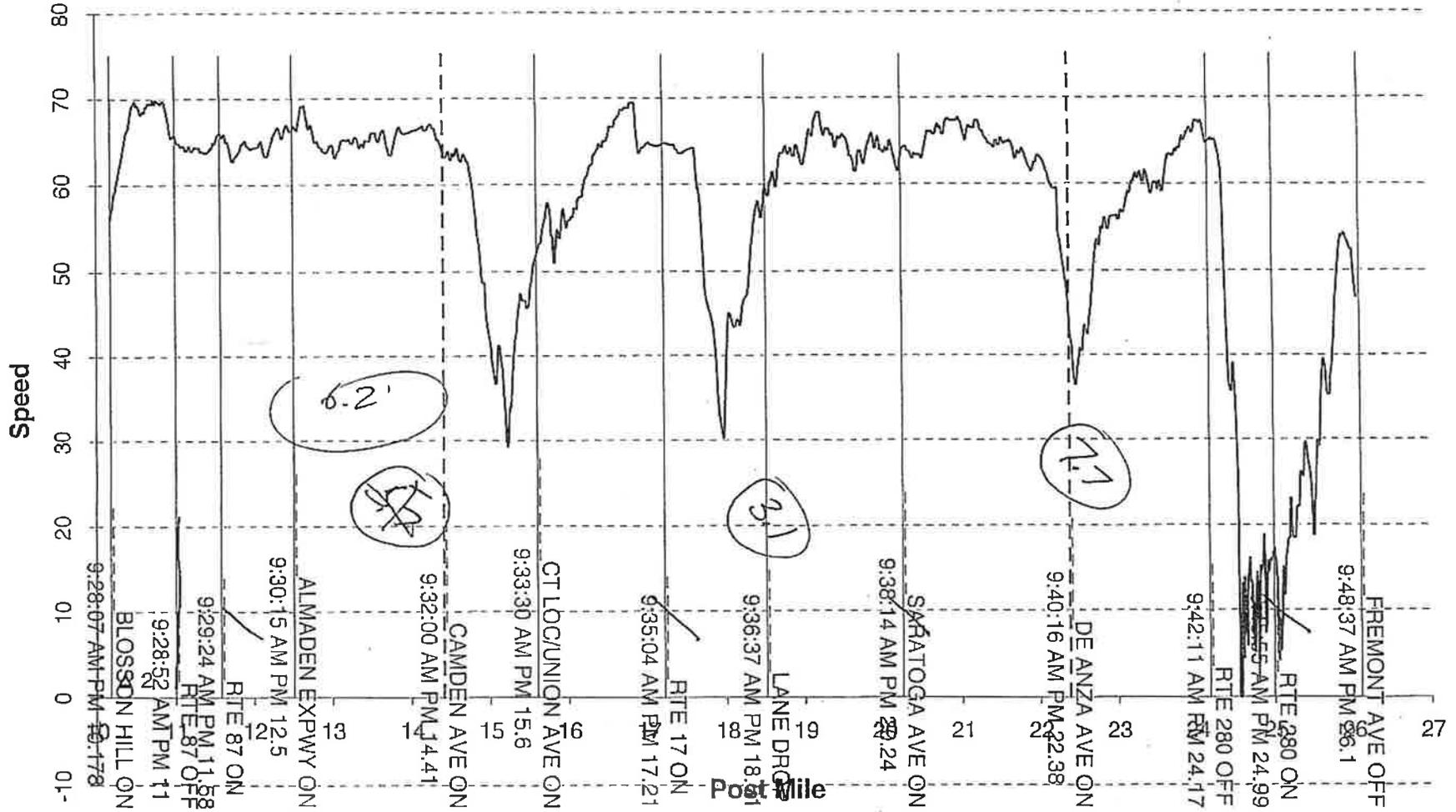


# TACHOGRAPH PLOT

Code: N08501H7  
 Driver: MARIA CASTRO

Date: 12/2/2008 - Tues Set: 04  
 Location: SCL-85-10.178/0

Run: 1



# TACHOGRAPH PLOT

Code: N08504H  
 Driver: ADOLFO ZEPEDA

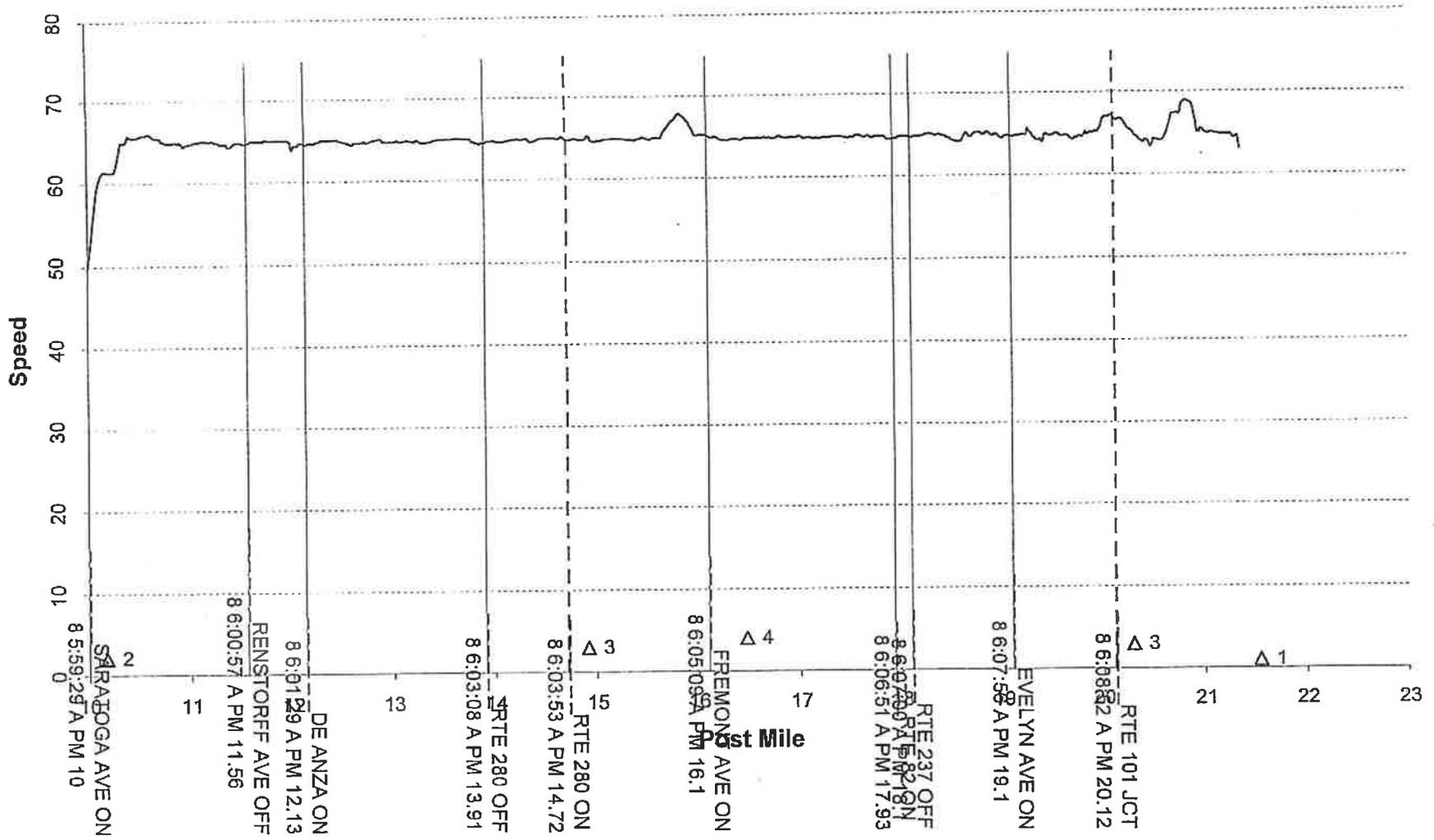
AM

Date: 12/10/2008 - Wed

Set: 01

Run: 1

Location: SCL-85-10/0



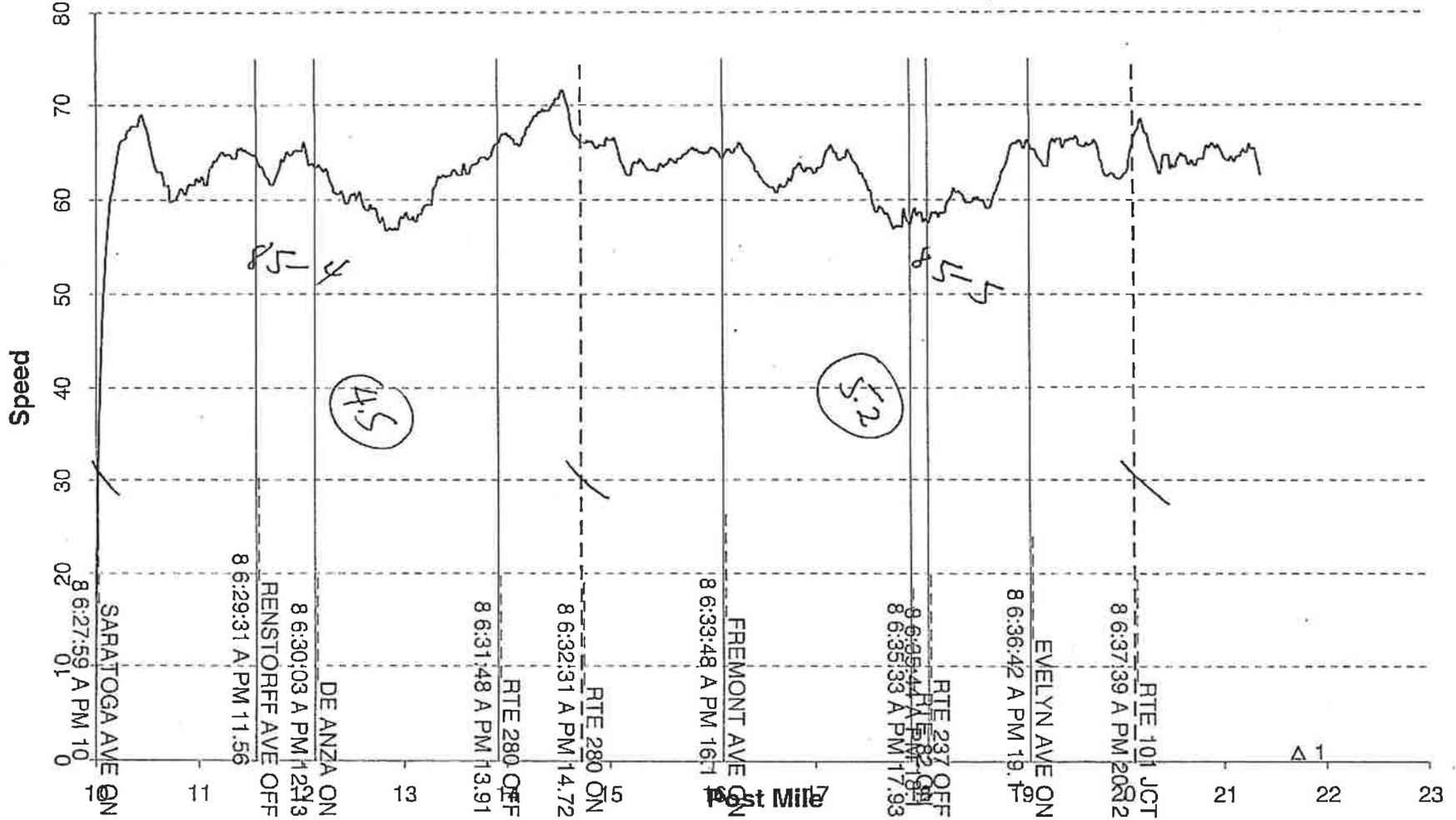
# TACHOGRAPH PLOT

Code: n08504h  
 Driver: MARIA CASTRO

AM-1

Date: 12/10/2008 - Wed  
 Location: SCL-85-10/0

Set: 01  
 Run: 1



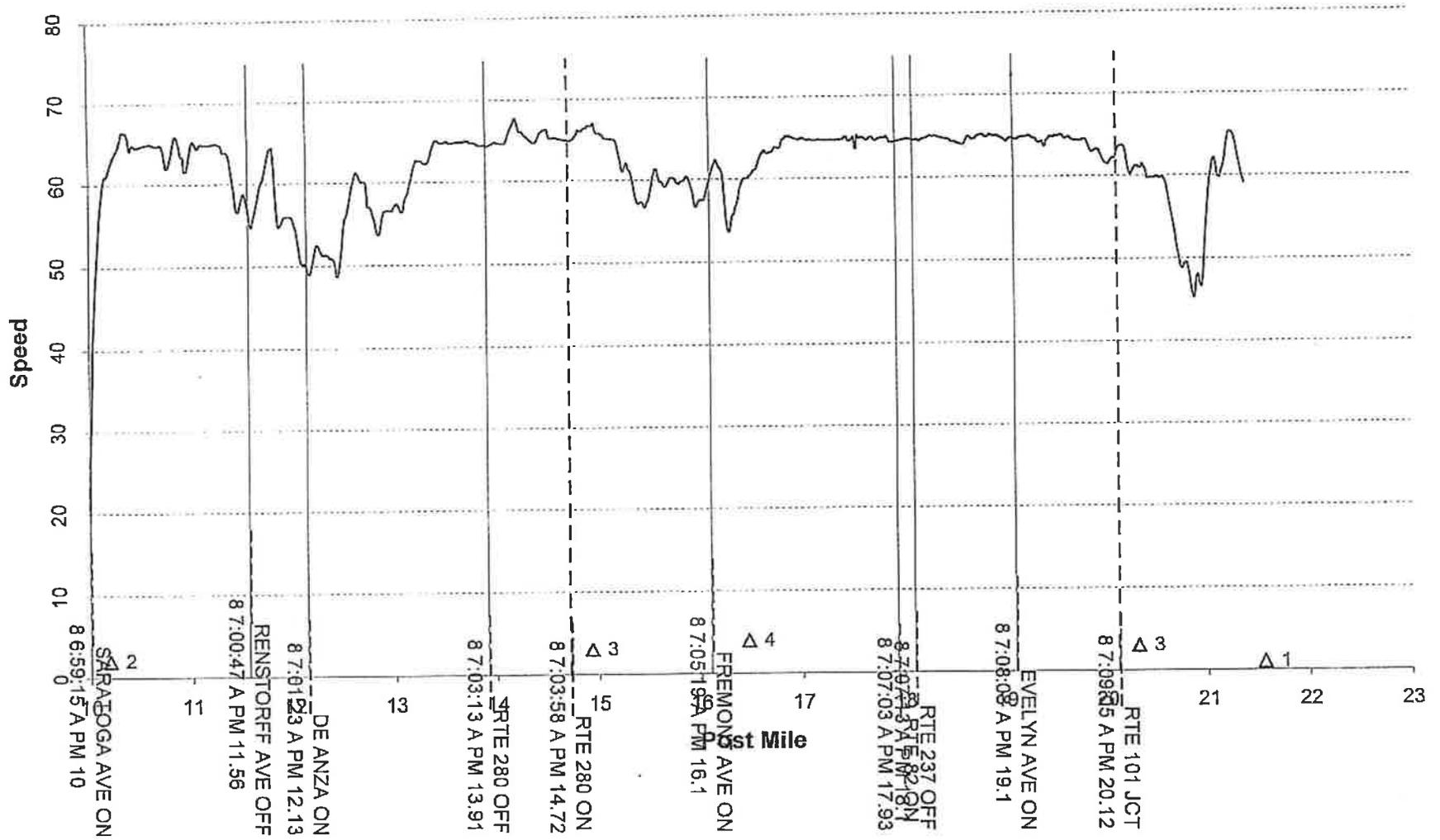
# TACHOGRAPH PLOT

Code: N08504H  
Driver: ADOLFO ZEPEDA

Date: 12/10/2008 - Wed  
Location: SCL-85-10/0

Set: 02

Run: 1

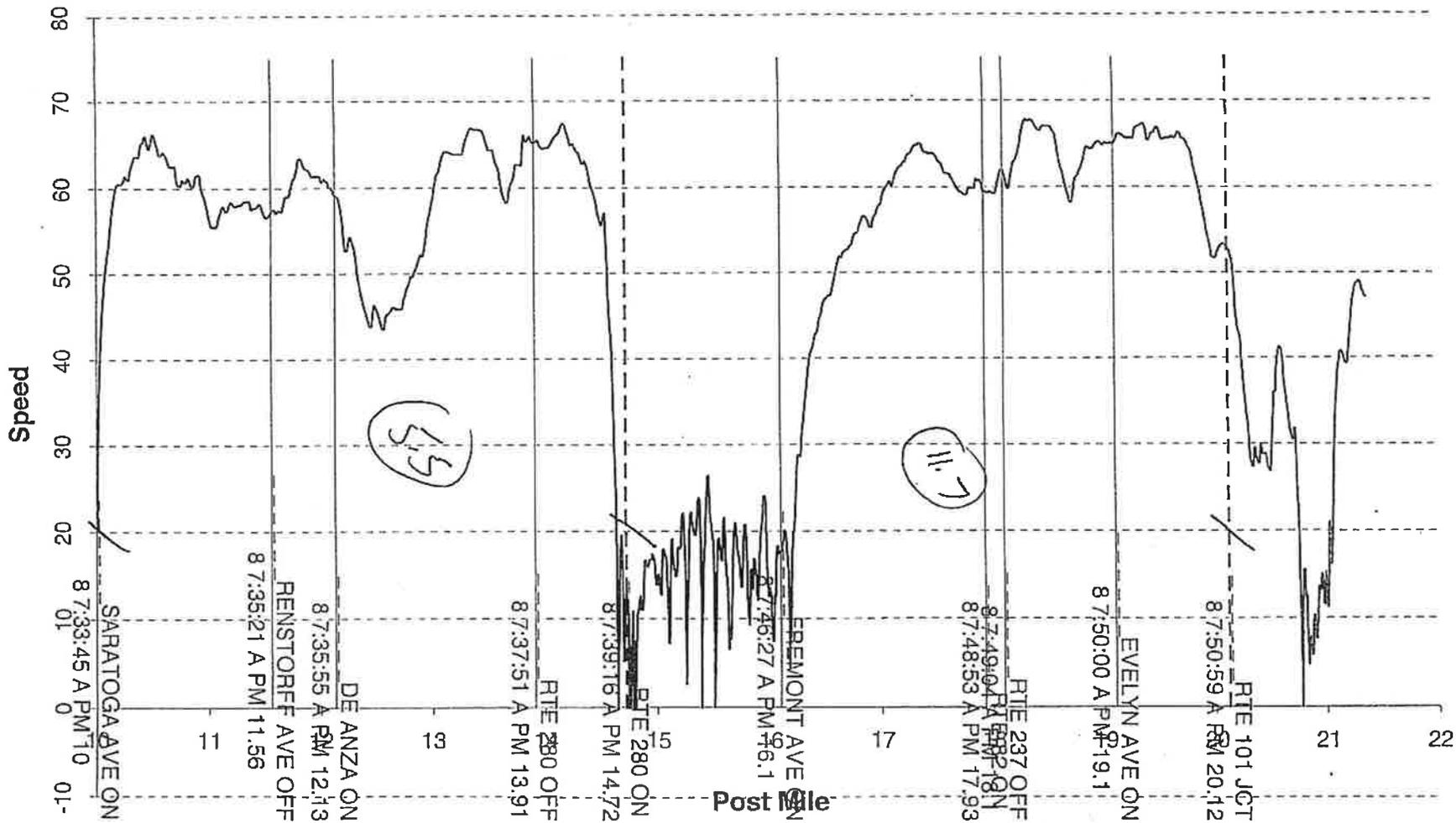


# TACHOGRAPH PLOT

Code: n08504h  
 Driver: MARIA CASTRO

Date: 12/10/2008 - Wed Set: 02  
 Location: SCL-85-10/0

Run: 1



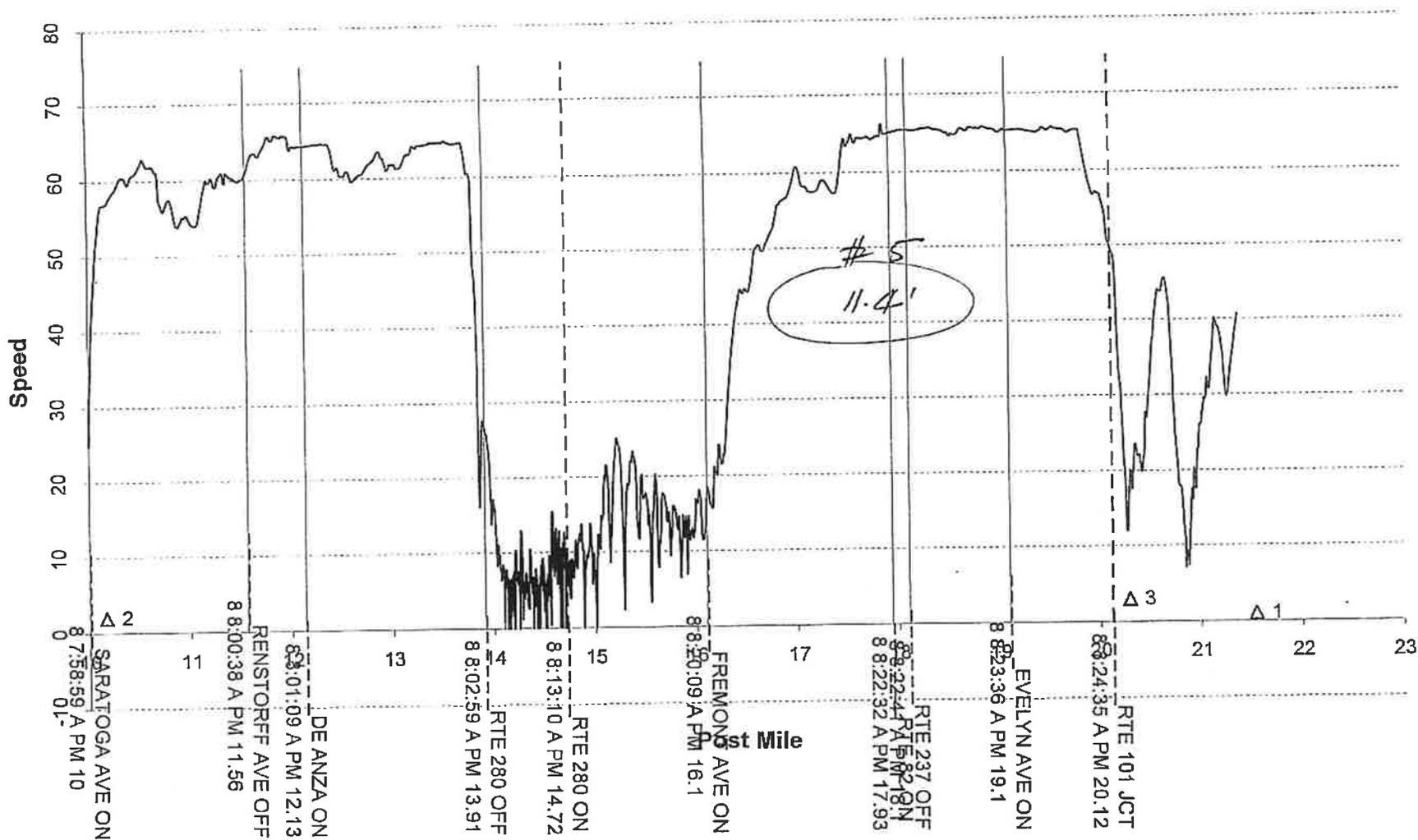
# TACHOGRAPH PLOT

Code: N08504H  
 Driver: ADOLFO ZEPEDA

Date: 12/10/2008 - Wed  
 Location: SCL-85-10/0

Set: 03

Run: 1

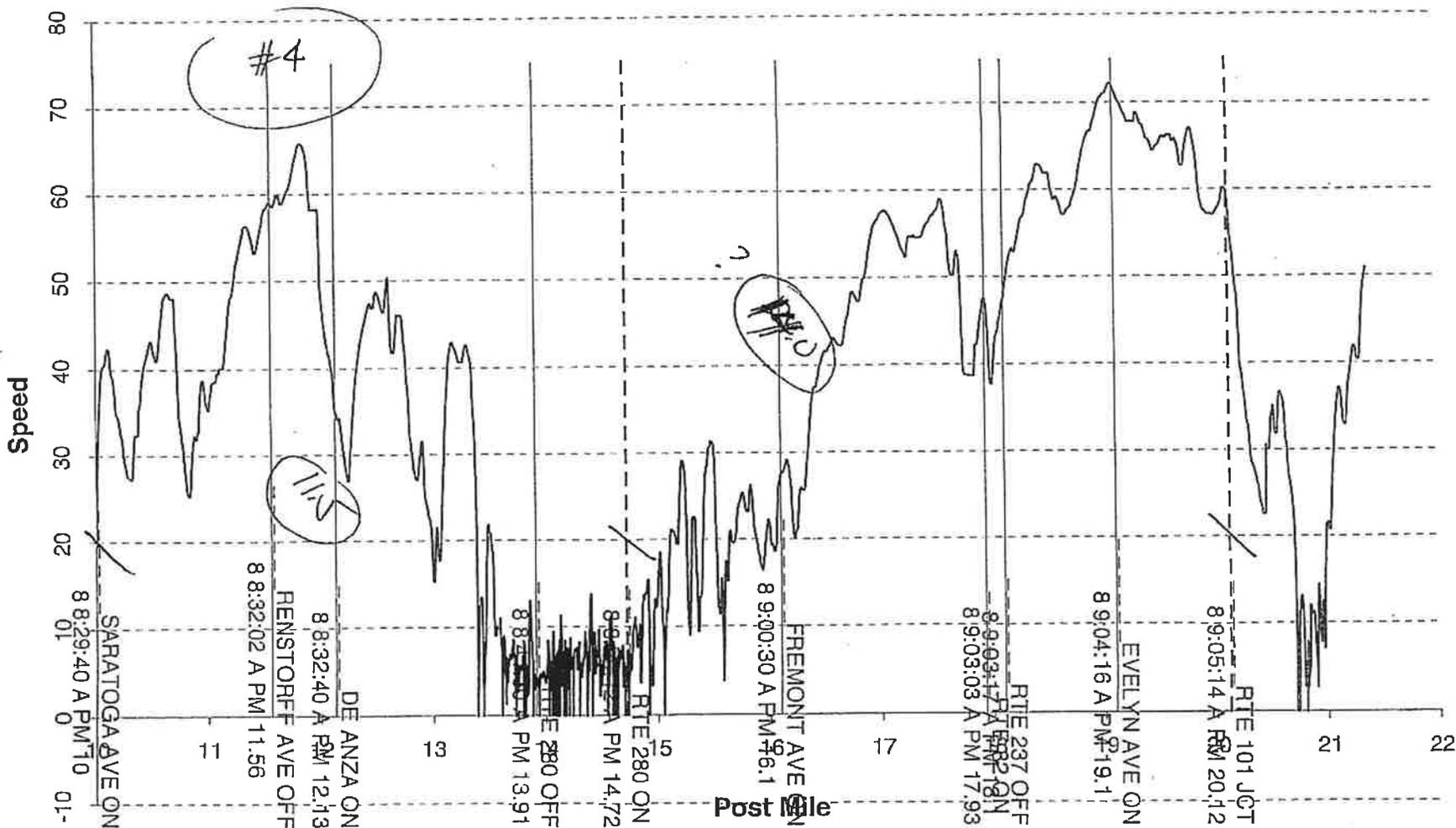


# TACHOGRAPH PLOT

Code: n08504h  
 Driver: MARIA CASTRO

Date: 12/10/2008 - Wed Set: 03  
 Location: SCL-85-10/0

Run: 1



# TACHOGRAPH PLOT

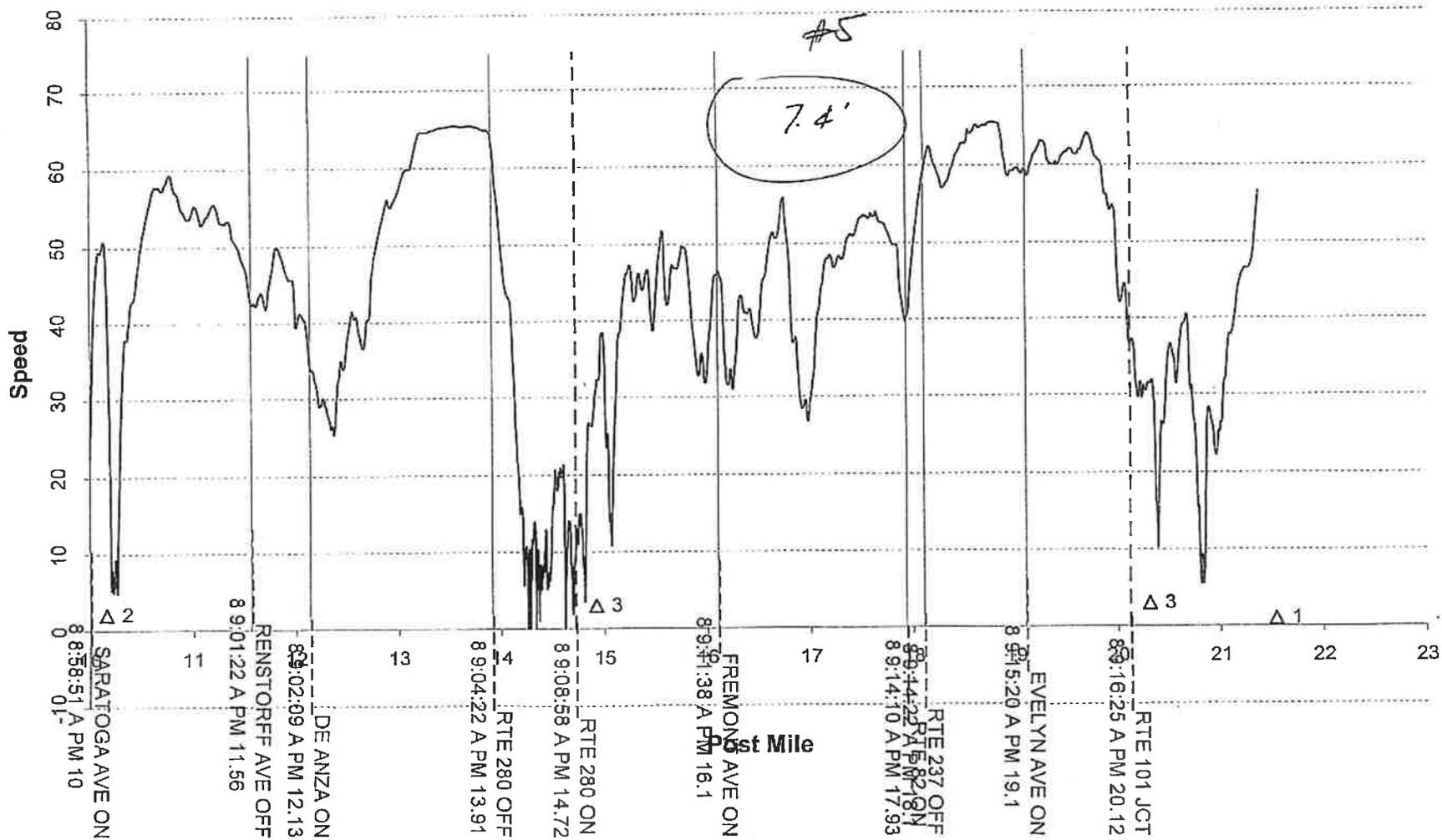
Code: N08504H  
Driver: ADOLFO ZEPEDA

Date: 12/10/2008 - Wed

Set: 04

Run: 1

Location: SCL-85-10/0

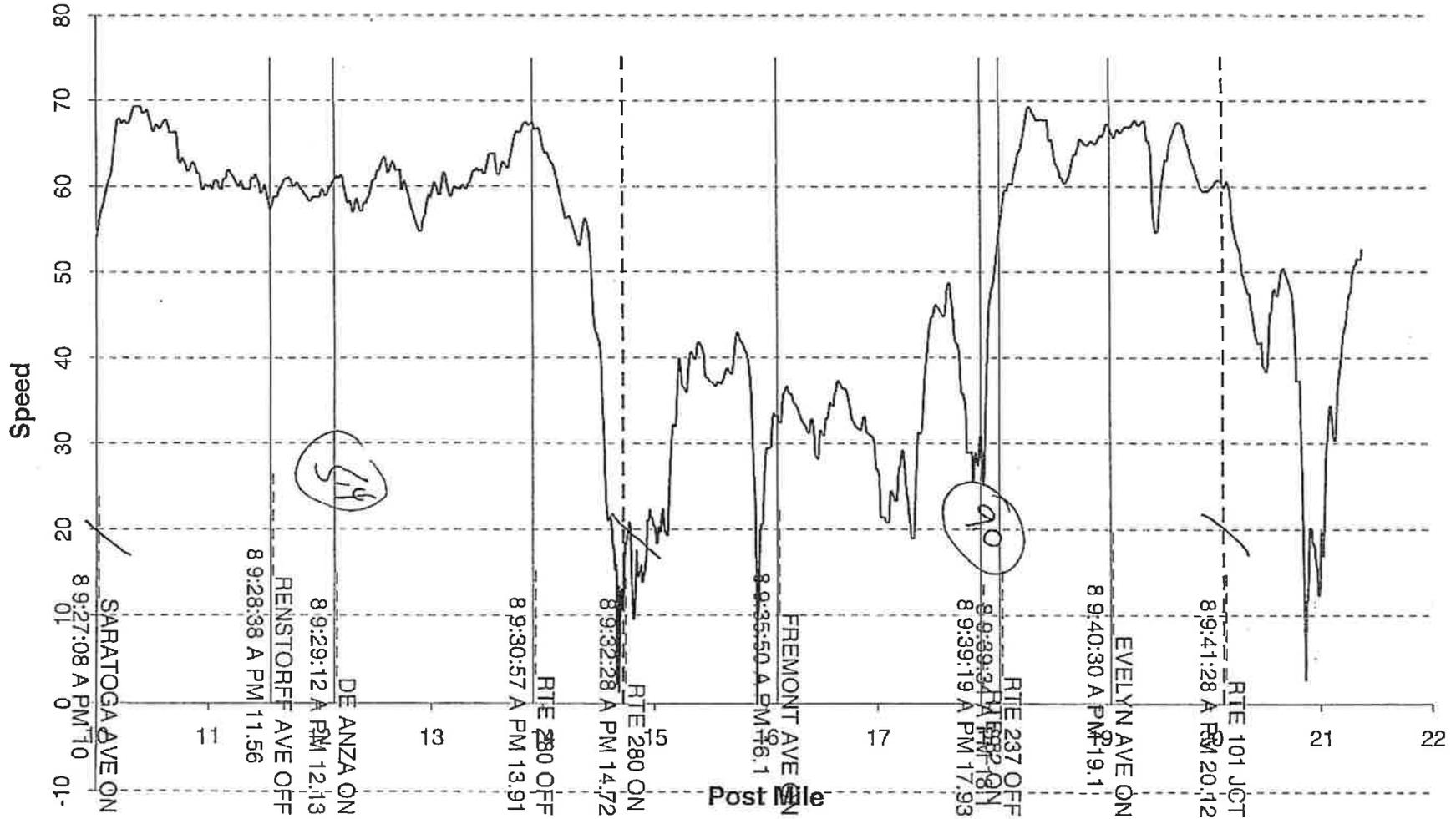


# TACHOGRAPH PLOT

Code: n08504h  
 Driver: MARIA CASTRO

Date: 12/10/2008 - Wed Set: 04  
 Location: SCL-85-10/0

Run: 1



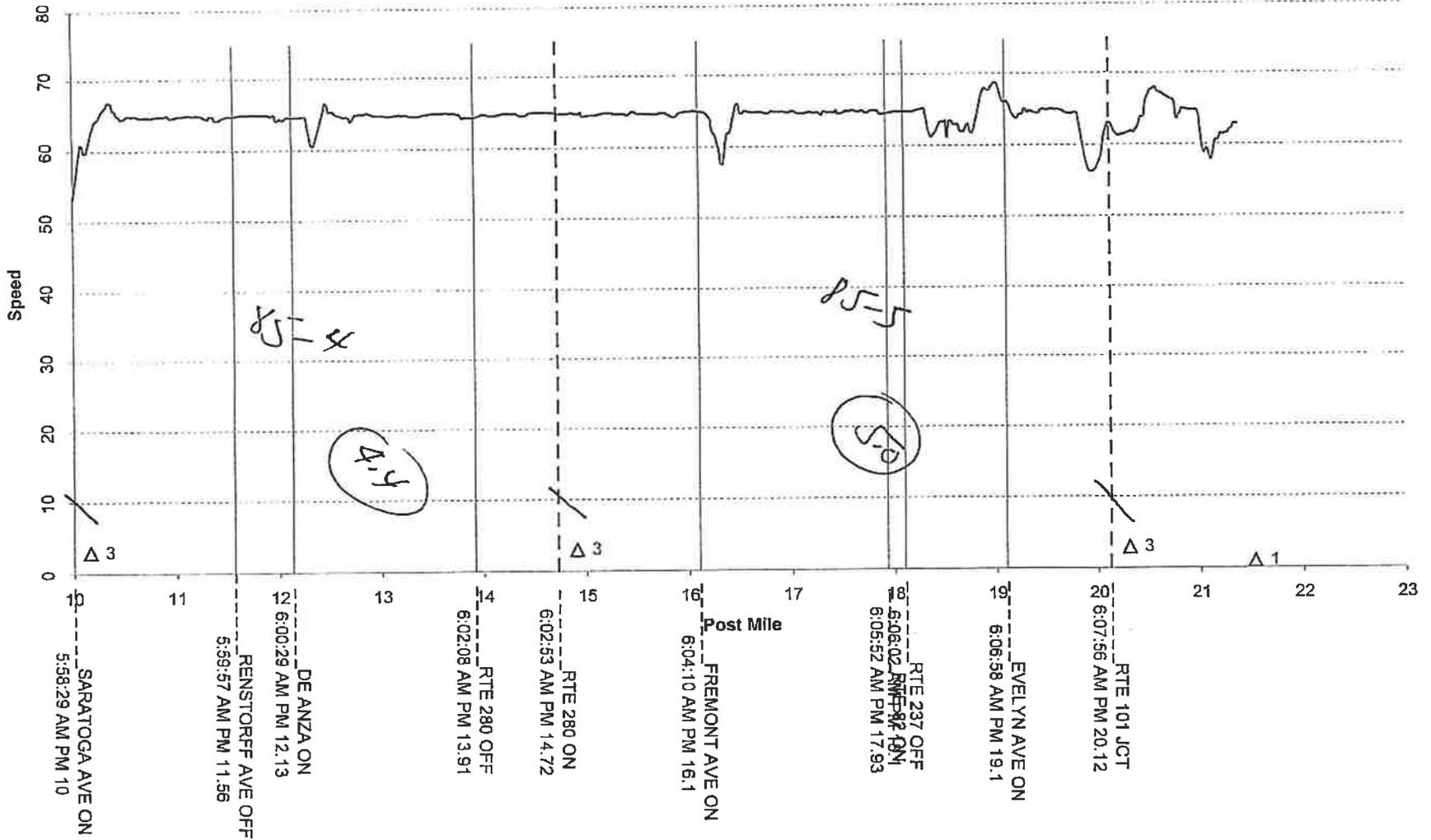
# TACHOGRAPH PLOT

Code: N08504H  
 Driver: ADOLFO ZEPEDA

*AM*

Date: 10/1/2008 - Wed Set: 01  
 Location: SCL-85-10/0

Run: 1

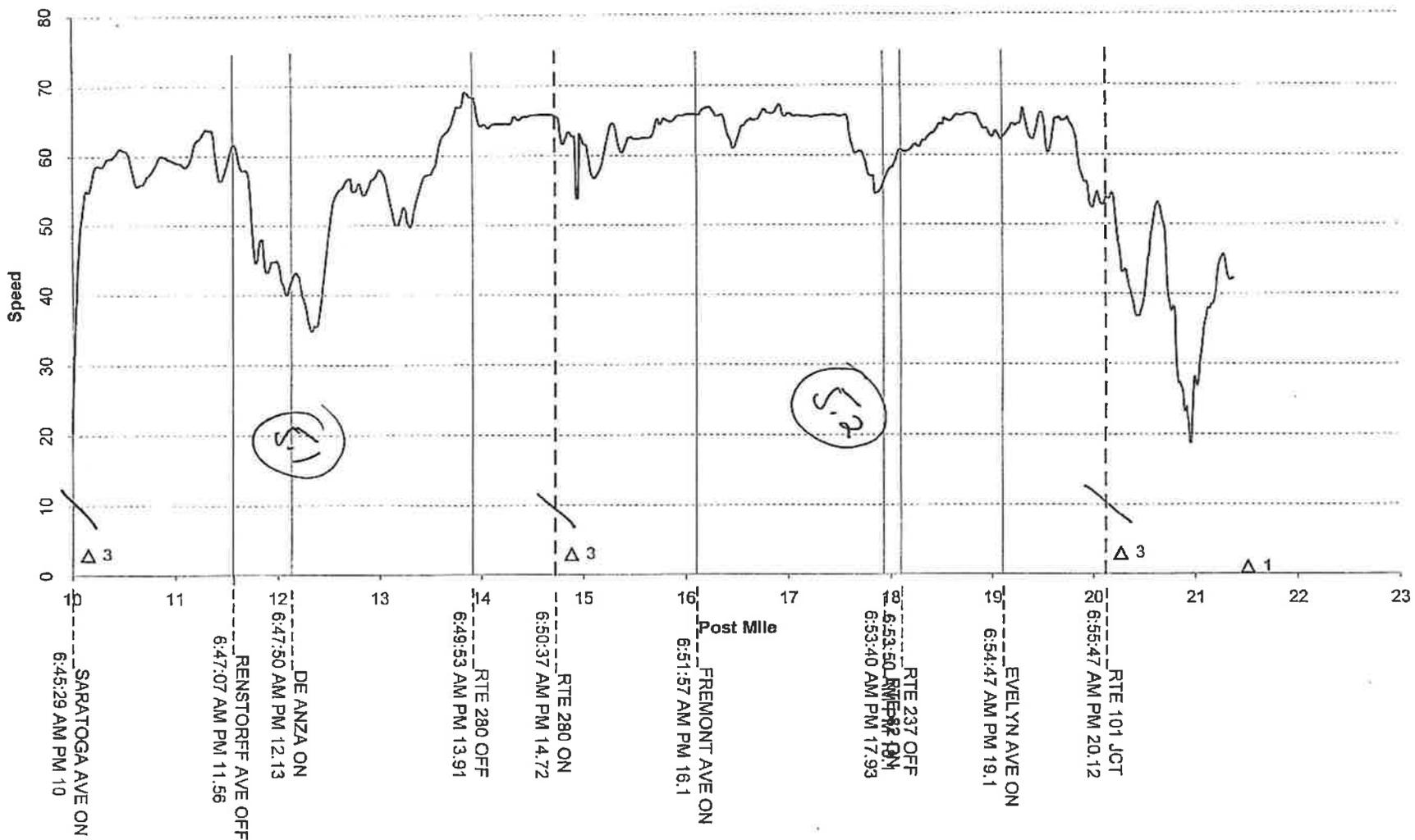


# TACHOGRAPH PLOT

Code: N08504H  
Driver: ADOLFO ZEPEDA

Date: 10/1/2008 - Wed Set: 02  
Location: SCL-85-10/0

Run: 1

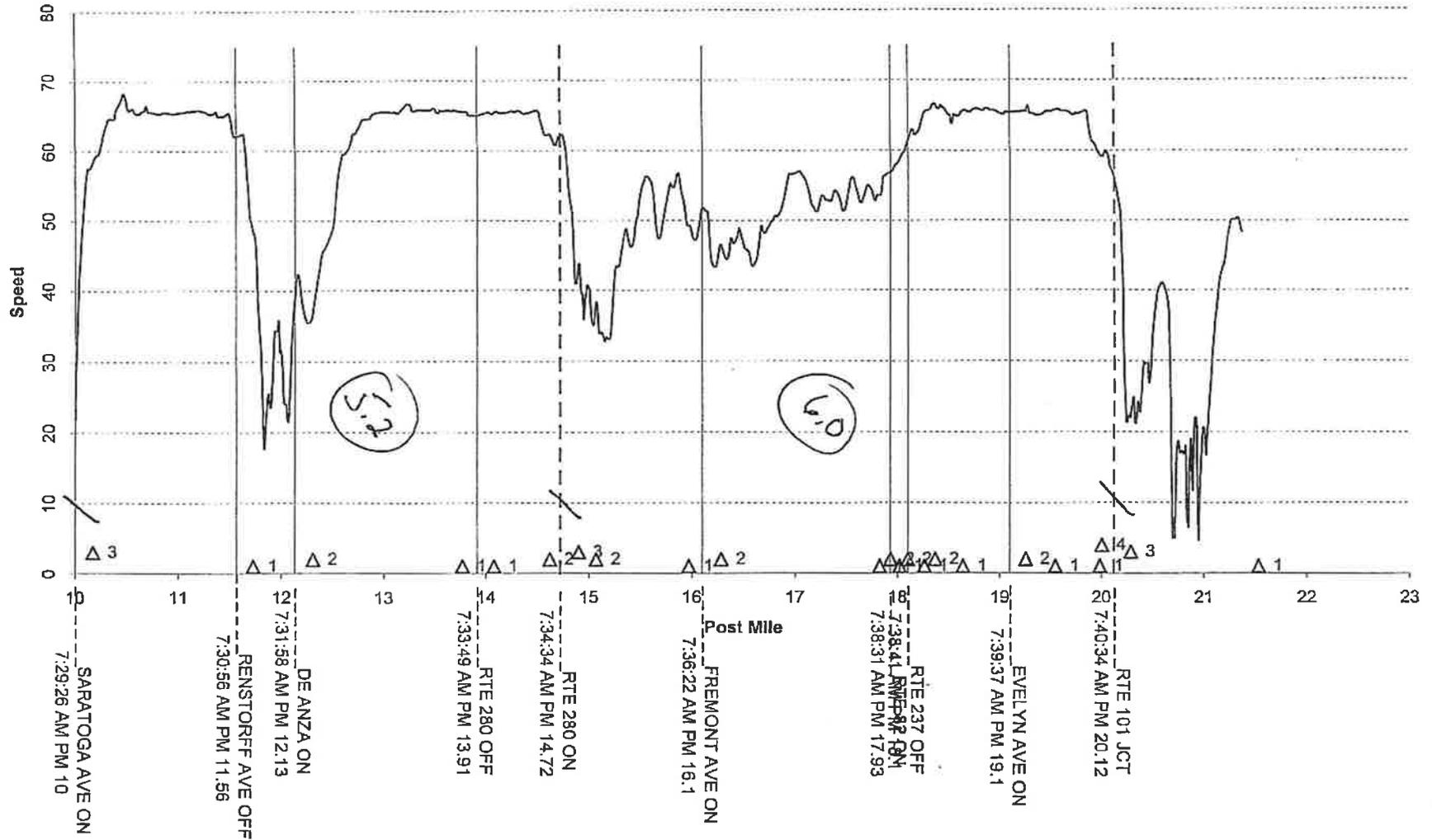


# TACHOGRAPH PLOT

Code: N08504H  
Driver: ADOLFO ZEPEDA

Date: 10/1/2008 - Wed Set: 03  
Location: SCL-85-10/0

Run: 1

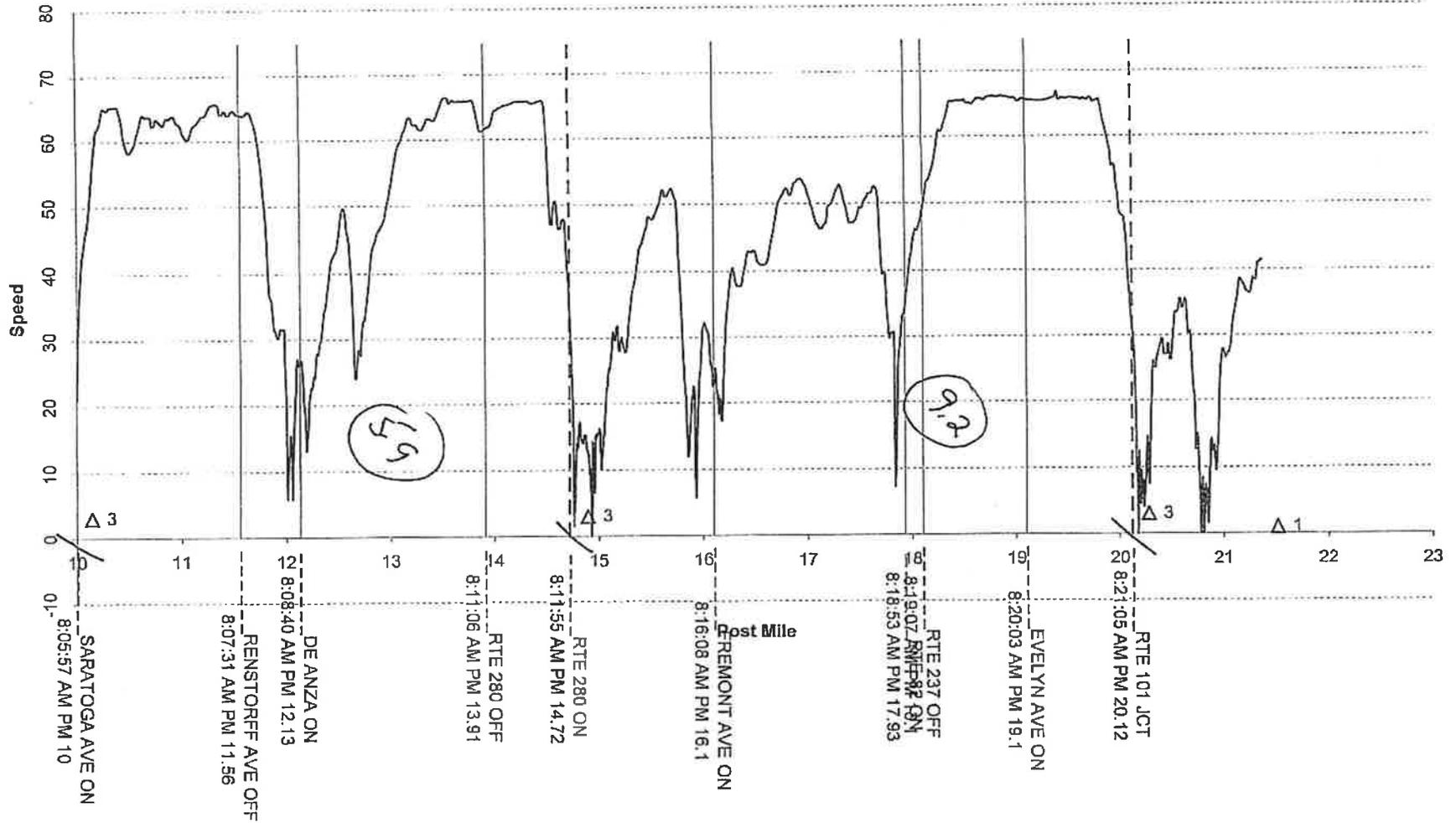


# TACHOGRAPH PLOT

Code: N08504H  
Driver: ADOLFO ZEPEDA

Date: 10/1/2008 - Wed Set: 04  
Location: SCL-85-10/0

Run: 1

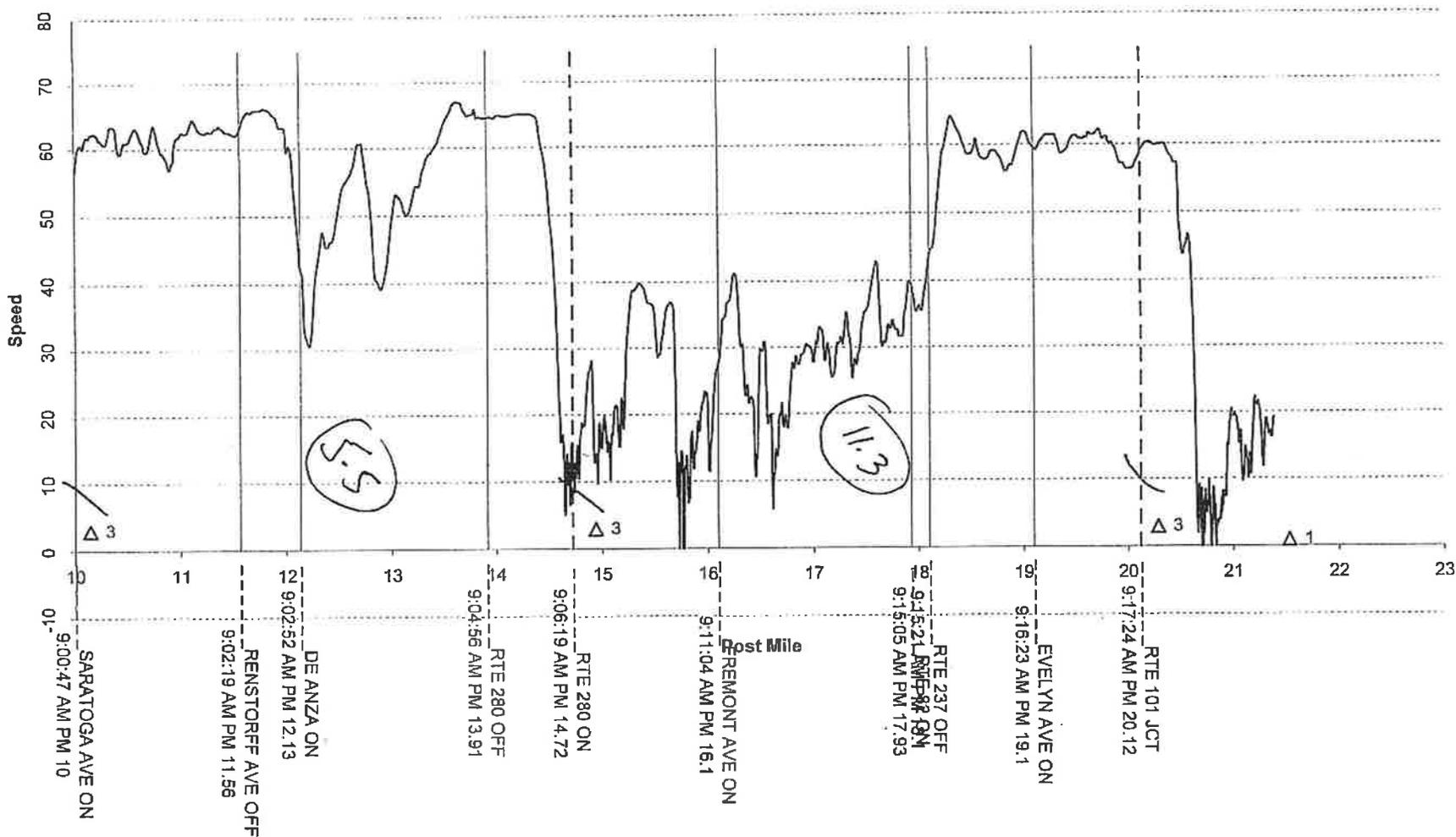


# TACHOGRAPH PLOT

Code: N08504H  
Driver: ADOLFO ZEPEDA

Date: 10/1/2008 - Wed Set: 05  
Location: SCL-85-10/0

Run: 1

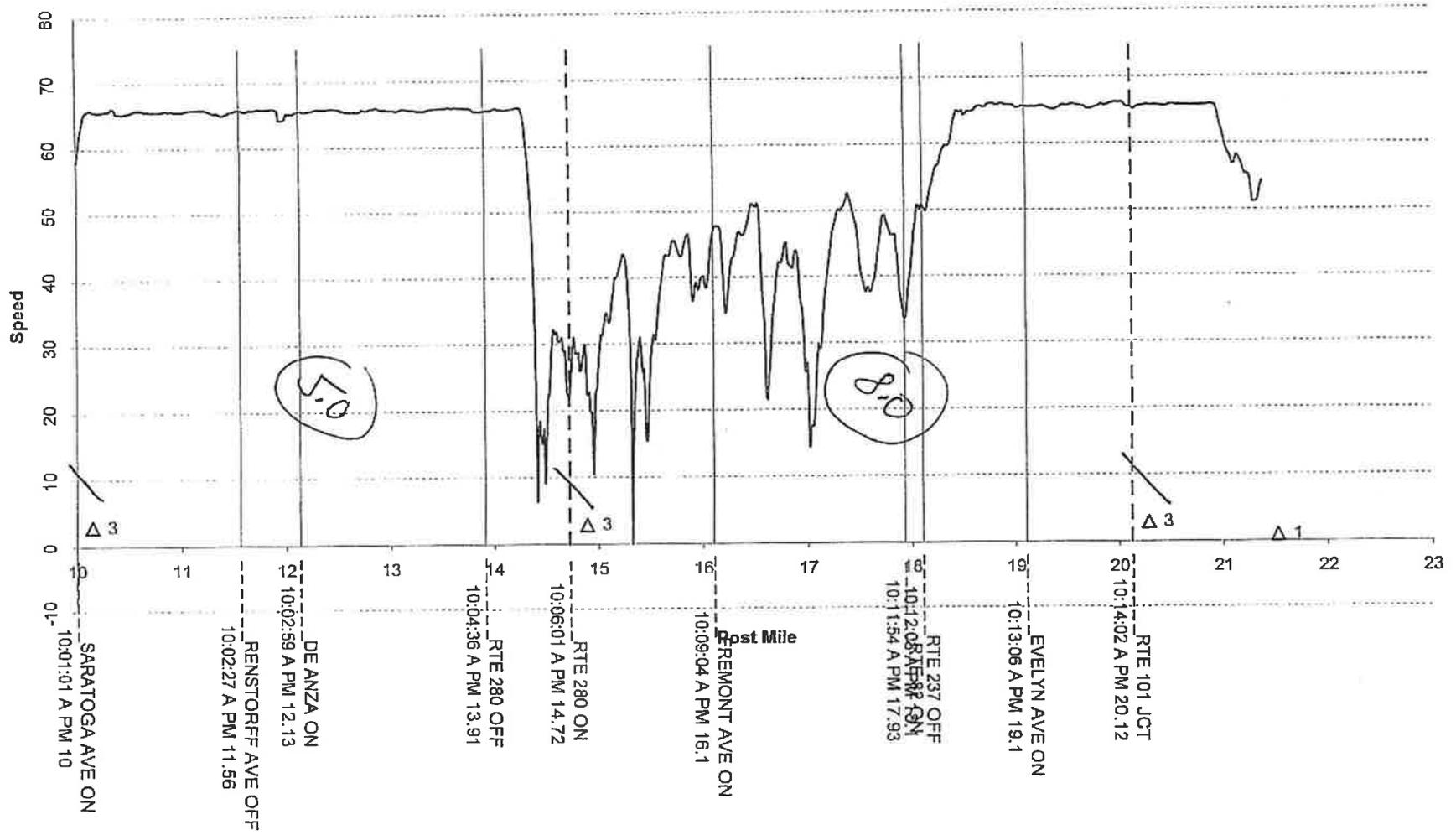


# TACHOGRAPH PLOT

Code: N08504H  
Driver: ADOLFO ZEPEDA

Date: 10/1/2008 - Wed Set: 06  
Location: SCL-85-10/0

Run: 1



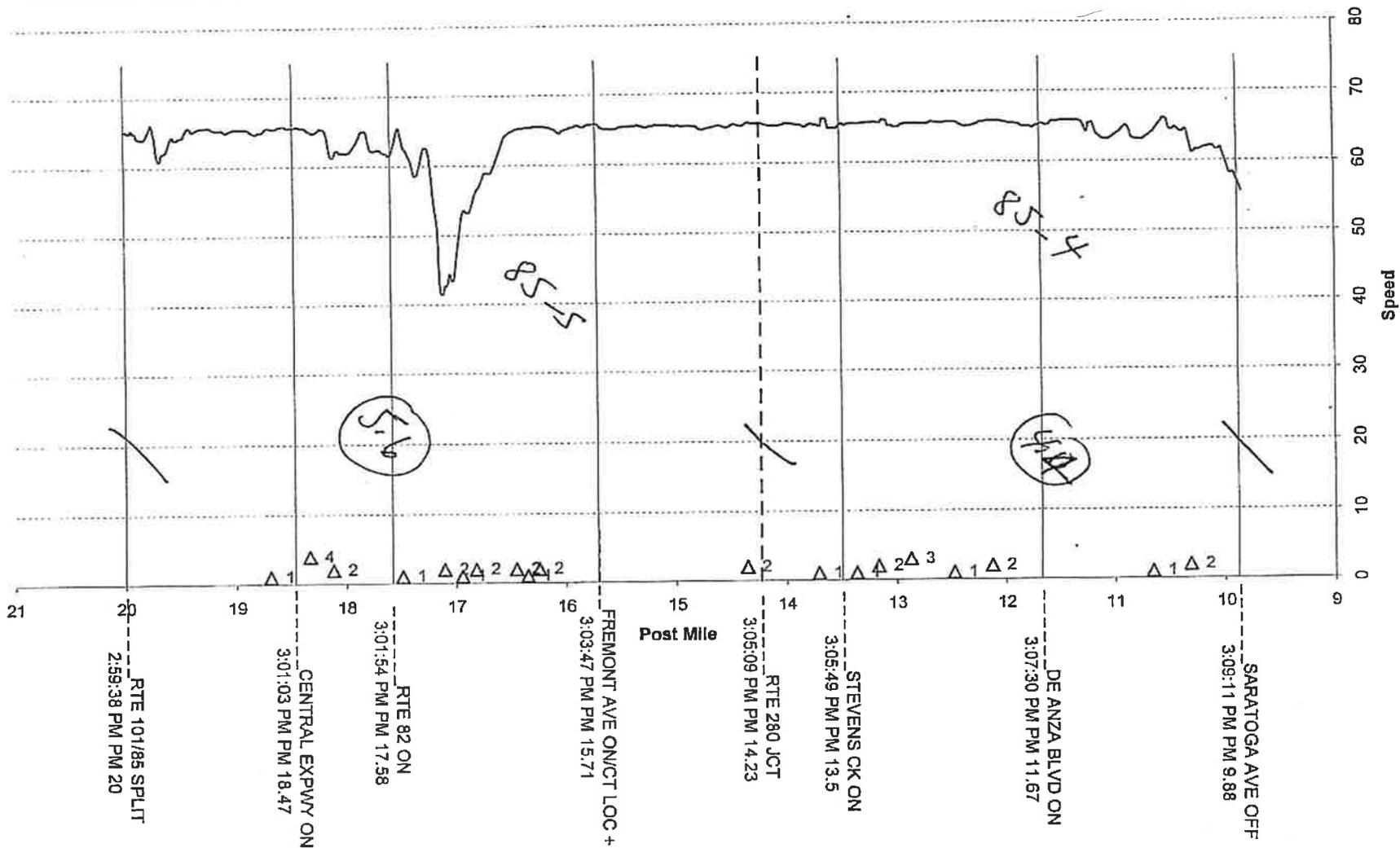
# TACHOGRAPH PLOT

Code: S08505H  
Driver: ADOLFO ZEPEDA

PM

Date: 9/30/2008 - Tues Set: 01  
Location: SCL-85-20/0

Run: 1

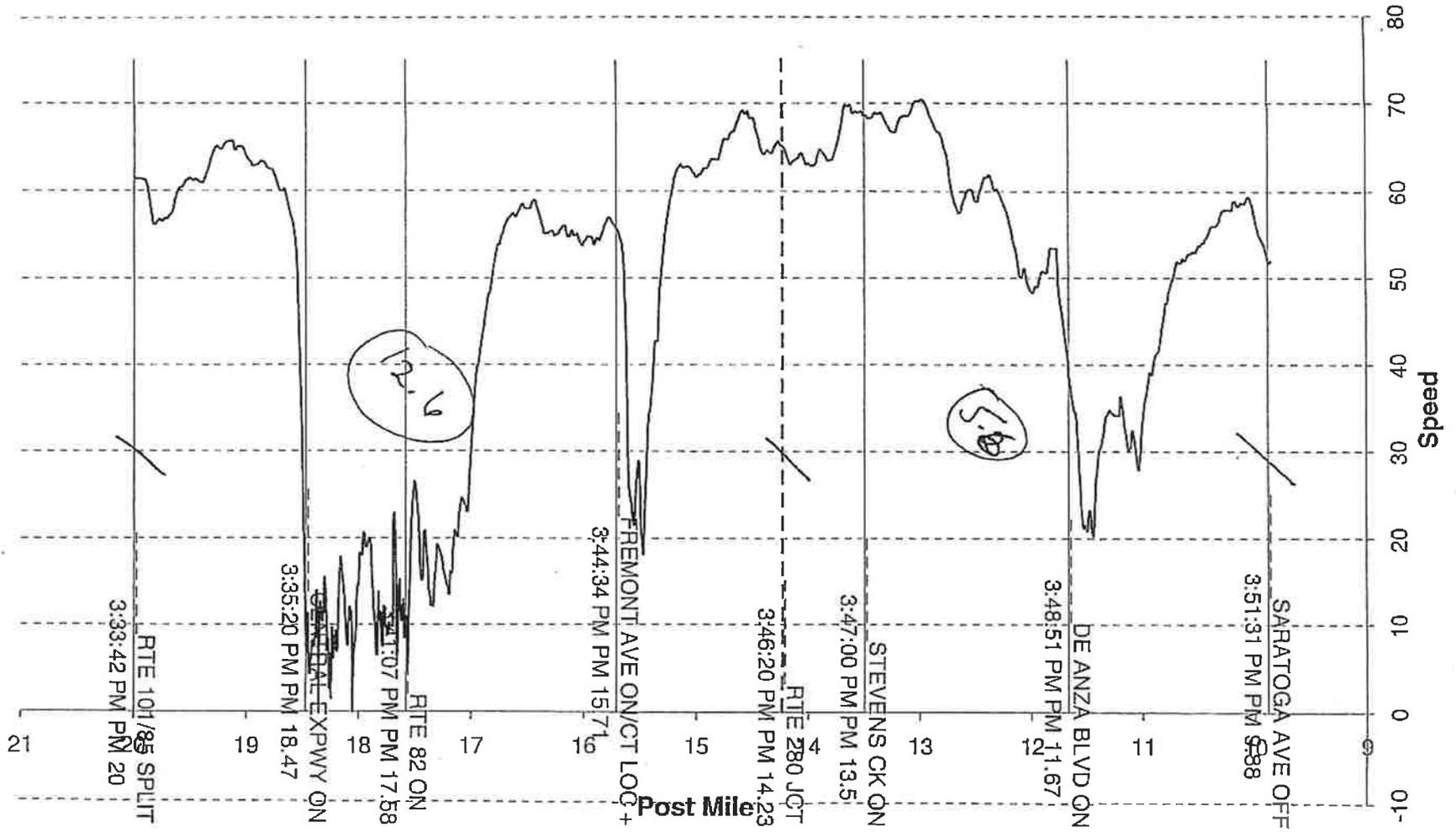


# TACHOGRAPH PLOT

Code: s08505h  
 Driver: MARIA CASTRO

Date: 9/30/2008 - Tues Set: 01  
 Location: SCL-85-20/0

Run: 1

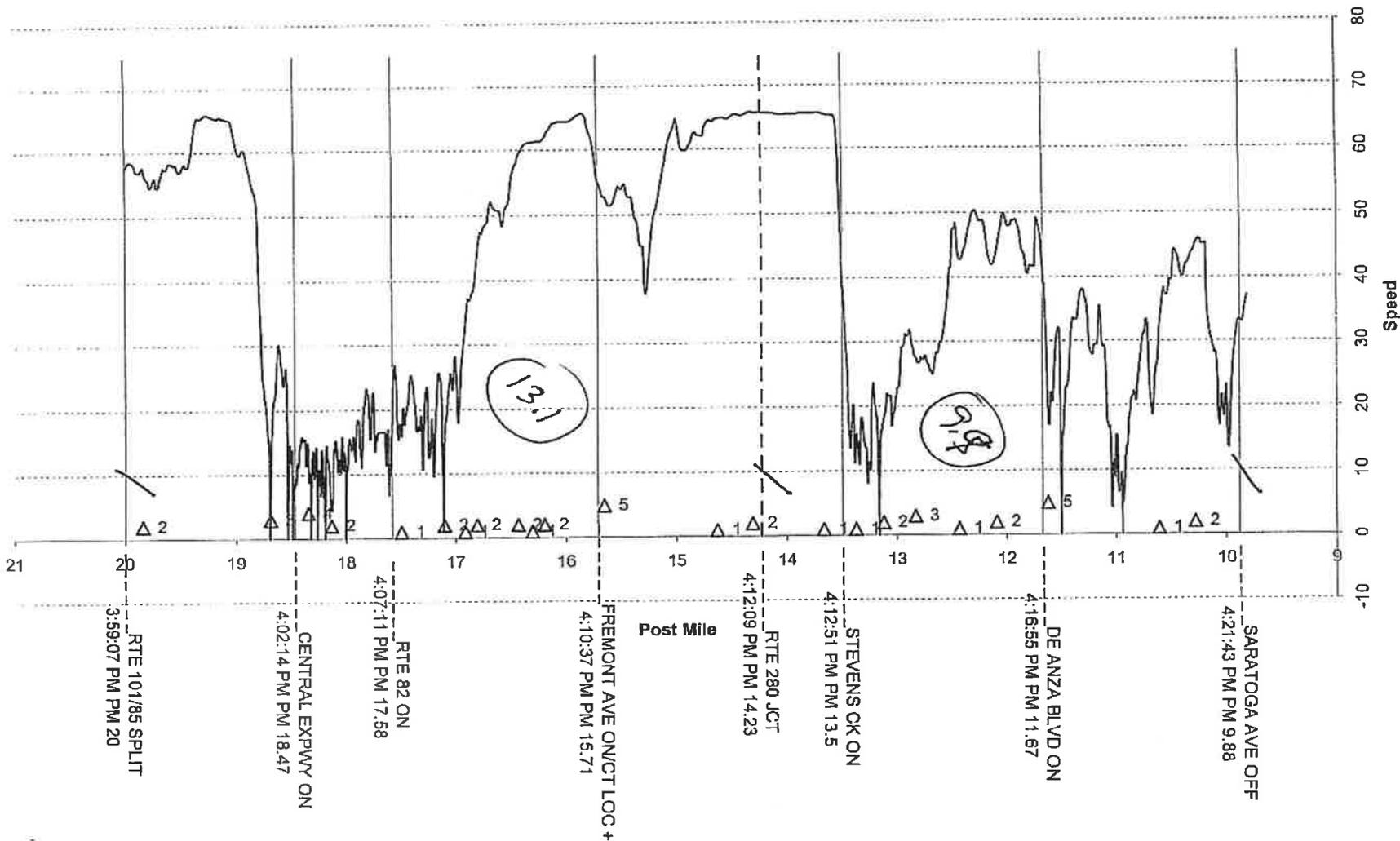


# TACHOGRAPH PLOT

Code: S08505H  
 Driver: ADOLFO ZEPEDA

Date: 9/30/2008 - Tues Set: 02  
 Location: SCL-85-20/0

Run: 1

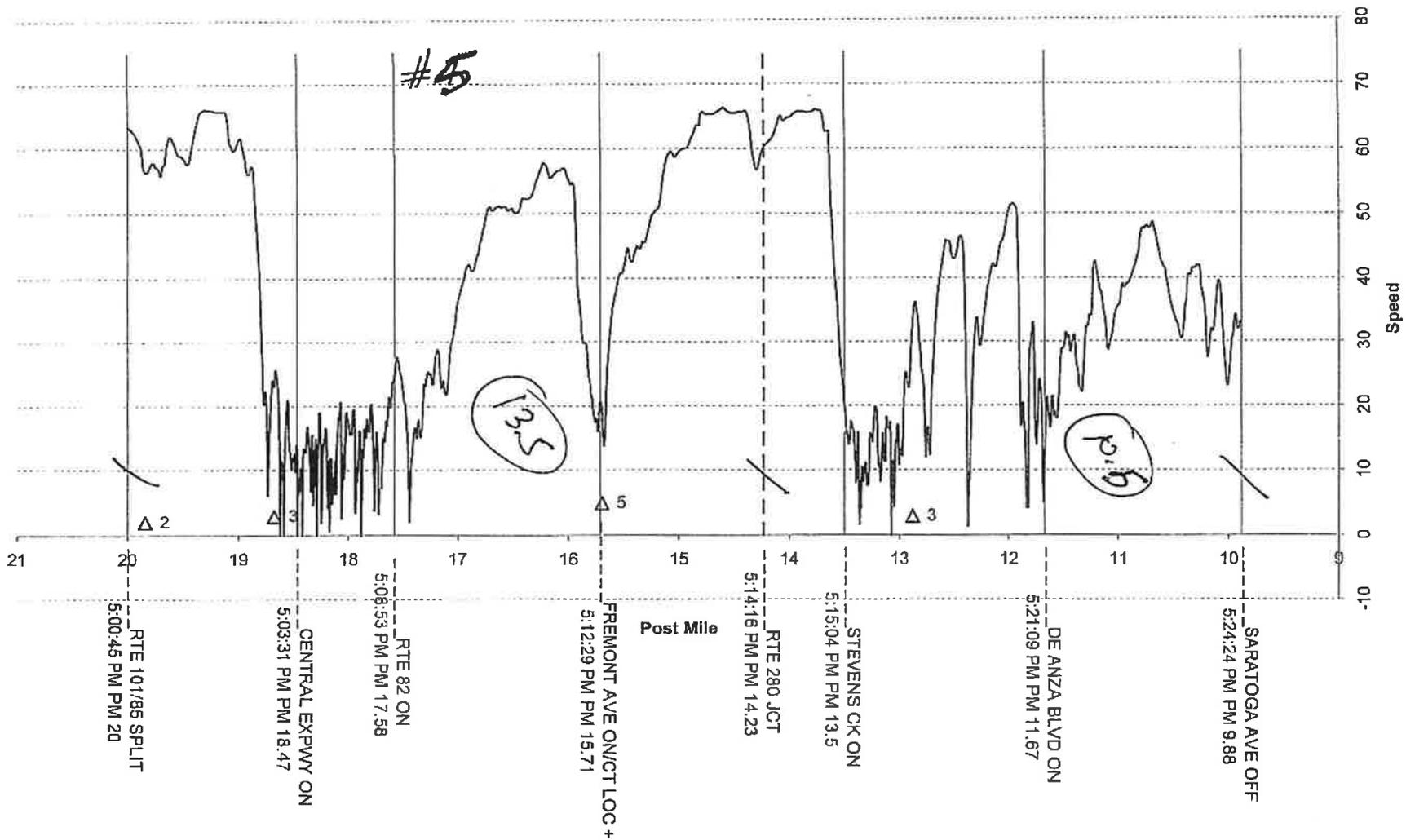


# TACHOGRAPH PLOT

Code: S08505H  
Driver: ADOLFO ZEPEDA

Date: 9/30/2008 - Tues Set: 03  
Location: SCL-85-20/0

Run: 1

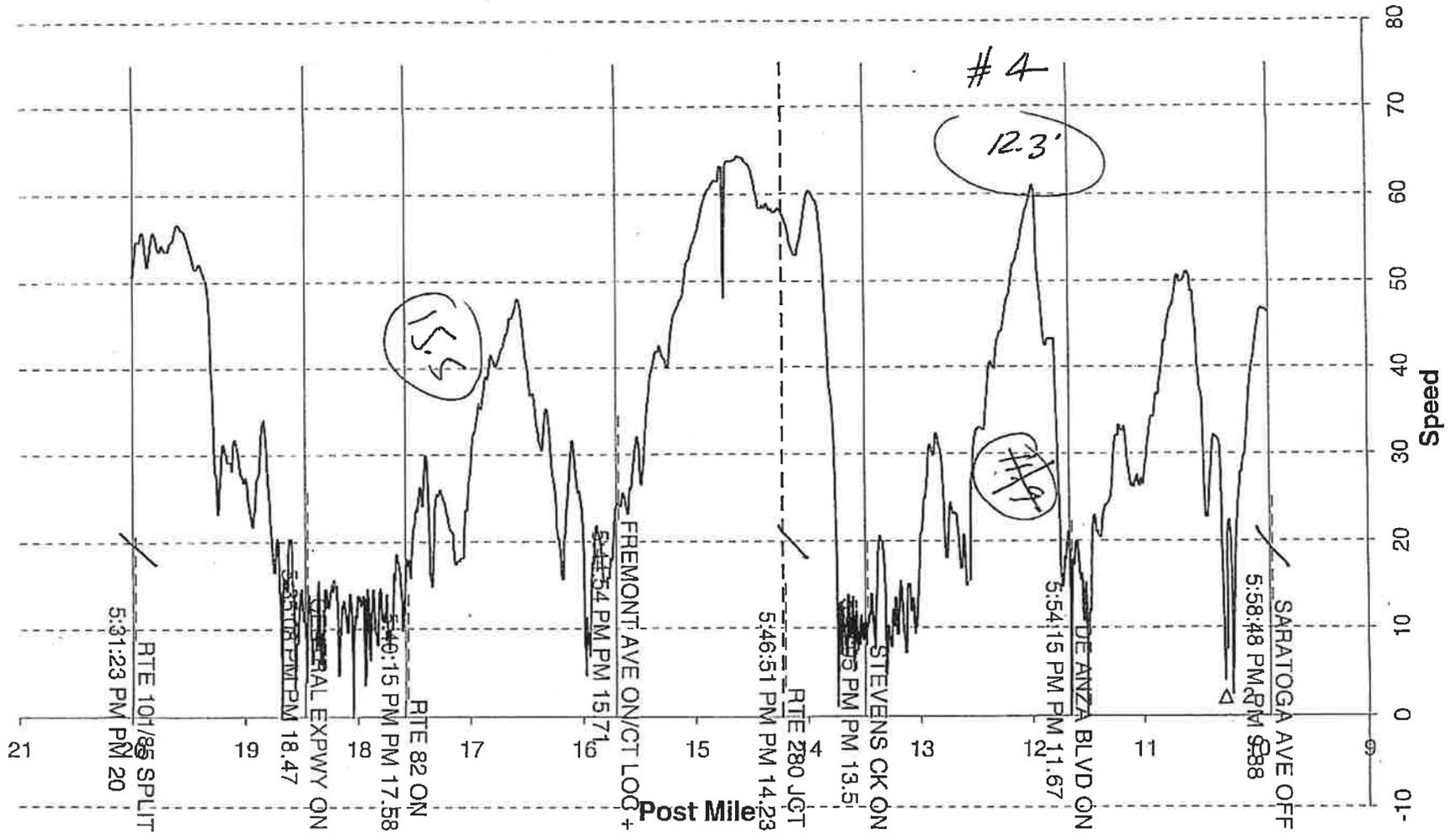


# TACHOGRAPH PLOT

Code: s08505h  
Driver: MARIA CASTRO

Date: 9/30/2008 - Tues      Set: 02  
Location: SCL-85-20/0

Run: 1



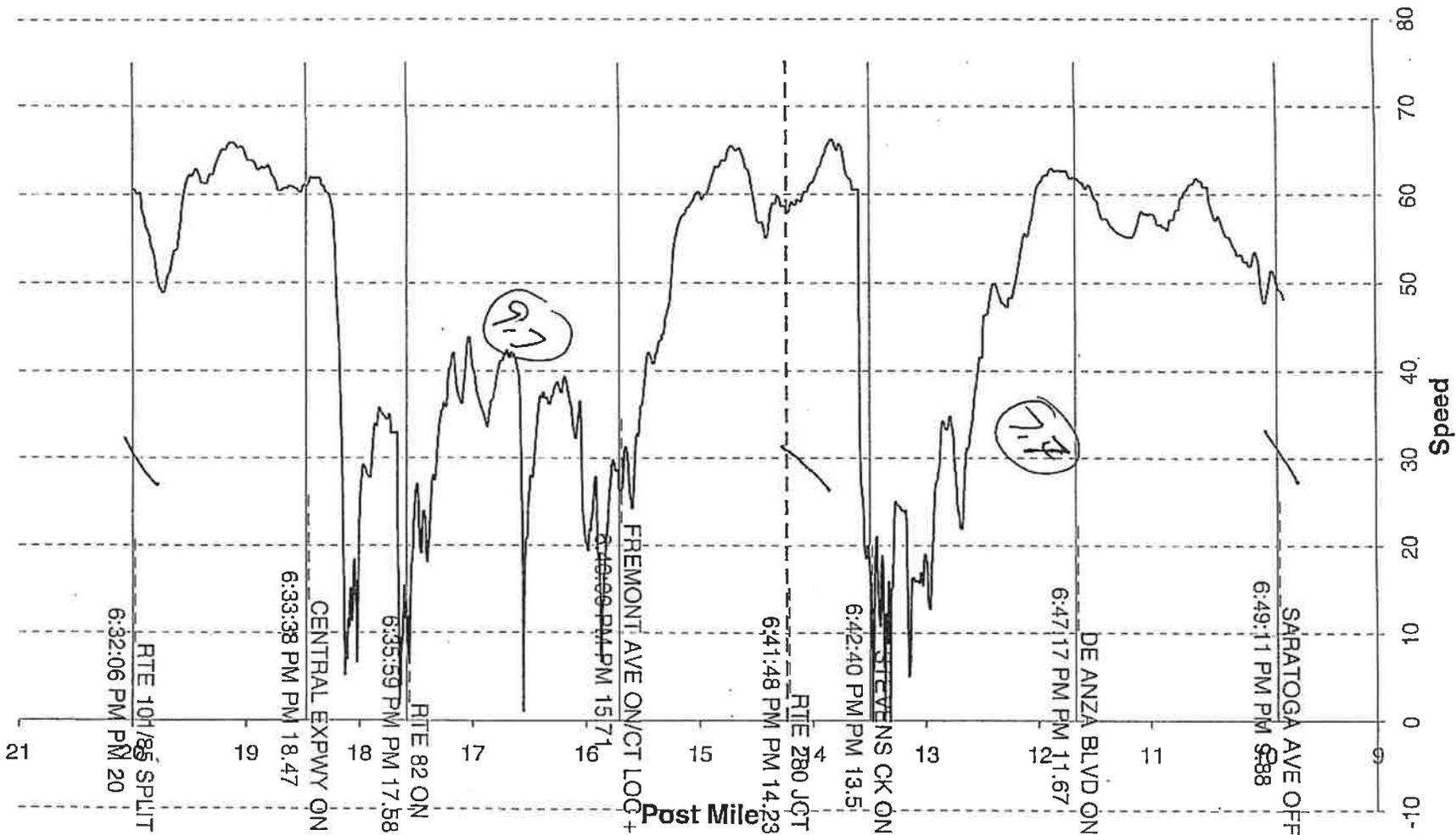


# TACHOGRAPH PLOT

Code: s08505h  
Driver: MARIA CASTRO

Date: 9/30/2008 - Tues  
Location: SCL-85-20/0

Set: 03  
Run: 1

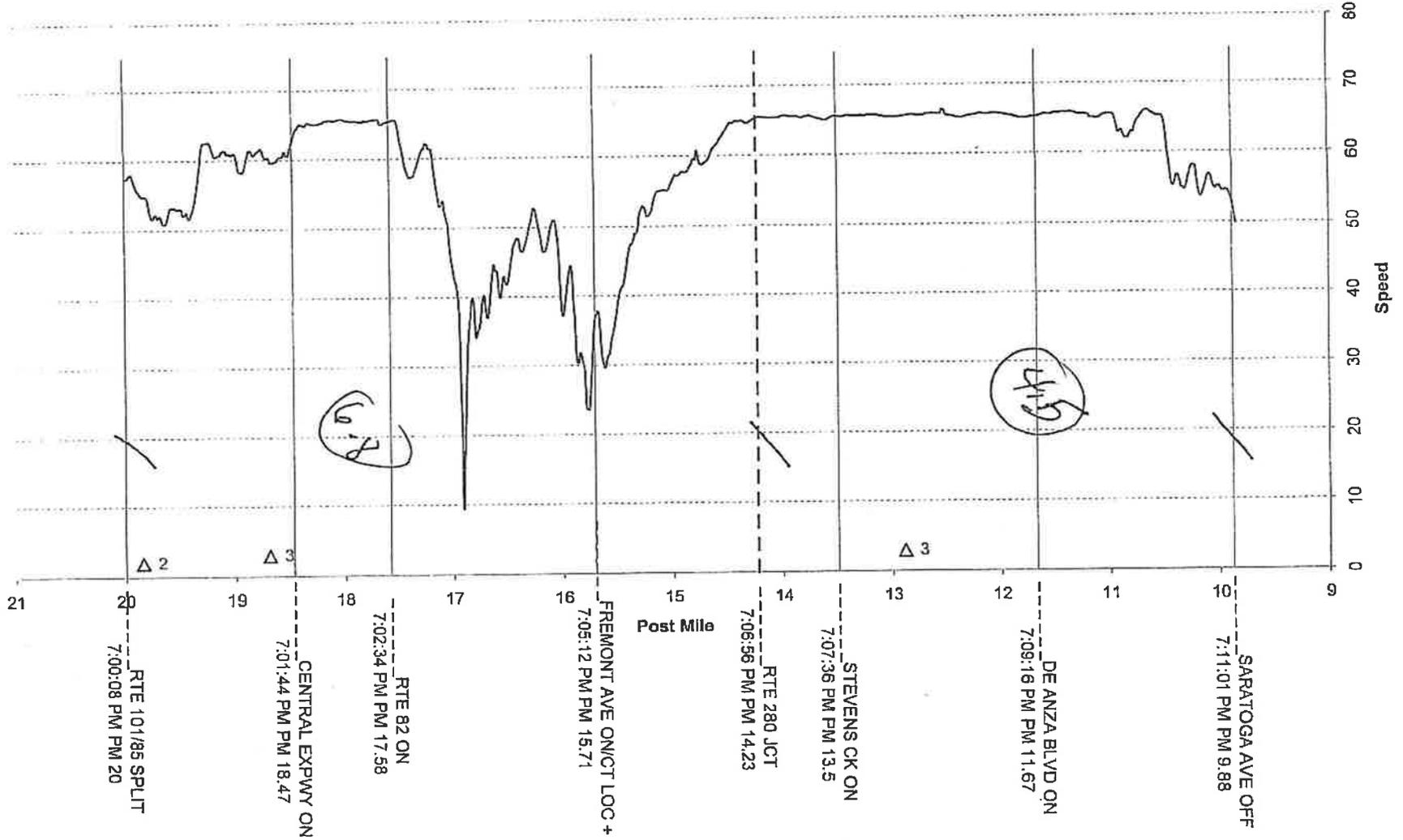


# TACHOGRAPH PLOT

Code: S08505H  
Driver: ADOLFO ZEPEDA

Date: 9/30/2008 - Tues      Set: 05  
Location: SCL-85-20/0

Run: 1



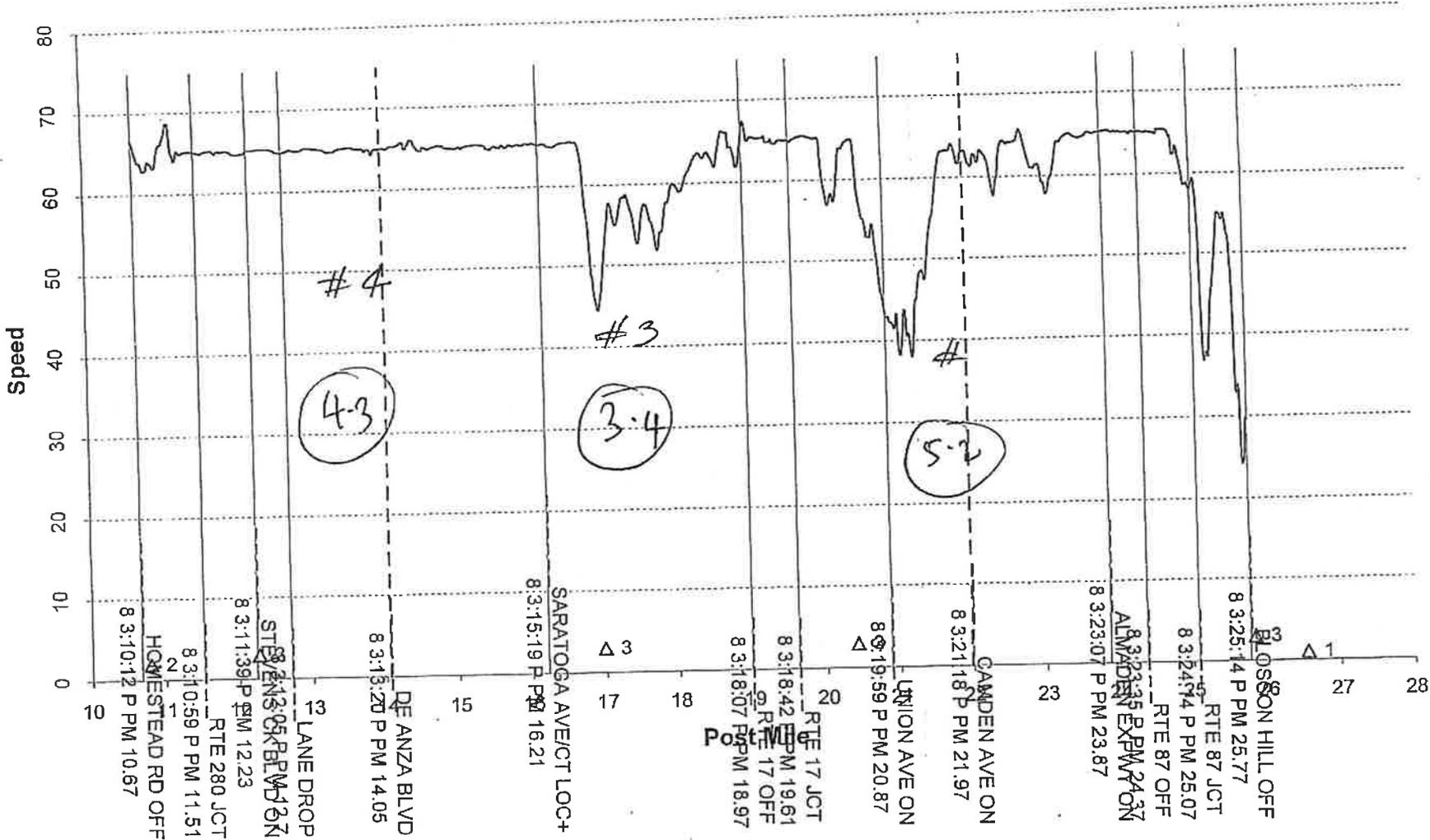
PM

### TACHOGRAPH PLOT

Code: S08505H6  
Driver: ADOLFO ZEPEDA

Date: 12/16/2008 - Tues      Set: 01  
Location: SCL-85-10.67/0

Run: 1

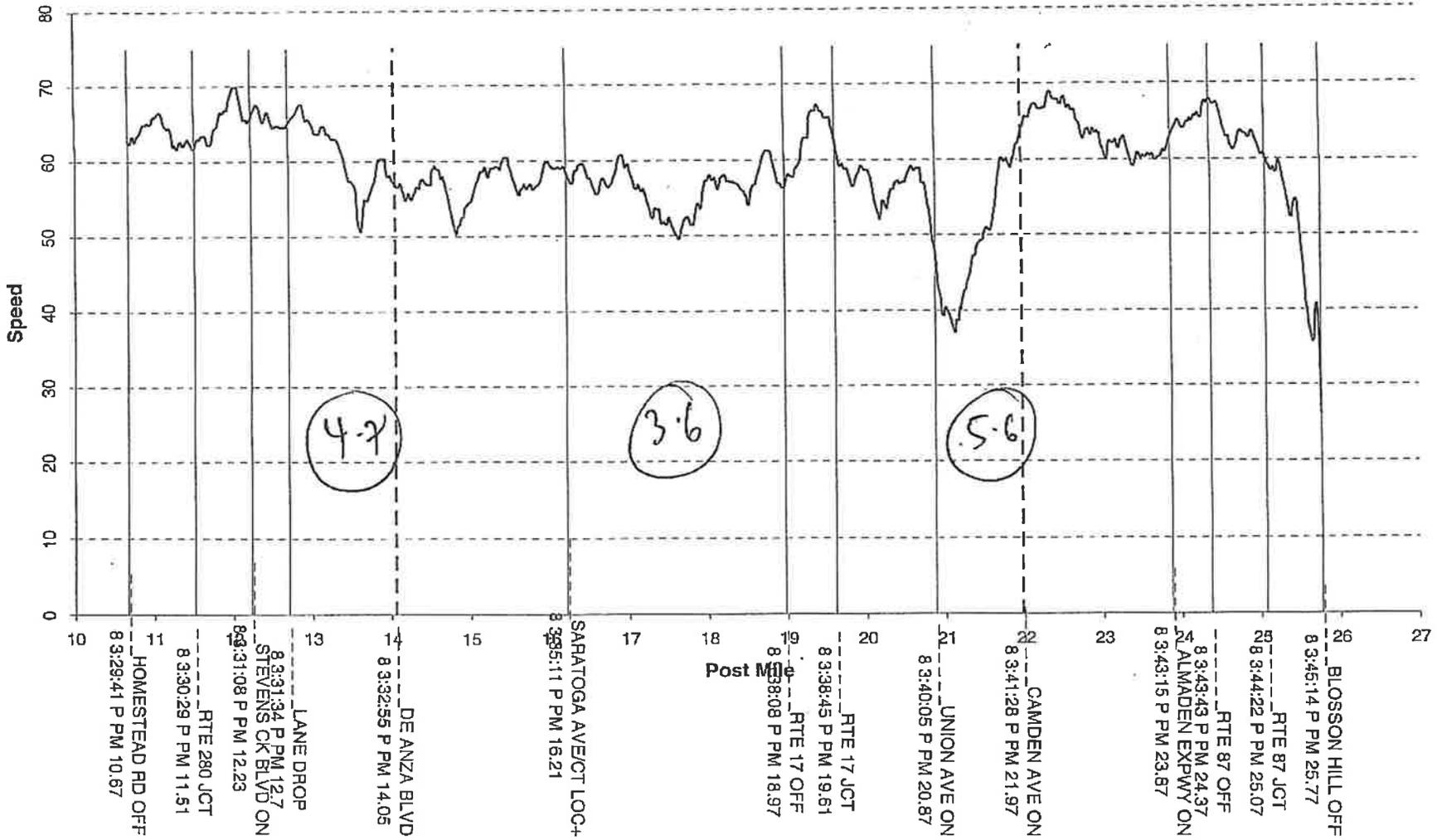


# TACHOGRAPH PLOT

Code: s08505h6  
Driver: MARIA CASTRO

Date: 12/16/2008 - Tues      Set: 01  
Location: SCL-85-10.67/0

Run: 1

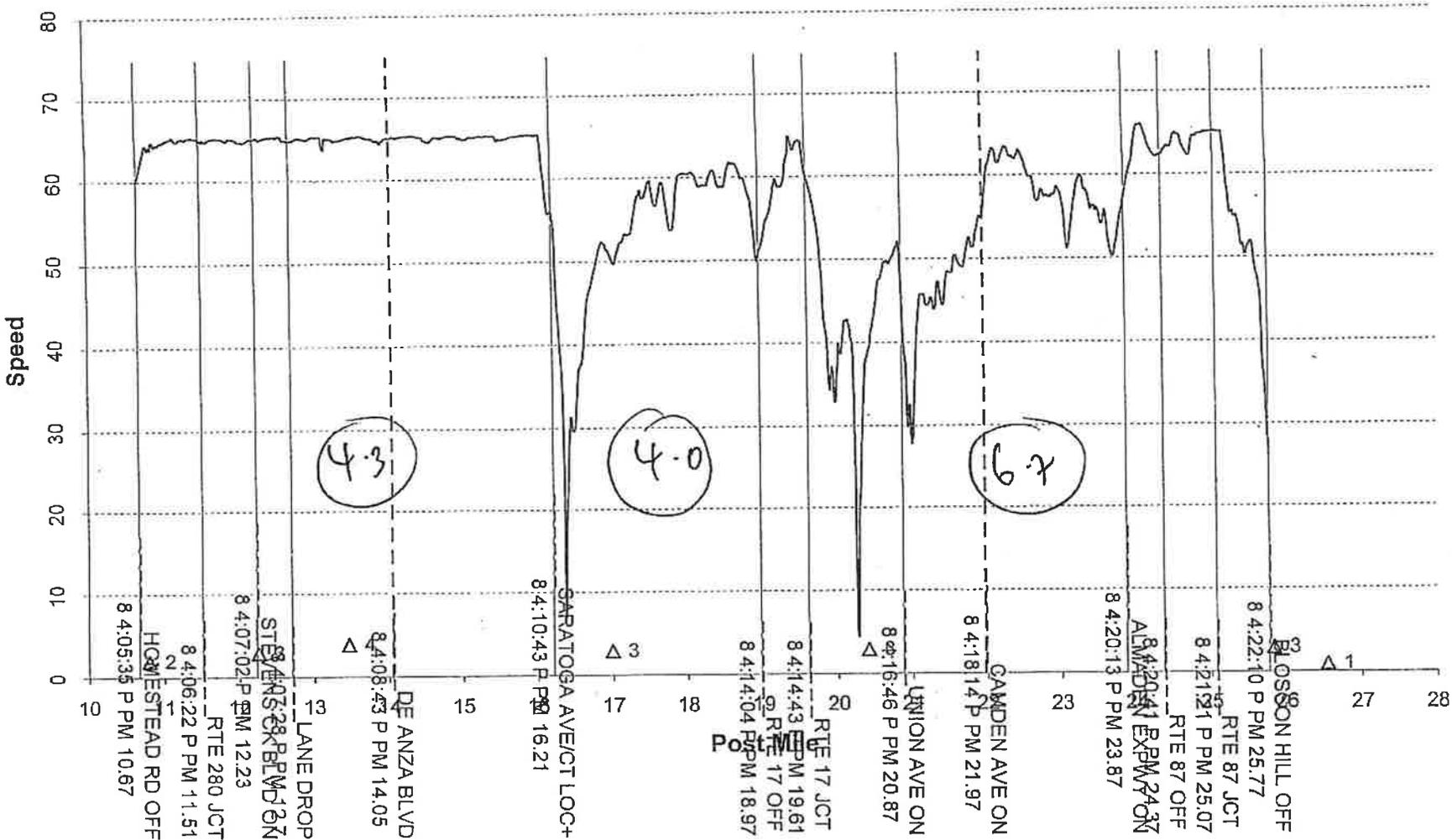


# TACHOGRAPH PLOT

Code: S08505H6  
 Driver: ADOLFO ZEPEDA

Date: 12/16/2008 - Tues Set: 02  
 Location: SCL-85-10.67/0

Run: 1

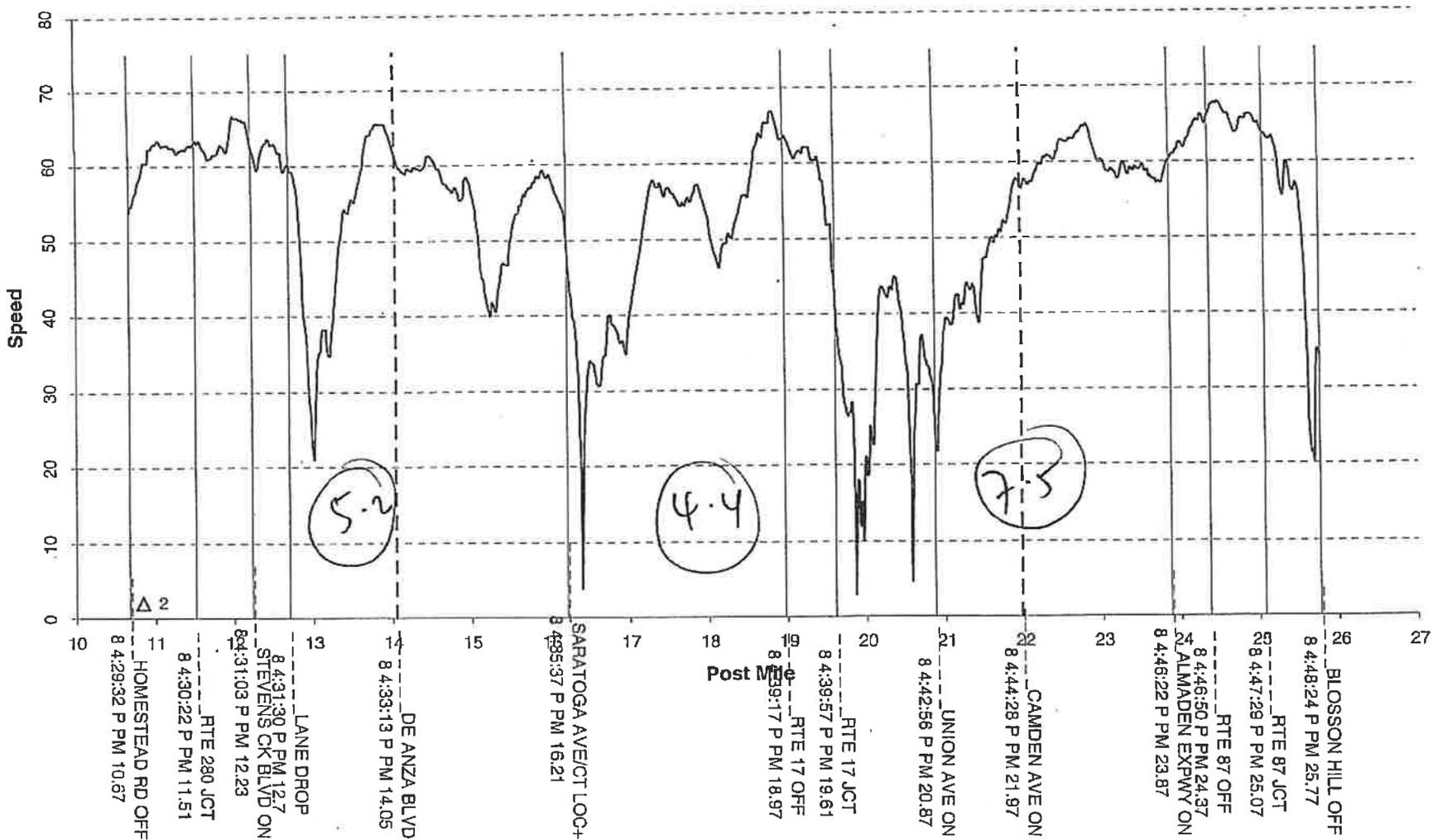


# TACHOGRAPH PLOT

Code: s08505h6  
 Driver: MARIA CASTRO

Date: 12/16/2008 - Tues Set: 02  
 Location: SCL-85-10.67/0

Run: 1

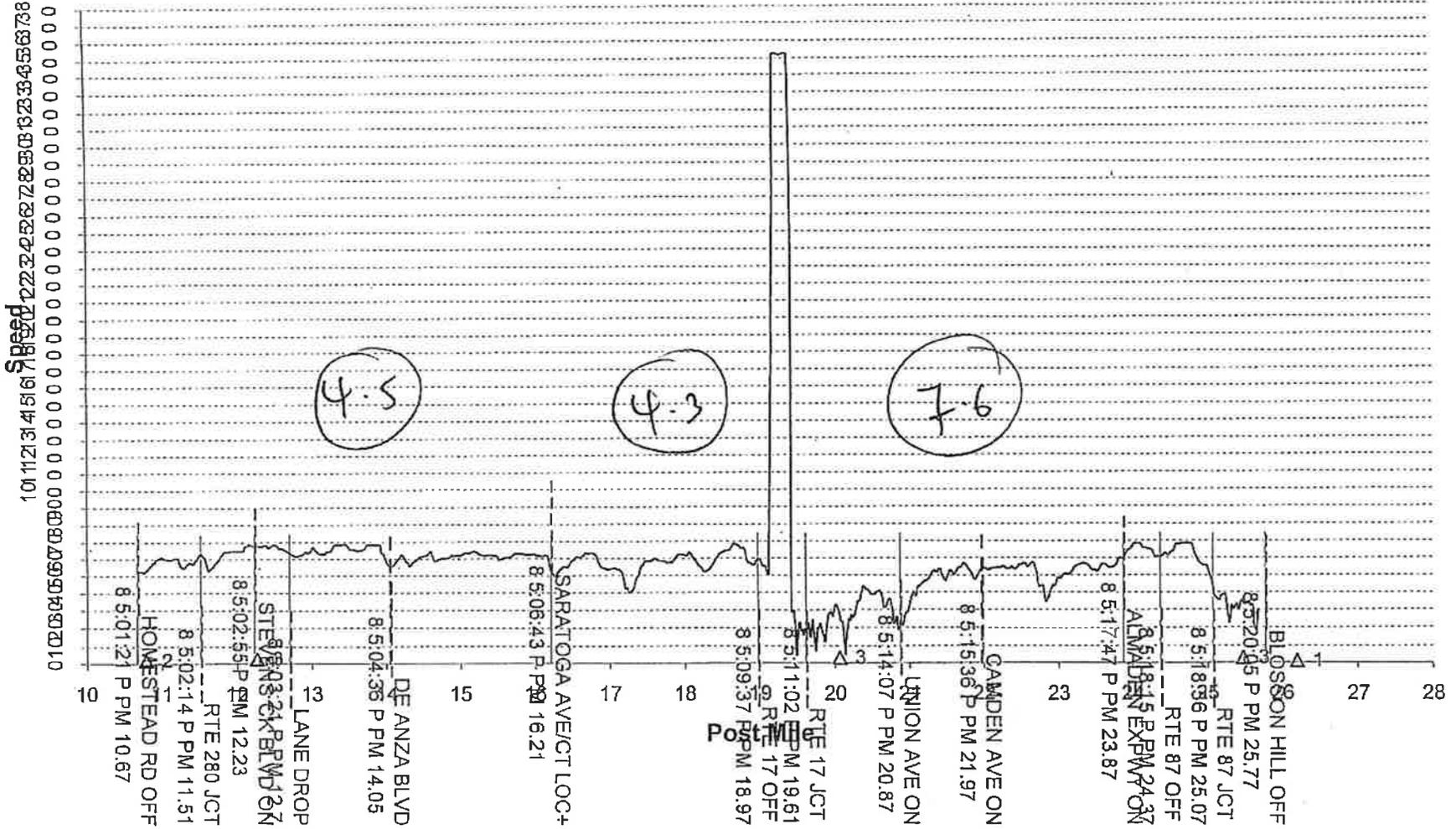


# TACHOGRAPH PLOT

Code: S08505H6  
 Driver: ADOLFO ZEPEDA

Date: 12/16/2008 - Tues Set: 03  
 Location: SCL-85-10.67/0

Run: 1

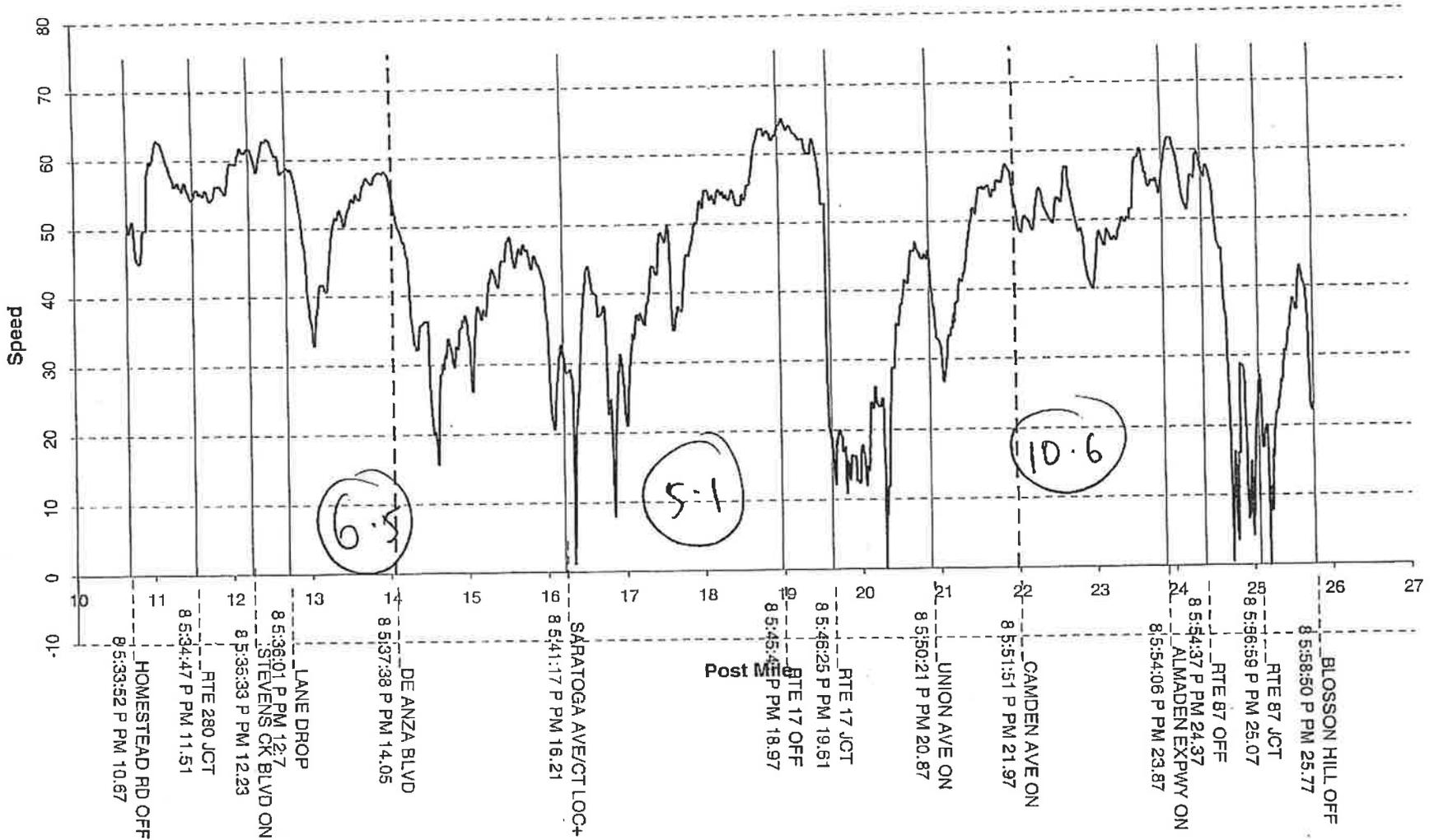


# TACHOGRAPH PLOT

Code: s08505h6  
 Driver: MARIA CASTRO

Date: 12/16/2008 - Tues Set: 03  
 Location: SCL-85-10.67/0

Run: 1

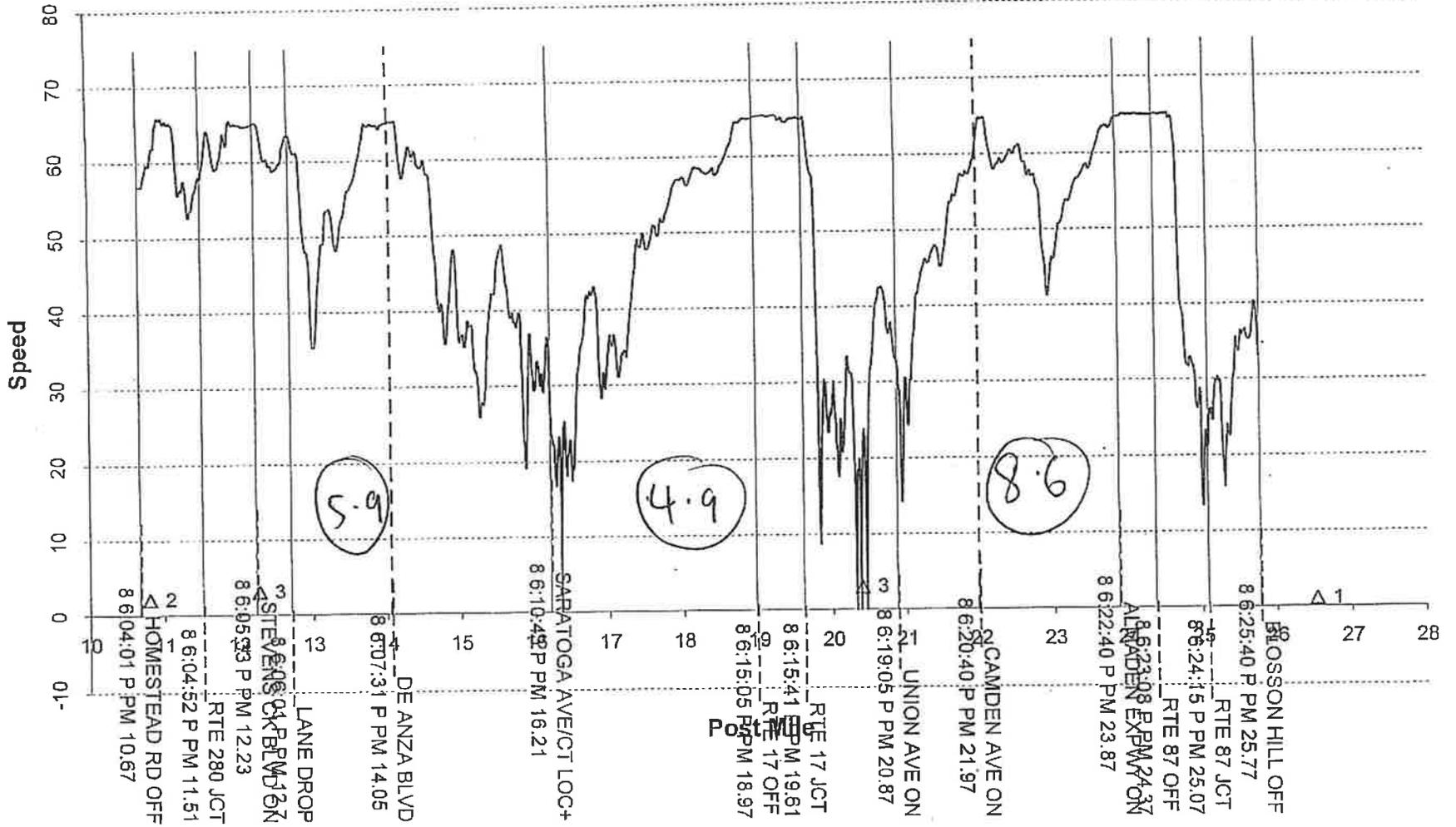


# TACHOGRAPH PLOT

Code: S08505H6  
 Driver: ADOLFO ZEPEDA

Date: 12/16/2008 - Tues Set: 04  
 Location: SCL-85-10.67/0

Run: 1

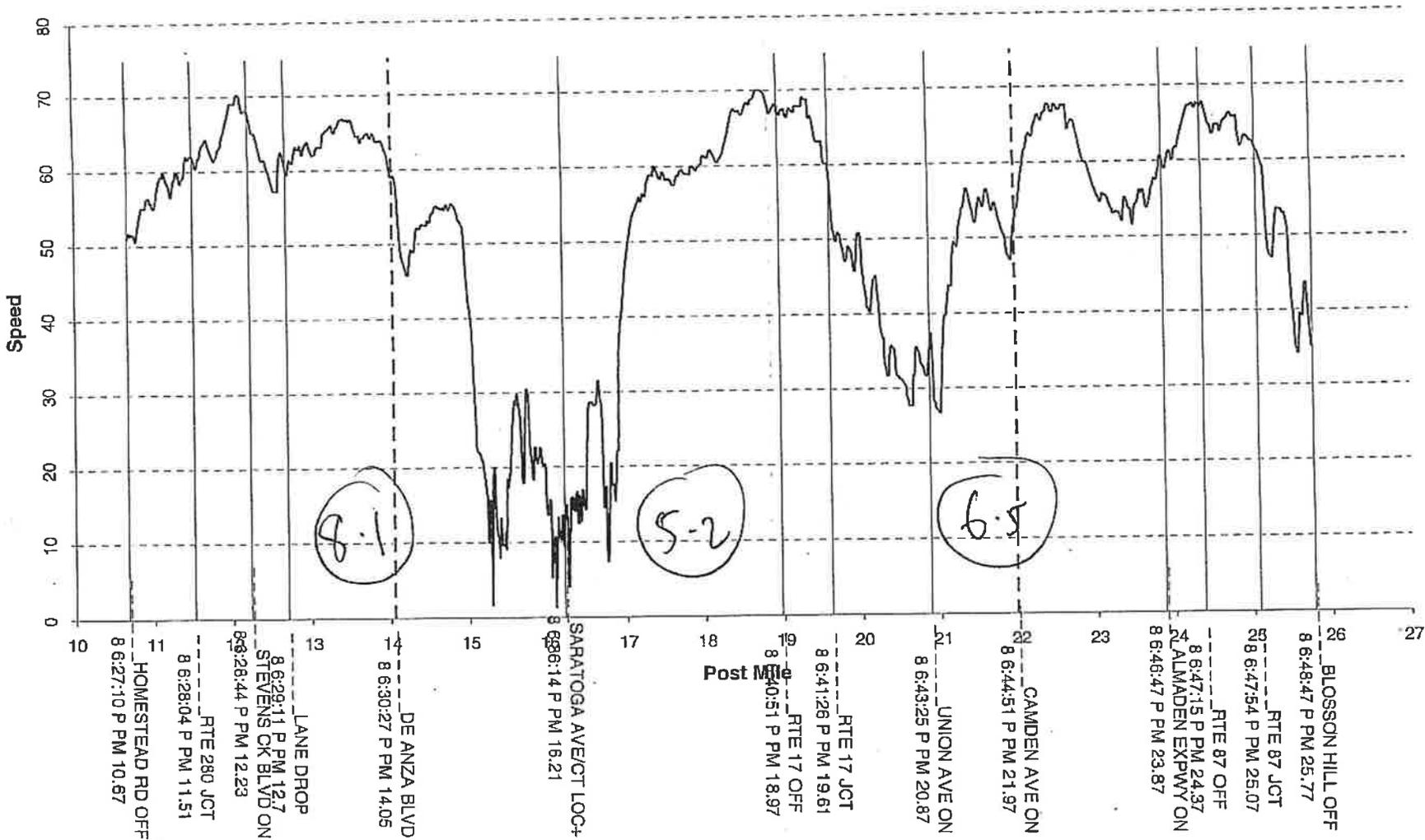


# TACHOGRAPH PLOT

Code: s08505h6  
 Driver: MARIA CASTRO

Date: 12/16/2008 - Tues Set: 04  
 Location: SCL-85-10.67/0

Run: 1

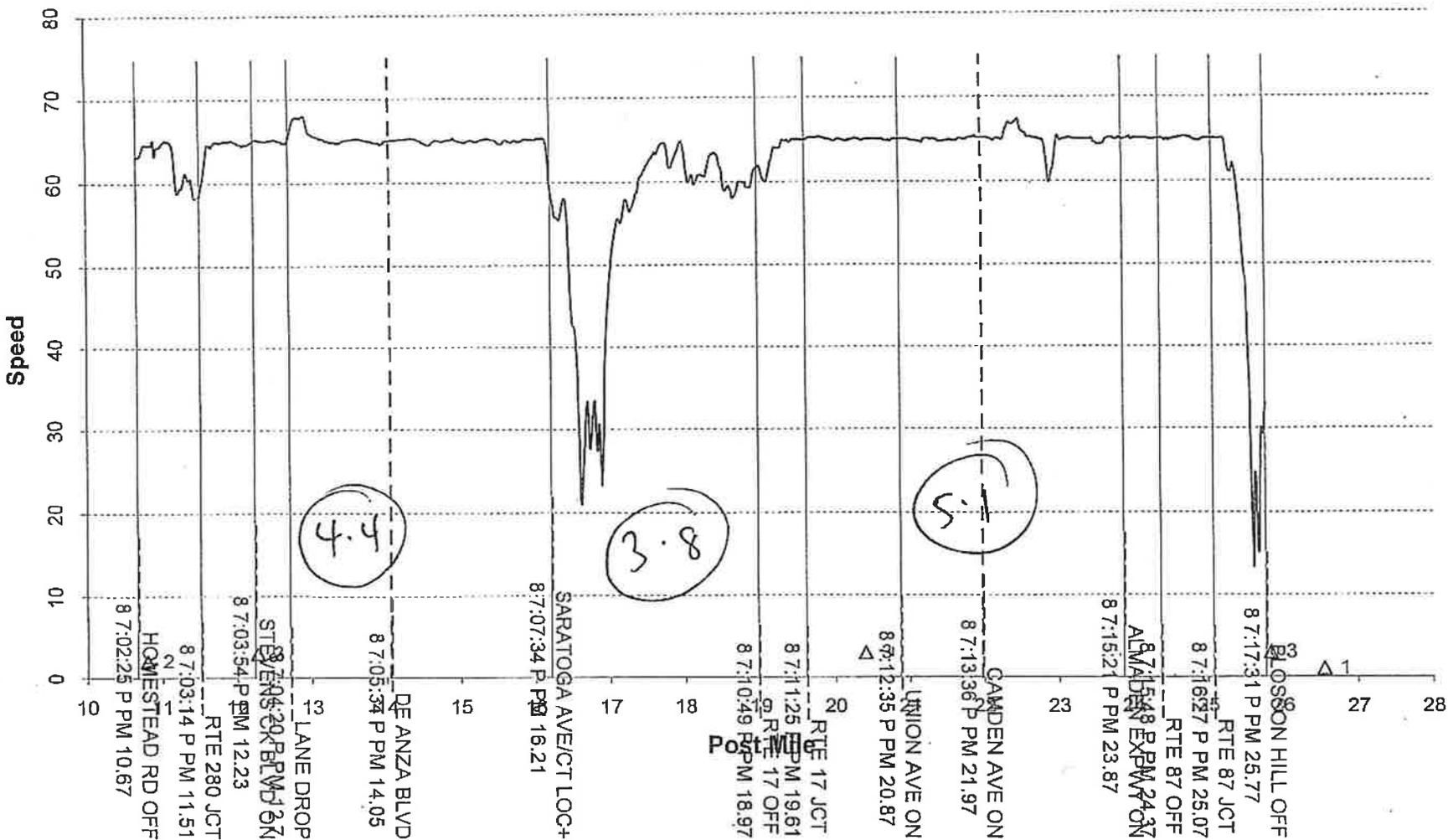


# TACHOGRAPH PLOT

Code: S08505H6  
 Driver: ADOLFO ZEPEDA

Date: 12/16/2008 - Tues Set: 05  
 Location: SCL-85-10.67/0

Run: 1

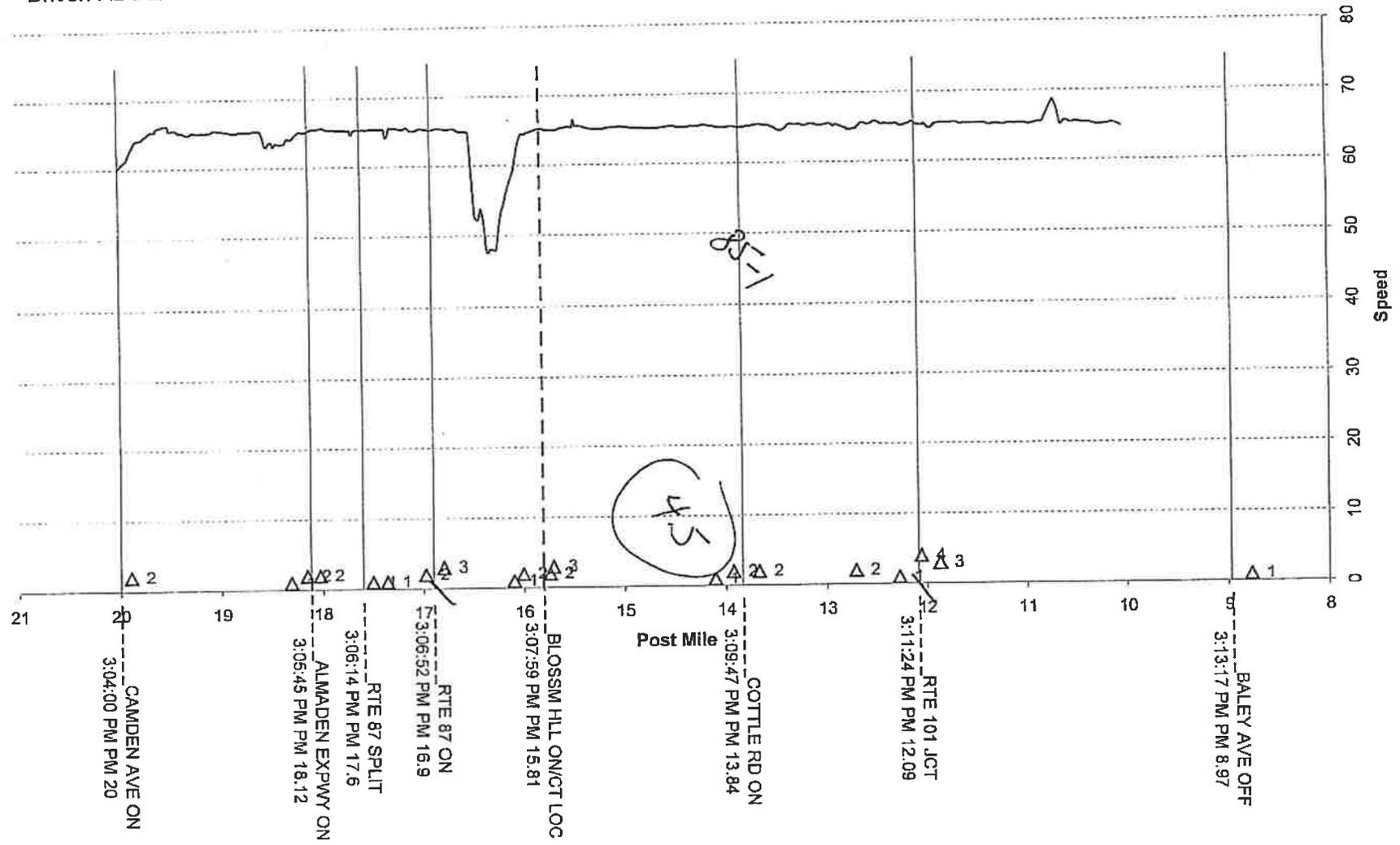


# TACHOGRAPH PLOT

Code: S08502H3 **PM**  
 Driver: ADOLFO ZEPEDA

Date: 5/1/2008 - Thur Set: 01  
 Location: SCL-85-20/0

Run: 1



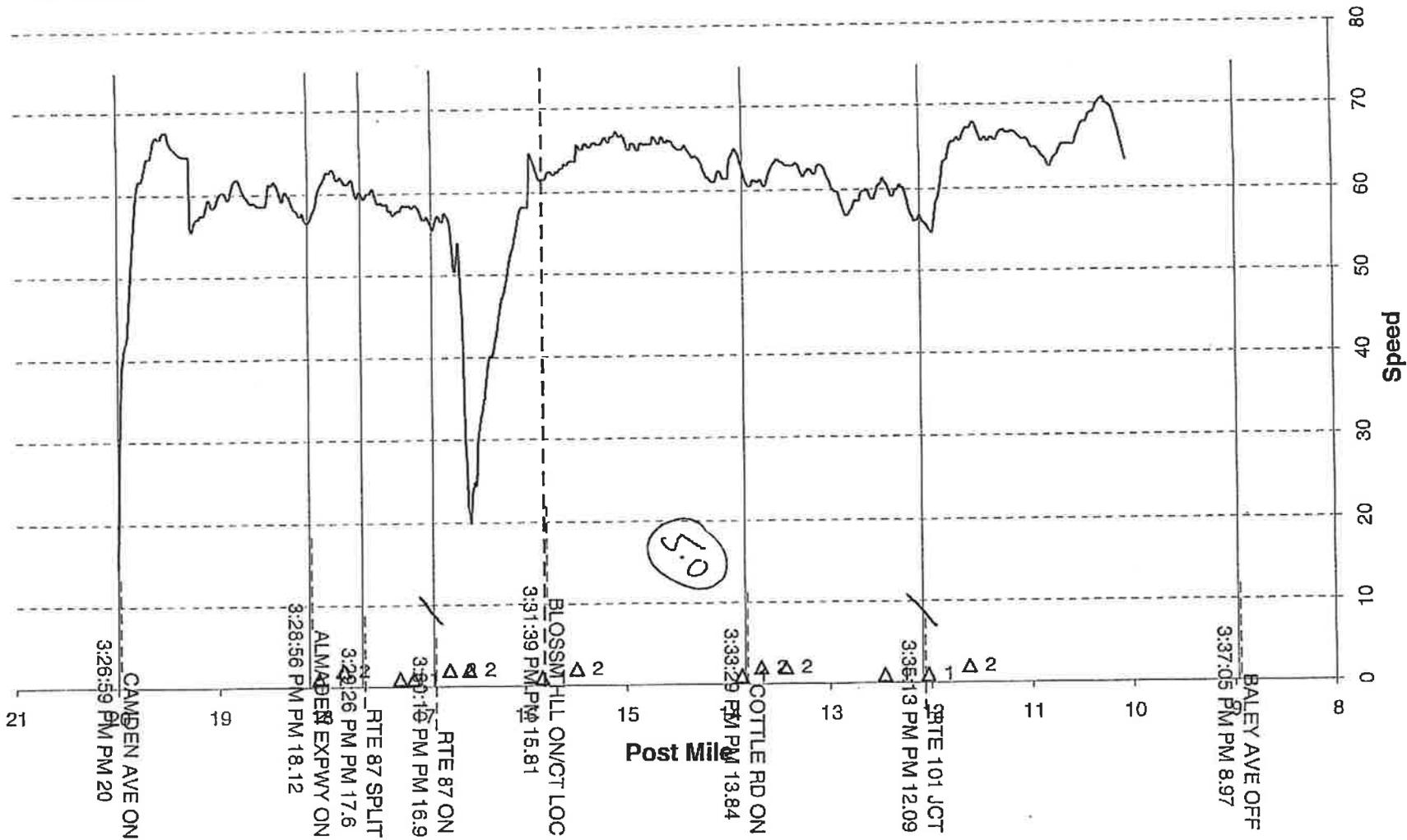
# TACHOGRAPH PLOT

Code: s08502h3  
 Driver: MARIA CASTRO

PM

Date: 5/1/2008 - Thur Set: 01  
 Location: SCL-85-20/0

Run: 1

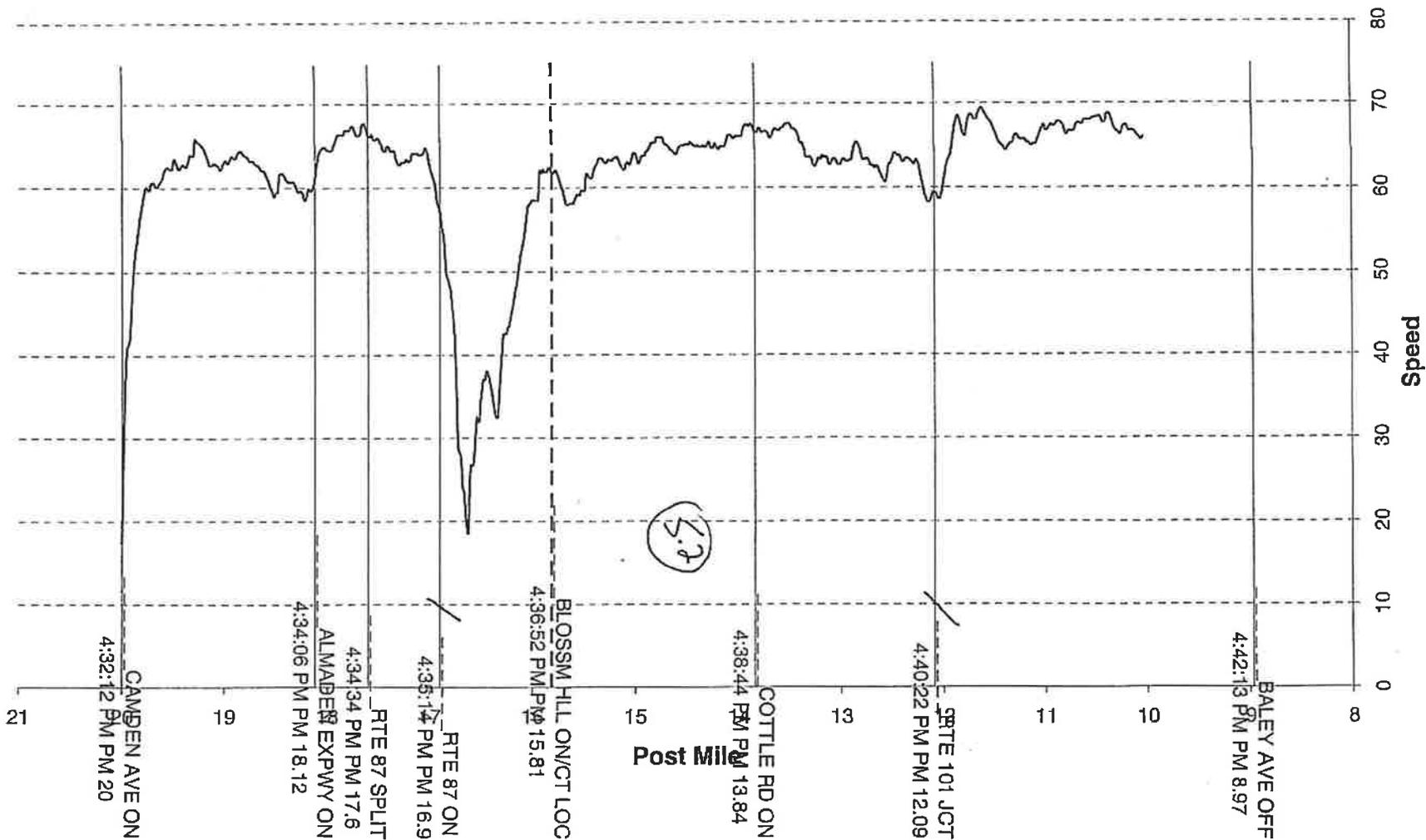


# TACHOGRAPH PLOT

Code: s08502h3  
 Driver: MARIA CASTRO

Date: 5/1/2008 - Thur Set: 02  
 Location: SCL-85-20/0

Run: 1

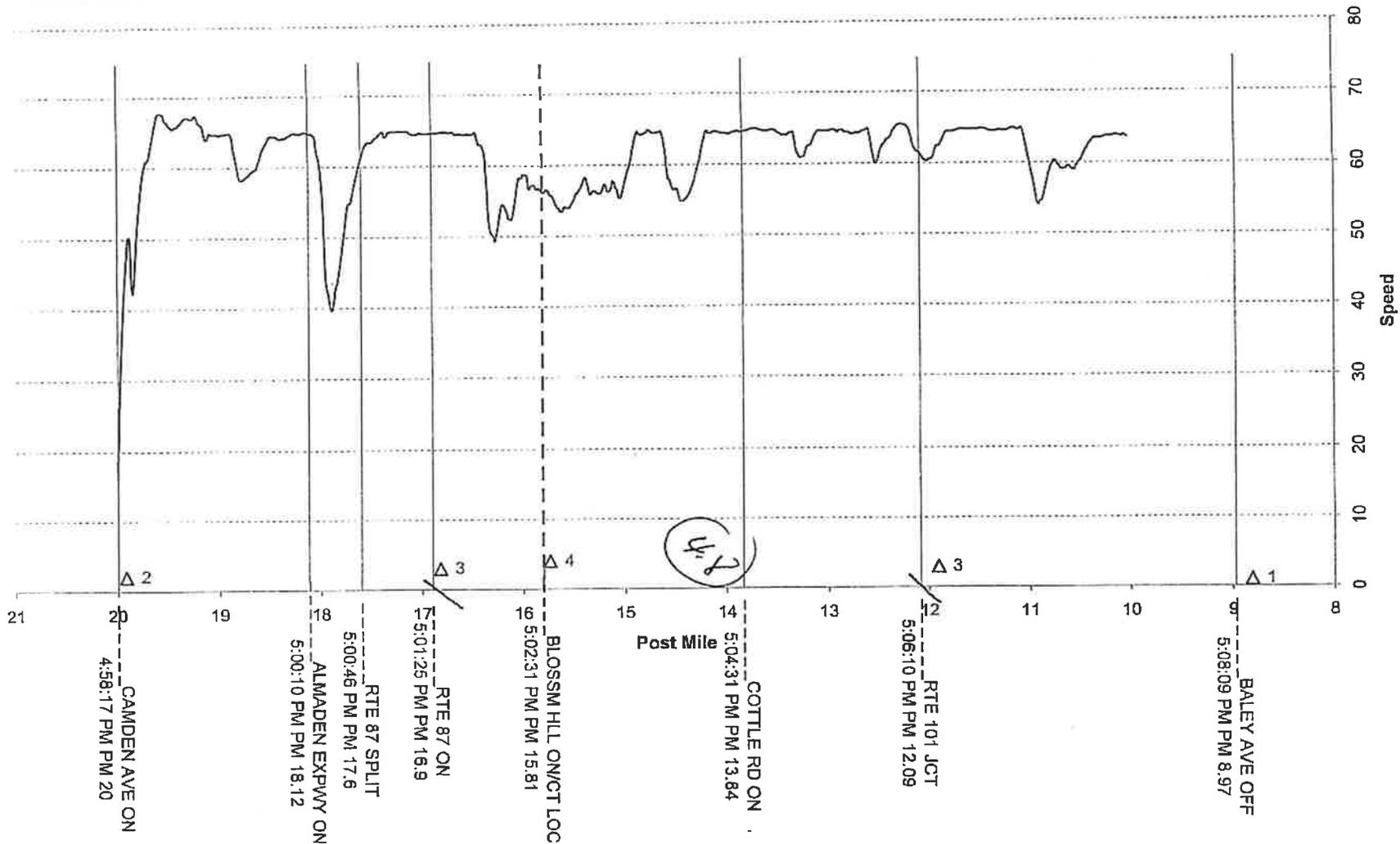


# TACHOGRAPH PLOT

Code: S08502H3  
Driver: ADOLFO ZEPEDA

Date: 5/1/2008 - Thur      Set: 02  
Location: SCL-85-20/0

Run: 1

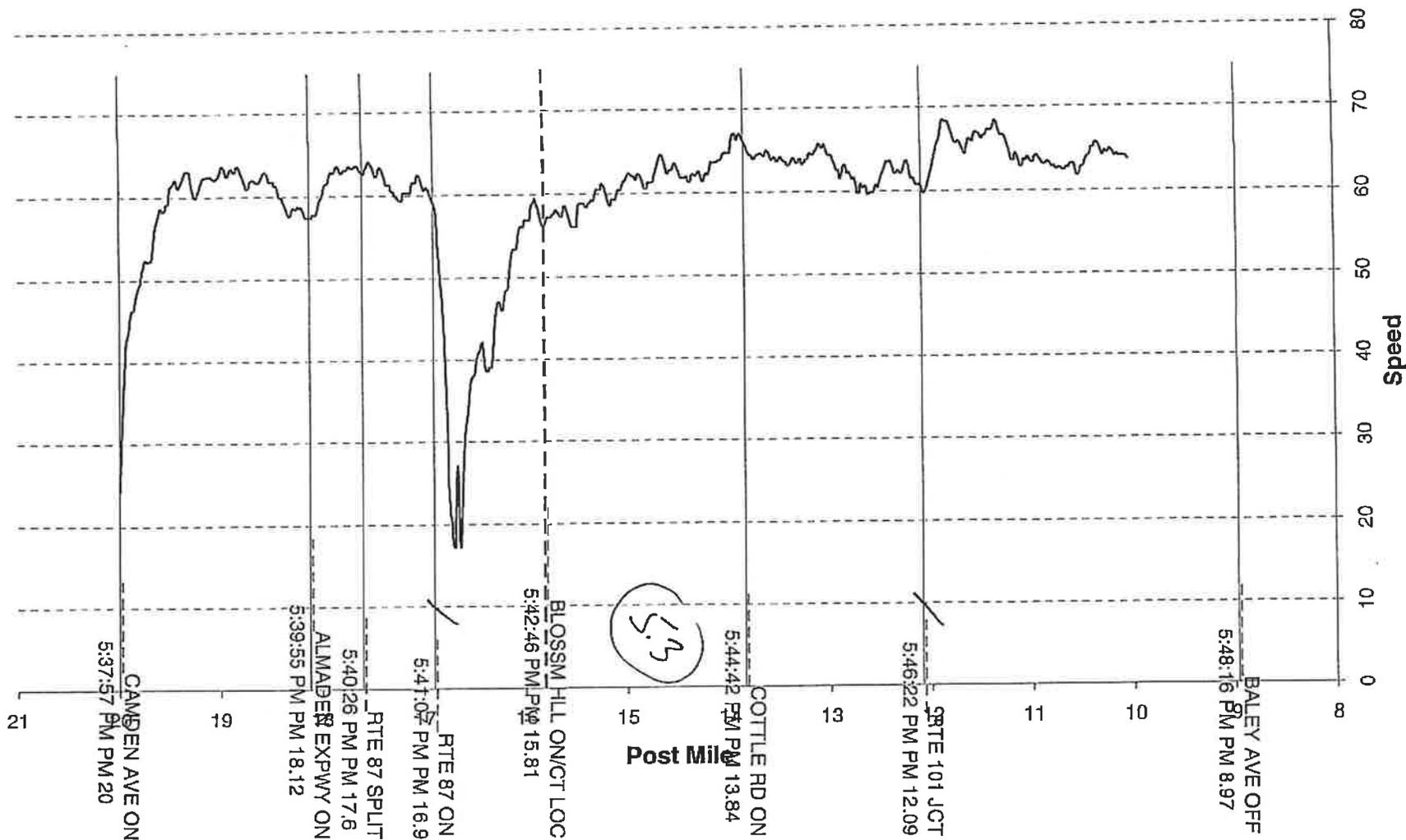


# TACHOGRAPH PLOT

Code: s08502h3  
Driver: MARIA CASTRO

Date: 5/1/2008 - Thur  
Location: SCL-85-20/0

Set: 03  
Run: 1

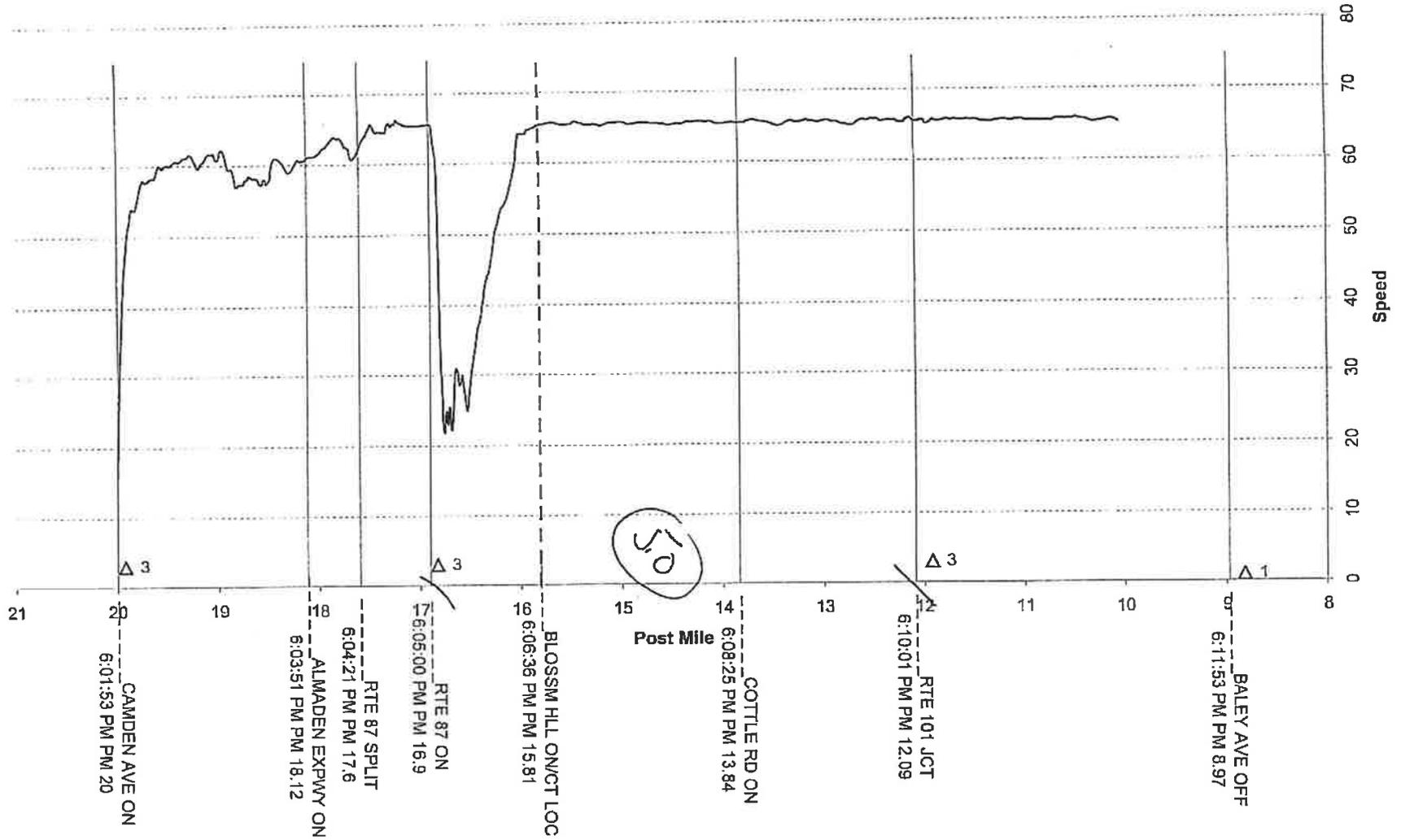


# TACHOGRAPH PLOT

Code: S08502H3  
Driver: ADOLFO ZEPEDA

Date: 5/1/2008 - Thur      Set: 03  
Location: SCL-85-20/0

Run: 1

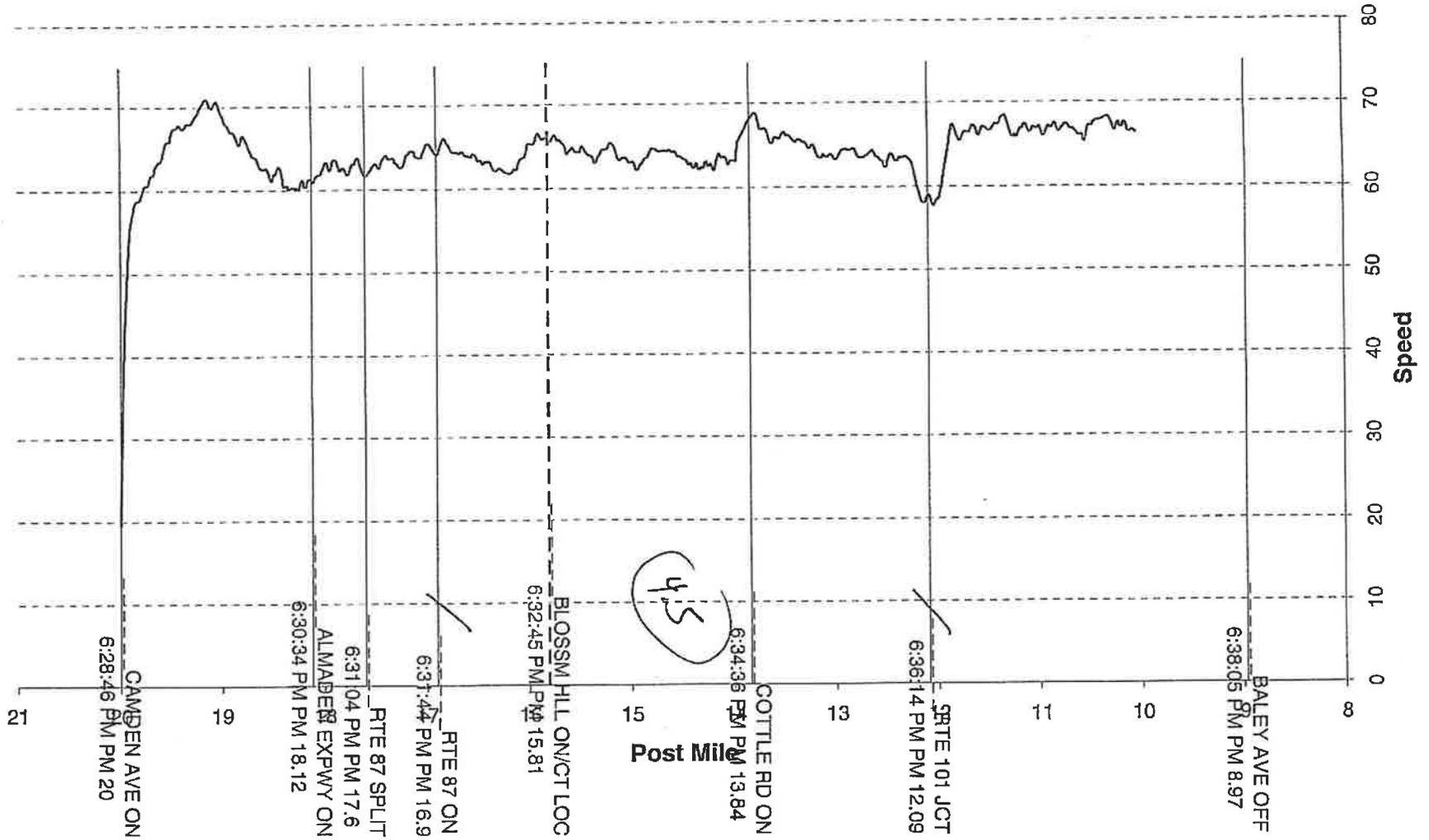


# TACHOGRAPH PLOT

Code: s08502h3  
Driver: MARIA CASTRO

Date: 5/1/2008 - Thur  
Location: SCL-85-20/0

Set: 04  
Run: 1



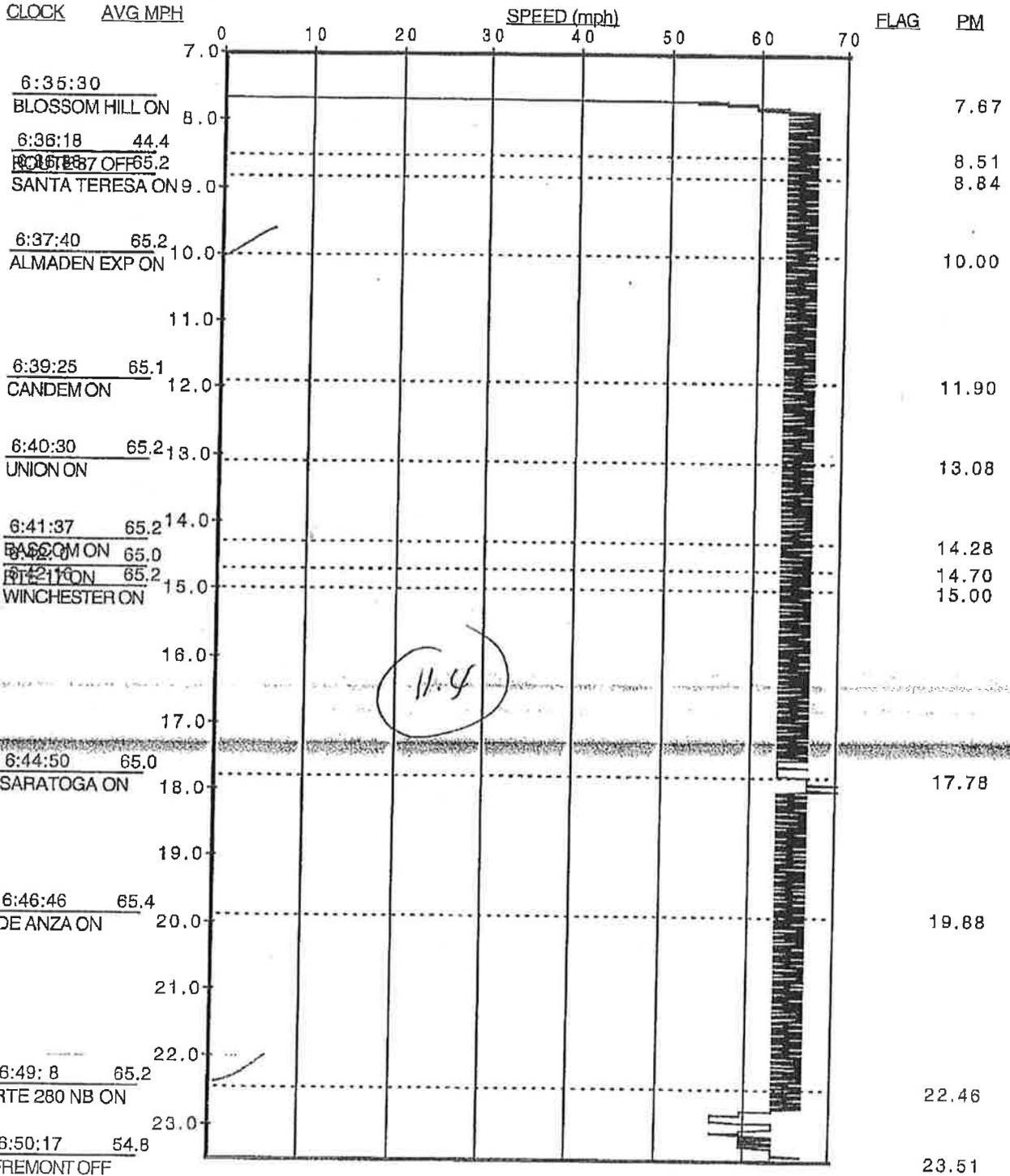
HOV

# TACHOGRAPH PLOT

HOLT R

**Location:** SCL-85-7.67/23.52  
**Driver:** ADOLFO ZEPEDA

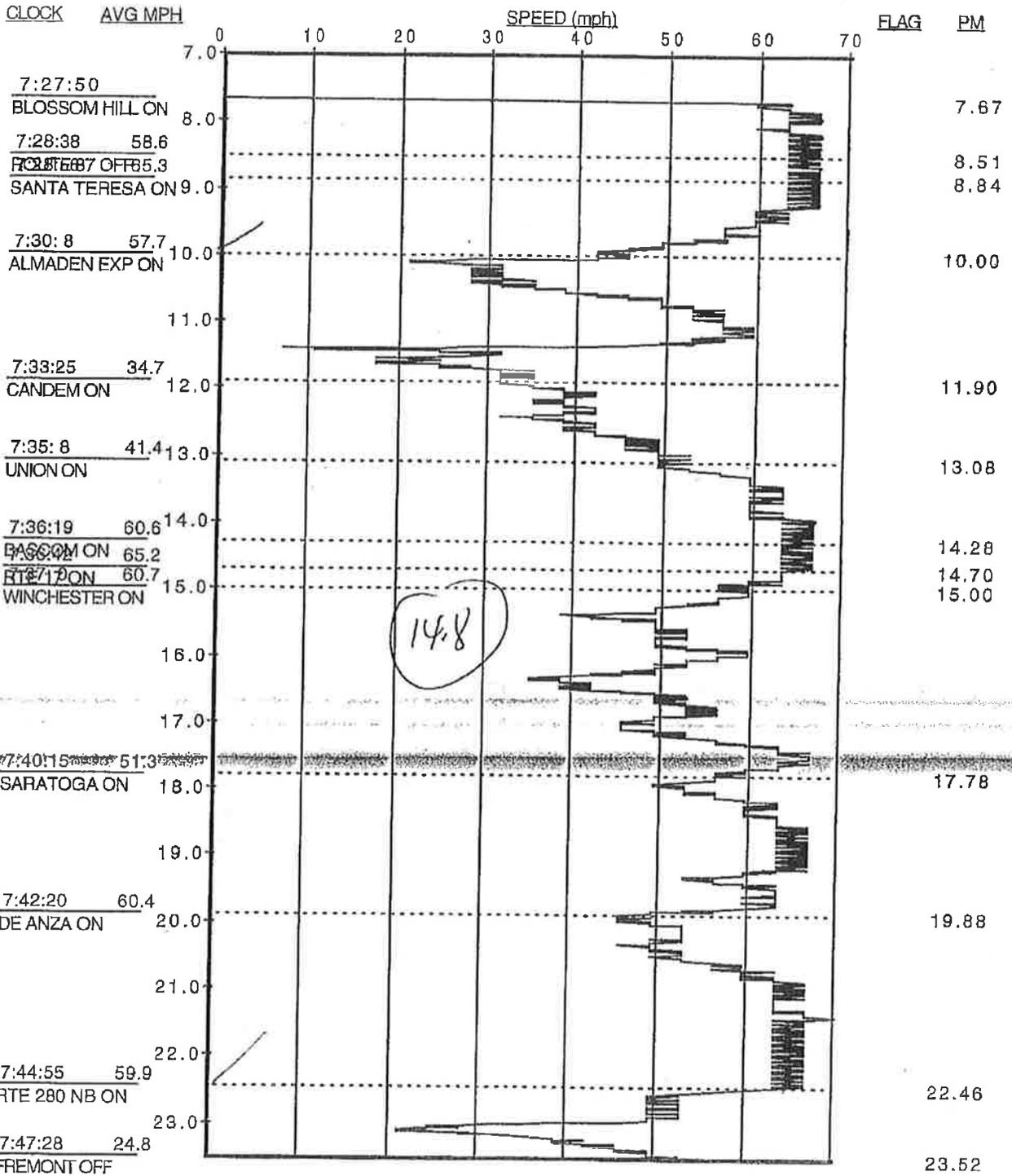
**Date:** 05-16-2007 **Period:** AM  
**Run:** 1 **Direction:** N/B



# TACHOGRAPH PLOT

Location: SCL-85-7.67/23.52  
 Driver: ADOLFO ZEPEDA

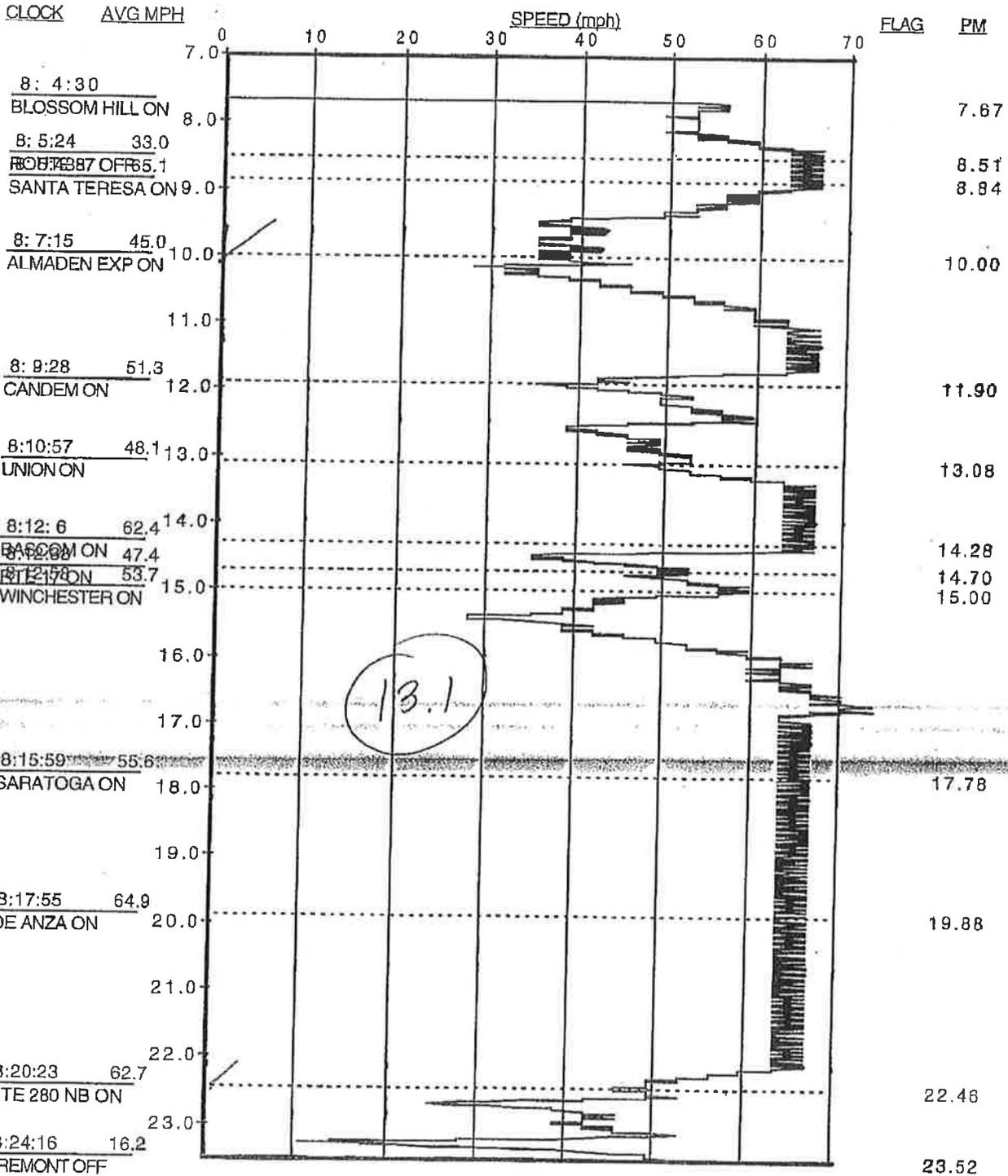
Date: 05-16-2007 Period: AM  
 Run: 2 Direction: N/B



# TACHOGRAPH PLOT

Location: SCL-85-7.67/23.52  
 Driver: ADOLFO ZEPEDA

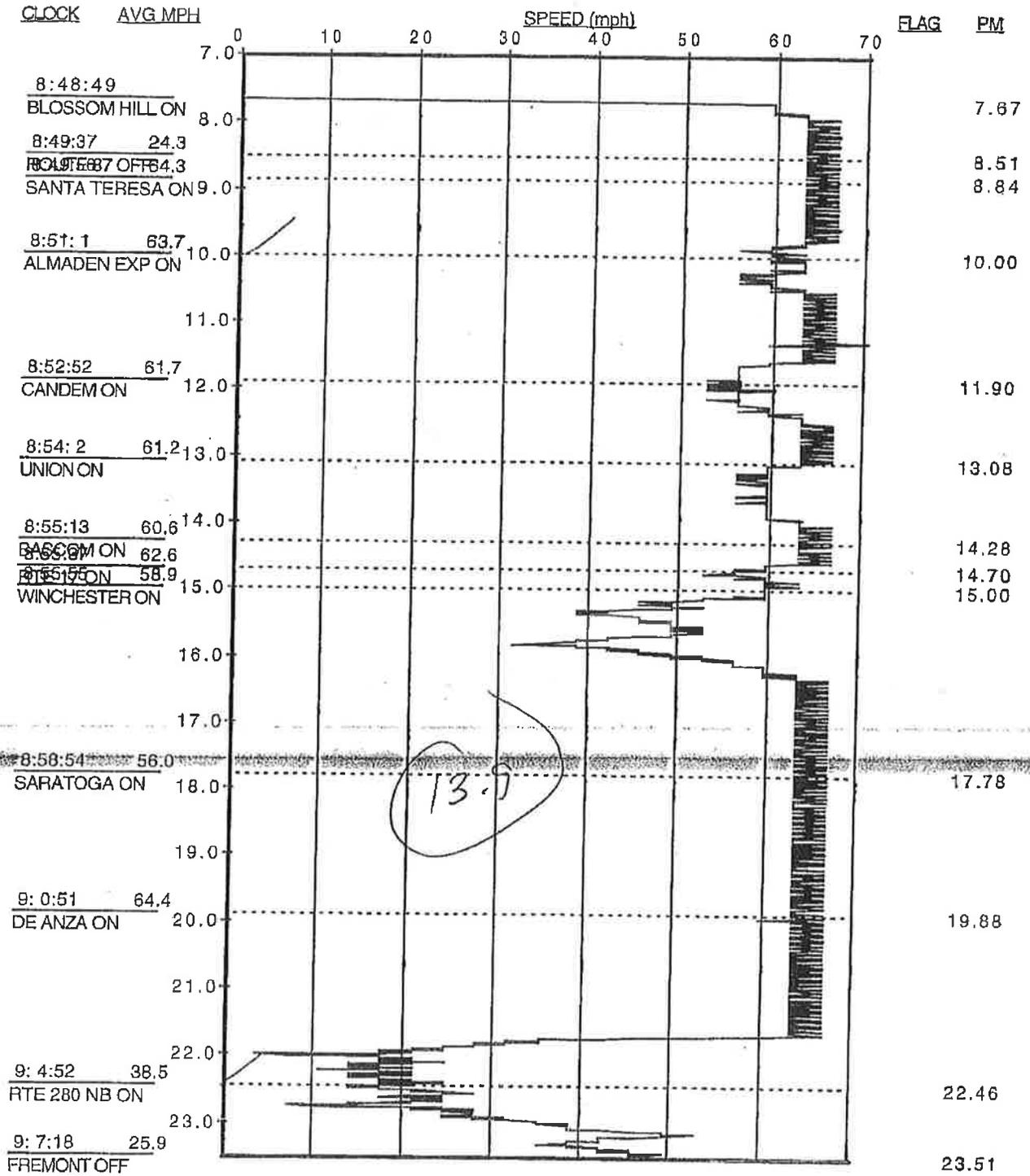
Date: 05-16-2007 Period: AM  
 Run: 3 Direction: N/B



# TACHOGRAPH PLOT

Location: SCL-85-7.67/23.52  
 Driver: ADOLFO ZEPEDA

Date: 05-16-2007 Period: AM  
 Run: 4 Direction: N/B

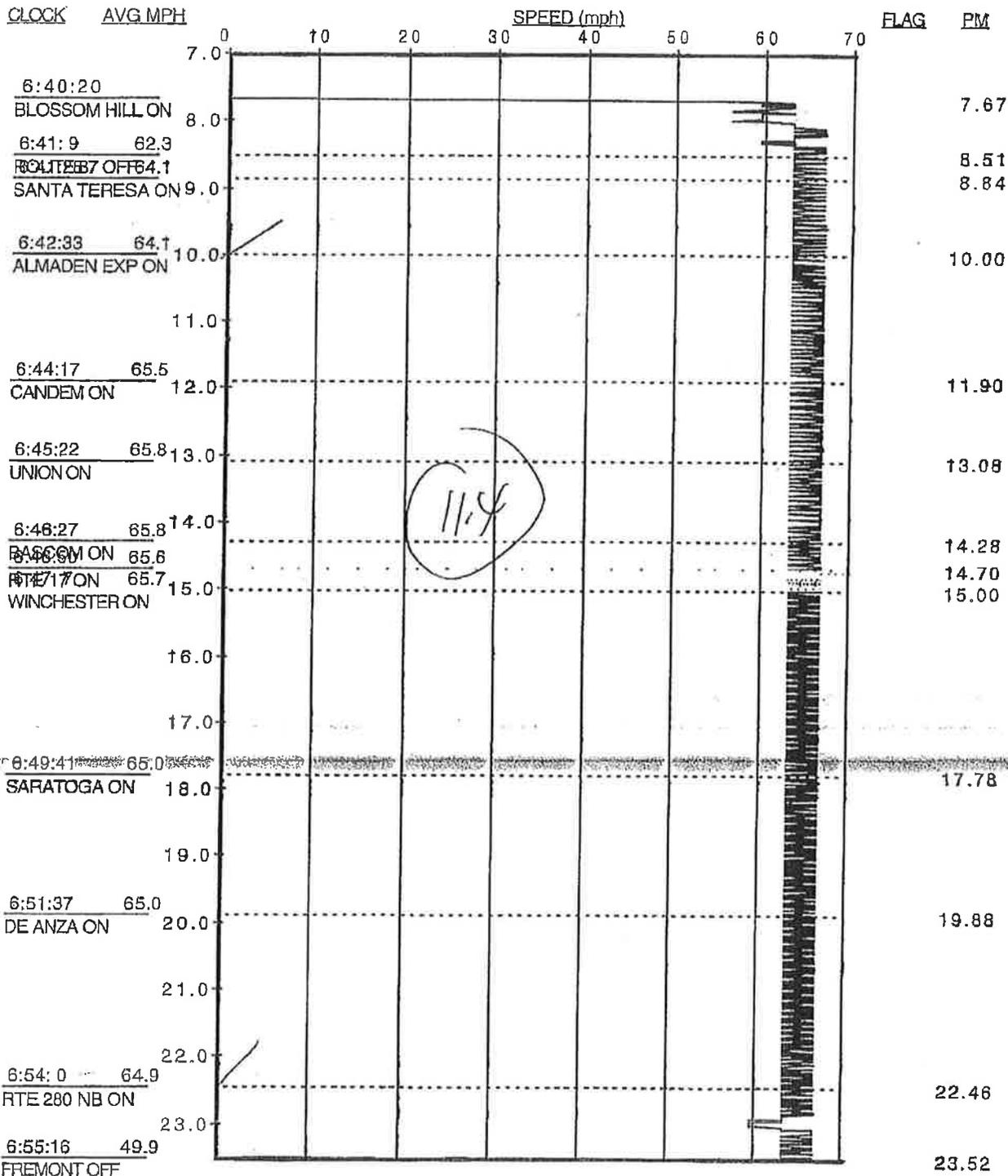


# TACHOGRAPH PLOT

HOVLTR

**Location:** SCL-85-7.67/23.52  
**Driver:** ADOLFO ZEPEDA

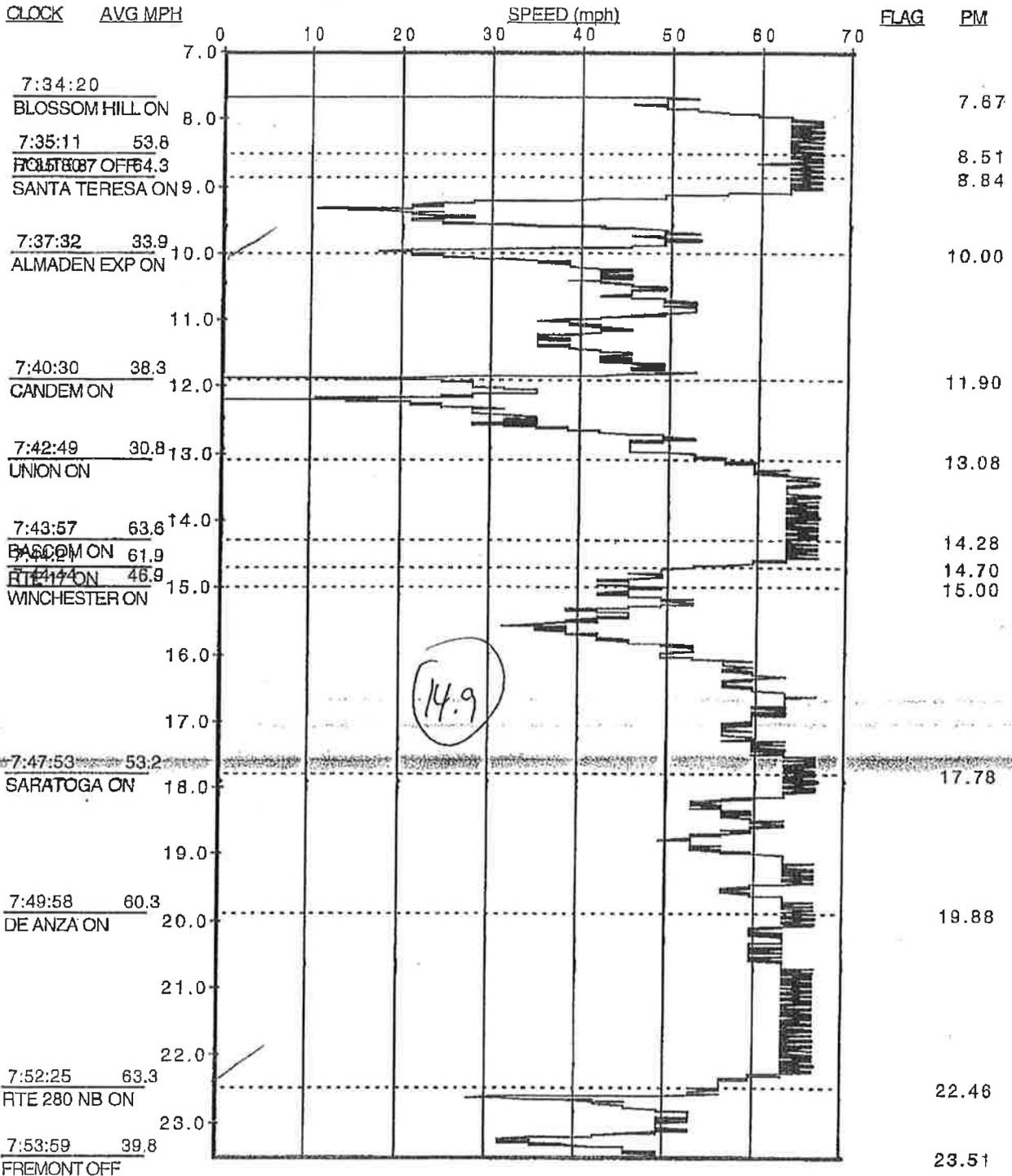
**Date:** 06-06-2007 **Period:** AM  
**Run:** 1 **Direction:** N/B



# TACHOGRAPH PLOT

Location: SCL-85-7.67/23.52  
 Driver: ADOLFO ZEPEDA

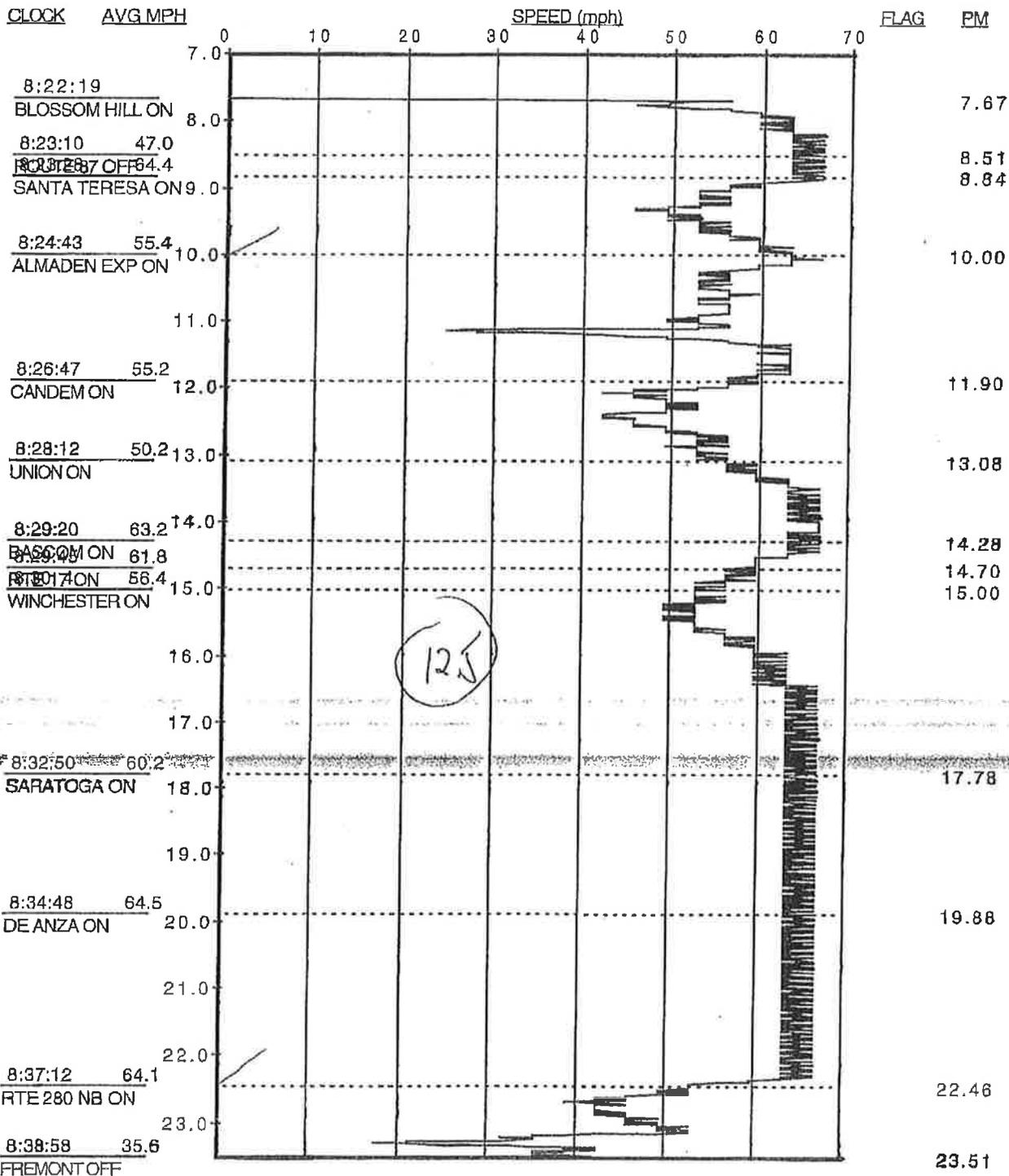
Date: 06-06-2007 Period: AM  
 Run: 2 Direction: N/B



# TACHOGRAPH PLOT

Location: SCL-85-7.67/23.52  
 Driver: ADOLFO ZEPEDA

Date: 06-06-2007 Period: AM  
 Run: 3 Direction: N/B

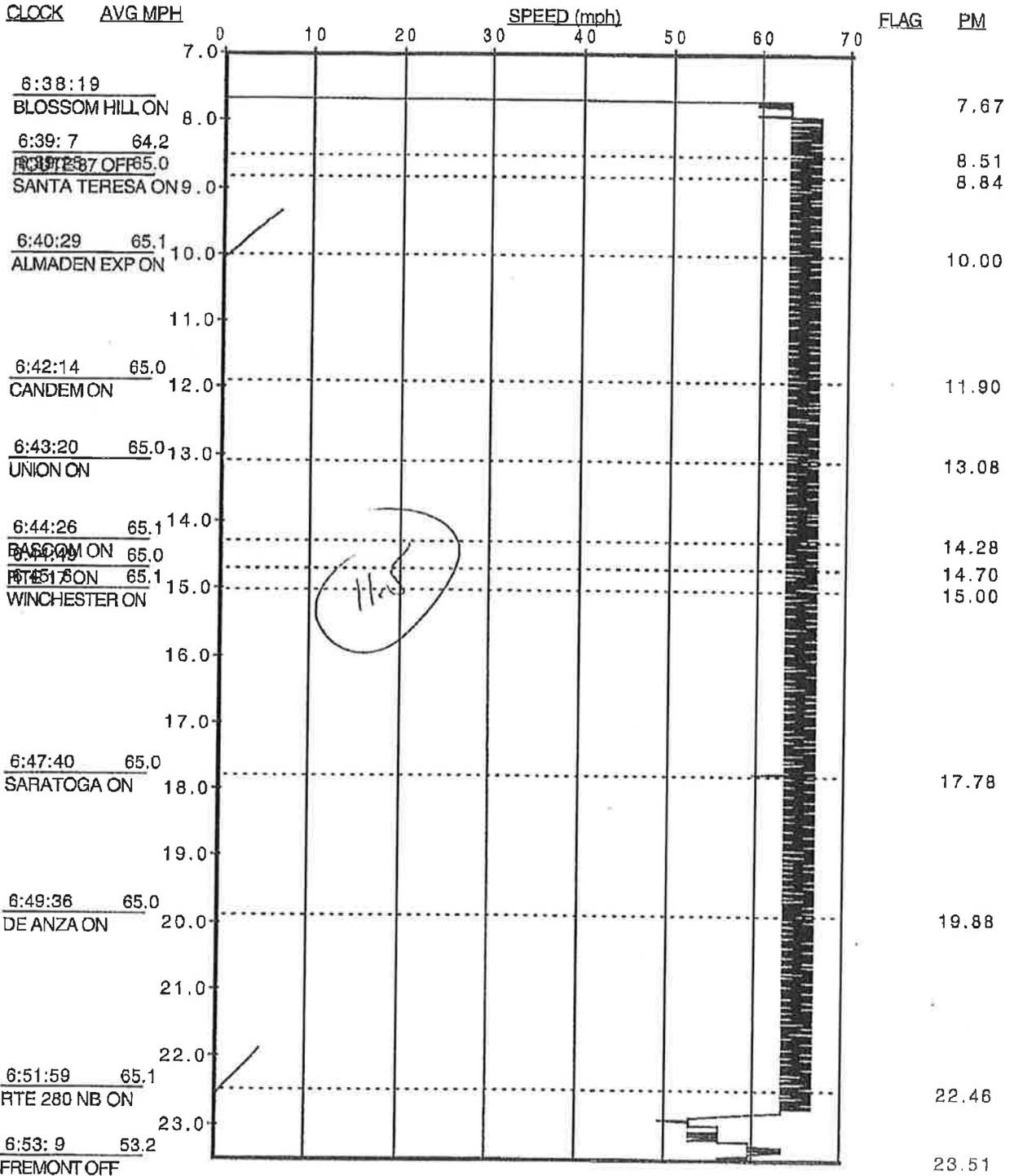


NOV 7. 2006  
**TACHOGRAPH PLOT**

NO8501H7

Location: SCL-85-7.67/23.52  
 Driver: ADOLFO ZEPEDA

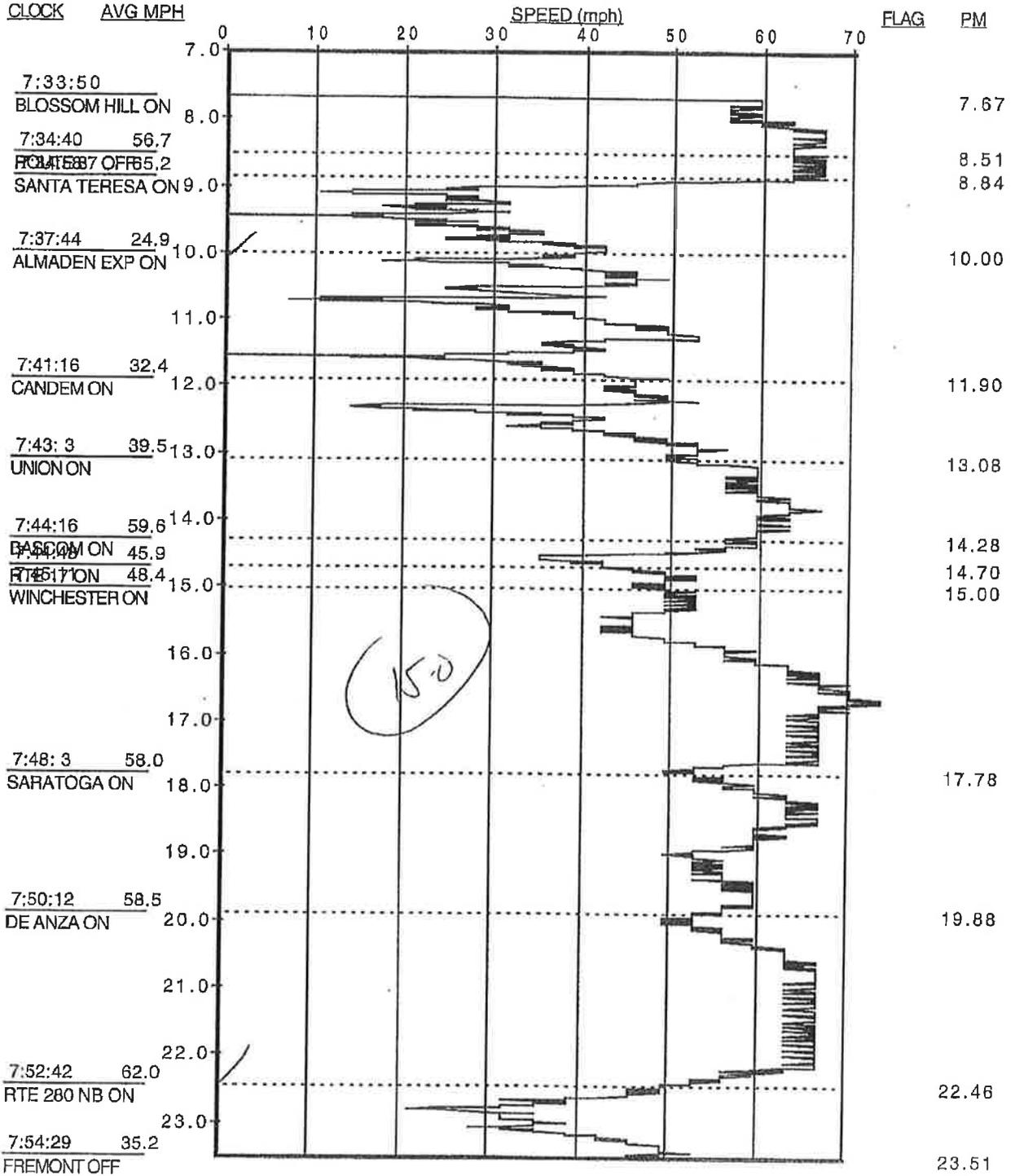
Date: 09-19-2006 Period: AM  
 Run: 1 Direction: N/B



# TACHOGRAPH PLOT

**Location:** SCL-85-7.67/23.52  
**Driver:** ADOLFO ZEPEDA

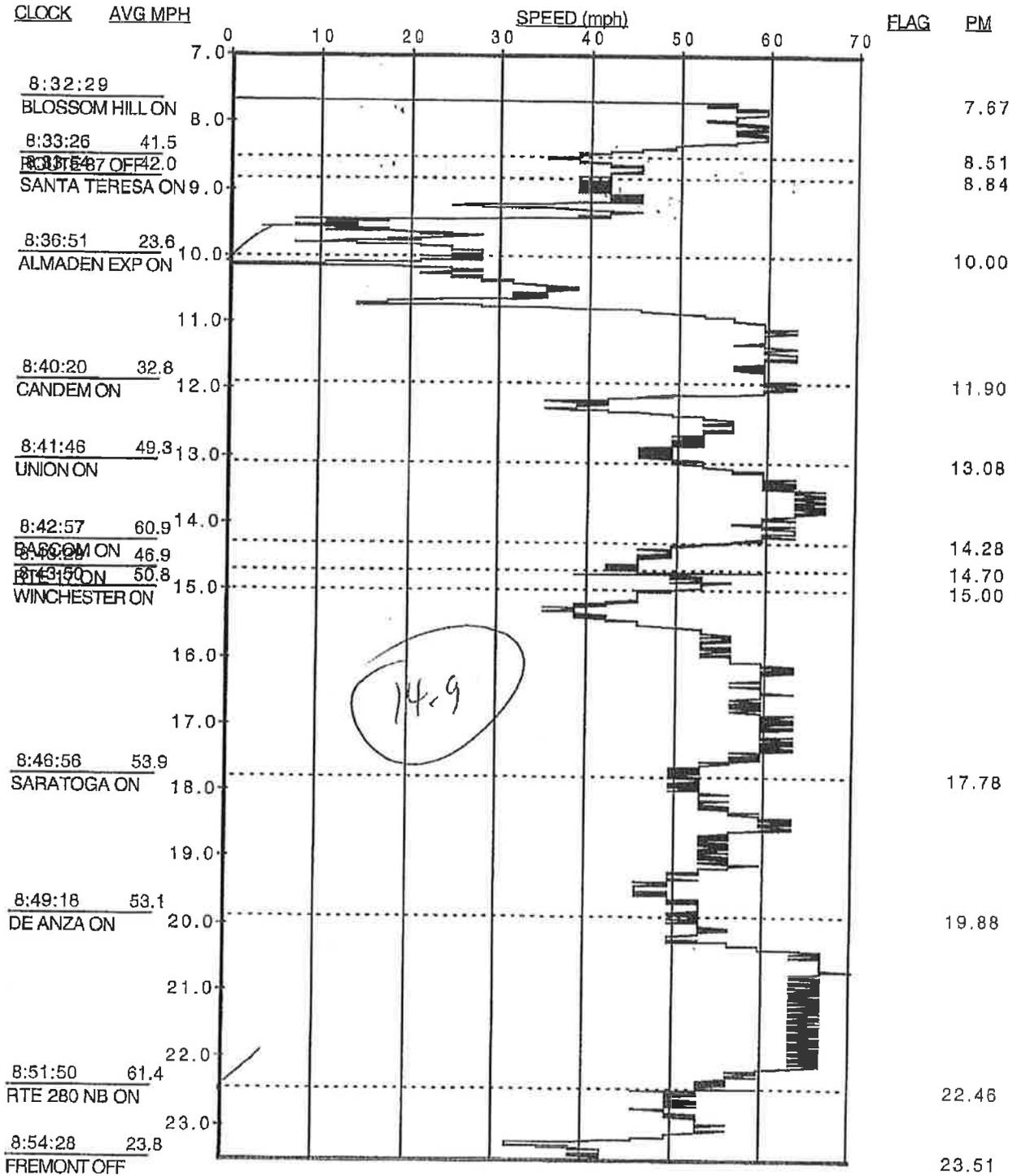
**Date:** 09-19-2006 **Period:** AM  
**Run:** 2 **Direction:** N/B



# TACHOGRAPH PLOT

**Location:** SCL-85-7.67/23.52  
**Driver:** ADOLFO ZEPEDA

**Date:** 09-19-2006 **Period:** AM  
**Run:** 3 **Direction:** N/B



# APPENDIX C

## Caltrans Approved Demands - Northbound AM

Dir	Description	5-6	6-7	7-8	8-9
N	NB OFF TO NB RTE 85 (GP)	568	1,092	745	713
N	NB OFF TO NB RTE 85 (HOV)	161	478	841	630
N	NB ON FR NB BERNAL	156	466	624	544
		886	2,035	2,211	1,887
N	NB ON FR SB BERNAL RD.	28	205	349	338
		914	2,241	2,559	2,225
N	NB ON FROM SB 101	42	168	443	460
		956	2,408	3,003	2,685
N	NB ON FR GREAT OAKS BL	109	370	461	410
		1,065	2,778	3,464	3,095
N	NB OFF TO COTTLE RD	48	148	91	179
		1,017	2,630	3,373	2,916
N	NB ON FR COTTLE AVE	337	761	919	916
		1,354	3,391	4,292	3,832
N	NB OFF TO BLOSSOM HILL	38	68	105	153
		1,316	3,323	4,187	3,679
N	NB ON FR EB BLOSSOM HILL	242	573	740	642
		1,559	3,896	4,927	4,320
N	NB ON FR WB BLOSSM HILL	623	1,174	904	908
		2,181	5,070	5,831	5,228
N	NB OFF TO RTE 87	1,151	2,092	2,122	1,707
		1,030	2,978	3,708	3,521
N	NB OF TO SANTA TERESA	38	81	116	173
		993	2,897	3,593	3,347
N	NB ON FR SANTA TERESA	121	347	506	421
		1,114	3,244	4,099	3,769
N	NB ON FR SB RTE 87	206	561	880	995
		1,320	3,805	4,979	4,764
N	NB OFF TO ALMADEN EXPWY	135	262	469	577
		1,185	3,543	4,510	4,187
N	NBON FR NB ALAMADEN EXP	199	510	671	769
		1,384	4,052	5,181	4,956
N	NBON FR SB ALAMADEN EXP	137	334	467	469
		1,522	4,387	5,647	5,424
N	NBOFF TO CAMBEN AVENUE	85	162	230	307
		1,436	4,225	5,417	5,117
N	NB ON FR CAMDEN AVE	553	1,149	1,166	1,271
		1,990	5,374	6,583	6,388
N	NB OFF TO UNION AVE	76	258	379	529
		1,914	5,116	6,204	5,859
N	NBON FR UNION AVENUE	242	526	527	582
		2,156	5,642	6,731	6,441
N	NBOFF TO BASCOM AVENUE	81	209	260	455
		2,075	5,433	6,471	5,986
N	NB OFF TO RTE 17	724	1,777	1,911	2,096
		1,351	3,657	4,560	3,890
N	NB ON FR BASCOM AVE	78	265	529	588
		1,429	3,921	5,089	4,477
N	NB ON FR RTE 17	496	1,050	805	809
		1,925	4,971	5,894	5,286
N	NB ON FR WINCHESTER BLVD	98	285	400	454
		2,023	5,256	6,295	5,740
N	NB OFF TO SARATOGA AVE	172	405	823	975
		1,851	4,851	5,471	4,766
N	NB ON FR SARATOGA AVE	122	390	772	862
		1,973	5,241	6,243	5,627

Dir	Description	5-6	6-7	7-8	8-9
N	NB OFF TO SARATOGA/SUNNYVALE RD	91	348	651	949
		1,882	4,893	5,592	4,678
N	NB ON FR SARATOGA/SUNNYVALE RD	140	416	678	902
		2,022	5,309	6,270	5,580
N	NB OFF TO STEVENS CREEK	234	541	555	714
		1,789	4,768	5,715	4,866
N	NB OFF TO RTE 280	628	2,138	2,627	2,167
		1,160	2,630	3,088	2,699
N	DUM NB ON FR SB RTE 280	69	215	493	571
		1,229	2,845	3,581	3,271
N	NBON FRNB280&STEVENS CR	589	1,355	1,928	1,939
		1,818	4,199	5,509	5,210
N	NB ON FR HOMESTEAD	49	129	215	266
		1,867	4,328	5,724	5,476
N	NB OFF TO FREMONT	96	324	461	562
		1,771	4,005	5,263	4,914
N	NB ON FROM FREMONT AVE	272	578	841	673
		2,043	4,583	6,104	5,587
N	NB OFF TO SB RTE 82	128	209	261	309
		1,915	4,374	5,844	5,278
N	NB ON FR SB RTE 82	27	54	89	75
		1,942	4,428	5,933	5,353
N	NB OFF TO NB RTE 82	98	329	519	504
		1,845	4,099	5,414	4,849
N	NB ON FR RTE 82	124	262	526	690
		1,969	4,361	5,940	5,539
N	NB OFF TO EB RTE 237	421	1,104	1,855	1,866
		1,548	3,257	4,085	3,673
N	DUM NB ON FR EB RTE 237	181	242	234	209
		1,729	3,499	4,319	3,881
N	NB OFF TO EVELYN AVE	65	185	302	300
		1,664	3,314	4,017	3,581
N	NB ON FR CENTRAL EXPWY	63	153	301	442
		1,728	3,467	4,318	4,023
N	NB OFF TO MOFFETT BLVD	114	281	461	468
		1,614	3,186	3,857	3,555
N	NB OFF TO SHORELINE BLVD.	333	602	1,104	1,484
N	NB 85 OFF TO NB 101 (HOV)	105	201	504	646

**State Route 85 Northbound - VTA Express Lanes Project  
Existing Conditions - AM Peak Period - Flows**

Rte	Dir	Description	Average Volumes from Model Runs		
			6-7	7-8	8-9
			1,470	1,561	1,350
85	N	NB ON FR NB BERNAL	461	611	536
			1,931	2,172	1,887
85	N	NB ON FR SB BERNAL RD.	203	341	330
			2,134	2,513	2,216
85	N	NB ON FROM SB 101	163	418	432
			2,297	2,931	2,648
85	N	NB ON FR GREAT OAKS BL	368	457	407
			2,665	3,388	3,055
85	N	NB OFF TO COTTLE RD	136	90	169
			2,529	3,298	2,886
85	N	NB ON FR COTTLE AVE	760	918	916
			3,288	4,216	3,802
85	N	NB OFF TO BLOSSOM HILL	58	98	146
			3,230	4,119	3,656
85	N	NB ON FR EB BLOSSOM HILL	566	723	630
			3,796	4,841	4,286
85	N	NB ON FR WB BLOSSOM HILL	1,173	905	908
			4,969	5,746	5,195
85	N	NB OFF TO RTE 87	1,970	2,046	1,700
			2,999	3,700	3,495
85	N	NB OFF TO SANTA TERESA	80	108	166
			2,919	3,592	3,329
85	N	NB ON FR SANTA TERESA	346	501	420
			3,265	4,093	3,748
85	N	NB ON FR SB RTE 87	559	871	986
			3,823	4,964	4,734
85	N	NB OFF TO ALMADEN EXPWY	253	449	567
			3,570	4,327 (4,516)	4,167
85	N	NBON FR NB ALAMADEN EXP	509	663	657
			4,079	4,990 (5,178)	4,824
85	N	NBON FR SB ALAMADEN EXP	334	464	466
			4,413	5,453	5,290
85	N	NBOFF TO CAMDEN AVENUE	148	222	295
			4,265	5,231	4,996
85	N	NB ON FR CAMDEN AVE	1,148	1,166	1,271
			5,413	6,331 (6,397)	6,266
85	N	NB OFF TO UNION AVE	231	380	530
			5,182	5,951	5,737
85	N	NBON FR UNION AVENUE	526	526	582
			5,708	6,477	6,319
85	N	NBOFF TO BASCOM AVENUE	193	242	444
			5,515	6,235	5,663 (5,875)
85	N	NB OFF TO RTE 17	1,511	1,819	2,013
			4,004	4,416	3,650 (3,862)
85	N	NB ON FR BASCOM AVE	265	527	534
			4,269	4,472 (4,943)	4,184 (4,396)
85	N	NB ON FR RTE 17	1,050	793	711
			4,523 (5,319)	5,266 (5,736)	4,894 (5,107)
85	N	NB ON FR WINCHESTER BLVD	285	399	447
			4,807	5,664	5,341
85	N	NB OFF TO SARATOGA AVE	365	729	903
			4,442	4,935	4,438
85	N	NB ON FR SARATOGA AVE	389	764	865
			4,831	5,441 (5,699)	*5,544 (5,303)
85	N	NB OFF TO SARATOGA/SUNNYVALE R	291	563	893
			4,540	4,878 (5,136)	4,651 (4,410)
85	N	NB ON FR SARATOGA/SUNNYVALE RD	416	677	900
			4,956	5,555	5,551
85	N	NB OFF TO STEVENS CREEK	457	490	706
			4,499	5,065	4,845

Rte	Dir	Description	Average Volumes from Model Runs		
			6-7	7-8	8-9
85	N	NB OFF TO RTE 280	1,838	2,321	2,156
			2,661	2,744	2,689
85	N	DUM NB ON FR SB RTE 280	215	492	572
			2,876	3,236	3,261
85	N	NBON FRNB280&STEVENS CR	1,349	1,977	1,803
			4,225	4,726 (5,213)	4,785 (5,063)
85	N	NB ON FR HOMESTEAD	129	214	266
			4,354	4,940 (5,427)	5,051 (5,330)
85	N	NB OFF TO FREMONT	272	400	522
			4,082	4,540 (5,027)	4,529 (4,808)
85	N	NB ON FROM FREMONT AVE	577	830	674
			4,659	5,370	5,203
85	N	NB OFF TO SB RTE 82	172	204	248
			4,487	5,146 (5,166)	4,956
85	N	NB ON FR SB RTE 82	54	89	75
			4,541	5,235 (5,255)	5,031
85	N	NB OFF TO NB RTE 82	271	393	425
			4,270	4,842 (4,862)	4,581 (4,606)
85	N	NB ON FR RTE 82	262	526	690
			4,532	5,368	5,271
85	N	NB OFF TO EB RTE 237	1,005	1,611	1,674
			3,527	3,777	3,622
85	N	DUM NB ON FR EB RTE 237	242	234	209
			3,769	4,010	3,831
85	N	NB OFF TO EVELYN AVE	161	272	298
			3,608	3,739	3,533
85	N	NB ON FR CENTRAL EXPWY	153	300	436
			3,761	4,039	3,969
85	N	NB OFF TO MOFFETT BLVD	241	388	416
			3,521	3,651	3,553

\* Due to vehicles in queue from previous hour.

**State Route 85 Northbound - VTA Express Lanes Project**  
**Existing Conditions - AM Peak Period Traffic Flow at Bottleneck Locations**

Description	(6-7)						
	Model Output			Flow			Difference
	GP	HOV	Total	GP	HOV	Total	Total
BETWEEN WINCHESTER LANE DROP AND SARATOGA OFF-RAMP	3988	819	4,807	4100	800	4,900	-93

Description	PEAK HOUR (7-8)						
	Model Output			Flow			Difference
	GP	HOV	Total	GP	HOV	Total	Total
BETWEEN ALMADEN EXPRESSWAY ON-RAMP AND CAMDEN AVENUE OFF-RAMP	3941	1512	5,453	4050	1,500	5,550	-97
BETWEEN UNION OFF-RAMP AND ON-RAMP	4480	1471	5,951	4600	1,460	6,060	-109
BETWEEN WINCHESTER LANE DROP AND SARATOGA OFF-RAMP	4197	1467	5,664	4100	1,480	5,580	84
BETWEEN SUNNYVALE - SARATOGA ON-RAMP AND STEVENS CREEK BLVD. OFF-RAMP	4205	1350	5,555	4150	1,330	5,480	75
BETWEEN FREMONT AVENUE ON-RAMP AND EL CAMINO OFF-RAMP	4399	971	5,370	4350	1,070	5,420	-50
BETWEEN EL CAMINO REAL ON-RAMP AND SR 237 OFF-RAMP	4312	1056	5,368	4350	890	5,240	128

Description	(8-9)						
	Model Output			Flow			Difference
	GP	HOV	Total	GP	HOV	Total	Total
BETWEEN WINCHESTER LANE DROP AND SARATOGA OFF-RAMP	4105	1236	5,341	4100	1,480	5,580	-239
BETWEEN SUNNYVALE - SARATOGA ON-RAMP AND STEVENS CREEK BLVD. OFF-RAMP	4232	1319	5,551	4150	1,330	5,480	71
BETWEEN FREMONT AVENUE ON-RAMP AND EL CAMINO OFF-RAMP	4272	931	5,203	4350	1,070	5,420	-217
BETWEEN EL CAMINO REAL ON-RAMP AND SR 237 OFF-RAMP	4328	943	5,271	4350	890	5,240	31



Rte	Dir	Description	Data Entered			Average Volumes from Model Runs			Difference in Volumes			Validation Criteria for Peak Hour				
			6-7	7-8	8-9	6-7	7-8	8-9	6-7	7-8	8-9	GEH Statistic		Link Volumes		
													GEH	Threshold	Met	Threshold
85	N	NB ON FR SARATOGA/SUNNYVALE RD	416	678	902	416	677	900	0	-1	-2	0.02	5	Yes	100	Yes
85	N	MAINLINE BET SARATOGA/SUNNYVALE ON AND STEVENS CREEK OFF	5,531	6,485	5,722	5,752	6,537	5,523								
85	N	NB OFF TO STEVENS CREEK	489	485	701	457	490	706	-32	5	5	0.17	5	Yes	100	Yes
85	N	MAINLINE BET STEVENS CREEK OFF AND RTE 280 OFF	5,042	5,999	5,021	5,295	6,047	4,817								
85	N	NB OFF TO RTE 280	1,933	2,296	2,128	1,838	2,321	2,156	-95	25	28	0.43	5	Yes	344	Yes
85	N	MAINLINE BET RTE 280 OFF AND ON	3,109	3,703	2,893	3,457	3,726	2,662								
85	N	DUM NB ON FR SB RTE 280	215	493	571	215	492	572	0	-1	0	0.03	5	Yes	100	Yes
85	N	MAINLINE BET SB RTE 280 ON AND NB 280 & STEVENS CREEK ON	3,324	4,196	3,464	3,672	4,218	3,233								
85	N	NBON FRNB280&STEVENS CR	1,355	2,050	1,939	1,349	1,977	1,803	-6	-73	-137	1.33	5	Yes	308	Yes
85	N	MAINLINE BET 280 & STEVENS CREEK AND HOMESTEAD ON	4,678	6,246	5,403	5,021	6,195	5,036								
85	N	NB ON FR HOMESTEAD	129	215	266	129	214	266	0	-1	0	0.03	5	Yes	100	Yes
85	N	MAINLINE BET HOMESTEAD ON AND FREMONT OFF	4,807	6,461	5,669	5,150	6,409	5,302								
85	N	NB OFF TO FREMONT	305	429	557	272	400	522	-33	-30	-35	1.18	5	Yes	100	Yes
85	N	MAINLINE BET FREMONT OFF AND ON	4,503	6,032	5,113	4,878	6,009	4,780								
85	N	NB ON FROM FREMONT AVE	578	841	673	577	830	674	-2	-11	1	0.32	5	Yes	126	Yes
85	N	MAINLINE BET FREMONT ON AND SB RTE 82 OFF	5,081	6,873	5,785	5,455	6,839	5,454								
85	N	NB OFF TO SB RTE 82	199	231	300	172	204	248	-27	-28	-52	1.52	5	Yes	100	Yes
85	N	MAINLINE BET SB RTE 82 OFF AND SB RTE 82 ON	4,882	6,641	5,486	5,283	6,635	5,207								
85	N	NB ON FR SB RTE 82	54	89	75	54	89	75	0	0	0	0.00	5	Yes	100	Yes
85	N	MAINLINE BET SB RTE 82 ON AND NB RTE 82 OFF	4,936	6,730	5,560	5,337	6,724	5,282								
85	N	NB OFF TO NB RTE 82	312	462	489	271	393	425	-41	-68	-65	2.66	5	Yes	100	Yes
85	N	MAINLINE BET NB RTE 82 OFF AND ON	4,624	6,269	5,071	5,066	6,331	4,857								
85	N	NB ON FR RTE 82	262	526	690	262	526	690	0	0	0	0.00	5	Yes	100	Yes
85	N	MAINLINE BET RTE 82 ON AND RTE 237 OFF	4,886	6,795	5,761	5,328	6,857	5,547								
85	N	NB OFF TO EB RTE 237	1,052	1,636	1,765	1,005	1,611	1,674	-47	-25	-92	0.51	5	Yes	245	Yes
85	N	MAINLINE BET ROUTE 237 OFF AND ON	3,834	5,158	3,996	4,323	5,246	3,873								
85	N	DUM NB ON FR EB RTE 237	242	234	209	242	234	209	0	-1	1	0.03	5	Yes	100	Yes
85	N	MAINLINE BET RTE 237 ON AND EVELYN OFF	4,076	5,392	4,204	4,565	5,479	4,082								
85	N	NB OFF TO EVELYN AVE	177	268	285	161	272	298	-16	4	13	0.17	5	Yes	100	Yes
85	N	MAINLINE BET EVELYN OFF AND CENTRAL ON	3,899	5,124	3,919	4,404	5,208	3,784								
85	N	NB ON FR CENTRAL EXPWY	153	301	442	153	300	436	0	-1	-7	0.02	5	Yes	100	Yes
85	N	MAINLINE BET CENTRAL ON AND MOFFETT OFF	4,052	5,425	4,362	4,557	5,508	4,220								
85	N	NB OFF TO MOFFETT BLVD	269	413	447	241	388	416	-29	-25	-31	1.01	5	Yes	100	Yes
85	N	MAINLINE NORTH OF MOFFETT	3,783	5,012	3,915	4,317	5,120	3,804								

**Validation Criteria Threshold Summary**

Criteria	Criteria Threshold	% Met Target	Links Comparison		Met	Percent Met
			Number of Links			
Link Volumes						
<700 vph	100 vph	>85%	31		31	100%
Between 700 vph and 2,700 vph	15%	>85%	14		14	100%
>2,700 vph	400 vph	>85%	-		-	-
GEH Statistic	5	>85%	45		45	100%
<b>Sum of Link Volumes</b>						
			<b>Data Entered</b>	<b>Model Average</b>	<b>Difference</b>	<b>Percent Difference</b>
Sum of all Links	5%		30,890	30,282	-608	-2%
			<b>Output (v)</b>	<b>Input (c)</b>	<b>v-c</b>	<b>v-c^2</b>
Sum of all Links	4		30,282	30,890	-608	369,664
					<b>v+c</b>	<b>v+c/2</b>
Sum of all Links					61,172	30586
						<b>GEH SQRT</b>
						3
						<b>Validation Criteria Met</b>
						Yes

**State Route 85 Northbound - VTA Express Lanes Project**  
**Existing Conditions - PM Peak Period**

Rte	Dir	Description	Data Entered				Average Volumes from Model Runs				Difference in Volumes				Validation Criteria for Peak Hour				
			3-4	4-5	5-6	6-7	3-4	4-5	5-6	6-7	3-4	4-5	5-6	6-7	GEH Statistic		Link Volumes		
															GEH	Threshold	Met	Threshold	Met
85	N	NB ON FR NB BERNAL	317	373	477	406	316	370	471	401	-2	-4	-7	-5	0.30	5	Yes	100	Yes
85	N	MAINLINE BET NB BERNAL ON AND SB BERNAL ON	1,629	1,867	2,261	1,868	1,628	1,862	2,249	1,863									
85	N	NB ON FR SB BERNAL RD.	117	168	287	239	116	166	281	236	-1	-2	-6	-4	0.34	5	Yes	100	Yes
85	N	MAINLINE BET SB BERNAL ON AND SB 101 ON	1,746	2,035	2,548	2,107	1,744	2,029	2,530	2,099									
85	N	NB ON FROM SB 101	273	304	332	306	264	290	313	293	-9	-14	-19	-13	1.07	5	Yes	100	Yes
85	N	MAINLINE BET SB 101 PM AMD GREAT OAKS ON	2,019	2,339	2,880	2,413	2,007	2,319	2,843	2,391									
85	N	NB ON FR GREAT OAKS BL	469	638	883	692	468	631	867	683	-1	-7	-17	-9	0.56	5	Yes	133	Yes
85	N	MAINLINE BET GREAT OAKS ON AND COTTLE OFF	2,487	2,977	3,764	3,105	2,475	2,950	3,710	3,074									
85	N	NB OFF TO COTTLE RD	270	294	362	313	259	296	338	298	-12	2	-24	-16	1.27	5	Yes	100	Yes
85	N	MAINLINE BET COTTLE OFF AND ON	2,217	2,683	3,402	2,792	2,216	2,654	3,372	2,777									
85	N	NB ON FR COTTLE AVE	944	977	1,176	965	944	977	1,168	970	0	0	-8	5	0.23	5	Yes	176	Yes
85	N	MAINLINE BET COTTLE ON AND BLOSSOM HILL OFF	3,161	3,660	4,578	3,757	3,160	3,631	4,540	3,746									
85	N	NB OFF TO BLOSSOM HILL	296	346	406	324	288	334	392	317	-8	-13	-14	-7	0.68	5	Yes	100	Yes
85	N	MAINLINE BET BLOSSOM HILL OFF AND EB BLOSSOM HILL ON	2,865	3,314	4,172	3,433	2,872	3,297	4,148	3,429									
85	N	NB ON FR EB BLOSSOM HILL	325	316	375	341	324	311	371	338	-2	-4	-4	-3	0.21	5	Yes	100	Yes
85	N	MAINLINE BET EB BLOSSOM HILL ON AND WB BLOSSOM HILL ON	3,191	3,630	4,547	3,774	3,196	3,609	4,519	3,768									
85	N	NB ON FR WB BLOSSOM HILL	754	744	858	809	754	744	858	809	0	0	0	1	0.01	5	Yes	129	Yes
85	N	MAINLINE BET WB BLOSSOM HILL ON AND 87 OFF	3,945	4,374	5,405	4,583	3,950	4,353	5,376	4,577									
85	N	NB OFF TO RTE 87	1,233	1,304	1,514	1,311	1,220	1,276	1,473	1,345	-13	-29	-42	34	1.08	5	Yes	227	Yes
85	N	MAINLINE BET 87 OFF AND SANTA TERESA OFF	2,712	3,070	3,891	3,272	2,730	3,077	3,904	3,232									
85	N	NB OFF TO SANTA TERESA	359	405	481	448	350	384	452	448	-9	-21	-29	0	1.34	5	Yes	100	Yes
85	N	MAINLINE BET SANTA TERESA OFF AND ON	2,353	2,665	3,410	2,824	2,380	2,693	3,452	2,784									
85	N	NB ON FR SANTA TERESA	406	406	417	400	404	416	397	-2	-3	-2	-2	0.07	5	Yes	100	Yes	
85	N	MAINLINE BE SANTA TERESA ON AND RTE 87 ON	2,760	3,071	3,827	3,223	2,785	3,096	3,868	3,182									
85	N	NB ON FR SB RTE 87	1,031	1,006	997	982	1,026	999	988	977	-6	-7	-8	-5	0.26	5	Yes	150	Yes
85	N	MAINLINE BET 87 ON AND ALMADEN OFF	3,791	4,077	4,824	4,206	3,810	4,095	4,856	4,159									
85	N	NB OFF TO ALMADEN EXPWY	1,080	1,089	1,167	1,196	1,072	1,068	1,129	1,192	-8	-21	-38	-5	1.11	5	Yes	175	Yes
85	N	MAINLINE BET ALMADEN OFF AND NB ALMADEN ON	2,711	2,988	3,657	3,009	2,739	3,028	3,727	2,967									
85	N	NBON FR NB ALMADEN EXP	658	625	689	588	659	625	688	589	1	0	-1	1	0.03	5	Yes	100	Yes
85	N	MAINLINE BET NB ALMADEN ON AND SB ALMADEN ON	3,369	3,613	4,346	3,598	3,398	3,652	4,415	3,556									
85	N	NBON FR SB ALMADEN EXP	345	359	346	324	345	357	345	323	0	-3	-1	-1	0.06	5	Yes	100	Yes
85	N	MAINLINE BET SB ALMADEN ON AND CAMDEN OFF	3,714	3,972	4,692	3,922	3,742	4,009	4,760	3,879									
85	N	NBOFF TO CAMDEN AVENUE	626	694	713	607	614	680	684	616	-11	-14	-29	9	1.10	5	Yes	107	Yes
85	N	MAINLINE BET CAMDEN OFF AND ON	3,088	3,277	3,979	3,315	3,128	3,329	4,076	3,264									
85	N	NB ON FR CAMDEN AVE	835	823	918	845	836	823	918	844	0	0	0	-1	0.01	5	Yes	138	Yes
85	N	MAINLINE BET CAMDEN ON AND UNION OFF	3,924	4,101	4,897	4,160	3,964	4,152	4,994	4,108									
85	N	NB OFF TO UNION AVE	478	430	467	429	471	423	473	431	-7	-7	5	2	0.25	5	Yes	100	Yes
85	N	MAINLINE BET UNION OFF AND ON	3,446	3,670	4,430	3,730	3,493	3,729	4,521	3,677									
85	N	NBON FR UNION AVENUE	549	586	738	638	548	586	739	638	-1	0	1	0	0.03	5	Yes	111	Yes
85	N	MAINLINE BET UNION ON AND BASCOM OFF	3,995	4,257	5,167	4,368	4,041	4,315	5,260	4,315									
85	N	NBOFF TO BASCOM AVENUE	473	418	387	344	476	411	371	349	2	-8	-15	5	0.79	5	Yes	100	Yes
85	N	MAINLINE BET BASCOM OFF AND RTE 17 OFF	3,522	3,838	4,781	4,024	3,565	3,904	4,888	3,966									
85	N	NB OFF TO RTE 17	2,181	2,117	2,520	2,171	2,195	2,093	2,461	2,192	14	-24	-60	21	1.20	5	Yes	378	Yes
85	N	MAINLINE BET RTE 17 OFF AND BASCOM ON	1,341	1,721	2,260	1,853	1,371	1,811	2,428	1,774									
85	N	NB ON FR BASCOM AVE	397	400	409	292	398	399	409	292	1	-2	0	0	0.01	5	Yes	100	Yes
85	N	MAINLINE BET BASCOM ON AND RTE 17 OFF	1,738	2,121	2,669	2,145	1,768	2,210	2,836	2,067									
85	N	NB ON FR RTE 17	1,002	1,090	1,227	1,059	1,002	1,090	1,226	1,061	0	0	-1	1	0.03	5	Yes	184	Yes
85	N	MAINLINE BET RTE 17 OFF AND WINCHESTER ON	2,740	3,211	3,896	3,205	2,770	3,300	4,062	3,127									
85	N	NB ON FR WINCHESTER BLVD	431	515	664	511	431	514	663	511	-1	-1	-1	-1	0.05	5	Yes	100	Yes
85	N	MAINLINE BET WINCHESTER ON AND SARATOGA OFF	3,171	3,727	4,560	3,716	3,201	3,814	4,725	3,638									
85	N	NB OFF TO SARATOGA AVE	1,136	1,161	1,437	1,190	1,138	1,150	1,401	1,215	2	-11	-36	25	0.95	5	Yes	216	Yes
85	N	MAINLINE BET SARATOGA OFF AND ON	2,035	2,566	3,123	2,526	2,063	2,664	3,324	2,423									
85	N	NB ON FR SARATOGA AVE	462	419	462	406	462	419	462	406	1	1	0	0	0.01	5	Yes	100	Yes
85	N	MAINLINE BET SARATOGA ON AND SARATOGA/SUNNYVALE OFF	2,497	2,984	3,585	2,932	2,525	3,083	3,786	2,829									
85	N	NB OFF TO SARATOGA/SUNNYVALE R	530	531	621	588	539	503	603	595	9	-29	-19	7	0.76	5	Yes	100	Yes
85	N	MAINLINE BET SARATOGA/SUNNYVALE OFF AND ON	1,967	2,453	2,964	2,344	1,986	2,580	3,183	2,234									
85	N	NB ON FR SARATOGA/SUNNYVALE RD	640	588	665	592	639	589	665	593	-1	1	0	0	0.00	5	Yes	100	Yes
85	N	MAINLINE BET SARATOGA/SUNNYVALE ON AND STEVENS CREEK OFF	2,606	3,041	3,629	2,936	2,625	3,169	3,848	2,827									
85	N	NB OFF TO STEVENS CREEK	415	611	402	313	421	599	402	324	6	-12	0	10	0.02	5	Yes	100	Yes
85	N	MAINLINE BET STEVENS CREEK OFF AND RTE 280 OFF	2,192	2,429	3,226	2,623	2,205	2,570	3,446	2,503									
85	N	NB OFF TO RTE 280	1,294	1,416	1,576	1,366	1,314	1,388	1,527	1,401	20	-28	-50	35	1.27	5	Yes	236	Yes
85	N	MAINLINE BET RTE 280 OFF AND ON	898	1,014	1,650	1,257	891	1,182	1,919	1,102									
85	N	DUM NB ON FR SB RTE 280	451	424	452	447	451	424	452	447	-1	1	0	0	0.01	5	Yes	100	Yes

Rte	Dir	Description	Data Entered				Average Volumes from Model Runs				Difference in Volumes				Validation Criteria for Peak Hour				
			3-4	4-5	5-6	6-7	3-4	4-5	5-6	6-7	3-4	4-5	5-6	6-7	GEH Statistic		Link Volumes		
			GEH	Threshold	Met	Threshold	Met												
85	N	MAINLINE BET SB RTE 280 ON AND NB 280 & STEVENS CREEK ON	1,349	1,437	2,102	1,704	1,342	1,606	2,371	1,549									
85	N	NBON FRNB280&STEVENS CR	1,591	1,565	1,946	1,800	1,589	1,565	1,945	1,799	-2	0	-1	-1	0.03	5	Yes	292	Yes
85	N	MAINLINE BET 280 & STEVENS CREEK AND HOMESTEAD ON	2,940	3,002	4,048	3,504	2,931	3,171	4,316	3,349									
85	N	NB ON FR HOMESTEAD	120	125	140	144	120	125	140	144	-1	1	0	0	0.03	5	Yes	100	Yes
85	N	MAINLINE BET HOMESTEAD ON AND FREMONT OFF	3,060	3,127	4,189	3,648	3,051	3,297	4,456	3,493									
85	N	NB OFF TO FREMONT	645	618	777	727	626	596	756	719	-19	-22	-21	-9	0.76	5	Yes	117	Yes
85	N	MAINLINE BET FREMONT OFF AND ON	2,415	2,509	3,412	2,921	2,425	2,701	3,701	2,774									
85	N	NB ON FROM FREMONT AVE	323	345	334	280	323	345	334	280	0	0	0	0	0.02	5	Yes	100	Yes
85	N	MAINLINE BET FREMONT ON AND SB RTE 82 OFF	2,738	2,854	3,746	3,201	2,748	3,046	4,035	3,054									
85	N	NB OFF TO SB RTE 82	322	363	355	295	289	303	301	264	-33	-60	-53	-31	2.94	5	Yes	100	Yes
85	N	MAINLINE BET SB RTE 82 OFF AND SB RTE 82 ON	2,416	2,491	3,391	2,906	2,459	2,743	3,734	2,790									
85	N	NB ON FR SB RTE 82	79	71	69	68	79	71	69	68	0	0	0	0	0.04	5	Yes	100	Yes
85	N	MAINLINE BET SB RTE 82 ON AND NB RTE 82 OFF	2,495	2,561	3,461	2,974	2,538	2,814	3,803	2,858									
85	N	NB OFF TO NB RTE 82	484	501	565	580	419	433	477	533	-65	-68	-88	-47	3.86	5	Yes	100	Yes
85	N	MAINLINE BET NB RTE 82 OFF AND ON	2,011	2,060	2,896	2,395	2,118	2,380	3,326	2,325									
85	N	NB ON FR RTE 82	337	330	333	332	337	330	333	332	0	0	0	0	0.02	5	Yes	100	Yes
85	N	MAINLINE BET RTE 82 ON AND RTE 237 OFF	2,348	2,390	3,229	2,727	2,455	2,710	3,659	2,657									
85	N	NB OFF TO EB RTE 237	905	889	1,010	867	905	933	1,044	940	0	44	34	73	1.06	5	Yes	151	Yes
85	N	MAINLINE BET ROUTE 237 OFF AND ON	1,443	1,501	2,219	1,860	1,551	1,777	2,615	1,717									
85	N	DUM NB ON FR EB RTE 237	165	164	131	126	165	164	132	126	0	0	0	0	0.01	5	Yes	100	Yes
85	N	MAINLINE BET RTE 237 ON AND EVELYN OFF	1,608	1,665	2,351	1,986	1,716	1,941	2,747	1,843									
85	N	NB OFF TO EVELYN AVE	189	245	290	325	208	253	275	341	19	8	-15	16	0.90	5	Yes	100	Yes
85	N	MAINLINE BET EVELYN OFF AND CENTRAL ON	1,420	1,420	2,061	1,661	1,508	1,688	2,472	1,502									
85	N	NB ON FR CENTRAL EXPWY	120	142	207	189	120	142	207	189	0	0	-1	0	0.05	5	Yes	100	Yes
85	N	MAINLINE BET CENTRAL ON AND MOFFETT OFF	1,540	1,562	2,268	1,850	1,628	1,831	2,678	1,691									
85	N	NB OFF TO MOFFETT BLVD	230	232	306	263	227	222	268	248	-3	-11	-38	-16	2.25	5	Yes	100	Yes
85	N	MAINLINE NORTH OF MOFFETT	1,309	1,330	1,962	1,587	1,400	1,609	2,411	1,444									

**Validation Criteria Threshold Summary**

Criteria	Criteria Threshold	% Met Target	Links Comparison		Met	Percent Met
			Number of Links			
Link Volumes						
<700 vph	100 vph	>85%	29		29	100%
Between 700 vph and 2,700 vph	15%	>85%	16		16	100%
>2,700 vph	400 vph	>85%	-		-	-
GEH Statistic	5	>85%	45		45	100%
<b>Sum of Link Volumes</b>						
			Data Entered	Model Average	Difference	Percent Difference
Sum of all Links	5%		30,890	30,282	-608	-2%
			Output (v)	Input (c)	v-c	v-c^2
Sum of all Links	4		30,282	30,890	-608	369,664
					v+c	v+c/2
						30586
					GEH SQRT	3
					Validation Criteria Met	Yes



Rte	Dir	Description	Data Entered			Average Volumes from Model Runs			Difference in Volumes			Validation Criteria for Peak Hour				
			6-7	7-8	8-9	6-7	7-8	8-9	6-7	7-8	8-9	GEH Statistic			Link Volumes	
												GEH	Threshold	Met	Threshold	Met
85	S	SB OFF TO NB RTE 87	112	367	502	91	304	437	-22	-63	-65	2.75	5	Yes	100	Yes
85	S	MAINLINE BET RTE 87 OFF AND SANTA TERESA OFF	1,978	3,420	3,439	2,102	3,722	3,680								
85	S	SB OFF TO SANTA TERESA	84	188	255	80	182	253	-4	-6	-2	0.35	5	Yes	100	Yes
85	S	MAINLINE BET SANTA TERESA OFF AND ON	1,894	3,232	3,184	2,021	3,540	3,427								
85	S	SB ON FR SANTA TERESA	75	143	165	75	143	165	0	0	-1	0.00	5	Yes	100	Yes
85	S	MAINLINE BET SANTA TERESA ON AND RTE 87 ON	1,970	3,375	3,349	2,096	3,683	3,592								
85	S	SB ON FR RTE 87	604	1,141	1,210	603	1,144	1,213	0	3	3	0.06	5	Yes	171	Yes
85	S	MAINLINE BET RTE 87 ON AND BLOSSOM HILL OFF	2,573	4,516	4,560	2,700	4,827	4,805								
85	S	SB OFF TO BLOSSOM HILL	260	530	641	233	471	578	-28	-58	-64	2.11	5	Yes	100	Yes
85	S	MAINLINE BET BLOSSOM HILL OFF AND WB BLOSSOM HILL ON	2,313	3,987	3,918	2,467	4,355	4,227								
85	S	SB ON FR WB BLOSSOM HILL	58	95	131	58	95	131	0	1	0	0.04	5	Yes	100	Yes
85	S	MAINLINE BET WB BLOSSOM HILL ON AND EB BLOSSOM HILL ON	2,371	4,081	4,049	2,525	4,451	4,358								
85	S	SB ON FR EB BLOSSOM HILL	73	137	161	73	137	161	0	1	0	0.03	5	Yes	100	Yes
85	S	MAINLINE BET EB BLOSSOM HILL ON AND COTTLE OFF	2,444	4,218	4,211	2,598	4,588	4,519								
85	S	SB OFF TO COTTLE RD	296	616	981	281	601	1001	-16	-15	21	0.48	5	Yes	100	Yes
85	S	MAINLINE BET COTTLE OFF AND SB COTTLE ON	2,148	3,602	3,230	2,317	3,987	3,518								
85	S	SB ON FR SB COTTLE RD	58	72	72	58	72	72	0	-1	1	0.05	5	Yes	100	Yes
85	S	MAINLINE BET SB COTTLE ON AND NB COTTLE ON	2,206	3,675	3,302	2,375	4,059	3,590								
85	S	SB ON FR NB COTTLE RD	98	178	189	98	178	188	-1	0	-1	0.01	5	Yes	100	Yes
85	S	MAINLINE BET NB COTTLE ON AND GREAT OAKS OFF	2,304	3,853	3,491	2,473	4,237	3,778								
85	S	SB OFF TO GREAT OAKS	309	653	849	300	625	869	-10	-27	20	0.88	5	Yes	100	Yes
85	S	MAINLINE BET GREAT OAKS OFF AND BERNAL OFF	1,994	3,200	2,642	2,173	3,611	2,909								
85	S	SB OFF TO BERNAL	214	424	634	207	412	631	-7	-12	-3	0.48	5	Yes	100	Yes
85	S	MAINLINE SOUTH OF BERNAL	1,781	2,776	2,008	1,966	3,199	2,277								

Validation Criteria Threshold Summary									
Criteria	Criteria Threshold	% Met Target	Links Comparison		Met	Percent Met			
			Number of Links						
Link Volumes									
<700 vph	100 vph	>85%	37	37	37	100%			
Between 700 vph and 2,700 vph	15%	>85%	9	9	9	100%			
>2,700 vph	400 vph	>85%	-	-	-	-			
GEH Statistic	5	>85%	46	46	46	100%			
<b>Sum of Link Volumes</b>									
		Data Entered	Model Average	Difference	Percent Difference	Validation Criteria Met			
Sum of all Links	5%	21,486	21,014	-472	-2%	Yes			
		Output (v)	Input (c)	v-c	v-c^2	v+c	v+c/2	GEH SQRT	Validation Criteria Met
Sum of all Links	4	21,014	21,486	-472	222,784	42,500	21250	3	Yes

## Caltrans Approved Demands - Southbound PM

Dir	Description	14-15	15-16	16-17	17-18	18-19
S	DUM SB OFF TO SB RTE 85 (GP)	1,333	1,458	1,618	1,747	1,633
S	DUM SB OFF TO SB RTE 85 (HOV)	607	1,286	1,052	1,153	1,064
S	ON RAMP FROM SHORELINE BLVD.	354	506	730	1,061	983
		2,293	3,250	3,400	3,960	3,680
S	SB ON FR MOFETT BLVD.	236	311	421	421	317
		2,529	3,561	3,821	4,381	3,997
S	SB OFF TO CENTRAL EXPWY.	122	154	190	335	272
		2,407	3,406	3,631	4,046	3,725
S	SB ON FR EVELYN AVE	301	285	305	458	445
		2,708	3,692	3,935	4,503	4,170
S	SB OFF TO WB RTE 237	284	288	341	523	475
		2,424	3,404	3,594	3,980	3,695
S	DUM SB ON FR WB RTE 237	968	1,145	1,278	1,194	1,173
		3,392	4,549	4,872	5,174	4,868
S	SB ON FR NB RTE 82	303	307	303	265	251
		3,695	4,857	5,175	5,439	5,119
S	SB OFF TO SB RTE 82	319	336	351	293	377
		3,376	4,521	4,824	5,146	4,742
S	SB ON FR SB RTE 82	640	678	713	784	713
		4,016	5,199	5,536	5,930	5,455
S	SB OFF TO FREMONT AVE	396	435	417	362	379
		3,620	4,764	5,119	5,568	5,076
S	SB ON FR FREMONT AVE.	625	776	725	758	669
		4,245	5,539	5,844	6,326	5,745
S	SB OFF TO HOMESTEAD RD	205	195	202	214	241
		4,039	5,344	5,642	6,112	5,504
S	SB OFF TO RTE 280	2,222	2,571	2,701	2,697	2,468
		1,818	2,773	2,942	3,415	3,037
S	DUM SB ON FR NB RTE 280	483	475	431	514	524
		2,301	3,248	3,373	3,929	3,561
S	DUM SB ON FR SB RTE 280	1,658	2,259	2,403	2,364	2,268
		3,959	5,507	5,775	6,294	5,829
S	SB OFF TO STEVENS CREEK	828	816	1,005	1,206	1,169
		3,131	4,691	4,771	5,088	4,660
S	SB ON FR STEVENS CREEK BLVD	512	520	546	627	482
		3,644	5,211	5,317	5,715	5,142
S	SB OFF TO SRTGA\SNNYV. RD.	768	771	757	862	931
		2,876	4,440	4,560	4,853	4,211
S	SB ON FR SRTGA\SNNYV. RD.	620	665	656	839	735
		3,496	5,105	5,216	5,692	4,946
S	SB OFF TO SARATOGA AVE.	585	579	554	569	495
		2,911	4,525	4,662	5,123	4,451
S	SB ON FR SARATOGA AVE.	1,017	1,164	1,196	1,149	1,074
		3,928	5,690	5,859	6,271	5,525
S	SB OFF TO WINCHESTER BLVD.	439	503	458	483	440
		3,489	5,187	5,400	5,788	5,084
S	SB OFF RTE 17	1,310	1,424	1,302	1,187	1,167
		2,179	3,763	4,098	4,601	3,917
S	SB OFF TO BASCOM AVE.	370	442	442	495	392
		1,809	3,321	3,656	4,105	3,526
S	SB ON FR RTE 17	2,288	2,023	1,756	1,763	1,808
		4,097	5,344	5,411	5,868	5,334
S	SB ON FR BASCOM AVE.	679	727	708	646	529
		4,776	6,071	6,119	6,515	5,863
S	SB OFF TO UNION\SAMARITN	633	623	612	673	678
		4,143	5,448	5,507	5,842	5,185

<b>Dir</b>	<b>Description</b>	<b>14-15</b>	<b>15-16</b>	<b>16-17</b>	<b>17-18</b>	<b>18-19</b>
<b>S</b>	SB ON FR UNION AVE.	483	570	546	523	587
		4,626	6,018	6,054	6,365	5,772
<b>S</b>	SB OFF TO CAMDEN AVE	1,048	1,188	1,077	1,167	1,168
		3,579	4,830	4,977	5,199	4,604
<b>S</b>	SB ON FR CAMDEN AVE.	491	568	650	811	665
		4,070	5,398	5,627	6,009	5,269
<b>S</b>	SB OFF TO ALMADEN EXPWY.	1,053	1,101	1,018	1,084	1,077
		3,016	4,297	4,609	4,925	4,192
<b>S</b>	SB ON FR SB ALMADEN EXPWY	327	368	412	460	432
		3,343	4,666	5,021	5,385	4,625
<b>S</b>	SB ON FR NB ALMADEN EXPWY	797	814	827	900	830
		4,141	5,479	5,849	6,285	5,454
<b>S</b>	SB OFF TO NB RTE 87	276	233	237	270	257
		3,865	5,246	5,612	6,016	5,197
<b>S</b>	SB OFF TO SANTA TERESA	588	629	719	894	683
		3,276	4,617	4,893	5,122	4,514
<b>S</b>	SB ON FR SANTA TERESA	372	384	365	375	375
		3,648	5,001	5,258	5,497	4,889
<b>S</b>	SB ON FR RTE 87	1,622	2,176	2,431	2,537	2,168
		5,270	7,177	7,689	8,034	7,057
<b>S</b>	SB OFF TO BLOSSOM HILL	1,361	1,901	2,295	2,778	2,623
		3,909	5,277	5,394	5,256	4,434
<b>S</b>	SB ON FR WB BLOSSOM HILL	109	103	99	114	103
		4,018	5,380	5,492	5,370	4,537
<b>S</b>	SB ON FR EB BLOSSOM HILL	185	197	221	264	211
		4,203	5,576	5,713	5,634	4,748
<b>S</b>	SB OFF TO COTTLE RD	1,119	1,307	1,342	1,569	1,412
		3,085	4,269	4,371	4,065	3,336
<b>S</b>	SB ON FR SB COTTLE RD	80	88	93	110	101
		3,164	4,357	4,464	4,174	3,437
<b>S</b>	SB ON FR NB COTTLE RD.	161	210	229	244	169
		3,326	4,567	4,693	4,419	3,607
<b>S</b>	SB OFF TO GREAT OAKS	447	482	524	643	516
		2,879	4,086	4,170	3,776	3,090
<b>S</b>	SB OFF TO BERNAL	615	775	882	1,022	897
		2,264	3,311	3,287	2,754	2,193
<b>S</b>	85 SB OFF TO SB 101 (HOV)	643	570	639	639	510

**State Route 85 Southbound - VTA Express Lanes Project**  
**Existing Conditions - PM Peak Period - Flows**

Rte	Dir	Description	Average Volumes from Model Runs			
			3-4	4-5	5-6	6-7
101	S	DUM SB OFF TO SB RTE 85 (GP)	1962	2344	2761	2617
101	S	DUM SB OFF TO SB RTE 85 (HOV)	1279	1055	1152	1066
85	S	SB ON FR MOFETT BLVD.	311	421	415	304
85	S	MAINLINE BET MOFFETT ON AND CENTRAL OFF	3,551	3,819	4,328	3,987
85	S	SB OFF TO CENTRAL EXPWY.	149	194	314	271
85	S	MAINLINE BET CENTRAL OFF AND EVELYN ON	3,402	3,626	3,812 (4,014)	3,674 (3,716)
85	S	SB ON FR EVELYN AVE	285	305	458	445
85	S	MAINLINE BET EVELYN ON AND RTE 237 OFF	3,687	3,931	4,270 (4,472)	4,119 (4,162)
85	S	SB OFF TO WB RTE 237	253	321	491	472
85	S	MAINLINE BET RTE 237 OFF AND ON	3,434	3,382 (3,610)	3,779 (3,981)	3,647 (3,690)
85	S	DUM SB ON FR WB RTE 237	1144	1236	1136	1146
85	S	MAINLINE BET RTE 237 ON AND NB RTE 82 ON	4,578	4,618 (4,846)	4,915 (5,117)	4,793 (4,836)
85	S	SB ON FR NB RTE 82	307	303	265	252
85	S	MAINLINE BET NB RTE 82 ON AND SB RTE 82 OFF	4,743 (4,885)	4,921 (5,149)	5,180 (5,382)	5,045 (5,087)
85	S	SB OFF TO SB RTE 82	315	319	263	373
85	S	MAINLINE BET SB RTE 82 OFF AND ON	4,428 (4,570)	4,603 (4,830)	4,917 (5,118)	4,672 (4,715)
85	S	SB ON FR SB RTE 82	678	712	784	712
85	S	MAINLINE BET SB RTE 82 ON AND FREMONT OFF	5,106	5,315	5,701	5,384
85	S	SB OFF TO FREMONT AVE	441	407	325	386
85	S	MAINLINE BET FREMONT OFF AND ON	4,610 (4,665)	4,909 (4,908)	5,118 (5,376)	5,033 (4,998)
85	S	SB ON FR FREMONT AVE.	776	725	758	670
85	S	MAINLINE BET FREMONT ON AND HOMESTEAD OFF	5,386	5,634	5,876	5,703
85	S	SB OFF TO HOMESTEAD RD	184	191	196	242
85	S	MAINLINE BET HOMESTEAD OFF AND RTE 280 OFF	5,202	5,443	5,680	5,461
85	S	SB OFF TO RTE 280	2469	2597	2523	2432
85	S	MAINLINE BET RTE 280 OFF AND NB RTE 280 ON	2,734	2,846	3,157	3,029
85	S	DUM SB ON FR NB RTE 280	475	432	514	524
85	S	MAINLINE BET NB RTE 280 ON AND SB RTE 280 ON	3,208	3,278	3,671	3,553
85	S	DUM SB ON FR SB RTE 280	2257	2402	2365	2269
85	S	MAINLINE BET SB RTE 280 ON AND STEVENS CREEK OFF	5,465	5,680	6,036	5,822
85	S	SB OFF TO STEVENS CREEK	774	989	1155	1182
85	S	MAINLINE BET STEVENS CREEK OFF AND ON	4,529 (4,691)	4,652 (4,691)	4,753 (4,881)	4,632 (4,640)
85	S	SB ON FR STEVENS CREEK BLVD	516	537	620	474
85	S	MAINLINE BET STEVENS CREEK ON AND SARATOGA/SUNNYVALE OFF	5,045	5,189	5,373	5,106
85	S	SB OFF TO SRTGA/SNNYV. RD.	744	733	810	922
85	S	MAINLINE BET SARATOGA/SUNNYVALE OFF AND ON	4,301	4,457	4,563	4,184
85	S	SB ON FR SRTGA/SNNYV. RD.	659	658	837	739
85	S	MAINLINE BET SARATOGA/SUNNYVALE ON AND SARATOGA OFF	4,959	5,114	5,400	4,923
85	S	SB OFF TO SARATOGA AVE.	553	547	548	483
85	S	MAINLINE BET SARATOGA OFF AND ON	4,184 (4,407)	4,407 (4,568)	4,711 (4,852)	4,502 (4,440)
85	S	SB ON FR SARATOGA AVE.	1156	1182	1139	1068
85	S	MAINLINE BET SARATOGA ON AND WINCHESTER OFF	5,340	5,589	5,850	*5,570
85	S	SB OFF TO WINCHESTER BLVD.	465	442	448	442
85	S	MAINLINE BET WINCHESTER OFF AND RTE 17 OFF	4,875	5,147	5,402	5,128
85	S	SB OFF RTE 17	1321	1243	1134	1140
85	S	MAINLINE BET RTE 17 OFF AND BASCOM OFF	3,554	3,904	4,268	3,988
85	S	SB OFF TO BASCOM AVE.	399	407	464	404
85	S	MAINLINE BET BASCOM OFF AND RTE 17 ON	3,156	3,497	3,804	3,584
85	S	SB ON FR RTE 17	1730	1726	1622	1652
85	S	MAINLINE BET RTE 17 ON AND BASCOM ON	4,886	4,986 (5,224)	5,271 (5,426)	5,298 (5,236)
85	S	SB ON FR BASCOM AVE.	716	699	639	523
85	S	MAINLINE BET BASCOM ON AND UNION/SAMARITAN OFF	5,602	5,684 (5,922)	5,911 (6,066)	5,821 (5,759)
85	S	SB OFF TO UNION/SAMARITAN	562	543	635	611
85	S	MAINLINE BET UNION/SAMARITAN OFF AND UNION ON	4,949 (5,039)	5,141 (5,379)	5,276 (5,431)	5,210 (5,148)
85	S	SB ON FR UNION AVE.	569	546	523	587
85	S	MAINLINE BET UNION ON AND CAMDEN OFF	5,518	5,687	5,799	*5,759
85	S	SB OFF TO CAMDEN AVE	1079	1022	1047	1175
85	S	MAINLINE BET CAMDEN OFF AND ON	4,439	4,665	4,752	4,622
85	S	SB ON FR CAMDEN AVE.	568	647	808	668
85	S	MAINLINE BET CAMDEN ON AND ALMADEN OFF	5,007	5,312	5,560	5,290
85	S	SB OFF TO ALMADEN EXPWY.	1020	959	1027	1084

Rte	Dir	Description	Average Volumes from Model Runs			
			3-4	4-5	5-6	6-7
85	S	MAINLINE BET ALMADEN OFF AND SB ALMADEN ON	3,987	4,353	4,533	4,207
85	S	SB ON FR SB ALMADEN EXPWY	368	412	460	432
85	S	MAINLINE BET SB ALMADEN ON AND NB ALMADEN ON	4,355	4,765	4,993	4,638
85	S	SB ON FR NB ALMADEN EXPWY	814	826	899	828
85	S	MAINLINE BET NB ALMADEN ON AND RTE 87 OFF	5,169	5,590	5,892	5,466
85	S	SB OFF TO NB RTE 87	204	215	248	238
85	S	MAINLINE BET RTE 87 OFF AND SANTA TERESA OFF	4,964	5,375	5,479 (5,644)	5,228
85	S	SB OFF TO SANTA TERESA	578	688	825	708
85	S	MAINLINE BET SANTA TERESA OFF AND ON	4,387	4,687	4,654 (4,819)	4,520
85	S	SB ON FR SANTA TERESA	384	366	375	375
85	S	MAINLINE BET SANTA TERESA ON AND RTE 87 ON	4,770	5,019 (5,053)	5,029 (5,194)	5,052 (4,896)
85	S	SB ON FR RTE 87	2189	2239	2248	2078
85	S	MAINLINE BET RTE 87 ON AND BLOSSOM HILL OFF	6,960	7,258	7,277	*7,130
85	S	SB OFF TO BLOSSOM HILL	1824	2145	2507	2552
85	S	MAINLINE BET BLOSSOM HILL OFF AND WB BLOSSOM HILL ON	5,136	5,113	4,770	4,578
85	S	SB ON FR WB BLOSSOM HILL	101	98	116	103
85	S	MAINLINE BET WB BLOSSOM HILL ON AND EB BLOSSOM HILL ON	5,237	5,211	4,886	4,681
85	S	SB ON FR EB BLOSSOM HILL	197	221	264	211
85	S	MAINLINE BET EB BLOSSOM HILL ON AND COTTLE OFF	5,434	5,432	5,150	4,892
85	S	SB OFF TO COTTLE RD	1230	1265	1443	1407
85	S	MAINLINE BET COTTLE OFF AND SB COTTLE ON	4,204	4,167	3,707	3,485
85	S	SB ON FR SB COTTLE RD	88	93	110	101
85	S	MAINLINE BET SB COTTLE ON AND NB COTTLE ON	4,292	4,260	3,817	3,586
85	S	SB ON FR NB COTTLE RD.	209	230	244	169
85	S	MAINLINE BET NB COTTLE ON AND GREAT OAKS OFF	4,501	4,490	4,061	3,755
85	S	SB OFF TO GREAT OAKS	459	509	592	534
85	S	MAINLINE BET GREAT OAKS OFF AND BERNAL OFF	4,042	3,982	3,468	3,221
85	S	SB OFF TO BERNAL	734	828	951	919
85	S	MAINLINE SOUTH OF BERNAL	3,308	3,153	2,517	2,302

\* Due to vehicles in queue from previous hour.

**State Route 85 Southbound - VTA Express Lanes Project**  
**Existing Conditions - PM Peak Period Traffic Flow at Bottleneck Locations**

Description	(15-16)						
	Model Output			Flow			Difference
	GP	HOV	Total	GP	HOV	Total	Total
MAINLINE BETWEEN SB RTE 82 ON AND FREMONT OFF	4218	888	5,106	4200	850	5,050	56
MAINLINE BETWEEN FREMONT ON AND HOMESTEAD OFF	4419	967	5,386	4400	900	5,300	86
MAINLINE BETWEEN STEVENS CREEK ON AND DE ANZA O	3975	1069	5,045	3900	1,100	5,000	45
MAINLINE BETWEEN SARATOGA ON AND WINCHESTER OF	4149	1192	5,340	4300	1,100	5,400	-60
MAINLINE BETWEEN UNION ON AND CAMDEN OFF	4276	1242	5,518	4300	1,200	5,500	18

Description	(16-17)						
	Model Output			Flow			Difference
	GP	HOV	Total	GP	HOV	Total	Total
MAINLINE BETWEEN SB RTE 82 ON AND FREMONT OFF	4251	1064	5,315	4200	1,110	5,310	5
MAINLINE BETWEEN FREMONT ON AND HOMESTEAD OFF	4475	1159	5,634	4400	1,200	5,600	34
MAINLINE BETWEEN STEVENS CREEK ON AND DE ANZA O	3939	1250	5,189	3900	1,300	5,200	-11
MAINLINE BETWEEN SARATOGA ON AND WINCHESTER OF	4207	1382	5,589	4300	1,400	5,700	-111
MAINLINE BETWEEN UNION ON AND CAMDEN OFF	4291	1396	5,687	4300	1,400	5,700	-13
MAINLINE BETWEEN RTE 87 ON AND BLOSSOM HILL OFF	6322	936	7,258	6300	900	7,200	58

Description	PEAK HOUR (17-18)						
	Model Output			Flow			Difference
	GP	HOV	Total	GP	HOV	Total	Total
MAINLINE BETWEEN SB RTE 82 ON AND FREMONT OFF	4273	1428	5,701	4200	1,520	5,720	-19
MAINLINE BETWEEN FREMONT ON AND HOMESTEAD OFF	4440	1435	5,876	4400	1,520	5,920	-44
MAINLINE BETWEEN STEVENS CREEK ON AND DE ANZA O	3946	1427	5,373	3900	1,500	5,400	-27
MAINLINE BETWEEN SARATOGA ON AND WINCHESTER OF	4272	1578	5,850	4300	1,500	5,800	50
MAINLINE BETWEEN UNION ON AND CAMDEN OFF	4395	1404	5,799	4300	1,400	5,700	99
MAINLINE BETWEEN RTE 87 ON AND BLOSSOM HILL OFF	6308	968	7,277	6300	1,000	7,300	-24

Description	(18-19)						
	Model Output			Flow			Difference
	GP	HOV	Total	GP	HOV	Total	Total
MAINLINE BETWEEN SB RTE 82 ON AND FREMONT OFF	4202	1182	5,384	4200	1,250	5,450	-66
MAINLINE BETWEEN FREMONT ON AND HOMESTEAD OFF	4336	1367	5,703	4400	1,250	5,650	53
MAINLINE BETWEEN STEVENS CREEK ON AND DE ANZA O	3892	1213	5,106	3900	1,240	5,140	-34
MAINLINE BETWEEN SARATOGA ON AND WINCHESTER OF	4316	1254	5,570	4300	1,200	5,500	70
MAINLINE BETWEEN UNION ON AND CAMDEN OFF	4312	1486	5,797	4300	1,450	5,750	47
MAINLINE BETWEEN RTE 87 ON AND BLOSSOM HILL OFF	6258	872	7,130	6300	750	7,050	80



Rte	Dir	Description	Data Entered				Average Volumes from Model Runs				Difference in Volumes				Validation Criteria for Peak Hour				
			3-4	4-5	5-6	6-7	3-4	4-5	5-6	6-7	3-4	4-5	5-6	6-7	GEH Statistic		Link Volumes		
																GEH	Threshold	Met	Threshold
85	S	SB OFF TO NB RTE 87	219	227	251	257	204	215	248	238	-15	-12	-2	-19	0.12	5	Yes	100	Yes
85	S	MAINLINE BET RTE 87 OFF AND SANTA TERESA OFF	5,511	6,033	6,807	5,273	5,635	6,039	6,526	5,119									
85	S	SB OFF TO SANTA TERESA	591	690	831	682	578	688	825	708	-13	-2	-6	26	0.16	5	Yes	125	Yes
85	S	MAINLINE BET SANTA TERESA OFF AND ON	4,920	5,343	5,976	4,592	5,058	5,351	5,701	4,412									
85	S	SB ON FR SANTA TERESA	384	365	375	375	384	366	375	375	-1	0	0	0	0.00	5	Yes	100	Yes
85	S	MAINLINE BET SANTA TERESA ON AND RTE 87 ON	5,305	5,709	6,351	4,967	5,441	5,716	6,076	4,787									
85	S	SB ON FR RTE 87	2,176	2,231	2,237	2,068	2,189	2,239	2,248	2,078	13	8	11	10	0.20	5	Yes	336	Yes
85	S	MAINLINE BET RTE 87 ON AND BLOSSOM HILL OFF	7,481	7,940	8,588	7,035	7,631	7,955	8,324	6,865									
85	S	SB OFF TO BLOSSOM HILL	1,827	2,149	2,524	2,621	1,824	2,145	2,507	2,552	-3	-4	-17	-69	0.28	5	Yes	379	Yes
85	S	MAINLINE BET BLOSSOM HILL OFF AND WB BLOSSOM HILL ON	5,654	5,790	6,064	4,414	5,807	5,810	5,818	4,313									
85	S	SB ON FR WB BLOSSOM HILL	103	99	114	103	101	98	116	103	-1	0	2	-1	0.17	5	Yes	100	Yes
85	S	MAINLINE BET WB BLOSSOM HILL ON AND EB BLOSSOM HILL ON	5,757	5,889	6,178	4,518	5,908	5,908	5,934	4,416									
85	S	SB ON FR EB BLOSSOM HILL	197	221	264	211	197	221	264	211	0	0	0	0	0.02	5	Yes	100	Yes
85	S	MAINLINE BET EB BLOSSOM HILL ON AND COTTLE OFF	5,953	6,110	6,442	4,729	6,105	6,129	6,198	4,627									
85	S	SB OFF TO COTTLE RD	1,259	1,262	1,436	1,411	1,230	1,265	1,443	1,407	-29	4	8	-4	0.17	5	Yes	215	Yes
85	S	MAINLINE BET COTTLE OFF AND SB COTTLE ON	4,694	4,848	5,007	3,318	4,875	4,864	4,754	3,220									
85	S	SB ON FR SB COTTLE RD	88	93	110	101	88	93	110	101	0	0	0	-1	0.01	5	Yes	100	Yes
85	S	MAINLINE BET SB COTTLE ON AND NB COTTLE ON	4,782	4,942	5,116	3,419	4,963	4,957	4,864	3,321									
85	S	SB ON FR NB COTTLE RD	210	229	244	169	209	230	244	169	-2	1	-1	-1	0.03	5	Yes	100	Yes
85	S	MAINLINE BET NB COTTLE ON AND GREAT OAKS OFF	4,992	5,171	5,361	3,588	5,172	5,188	5,108	3,490									
85	S	SB OFF TO GREAT OAKS	465	494	592	516	459	509	592	534	-6	15	0	18	0.01	5	Yes	100	Yes
85	S	MAINLINE BET GREAT OAKS OFF AND BERNAL OFF	4,527	4,676	4,768	3,072	4,713	4,679	4,516	2,956									
85	S	SB OFF TO BERNAL	748	833	942	896	734	828	951	919	-14	-5	9	23	0.25	5	Yes	141	Yes
85	S	MAINLINE SOUTH OF BERNAL	3,779	3,843	3,827	2,176	3,979	3,850	3,565	2,037									

Validation Criteria Threshold Summary										
Criteria	Criteria Threshold	% Met Target	Links Comparison		Met	Percent Met				
			Number of Links							
Link Volumes										
<700 vph	100 vph	>85%	24	24	100%					
Between 700 vph and 2,700 vph	15%	>85%	21	21	100%					
>2,700 vph	400 vph	>85%	1	1	100%					
GEH Statistic	5	>85%	46	46	100%					
Sum of Link Volumes										
			Data Entered	Model Average	Difference	Percent Difference	Validation Criteria Met			
Sum of all Links	5%		39,733	39,460	-273	-1%	Yes			
			Output (v)	Input (c)	v-c	v-c^2	v+c	v+c/2	GEH SQRT	Validation Criteria Met
Sum of all Links	4		39,460	39,733	-273	74,529	79,193	39596.5	1	Yes

# APPENDIX D

State Route 85 Northbound - VTA Express Lanes Project  
Existing Conditions - Density - AM Peak Period

Description	Average Density						Average Speed					
	6-7		7-8		8-9		6-7		7-8		8-9	
	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV
MAINLINE BET NB BERNAL ON AND SB BERNAL ON	11.29	5.73	11.22	9.53	10.16	7.51	64.80	71.78	64.63	70.57	64.71	71.20
MAINLINE BETWEEN SB BERNAL ON AND SB 101 ON	12.94	6.11	14.03	10.83	12.86	8.73	63.11	70.48	61.20	67.79	61.26	68.11
MAINLINE BETWEEN SB 101 ON AND GREAT OAKS ON	13.77	6.12	16.52	10.92	15.38	9.15	65.37	70.72	64.61	68.53	64.62	68.59
MAINLINE BETWEEN GREAT OAKS ON AND COTTLE OFF	16.26	6.70	18.85	12.53	17.47	10.61	65.07	70.88	65.26	69.36	65.42	69.80
MAINLINE BETWEEN COTTLE OFF AND ON	15.09	6.72	17.73	13.02	15.92	10.92	64.95	71.15	65.35	70.06	65.48	70.63
MAINLINE BETWEEN COTTLE ON AND BLOSSOM HILL OFF	20.40	8.51	23.95	16.98	22.11	14.80	63.40	69.50	62.52	66.71	62.94	67.54
MAINLINE BETWEEN BLOSSOM HILL OFF AND EB BLOSSOM HILL ON	19.54	8.55	22.30	16.71	20.33	14.56	63.84	70.60	64.12	68.98	64.39	69.60
MAINLINE BETWEEN EB BLOSSOM HILL ON AND WB BLOSSOM HILL ON	24.56	9.01	29.89	18.47	26.39	15.88	61.15	69.70	58.37	66.24	59.97	67.69
MAINLINE BETWEEN WB BLOSSOM HILL ON AND 87 OFF	25.64	7.35	28.57	14.92	26.37	13.55	62.77	69.66	61.62	67.09	62.65	68.18
MAINLINE BETWEEN 87 OFF AND SANTA TERESA OFF	17.81	7.39	20.06	14.58	19.66	13.74	64.43	70.53	64.22	68.69	64.16	69.27
MAINLINE BETWEEN SANTA TERESA OFF AND ON	17.21	7.21	19.34	14.13	18.53	13.41	64.58	71.12	64.46	69.33	64.30	69.58
MAINLINE BETWEEN SANTA TERESA ON AND 87 ON	19.93	7.60	23.32	15.01	21.83	14.04	63.60	70.92	62.84	69.00	63.28	69.30
MAINLINE BETWEEN 87 ON AND ALMADEN OFF	17.16	7.49	20.39	14.54	19.75	13.58	64.76	71.17	63.79	69.25	63.68	69.39
MAINLINE BETWEEN ALMADEN OFF AND NB ALMADEN ON	22.39	8.12	38.67	16.94	26.37	15.77	61.87	70.54	41.84	66.46	58.76	66.91
MAINLINE BETWEEN NB ALMADEN ON AND SB ALMADEN ON	32.12	10.98	45.29	26.59	39.52	24.90	49.09	62.91	39.99	52.50	44.09	53.23
MAINLINE BETWEEN SB ALMADEN ON AND CAMDEN OFF	28.21	10.85	36.36	24.07	34.94	22.55	59.02	64.42	53.92	56.37	54.14	57.29
MAINLINE BETWEEN CAMDEN OFF AND ON	24.63	10.44	29.13	20.54	27.89	19.67	63.07	70.32	63.36	68.30	63.32	68.73
MAINLINE BETWEEN CAMDEN ON AND UNION OFF	29.69	10.83	41.02	21.08	34.05	19.96	60.03	69.44	49.73	65.92	58.12	67.22
MAINLINE BETWEEN UNION OFF AND ON	35.87	13.10	44.83	28.70	43.19	26.70	54.82	65.81	48.87	54.66	49.27	57.42
MAINLINE BETWEEN UNION ON AND BASCOM OFF	29.49	10.64	33.38	19.14	63.78	27.18	64.26	70.11	63.73	66.93	39.27	53.64
MAINLINE BETWEEN BASCOM OFF AND ROUTE 17 OFF	29.56	8.55	34.53	15.33	103.21	32.16	61.79	70.12	59.74	68.07	24.37	40.83
MAINLINE BETWEEN ROUTE 17 OFF AND BASCOM ON	23.19	8.86	36.79	17.29	125.80	23.93	63.02	69.97	46.71	64.29	12.46	51.81
MAINLINE BETWEEN BASCOM ON AND ROUTE 17 ON	25.26	9.22	61.52	21.82	131.86	22.00	62.24	70.15	29.31	58.31	11.82	60.50
MAINLINE BETWEEN ROUTE 17 ON AND WINCHESTER ON	29.54	9.48	124.23	30.13	156.67	24.45	52.86	69.53	13.68	49.08	10.51	56.98
MAINLINE BETWEEN WINCHESTER ON AND LANE DROP	82.33	12.68	144.44	31.53	150.11	24.12	20.93	60.13	12.70	51.58	11.30	59.19

Description	Average Density						Average Speed					
	6-7		7-8		8-9		6-7		7-8		8-9	
	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV
MAINLINE BETWEEN LANE DROP AND SARATOGA OFF	35.19	12.81	37.01	22.85	38.63	21.10	57.00	66.16	57.22	61.64	53.04	59.08
MAINLINE BETWEEN SARATOGA OFF AND ON	28.67	11.55	41.29	22.04	36.96	19.01	63.13	69.57	47.51	62.39	48.46	63.12
MAINLINE BETWEEN SARATOGA ON AND SARATOGA/SUNNYVALE OFF	33.98	11.98	84.11	32.01	72.54	29.14	58.06	67.68	23.85	48.91	27.88	49.83
MAINLINE BETWEEN SARATOGA/SUNNYVALE OFF AND ON	55.18	12.48	108.07	29.92	107.69	29.10	32.39	65.21	16.49	51.11	15.98	50.48
MAINLINE BETWEEN SARATOGA/SUNNYVALE ON AND STEVENS CREEK OFF	36.87	13.49	44.26	29.18	44.23	28.44	51.16	62.48	45.28	52.75	45.21	54.04
MAINLINE BETWEEN STEVENS CREEK OFF AND ROUTE 280 OFF	24.86	6.36	28.57	11.55	27.12	11.60	61.85	69.61	60.88	68.76	61.45	69.10
MAINLINE BETWEEN ROUTE 280 OFF AND SB ROUTE 280 ON	14.32	5.62	15.59	10.14	15.07	10.40	64.87	70.85	64.99	69.83	65.29	70.23
MAINLINE BETWEEN SB ROUTE 280 ON AND 280/STEVENS CREEK ON	16.10	5.61	20.00	11.17	21.00	11.96	64.07	70.49	61.70	67.46	58.94	66.60
MAINLINE BETWEEN 280/STEVENS CREEK ON AND HOMESTEAD ON	16.51	5.57	21.84	11.27	68.33	19.93	64.53	70.71	62.16	68.14	25.74	50.89
MAINLINE BETWEEN HOMESTEAD ON AND FREMONT OFF	27.38	8.42	59.56	23.37	84.44	28.23	59.54	66.37	31.64	53.84	22.83	50.19
MAINLINE BETWEEN FREMONT OFF AND ON	24.32	7.93	87.45	21.67	107.39	30.94	61.45	69.66	21.98	57.77	15.67	46.42
MAINLINE BETWEEN FREMONT ON AND SB ROUTE 82 OFF	29.01	8.19	44.37	23.57	39.29	29.53	60.63	68.34	46.39	54.57	48.45	50.84
MAINLINE BETWEEN SB ROUTE 82 OFF AND ON	28.39	6.60	42.95	15.90	49.53	16.40	60.32	70.31	49.80	61.28	42.53	56.75
MAINLINE BETWEEN SB ROUTE 82 ON AND NB ROUTE 82 OFF	29.06	6.80	42.25	15.44	51.13	15.76	56.60	70.21	48.56	63.63	39.92	59.90
MAINLINE BETWEEN NB ROUTE 82 OFF AND ROUTE 82 ON	26.86	6.87	38.92	15.58	57.93	16.13	58.69	69.86	49.62	64.21	34.97	60.35
MAINLINE BETWEEN ROUTE 82 ON AND EB ROUTE 237 OFF	24.44	6.99	42.26	16.62	63.85	18.15	53.79	69.65	36.47	62.85	25.87	57.10
MAINLINE BETWEEN EB ROUTE 237 OFF AND EB ROUTE 237 ON	19.12	7.00	23.70	14.99	23.45	15.40	62.88	69.54	58.50	65.01	56.47	61.44
MAINLINE BETWEEN EB ROUTE 237 ON AND EVELYN OFF	19.43	6.71	24.38	13.66	24.28	13.40	62.12	70.09	57.01	66.29	54.68	63.98
MAINLINE BETWEEN EVELYN OFF AND CENTRAL ON	19.63	6.57	23.11	12.51	21.68	12.11	63.52	70.69	61.86	67.87	62.27	67.54
MAINLINE BETWEEN CENTRAL ON AND MOFFET OFF	22.58	6.79	28.93	14.61	31.03	16.16	58.28	68.99	54.97	59.25	51.06	54.60
MAINLINE BETWEEN MOFFET OFF AND SHORELINE OFF/NB 85 & NB 101 CONNECTOR	17.80	5.47	20.01	11.15	18.56	11.44	63.64	69.14	62.95	65.22	62.85	64.48

**State Route 85 Northbound - VTA Express Lanes Project**  
**Existing Conditions - Density - PM Peak Period**

Description	Average Density								Average Speed							
	3-4		4-5		5-6		6-7		3-4		4-5		5-6		6-7	
	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV
MAINLINE BET NB BERNAL ON AND SB BERNAL ON	9.61	4.73	11.38	4.70	13.87	5.47	11.25	5.05	65.17	72.81	64.82	72.63	64.31	71.56	64.84	72.42
MAINLINE BETWEEN SB BERNAL ON AND SB 101 ON	10.54	4.92	12.60	5.44	16.31	6.54	13.17	5.90	64.22	71.89	63.21	70.17	61.25	68.38	62.36	69.13
MAINLINE BETWEEN SB 101 ON AND GREAT OAKS ON	12.38	5.02	14.35	5.85	17.83	7.07	14.81	6.31	65.27	71.68	64.86	70.54	64.03	69.11	64.72	69.67
MAINLINE BETWEEN GREAT OAKS ON AND COTTLE OFF	15.56	5.84	18.26	7.72	23.51	9.94	19.00	8.64	65.17	71.19	64.56	70.30	62.84	68.20	64.34	69.57
MAINLINE BETWEEN COTTLE OFF AND ON	13.56	5.77	15.58	7.94	20.16	10.21	16.34	8.82	65.26	71.68	65.02	71.46	63.70	70.39	65.02	71.05
MAINLINE BETWEEN COTTLE ON AND BLOSSOM HILL OFF	20.34	7.93	22.18	11.50	28.89	14.99	23.22	12.56	63.37	69.63	62.67	68.12	59.94	64.81	62.27	67.40
MAINLINE BETWEEN BLOSSOM HILL OFF AND EB BLOSSOM HILL ON	17.79	7.72	18.97	10.95	24.30	14.09	20.17	12.13	64.34	71.08	64.35	70.55	62.98	68.71	64.02	69.80
MAINLINE BETWEEN EB BLOSSOM HILL ON AND WB BLOSSOM HILL ON	20.40	7.92	21.52	11.23	27.62	14.47	22.97	12.45	63.32	70.98	63.02	70.44	61.13	68.77	62.72	69.85
MAINLINE BETWEEN WB BLOSSOM HILL ON AND 87 OFF	21.67	6.73	22.53	9.75	28.13	12.83	24.05	11.01	64.13	70.89	64.00	70.27	62.03	68.67	63.68	69.82
MAINLINE BETWEEN 87 OFF AND SANTA TERESA OFF	17.15	6.79	17.82	9.92	25.01	14.29	19.38	11.33	64.30	70.85	64.21	70.13	57.46	64.15	63.52	69.40
MAINLINE BETWEEN SANTA TERESA OFF AND ON	14.78	6.22	15.42	9.10	20.62	12.65	16.71	10.49	64.28	70.87	64.02	69.46	60.39	64.62	62.76	67.83
MAINLINE BETWEEN SANTA TERESA ON AND 87 ON	17.70	6.64	18.20	9.63	22.87	12.64	19.25	10.87	64.25	70.93	64.04	70.05	62.50	68.06	63.75	69.54
MAINLINE BETWEEN 87 ON AND ALMADEN OFF	16.44	5.95	16.85	8.76	21.11	11.61	17.87	9.75	62.80	70.82	62.42	69.82	59.20	68.00	60.85	69.37
MAINLINE BETWEEN ALMADEN OFF AND NB ALMADEN ON	17.74	6.25	17.75	9.52	22.18	12.62	18.05	10.19	63.55	70.27	63.68	68.89	61.09	66.85	63.61	68.66
MAINLINE BETWEEN NB ALMADEN ON AND SB ALMADEN ON	28.25	8.73	26.93	13.09	34.80	18.28	27.11	13.88	49.68	62.78	50.77	62.07	45.96	57.10	50.54	61.54
MAINLINE BETWEEN SB ALMADEN ON AND CAMDEN OFF	24.46	8.76	23.88	12.83	28.33	16.11	23.73	13.45	63.24	68.91	63.43	68.20	62.05	66.10	63.38	67.94
MAINLINE BETWEEN CAMDEN OFF AND ON	19.08	8.01	18.08	11.30	21.92	14.13	18.59	11.95	64.10	71.33	64.87	70.29	64.31	69.67	64.72	70.68
MAINLINE BETWEEN CAMDEN ON AND UNION OFF	21.46	7.59	20.87	10.61	24.65	13.50	21.30	11.46	64.00	71.28	64.46	70.62	63.68	69.80	64.42	70.69
MAINLINE BETWEEN UNION OFF AND ON	22.09	8.31	21.62	11.29	25.55	14.89	22.14	12.54	64.58	70.92	64.75	70.25	64.19	68.73	64.74	70.03
MAINLINE BETWEEN UNION ON AND BASCOM OFF	22.11	5.93	22.01	8.39	26.13	11.38	22.79	9.55	64.38	71.57	64.88	71.07	64.23	70.17	64.93	70.98
MAINLINE BETWEEN BASCOM OFF AND ROUTE 17 OFF	18.52	2.96	19.52	4.96	24.21	7.35	20.58	6.02	63.78	71.40	63.81	70.73	61.57	69.24	63.50	70.54

Description	Average Density								Average Speed							
	3-4		4-5		5-6		6-7		3-4		4-5		5-6		6-7	
	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV
MAINLINE BETWEEN ROUTE 17 OFF AND BASCOM ON	8.54	3.08	9.91	5.20	12.90	7.50	10.79	6.22	65.87	72.02	65.97	71.39	65.41	70.45	65.92	71.20
MAINLINE BETWEEN BASCOM ON AND ROUTE 17 ON	11.44	3.47	12.60	6.03	15.68	8.32	12.80	6.71	65.56	71.82	65.41	70.93	64.91	70.55	65.76	71.40
MAINLINE BETWEEN ROUTE 17 ON AND WINCHESTER ON	11.82	3.71	12.89	6.43	15.72	8.65	13.04	7.03	66.04	72.36	66.41	71.66	66.01	71.24	66.48	71.78
MAINLINE BETWEEN WINCHESTER ON AND SARATOGA OFF	17.88	4.32	19.53	7.70	24.52	10.25	19.76	8.22	65.14	72.22	65.13	71.39	62.87	70.03	65.05	71.24
MAINLINE BETWEEN SARATOGA OFF AND ON	13.14	4.81	13.70	9.99	16.61	12.70	13.98	10.42	65.11	72.18	65.50	71.32	65.21	70.05	65.56	70.87
MAINLINE BETWEEN SARATOGA ON AND SARATOGA/SUNNYVALE OFF	16.98	4.95	17.30	9.68	20.85	12.04	17.70	10.06	64.11	71.68	64.53	70.86	63.78	70.01	64.41	70.43
MAINLINE BETWEEN SARATOGA/SUNNYVALE OFF AND ON	13.01	4.41	13.78	8.57	16.47	10.74	13.64	8.73	64.85	72.18	65.28	71.30	64.86	70.70	65.48	71.12
MAINLINE BETWEEN SARATOGA/SUNNYVALE ON AND STEVENS CREEK OFF	17.85	4.82	18.30	9.32	21.05	12.29	17.89	9.66	64.55	71.71	63.84	70.17	63.59	69.37	65.17	70.69
MAINLINE BETWEEN STEVENS CREEK OFF AND ROUTE 280 OFF	13.88	2.18	13.64	4.09	17.55	6.66	15.21	5.23	64.85	72.24	65.46	71.23	64.43	70.66	65.09	71.14
MAINLINE BETWEEN ROUTE 280 OFF AND SB ROUTE 280 ON	5.93	2.03	5.49	3.72	8.82	6.10	7.14	4.90	65.98	72.78	66.65	72.00	66.20	71.40	66.64	71.81
MAINLINE BETWEEN SB ROUTE 280 ON AND 280/STEVENS CREEK ON	9.47	2.36	8.70	4.38	12.32	6.87	10.58	5.74	64.50	70.48	64.27	69.41	63.95	69.30	63.95	69.61
MAINLINE BETWEEN 280/STEVENS CREEK ON AND HOMESTEAD ON	11.56	2.56	10.71	4.71	15.30	7.26	13.20	6.10	65.27	70.87	66.06	70.49	64.51	69.57	65.33	70.36
MAINLINE BETWEEN HOMESTEAD ON AND FREMONT OFF	21.66	5.66	18.98	10.61	26.32	15.18	23.11	13.28	61.76	67.24	62.25	66.44	58.50	62.50	60.36	64.54
MAINLINE BETWEEN FREMONT OFF AND ON	16.31	4.97	14.18	9.34	19.43	12.71	17.32	11.44	64.16	70.68	64.77	69.25	62.59	65.74	63.32	66.57
MAINLINE BETWEEN FREMONT ON AND SB ROUTE 82 OFF	19.42	4.56	17.57	8.15	22.39	11.15	19.91	10.06	63.23	70.90	64.30	70.77	62.98	69.12	63.83	69.89
MAINLINE BETWEEN SB ROUTE 82 OFF AND ON	13.40	13.40	13.47	13.47	17.88	17.88	16.13	16.13	65.59	65.59	65.66	65.66	63.91	63.91	64.58	64.58
MAINLINE BETWEEN SB ROUTE 82 ON AND NB ROUTE 82 OFF	18.76	3.02	17.53	5.25	22.96	8.22	20.61	7.14	57.34	71.94	57.35	71.68	54.83	70.30	55.15	70.65
MAINLINE BETWEEN NB ROUTE 82 OFF AND ROUTE 82 ON	16.09	3.13	15.45	5.41	19.74	8.33	17.15	7.32	60.38	70.74	58.14	71.38	58.04	69.97	58.79	70.22
MAINLINE BETWEEN ROUTE 82 ON AND EB ROUTE 237 OFF	14.03	3.20	13.83	5.72	16.50	8.43	14.41	7.45	55.80	70.81	48.92	71.10	53.76	69.89	54.57	70.23
MAINLINE BETWEEN EB ROUTE 237 OFF AND EB ROUTE 237 ON	10.59	3.38	9.38	5.61	12.19	8.33	10.78	7.41	63.88	70.15	62.52	71.01	64.17	70.05	64.53	70.30
MAINLINE BETWEEN EB ROUTE 237 ON AND EVELYN OFF	10.52	3.19	9.34	5.07	12.31	7.66	10.93	6.73	64.68	71.02	64.53	71.44	63.77	70.46	63.61	70.57
MAINLINE BETWEEN EVELYN OFF AND CENTRAL ON	10.16	3.07	8.77	4.57	11.49	6.97	9.71	5.99	65.53	71.98	65.89	71.95	65.47	71.03	65.84	71.29
MAINLINE BETWEEN CENTRAL ON AND MOFFET OFF	11.69	3.21	10.60	4.42	14.22	6.84	12.22	5.82	62.04	70.16	61.91	71.33	60.35	70.41	60.91	70.75
MAINLINE BETWEEN MOFFET OFF AND SHORELINE OFF/NB 85 & NB 101 CONNECTOR	8.64	3.35	7.72	4.40	10.23	6.74	8.70	5.67	65.59	70.86	65.88	71.24	65.44	70.12	65.80	70.48

**State Route 85 Southbound - VTA Express Lanes Project**  
**Existing Conditions - Density - AM Peak**

Description	Average Density						Average Speed					
	6-7		7-8		8-9		6-7		7-8		8-9	
	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV
MAINLINE BETWEEN 85CONNECTORS/SHORELINE ON AND MOFETT ON	3.28	3.86	6.48	5.91	8.35	7.19	66.38	73.45	65.80	72.75	65.60	72.29
MAINLINE BETWEEN MOFETT ON AND CENTRAL EXPWY OFF	3.97	3.37	8.30	5.12	10.52	6.30	67.32	73.31	66.32	72.63	66.17	72.11
MAINLINE BETWEEN CENTRAL EXPWY OFF AND EVELYN ON	3.74	3.00	7.83	4.68	9.94	5.88	67.56	73.19	66.43	72.83	66.17	72.46
MAINLINE BETWEEN EVELYN ON AND RTE 237 OFF	4.02	2.60	8.83	4.30	11.37	5.47	66.53	73.22	65.08	73.08	64.38	72.46
MAINLINE BETWEEN RTE 237 OFF AND ON	3.91	2.55	8.79	4.32	11.19	5.76	67.26	73.32	66.13	73.05	65.86	72.51
MAINLINE BETWEEN RTE 237 ON AND NB RTE 82 ON	7.35	2.48	14.50	4.56	17.70	7.15	66.54	73.57	65.10	73.27	64.52	72.80
MAINLINE BETWEEN NB RTE 82 ON AND RTE 82 OFF	7.72	2.48	16.31	4.85	21.31	8.53	64.09	73.77	58.37	73.05	53.41	71.08
MAINLINE BETWEEN RTE 82 OFF AND SB RTE 82 ON	7.55	2.56	15.05	5.51	18.31	9.80	65.56	73.80	63.07	71.95	61.43	70.52
MAINLINE BETWEEN SB RTE 82 ON AND FREMONT OFF	8.10	3.05	15.95	8.07	20.08	13.56	67.78	74.12	65.66	72.53	64.82	71.09
MAINLINE BETWEEN FREMONT OFF AND ON	7.87	2.85	15.14	7.28	17.83	11.56	65.03	73.99	64.14	72.35	63.64	71.09
MAINLINE BETWEEN FREMONT ON AND HOMESTEAD OFF	10.87	1.62	21.87	5.56	27.09	9.60	60.44	72.71	59.17	69.33	58.66	67.28
MAINLINE BETWEEN HOMESTEAD OFF AND RTE 280 OFF	8.06	1.08	14.61	3.26	17.72	5.55	65.67	74.49	64.29	73.92	63.61	73.47
MAINLINE BETWEEN RTE 280 OFF AND NB RTE 280 ON	2.69	1.08	5.98	3.32	7.47	5.64	65.62	74.63	65.77	74.25	66.26	73.61
MAINLINE BETWEEN NB RTE 280 ON AND SB RTE 280 ON	3.91	1.15	8.39	3.58	10.28	5.95	66.07	74.50	65.78	73.89	66.09	73.24
MAINLINE BETWEEN SB RTE 280 ON AND STEVENS CREEK OFF	3.48	0.98	8.36	3.04	11.11	4.86	66.96	74.70	66.06	74.30	65.01	73.68
MAINLINE BETWEEN STEVENS CREEK OFF AND ON	3.06	0.94	7.05	3.04	9.07	4.96	67.10	74.74	67.19	74.71	67.38	74.25
MAINLINE BETWEEN STEVENS CREEK ON AND DE ANZA OFF	5.07	1.32	11.35	5.07	15.09	8.29	66.92	75.73	65.69	74.29	65.25	73.03
MAINLINE BETWEEN DE ANZA OFF AND ON	4.05	1.50	8.58	4.99	11.26	7.89	66.86	76.50	65.95	74.54	65.67	73.16
MAINLINE BETWEEN DE ANZA ON AND SARATOGA OFF	4.68	1.81	10.44	5.65	14.62	9.06	66.48	76.27	65.43	73.74	64.78	72.18
MAINLINE BETWEEN SARATOGA OFF AND ON	3.49	1.65	7.59	4.66	10.99	7.47	66.50	76.37	65.90	73.87	65.58	72.60
MAINLINE BETWEEN SARATOGA ON AND WINCHESTER OFF	5.77	2.18	13.49	7.54	18.15	11.94	66.68	76.41	65.06	73.53	64.25	71.84
MAINLINE BETWEEN WINCHESTER OFF AND RTE 17 OFF	4.93	1.68	10.83	5.07	14.14	7.57	67.21	75.93	66.10	73.81	65.84	72.48

Description	Average Density						Average Speed					
	6-7		7-8		8-9		6-7		7-8		8-9	
	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV
MAINLINE BETWEEN RTE 17 OFF AND BASCOM OFF	3.09	1.28	7.24	3.76	9.35	5.49	66.88	75.93	66.07	73.99	65.92	73.11
MAINLINE BETWEEN BASCOM OFF AND RTE 17 ON	2.45	1.23	5.61	3.45	7.09	5.08	66.56	76.10	66.39	74.26	66.59	73.61
MAINLINE BETWEEN RTE 17 ON AND BASCOM ON	3.34	1.16	8.38	3.36	10.63	4.77	68.02	76.18	66.79	74.11	66.40	73.19
MAINLINE BETWEEN BASCOM ON AND UNION/SAMARITN OFF	8.24	1.31	16.82	4.27	19.79	5.59	68.22	76.70	65.95	74.98	65.35	74.26
MAINLINE BETWEEN UNION/SAMARITN OFF AND UNION ON	7.63	1.74	15.24	5.97	17.68	7.44	67.76	77.48	65.38	74.94	64.82	74.23
MAINLINE BETWEEN UNION ON AND CAMDEN OFF	9.52	2.77	19.71	7.61	23.80	9.02	56.73	75.97	54.02	72.74	53.31	71.63
MAINLINE BETWEEN CAMDEN OFF AND ON	6.57	3.19	13.37	6.98	15.79	7.94	66.13	75.75	65.07	73.13	64.64	72.64
MAINLINE BETWEEN CAMDEN ON AND ALMADEN EXPWY OFF	8.73	3.54	17.19	7.48	20.26	8.54	65.19	75.16	63.41	72.06	62.72	71.54
MAINLINE BETWEEN ALMADEN EXPWY OFF AND SB ALMADEN EXPWY ON	7.14	3.17	13.86	6.34	15.93	6.78	65.48	74.89	64.66	72.43	64.38	72.06
MAINLINE BETWEEN SB ALMADEN EXPWY ON AND NB ALMADEN EXPWY ON	7.11	3.11	13.79	6.17	15.83	6.68	65.62	74.88	64.94	72.66	64.66	72.29
MAINLINE BETWEEN NB ALMADEN EXPWY ON AND RTE 87 OFF	8.67	3.14	16.18	6.06	17.72	6.49	65.73	74.61	64.22	72.26	63.66	71.79
MAINLINE BETWEEN RTE 87 OFF AND SANTA TERESA OFF	8.37	3.11	15.58	5.88	17.04	6.22	65.58	74.79	62.58	72.45	60.73	71.80
MAINLINE BETWEEN SANTA TERESA OFF AND ON	12.00	3.53	20.98	6.55	21.65	6.79	65.54	75.12	63.76	72.67	63.46	72.42
MAINLINE BETWEEN SANTA TERESA ON AND RTE 87 ON	12.39	3.94	22.08	7.19	23.07	7.42	64.95	75.07	62.57	72.19	62.14	71.96
MAINLINE BETWEEN RTE 87 ON AND BLOSSOM HILL OFF	15.39	5.14	27.86	8.33	28.82	8.42	62.39	74.23	60.81	71.90	60.76	71.76
MAINLINE BETWEEN BLOSSOM HILL OFF AND WB BLOSSOM HILL ON	14.44	5.29	26.36	8.43	27.28	8.55	64.70	74.27	62.94	72.07	62.68	71.79
MAINLINE BETWEEN WB BLOSSOM HILL ON AND EB BLOSSOM HILL ON	14.87	5.44	27.57	8.63	28.89	8.92	63.97	73.77	61.37	71.14	60.84	70.65
MAINLINE BETWEEN EB BLOSSOM HILL ON AND COTTLE OFF	14.69	4.89	25.98	7.72	26.52	7.37	64.57	73.72	63.27	71.76	63.36	71.55
MAINLINE BETWEEN COTTLE OFF AND SB COTTLE ON	13.28	4.85	23.48	7.69	22.07	7.23	64.36	73.44	62.81	71.14	63.34	71.19
MAINLINE BETWEEN SB COTTLE ON AND NB COTTLE ON	13.76	4.86	24.24	7.71	22.93	7.15	64.11	73.13	62.19	70.95	62.69	71.05
MAINLINE BETWEEN NB COTTLE ON AND GREAT OAKS OFF	14.58	4.66	26.28	7.18	25.42	6.45	64.17	73.18	61.26	71.15	61.39	71.24
MAINLINE BETWEEN GREAT OAKS OFF AND BERNAL OFF	12.47	4.05	21.25	5.83	18.93	4.76	64.42	73.59	62.82	71.95	62.66	71.80
MAINLINE BETWEEN BERNAL OFF AND 85 SPLIT	10.51	4.51	17.45	6.32	13.37	5.00	64.52	72.94	63.41	70.89	64.23	71.90

**State Route 85 Southbound - VTA Express Lanes Project**  
**Existing Conditions - Density - PM Peak Period**

Description	Average Density								Average Speed							
	3-4		4-5		5-6		6-7		3-4		4-5		5-6		6-7	
	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV
MAINLINE BETWEEN 85CONNECTORS/SHORELINE ON AND MOFETT ON	16.42	15.52	19.02	13.28	31.24	15.53	37.07	15.21	64.76	70.14	64.02	70.60	50.24	68.56	43.31	68.56
MAINLINE BETWEEN MOFETT ON AND CENTRAL EXPWY OFF	20.40	13.30	23.74	12.10	40.50	19.04	40.79	18.96	63.91	69.73	62.34	69.94	47.07	58.57	36.77	56.07
MAINLINE BETWEEN CENTRAL EXPWY OFF AND EVELYN ON	19.65	12.12	25.54	11.24	93.31	18.17	126.09	18.59	64.47	69.79	58.54	69.82	15.46	54.90	10.83	53.64
MAINLINE BETWEEN EVELYN ON AND RTE 237 OFF	21.83	11.39	33.75	11.24	120.70	19.28	134.29	16.78	60.03	69.89	48.64	66.75	11.12	50.22	9.71	59.29
MAINLINE BETWEEN RTE 237 OFF AND ON	20.54	11.34	55.28	11.88	124.34	19.24	124.52	17.91	63.32	69.90	32.08	66.14	11.71	52.41	11.88	53.42
MAINLINE BETWEEN RTE 237 ON AND NB RTE 82 ON	43.61	12.99	82.32	14.91	102.81	21.86	100.90	22.62	43.26	66.14	23.50	60.93	17.73	50.90	18.26	46.36
MAINLINE BETWEEN NB RTE 82 ON AND RTE 82 OFF	60.47	16.09	80.82	16.22	91.06	18.74	88.07	19.07	29.74	58.07	22.88	57.66	19.97	58.31	20.44	58.58
MAINLINE BETWEEN RTE 82 OFF AND SB RTE 82 ON	66.93	15.16	62.01	14.59	79.42	19.04	72.29	17.35	29.75	63.79	30.73	63.39	24.29	56.96	25.85	57.63
MAINLINE BETWEEN SB RTE 82 ON AND FREMONT OFF	42.73	16.18	29.97	18.10	35.92	23.97	28.84	20.77	51.22	64.10	56.47	62.11	55.75	57.48	56.76	63.31
MAINLINE BETWEEN FREMONT OFF AND ON	60.33	13.70	73.98	16.84	82.38	22.14	72.62	20.17	32.42	65.70	26.93	63.46	23.89	59.89	26.49	61.83
MAINLINE BETWEEN FREMONT ON AND HOMESTEAD OFF	47.59	15.03	49.19	18.06	44.92	23.18	51.60	21.78	44.37	64.96	40.56	64.41	45.85	62.19	43.91	62.64
MAINLINE BETWEEN HOMESTEAD OFF AND RTE 280 OFF	29.31	6.75	31.39	8.25	33.04	11.26	31.62	10.39	55.64	69.18	53.60	68.46	51.34	66.14	51.65	65.64
MAINLINE BETWEEN RTE 280 OFF AND NB RTE 280 ON	16.94	6.68	17.44	8.31	18.17	11.04	17.60	10.01	64.36	71.81	64.30	71.69	64.47	71.31	64.54	71.48
MAINLINE BETWEEN NB RTE 280 ON AND SB RTE 280 ON	20.78	7.23	21.01	8.74	22.44	11.77	21.92	10.69	63.20	71.10	63.30	71.23	63.00	70.51	63.15	70.87
MAINLINE BETWEEN SB RTE 280 ON AND STEVENS CREEK OFF	21.76	6.76	23.17	8.04	28.06	10.82	23.92	9.80	61.60	71.68	59.19	70.63	50.20	69.62	57.35	70.20
MAINLINE BETWEEN STEVENS CREEK OFF AND ON	20.93	8.31	21.05	9.62	21.48	11.93	20.49	11.07	64.10	72.16	63.79	71.30	63.55	70.67	63.97	71.07
MAINLINE BETWEEN STEVENS CREEK ON AND LANE DROP	32.89	14.16	33.22	15.88	44.47	18.05	30.31	15.04	60.22	70.28	60.12	69.72	45.23	68.98	52.17	66.94
MAINLINE BETWEEN LANE DROP AND DE ANZA OFF	41.89	15.43	40.77	17.31	43.63	19.82	40.82	17.60	47.79	69.11	47.79	68.34	46.57	67.57	53.42	68.82
MAINLINE BETWEEN E ANZA OFF AND ON	26.59	14.17	27.33	15.81	28.18	17.98	24.58	16.07	61.35	70.05	61.10	69.87	58.61	68.95	61.96	70.24
MAINLINE BETWEEN E ANZA ON AND SARATOGA OFF	31.06	15.93	31.81	17.79	35.64	20.73	29.77	18.36	61.08	68.70	61.00	68.37	56.12	67.44	61.66	68.67
MAINLINE BETWEEN SARATOGA OFF AND ON	73.68	15.79	91.12	18.76	56.58	23.30	91.21	19.04	30.45	64.83	25.23	62.58	31.47	59.05	24.05	63.42
MAINLINE BETWEEN SARATOGA ON AND WINCHESTER OFF	34.27	18.00	35.09	20.89	35.39	21.27	34.16	22.12	59.83	67.56	59.60	66.86	53.52	66.75	59.65	66.70
MAINLINE BETWEEN WINCHESTER OFF AND RTE 17 OFF	25.48	12.68	26.58	14.77	27.08	17.15	26.08	15.68	63.20	69.77	62.99	69.33	62.65	68.85	63.28	69.40
MAINLINE BETWEEN RTE 17 OFF AND BASCOM OFF	22.40	10.66	25.28	13.08	27.55	15.68	26.31	14.45	61.10	69.66	59.90	68.43	58.31	67.11	57.66	67.65

Description	Average Density								Average Speed							
	3-4		4-5		5-6		6-7		3-4		4-5		5-6		6-7	
	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV	GP	HOV
MAINLINE BETWEEN BASCOM OFF AND RTE 17 ON	18.51	9.72	22.52	12.08	29.89	15.08	26.57	13.86	64.14	70.96	59.44	69.89	46.86	66.63	49.91	67.99
MAINLINE BETWEEN RTE 17 ON AND BASCOM ON	20.39	9.39	64.17	16.02	132.66	30.03	131.02	28.19	64.23	70.90	24.19	58.67	10.54	44.63	10.76	45.53
MAINLINE BETWEEN BASCOM ON AND UNION/SAMARITN OFF	34.94	11.96	90.89	20.20	113.34	28.37	114.39	28.81	59.25	69.74	20.97	54.96	15.42	47.33	15.10	45.65
MAINLINE BETWEEN UNION/SAMARITN OFF AND UNION ON	76.84	20.68	90.23	20.65	83.56	22.86	92.18	24.60	26.11	62.48	21.92	63.69	23.59	62.37	20.75	60.06
MAINLINE BETWEEN UNION ON AND CAMDEN OFF	28.67	19.97	30.32	16.24	35.29	17.53	30.29	18.42	60.45	62.58	59.35	69.83	54.79	69.30	59.02	69.16
MAINLINE BETWEEN CAMDEN OFF AND ON	26.53	15.15	29.11	15.62	34.25	17.17	27.18	17.72	62.63	70.80	60.71	70.25	52.31	68.81	61.71	70.02
MAINLINE BETWEEN CAMDEN ON AND ALMADEN EXPWY OFF	32.58	16.35	35.25	17.70	37.01	19.47	33.47	20.38	59.20	68.36	58.10	67.43	57.55	66.34	58.72	66.81
MAINLINE BETWEEN ALMADEN EXPWY OFF AND SB ALMADEN EXPWY ON	24.05	12.54	26.81	13.80	27.75	14.79	24.29	15.97	63.60	69.75	63.28	69.24	63.14	68.78	63.91	69.46
MAINLINE BETWEEN SB ALMADEN EXPWY ON AND NB ALMADEN EXPWY ON	23.88	11.87	26.59	13.17	27.51	13.98	24.37	15.12	64.20	70.52	63.98	70.02	63.97	69.67	64.21	70.31
MAINLINE BETWEEN NB ALMADEN EXPWY ON AND RTE 87 OFF	24.01	11.41	26.57	12.87	37.30	14.09	30.07	15.31	63.19	69.40	62.31	68.84	49.08	67.04	54.38	67.41
MAINLINE BETWEEN RTE 87 OFF AND SANTA TERESA OFF	29.85	11.44	26.49	14.77	62.65	16.52	44.84	19.27	45.59	64.29	55.46	56.80	24.93	56.88	31.60	51.86
MAINLINE BETWEEN SANTA TERESA OFF AND ON	28.99	11.32	32.06	12.49	46.64	13.62	45.36	16.02	60.43	69.83	59.01	69.42	44.20	67.20	45.28	67.24
MAINLINE BETWEEN SANTA TERESA ON AND RTE 87 ON	34.47	13.01	37.86	14.04	57.50	15.17	51.60	17.99	55.06	67.68	53.62	67.56	37.42	66.06	41.82	66.17
MAINLINE BETWEEN RTE 87 ON AND BLOSSOM HILL OFF	37.20	12.40	43.74	13.33	44.49	13.51	46.63	17.10	53.18	69.52	48.21	68.93	50.57	66.15	48.14	63.21
MAINLINE BETWEEN BLOSSOM HILL OFF AND WB BLOSSOM HILL ON	33.92	13.44	33.88	13.20	31.67	12.39	29.27	14.82	61.08	69.46	61.81	69.47	61.89	70.08	62.43	69.95
MAINLINE BETWEEN WB BLOSSOM HILL ON AND EB BLOSSOM HILL ON	35.80	13.67	36.52	13.40	33.98	12.43	30.53	14.99	58.63	68.47	58.13	68.31	59.00	69.01	61.09	69.17
MAINLINE BETWEEN EB BLOSSOM HILL ON AND COTTLE OFF	31.32	11.43	32.30	11.05	30.27	9.69	27.79	11.63	62.42	70.03	62.45	69.87	62.65	70.45	62.94	70.74
MAINLINE BETWEEN COTTLE OFF AND SB COTTLE ON	26.24	11.07	27.57	10.67	24.00	9.33	21.29	11.22	63.07	69.59	61.86	69.42	63.58	70.18	63.92	70.34
MAINLINE BETWEEN SB COTTLE ON AND NB COTTLE ON	27.47	10.88	30.47	10.52	25.45	9.23	22.54	11.04	61.94	69.34	58.62	69.33	62.36	69.87	62.98	69.91
MAINLINE BETWEEN NB COTTLE ON AND GREAT OAKS OFF	29.53	10.49	34.33	10.55	28.10	8.75	24.52	10.36	61.33	69.55	56.40	67.53	61.52	70.12	62.41	70.26
MAINLINE BETWEEN GREAT OAKS OFF AND BERNAL OFF	27.04	8.52	33.61	9.80	24.86	6.56	22.24	7.65	60.74	70.23	54.21	64.23	60.71	71.15	61.08	70.97
MAINLINE BETWEEN BERNAL OFF AND 85 SPLIT	19.95	9.36	19.99	8.89	16.06	6.90	13.72	8.18	62.40	68.83	62.68	69.13	63.56	70.73	63.88	70.54