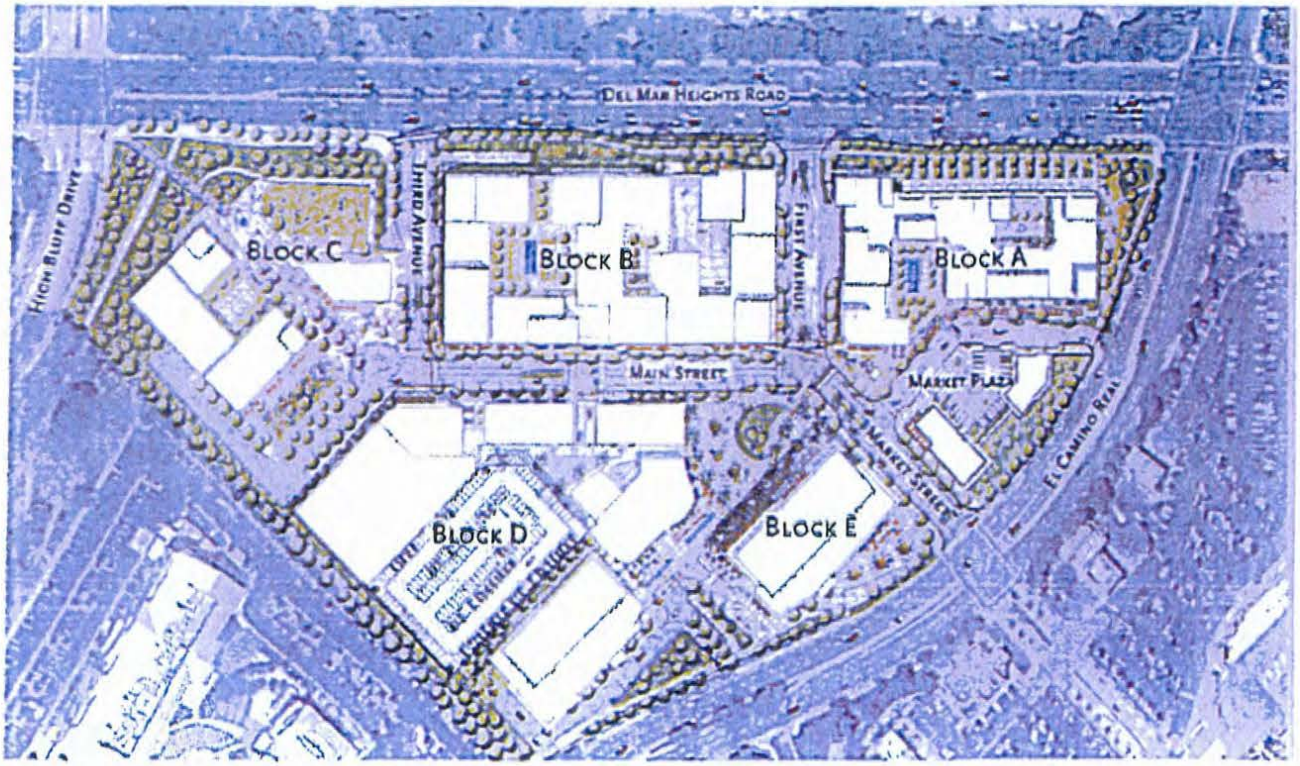
ATTACHMENT 1

Summary of Traffic Impacts by Phase

Type of Impact	Location	PHASE 1		PHASE 1 & 2		PHASE 1, 2 & 3	
		Originally Proposed Project	Reduced Main Street Alternative	Originally Proposed Project	Reduced Main Street Alternative	Originally Proposed Project	Reduced Main Street Alternative
Existing + Project Direct Significant Impacts							
Street Segments	Del Mar Heights Road (1-5 SB Ramps to I-5 NB Ramps)	NS	NS	NS	NS	SNM	SNM
	Del Mar Heights Road (1-5 NB Ramps to High Bluff Dr.)	SNM	SNM	SNM	SNM	SNM	SNM
	El Camino Real (Via de la Valle to San Dieguito Road)	SNM	SNM	SNM	SNM	SNM	SNM
	Via de la Valle (San Andres Drive to El Camino Real)	SNM	SNM	SNM	SNM	SNM	SNM
Intersection	Carmel Creek Road / Del Mar Trail	NS	NS	SM	SM	SM	SM
Near Term Direct Significant Impacts							
Street Segments	Del Mar Heights Road (1-5 SB Ramps to I-5 NB Ramps)	NS	NS	NS	NS	SNM	SNM
	Del Mar Heights Road (1-5 NB Ramps to High Bluff Dr.)	SNM	SNM	SNM	SNM	SNM	SNM
	El Camino Real (Via de la Valle to San Dieguito Road)	SNM	SNM	SNM	SNM	SNM	SNM
	Via de la Valle (San Andres Drive to El Camino Real)	SNM	SNM	SNM	SNM	SNM	SNM
Intersections	Del Mar Heights Road / I-5 NB Ramps	NS	NS	NS	NS	SNM	SNM
	Del Mar Heights Road / High Bluff Drive	NS	NS	SM	SM	SM	SM
	Del Mar Heights Road / El Camino Real	NS	NS	SM	SM	SM	SM
	Carmel Creek Road / Del Mar Trail	SM	SM	SM	SM	SM	SM
Long Term Cumulative (Year 2030) Significant Impacts							
Street Segments	Del Mar Heights Road (1-5 NB Ramps to High Bluff Dr.)	N/A	N/A	N/A	N/A	SNM	SNM
	El Camino Real (Via de la Valle to San Dieguito Road)	N/A	N/A	N/A	N/A	SNM	SNM
	Via de la Valle (San Andres Drive to El Camino Real)	N/A	N/A	N/A	N/A	SNM	SNM
Intersections	Del Mar Heights Road / I-5 NB Ramps	N/A	N/A	N/A	N/A	SNM	SNM
	Del Mar Heights Road / High Bluff Drive	N/A	N/A	N/A	N/A	SM	SM
	Del Mar Heights Road / El Camino Real	N/A	N/A	N/A	N/A	SM	SM
	El Camino Real / SR-56 EB On-Ramp	N/A	N/A	N/A	N/A	SNM	SNM
	Carmel Creek Road / Del Mar Trail	N/A	N/A	N/A	N/A	SM	SM
Freeway Ramp Meters	Del Mar Heights Road / I-5 SB On-Ramp Meter (Westbound Loop)	N/A	N/A	N/A	N/A	SNM	SNM
	Del Mar Heights Road / I-5 NB On-Ramp Meter	N/A	N/A	N/A	N/A	SNM	SNM

NS: Not Significant
SM: Significant but mitigable
SNM: Significant and not fully mitigated
N/A: Not Applicable



One Paseo

ATTACHMENT 1-1

Revised Project Site Plan

ATTACHMENT 2

DEVELOPMENT SUMMARY						
Phase/Block	Commercial Retail (Sq. Ft.)		Commercial Office (Sq. Ft.)		Residential (MF Units)	Total
	Retail	Cinema**	Corporate Office	Professional Office*		
Phase 1						
Block D	70,100	---	221,000	21,000	---	312,100
Block E	30,254	---	242,000	---	---	272,254
Phase 1 Total	*100,354*	---	*463,000*	*21,000*		*584,354*
Phase 2						
Block A	47,535	---	---	---	165	*47,535* +165 MF units
Phase 2 Total	*47,535*	---	---	---	*165*	*47,535* *+165 MF units*
Phase 3						
Block B	38,000	---	---	---	337	38,000 +337 MF units
Block C	12,611	---	---	---	106	12,611 + 106 MF units
Block D	---	48,000	---	---	---	48,000
Phase 3 Total	*50,611*	*48,000*	---	---	*443*	*98,611* *+ 443 MF units*
Total	198,500	48,000	463,000	21,000	608	730,500 + 608 MF units

*Professional Office - located on Main Street.

**Cinema - 400 seats in Phase 1 and 800 seats in Phase 3, located on Block D.

ATTACHMENT 2-1

One Paseo Trip Generation Table

(Project Buildout)

Proposed Project - Driveway Rates

Use	Amount		Trip	ADT	AM Peak Hour					PM Peak Hour				
					%*	#	In : Out	In	Out	%*	#	In : Out	In	Out
Corporate Office	245,000	SF	10 /KSF	2,450	15%	368	9 : 1	331	37	15%	368	1 : 9	37	331
Multi-Tenant Office	291,000	SF	Ln(T) = 0.756 Ln(x) + 3.95	3,786	13%	492	9 : 1	443	49	14%	530	2 : 8	106	424
Hotel	150	Rms	10 /Rm	1,500	6%	90	6 : 4	54	36	8%	120	6 : 4	72	48
Community Shopping Center	220,000	GLSF	Blended Rate**	14,781	3%	443	6 : 4	266	177	10%	1,478	5 : 5	739	739
Cinema[1]	10	screens	220 /screen	2,200	0%	0	0 : 0	0	0	24	240	41 : 59	98	142
Multi-Family Residential	608	DU	6 /DU	3,648	8%	292	2 : 8	58	233	10%	365	7 : 3	255	109
TOTAL				28,365		1,685		1,152	533		3,100		1,308	1,793

Mixed Use Reductions

Use	Amount		Trip	ADT	AM Peak Hour					PM Peak Hour				
					%*	#	In : Out	In	Out	%*	#	In : Out	In	Out
Corporate Office	245,000	SF	10 /KSF	2,450	15%	368	9 : 1	331	37	15%	368	1 : 9	37	331
Multi-Tenant Office	291,000	SF	Ln(T) = 0.756 Ln(x) + 3.95	3,786	13%	492	9 : 1	443	49	14%	530	2 : 8	106	424
Commercial Office Reduction %				3%		5%		5%	5%		4%		4%	4%
Sub-Total Commercial Office Reduction				187		43		39	4		36		6	30
Hotel	150	Rms	10 /Rm	1,500	6%	90	6 : 4	54	36	8%	120	6 : 4	72	48
Multi-Family Residential	608	DU	6 /DU	3,648	8%	292	2 : 8	58	233	10%	365	7 : 3	255	109
Residential Reduction %				10%		8%		8%	8%		10%		10%	10%
Sub-Total Residential Reduction				515		31		9	22		48		33	16
Community Shopping Center	220,000	GLSF	Blended Rate**	14,781	3%	443	6 : 4	266	177	10%	1,478	5 : 5	739	739
Cinema[1]	10	screens	220 /screen	2,200	0%	0	0 : 0	0	0	24	240	41 : 59	98	142
Commercial Retail Reduction				702		74		48	26		84		38	46
Sub-Total Commercial Retail Reduction				16,279		370		218	152		1,634		799	835
TOTAL REDUCTION				1,404		147		95	52		169		77	92

Notes:

* = Source: City of San Diego Trip Generation Manual, May 2003

** = Blended Rate:100,650sf @ 40/ksf =4,026 ADT & 30,000sf @ 150/ksf =4,500 ADT & 89,350sf @ 70/ksf =6,255 ADT, so the total is 14,781 ADT.

[1] = Cinema trip rate is based on ITE's Trip Generation, 8th edition, Land Use 443. Phasing options for a cinema ranging from 8 to 10 screens is discussed in Section 14.0

DU = Dwelling Unit

KSF = 1,000 Square Foot GLSF = Gross Leasable Square Foot

Rm = Room

ATTACHMENT 2-1

One Paseo Trip Generation Table

(Project Buildout)

NET NEW TRIPS

Condition	ADT	AM Peak Hour			PM Peak Hour		
		#	In	Out	#	In	Out
Proposed Project	28,365	1,685	1,152	533	3,100	1,308	1,793
Mixed Use Reductions	1,404	147	95	52	169	77	92
TOTAL	26,961	1,538	1,057	481	2,932	1,231	1,701

Notes:

* = Source: City of San Diego Trip Generation Manual, May 2003

ATTACHMENT 3

One Paseo Project Trip Generation

Driveway Rates

PHASE 1

Reduced Main Street Alternative

Use	Amount	Trip*	ADT	AM Peak Hour					PM Peak Hour				
				%*	#	In : Out	In	Out	%*	#	In : Out	In	Out
Corporate Office	237,750 SF	10 /KSF	2,378	15%	357	9 : 1	321	36	15%	357	1 : 9	36	321
Multi-Tenant Office	259,590 SF	Ln(T) = 0.756 Ln(x) + 3.95	3,473	13%	451	9 : 1	406	45	14%	486	2 : 8	97	389
Retail	100,650 SF	40 /KSF	4,026	3%	121	6 : 4	72	48	9%	362	5 : 5	181	181
Cinema	400 seats	1.8 /seat	720	0.3%	2	3 : 7	1	2	8%	58	7 : 3	40	17
TOTAL			**10,596**		**931**		**800**	**131**		**1,263**		**354**	**908**

Mixed Use Reductions

Use	Amount	Trip*	ADT	AM Peak Hour					PM Peak Hour				
				%*	#	In : Out	In	Out	%*	#	In : Out	In	Out
Corporate Office	237,750 SF	10 /KSF	2,378	15%	357	9 : 1	321	36	15%	357	1 : 9	36	321
Multi-Tenant Office	259,590 SF	Ln(T) = 0.756 Ln(x) + 3.95	3,473	13%	451	9 : 1	406	45	14%	486	2 : 8	97	389
Commercial Office Reduction %			3%		5%		5%	5%		4%		4%	4%
Sub-Total Commercial Office Reduction			**176**		**40**		**36**	4		**34**		**5**	**28**
Retail	100,650 SF	40 /KSF	4,026	3%	121	6 : 4	72	48	9%	362	5 : 5	181	181
Cinema	400 seats	1.8 /seat	720	0.3%	2	3 : 7	1	2	8%	58	7 : 3	40	17
Sub-Total Commercial Retail Reduction			**176**		**40**		**36**	4		**34**		**5**	**28**
TOTAL REDUCTION			**352**		**80**		**72**	**8**		**68**		**10**	**56**

Notes:

* = Source: City of San Diego Trip Generation Manual, May 2003

KSF = 1,000 Square Foot

ATTACHMENT 3

One Paseo Trip Generation Table

PHASE 1

NET NEW TRIPS

Condition	ADT	AM Peak Hour			PM Peak Hour		
		#	In	Out	#	In	Out
Reduced Main Street Alternative	10,596	931	800	131	1,263	354	908
Mixed Use Reductions	352	80	72	8	68	10	56
TOTAL	**10,245**	**851**	**728**	**122**	**1,195**	**344**	**852**

Notes:

* = Source: City of San Diego Trip Generation Manual, May 2003

ATTACHMENT 4

One Paseo Trip Generation Table

Phase 1 & 2

Driveway Rates

Reduced Main Street Alternative

Use	Amount		Trip*	ADT	AM Peak Hour						PM Peak Hour					
					%*	#	In	: Out	In	Out	%*	#	In	: Out	In	Out
Corporate Office	237,750	SF	10 /KSF	2,378	15%	357	9	: 1	321	36	15%	357	1	: 9	36	321
Multi-Tenant Office	259,590	SF	Ln(T) = 0.756 Ln(x) + 3.95	3,473	13%	451	9	: 1	406	45	14%	486	2	: 8	97	389
Community Shopping Center	166,260	SF	Blended Rate**	11,019	3%	331	6	: 4	198	132	10%	1,102	5	: 5	551	551
Multi-Family Residential	165	DU	6 /DU	990	8%	79	2	: 8	16	63	10%	99	7	: 3	69	30
Cinema	400	seats	1.8 /seat	720	0.3%	2	3	: 7	1	2	8%	58	7	: 3	40	17
TOTAL				**18,579**		**1,220**			**942**	**278**		**2,101**			**793**	**1,308**

Mixed Use Reductions

Use	Amount		Trip*	ADT	AM Peak Hour						PM Peak Hour					
					%*	#	In	: Out	In	Out	%*	#	In	: Out	In	Out
Corporate Office	237,750	SF	10 /KSF	2,378	15%	357	9	: 1	321	36	15%	357	1	: 9	36	321
Multi-Tenant Office	259,590	SF	Ln(T) = 0.756 Ln(x) + 3.95	3,473	13%	451	9	: 1	406	45	14%	486	2	: 8	97	389
Commercial Office Reduction %				3%		5%			5%	5%		4%			4%	4%
Sub-Total Commercial Office Reduction				**176**		**40**			**36**	**4**		**34**			**5**	**28**
Multi-Family Residential	165	DU	6 /DU	990	8%	79	2	: 8	16	63	10%	99	7	: 3	69	30
Residential Reduction %				10%		8%			8%	8%		10%			10%	10%
Sub-Total Residential Reduction				**99**		**6**			**1**	**5**		**10**			**7**	**3**
Community Shopping Center	166,260	SF	Blended Rate**	11,019	3%	331	6	: 4	198	132	10%	1,102	5	: 5	551	551
Cinema	400	seats	1.8 /seat	720	0.3%	2	3	: 7	1	2	8%	58	7	: 3	40	17
Commercial Retail Reduction				**275**		**47**			**38**	**9**		**44**			**12**	**31**
Sub-Total Commercial Retail Reduction				10,744		284			161	123		1,058			539	520
TOTAL REDUCTION				**549**		**93**			**75**	**18**		**87**			**24**	**63**

Notes:

* = Source: City of San Diego Trip Generation Manual, May 2003

** = Blended Rate: 100,650 sf @ 40/ksf = 4,026 ADT and 30,000 sf @ 150/ksf = 4,500 ADT, and 35,610 sf @ 70/ksf = 2,493 ADT; total ADT is 11,019.

DU = Dwelling Unit

KSF = 1,000 Square Foot

ATTACHMENT 4

One Paseo Trip Generation Table

Phase 1 & 2

NET NEW TRIPS

Condition	ADT	AM Peak Hour			PM Peak Hour		
		#	In	Out	#	In	Out
Reduced Main Street Alternative	18,579	1,220	942	278	2,101	793	1,308
Mixed Use Reductions	549	93	75	18	87	24	63
TOTAL	**18,030**	**1,127**	**867**	**260**	**2,014**	**769**	**1,245**

Notes:

* = Source: City of San Diego Trip Generation Manual, May 2003

ATTACHMENT 5

One Paseo Trip Generation Table

(Project Buildout)

Driveway Rates

Reduced Main Street Alternative

Use	Amount		Trip	ADT	AM Peak Hour					PM Peak Hour				
					%*	#	In : Out	In	Out	%*	#	In : Out	In	Out
Corporate Office	237,750	SF	10 /KSF	2,378	15%	357	9 : 1	321	36	15%	357	1 : 9	36	321
Multi-Tenant Office	259,590	SF	Ln(T) = 0.756 Ln(x) + 3.95	3,473	13%	451	9 : 1	406	45	14%	486	2 : 8	97	389
Community Shopping Center	198,500	GLSF	Blended Rate**	13,276	3%	398	6 : 4	239	159	10%	1,328	5 : 5	664	664
Cinema	1,200	seats	1.8 /seat	2,160	0.3%	6	3 : 7	2	5	8.0%	173	7 : 3	121	52
Multi-Family Residential	608	DU	6 /DU	3,648	8%	292	2 : 8	58	233	10%	365	7 : 3	255	109
TOTAL				**24,934**		**1,505**		**1,027**	**478**		**2,708**		**1,173**	**1,535**

Mixed Use Reductions

Use	Amount		Trip	ADT	AM Peak Hour					PM Peak Hour				
					%*	#	In : Out	In	Out	%*	#	In : Out	In	Out
Corporate Office	237,750	SF	10 /KSF	2,378	15%	357	9 : 1	321	36	15%	357	1 : 9	36	321
Multi-Tenant Office	259,590	SF	Ln(T) = 0.756 Ln(x) + 3.95	3,473	13%	451	9 : 1	406	45	14%	486	2 : 8	97	389
Commercial Office Reduction %				3%		5%		5%	5%		4%		4%	4%
Sub-Total Commercial Office Reduction				**176**		**40**		**36**	**4**		**34**		**5**	**28**
Multi-Family Residential	608	DU	6 /DU	3,648	8%	292	2 : 8	58	233	10%	365	7 : 3	255	109
Residential Reduction %				10%		8%		8%	8%		10%		10%	10%
Sub-Total Residential Reduction				**365**		**23**		**5**	**19**		**36**		**26**	**11**
Community Shopping Center	198,500	GLSF	Blended Rate**	13,276	3%	398	6 : 4	239	159	10%	1,328	5 : 5	664	664
Cinema	1,200	seats	1.8 /seat	2,160	0.3%	6	3 : 7	2	5	8.0%	173	7 : 3	121	52
Commercial Retail Reduction (Commercial Office + Residential)				**540**		**64**		**41**	**23**		**70**		**31**	**39**
Sub-Total Commercial Retail Reduction				14,896		341		200	141		1,430		754	676
TOTAL REDUCTION				**1,081**		**128**		**82**	**45**		**140**		**62**	**79**

Notes:

* = Source: City of San Diego Trip Generation Manual, May 2003

** = Blended Rate:100,650sf @ 40/ksf =4,026 ADT & 30,000sf @ 150/ksf =4,500 ADT & 67,850sf @ 70/ksf =4,750 ADT, so the total is 13,276 ADT.

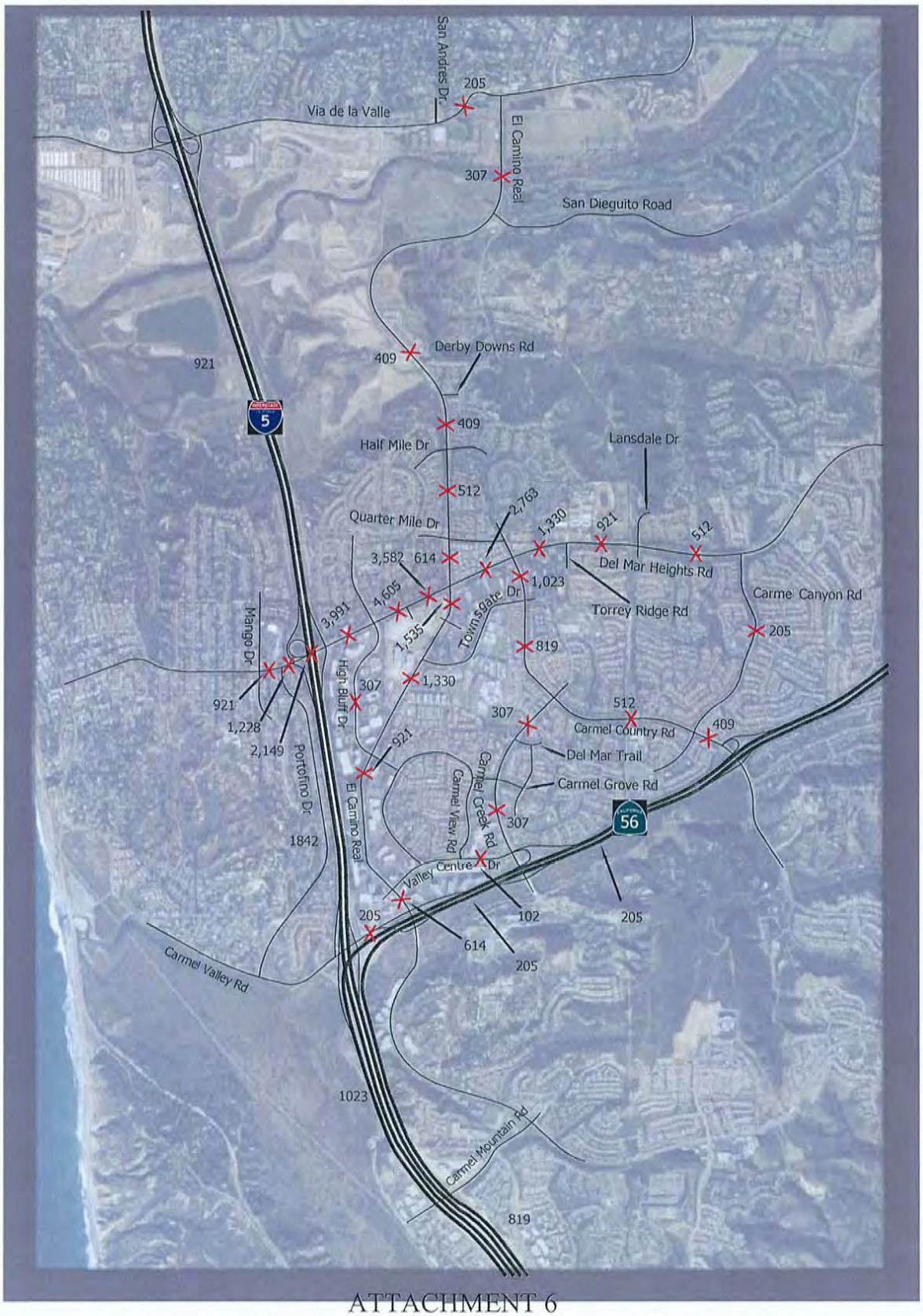
DU = Dwelling Unit

KSF = 1,000 Square Foot GLSF = Gross Leasable Square Foot

ATTACHMENT 5
One Paseo Trip Generation Table
(Project Buildout)

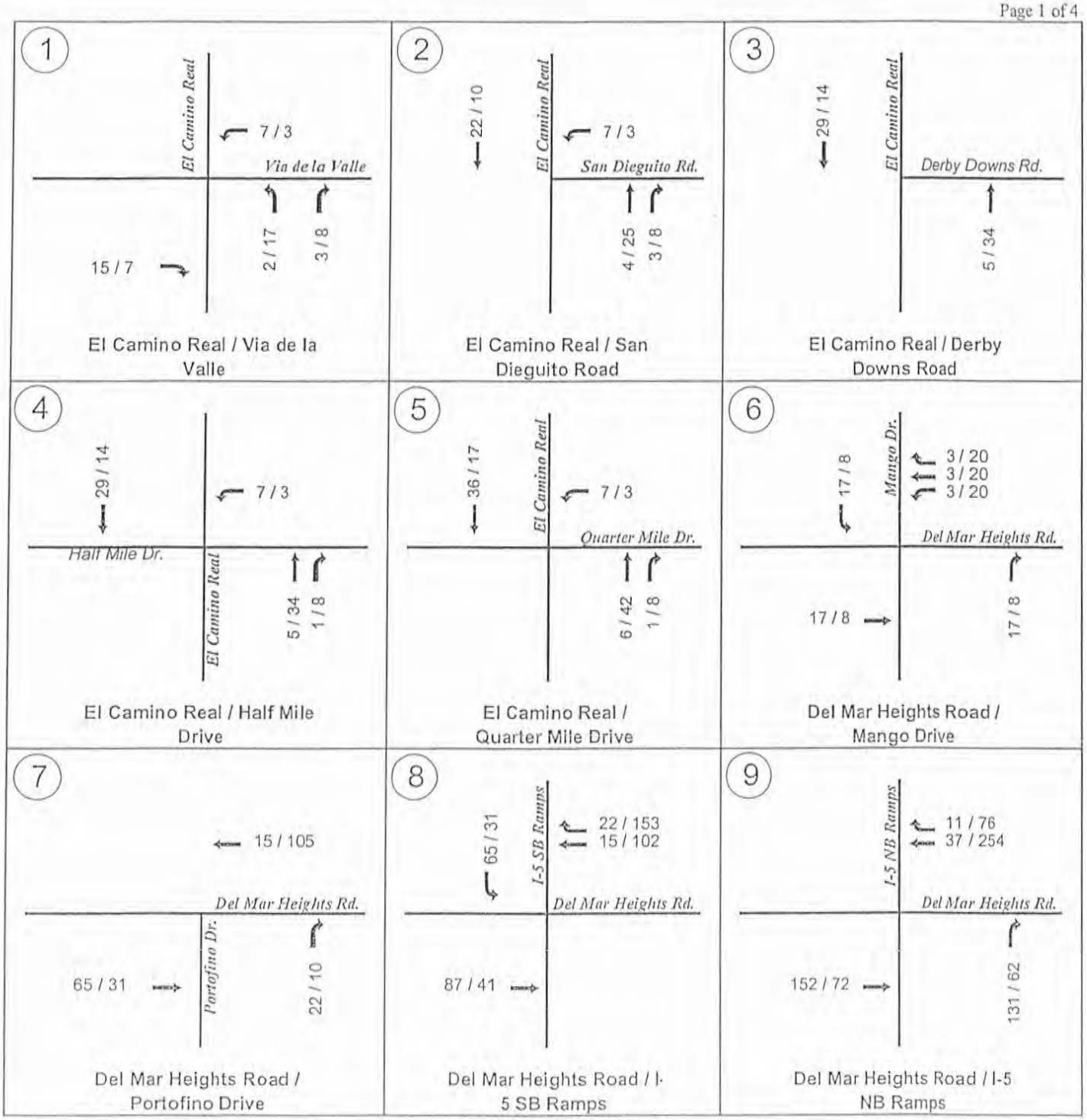
NET NEW TRIPS

Condition	ADT	AM Peak Hour			PM Peak Hour		
		#	In	Out	#	In	Out
Reduced Main Street Alternative	24,934	1,505	1,027	478	2,708	1,173	1,535
Mixed Use Reductions	1,081	128	82	45	140	62	79
TOTAL	**23,854**	**1,377**	**944**	**433**	**2,568**	**1,111**	**1,456**
Proposed Project	26,961	1,538	1,057	481	2,932	1,231	1,701
Reduced Main St. Alt. % Reduction	11%	10.5%	10.7%	10%	12.4%	9.7%	14.4%



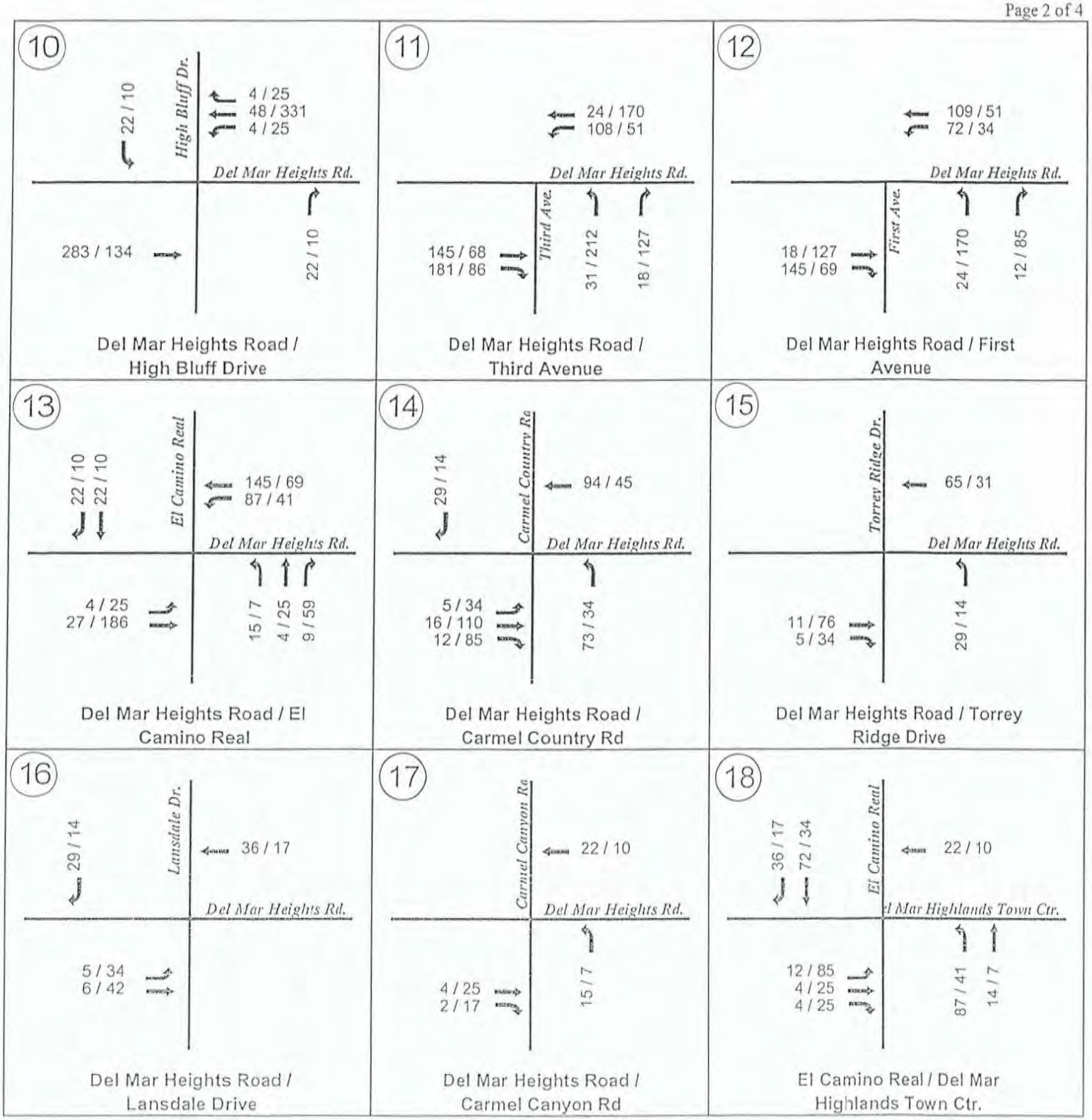
ATTACHMENT 6

Project Only (Phase 1) Average Daily Traffic



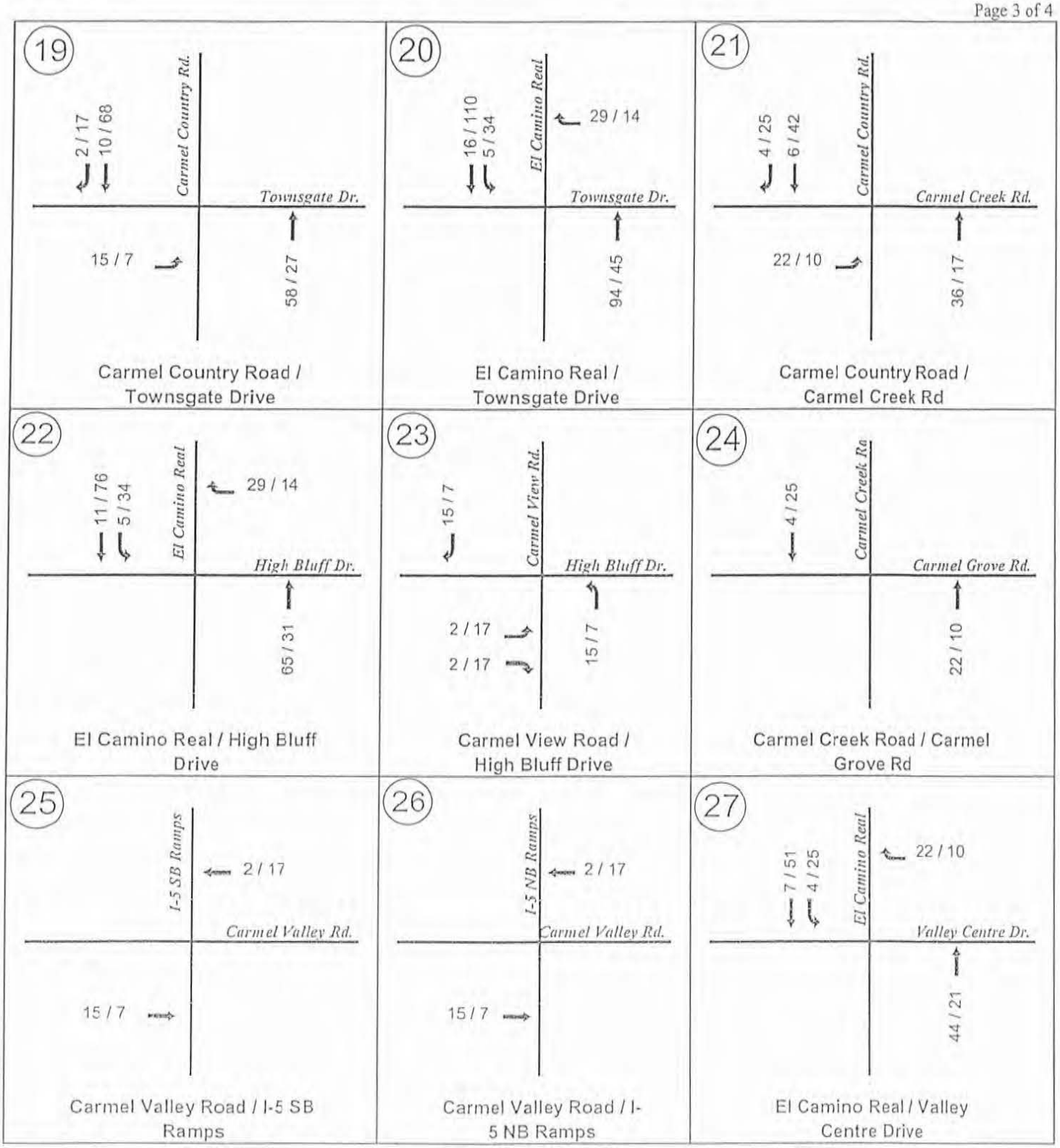
ATTACHMENT 7

Project Only (Phase 1) AM/PM Peak Hour Traffic



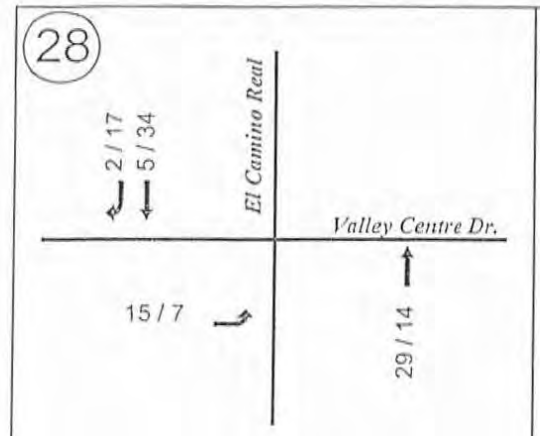
ATTACHMENT 7

Project Only AM/PM Peak Hour Traffic

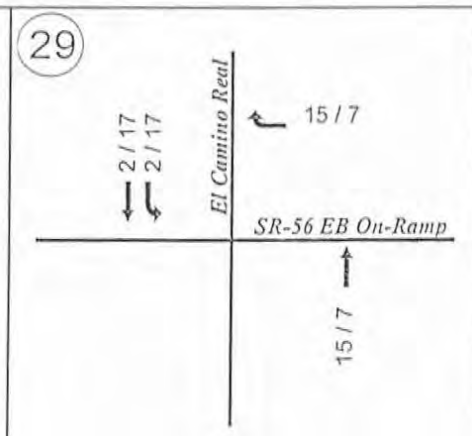


ATTACHMENT 7

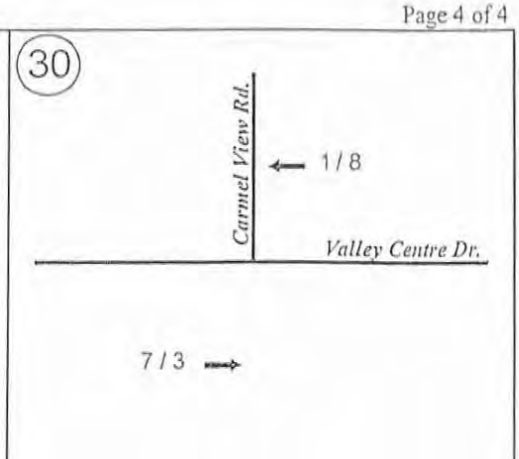
Project Only AM/PM Peak Hour Traffic



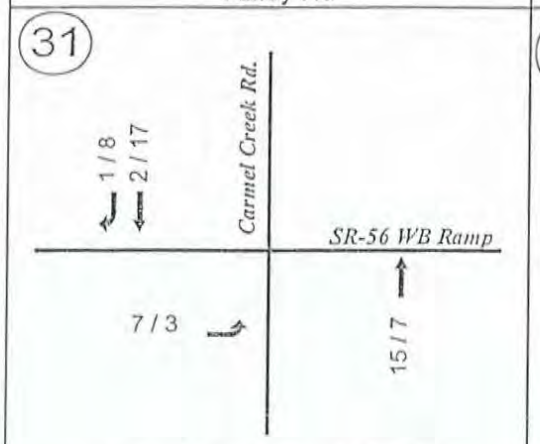
El Camino Real / Carmel Valley Rd



El Camino Real / SR-56 EB On Ramp

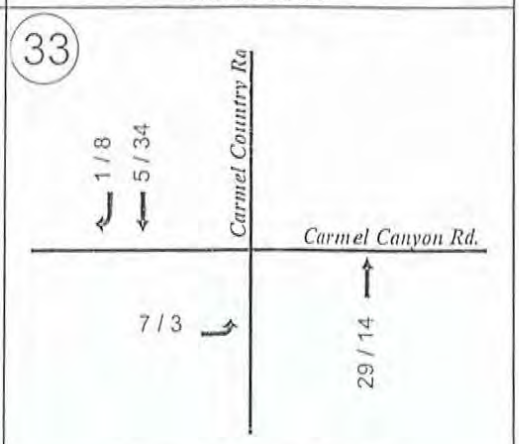


Carmel View Road / Valley Centre Drive

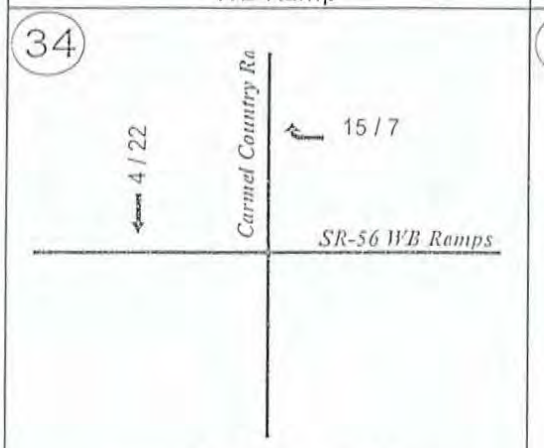


Carmel Creek Road / SR-56 WB Ramp

Carmel Creek Road / SR-56 EB Ramps

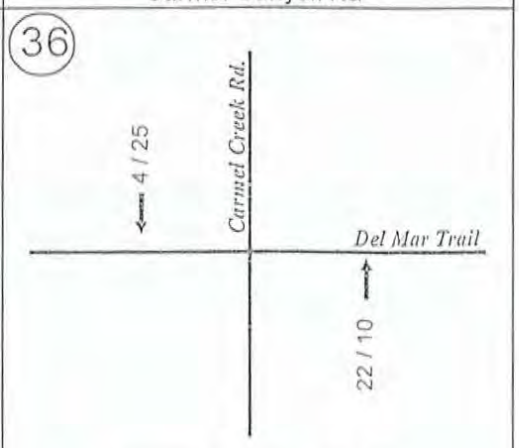


Carmel Country Road / Carmel Canyon Rd



Carmel Country Road / SR-56 WB Ramps

Carmel Country Road / SR-56 EB Ramps



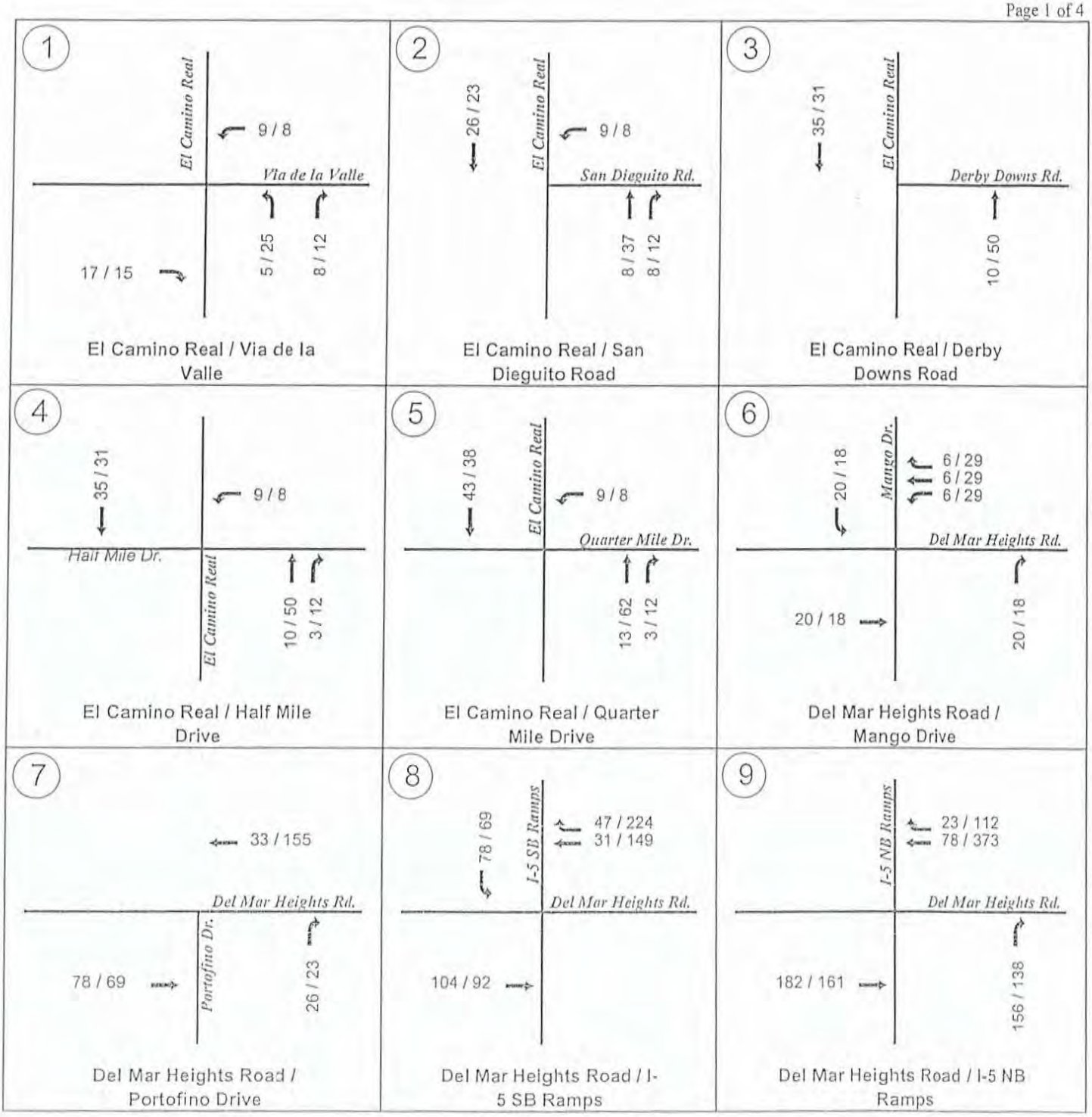
Carmel Creek Road / Del Mar Trail

ATTACHMENT 7

Project Only AM/PM Peak Hour Traffic

ATTACHMENT 8

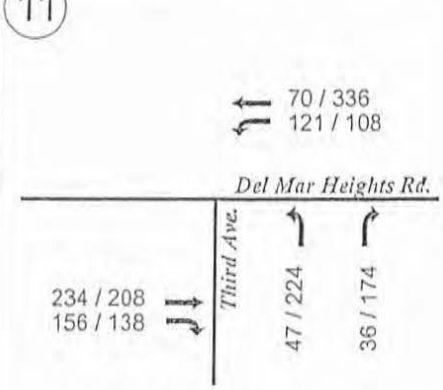
Project Only (Phase 1&2) Average Daily Traffic



ATTACHMENT 9

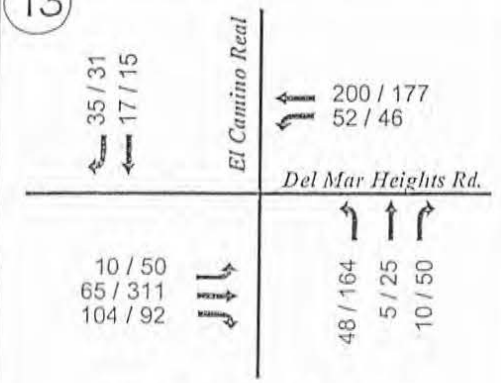
Project Only (Phase 1 & 2) AM/PM Peak Hour Traffic

Del Mar Heights Road / High Bluff Drive

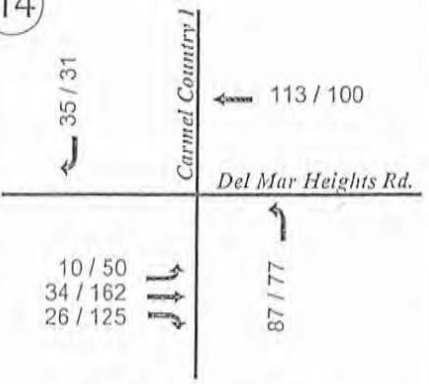


Del Mar Heights Road / Third Avenue

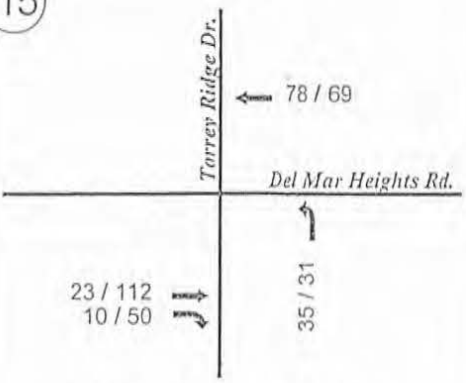
Del Mar Heights Road / First Avenue



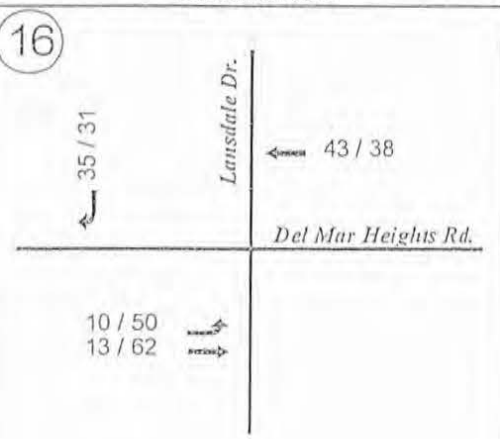
Del Mar Heights Road / El Camino Real



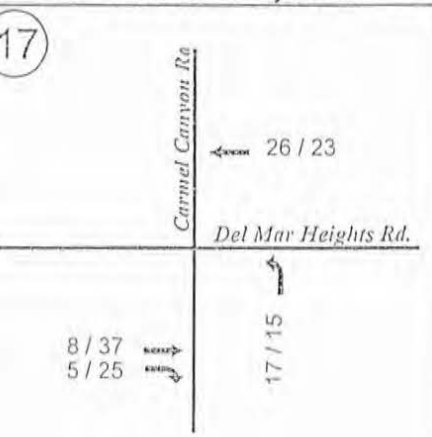
Del Mar Heights Road / Carmel Country Rd



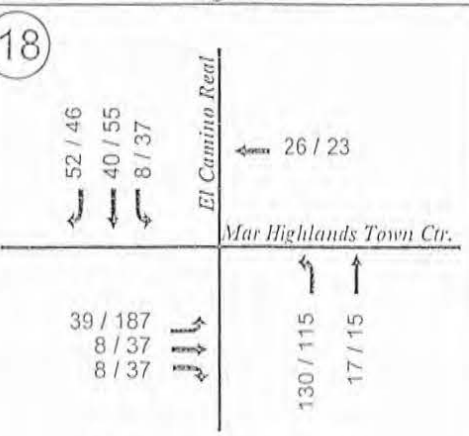
Del Mar Heights Road / Torrey Ridge Drive



Del Mar Heights Road / Lansdale Drive



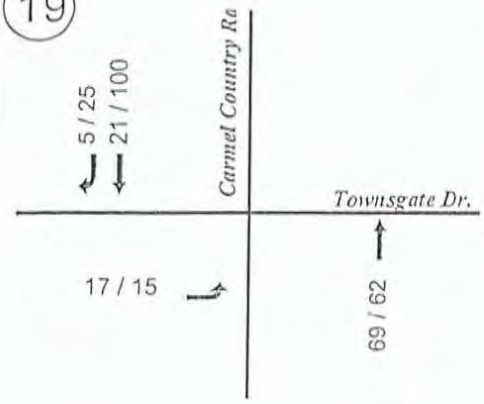
Del Mar Heights Road / Carmel Canyon Rd



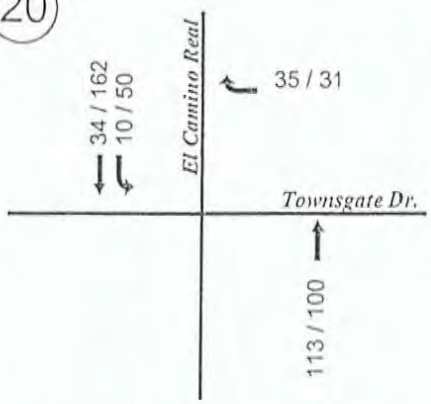
El Camino Real / Del Mar Highlands Town Ctr.

ATTACHMENT 9

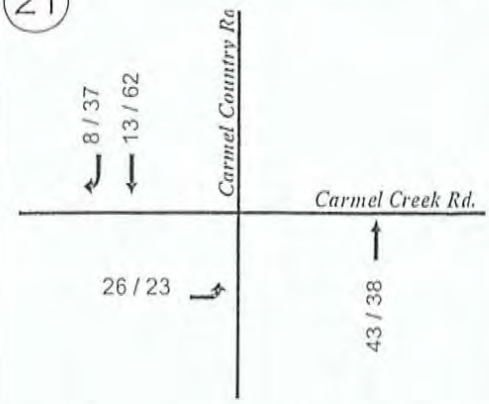
Project Only AM/PM Peak Hour Traffic



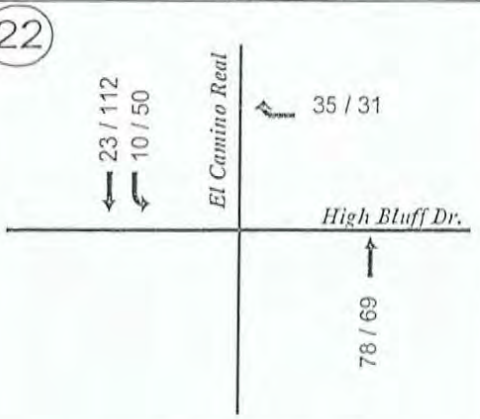
Carmel Country Road / Townsgate Drive



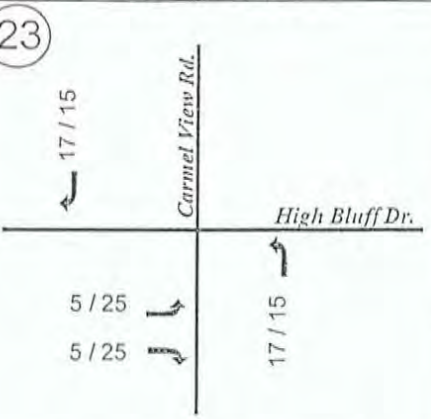
El Camino Real / Townsgate Drive



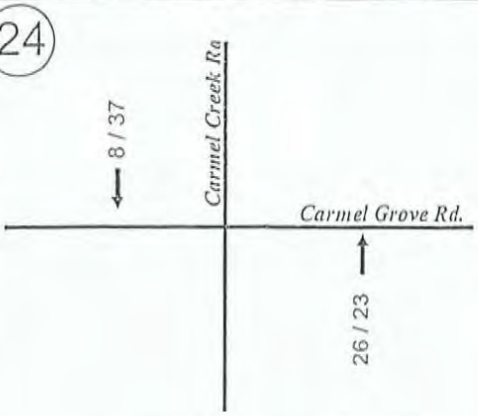
Carmel Country Road / Carmel Creek Rd



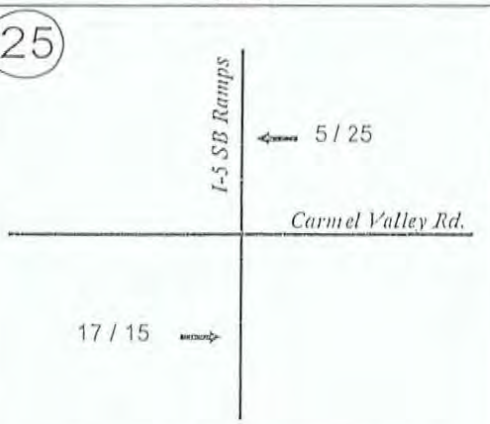
El Camino Real / High Bluff Drive



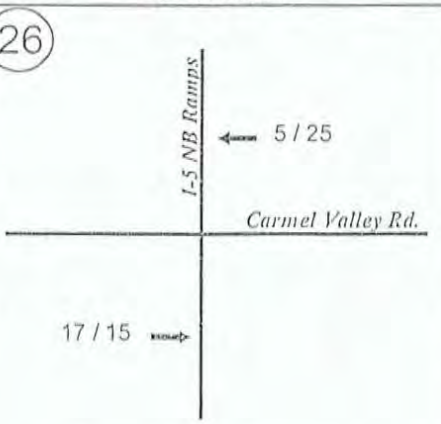
Carmel View Road / High Bluff Drive



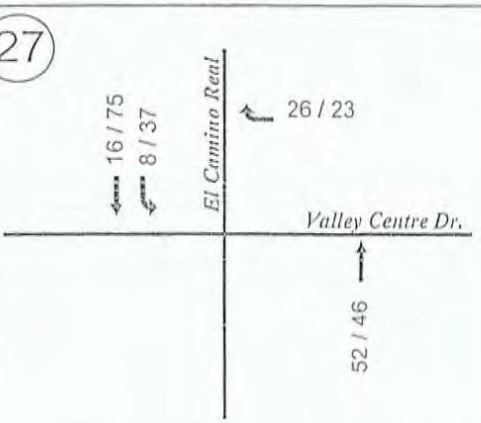
Carmel Creek Road / Carmel Grove Rd



Carmel Valley Road / I-5 SB Ramps



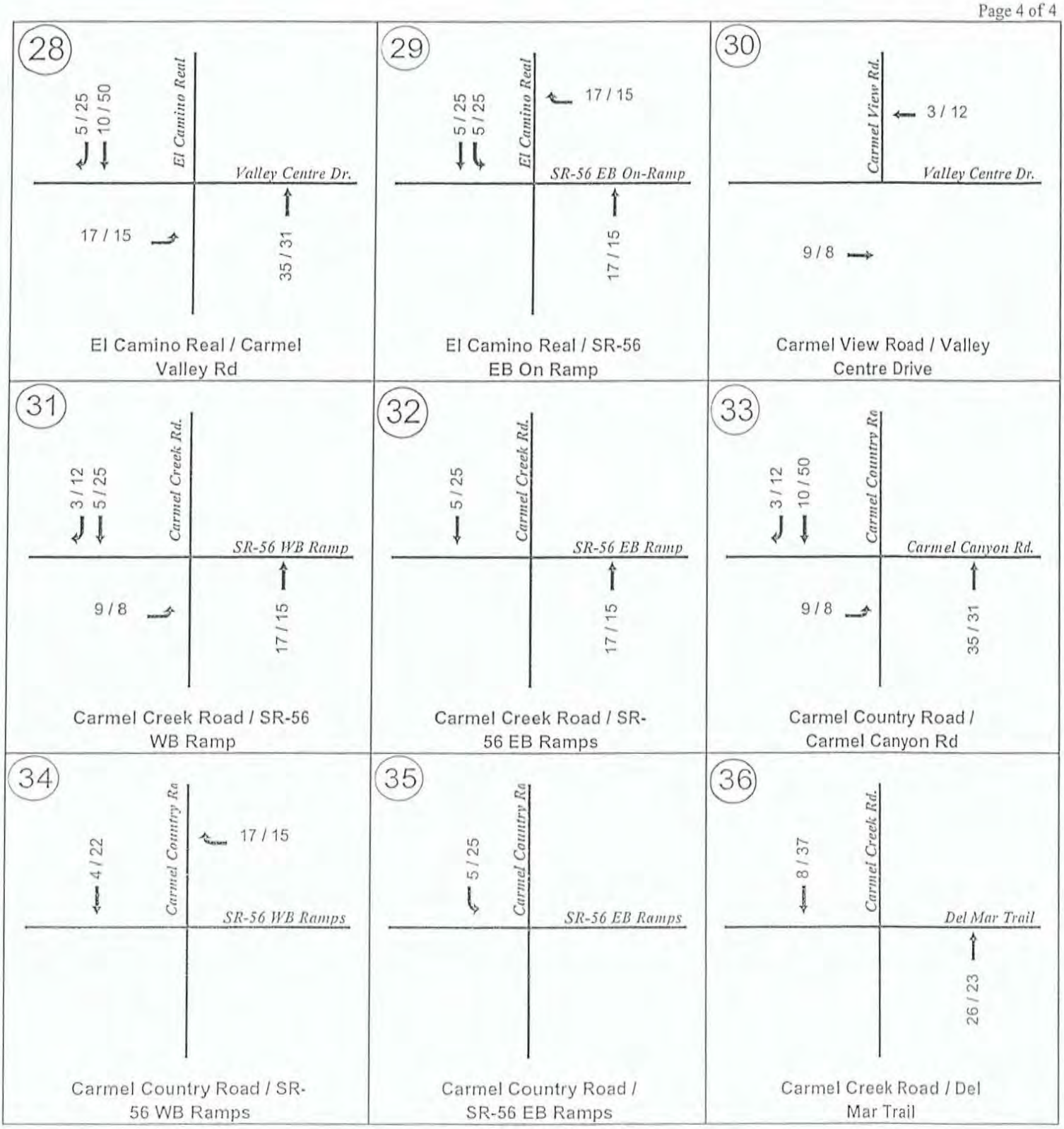
Carmel Valley Road / I-5 NB Ramps



El Camino Real / Valley Centre Drive

ATTACHMENT 9

Project Only AM/PM Peak Hour Traffic

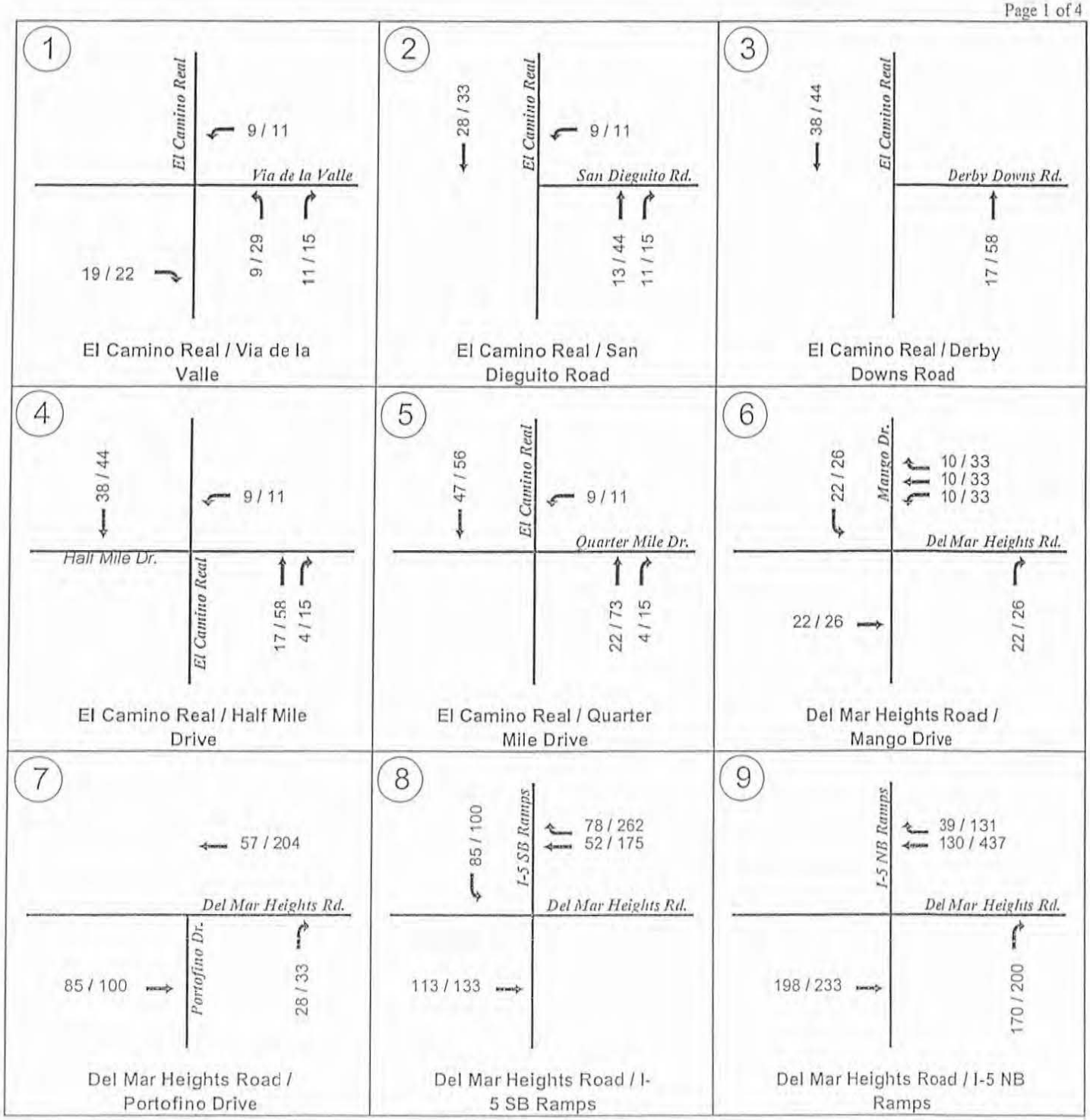


ATTACHMENT 9

Project Only AM/PM Peak Hour Traffic

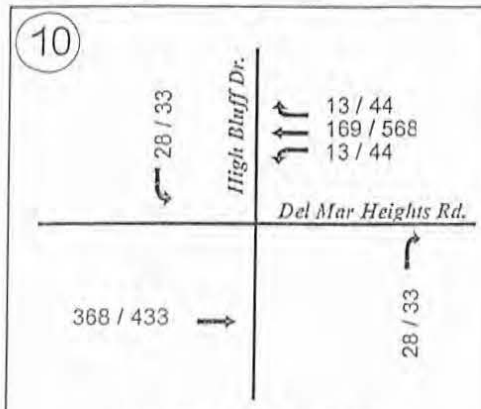
ATTACHMENT 10

Project Only (Buildout) Average Daily Traffic

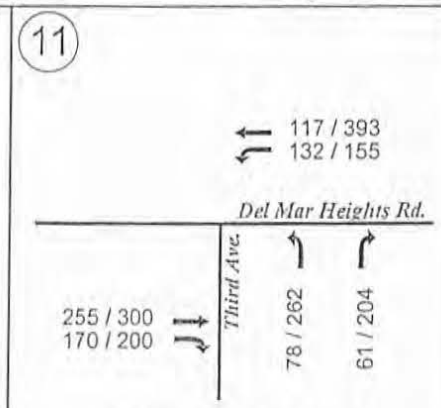


ATTACHMENT 11

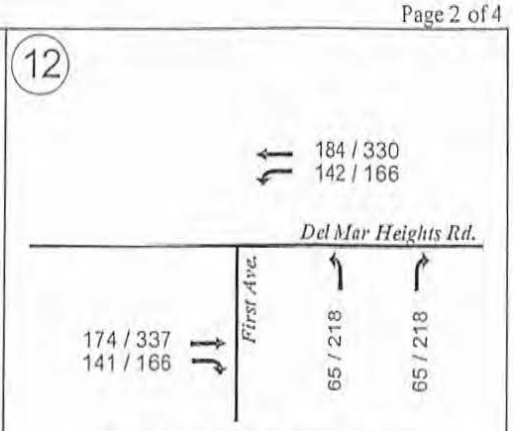
Project Only (Buildout) AM/PM Peak Hour Traffic



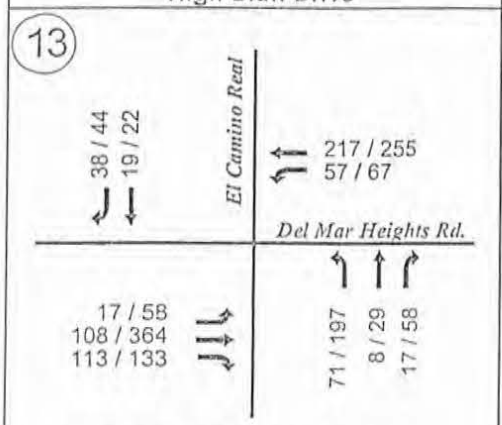
Del Mar Heights Road / High Bluff Drive



Del Mar Heights Road / Third Avenue

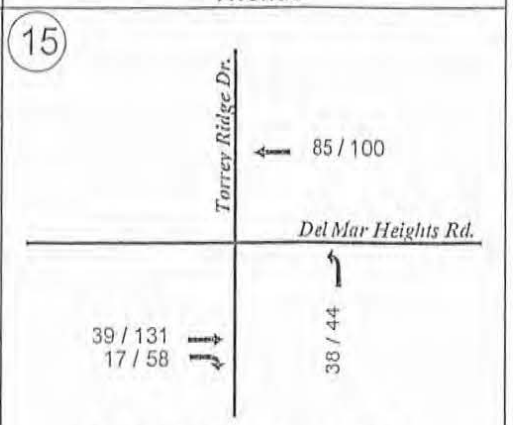


Del Mar Heights Road / First Avenue

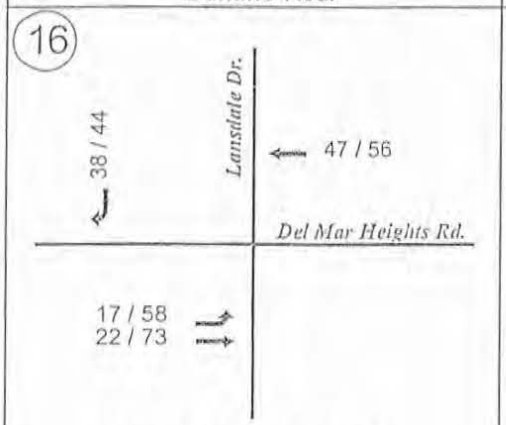


Del Mar Heights Road / El Camino Real

Del Mar Heights Road / Carmel Country Rd

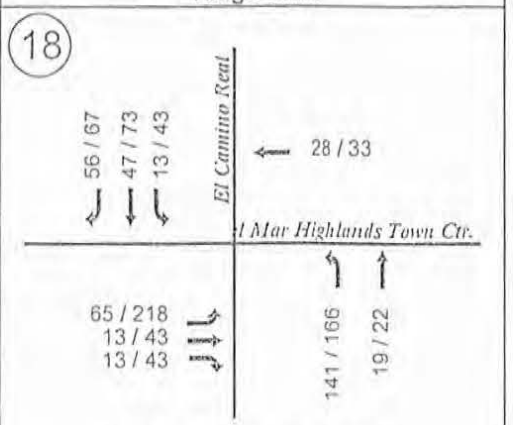


Del Mar Heights Road / Torrey Ridge Drive



Del Mar Heights Road / Lansdale Drive

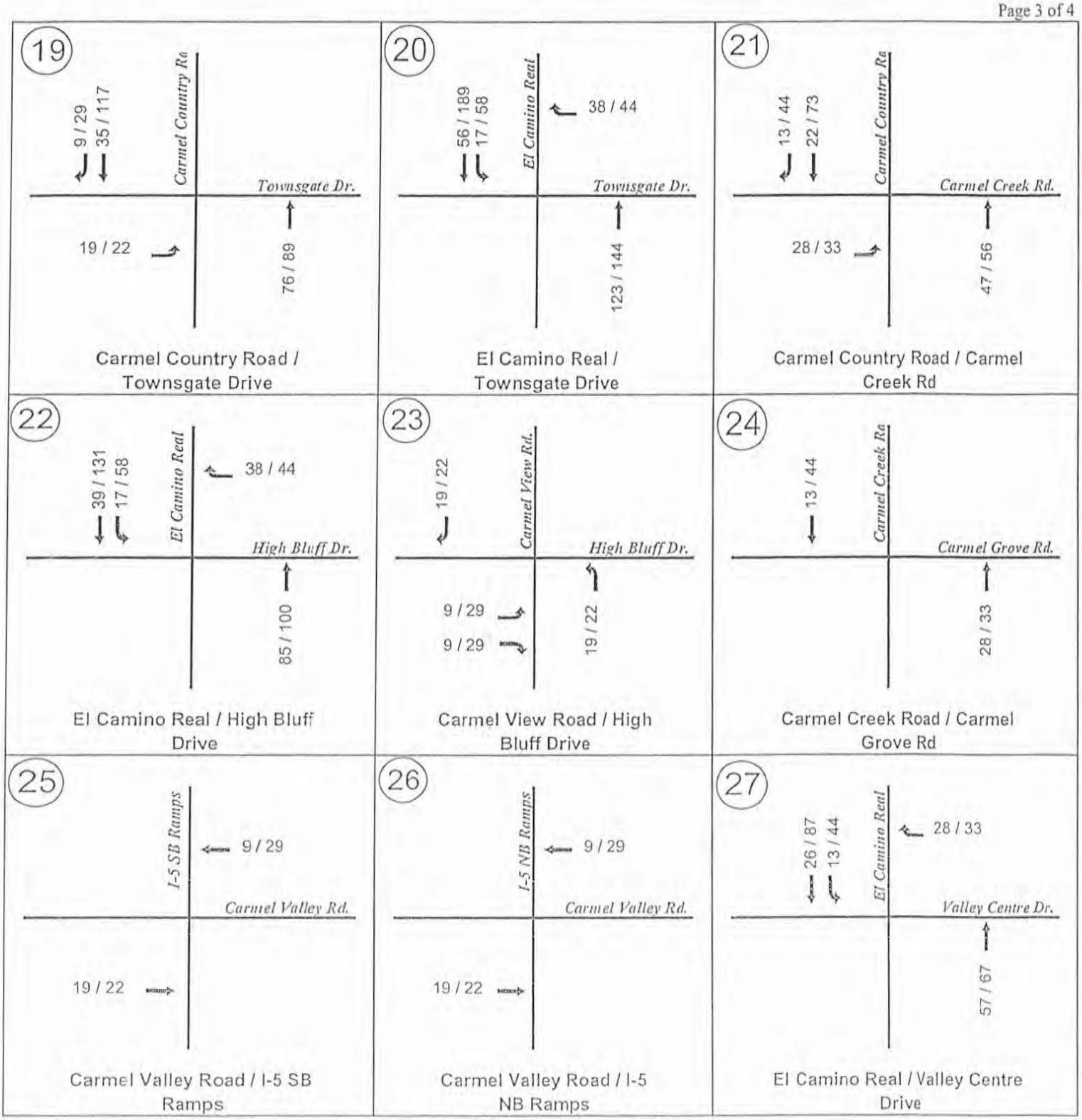
Del Mar Heights Road / Carmel Canyon Rd



El Camino Real / Del Mar Highlands Town Ctr.

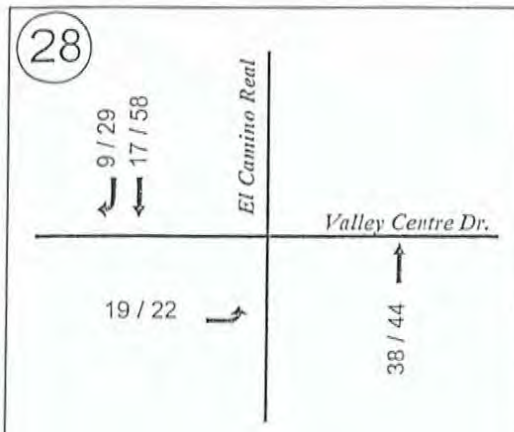
ATTACHMENT 11

Project Only AM/PM Peak Hour Traffic

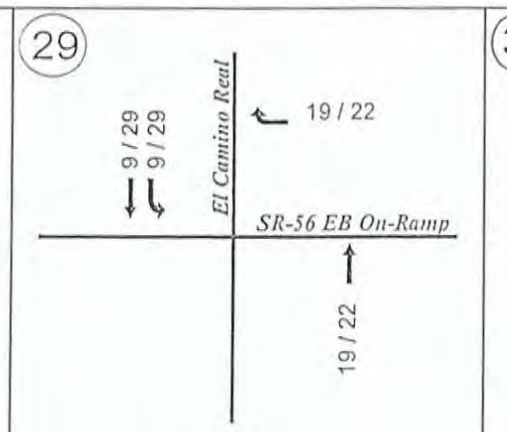


ATTACHMENT 11

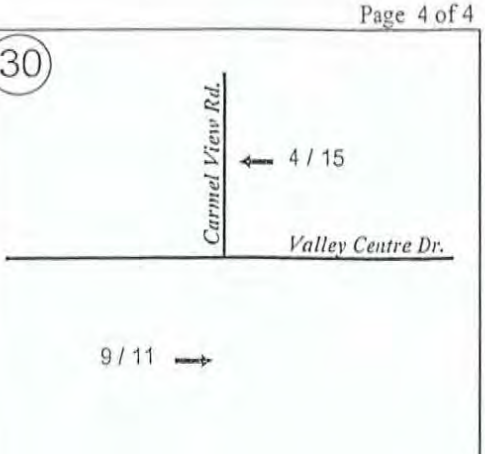
Project Only AM/PM Peak Hour Traffic



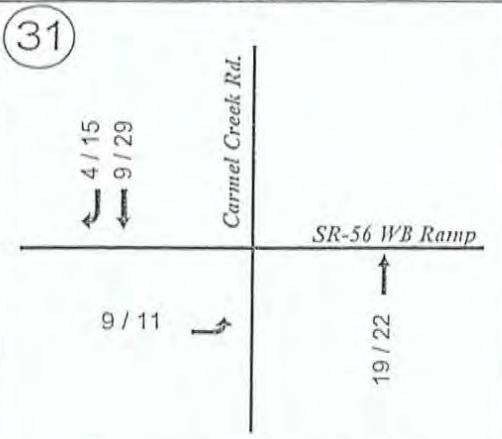
El Camino Real / Carmel Valley Rd



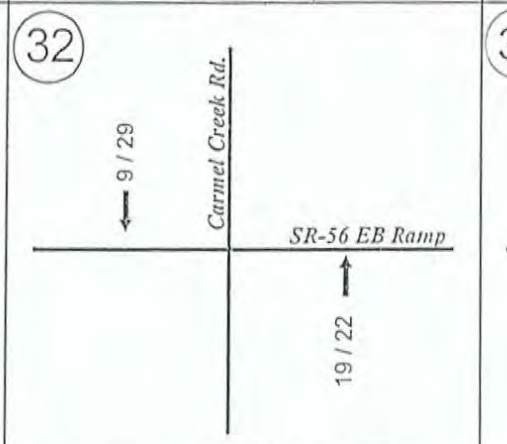
El Camino Real / SR-56 EB On Ramp



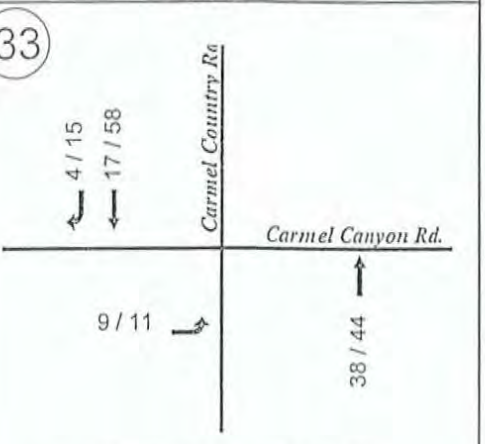
Carmel View Road / Valley Centre Drive



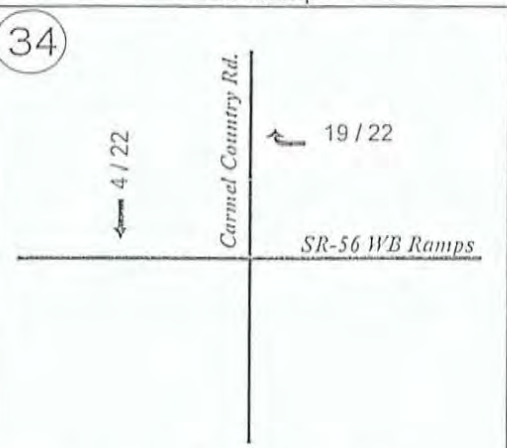
Carmel Creek Road / SR-56 WB Ramp



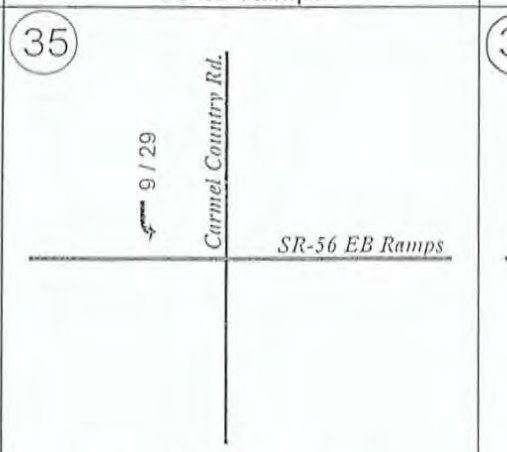
Carmel Creek Road / SR-56 EB Ramps



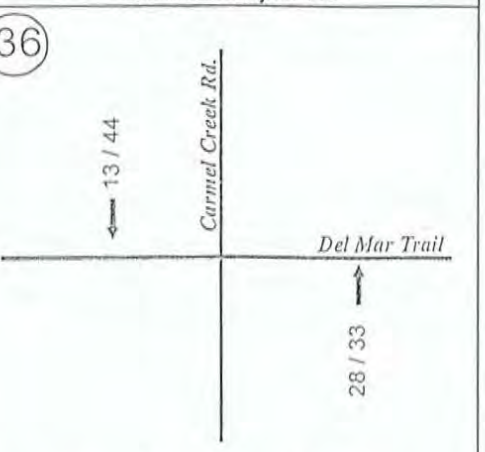
Carmel Country Road / Carmel Canyon Rd



Carmel Country Road / SR-56 WB Ramps



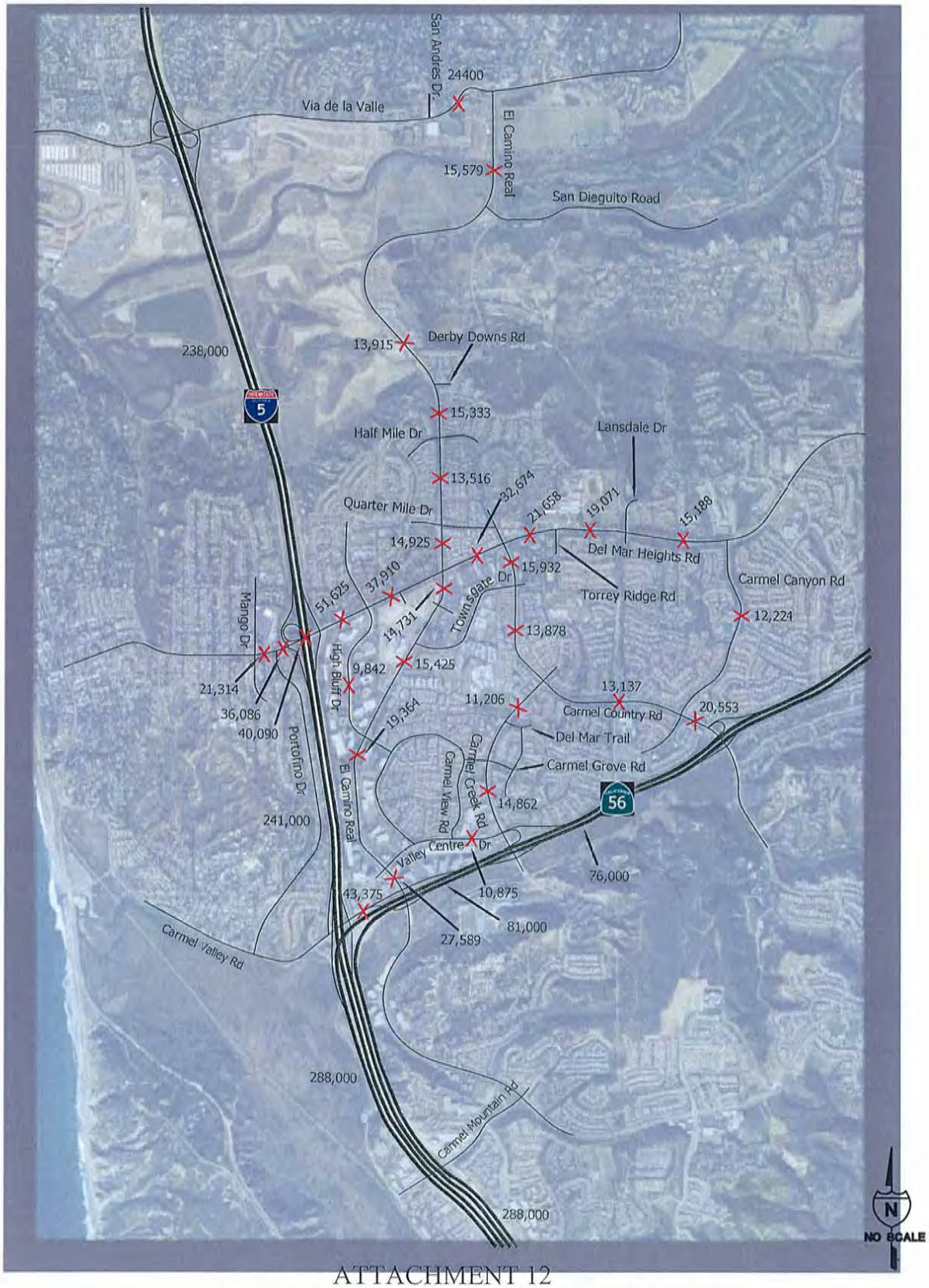
Carmel Country Road / SR-56 EB Ramps



Carmel Creek Road / Del Mar Trail

ATTACHMENT 11

Project Only AM/PM Peak Hour Traffic



ATTACHMENT 12

Existing Average Daily Traffic

ATTACHMENT 13

Existing Street Segment Levels of Service

Road	Segment	Jurisd.	Functional Class.	Capacity at LOS E	Volume	V/C	LOS
Del Mar Heights Rd.	Mango Drive to Portofino Drive	SD	5-M	45,000	21,314	0.47	B
	Portofino Drive to I-5 Southbound Ramps	SD	5-PA	50,000	36,086	0.72	C
	I-5 Southbound Ramps and I-5 Northbound Ramps	SD	5-PA	50,000	40,090	0.80	D
	I-5 Northbound Ramps to High Bluff Drive	SD	PA	60,000	51,625	0.86	D
	High Bluff Drive to Third Avenue	SD	PA	60,000	37,910	0.63	C
	Thirth Avenue to First Avenue	SD	PA	60,000	37,910	0.63	C
	First Avenue to El Camino Real	SD	PA	60,000	37,910	0.63	C
	El Camino Real to Carmel Country Road	SD	PA	60,000	32,674	0.54	B
	Carmel Country Road to Torrey Ridge Road	SD	PA	60,000	21,658	0.36	A
	Torrey Ridge Road to Lansdale Drive	SD	PA	60,000	19,071	0.32	A
	Lansdale Drive to Carmel Canyon Road	SD	PA	60,000	15,188	0.25	A
El Camino Real	Via de la Valle to San Dieguito Road	SD	2-Ca	15,000	15,579	1.04	F
	San Dieguito Road to Derby Downs Road	SD	4-M	40,000	13,915	0.35	A
	Derby Downs Road to Half Mile Drive	SD	4-M	40,000	15,333	0.38	B
	Half Mile Drive to Quarter Mile Drive	SD	4-M	40,000	13,516	0.34	A
	Quarter Mile Drive to Del Mar Heights Road	SD	4-M	40,000	14,925	0.37	A
	Del Mar Heights Road to Townsgate Drive	SD	6-M	50,000	14,731	0.29	A
	Townsgate Drive to High Bluff Drive	SD	6-M	50,000	15,425	0.31	A
	High Bluff Drive to Valley Centre Drive	SD	6-M	50,000	19,364	0.39	A
	Valley Centre Drive to Carmel Valley Road	SD	5-M	45,000	27,589	0.61	C
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	SD	4-M	40,000	15,932	0.40	B
	Townsgate Drive to Carmel Creek Road	SD	4-M	40,000	13,878	0.35	A
	Carmel Creek Road to Carmel Canyon Road	SD	4-M	40,000	13,137	0.33	A
	Carmel Canyon Road to SR-56 Westbound Ramps	SD	4-M	40,000	20,553	0.51	B
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Road	SD	4-M	40,000	12,224	0.31	A
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	SD	4-M	40,000	11,206	0.28	A
	Carmel Grove Road to SR-56 Westbound Ramps	SD	4-M	40,000	14,862	0.37	A
Valley Centre Drive	Carmel View Road to Carmel Creek Road	SD	4-C	30,000	10,875	0.36	B
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	SD	PA	60,000	43,375	0.72	C
High Bluff Drive*	Del Mar Heights Road to El Camino Real	SD	2-Ca	15,000	9,842	0.66	C
Via de la Valle	San Andres Drive to El Camino Real (West)	SD	2-Cb	10,000	24,400	2.44	F

Legend:

SD= City of San Diego
Cap.= Capacity
Class.= Classification
LOS= Level of Service
V/C= Volume to Capacity Ratio

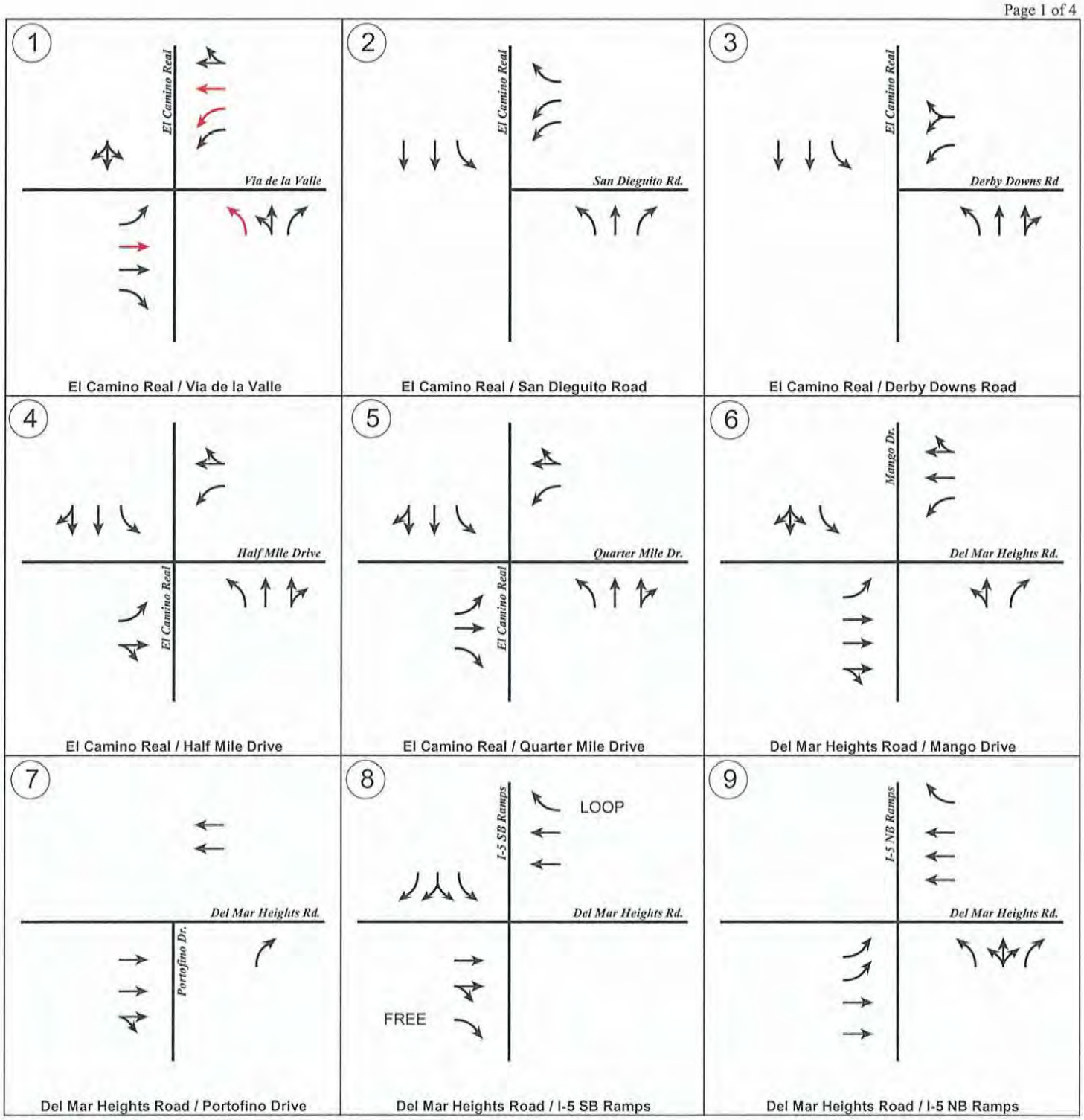
PA = 6 lane Primary Arterial
6-M = 6 lane Major
4-M=4 lane Major
2-Ca=2 lane collector
2-Cb = 2 lane Collector with no fronting property

* High Bluff Drive is three lanes on the northern portion and four lanes on the southern portion and has a raised . median. However, a conservative capacity of 15,000 ADT was applied.

Notes:

5-M = 5 lane Major with LOS E capacity of 45,000 ADT
5-PA = 5 lane Primary Arterial with LOS E capacity of 50,000 ADT

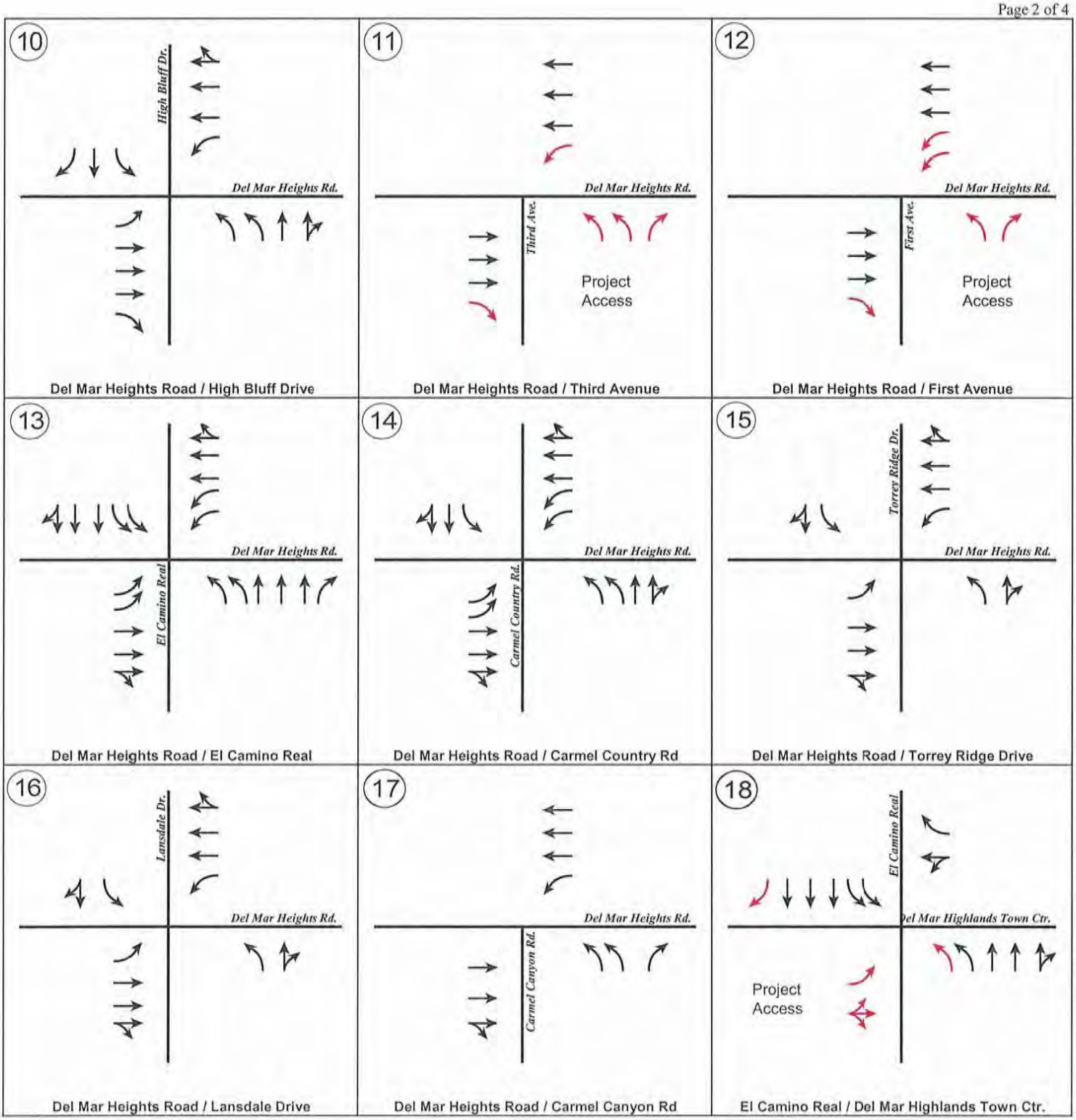
Counts Conducted May 2009, Via de la Valle count data was obtained in April 2007, see Appendix C.



*The red arrows in Intersection #1 are planned lane configurations in the Year 2030 scenarios.

ATTACHMENT 14

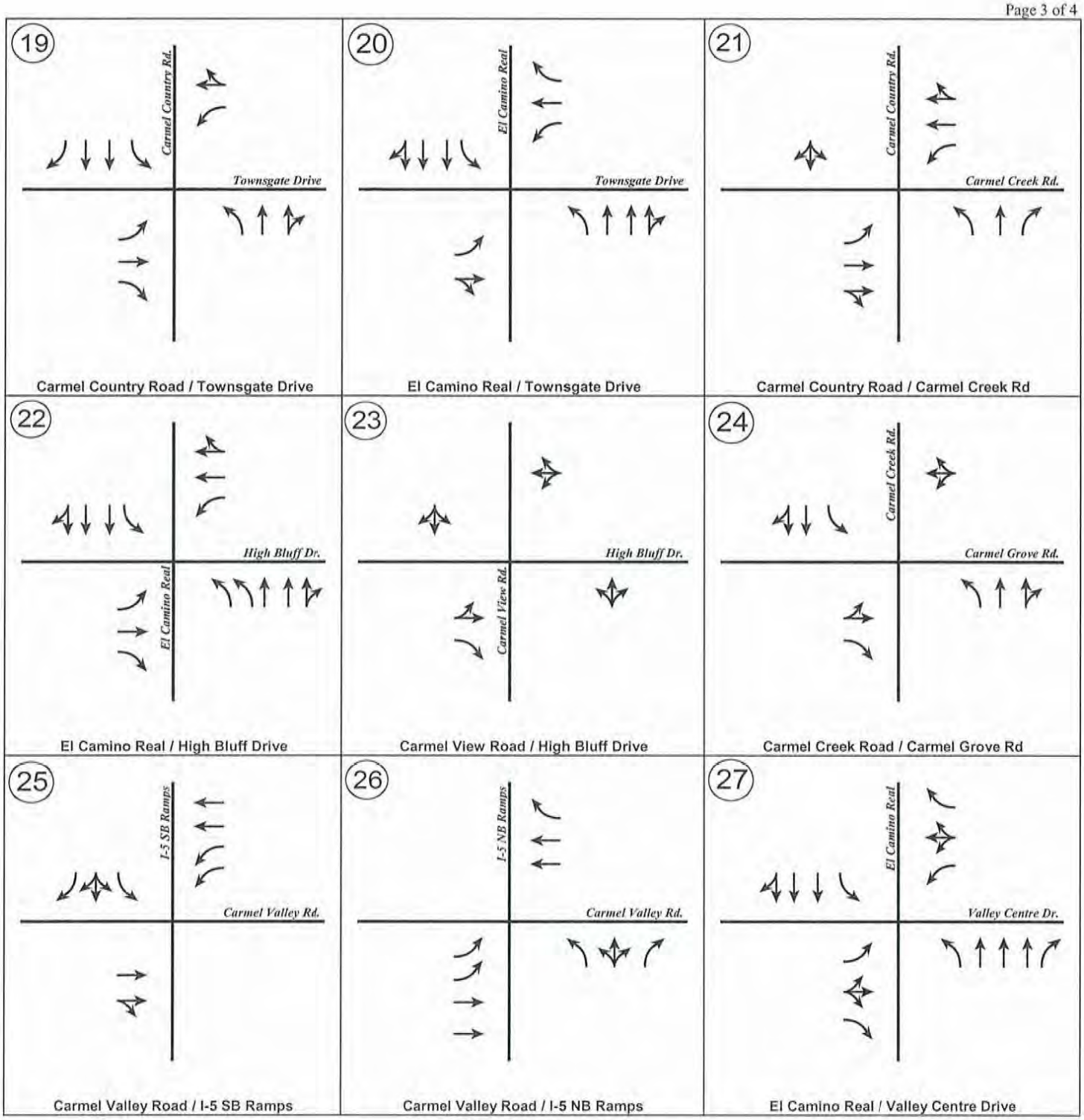
Existing Lane Configurations



*The red arrows indicate planned lane configurations when project access is constructed.

ATTACHMENT 14

Existing Lane Configurations



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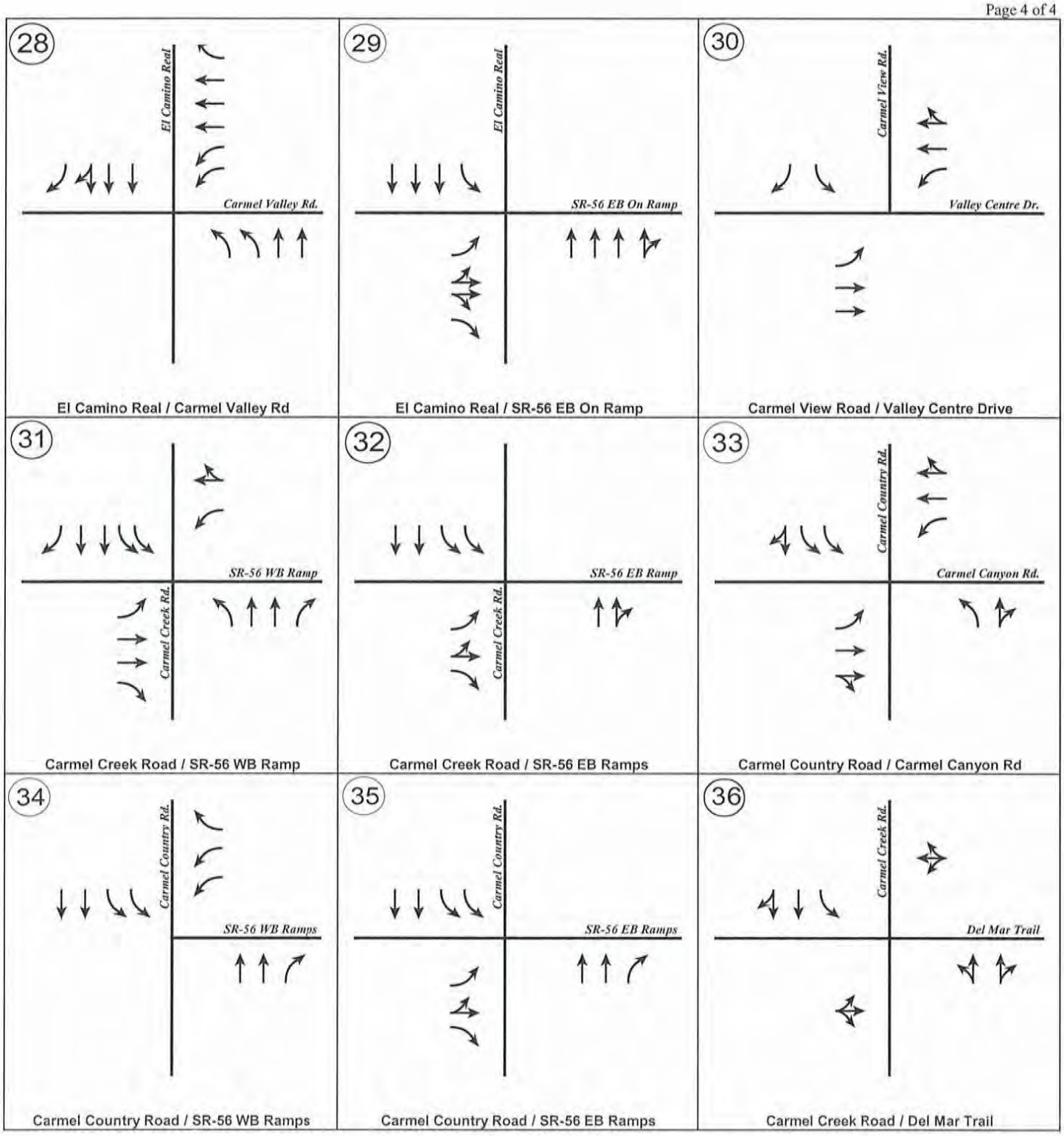
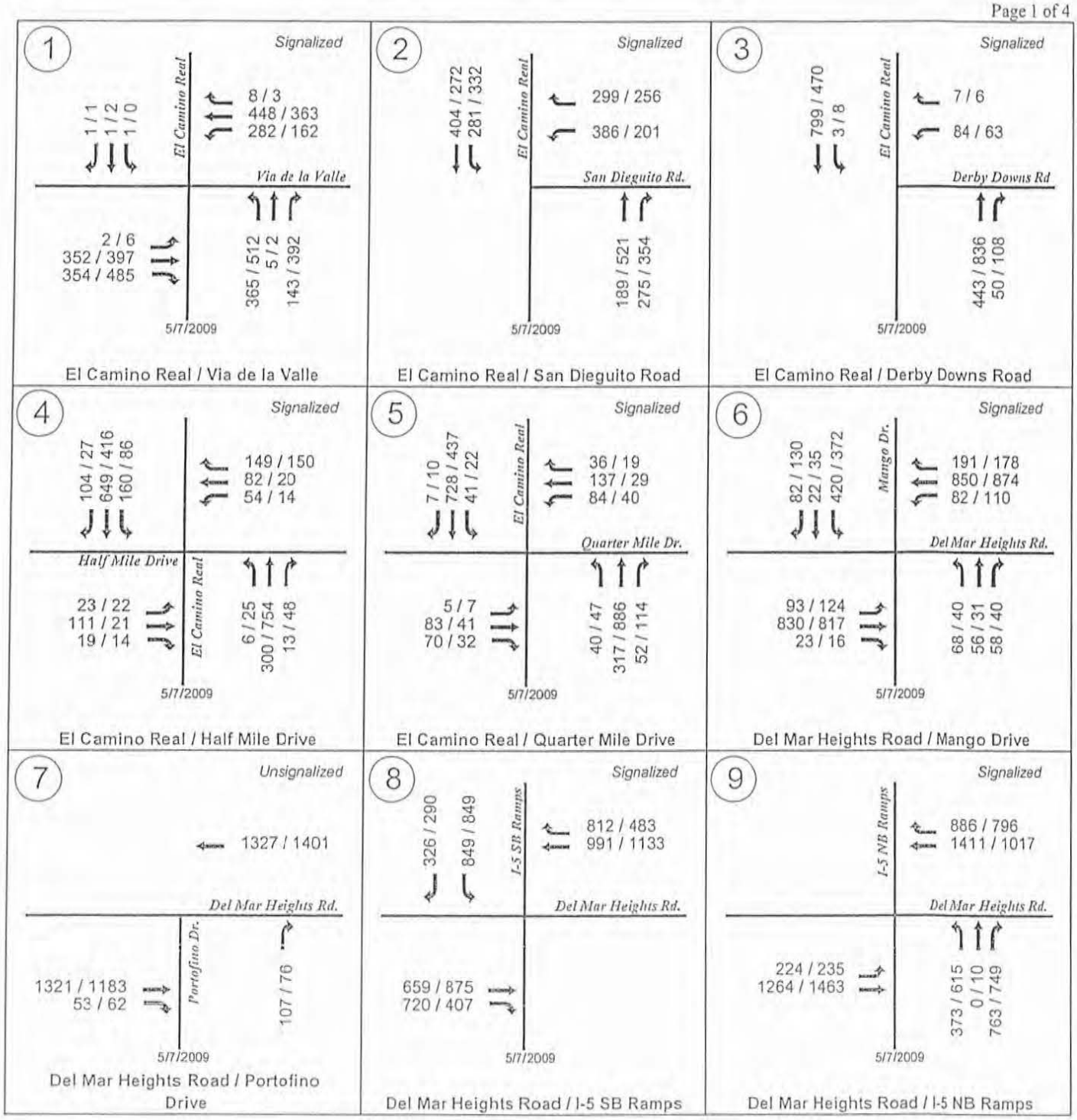
Existing Lane Configurations



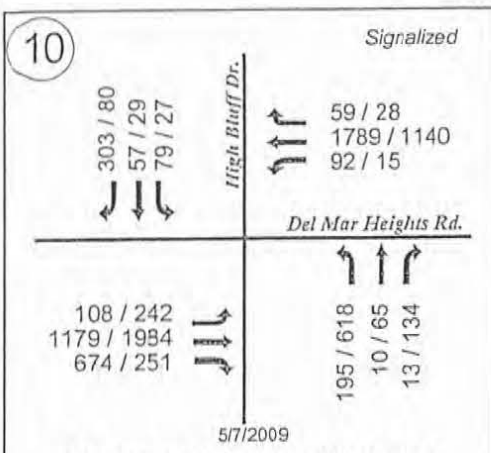
ATTACHMENT 14

Existing Lane Configurations



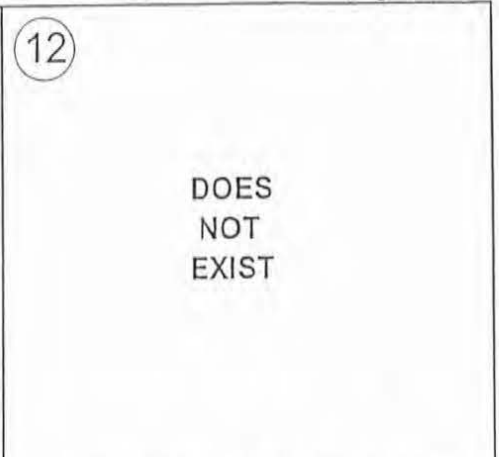
ATTACHMENT 15

Existing AM/PM Peak Hour Traffic

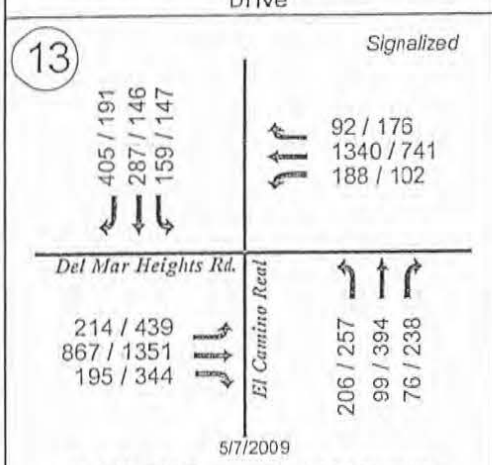


Del Mar Heights Road / High Bluff Drive

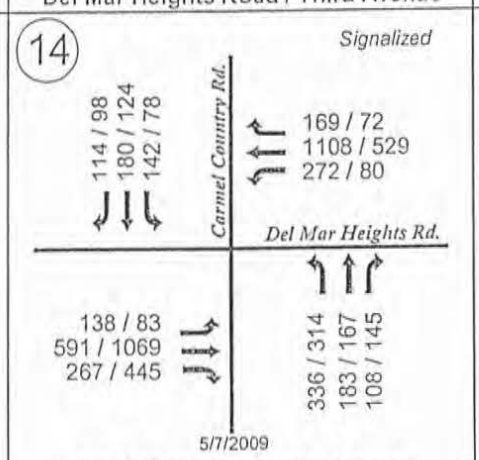
Del Mar Heights Road / Third Avenue



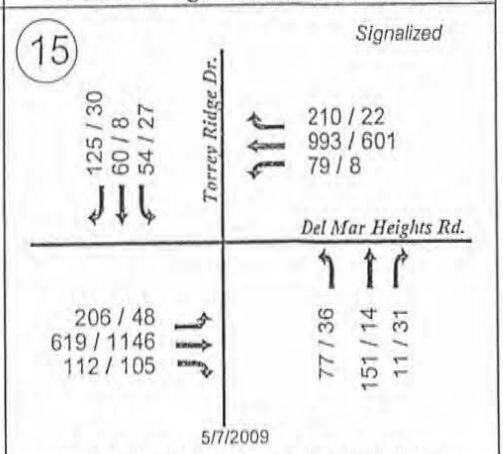
Del Mar Heights Road / First Avenue



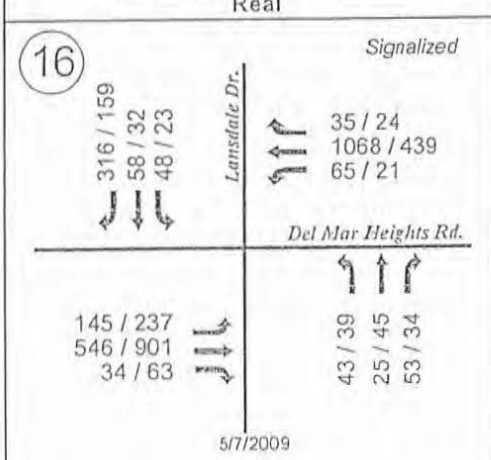
Del Mar Heights Road / El Camino Real



Del Mar Heights Road / Carmel Country Rd

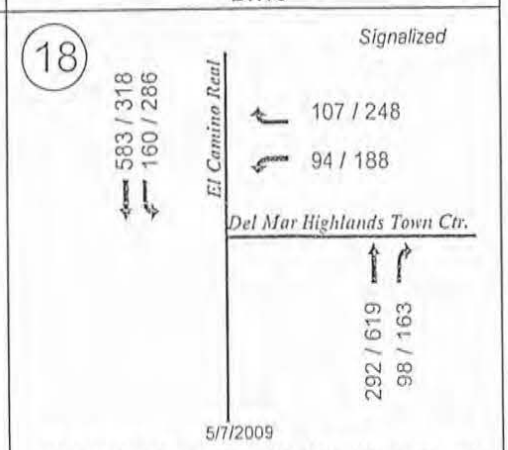


Del Mar Heights Road / Torrey Ridge Drive



Del Mar Heights Road / Lansdale Drive

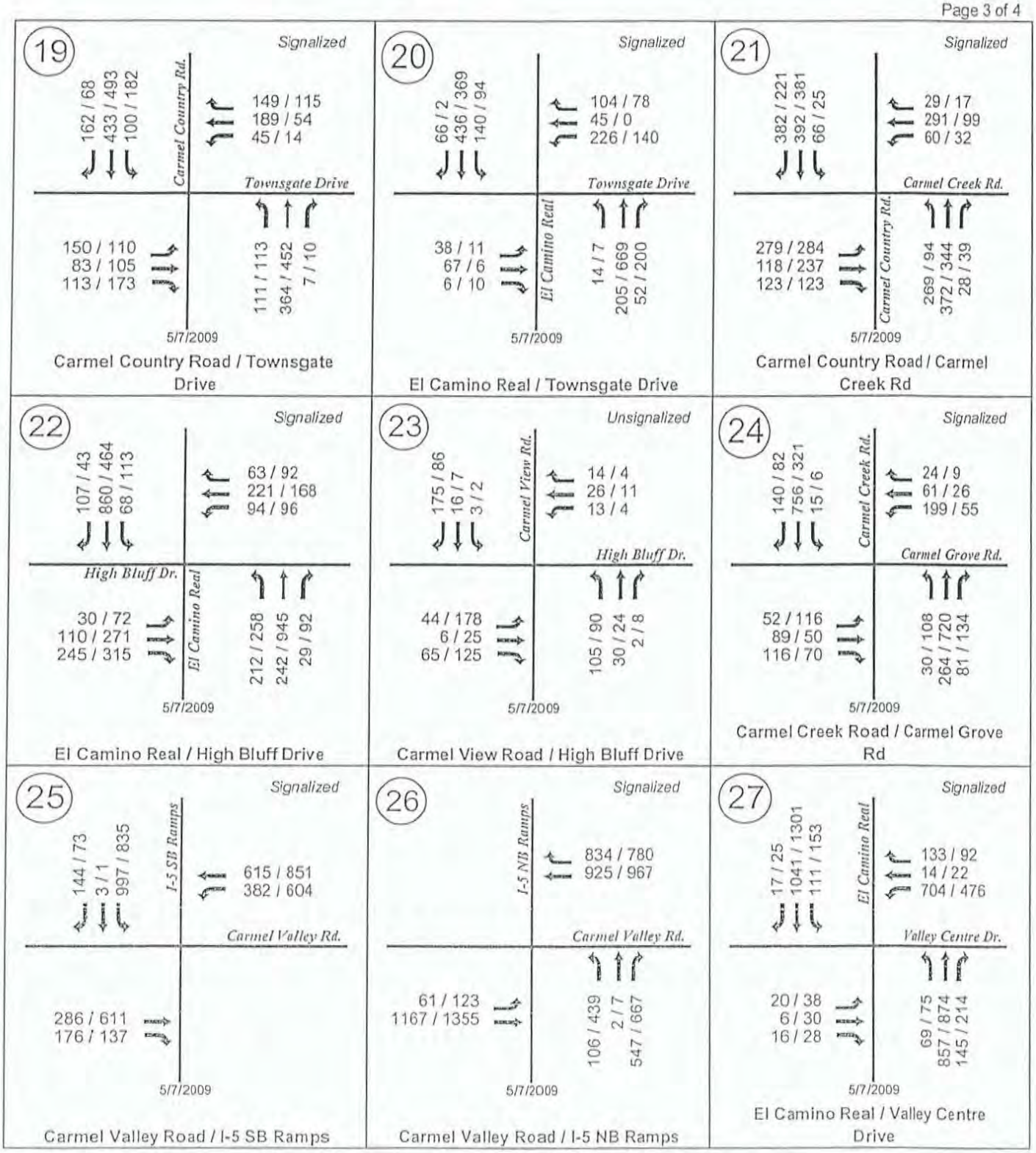
Del Mar Heights Road / Carmel Canyon Rd



El Camino Real / Del Mar Highlands Town Ctr.

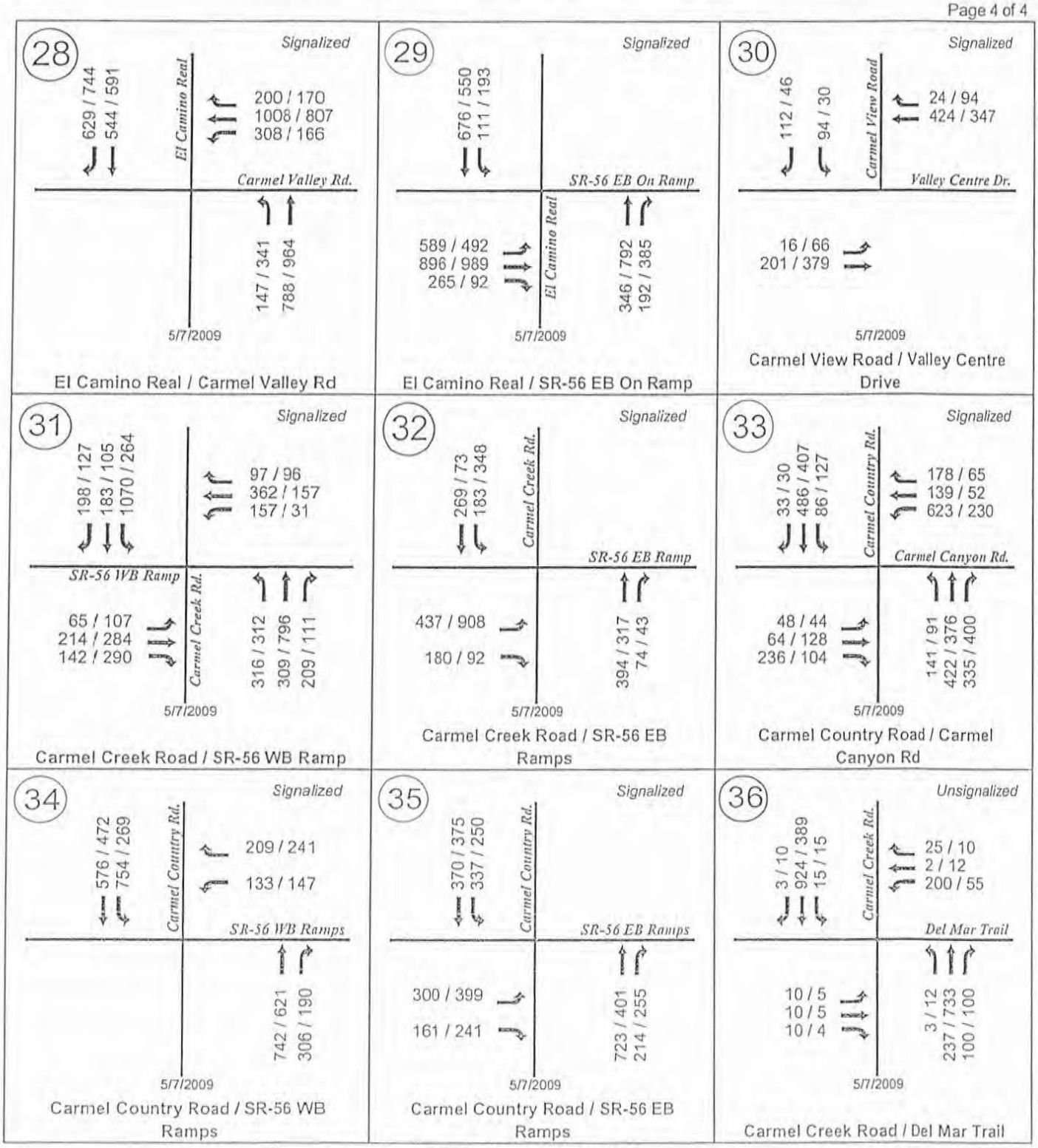
ATTACHMENT 15

Existing AM/PM Peak Hour Traffic



ATTACHMENT 15

Existing AM/PM Peak Hour Traffic



ATTACHMENT 15

Existing AM/PM Peak Hour Traffic

ATTACHMENT 16

Existing Intersection Levels of Service

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	El Camino Real / Via de la Valle	Signalized	30.3	C	37.3	D
2	El Camino Real / San Dieguito Road	Signalized	17.4	B	25.4	C
3	El Camino Real / Derby Downs Road	Signalized	4.9	A	5.5	A
4	El Camino Real / Half Mile Drive	Signalized	21.6	C	18.3	B
5	El Camino Real / Quarter Mile Drive	Signalized	20.4	C	14.1	B
6	Del Mar Heights Road / Mango Drive	Signalized	35.2	D	35.4	D
7	Del Mar Heights Road / Portofino Drive	Minor Street	9.4	A	9.2	A
8	Del Mar Heights Road / I-5 SB Ramps	Signalized	20.4	C	20.3	C
9	Del Mar Heights Road / I-5 NB Ramps	Signalized	31.1	C	34.2	C
10	Del Mar Heights Road / High Bluff Drive	Signalized	28.8	C	39.2	D
11	Del Mar Heights Road / Third Avenue	Signalized	DNE	DNE	DNE	DNE
12	Del Mar Heights Road / First Avenue	Signalized	DNE	DNE	DNE	DNE
13	Del Mar Heights Road / El Camino Real	Signalized	31.4	C	29.1	C
14	Del Mar Heights Road / Carmel Country Rd	Signalized	28.6	C	25.0	C
15	Del Mar Heights Road / Torrey Ridge Drive	Signalized	25.8	C	9.8	A
16	Del Mar Heights Road / Lansdale Drive	Signalized	23.9	C	17.1	B
17	Del Mar Heights Road / Carmel Canyon Rd	Signalized	15.9	B	11.3	B
18	El Camino Real / Del Mar Highlands Town Ctr.	Signalized	8.3	A	14.8	B
19	Carmel Country Road / Townsgate Drive	Signalized	28.9	C	25.5	C
20	El Camino Real / Townsgate Drive	Signalized	22.9	C	18.5	B
21	Carmel Country Road / Carmel Creek Rd	Signalized	51.7	D	28.3	C
22	El Camino Real / High Bluff Drive	Signalized	27.0	C	32.5	C
23	Carmel View Road / High Bluff Drive	All-Way Stop	8.3	A	9.0	A
24	Carmel Creek Road / Carmel Grove Rd	Signalized	27.3	C	20.1	C
25	Carmel Valley Road / I-5 SB Ramps	Signalized	20.4	C	27.9	C
26	Carmel Valley Road / I-5 NB Ramps	Signalized	14.8	B	22.0	C
27	El Camino Real / Valley Centre Drive	Signalized	25.1	C	23.2	C
28	El Camino Real / Carmel Valley Rd	Signalized	19.9	B	25.4	C
29	El Camino Real / SR-56 EB On Ramp	Signalized	17.9	B	28.8	C
30	Carmel View Road / Valley Centre Drive	Signalized	7.6	A	6.7	A
31	Carmel Creek Road / SR-56 WB Ramp	Signalized	52.5	D	27.3	C
32	Carmel Creek Road / SR-56 EB Ramps	Signalized	14.4	B	22.1	C
33	Carmel Country Road / Carmel Canyon Rd	Signalized	37.2	D	28.5	C
34	Carmel Country Road / SR-56 WB Ramps	Signalized	17.4	B	11.6	B
35	Carmel Country Road / SR-56 EB Ramps	Signalized	15.8	B	13.9	B
36	Carmel Creek Road / Del Mar Trail	All-Way Stop	41.6	E	20.1	C

Notes:

DNE = Does not exist

LOS = Level of Service

Orange indicates unacceptable level of service.

Table 5-2

ATTACHMENT 17

Existing Freeway Segment LOS Summary

Segment	Lanes	Dir.	Cap.	ADT*	Peak Hour %	Dir. Split	Truck Factor	PHV	V/C	LOS
I-5										
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	NB	12,800	222,000	0.068	0.53	0.98	8,089	0.632	C
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	SB	12,800	222,000	0.067	0.55	0.98	8,350	0.652	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	NB	13,450	238,000	0.068	0.53	0.98	8,672	0.645	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	SB	13,450	238,000	0.067	0.55	0.98	8,951	0.666	C
Del Mar Heights Rd./ SR-56	6-GP+1-M	NB	15,780	241,000	0.068	0.53	0.98	8,781	0.556	B
Del Mar Heights Rd./ SR-56	6-GP+1-M	SB	15,780	241,000	0.067	0.55	0.98	9,064	0.574	B
SR-56/ Carmel Mountain Road	9-GP+1-M	NB	22,830	288,000	0.079	0.57	0.98	13,118	0.575	B
SR-56/ Carmel Mountain Road	8-GP+1-M	SB	20,480	288,000	0.080	0.55	0.98	12,883	0.629	C
Carmel Mountain Road/ I-805 Merge	10	NB	23,500	288,000	0.079	0.57	0.98	13,118	0.558	B
Carmel Mountain Road/ I-805 Merge	10	SB	23,500	288,000	0.080	0.55	0.98	12,883	0.548	B
SR-56										
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	EB	6,500	81,000	0.093	0.69	0.98	5,294	0.814	D
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	WB	6,500	81,000	0.094	0.70	0.98	5,429	0.835	D
Carmel Creek Rd. / Carmel Country	2-GP + 1-AX	EB	6,500	76,000	0.093	0.69	0.98	4,967	0.764	C
Carmel Creek Rd. / Carmel Country	2-GP + 1-AX	WB	6,500	76,000	0.094	0.70	0.98	5,093	0.784	C

Legend:
*Caltrans 2008 Count Data
Dir.= Direction
Cap. = Capacity
ADT= Average Daily Traffic
V/C= Volume to Capacity Ratio
LOS= Level of Service
PHV= Peak Hour Volume
#-GP= # of General Purpose Lanes

Notes:
Capacity for LOS "E" freeway mainline is 2,350 vphpl and for auxiliary lane is 1800 vphpl.
Taken from Transition between LOS"C" and LOS "D" criteria for Basic Freeway Segments @ 65 mi/hr in "Caltrans Guide for the Preparation of Traffic Impact Studies", December 2002
AX = Auxiliary Lane with LOS "E" capacity of 1,800 vphpl
Peak Hour % and Dir. Split taken from Caltrans internet posted Traffic Volumes

#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1680 vphpl taken from Caltrans Guide, December 2002)
HOV = High Occupancy Vehicle lane with LOS"E" capacity of 1,600 vphpl

ATTACHMENT 18

Existing Ramp Meter Analysis

Most Restrictive Meter Rate

Location		Demand (Veh/Hr)	Meter Rate (Veh/Hr)	Excess Demand (Veh/Hr)	Delay (Min)	Queue (Feet)
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound)	AM	406	368	38	6.20	1,102
	PM	242	368	0	0	0
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	360	499	0	0	0
	PM	204	499	0	0	0
Del Mar Heights Rd. / I-5 NB on Ramp	AM	N/A	Meter is not turned on			
	PM	516	593	0	0	0

NOTE:

Meter rate is based on the most restrictive meter rate provided by Caltrans, see Appendix C

Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour

Queue = Excess Demand * 29 feet/vehicle

Observed Meter Delay & Queue

Location		Ramp Meter Lanes	Observed Delay (Min)	Observed Queue (Feet)
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound)	AM	2 - SOV	1.0	261
	PM		1.0	145
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	1-SOV + 1-HOV	2.0	319
	PM		1.0	58
Del Mar Heights Rd. / I-5 NB on Ramp	AM	2 - SOV	Not Turned On	
	PM		1.5	203

NOTE:

Meter Rate = Observed in the field, see Appendix C

SOV = Single Occupancy Vehicle Lane

HOV = High Occupancy Vehicle Lane

ATTACHMENT 19

Existing + Project (Phase 1) Average Daily Traffic

ATTACHMENT 20

Existing with Project (Phase 1) Street Segment Levels of Service

Existing + Project Analysis

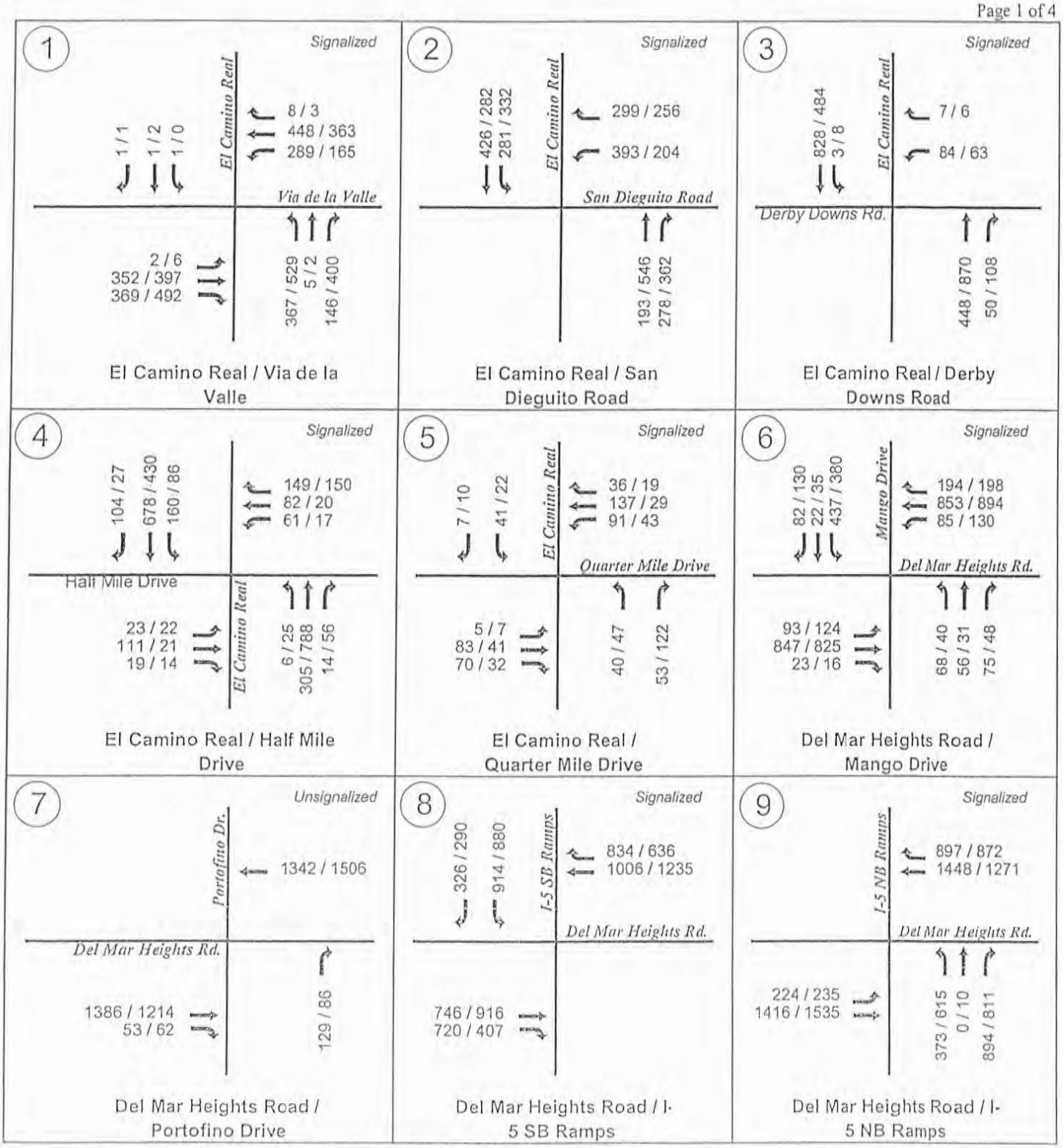
Road	Segment	Jurisd.	Class.	Cap.	Volume	V/C	LOS
Del Mar Heights Rd.	Mango Drive to Portofino Drive	SD	5-M	45,000	22,236	0.49	B
	Portofino Drive to I-5 Southbound Ramps	SD	5-PA	50,000	37,315	0.75	C
	I-5 Southbound Ramps and I-5 Northbound Ramps	SD	5-PA	50,000	42,241	0.84	D
	I-5 Northbound Ramps to High Bluff Drive	SD	PA	60,000	55,621	0.93	E
	High Bluff Drive to Third Avenue	SD	PA	60,000	42,520	0.71	C
	Third Avenue to First Avenue	SD	PA	60,000	41,496	0.69	C
	First Avenue to El Camino Real	SD	PA	60,000	40,471	0.67	C
	El Camino Real to Carmel Country Road	SD	PA	60,000	35,440	0.59	C
	Carmel Country Road to Torrey Ridge Road	SD	PA	60,000	22,990	0.38	A
	Torrey Ridge Road to Lansdale Drive	SD	PA	60,000	19,993	0.33	A
	Lansdale Drive to Carmel Canyon Road	SD	PA	60,000	15,700	0.26	A
El Camino Real	Via de la Valle to San Dieguito Road	SD	2-Ca	15,000	15,886	1.06	F
	San Dieguito Road to Derby Downs Road	SD	4-M	40,000	14,325	0.36	A
	Derby Downs Road to Half Mile Drive	SD	4-M	40,000	15,743	0.39	B
	Half Mile Drive to Quarter Mile Drive	SD	4-M	40,000	14,028	0.35	A
	Quarter Mile Drive to Del Mar Heights Road	SD	4-M	40,000	15,540	0.39	B
	Del Mar Heights Road to Townsgate Drive	SD	6-M	50,000	16,268	0.33	A
	Townsgate Drive to High Bluff Drive	SD	6-M	50,000	16,757	0.34	A
	High Bluff Drive to Valley Centre Drive	SD	6-M	50,000	20,286	0.41	B
	Valley Centre Drive to Carmel Valley Road	SD	5-M	45,000	28,204	0.63	C
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	SD	4-M	40,000	16,957	0.42	B
	Townsgate Drive to Carmel Creek Road	SD	4-M	40,000	14,698	0.37	A
	Carmel Creek Road to Carmel Canyon Road	SD	4-M	40,000	13,649	0.34	A
	Carmel Canyon Road to SR-56 Westbound Ramps	SD	4-M	40,000	20,963	0.52	B
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Road	SD	4-M	40,000	12,429	0.31	A
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	SD	4-M	40,000	11,513	0.29	A
	Carmel Grove Road to SR-56 Westbound Ramps	SD	4-M	40,000	15,169	0.38	B
Valley Centre Drive	Carmel View Road to Carmel Creek Road	SD	4-C	30,000	10,977	0.37	B
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	SD	PA	60,000	43,580	0.73	C
High Bluff Drive	Del Mar Heights Road to El Camino Real	SD	2-Ca	15,000	10,149	0.68	D
Via de la Valle	San Andres Drive to El Camino Real (West)	SD	2-Cb	10,000	24,605	2.46	F

Legend:

SD= City of San Diego
Cap.= Capacity
Class.= Classification
LOS= Level of Service
V/C= Volume to Capacity Ratio

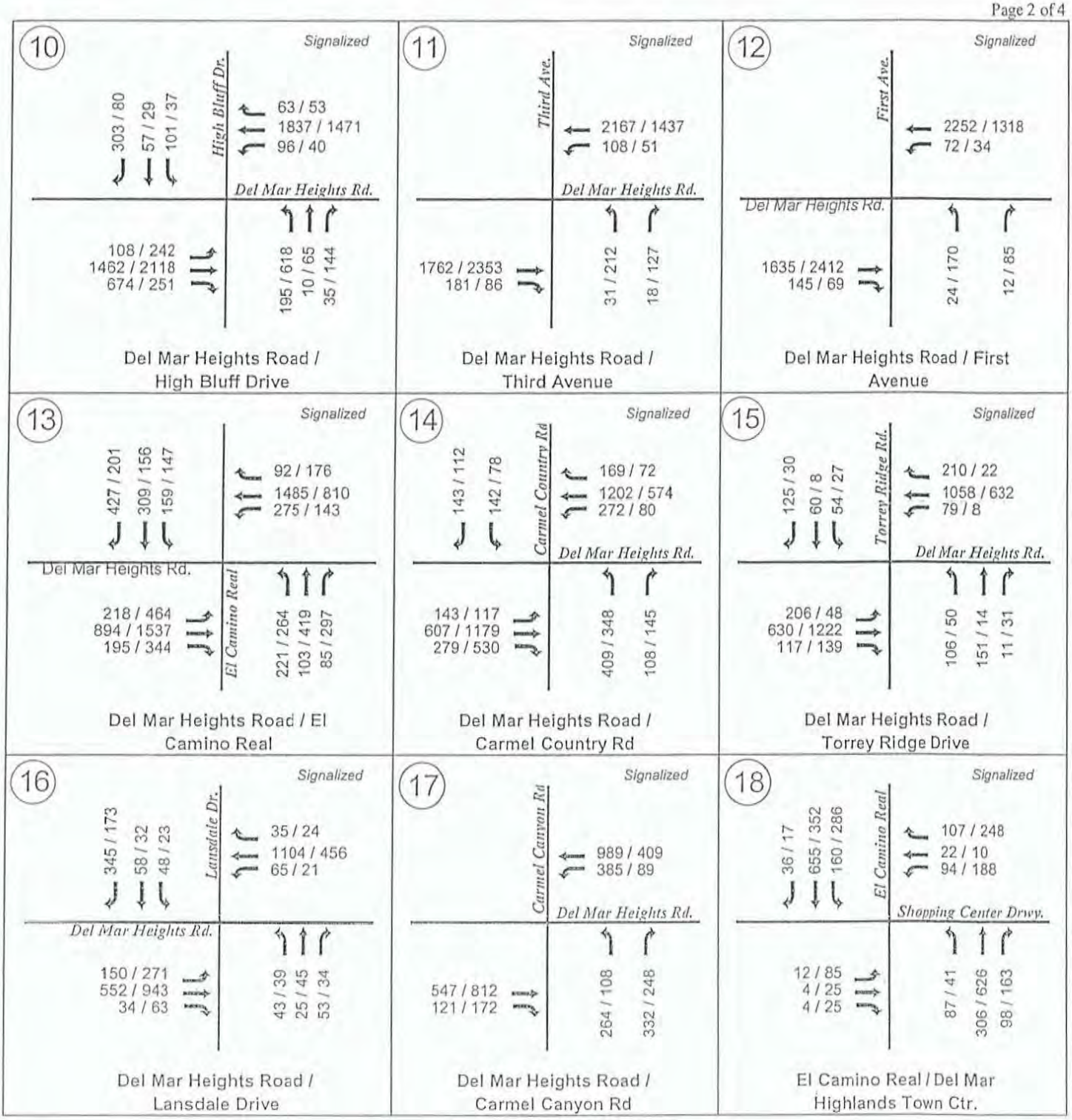
PA = 6 lane Prime Arterial
6-M = 6 lane Major
4-M=4 lane Major
2-Ca=2 lane collector
2-Cb=2 lane collector with no fronting property

5-M = 5 lane Major with LOS E capacity of 45,000 ADT
5-PA = 5 lane Prime Arterial with LOS E capacity of 50,000 ADT



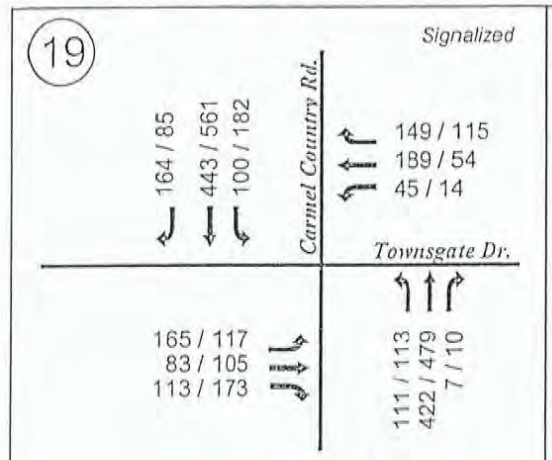
ATTACHMENT 21

Existing + Project (Phase 1) AM/PM Peak Hour Traffic

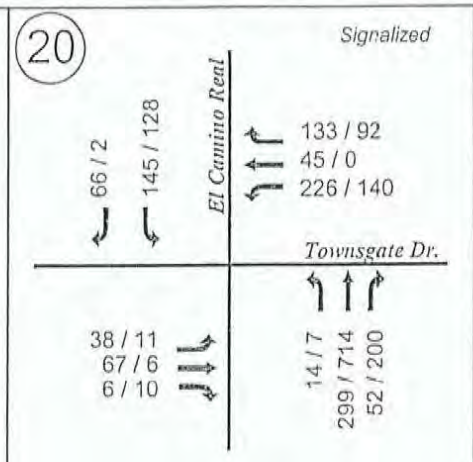


ATTACHMENT 21

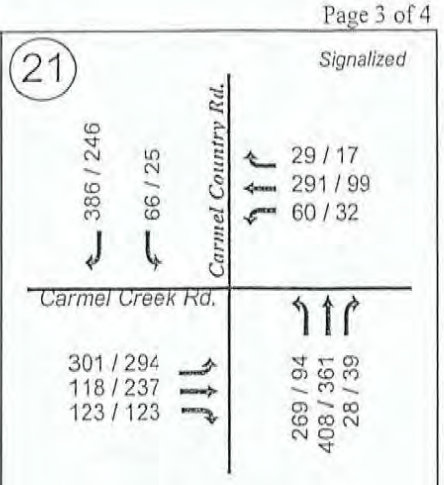
Existing + Project (Phase 1) AM/PM Peak Hour Traffic



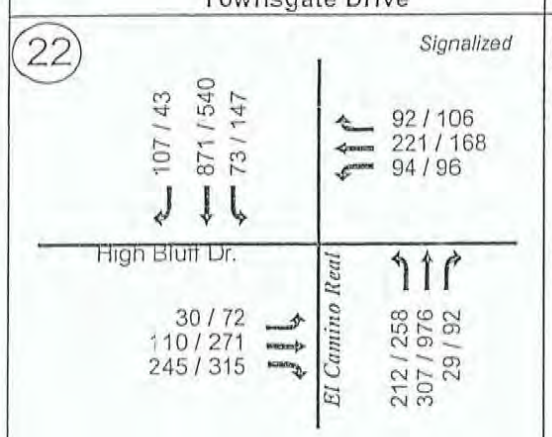
Carmel Country Road / Townsgate Drive



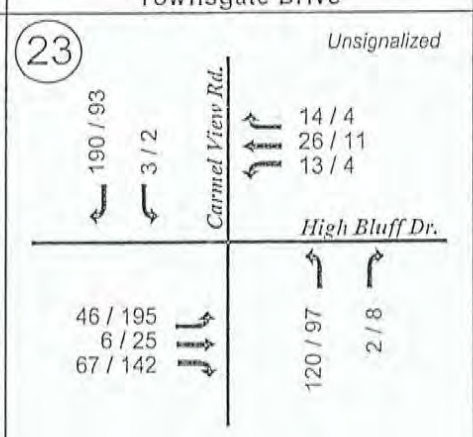
El Camino Real / Townsgate Drive



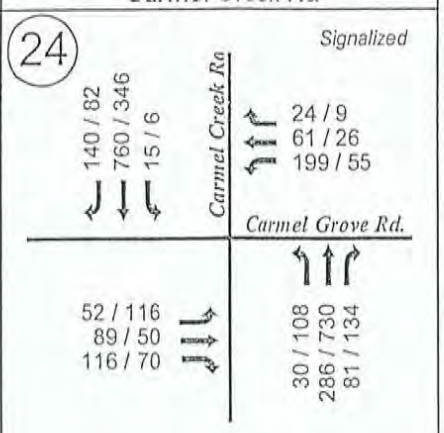
Carmel Country Road / Carmel Creek Rd



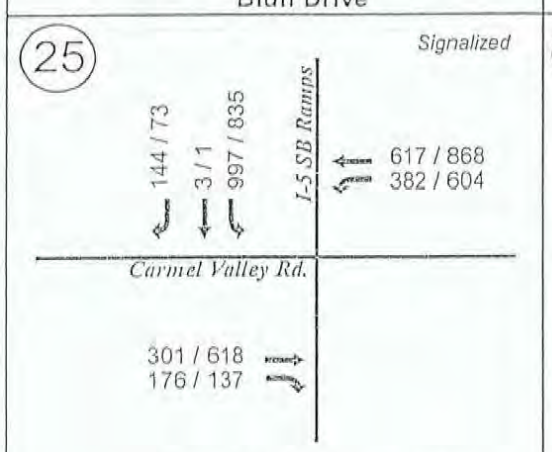
El Camino Real / High Bluff Drive



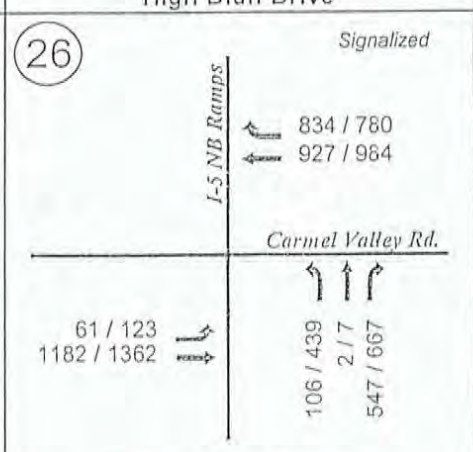
Carmel View Road / High Bluff Drive



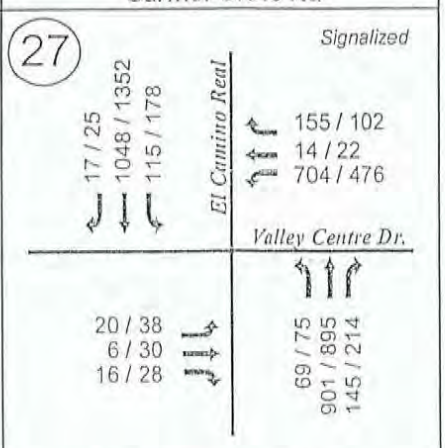
Carmel Creek Road / Carmel Grove Rd



Carmel Valley Road / I-5 SB Ramps



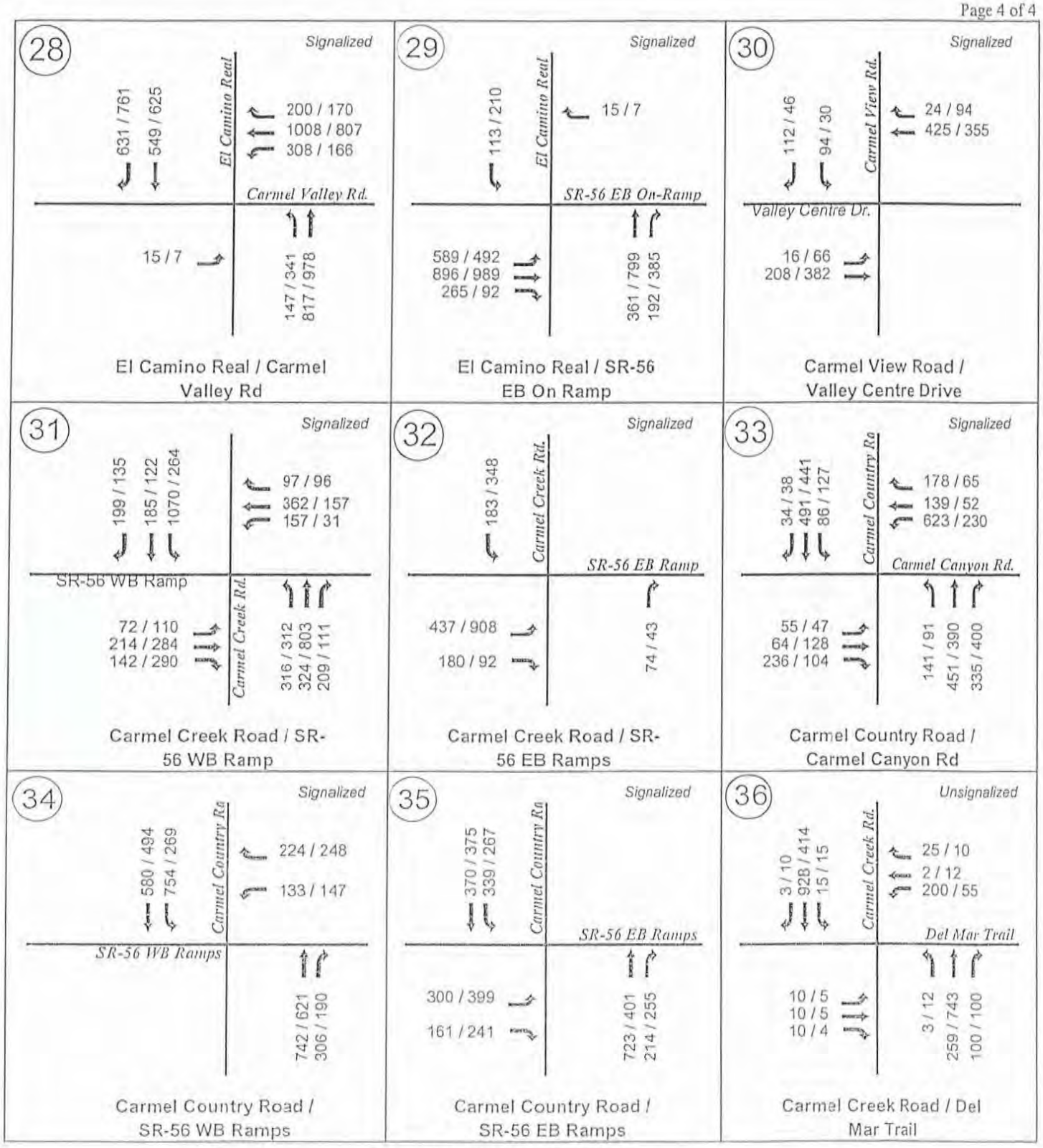
Carmel Valley Road / I-5 NB Ramps



El Camino Real / Valley Centre Drive

ATTACHMENT 21

Existing + Project (Phase 1) AM/PM Peak Hour Traffic



ATTACHMENT 21

Existing + Project (Phase 1) AM/PM Peak Hour Traffic

ATTACHMENT 22

Existing + Project Intersection Levels of Service
Phase 1

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	El Camino Real / Via de la Valle	Signalized	30.6	C	38.4	D
2	El Camino Real / San Dieguito Road	Signalized	17.5	B	26.3	C
3	El Camino Real / Derby Downs Road	Signalized	4.9	A	5.5	A
4	El Camino Real / Half Mile Drive	Signalized	21.9	C	19.5	B
5	El Camino Real / Quarter Mile Drive	Signalized	20.5	C	15.2	B
6	Del Mar Heights Road / Mango Drive	Signalized	36.1	D	38.4	D
7	Del Mar Heights Road / Portofino Drive	Minor Street	9.5	A	9.2	A
8	Del Mar Heights Road / I-5 SB Ramps	Signalized	24	C	22.4	C
9	Del Mar Heights Road / I-5 NB Ramps	Signalized	35.9	D	37.2	D
10	Del Mar Heights Road / High Bluff Drive	Signalized	29.3	C	44.6	D
11	Del Mar Heights Road / Third Avenue	Signalized	6.1	A	11.7	B
12	Del Mar Heights Road / First Avenue	Signalized	5	A	11.3	B
13	Del Mar Heights Road / El Camino Real	Signalized	34.2	C	32.8	C
14	Del Mar Heights Road / Carmel Country Rd	Signalized	30.5	C	26.8	C
15	Del Mar Heights Road / Torrey Ridge Drive	Signalized	28.4	C	10.9	B
16	Del Mar Heights Road / Lansdale Drive	Signalized	25.2	C	17.6	B
17	Del Mar Heights Road / Carmel Canyon Rd	Signalized	16	B	11.5	B
18	El Camino Real / Del Mar Highlands Town Ctr.	Signalized	16.4	B	24.4	C
19	Carmel Country Road / Townsgate Drive	Signalized	29.8	C	26	C
20	El Camino Real / Townsgate Drive	Signalized	23.7	C	19.1	B
21	Carmel Country Road / Carmel Creek Rd	Signalized	53.2	D	29.6	C
22	El Camino Real / High Bluff Drive	Signalized	27.3	C	33.6	C
23	Carmel View Road / High Bluff Drive	All Way Stop	8.5	A	9.3	A
24	Carmel Creek Road / Carmel Grove Rd	Signalized	27.3	C	20.2	C
25	Carmel Valley Road / I-5 SB Ramps	Signalized	20.8	C	28.1	C
26	Carmel Valley Road / I-5 NB Ramps	Signalized	14.9	B	22.2	C
27	El Camino Real / Valley Centre Drive	Signalized	25.2	C	23.6	C
28	El Camino Real / Carmel Valley Rd	Signalized	19.9	B	25.9	C
29	El Camino Real / SR-56 EB On Ramp	Signalized	18.2	B	30.5	C
30	Carmel View Road / Valley Centre Drive	Signalized	7.6	A	6.7	A
31	Carmel Creek Road / SR-56 WB Ramp	Signalized	53.3	D	27.6	C
32	Carmel Creek Road / SR-56 EB Ramps	Signalized	14.4	B	22.3	C
33	Carmel Country Road / Carmel Canyon Rd	Signalized	37.2	D	28.7	C
34	Carmel Country Road / SR-56 WB Ramps	Signalized	17.4	B	11.7	B
35	Carmel Country Road / SR-56 EB Ramps	Signalized	15.8	B	14	B
36	Carmel Creek Road / Del Mar Trail	All Way Stop	43.6	E	21.1	C

Notes:

LOS = Level of Service

ATTACHMENT 23

Existing With Project (Phase 1) Freeway Segment LOS Summary

Segment	Lanes	Dir.	Cap.	ADT	Peak Hour %	Dir. Split	Truck Factor	PHV	V/C	LOS
I-5										
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	NB	12,800	222,717	0.068	0.53	0.98	8,115	0.634	C
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	SB	12,800	222,717	0.067	0.55	0.98	8,377	0.654	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	NB	13,450	238,922	0.068	0.53	0.98	8,705	0.647	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	SB	13,450	238,922	0.067	0.55	0.98	8,986	0.668	C
Del Mar Heights Rd./ SR-56	6-GP+1-M	NB	15,780	242,844	0.068	0.53	0.98	8,848	0.561	B
Del Mar Heights Rd./ SR-56	6-GP+1-M	SB	15,780	242,844	0.067	0.55	0.98	9,134	0.579	B
SR-56/ Carmel Mountain Road	9-GP+1-M	NB	22,830	289,025	0.079	0.57	0.98	13,164	0.577	B
SR-56/ Carmel Mountain Road	8-GP+1-M	SB	20,480	289,025	0.080	0.55	0.98	12,928	0.631	C
Carmel Mountain Road/ I-805 Merge	10	NB	23,500	288,820	0.079	0.57	0.98	13,155	0.560	B
Carmel Mountain Road/ I-805 Merge	10	SB	23,500	288,820	0.080	0.55	0.98	12,919	0.550	B
SR-56										
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	EB	6,500	81,205	0.093	0.69	0.98	5,307	0.816	D
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	WB	6,500	81,205	0.094	0.70	0.98	5,442	0.837	D
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	EB	6,500	76,205	0.093	0.69	0.98	4,980	0.766	C
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	WB	6,500	76,205	0.094	0.70	0.98	5,107	0.786	C

Legend:

Dir.= Direction
Cap. = Capacity
ADT= Average Daily Traffic
V/C= Volume to Capacity Ratio
LOS= Level of Service
PHV= Peak Hour Volume
#-GP= # of General Purpose Lanes

Note:

Capacity for LOS "E" roadway is 2,350 veh/hr/ln.
Taken from Transition between LOS"C" and LOS "D" criteria for Basic Freeway Segments @ 65 mi/hr in "Caltrans Guide for the Preparation of Traffic Impact Studies", December 2002
AX = Auxilary lane with LOS E capacity of 1,800 veh/hr/ln
Peak Hour % and Dir. Split taken from Caltrans internet posted Traffic Volumes

#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1680 veh/hr/ln taken from Caltrans Guide, December 2002)
#-HOV = # of High Occupancy Vehicle lane with LOS E capacity of 1,600 veh/hr/ln

ATTACHMENT 24

Existing with Project Ramp Meter Analysis
(Phase 1)

Most Restrictive Meter Rate

Location		Demand (Veh/Hr)	Meter Rate (Veh/Hr)	Excess Demand (Veh/Hr)	Delay (Min)	Queue (Feet)
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound)	AM	417	368	49	7.99	1,421
	PM	318	368	0	0	0
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	360	499	0	0	0
	PM	204	499	0	0	0
Del Mar Heights Rd. / I-5 NB on Ramp	AM	N/A	Meter is not turned on			
	PM	554	593	0	0	0

NOTE:
Meter rate is based on the most restrictive meter rate provided by Caltrans
Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour
Queue = Excess Demand * 29 feet/vehicle

ATTACHMENT 25

Existing + Project (Phase 1&2) Average Daily Traffic

ATTACMENT 26

Existing with Project (Phase 1 & 2) Street Segment Levels of Service

Existing + Project Analysis

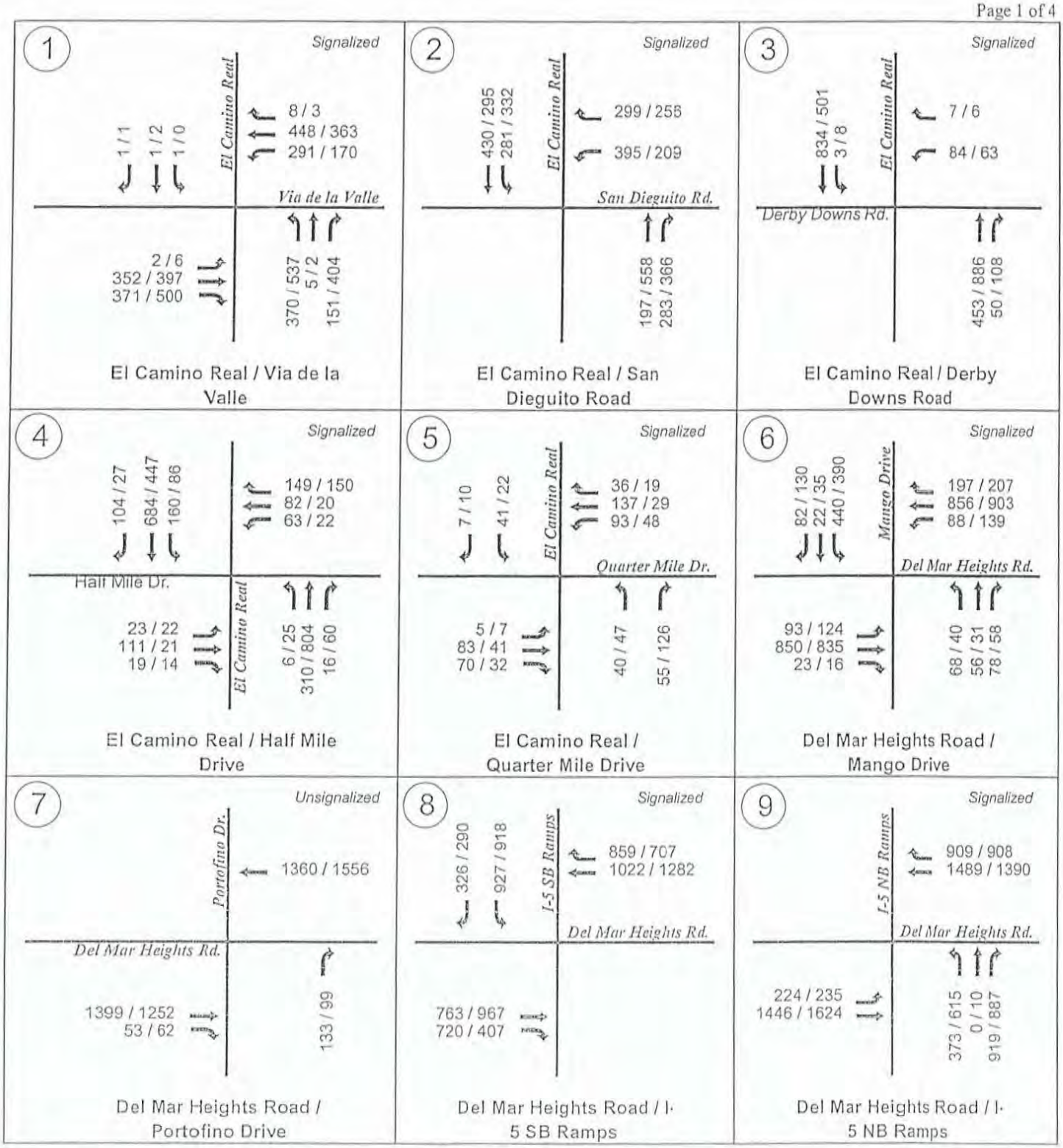
Road	Segment	Jurisd.	Class.	Cap.	Volume	V/C	LOS
Del Mar Heights Rd.	Mango Drive to Portofino Drive	SD	5-M	45,000	22,937	0.51	B
	Portofino Drive to I-5 Southbound Ramps	SD	5-PA	50,000	38,250	0.76	C
	I-5 Southbound Ramps and I-5 Northbound Ramps	SD	5-PA	50,000	43,876	0.88	D
	I-5 Northbound Ramps to High Bluff Drive	SD	PA	60,000	58,657	0.98	E
	High Bluff Drive to Third Avenue	SD	PA	60,000	46,024	0.77	C
	Third Avenue to First Avenue	SD	PA	60,000	45,302	0.76	C
	First Avenue to El Camino Real	SD	PA	60,000	45,302	0.76	C
	El Camino Real to Carmel Country Road	SD	PA	60,000	37,542	0.63	C
	Carmel Country Road to Torrey Ridge Road	SD	PA	60,000	24,002	0.40	A
	Torrey Ridge Road to Lansdale Drive	SD	PA	60,000	20,694	0.34	A
	Lansdale Drive to Carmel Canyon Road	SD	PA	60,000	16,090	0.27	A
El Camino Real	Via de la Valle to San Dieguito Road	SD	2-Ca	15,000	16,120	1.07	F
	San Dieguito Road to Derby Downs Road	SD	4-M	40,000	14,636	0.37	A
	Derby Downs Road to Half Mile Drive	SD	4-M	40,000	16,054	0.40	B
	Half Mile Drive to Quarter Mile Drive	SD	4-M	40,000	14,418	0.36	A
	Quarter Mile Drive to Del Mar Heights Road	SD	4-M	40,000	16,007	0.40	B
	Del Mar Heights Road to Townsgate Drive	SD	6-M	50,000	17,436	0.35	A
	Townsgate Drive to High Bluff Drive	SD	6-M	50,000	17,769	0.36	A
	High Bluff Drive to Valley Centre Drive	SD	6-M	50,000	20,987	0.42	B
	Valley Centre Drive to Carmel Valley Road	SD	5-M	45,000	28,671	0.64	C
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	SD	4-M	40,000	17,735	0.44	B
	Townsgate Drive to Carmel Creek Road	SD	4-M	40,000	15,320	0.38	B
	Carmel Creek Road to Carmel Canyon Road	SD	4-M	40,000	14,039	0.35	A
	Carmel Canyon Road to SR-56 Westbound Ramps	SD	4-M	40,000	21,274	0.53	C
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Road	SD	4-M	40,000	12,585	0.31	A
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	SD	4-M	40,000	11,747	0.29	A
	Carmel Grove Road to SR-56 Westbound Ramps	SD	4-M	40,000	15,403	0.39	B
Valley Centre Drive	Carmel View Road to Carmel Creek Road	SD	4-C	30,000	11,055	0.37	B
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	SD	PA	60,000	43,736	0.73	C
High Bluff Drive	Del Mar Heights Road to El Camino Real	SD	2-Ca	15,000	10,383	0.69	D
Via de la Valle	San Andres Drive to El Camino Real (West)	SD	2-Cb	10,000	24,761	2.48	F

Legend:

SD= City of San Diego
Cap.= Capacity
Class.= Classification
LOS= Level of Service
V/C= Volume to Capacity Ratio

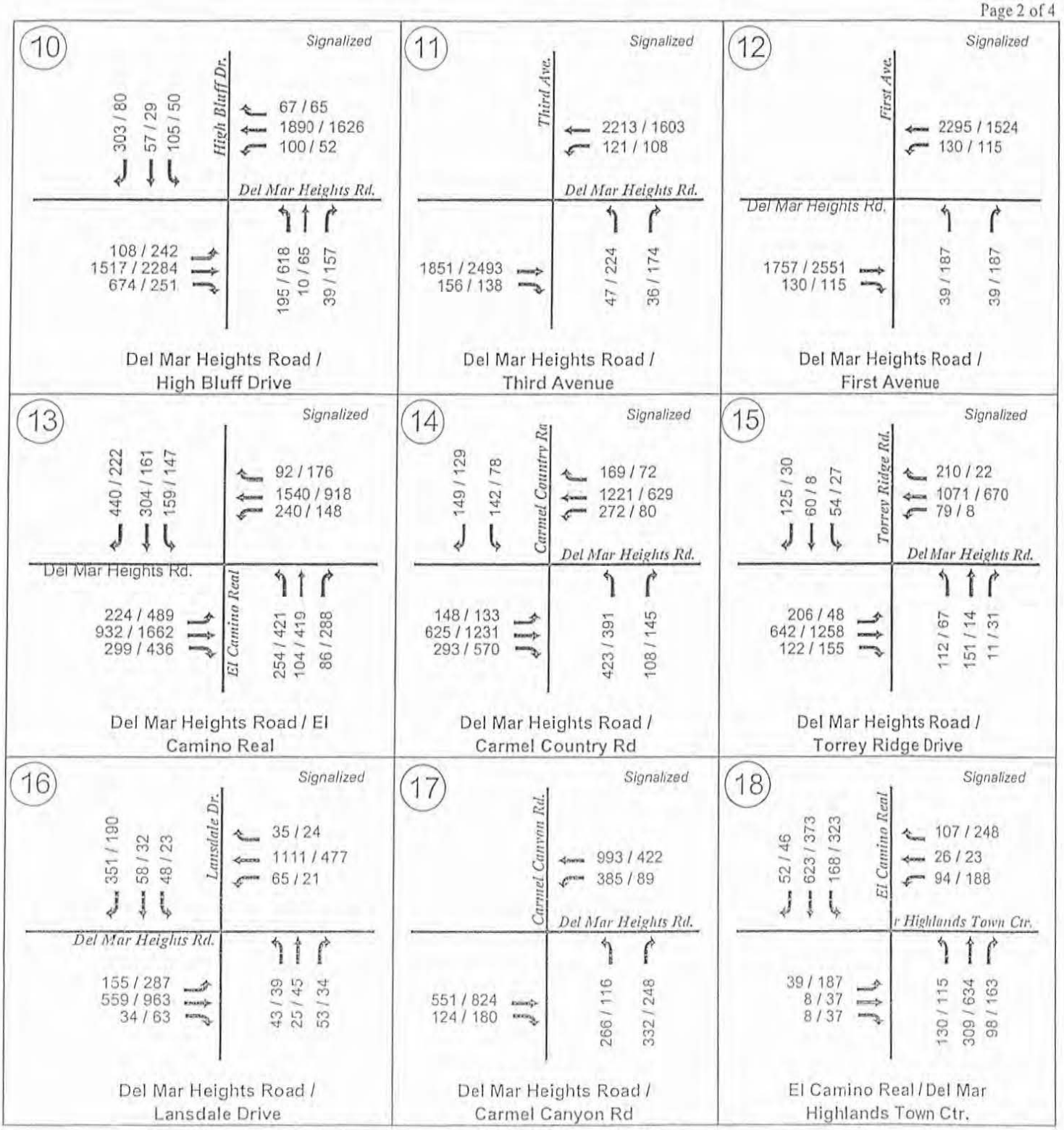
PA = 6 lane Prime Arterial
6-M = 6 lane Major
4-M=4 lane Major
2-Ca=2 lane collector
2-Cb=2 lane collector with no fronting property

5-M = 5 lane Major with LOS E capacity of 45,000 ADT
5-PA = 5 lane Prime Arterial with LOS E capacity of 50,000 ADT



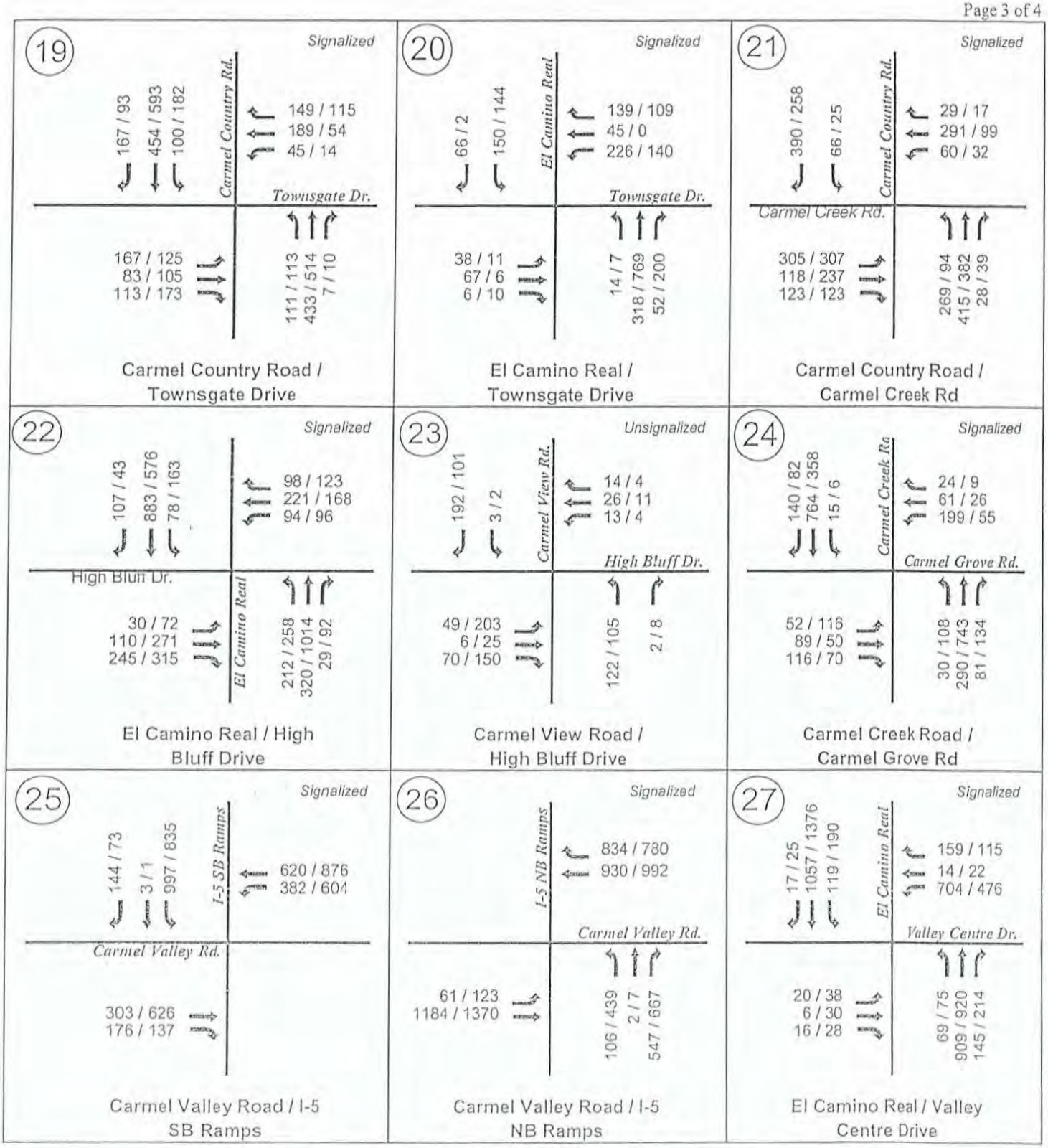
ATTACHMENT 27

Existing + Project (Phase 1&2) AM/PM Peak Hour Traffic



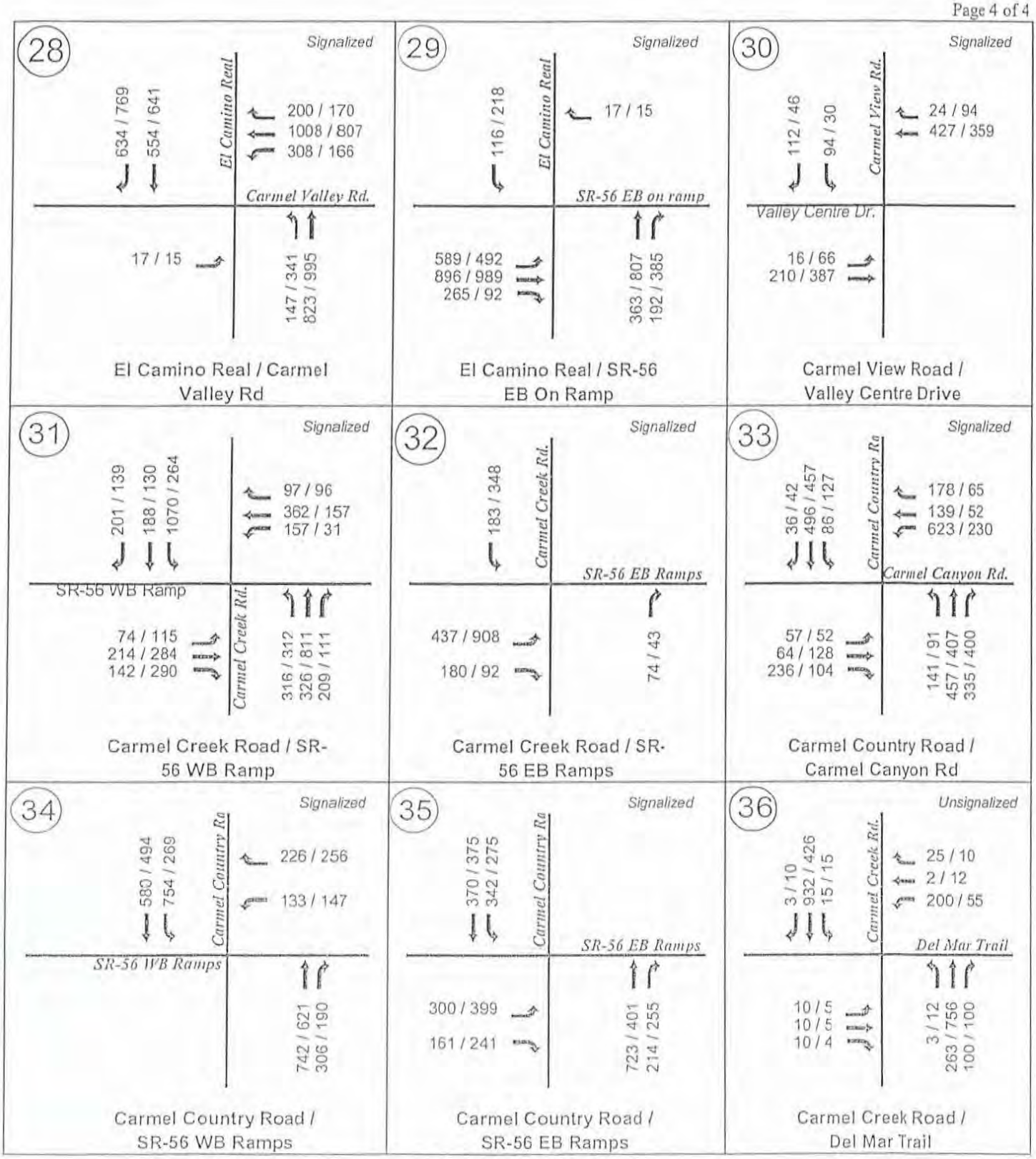
ATTACHMENT 27

Existing + Project (Phase 1&2) AM/PM Peak Hour Traffic



ATTACHMENT 27

Existing + Project (Phase 1&2) AM/PM Peak Hour Traffic



ATTACHMENT 27

Existing + Project (Phase 1&2) AM/PM Peak Hour Traffic

ATTACHMENT 28

Existing + Project (Phase 1 & 2) Intersection Levels of Service

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	El Camino Real / Via de la Valle	Signalized	30.8	C	39.6	D
2	El Camino Real / San Dieguito Road	Signalized	17.6	B	26.8	C
3	El Camino Real / Derby Downs Road	Signalized	4.9	A	5.5	A
4	El Camino Real / Half Mile Drive	Signalized	22	C	21.7	C
5	El Camino Real / Quarter Mile Drive	Signalized	20.6	C	15.5	B
6	Del Mar Heights Road / Mango Drive	Signalized	36.7	D	39.2	D
7	Del Mar Heights Road / Portofino Drive	Minor Street	9.6	A	9.3	A
8	Del Mar Heights Road / I-5 SB Ramps	Signalized	24.1	C	24.3	C
9	Del Mar Heights Road / I-5 NB Ramps	Signalized	37.4	D	41.7	D
10	Del Mar Heights Road / High Bluff Drive	Signalized	30.2	C	51.9	D
11	Del Mar Heights Road / Third Avenue	Signalized	8.1	A	14.9	B
12	Del Mar Heights Road / First Avenue	Signalized	7.6	A	15.8	B
13	Del Mar Heights Road / El Camino Real	Signalized	35.8	D	38.6	D
14	Del Mar Heights Road / Carmel Country Rd	Signalized	31	C	28.8	C
15	Del Mar Heights Road / Torrey Ridge Drive	Signalized	28.7	C	11.1	B
16	Del Mar Heights Road / Lansdale Drive	Signalized	25.5	C	18	B
17	Del Mar Heights Road / Carmel Canyon Rd	Signalized	16.1	B	11.6	B
18	El Camino Real / Del Mar Highlands Town Ctr.	Signalized	18.2	B	29.4	C
19	Carmel Country Road / Townsgate Drive	Signalized	30.1	C	27.7	C
20	El Camino Real / Townsgate Drive	Signalized	23.8	C	19.5	B
21	Carmel Country Road / Carmel Creek Rd	Signalized	53.9	D	30.4	C
22	El Camino Real / High Bluff Drive	Signalized	27.3	C	34.4	C
23	Carmel View Road / High Bluff Drive	All Way Stop	8.6	A	9.5	A
24	Carmel Creek Road / Carmel Grove Rd	Signalized	27.3	C	20.3	C
25	Carmel Valley Road / I-5 SB Ramps	Signalized	20.9	C	28.5	C
26	Carmel Valley Road / I-5 NB Ramps	Signalized	14.9	B	22.4	C
27	El Camino Real / Valley Centre Drive	Signalized	25.2	C	23.9	C
28	El Camino Real / Carmel Valley Rd	Signalized	20	B	26.2	C
29	El Camino Real / SR-56 EB On Ramp	Signalized	18.3	B	31	C
30	Carmel View Road / Valley Centre Drive	Signalized	7.6	A	6.7	A
31	Carmel Creek Road / SR-56 WB Ramp	Signalized	53.6	D	27.4	C
32	Carmel Creek Road / SR-56 EB Ramps	Signalized	14.5	B	22.3	C
33	Carmel Country Road / Carmel Canyon Rd	Signalized	37.3	D	29	C
34	Carmel Country Road / SR-56 WB Ramps	Signalized	17.4	B	11.7	B
35	Carmel Country Road / SR-56 EB Ramps	Signalized	15.8	B	14.1	B
36	Carmel Creek Road / Del Mar Trail	All Way Stop	44.5	E	22	C

Notes:

LOS = Level of Service

ATTACHMENT 29

Existing With Project (Phase 1 & 2) Freeway Segment LOS Summary

Segment	Lanes	Dir.	Cap.	ADT	Peak Hour %	Dir. Split	Truck Factor	PHV	V/C	LOS
I-5										
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	NB	12,800	223,262	0.068	0.53	0.98	8,135	0.636	C
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	SB	12,800	223,262	0.067	0.55	0.98	8,397	0.656	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	NB	13,450	239,623	0.068	0.53	0.98	8,731	0.649	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	SB	13,450	239,623	0.067	0.55	0.98	9,012	0.670	C
Del Mar Heights Rd./ SR-56	6-GP+1-M	NB	15,780	244,245	0.068	0.53	0.98	8,899	0.564	B
Del Mar Heights Rd./ SR-56	6-GP+1-M	SB	15,780	244,245	0.067	0.55	0.98	9,186	0.582	B
SR-56/ Carmel Mountain Road	9-GP+1-M	NB	22,830	289,803	0.079	0.57	0.98	13,200	0.578	B
SR-56/ Carmel Mountain Road	8-GP+1-M	SB	20,480	289,803	0.080	0.55	0.98	12,963	0.633	C
Carmel Mountain Road/ I-805 Merge	10	NB	23,500	289,442	0.079	0.57	0.98	13,183	0.561	B
Carmel Mountain Road/ I-805 Merge	10	SB	23,500	289,442	0.080	0.55	0.98	12,947	0.551	B
SR-56										
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	EB	6,500	81,361	0.093	0.69	0.98	5,317	0.818	D
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	WB	6,500	81,361	0.094	0.70	0.98	5,453	0.839	D
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	EB	6,500	76,361	0.093	0.69	0.98	4,990	0.768	C
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	WB	6,500	76,361	0.094	0.70	0.98	5,118	0.787	C

Legend:

Dir.= Direction
Cap. = Capacity
ADT= Average Daily Traffic
V/C= Volume to Capacity Ratio
LOS= Level of Service
PHV= Peak Hour Volume
#-GP= # of General Purpose Lanes
#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1680 veh/hr/ln taken from Caltrans Guide, December 2002)
#-HOV = # of High Occupancy Vehicle lane with LOS E capacity of 1,600 veh/hr/ln

Note:

Capacity for LOS "E" roadway is 2,350 veh/hr/ln.
Taken from Transition between LOS"C" and LOS "D" criteria for Basic Freeway Segments @ 65 mi/hr in "Caltrans Guide for the Preparation of Traffic Impact Studies", December 2002
AX = Auxilary lane with LOS E capacity of 1,800 veh/hr/ln
Peak Hour % and Dir. Split taken from Caltrans internet posted Traffic Volumes

ATTACHMENT 30

Existing with Project Ramp Meter Analysis
(Phase 1 & 2)

Most Restrictive Meter Rate

Location		Demand (Veh/Hr)	Meter Rate (Veh/Hr)	Excess Demand (Veh/Hr)	Delay (Min)	Queue (Feet)
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound)	AM	430	368	61.5	10.03	1,784
	PM	354	368	0	0	0
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	360	499	0	0	0
	PM	204	499	0	0	0
Del Mar Heights Rd. / I-5 NB on Ramp	AM	N/A	Meter is not turned on			
	PM	572	593	0	0	0

NOTE:
Meter rate is based on the most restrictive meter rate provided by Caltrans
Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour
Queue = Excess Demand * 29 feet/vehicle

ATTACHENT 31

Existing + Project (Buildout) Average Daily Traffic

ATTACHMENT 32

Existing with Project (Buildout) Street Segment Levels of Service

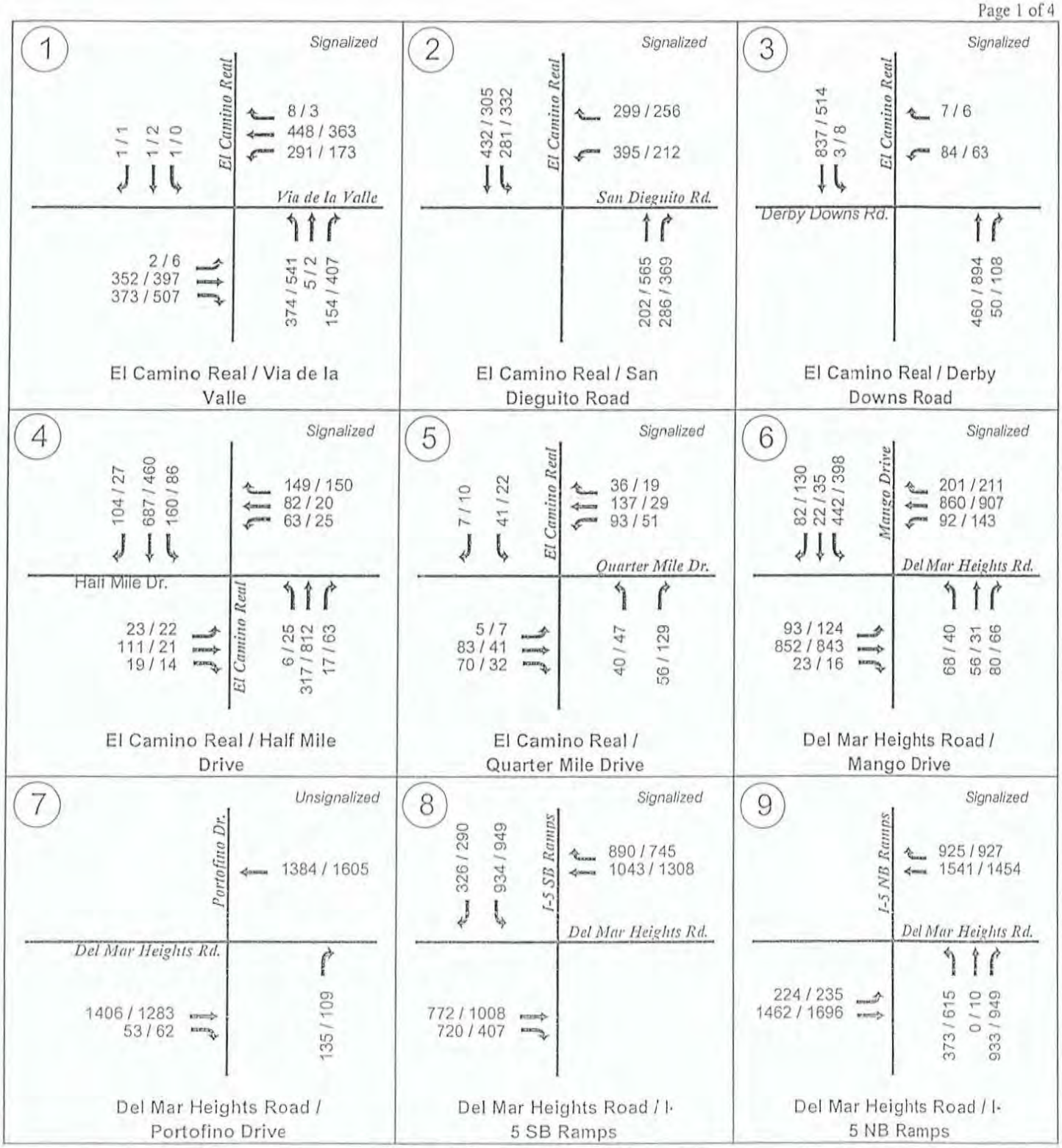
Existing + Project Analysis

Road	Segment	Jurisd.	Class.	Cap.	Volume	V/C	LOS
Del Mar Heights Rd.	Mango Drive to Portofino Drive	SD	5-M	45,000	23,461	0.52	B
	Portofino Drive to I-5 Southbound Ramps	SD	5-PA	50,000	38,948	0.78	C
	I-5 Southbound Ramps and I-5 Northbound Ramps	SD	5-PA	50,000	45,099	0.90	E
	I-5 Northbound Ramps to High Bluff Drive	SD	PA	60,000	60,928	1.02	F
	High Bluff Drive to Third Avenue	SD	PA	60,000	48,644	0.81	D
	Third Avenue to First Avenue	SD	PA	60,000	47,690	0.79	C
	First Avenue to El Camino Real	SD	PA	60,000	47,690	0.79	C
	El Camino Real to Carmel Country Road	SD	PA	60,000	39,115	0.65	C
	Carmel Country Road to Torrey Ridge Road	SD	PA	60,000	24,759	0.41	A
	Torrey Ridge Road to Lansdale Drive	SD	PA	60,000	21,218	0.35	A
	Lansdale Drive to Carmel Canyon Road	SD	PA	60,000	16,381	0.27	A
El Camino Real	Via de la Valle to San Dieguito Road	SD	2-Ca	15,000	16,295	1.09	F
	San Dieguito Road to Derby Downs Road	SD	4-M	40,000	14,869	0.37	A
	Derby Downs Road to Half Mile Drive	SD	4-M	40,000	16,287	0.41	B
	Half Mile Drive to Quarter Mile Drive	SD	4-M	40,000	14,709	0.37	A
	Quarter Mile Drive to Del Mar Heights Road	SD	4-M	40,000	16,356	0.41	B
	Del Mar Heights Road to Townsgate Drive	SD	6-M	50,000	19,502	0.39	A
	Townsgate Drive to High Bluff Drive	SD	6-M	50,000	18,526	0.37	A
	High Bluff Drive to Valley Centre Drive	SD	6-M	50,000	21,511	0.43	B
	Valley Centre Drive to Carmel Valley Road	SD	5-M	45,000	29,020	0.64	C
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	SD	4-M	40,000	18,317	0.46	B
	Townsgate Drive to Carmel Creek Road	SD	4-M	40,000	15,786	0.39	B
	Carmel Creek Road to Carmel Canyon Road	SD	4-M	40,000	14,330	0.36	A
	Carmel Canyon Road to SR-56 Westbound Ramps	SD	4-M	40,000	21,507	0.54	C
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Road	SD	4-M	40,000	12,701	0.32	A
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	SD	4-M	40,000	11,922	0.30	A
	Carmel Grove Road to SR-56 Westbound Ramps	SD	4-M	40,000	15,578	0.39	B
Valley Centre Drive	Carmel View Road to Carmel Creek Road	SD	4-C	30,000	11,114	0.37	B
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	SD	PA	60,000	43,852	0.73	C
High Bluff Drive	Del Mar Heights Road to El Camino Real	SD	2-Ca	15,000	10,558	0.70	D
Via de la Valle	San Andres Drive to El Camino Real (West)	SD	2-Cb	10,000	24,877	2.49	F

Legend:

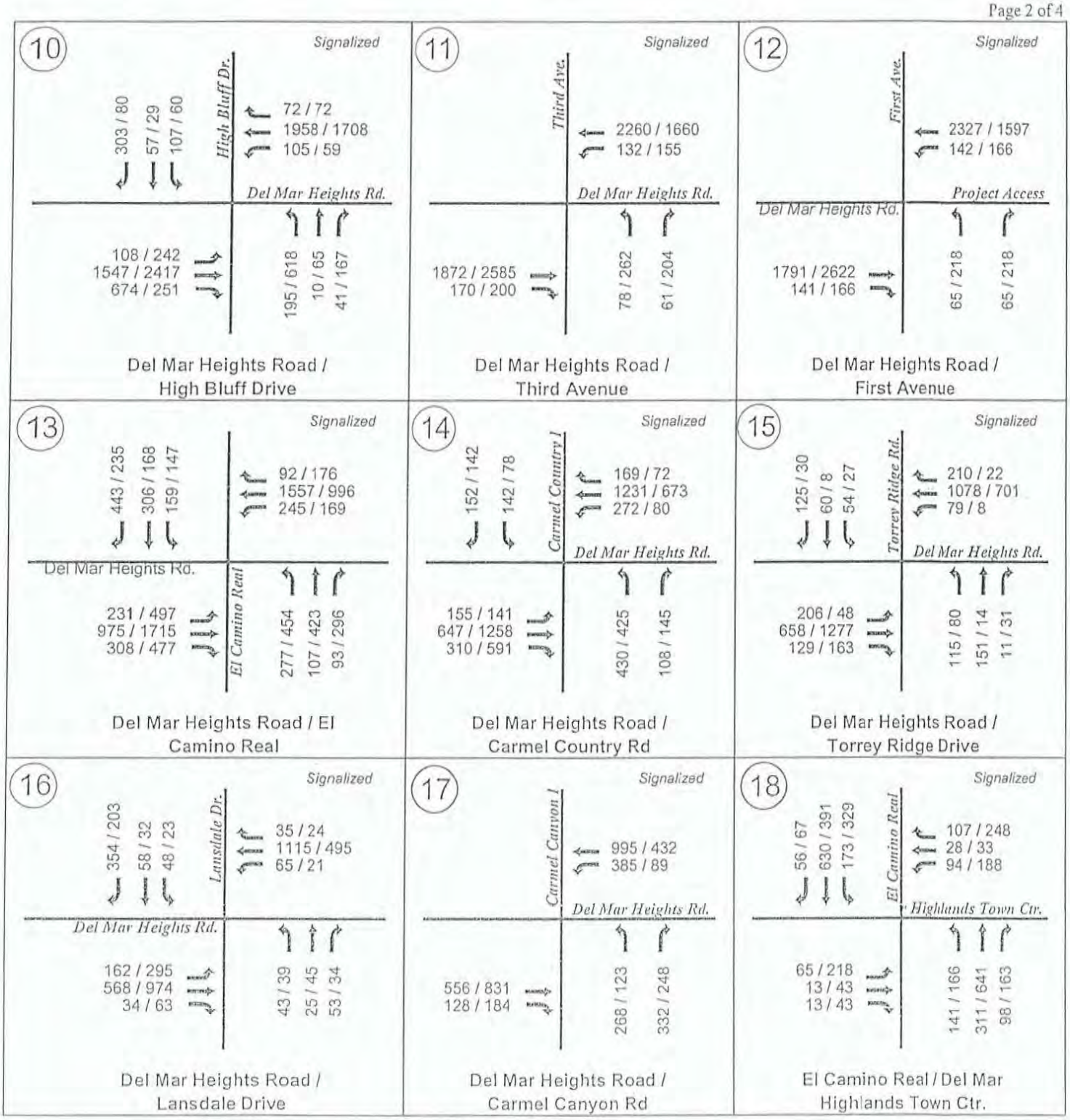
SD= City of San Diego
Cap.= Capacity
Class.= Classification
LOS= Level of Service
V/C= Volume to Capacity Ratio

PA = 6 lane Prime Arterial
6-M = 6 lane Major
4-M=4 lane Major
2-Ca=2 lane collector
2-Cb=2 lane collector with no fronting property



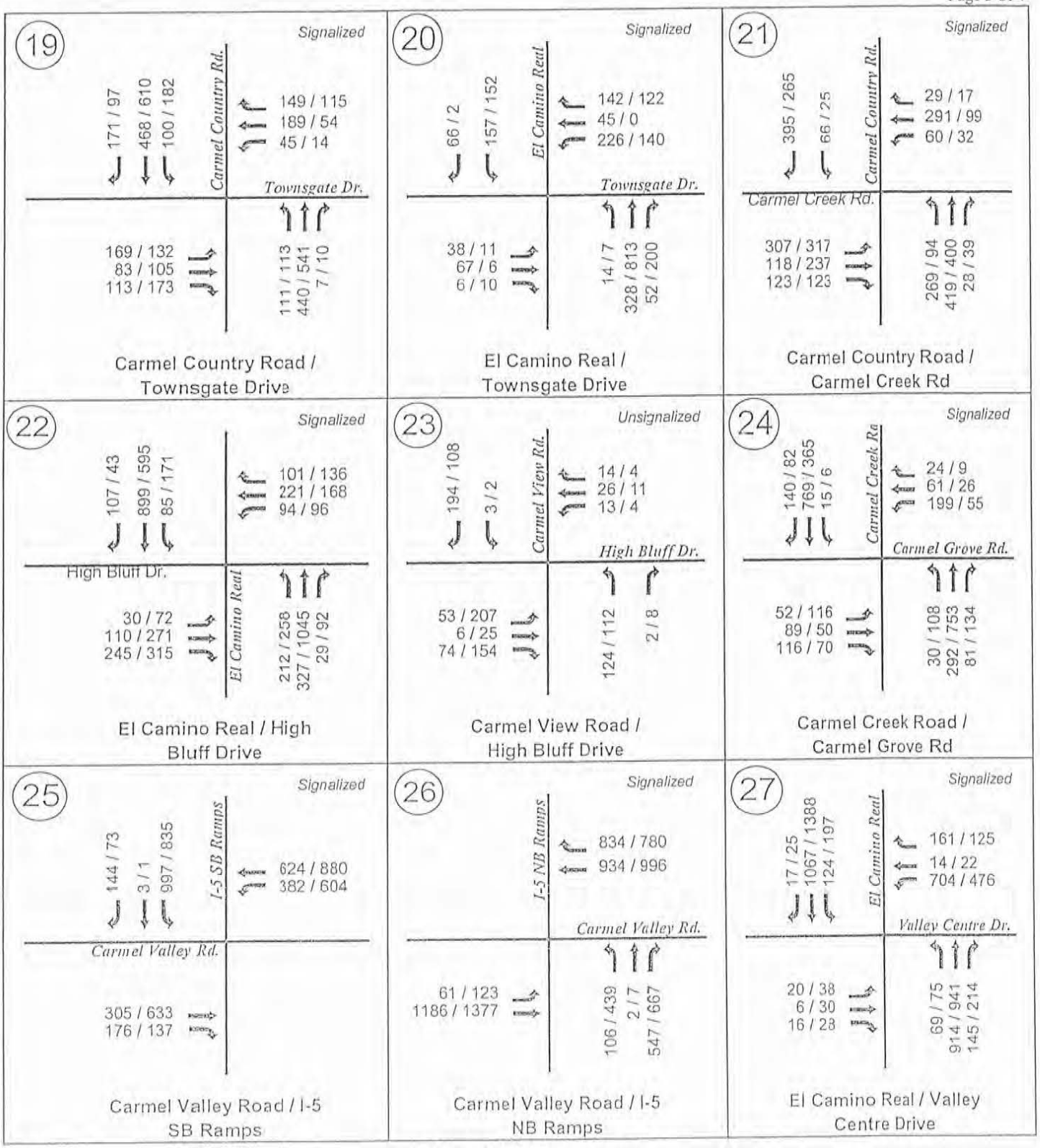
ATTACHMENT 33

Existing + Project (Buildout) AM/PM Peak Hour Traffic



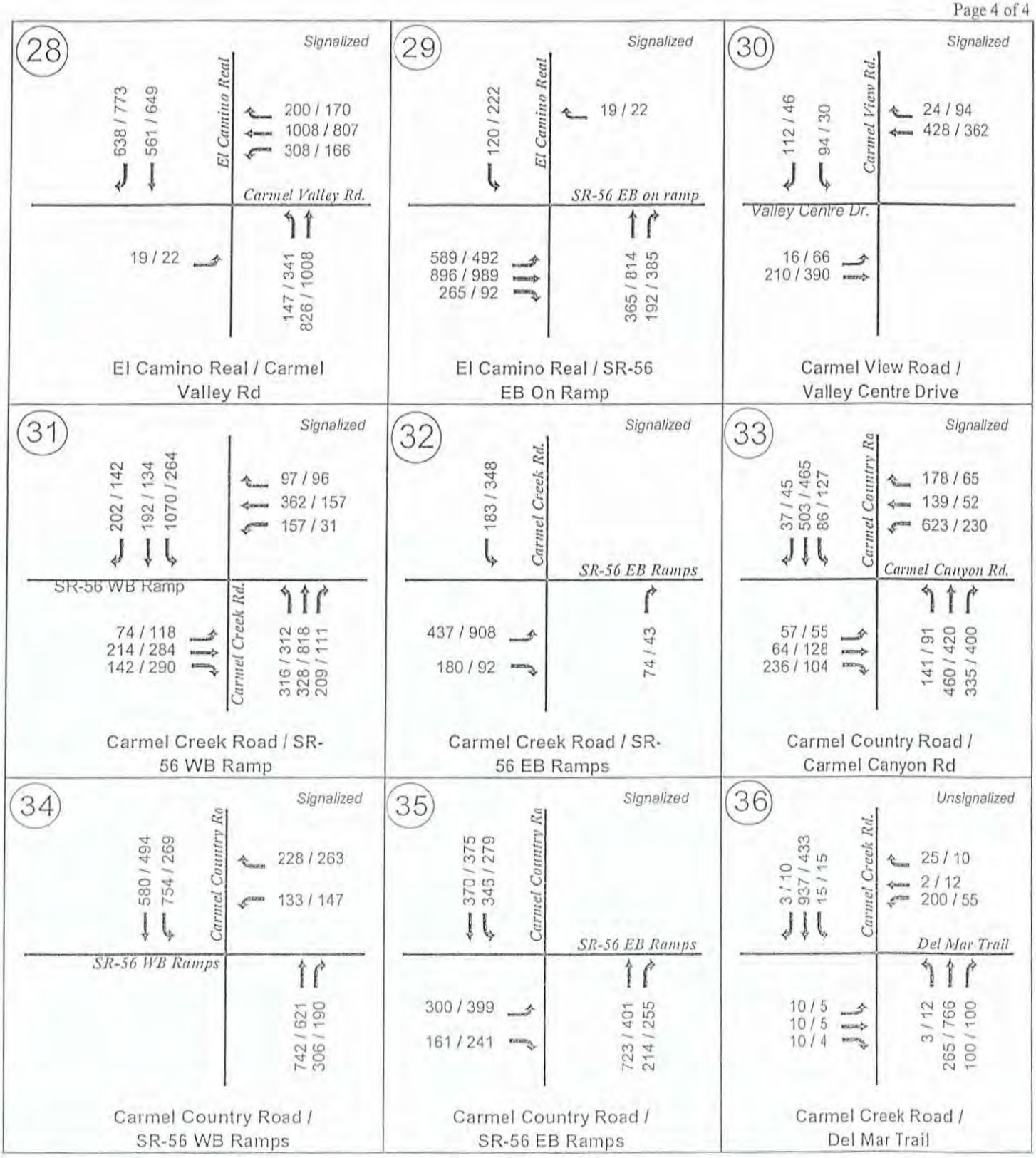
ATTACHMENT 33

Existing + Project (Buildout) AM/PM Peak Hour Traffic



ATTACHMENT 33

Existing + Project (Buildout) AM/PM Peak Hour Traffic



ATTACHMENT 33

Existing + Project (Buildout) AM/PM Peak Hour Traffic

ATTACHMENT 34

Existing + Project (Buildout) Intersection Levels of Service

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	El Camino Real / Via de la Valle	Signalized	31.1	C	40	D
2	El Camino Real / San Dieguito Road	Signalized	17.7	B	27.2	C
3	El Camino Real / Derby Downs Road	Signalized	4.9	A	5.5	A
4	El Camino Real / Half Mile Drive	Signalized	22	C	18.4	B
5	El Camino Real / Quarter Mile Drive	Signalized	20.6	C	15.6	B
6	Del Mar Heights Road / Mango Drive	Signalized	37	D	39.9	D
7	Del Mar Heights Road / Portofino Drive	Minor Street	9.6	A	9.4	A
8	Del Mar Heights Road / I-5 SB Ramps	Signalized	24.4	C	25.4	C
9	Del Mar Heights Road / I-5 NB Ramps	Signalized	38.7	D	46.7	D
10	Del Mar Heights Road / High Bluff Drive	Signalized	31.5	C	52.1	D
11	Del Mar Heights Road / Third Avenue	Signalized	8.9	A	18.8	B
12	Del Mar Heights Road / First Avenue	Signalized	8.4	A	19.2	B
13	Del Mar Heights Road / El Camino Real	Signalized	36.7	D	44.9	D
14	Del Mar Heights Road / Carmel Country Rd	Signalized	31.5	C	30.1	C
15	Del Mar Heights Road / Torrey Ridge Drive	Signalized	28.8	C	12.8	B
16	Del Mar Heights Road / Lansdale Drive	Signalized	25.2	C	18.2	B
17	Del Mar Heights Road / Carmel Canyon Rd	Signalized	16.2	B	11.6	B
18	El Camino Real / Del Mar Highlands Town Ctr.	Signalized	20.3	C	31.2	C
19	Carmel Country Road / Townsgate Drive	Signalized	30.3	C	28.3	C
20	El Camino Real / Townsgate Drive	Signalized	23.8	C	19.7	B
21	Carmel Country Road / Carmel Creek Rd	Signalized	54.5	D	30.9	C
22	El Camino Real / High Bluff Drive	Signalized	27.5	C	35	C
23	Carmel View Road / High Bluff Drive	All Way Stop	8.7	A	9.7	A
24	Carmel Creek Road / Carmel Grove Rd	Signalized	27.4	C	20.3	C
25	Carmel Valley Road / I-5 SB Ramps	Signalized	20.9	C	28.9	C
26	Carmel Valley Road / I-5 NB Ramps	Signalized	14.9	B	22.6	C
27	El Camino Real / Valley Centre Drive	Signalized	25.3	C	24	C
28	El Camino Real / Carmel Valley Rd	Signalized	20.1	C	26.3	C
29	El Camino Real / SR-56 EB On Ramp	Signalized	18.4	B	32.1	C
30	Carmel View Road / Valley Centre Drive	Signalized	7.6	A	6.7	A
31	Carmel Creek Road / SR-56 WB Ramp	Signalized	54.5	D	27.7	C
32	Carmel Creek Road / SR-56 EB Ramps	Signalized	14.5	B	22.4	C
33	Carmel Country Road / Carmel Canyon Rd	Signalized	37.4	D	28.7	C
34	Carmel Country Road / SR-56 WB Ramps	Signalized	17.5	B	11.8	B
35	Carmel Country Road / SR-56 EB Ramps	Signalized	15.9	B	14.1	B
36	Carmel Creek Road / Del Mar Trail	All Way Stop	45.7	E	22.5	C

Notes:

LOS = Level of Service

ATTACHMENT 35

Existing With Project (Buildout) Freeway Segment LOS Summary

Segment	Lanes	Dir.	Cap.	ADT	Peak Hour %	Dir. Split	Truck Factor	PHV	V/C	LOS
I-5										
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	NB	12,800	223,670	0.068	0.53	0.98	8,150	0.637	C
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	SB	12,800	223,670	0.067	0.55	0.98	8,412	0.657	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	NB	13,450	240,147	0.068	0.53	0.98	8,750	0.651	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	SB	13,450	240,147	0.067	0.55	0.98	9,032	0.672	C
Del Mar Heights Rd./ SR-56	6-GP+1-M	NB	15,780	245,294	0.068	0.53	0.98	8,938	0.566	B
Del Mar Heights Rd./ SR-56	6-GP+1-M	SB	15,780	245,294	0.067	0.55	0.98	9,226	0.585	B
SR-56/ Carmel Mountain Road	9-GP+1-M	NB	22,830	290,385	0.079	0.57	0.98	13,226	0.579	B
SR-56/ Carmel Mountain Road	8-GP+1-M	SB	20,480	290,385	0.080	0.55	0.98	12,989	0.634	C
Carmel Mountain Road/ I-805 Merge	10	NB	23,500	289,908	0.079	0.57	0.98	13,205	0.562	B
Carmel Mountain Road/ I-805 Merge	10	SB	23,500	289,908	0.080	0.55	0.98	12,968	0.552	B
SR-56										
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	EB	6,500	81,477	0.093	0.69	0.98	5,325	0.819	D
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	WB	6,500	81,477	0.094	0.70	0.98	5,461	0.840	D
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	EB	6,500	76,477	0.093	0.69	0.98	4,998	0.769	C
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	WB	6,500	76,477	0.094	0.70	0.98	5,125	0.789	C

Legend:

Dir.= Direction
Cap. = Capacity
ADT= Average Daily Traffic
V/C= Volume to Capacity Ratio
LOS= Level of Service
PHV= Peak Hour Volume
#-GP= # of General Purpose Lanes
#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1680 veh/hr/ln taken from Caltrans Guide, December 2002)
#-HOV = # of High Occupancy Vehicle lane with LOS E capacity of 1,600 veh/hr/ln

Note:

Capacity for LOS "E" roadway is 2,350 veh/hr/ln.
Taken from Transition between LOS"C" and LOS "D" criteria for Basic Freeway Segments @ 65 mi/hr in "Caltrans Guide for the Preparation of Traffic Impact Studies", December 2002
AX = Auxilary lane with LOS E capacity of 1,800 veh/hr/ln
Peak Hour % and Dir. Split taken from Caltrans internet posted Traffic Volumes

ATTACHMENT 36

Existing with Project Ramp Meter Analysis
(Buildout)

Most Restrictive Meter Rate

Location		Demand (Veh/Hr)	Meter Rate (Veh/Hr)	Excess Demand (Veh/Hr)	Delay (Min)	Queue (Feet)
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound)	AM	445	368	77.0	12.55	2,233
	PM	373	368	4.5	0.73	131
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	360	499	0	0	0
	PM	204	499	0	0	0
Del Mar Heights Rd. / I-5 NB on Ramp	AM	N/A	Meter is not turned on			
	PM	581	593	0	0.00	0

NOTE:
Meter rate is based on the most restrictive meter rate provided by Caltrans
Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour
Queue = Excess Demand * 29 feet/vehicle

ATTACHMENT 37

Near Term With Project (Phase 1) Average Daily Traffic

ATTACHMENT 38

Near Term with Project (Phase 1) Street Segment Levels of Service

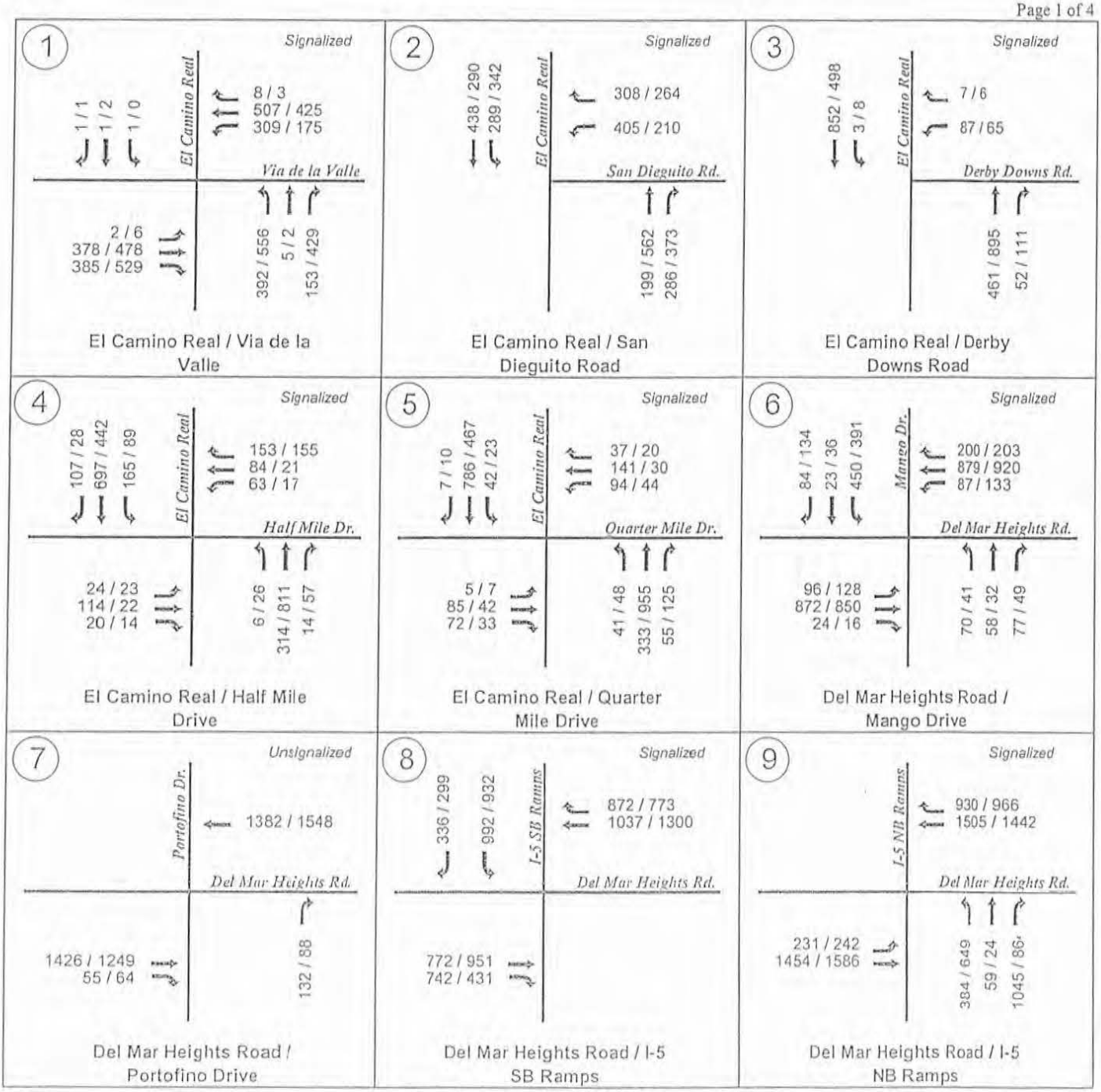
Road	Segment	Jurisd.	Functional Class.	Capacity at LOS E	Volume	V/C	LOS
Del Mar Heights Rd.	Mango Drive to Portofino Drive	SD	5-M	45,000	22,875	0.51	B
	Portofino Drive to I-5 Southbound Ramps	SD	5-PA	50,000	38,398	0.77	C
	I-5 Southbound Ramps and I-5 Northbound Ramps	SD	5-PA	50,000	43,364	0.87	D
	I-5 Northbound Ramps to High Bluff Drive	SD	PA	60,000	58,770	0.98	E
	High Bluff Drive to Third Avenue	SD	PA	60,000	45,259	0.75	C
	Thirth Avenue to First Avenue	SD	PA	60,000	44,234	0.74	C
	First Avenue to El Camino Real	SD	PA	60,000	43,210	0.72	C
	El Camino Real to Carmel Country Road	SD	PA	60,000	36,420	0.61	C
	Carmel Country Road to Torrey Ridge Road	SD	PA	60,000	23,640	0.39	A
	Torrey Ridge Road to Lansdale Drive	SD	PA	60,000	20,565	0.34	A
	Lansdale Drive to Carmel Canyon Road	SD	PA	60,000	16,156	0.27	A
El Camino Real	Via de la Valle to San Dieguito Road	SD	2-Ca	15,000	16,543	1.10	F
	San Dieguito Road to Derby Downs Road	SD	4-M	40,000	14,742	0.37	A
	Derby Downs Road to Half Mile Drive	SD	4-M	40,000	16,203	0.41	B
	Half Mile Drive to Quarter Mile Drive	SD	4-M	40,000	14,434	0.36	A
	Quarter Mile Drive to Del Mar Heights Road	SD	4-M	40,000	15,987	0.40	B
	Del Mar Heights Road to Townsgate Drive	SD	6-M	50,000	18,551	0.37	A
	Townsgate Drive to High Bluff Drive	SD	6-M	50,000	17,994	0.36	A
	High Bluff Drive to Valley Centre Drive	SD	6-M	50,000	21,957	0.44	B
	Valley Centre Drive to Carmel Valley Road	SD	5-M	45,000	30,745	0.68	C
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	SD	4-M	40,000	17,434	0.44	B
	Townsgate Drive to Carmel Creek Road	SD	4-M	40,000	15,114	0.38	B
	Carmel Creek Road to Carmel Canyon Road	SD	4-M	40,000	14,043	0.35	A
	Carmel Canyon Road to SR-56 Westbound Ramps	SD	4-M	40,000	21,579	0.54	C
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Road	SD	4-M	40,000	12,796	0.32	A
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	SD	4-M	40,000	11,850	0.30	A
	Carmel Grove Road to SR-56 Westbound Ramps	SD	4-M	40,000	16,240	0.41	B
Valley Centre Drive	Carmel View Road to Carmel Creek Road	SD	4-C	30,000	11,929	0.40	B
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	SD	PA	60,000	46,173	0.77	C
High Bluff Drive	Del Mar Heights Road to El Camino Real	SD	2-Ca	15,000	10,445	0.70	D
Via de la Valle	San Andres Drive to El Camino Real (West)	SD	2-Cb	10,000	26,937	2.69	F

Legend:

SD= City of San Diego
Cap.= Capacity
Class.= Classification
LOS= Level of Service
V/C= Volume to Capacity Ratio

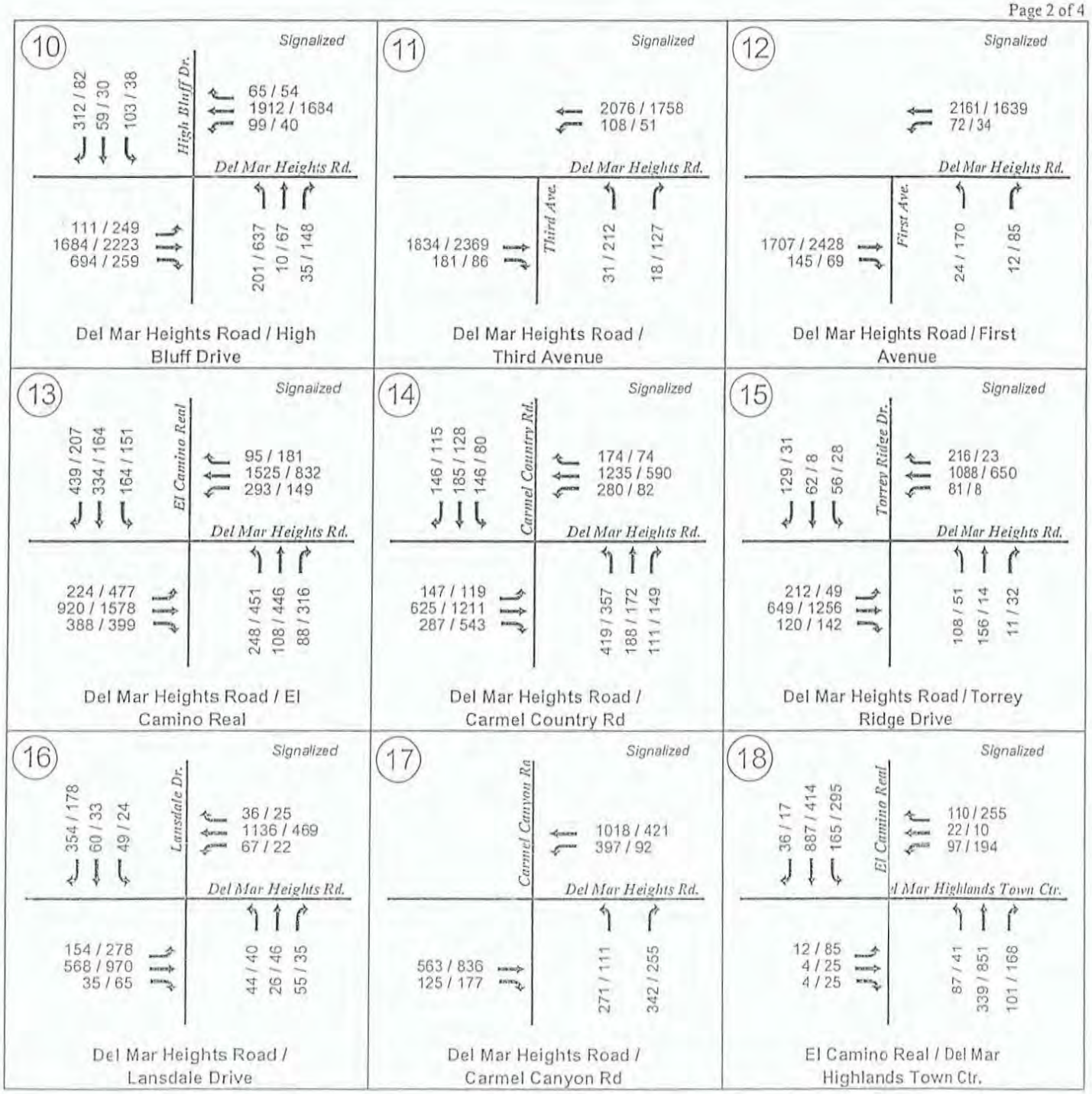
PA = 6 lane Primary Arterial
6-M = 6 lane Major
4-M=4 lane Major
2-Ca=2 lane collector
2-Cb = 2 lane Collector with no fronting property

5-M = 5 lane Major with LOS E capacity of 45,000 ADT
5-PA = 5 lane Primary Arterial with LOS E capacity of 50,000 ADT



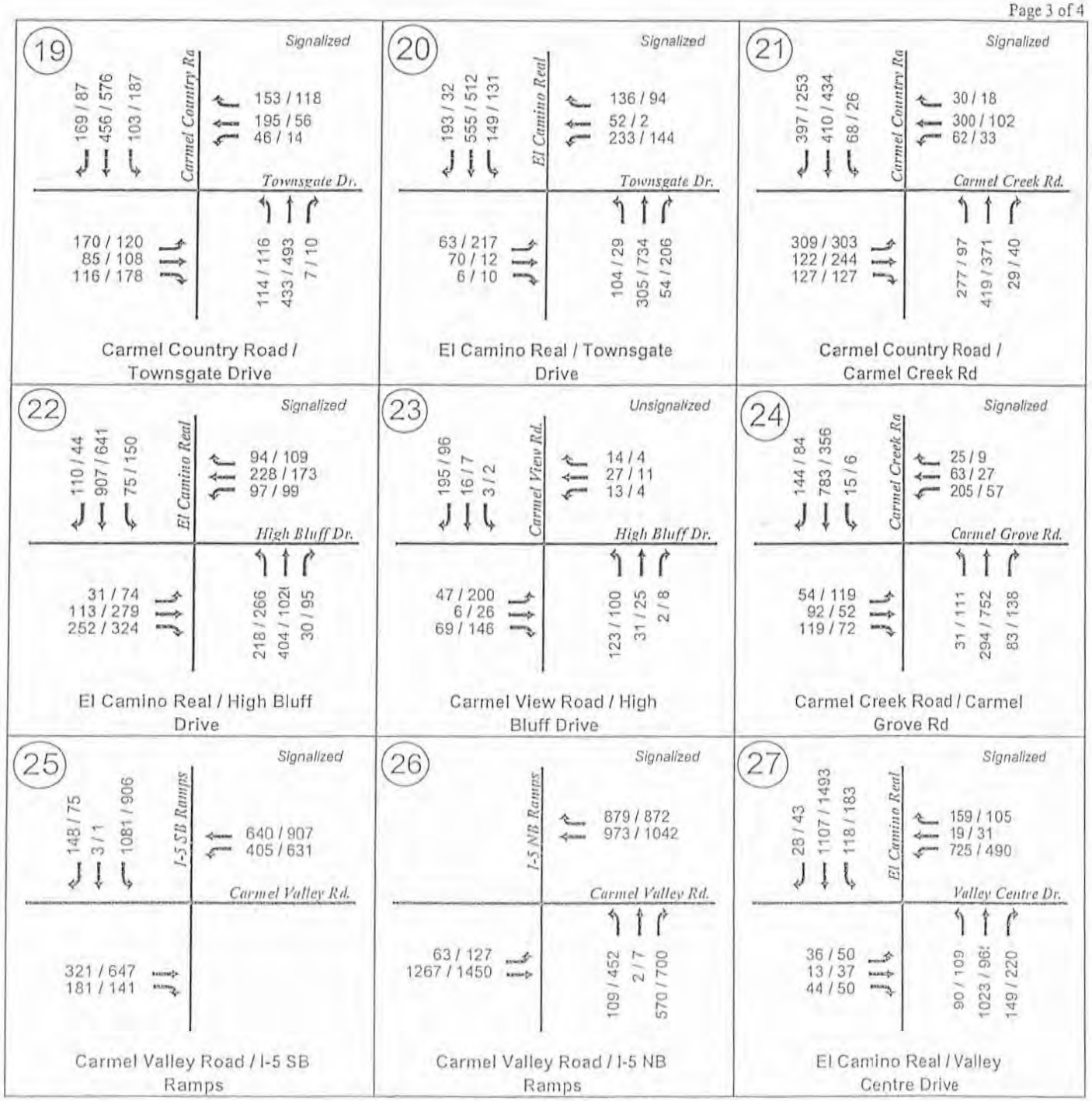
ATTACHMENT 39

Near Term + Project (Phase 1) AM/PM Peak Hour Traffic



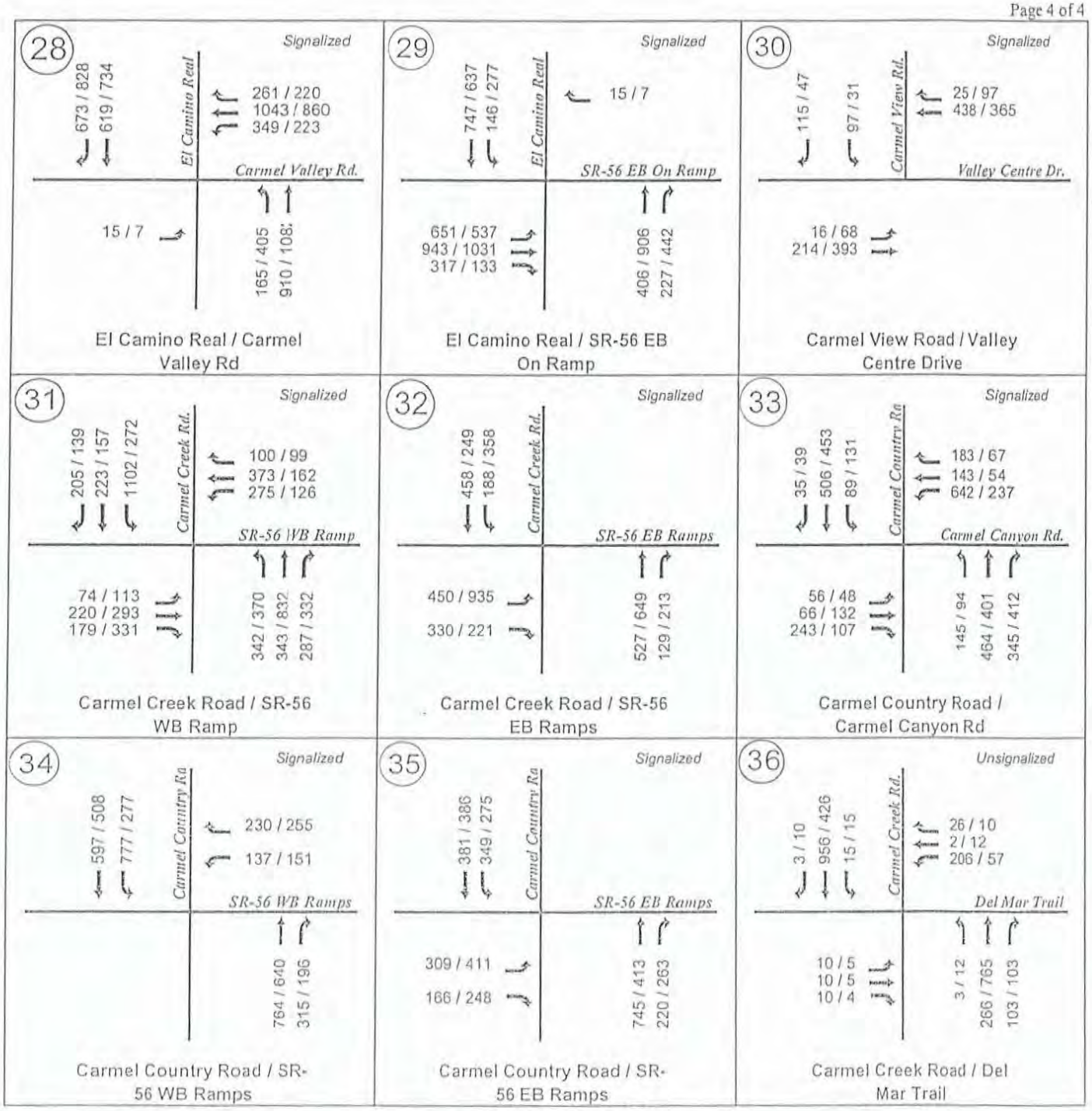
ATTACHMENT 39

Near Term + Project (Phase 1) AM/PM Peak Hour Traffic



ATTACHMENT 39

Near Term + Project (Phase 1) AM/PM Peak Hour Traffic



ATTACHMENT 39

Near Term + Project (Phase 1) AM/PM Peak Hour Traffic

ATTACHMENT 40

Near Term + Project (Phase 1) Intersection Levels of Service

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	El Camino Real / Via de la Valle	Signalized	33.8	C	45.4	D
2	El Camino Real / San Dieguito Road	Signalized	17.9	B	27.3	C
3	El Camino Real / Derby Downs Road	Signalized	4.9	A	5.6	A
4	El Camino Real / Half Mile Drive	Signalized	18.6	B	17.8	B
5	El Camino Real / Quarter Mile Drive	Signalized	20.8	C	16	B
6	Del Mar Heights Road / Mango Drive	Signalized	38.2	D	40.0	D
7	Del Mar Heights Road / Portofino Drive	Minor Street	9.6	A	9.3	A
8	Del Mar Heights Road / I-5 SB Ramps	Signalized	29.2	C	24.6	C
9	Del Mar Heights Road / I-5 NB Ramps	Signalized	47.6	D	43.8	D
10	Del Mar Heights Road / High Bluff Drive	Signalized	32.1	C	52.9	D
11	Del Mar Heights Road / Third Avenue	Signalized	6.1	A	11.3	B
12	Del Mar Heights Road / First Avenue	Signalized	5.2	A	11	B
13	Del Mar Heights Road / El Camino Real	Signalized	36.7	D	38.7	D
14	Del Mar Heights Road / Carmel Country Rd	Signalized	31.2	C	27.8	C
15	Del Mar Heights Road / Torrey Ridge Drive	Signalized	29.3	C	10.9	B
16	Del Mar Heights Road / Lansdale Drive	Signalized	25.5	C	17.8	B
17	Del Mar Heights Road / Carmel Canyon Rd	Signalized	16.5	B	11.6	B
18	El Camino Real / Del Mar Highlands Town Ctr.	Signalized	16.8	B	26.1	C
19	Carmel Country Road / Townsgate Drive	Signalized	30.9	C	26.4	C
20	Carmel Country Road / Townsgate Drive	Signalized	24.5	C	23.7	C
21	Carmel Country Road / Carmel Creek Rd	Signalized	62.5	E	30.6	C
22	El Camino Real / High Bluff Drive	Signalized	27.6	C	34.4	C
23	Carmel View Road / High Bluff Drive	All Way Stop	8.6	A	9.5	A
24	Carmel Creek Road / Carmel Grove Rd	Signalized	28.3	C	20.6	C
25	Carmel Valley Road / I-5 SB Ramps	Signalized	23.3	C	34.1	C
26	Carmel Valley Road / I-5 NB Ramps	Signalized	15.9	B	26.1	C
27	El Camino Real / Valley Centre Drive	Signalized	29	C	30.3	C
28	El Camino Real / Carmel Valley Rd	Signalized	22.4	C	35.4	D
29	El Camino Real / SR-56 EB On Ramp	Signalized	20.5	C	49.6	D
30	Carmel View Road / Valley Centre Drive	Signalized	7.7	A	6.7	A
31	Carmel Creek Road / SR-56 WB Ramp	Signalized	53.9	D	29	C
32	Carmel Creek Road / SR-56 EB Ramps	Signalized	16.0	B	32.2	C
33	Carmel Country Road / Carmel Canyon Rd	Signalized	40.0	D	29.5	C
34	Carmel Country Road / SR-56 WB Ramps	Signalized	17.9	B	11.9	B
35	Carmel Country Road / SR-56 EB Ramps	Signalized	16.1	B	14.2	B
36	Carmel Creek Road / Del Mar Trail	All Way Stop	50.8	F	22.8	C

Notes:

LOS = Level of Service

Orange indicates unacceptable level of service.

Intersection #36 reports the worst approach delay and level of service.

ATTACHMENT 41

Near Term With Project (Phase 1) Freeway Segment LOS Summary

Segment	Lanes	Dir.	Cap.	ADT	Peak Hour %	Dir. Split	Truck Factor	PHV	V/C	LOS
I-5										
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	NB	12,800	223,943	0.068	0.53	0.98	8,160	0.637	C
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	SB	12,800	223,896	0.067	0.55	0.98	8,421	0.658	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	NB	13,450	240,148	0.068	0.53	0.98	8,750	0.651	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	SB	13,450	240,101	0.067	0.55	0.98	9,030	0.671	C
Del Mar Heights Rd./ SR-56	6-GP+1-M	NB	15,780	244,177	0.068	0.53	0.98	8,897	0.564	B
Del Mar Heights Rd./ SR-56	6-GP+1-M	SB	15,780	244,119	0.067	0.55	0.98	9,181	0.582	B
SR-56/ Carmel Mountain Road	9-GP+1-M	NB	22,830	290,630	0.079	0.57	0.98	13,238	0.580	B
SR-56/ Carmel Mountain Road	8-GP+1-M	SB	20,480	290,630	0.080	0.55	0.98	13,000	0.635	C
Carmel Mountain Road/ I-805 Merge	10	NB	23,500	290,425	0.079	0.57	0.98	13,228	0.563	B
Carmel Mountain Road/ I-805 Merge	10	SB	23,500	290,425	0.080	0.55	0.98	12,991	0.553	B
SR-56										
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	EB	6,500	84,353	0.093	0.69	0.98	5,513	0.848	D
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	WB	6,500	84,353	0.094	0.70	0.98	5,653	0.870	D
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	EB	6,500	78,586	0.093	0.69	0.98	5,136	0.790	D
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	WB	6,500	78,586	0.094	0.70	0.98	5,267	0.810	D

Legend:

Dir.= Direction
Cap. = Capacity
ADT= Average Daily Traffic
V/C= Volume to Capacity Ratio
LOS= Level of Service
PHV= Peak Hour Volume
#-GP= # of General Purpose Lanes
#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1680 vphpl taken from Caltrans Guide, December 2002)
HOV = High Occupancy Vehicle lane with LOS"E" capacity of 1,600 vphpl

Note:

Capacity for LOS "E" roadway is 2,350 vphpl.
Taken from Transition between LOS"C" and LOS "D" criteria for Basic Freeway Segments @ 65 mi/hr in "Caltrans Guide for the Preparation of Traffic Impact Studies", December 2002
AX = Auxiliary Lane with LOS "E" capacity of 1,800 vphpl
Peak Hour % and Dir. Split taken from Caltrans internet posted Traffic Volumes

ATTACHMENT 42

Near Term with Project Ramp Meter Analysis
(Project Phase 1)

Most Restrictive Meter Rate

Location		Demand (Veh/Hr)	Meter Rate (Veh/Hr)	Excess Demand (Veh/Hr)	Delay (Min)	Queue (Feet)
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound)	AM	436	368	68	11.09	1,972
	PM	387	368	18.5	3.02	537
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	371	499	0	0	0
	PM	216	499	0	0	0
Del Mar Heights Rd. / I-5 NB on Ramp	AM	N/A	Meter is not turned on			
	PM	604	593	11	1.11	319

NOTE:
Meter rate is based on the most restrictive meter rate provided by Caltrans, see Appendix C
Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour
Queue = Excess Demand * 29 feet/vehicle

ATTACHMENT 43

Near Term With Project (Phase 1 & 2) Average Daily Traffic

ATTACHMENT 44

Near Term with Project (Phase 1 & 2) Street Segment Levels of Service

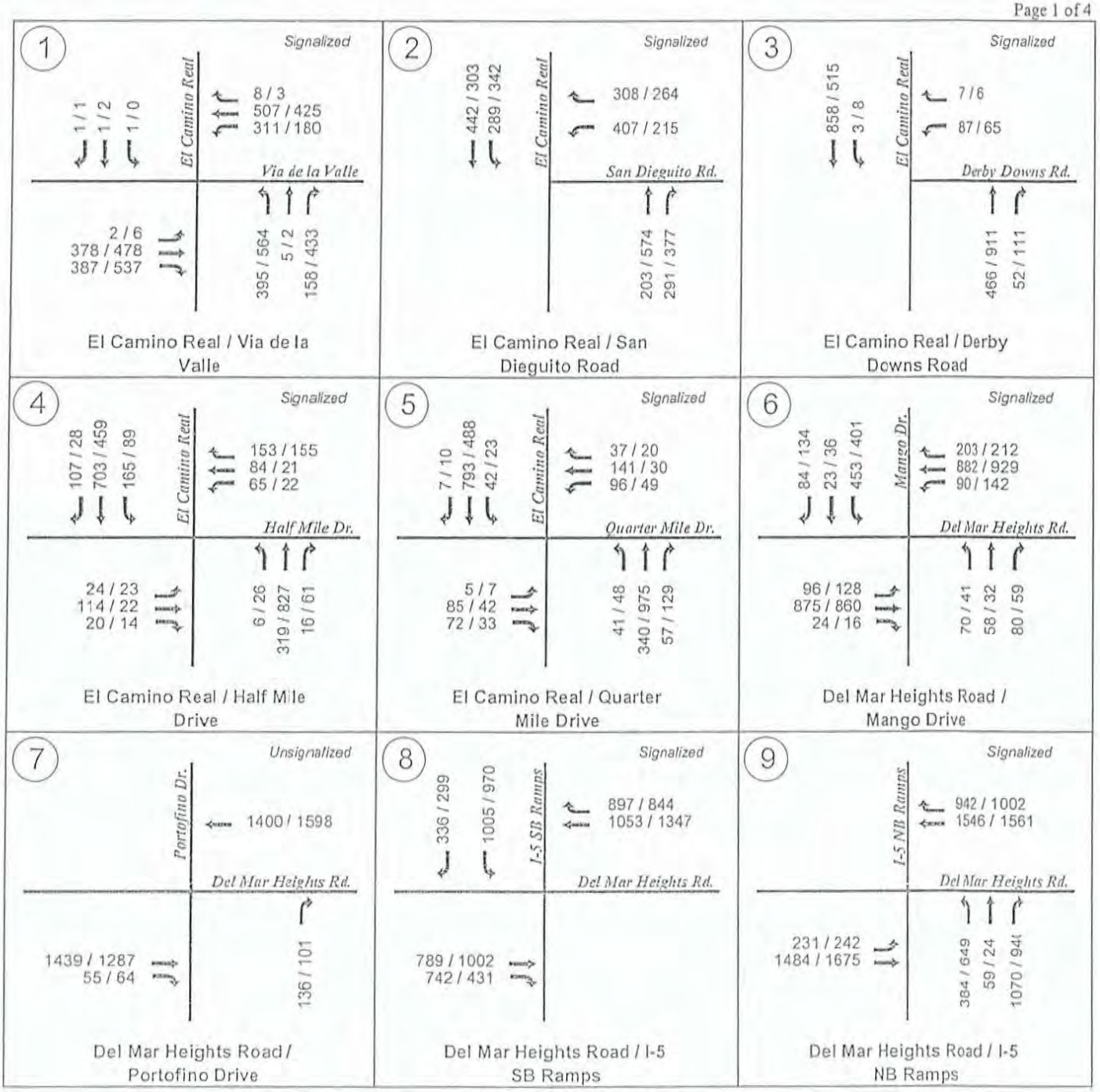
Road	Segment	Jurisd.	Functional Class.	Capacity at LOS E	Volume	V/C	LOS
Del Mar Heights Rd.	Mango Drive to Portofino Drive	SD	5-M	45,000	23,576	0.52	B
	Portofino Drive to I-5 Southbound Ramps	SD	5-PA	50,000	39,332	0.79	C
	I-5 Southbound Ramps and I-5 Northbound Ramps	SD	5-PA	50,000	44,999	0.90	D
	I-5 Northbound Ramps to High Bluff Drive	SD	PA	60,000	61,806	1.03	F
	High Bluff Drive to Third Avenue	SD	PA	60,000	48,762	0.81	C
	Thirth Avenue to First Avenue	SD	PA	60,000	48,041	0.80	C
	First Avenue to El Camino Real	SD	PA	60,000	48,041	0.80	C
	El Camino Real to Carmel Country Road	SD	PA	60,000	38,522	0.64	C
	Carmel Country Road to Torrey Ridge Road	SD	PA	60,000	24,652	0.41	A
	Torrey Ridge Road to Lansdale Drive	SD	PA	60,000	21,266	0.35	A
	Lansdale Drive to Carmel Canyon Road	SD	PA	60,000	16,545	0.28	A
El Camino Real	Via de la Valle to San Dieguito Road	SD	2-Ca	15,000	16,776	1.12	F
	San Dieguito Road to Derby Downs Road	SD	4-M	40,000	15,054	0.38	B
	Derby Downs Road to Half Mile Drive	SD	4-M	40,000	16,514	0.41	B
	Half Mile Drive to Quarter Mile Drive	SD	4-M	40,000	14,823	0.37	A
	Quarter Mile Drive to Del Mar Heights Road	SD	4-M	40,000	16,455	0.41	B
	Del Mar Heights Road to Townsgate Drive	SD	6-M	50,000	19,718	0.39	A
	Townsgate Drive to High Bluff Drive	SD	6-M	50,000	19,006	0.38	A
	High Bluff Drive to Valley Centre Drive	SD	6-M	50,000	22,658	0.45	B
	Valley Centre Drive to Carmel Valley Road	SD	5-M	45,000	31,212	0.69	C
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	SD	4-M	40,000	18,213	0.46	B
	Townsgate Drive to Carmel Creek Road	SD	4-M	40,000	15,737	0.39	B
	Carmel Creek Road to Carmel Canyon Road	SD	4-M	40,000	14,433	0.36	A
	Carmel Canyon Road to SR-56 Westbound Ramps	SD	4-M	40,000	21,891	0.55	C
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Road	SD	4-M	40,000	12,951	0.32	A
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	SD	4-M	40,000	12,083	0.30	A
	Carmel Grove Road to SR-56 Westbound Ramps	SD	4-M	40,000	16,474	0.41	B
Valley Centre Drive	Carmel View Road to Carmel Creek Road	SD	4-C	30,000	12,007	0.40	B
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	SD	PA	60,000	46,329	0.77	C
High Bluff Drive	Del Mar Heights Road to El Camino Real	SD	2-Ca	15,000	10,678	0.71	D
Via de la Valle	San Andres Drive to El Camino Real (West)	SD	2-Cb	10,000	27,093	2.71	F

Legend:

SD= City of San Diego
Cap.= Capacity
Class.= Classification
LOS= Level of Service
V/C= Volume to Capacity Ratio

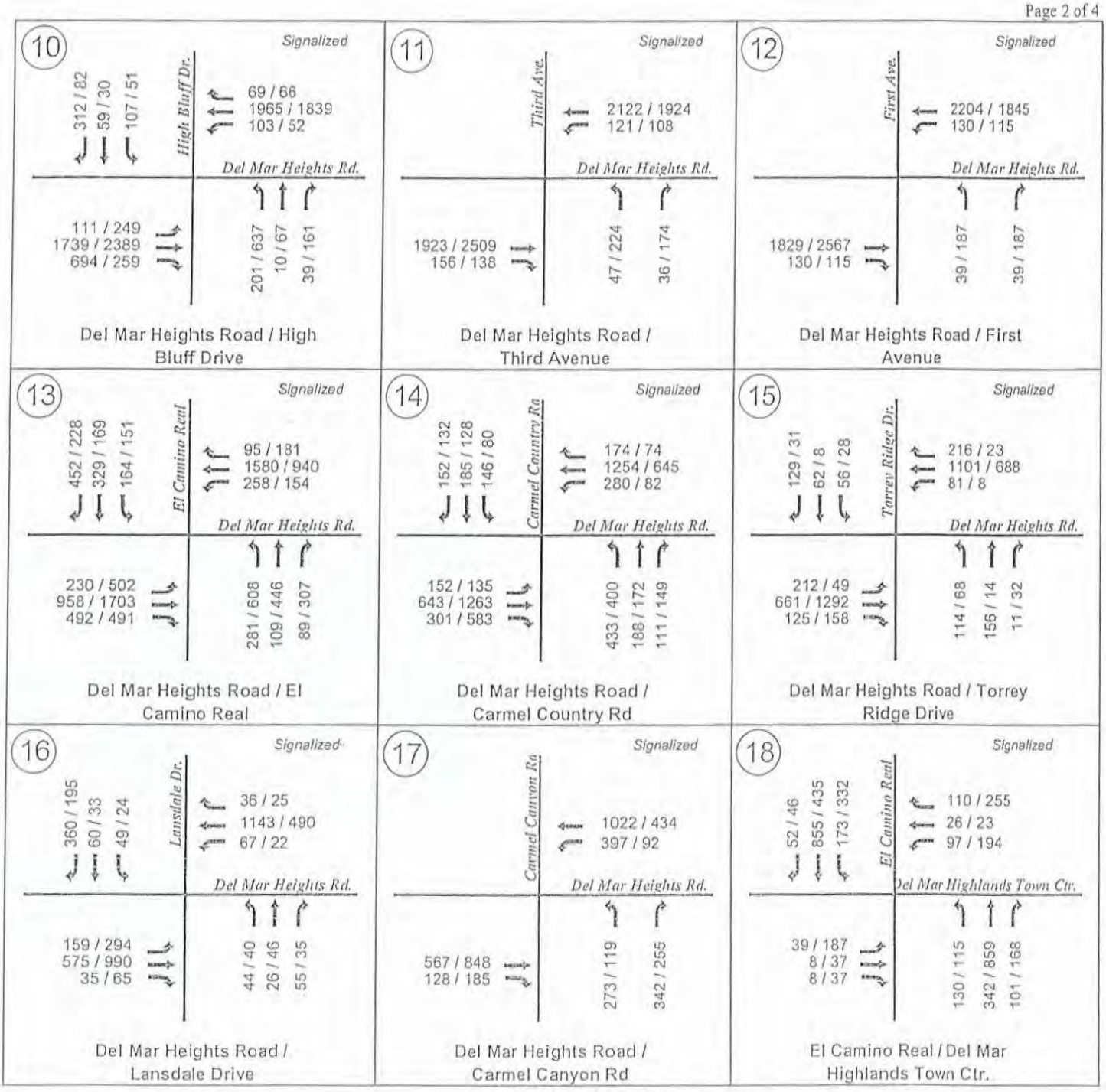
PA = 6 lane Primary Arterial
6-M = 6 lane Major
4-M=4 lane Major
2-Ca=2 lane collector
2-Cb = 2 lane Collector with no fronting property

5-M = 5 lane Major with LOS E capacity of 45,000 ADT
5-PA = 5 lane Primary Arterial with LOS E capacity of 50,000 ADT



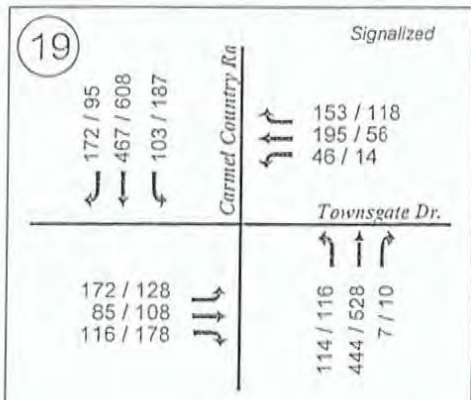
ATTACHMENT 45

Near Term + Project (Phase 1 & 2) AM/PM Peak Hour Traffic

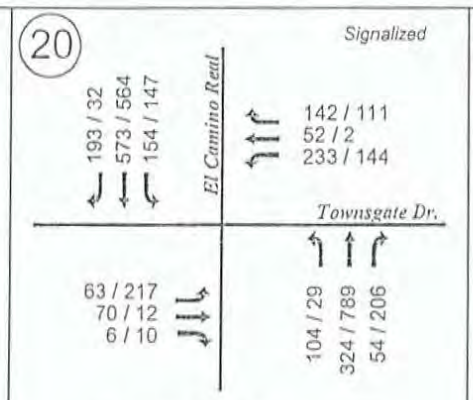


ATTACHMENT 45

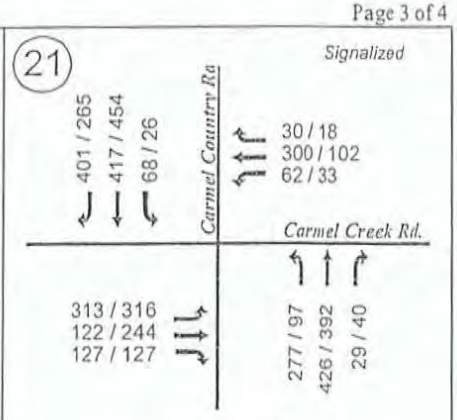
Near Term + Project (Phase 1 & 2) AM/PM Peak Hour Traffic



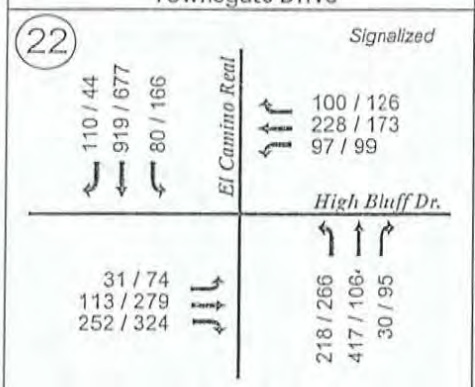
Carmel Country Road / Townsgate Drive



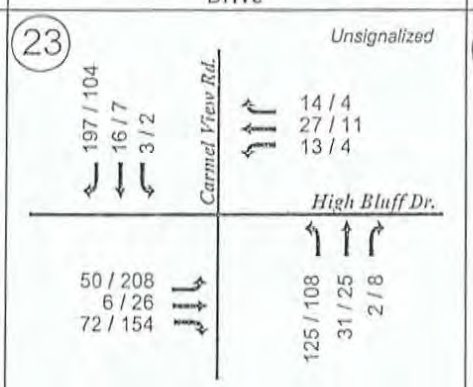
El Camino Real / Townsgate Drive



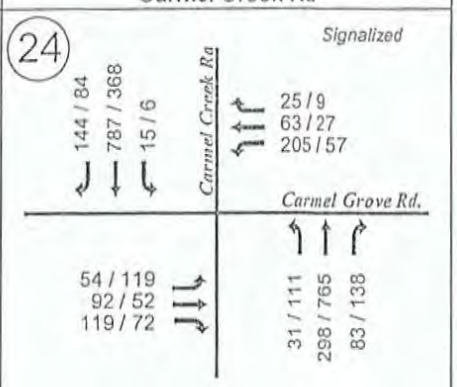
Carmel Country Road / Carmel Creek Rd



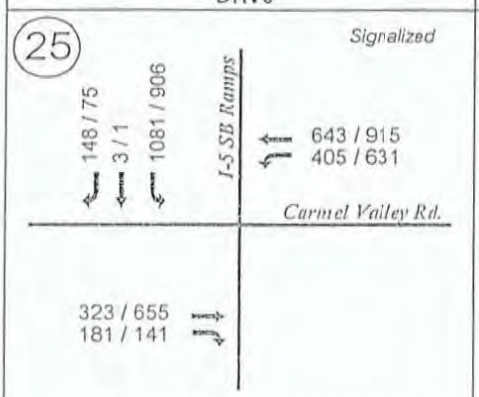
El Camino Real / High Bluff Drive



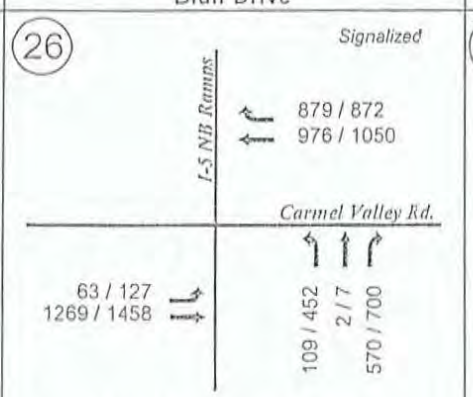
Carmel View Road / High Bluff Drive



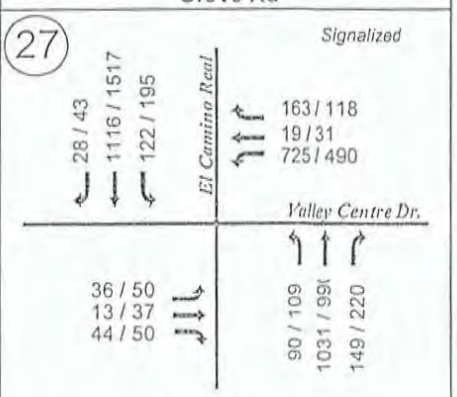
Carmel Creek Road / Carmel Grove Rd



Carmel Valley Road / I-5 SB Ramps



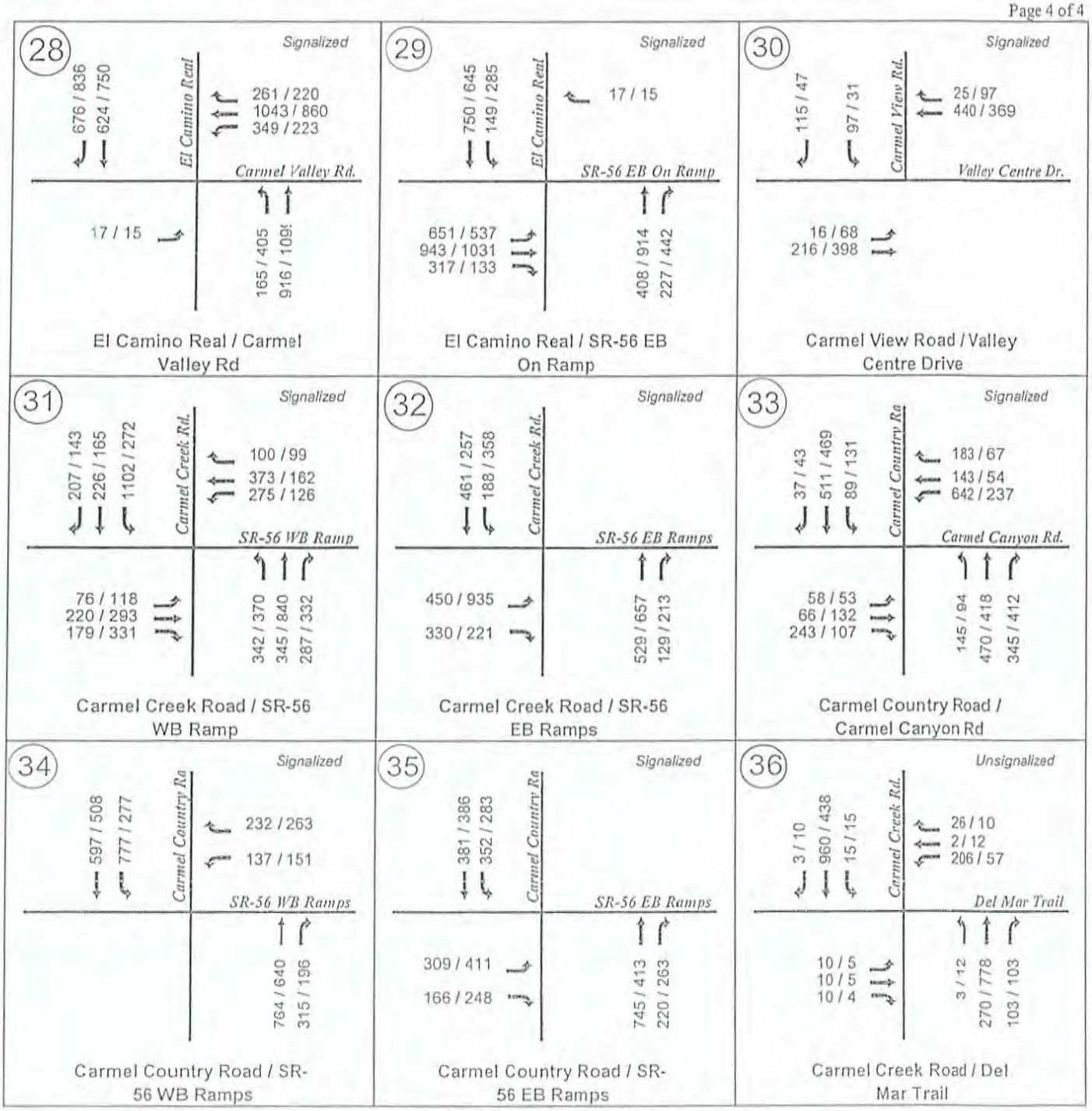
Carmel Valley Road / I-5 NB Ramps



El Camino Real / Valley Centre Drive

ATTACHMENT 45

Near Term + Project (Phase 1 & 2) AM/PM Peak Hour Traffic



ATTACHMENT 45

Near Term + Project (Phase 1 & 2) AM/PM Peak Hour Traffic

ATTACHMENT 46

Near Term + Project (Phase 1 & 2) Intersection Levels of Service

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	El Camino Real / Via de la Valle	Signalized	34.1	C	46.7	D
2	El Camino Real / San Dieguito Road	Signalized	18.1	B	28	C
3	El Camino Real / Derby Downs Road	Signalized	4.9	A	5.5	A
4	El Camino Real / Half Mile Drive	Signalized	18.7	B	19.8	B
5	El Camino Real / Quarter Mile Drive	Signalized	20.8	C	15.9	B
6	Del Mar Heights Road / Mango Drive	Signalized	38.6	D	41.1	D
7	Del Mar Heights Road / Portofino Drive	Minor Street	9.6	A	9.4	A
8	Del Mar Heights Road / I-5 SB Ramps	Signalized	30.6	C	27.8	C
9	Del Mar Heights Road / I-5 NB Ramps	Signalized	50.2	D	50.8	D
10	Del Mar Heights Road / High Bluff Drive	Signalized	33.2	C	63.6	E
11	Del Mar Heights Road / Third Avenue	Signalized	8.2	A	14.5	B
12	Del Mar Heights Road / First Avenue	Signalized	7.4	A	15.3	B
13	Del Mar Heights Road / El Camino Real	Signalized	38.9	D	64.9	E
14	Del Mar Heights Road / Carmel Country Rd	Signalized	31.8	C	29.4	C
15	Del Mar Heights Road / Torrey Ridge Drive	Signalized	29.6	C	12.6	B
16	Del Mar Heights Road / Lansdale Drive	Signalized	25.9	C	18.1	B
17	Del Mar Heights Road / Carmel Canyon Rd	Signalized	16.6	B	11.7	B
18	El Camino Real / Del Mar Highlands Town Ctr.	Signalized	19.5	B	31.9	C
19	Carmel Country Road / Townsgate Drive	Signalized	31.1	C	27	C
20	Carmel Country Road / Townsgate Drive	Signalized	24.6	C	25.8	C
21	Carmel Country Road / Carmel Creek Rd	Signalized	62.7	E	31.4	C
22	El Camino Real / High Bluff Drive	Signalized	27.8	C	35.2	D
23	Carmel View Road / High Bluff Drive	All Way Stop	8.7	A	9.7	A
24	Carmel Creek Road / Carmel Grove Rd	Signalized	28.3	C	20.7	C
25	Carmel Valley Road / I-5 SB Ramps	Signalized	23.4	C	34.9	C
26	Carmel Valley Road / I-5 NB Ramps	Signalized	15.9	B	26.5	C
27	El Camino Real / Valley Centre Drive	Signalized	29	C	31.1	C
28	El Camino Real / Carmel Valley Rd	Signalized	22.5	C	35.9	D
29	El Camino Real / SR-56 EB On Ramp	Signalized	20.6	C	50.6	D
30	Carmel View Road / Valley Centre Drive	Signalized	7.7	A	6.7	A
31	Carmel Creek Road / SR-56 WB Ramp	Signalized	54.2	D	29.3	C
32	Carmel Creek Road / SR-56 EB Ramps	Signalized	16	B	32.4	C
33	Carmel Country Road / Carmel Canyon Rd	Signalized	40.2	D	29.7	C
34	Carmel Country Road / SR-56 WB Ramps	Signalized	18	B	12	B
35	Carmel Country Road / SR-56 EB Ramps	Signalized	16.2	B	14.3	B
36	Carmel Creek Road / Del Mar Trail	All Way Stop	51.9	F	23.8	C

Notes:

LOS = Level of Service

Orange indicates unacceptable level of service.

Intersection #36 reports the worst approach delay and level of service

ATTACHMENT 47

Near Term With Project (Phase 1 & 2) Freeway Segment LOS Summary

Segment	Lanes	Dir.	Cap.	ADT	Peak Hour %	Dir. Split	Truck Factor	PHV	V/C	LOS
I-5										
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	NB	12,800	224,488	0.068	0.53	0.98	8,179	0.639	C
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	SB	12,800	224,441	0.067	0.55	0.98	8,441	0.659	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	NB	13,450	240,849	0.068	0.53	0.98	8,776	0.652	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	SB	13,450	240,802	0.067	0.55	0.98	9,057	0.673	C
Del Mar Heights Rd./ SR-56	6-GP+1-M	NB	15,780	245,578	0.068	0.53	0.98	8,948	0.567	B
Del Mar Heights Rd./ SR-56	6-GP+1-M	SB	15,780	245,520	0.067	0.55	0.98	9,234	0.585	B
SR-56/ Carmel Mountain Road	9-GP+1-M	NB	22,830	291,408	0.079	0.57	0.98	13,273	0.581	B
SR-56/ Carmel Mountain Road	8-GP+1-M	SB	20,480	291,408	0.080	0.55	0.98	13,035	0.636	C
Carmel Mountain Road/ I-805 Merge	10	NB	23,500	291,047	0.079	0.57	0.98	13,257	0.564	B
Carmel Mountain Road/ I-805 Merge	10	SB	23,500	291,047	0.080	0.55	0.98	13,019	0.554	B
SR-56										
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	EB	6,500	84,509	0.093	0.69	0.98	5,523	0.850	D
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	WB	6,500	84,509	0.094	0.70	0.98	5,664	0.871	D
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	EB	6,500	78,742	0.093	0.69	0.98	5,146	0.792	D
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	WB	6,500	78,742	0.094	0.70	0.98	5,277	0.812	D

Legend:
*Caltrans 2008 Count Data
Dir.= Direction
Cap. = Capacity
ADT= Average Daily Traffic
V/C= Volume to Capacity Ratio
LOS= Level of Service
PHV= Peak Hour Volume
#-GP= # of General Purpose Lanes
#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1680 vphpl taken from Caltrans Guide, December 2002)
HOV = High Occupancy Vehicle lane with LOS"E" capacity of 1,600 vphpl

Note:

Capacity for LOS "E" roadway is 2,350 vphpl.
Taken from Transition between LOS"C" and LOS "D" criteria for Basic Freeway Segments @ 65 mi/hr in "Caltrans Guide for the Preparation of Traffic Impact Studies", December 2002
AX = Auxiliary Lane with LOS "E" capacity of 1,800 vphpl
Peak Hour % and Dir. Split taken from Caltrans internet posted Traffic Volumes

ATTACHMENT 48

Near Term with Project Ramp Meter Analysis
(Phase 1 & 2)

Most Restrictive Meter Rate

Location		Demand (Veh/Hr)	Meter Rate (Veh/Hr)	Excess Demand (Veh/Hr)	Delay (Min)	Queue (Feet)
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound)	AM	449	368	80.5	13.13	2,335
	PM	422	368	54	8.80	1,566
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	371	499	0	0	0
	PM	216	499	0	0	0
Del Mar Heights Rd. / I-5 NB on Ramp	AM	N/A	Meter is not turned on			
	PM	622	593	29	2.93	841

NOTE:
Meter rate is based on the most restrictive meter rate provided by Caltrans, see Appendix C
Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour
Queue = Excess Demand * 29 feet/vehicle

ATTACHMENT 49

Near Term With Project (Buildout) Average Daily Traffic

ATTACHMENT 50

Near Term + Project (Build-out) Street Segment Levels of Service

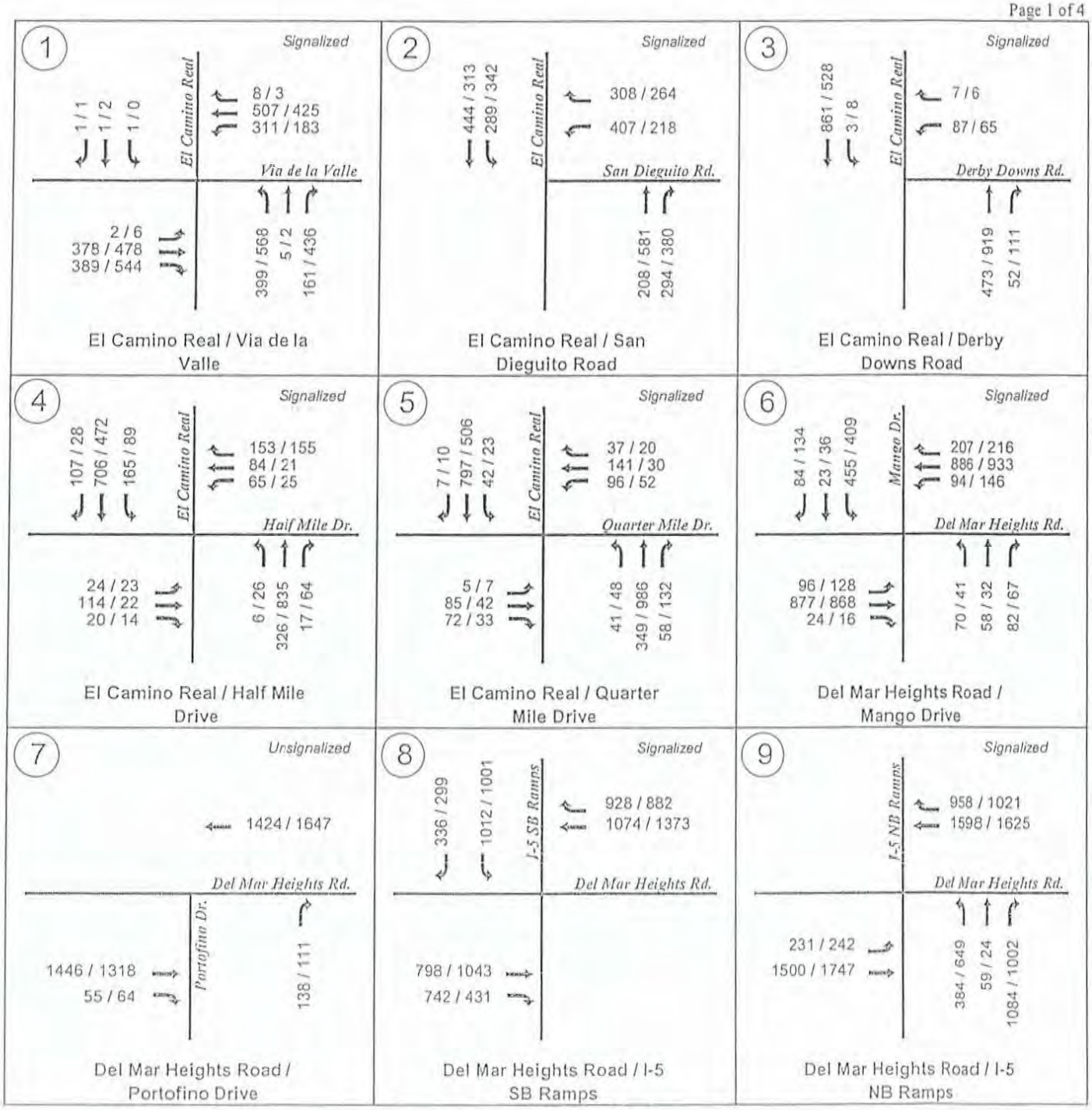
Road	Segment	Jurisd.	Functional Class.	Capacity at LOS E	Volume	V/C	LOS
Del Mar Heights Rd.	Mango Drive to Portofino Drive	SD	5-M	45,000	24,100	0.54	B
	Portofino Drive to I-5 Southbound Ramps	SD	5-PA	50,000	40,031	0.80	D
	I-5 Southbound Ramps and I-5 Northbound Ramps	SD	5-PA	50,000	46,222	0.92	E
	I-5 Northbound Ramps to High Bluff Drive	SD	PA	60,000	64,078	1.07	F
	High Bluff Drive to Third Avenue	SD	PA	60,000	51,383	0.86	D
	Thirth Avenue to First Avenue	SD	PA	60,000	50,428	0.84	D
	First Avenue to El Camino Real	SD	PA	60,000	50,428	0.84	D
	El Camino Real to Carmel Country Road	SD	PA	60,000	40,572	0.68	C
	Carmel Country Road to Torrey Ridge Road	SD	PA	60,000	25,409	0.42	B
	Torrey Ridge Road to Lansdale Drive	SD	PA	60,000	21,790	0.36	A
	Lansdale Drive to Carmel Canyon Road	SD	PA	60,000	16,836	0.28	A
El Camino Real	Via de la Valle to San Dieguito Road	SD	2-Ca	15,000	16,951	1.13	F
	San Dieguito Road to Derby Downs Road	SD	4-M	40,000	15,287	0.38	B
	Derby Downs Road to Half Mile Drive	SD	4-M	40,000	16,747	0.42	B
	Half Mile Drive to Quarter Mile Drive	SD	4-M	40,000	15,114	0.38	B
	Quarter Mile Drive to Del Mar Heights Road	SD	4-M	40,000	16,804	0.42	B
	Del Mar Heights Road to Townsgate Drive	SD	6-M	50,000	21,785	0.44	B
	Townsgate Drive to High Bluff Drive	SD	6-M	50,000	19,763	0.40	A
	High Bluff Drive to Valley Centre Drive	SD	6-M	50,000	23,182	0.46	B
	Valley Centre Drive to Carmel Valley Road	SD	5-M	45,000	31,562	0.70	C
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	SD	4-M	40,000	18,795	0.47	B
	Townsgate Drive to Carmel Creek Road	SD	4-M	40,000	16,203	0.41	B
	Carmel Creek Road to Carmel Canyon Road	SD	4-M	40,000	14,724	0.37	A
	Carmel Canyon Road to SR-56 Westbound Ramps	SD	4-M	40,000	22,124	0.55	C
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Road	SD	4-M	40,000	13,068	0.33	A
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	SD	4-M	40,000	12,258	0.31	A
	Carmel Grove Road to SR-56 Westbound Ramps	SD	4-M	40,000	16,648	0.42	B
Valley Centre Drive	Carmel View Road to Carmel Creek Road	SD	4-C	30,000	12,065	0.40	B
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	SD	PA	60,000	46,445	0.77	C
High Bluff Drive	Del Mar Heights Road to El Camino Real	SD	2-Ca	15,000	10,853	0.72	D
Via de la Valle	San Andres Drive to El Camino Real (West)	SD	2-Cb	10,000	27,209	2.72	F

Legend:

SD= City of San Diego
Cap.= Capacity
Class.= Classification
LOS= Level of Service
V/C= Volume to Capacity Ratio

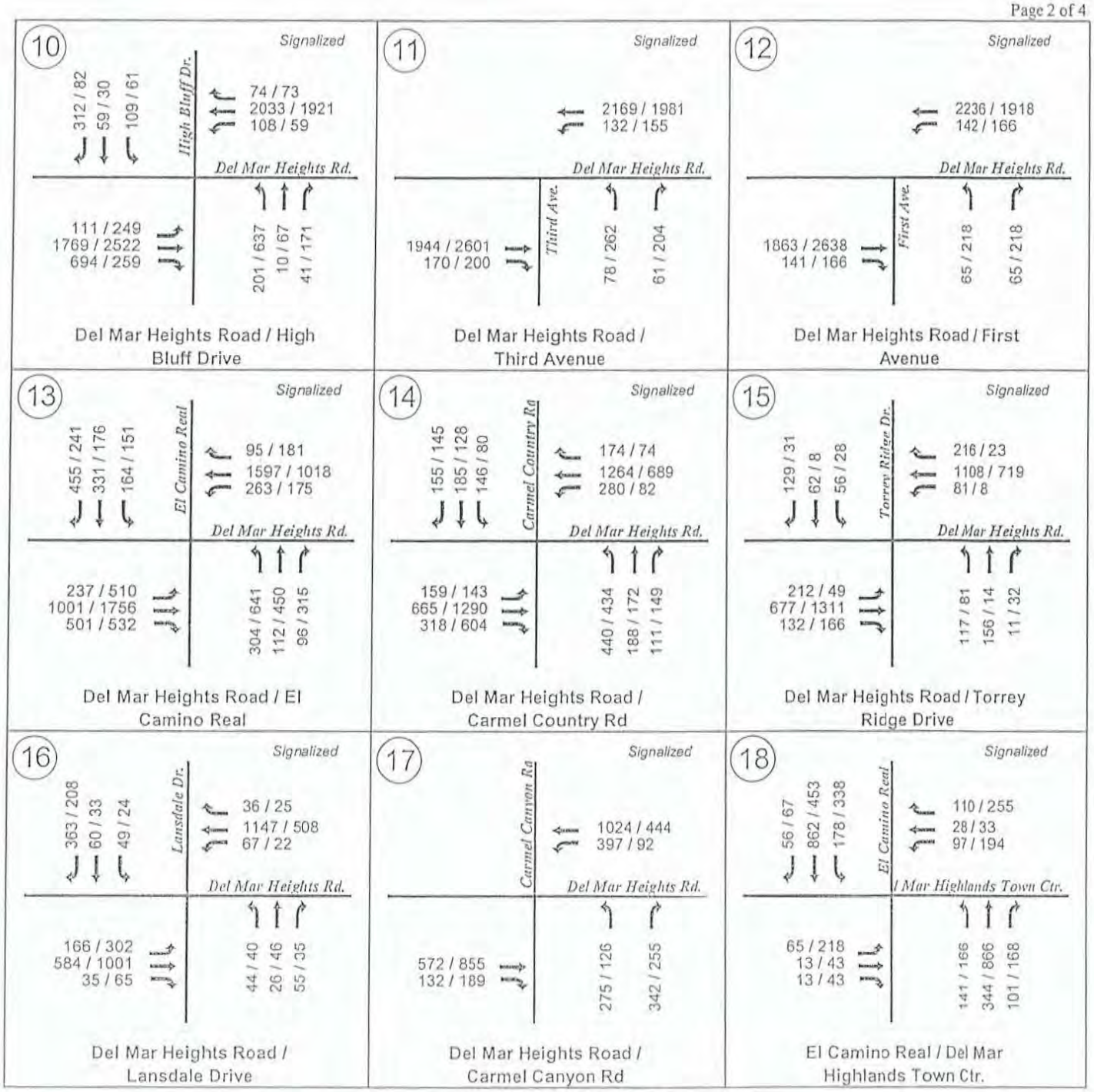
PA = 6 lane Primary Arterial
6-M = 6 lane Major
4-M=4 lane Major
2-Ca=2 lane collector
2-Cb = 2 lane Collector with no fronting property

5-M = 5 lane Major with LOS E capacity of 45,000 ADT
5-PA = 5 lane Primary Arterial with LOS E capacity of 50,000 ADT



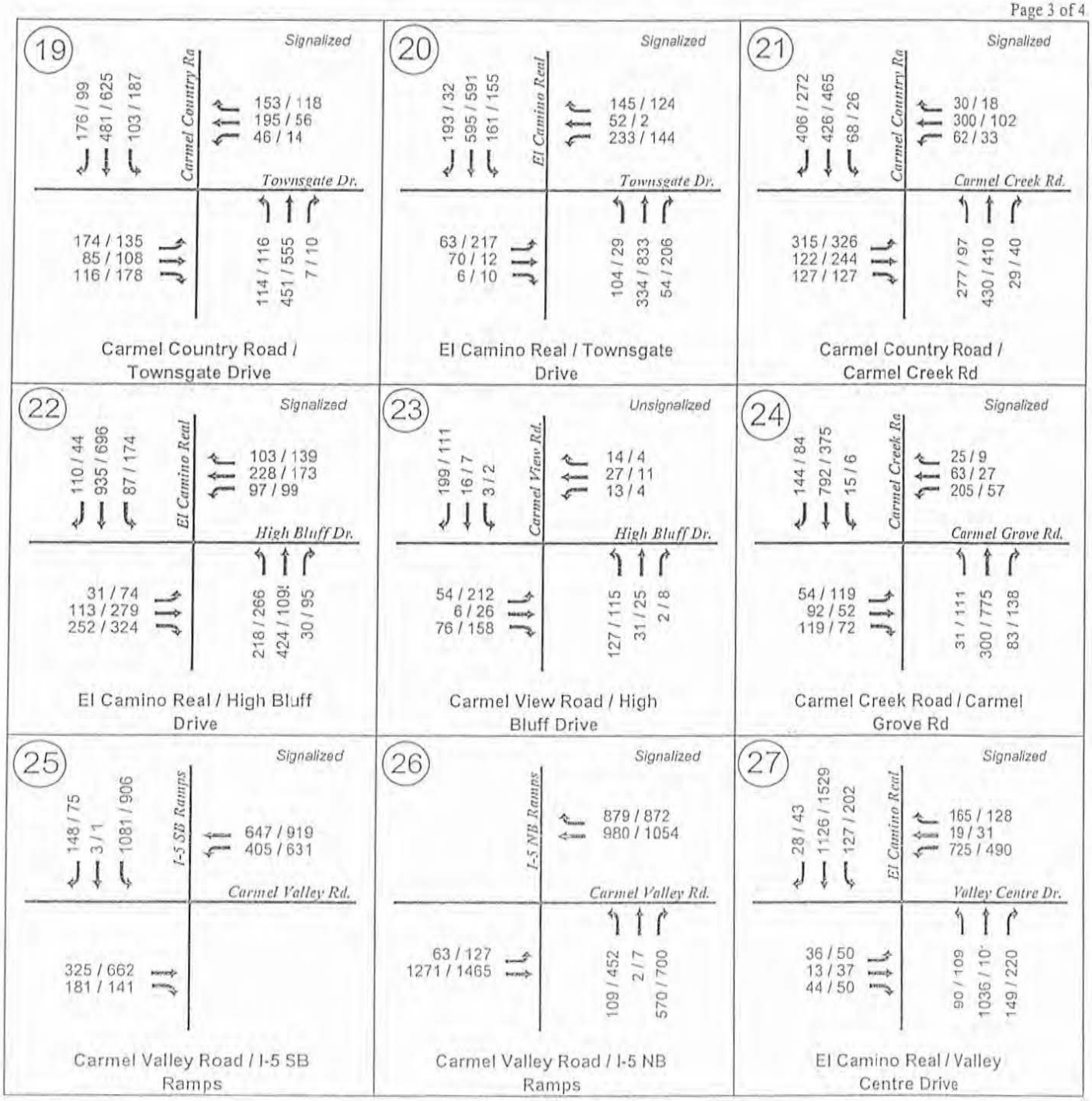
ATTACHMENT 51

Near Term + Project (Buildout) AM/PM Peak Hour Traffic



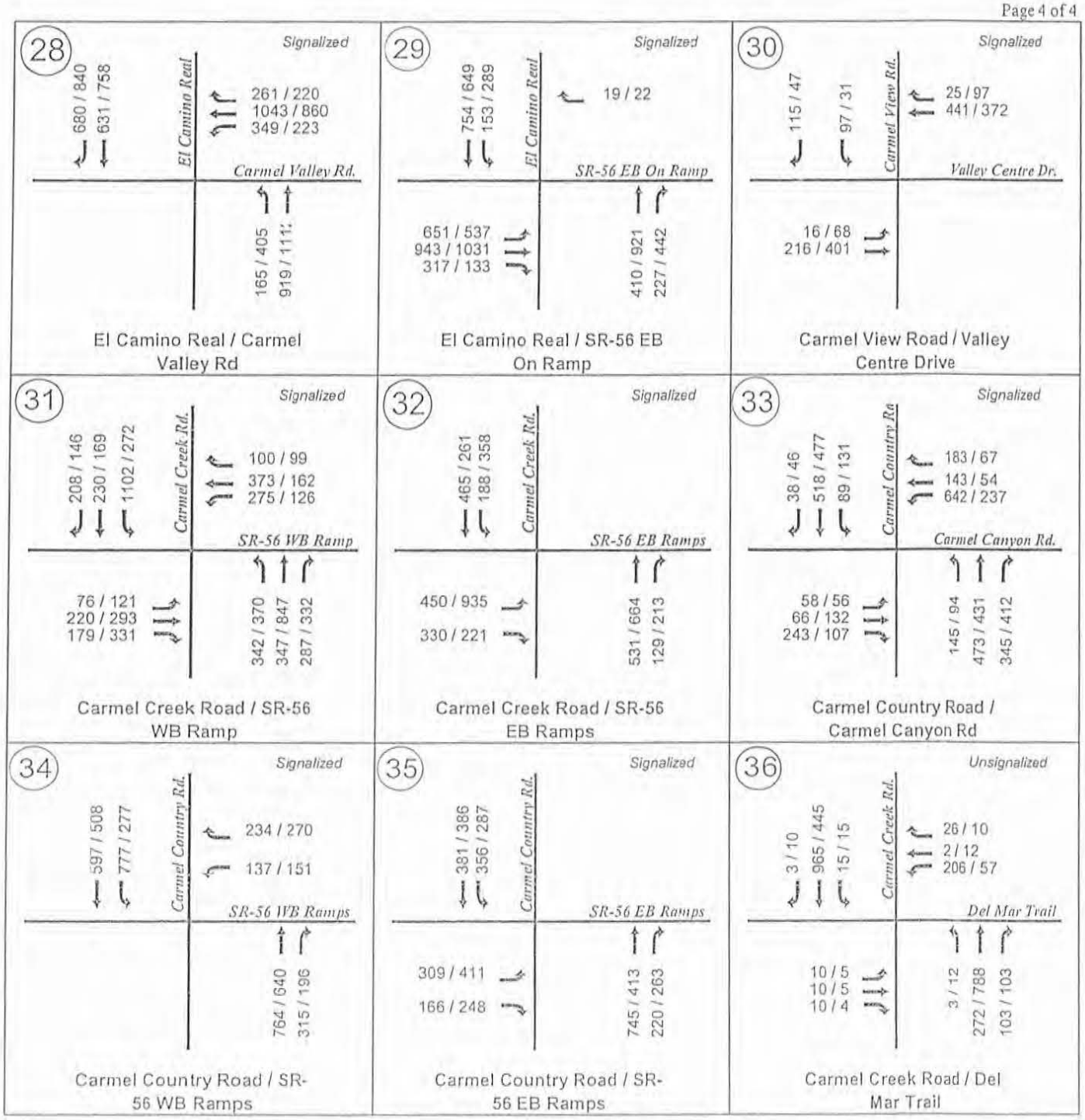
ATTACHMENT 51

Near Term + Project (Buildout) AM/PM Peak Hour Traffic



ATTACHMENT 51

Near Term + Project (Buildout) AM/PM Peak Hour Traffic



ATTACHMENT 51

Near Term + Project (Buildout) AM/PM Peak Hour Traffic

ATTACHMENT 52

Near Term + Project (Build-out) Intersection Levels of Service

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	El Camino Real / Via de la Valle	Signalized	34.4	C	47.4	D
2	El Camino Real / San Dieguito Road	Signalized	18.2	B	28.4	C
3	El Camino Real / Derby Downs Road	Signalized	4.9	A	5.6	A
4	El Camino Real / Half Mile Drive	Signalized	18.7	B	18.2	B
5	El Camino Real / Quarter Mile Drive	Signalized	20.9	C	16.2	B
6	Del Mar Heights Road / Mango Drive	Signalized	39.1	D	41.8	D
7	Del Mar Heights Road / Portofino Drive	Minor Street	9.7	A	9.5	A
8	Del Mar Heights Road / I-5 SB Ramps	Signalized	31.2	C	30.3	C
9	Del Mar Heights Road / I-5 NB Ramps	Signalized	52.3	D	57.7	E
10	Del Mar Heights Road / High Bluff Drive	Signalized	35.1	D	74	E
11	Del Mar Heights Road / Third Avenue	Signalized	9	A	19.1	B
12	Del Mar Heights Road / First Avenue	Signalized	8.2	A	18.8	B
13	Del Mar Heights Road / El Camino Real	Signalized	40.2	D	78.3	E
14	Del Mar Heights Road / Carmel Country Rd	Signalized	32.2	C	31	C
15	Del Mar Heights Road / Torrey Ridge Drive	Signalized	29.7	C	12.9	B
16	Del Mar Heights Road / Lansdale Drive	Signalized	26.2	C	18.4	B
17	Del Mar Heights Road / Carmel Canyon Rd	Signalized	16.7	B	11.8	B
18	El Camino Real / Del Mar Highlands Town Ctr.	Signalized	21.1	C	33.6	C
19	Carmel Country Road / Townsgate Drive	Signalized	31.4	C	27.5	C
20	Carmel Country Road / Townsgate Drive	Signalized	24.8	C	26.2	C
21	Carmel Country Road / Carmel Creek Rd	Signalized	63.6	E	31.9	C
22	El Camino Real / High Bluff Drive	Signalized	27.9	C	35.9	D
23	Carmel View Road / High Bluff Drive	All-Way Stop	8.7	A	9.9	A
24	Carmel Creek Road / Carmel Grove Rd	Signalized	28.4	C	20.7	C
25	Carmel Valley Road / I-5 SB Ramps	Signalized	23.4	C	35.5	D
26	Carmel Valley Road / I-5 NB Ramps	Signalized	15.9	B	26.9	C
27	El Camino Real / Valley Centre Drive	Signalized	29.2	C	31.7	C
28	El Camino Real / Carmel Valley Rd	Signalized	22.7	C	36.1	D
29	El Camino Real / SR-56 EB On Ramp	Signalized	20.7	C	51.7	D
30	Carmel View Road / Valley Centre Drive	Signalized	7.7	A	6.7	A
31	Carmel Creek Road / SR-56 WB Ramp	Signalized	54.2	D	29.4	C
32	Carmel Creek Road / SR-56 EB Ramps	Signalized	16	B	32.5	C
33	Carmel Country Road / Carmel Canyon Rd	Signalized	40.4	D	29.4	C
34	Carmel Country Road / SR-56 WB Ramps	Signalized	18	B	12.1	B
35	Carmel Country Road / SR-56 EB Ramps	Signalized	16.3	B	14.3	B
36	Carmel Creek Road / Del Mar Trail	All-Way Stop	53	F	24.5	C

Notes:

Orange indicates unacceptable level of service.

LOS = Level of Service

ATTACHMENT 53

Near Term + Project (Buildout) Freeway Segment LOS Summary

Segment	Lanes	Dir.	Cap.	ADT	Peak Hour %	Dir. Split	Truck Factor	PHV	V/C	LOS
I-5										
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	NB	12,800	224,896	0.068	0.53	0.98	8,194	0.640	C
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	SB	12,800	224,849	0.067	0.55	0.98	8,457	0.661	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	NB	13,450	241,373	0.068	0.53	0.98	8,795	0.654	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	SB	13,450	241,326	0.067	0.55	0.98	9,076	0.675	C
Del Mar Heights Rd./ SR-56	6-GP+1-M	NB	15,780	246,627	0.068	0.53	0.98	8,986	0.569	B
Del Mar Heights Rd./ SR-56	6-GP+1-M	SB	15,780	246,569	0.067	0.55	0.98	9,274	0.588	B
SR-56/ Carmel Mountain Road	9-GP+1-M	NB	22,830	291,990	0.079	0.57	0.98	13,300	0.583	B
SR-56/ Carmel Mountain Road	8-GP+1-M	SB	20,480	291,990	0.080	0.55	0.98	13,061	0.638	C
Carmel Mountain Road/ I-805 Merge	10	NB	23,500	291,513	0.079	0.57	0.98	13,278	0.565	B
Carmel Mountain Road/ I-805 Merge	10	SB	23,500	291,513	0.080	0.55	0.98	13,040	0.555	B
SR-56										
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	EB	6,500	84,625	0.093	0.69	0.98	5,531	0.851	D
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	WB	6,500	84,625	0.094	0.70	0.98	5,672	0.873	D
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	EB	6,500	78,858	0.093	0.69	0.98	5,154	0.793	D
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	WB	6,500	78,858	0.094	0.70	0.98	5,285	0.813	D

Legend:

*Caltrans 2008 Count Data
Dir.= Direction
Cap. = Capacity
ADT= Average Daily Traffic
V/C= Volume to Capacity Ratio
LOS= Level of Service
PHV= Peak Hour Volume
#-GP= # of General Purpose Lanes
#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1680 vphpl taken from Caltrans Guide, December 2002)
HOV = High Occupancy Vehicle lane with LOS"E" capacity of 1,600 vphpl

Note:

Capacity for LOS "E" roadway is 2,350 vphpl.
Taken from Transition between LOS"C" and LOS "D" criteria for Basic Freeway Segments @ 65 mi/hr in "Caltrans Guide for the Preparation of Traffic Impact Studies", December 2002
AX = Auxiliary Lane with LOS "E" capacity of 1,800 vphpl
Peak Hour % and Dir. Split taken from Caltrans internet posted Traffic Volumes

ATTACHMENT 54

Near Term with Project Ramp Meter Analysis
(Buildout)

Most Restrictive Meter Rate

Location		Demand (Veh/Hr)	Meter Rate (Veh/Hr)	Excess Demand (Veh/Hr)	Delay (Min)	Queue (Feet)
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound)	AM	464	368	96.0	15.65	2,784
	PM	441	368	73	11.90	2,117
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	371	499	0	0	0
	PM	216	499	0	0	0
Del Mar Heights Rd. / I-5 NB on Ramp	AM	N/A	Meter is not turned on			
	PM	632	593	38.5	3.90	1,117

NOTE:
Meter rate is based on the most restrictive meter rate provided by Caltrans, see Appendix C
Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour
Queue = Excess Demand * 29 feet/vehicle

ATTACHMENT 55

Year 2030 With Project (Buildout) Average Daily Traffic

ATTACHMENT 56

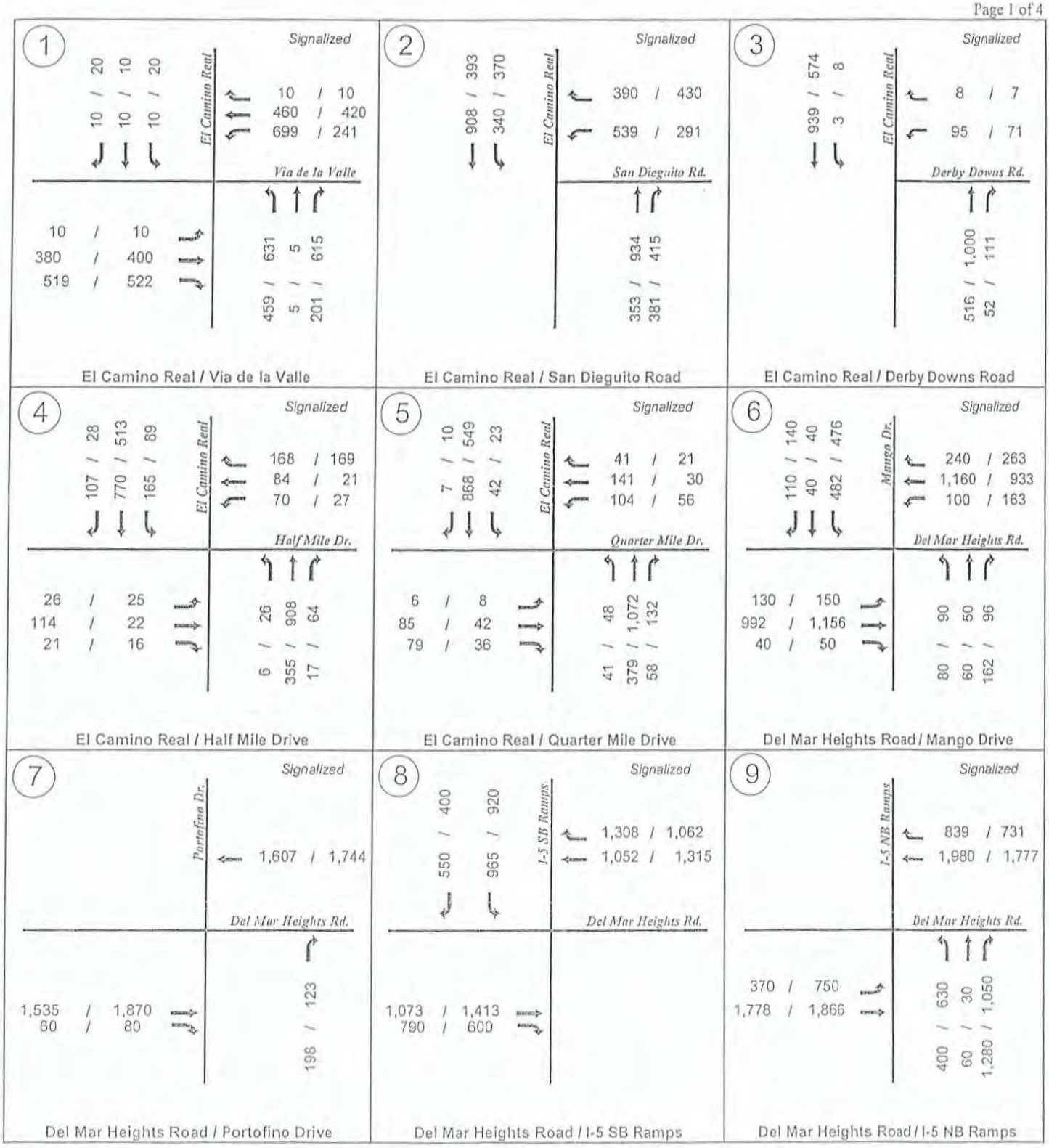
Year 2030 with Project (Buildout) Street Segment Levels of Service

Road	Segment	Jurisd.	Class.	Functional Class.	Capacity at LOS E	V/C	LOS
Del Mar Heights Rd.	Mango Drive to Portofino Drive	SD	5-M	45,000	38,147	0.85	D
	Portofino Drive to I-5 Southbound Ramps	SD	5-PA	50,000	42,442	0.85	D
	I-5 SB Ramps and I-5 NB Ramps	SD	5-PA	50,000	42,829	0.86	D
	I-5 Northbound Ramps to High Bluff Drive	SD	PA	60,000	61,103	1.02	F
	High Bluff Drive to Third Avenue	SD	PA	60,000	53,504	0.89	D
	Thirth Avenue to First Avenue	SD	PA	60,000	52,550	0.88	D
	First Avenue to El Camino Real	SD	PA	60,000	52,550	0.88	D
	El Camino Real to Carmel Country Road	SD	PA	60,000	45,288	0.75	C
	Carmel Country Road to Torrey Ridge Road	SD	PA	60,000	37,501	0.63	C
	Torrey Ridge Road to Lansdale Drive	SD	PA	60,000	36,547	0.61	C
	Lansdale Drive to Carmel Canyon Road	SD	PA	60,000	35,593	0.59	C
El Camino Real	Via de la Valle to San Dieguito Road	SD	2-Ca	15,000	32,036	2.14	F
	San Dieguito Road to Derby Downs Road	SD	4-M	40,000	29,954	0.75	C
	Derby Downs Road to Half Mile Drive	SD	4-M	40,000	29,954	0.75	C
	Half Mile Drive to Quarter Mile Drive	SD	4-M	40,000	30,193	0.75	D
	Quarter Mile Drive to Del Mar Heights Road	SD	4-M	40,000	30,431	0.76	D
	Del Mar Heights Road to Townsgate Drive	SD	6-M	50,000	27,771	0.56	B
	Townsgate Drive to High Bluff Drive	SD	6-M	50,000	29,101	0.58	C
	High Bluff Drive to Valley Centre Drive	SD	6-M	50,000	37,767	0.76	C
	Valley Centre Drive to Carmel Valley Road	SD	5-M	45,000	37,901	0.84	D
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	SD	4-M	40,000	24,665	0.62	C
	Townsgate Drive to Carmel Creek Road	SD	4-M	40,000	20,708	0.52	B
	Carmel Creek Road to Carmel Canyon Road	SD	4-M	40,000	14,783	0.37	A
	Carmel Canyon Road to SR-56 WB Ramps	SD	4-M	40,000	26,954	0.67	C
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Rd.	SD	4-M	40,000	13,477	0.34	A
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	SD	4-M	40,000	15,716	0.39	B
	Carmel Grove Road to SR-56 WB Ramps	SD	4-M	40,000	17,716	0.44	B
Valley Centre Drive	Carmel View Road to Carmel Creek Road	SD	4-C	30,000	20,239	0.67	D
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	SD	PA	60,000	43,497	0.72	C
High Bluff Drive	Del Mar Heights Road to El Camino Real	SD	2-Ca	15,000	12,416	0.83	D
Via de la Valle	San Andres Drive to El Camino Real (West)	SD	2-Cb	10,000	33,577	3.36	F

Legend:

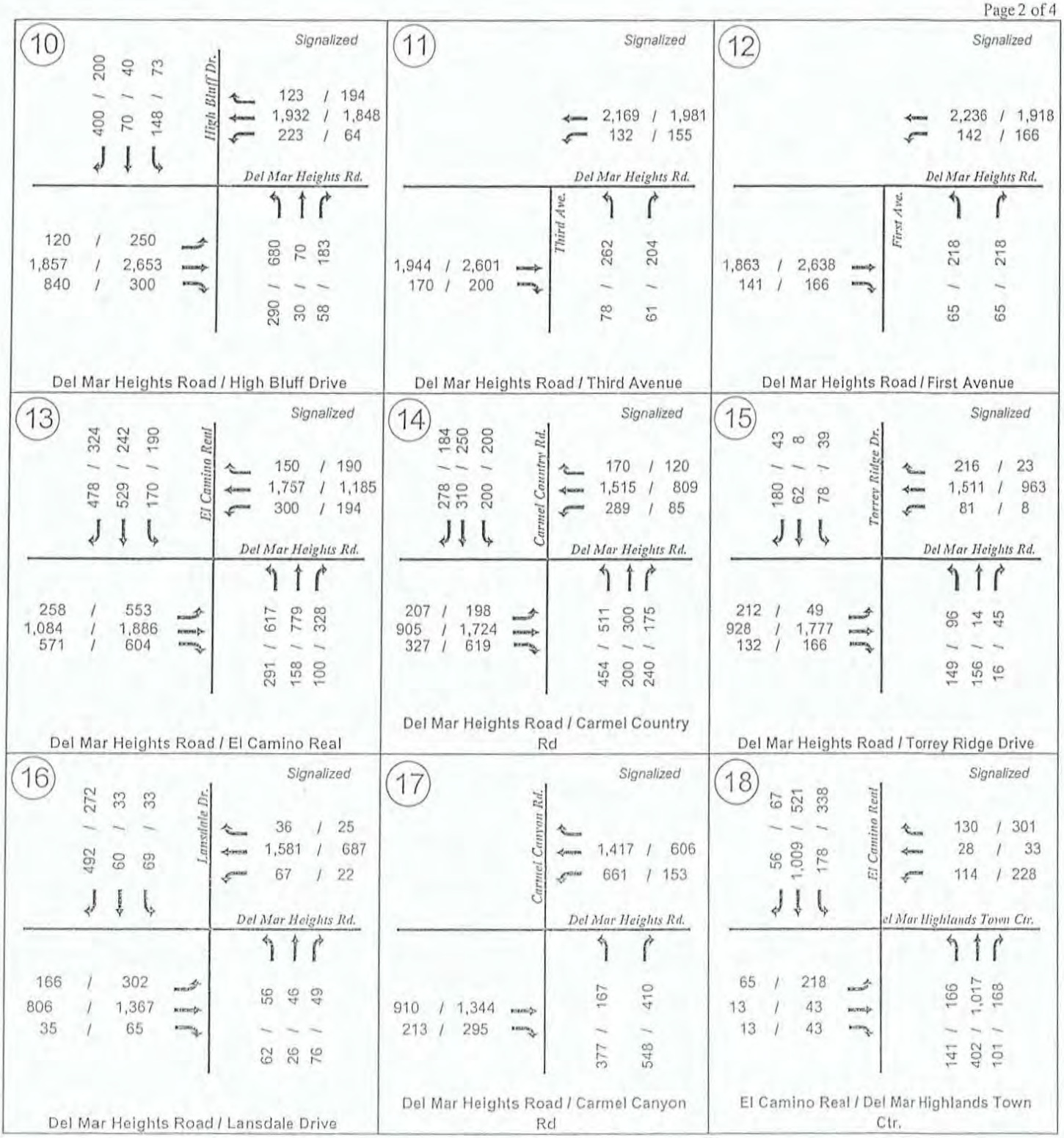
SD= City of San Diego
Cap.= Capacity
Class.= Classification
LOS= Level of Service
V/C= Volume to Capacity Ratio

PA = 6 lane Primary Arterial
6-M = 6 lane Major
4-M=4 lane Major
2-Ca=2 lane collector
2-Cb = 2 lane Collector with no fronting property
* Cumulative Rates used for this segment
5-M = 5 lane Major with LOS E capacity of 45,000 ADT
5-PA = 5 lane Primary Arterial with LOS E capacity of 50,000 ADT



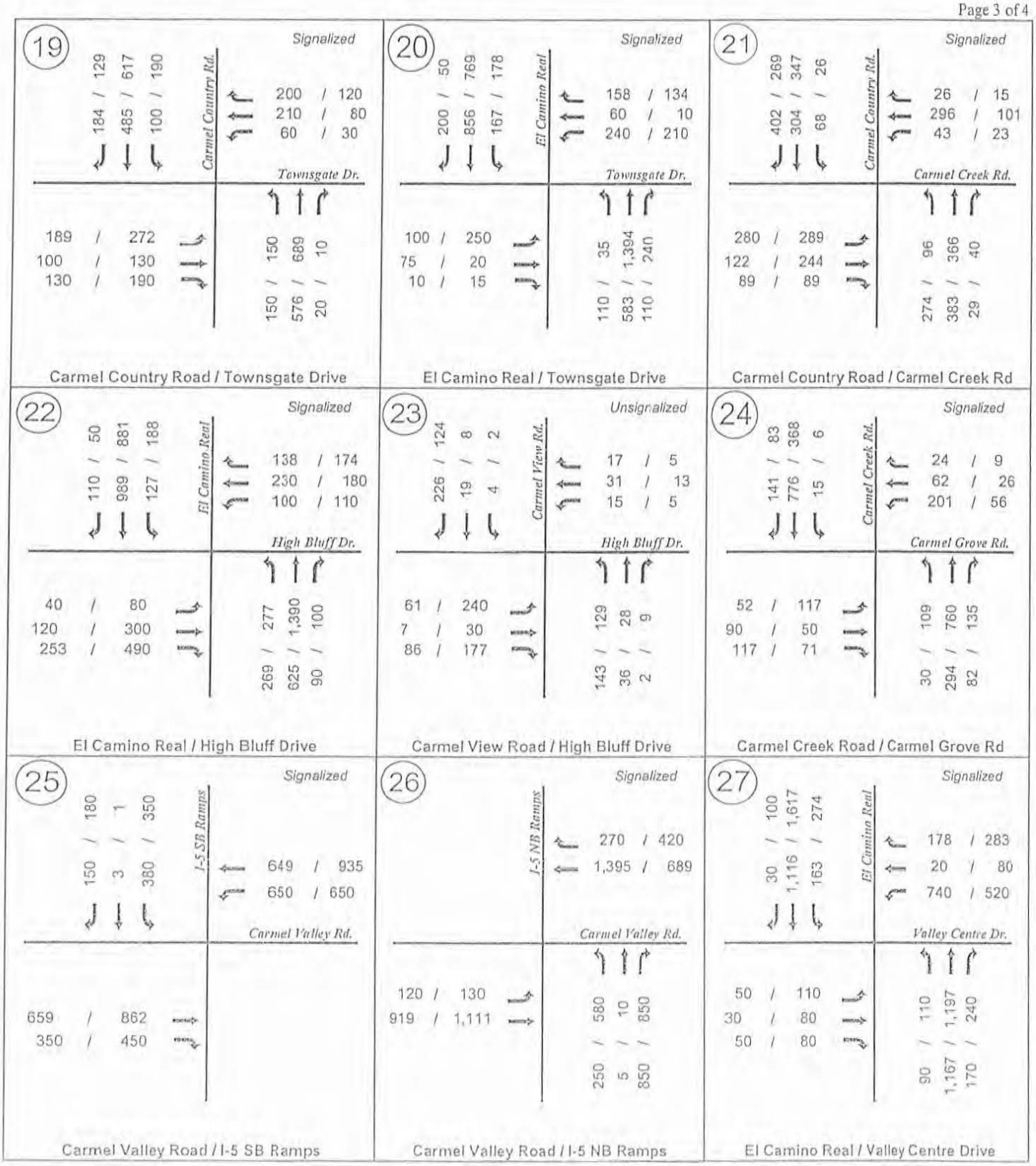
ATTACHMENT 57

Year 2030 With Project (Build-out) AM/PM Peak Hour Traffic



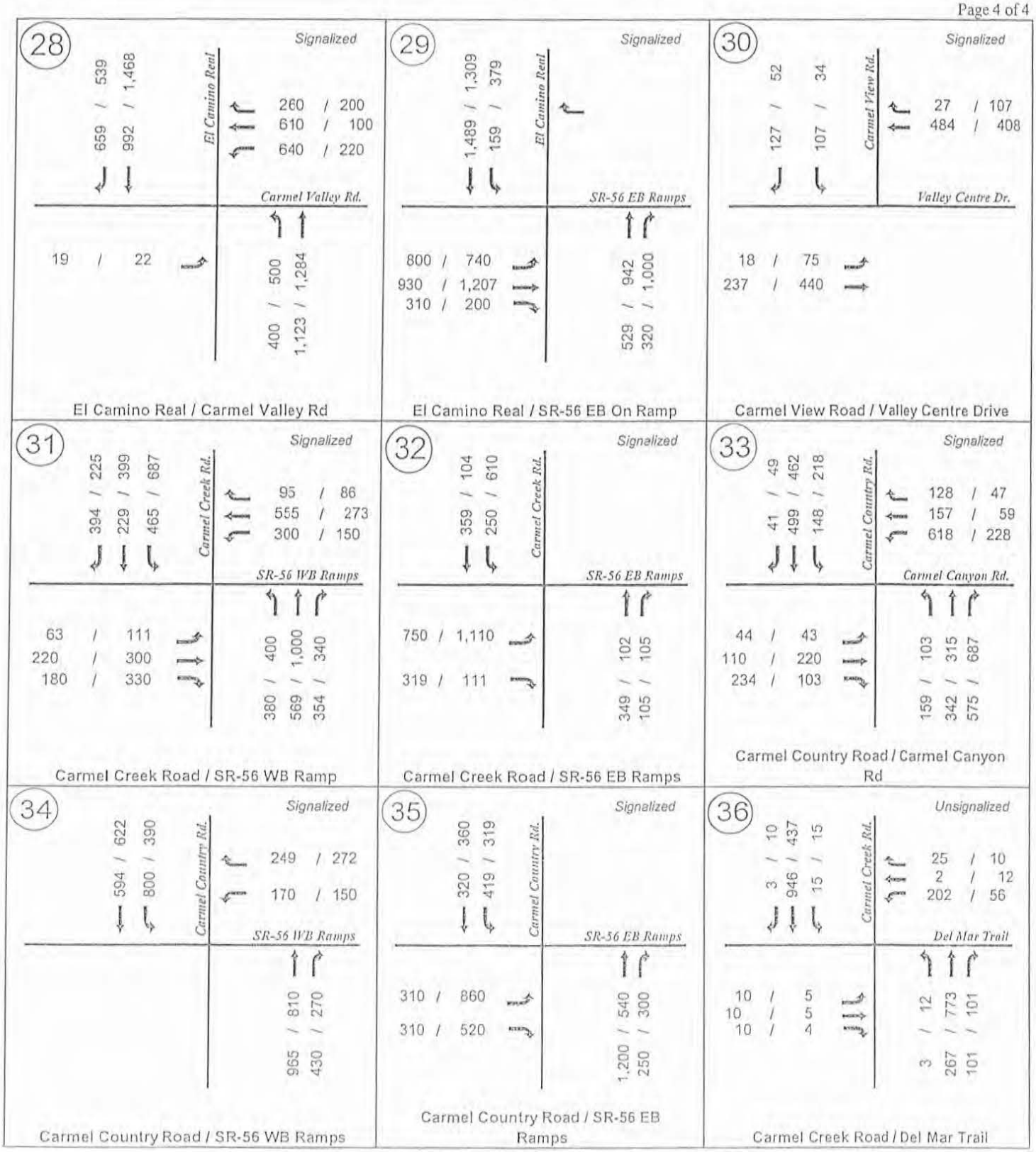
ATTACHMENT 57

Year 2030 With Project AM/PM Peak Hour Traffic



ATTACHMENT 57

Year 2030 With Project AM/PM Peak Hour Traffic



ATTACHMENT 57

Year 2030 With Project AM/PM Peak Hour Traffic

ATTACHMENT 58

Year 2030 With Project (Buildout) Intersection Levels of Service

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	El Camino Real / Via de la Valle	Signalized	28	C	23.6	C
2	El Camino Real / San Dieguito Road	Signalized	28.6	C	52.2	D
3	El Camino Real / Derby Downs Road	Signalized	5.7	A	5.8	A
4	El Camino Real / Half Mile Drive	Signalized	18.7	B	18.6	B
5	El Camino Real / Quarter Mile Drive	Signalized	21.5	C	16.6	B
6	Del Mar Heights Road / Mango Drive	Signalized	48.7	D	45.0	D
7	Del Mar Heights Road / Portofino Drive	Minor Street	10.1	B	9.9	A
8	Del Mar Heights Road / I-5 SB Ramps	Signalized	35	D	26.9	C
9	Del Mar Heights Road / I-5 NB Ramps	Signalized	108.3	F	99.7	F
10	Del Mar Heights Road / High Bluff Drive	Signalized	62.4	E	92.6	F
11	Del Mar Heights Road / Third Avenue	Signalized	9	A	18.3	B
12	Del Mar Heights Road / First Avenue	Signalized	8.2	A	18.8	B
13	Del Mar Heights Road / El Camino Real	Signalized	51.1	D	86.4	F
14	Del Mar Heights Road / Carmel Country Rd	Signalized	45.2	D	51.2	D
15	Del Mar Heights Road / Torrey Ridge Drive	Signalized	36	D	14.6	B
16	Del Mar Heights Road / Lansdale Drive	Signalized	44.2	D	20.7	C
17	Del Mar Heights Road / Carmel Canyon Rd	Signalized	35.6	D	19.3	B
18	El Camino Real / Del Mar Highlands Town Ctr.	Signalized	21.6	C	36.5	D
19	Carmel Country Road / Townsgate Drive	Signalized	36.3	D	35.1	D
20	Carmel Country Road / Townsgate Drive	Signalized	28.1	C	33.1	C
21	Carmel Country Road / Carmel Creek Rd	Signalized	53.4	D	27.7	C
22	El Camino Real / High Bluff Drive	Signalized	29.5	C	45.1	D
23	Carmel View Road / High Bluff Drive	All Way Stop	9.3	A	10.7	B
24	Carmel Creek Road / Carmel Grove Rd	Signalized	27.6	C	20.4	C
25	Carmel Valley Road / I-5 SB Ramps	Signalized	26.3	C	30.3	C
26	Carmel Valley Road / I-5 NB Ramps	Signalized	30.3	C	26.7	C
27	El Camino Real / Valley Centre Drive	Signalized	30.2	C	42.3	D
28	El Camino Real / Carmel Valley Rd	Signalized	23.9	C	22.3	C
29	El Camino Real / SR-56 EB On Ramp	Signalized	27.7	C	94.9	F
30	Carmel View Road / Valley Centre Drive	Signalized	8	A	6.5	A
31	Carmel Creek Road / SR-56 WB Ramp	Signalized	48.5	D	49.6	D
32	Carmel Creek Road / SR-56 EB Ramps	Signalized	18.3	B	25.5	C
33	Carmel Country Road / Carmel Canyon Rd	Signalized	49.5	D	42.1	D
34	Carmel Country Road / SR-56 WB Ramps	Signalized	21.1	C	13.8	B
35	Carmel Country Road / SR-56 EB Ramps	Signalized	21.7	C	21.6	C
36	Carmel Creek Road / Del Mar Trail	All Way Stop	47.7	E	23.2	C

Notes:

LOS = Level of Service

Orange indicates unacceptable levels of service

Intersection #36 reports the worst approach delay and level of service

ATTACHMENT 59

Year 2030 with Project (Buildout) Freeway Segment LOS Summary

Segment	Lanes	Dir.	Cap.	ADT*	Peak Hour %	Dir. Split	Truck Factor	PHV	V/C	LOS
I-5										
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	NB	12,800	260,800	0.068	0.53	0.98	9,503	0.742	C
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	SB	12,800	260,800	0.067	0.55	0.98	9,809	0.766	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	NB	13,450	289,300	0.068	0.53	0.98	10,541	0.784	C
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	SB	13,450	289,300	0.067	0.55	0.98	10,881	0.809	D
Del Mar Heights Rd./ SR-56	6-GP+1-M	NB	15,780	306,100	0.068	0.53	0.98	11,153	0.707	C
Del Mar Heights Rd./ SR-56	6-GP+1-M	SB	15,780	306,100	0.067	0.55	0.98	11,513	0.730	C
SR-56/ Carmel Mountain Road	9-GP+1-M	NB	22,830	412,300	0.079	0.57	0.98	18,779	0.823	D
SR-56/ Carmel Mountain Road	8-GP+1-M	SB	20,480	412,300	0.080	0.55	0.98	18,443	0.901	D
Carmel Mountain Road/ I-805 Merge	10	NB	23,500	391,600	0.079	0.57	0.98	17,837	0.759	C
Carmel Mountain Road/ I-805 Merge	10	SB	23,500	391,600	0.080	0.55	0.98	17,517	0.745	C
SR-56										
El Camino Real / Carmel Creek Rd.	3-GP + 1-AX	EB	8,850	133,800	0.093	0.69	0.98	8,744	0.988	E
El Camino Real / Carmel Creek Rd.	3-GP + 1-AX	WB	8,850	133,800	0.094	0.70	0.98	8,967	1.013	F
Carmel Creek Rd. / Carmel Country Rd.	3-GP + 1-AX	EB	8,850	122,700	0.093	0.69	0.98	8,019	0.906	D
Carmel Creek Rd. / Carmel Country Rd.	3-GP + 1-AX	WB	8,850	122,700	0.094	0.70	0.98	8,223	0.929	E

Legend:

Dir.= Direction
Cap. = Capacity
ADT= Average Daily Traffic
V/C= Volume to Capacity Ratio
LOS= Level of Service
PHV= Peak Hour Volume
#-GP= # of General Purpose Lanes

Note:

Capacity for LOS "E" roadway is 2,350 vphpl.
Taken from Transition between LOS"C" and LOS "D" criteria for Basic Freeway Segments @ 65 mi/hr in "Caltrans Guide for the Preparation of Traffic Impact Studies", December 2002
AX = Auxiliary Lane with LOS "E" capacity of 1,800 vphpl
Peak Hour % and Dir. Split taken from Caltrans internet posted Traffic Volumes

#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1,680 vphpl taken from Caltrans Guide, December 2002)
HOV = High Occupancy Vehicle lane with LOS"E" capacity of 1,600 vphpl
* Based on SANDAG Series 11 Year 2030 Travel Forecast & SR-56 segments used cumulative rates.

ATTACHMENT 60

Year 2030 with Project (Buildout) Ramp Meter Analysis

Most Restrictive Meter Rate

Location		Ramp Meter Lanes	Demand (Veh/Hr/Ln)	Meter Rate (Veh/Hr/Ln)	Excess Demand (Veh/Hr/Ln)	Delay (Min)	Queue (Feet)
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound)	AM	2 SOV	654	368	286	46.63	8,294
	PM		531	368	163	26.58	4,727
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	1 SOV + 1 HOV	395	499	0	0	0
	PM		300	499	0	0	0
Del Mar Heights Rd. / I-5 NB on Ramp	AM	2 SOV	605	593	12	1.16	334
	PM		741	593	148	14.92	4,278
El Camino Real / SR-56 EB on Ramp	AM	2 SOV	705	1200	0	0.00	0
	PM		1293	1200	93	4.65	2,697
Carmel Country Rd. / SR-56 EB on Ramp	AM	2 SOV	669	900	0	0.00	0
	PM		619	900	0	0.00	0

NOTE:

The ramp meter rates at the EB on-ramps at El Camino Real & Carmel Country are based on SR-56 widened to 3 lanes in each direction per the Regional Transportation Plan which would allow more capacity on the freeway.

(Veh/Hr/Ln) = Vehicles per Hour per Lane

Meter rates are based on the most restrictive meter rate provided by Caltrans, see Appendix C

Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour

Queue = Excess Demand * 29 feet/vehicle

SOV = Single Occupancy Vehicle

HOV = High Occupancy Vehicle

15 Minute Max. Meter Rate

Location		Ramp Meter Lanes	Demand (Veh/Hr/Ln)	Meter Rate (Veh/Hr/Ln)	Excess Demand (Veh/Hr/Ln)	Delay (Min)	Queue (Feet)
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound)	AM	2 SOV	654	492	162	19.8	4,698
	PM		531	320	211	39.6	6,119
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	1 SOV + 1 HOV	395	316	79	15.0	2,291
	PM		300	240	60	15.0	1,740
Del Mar Heights Rd. / I-5 NB on Ramp	AM	2 SOV	605	468	137	17.5	3,959
	PM		741	540	201	22.3	5,815
El Camino Real / SR-56 EB on Ramp	AM	2 SOV	705	560	144.5	15.5	4,191
	PM		1293	1023	270	15.8	7,830
Carmel Country Rd. / SR-56 EB on Ramp	AM	2 SOV	669	264	405	92.0	11,745
	PM		619	236	383	97.4	11,107

NOTE:

Meter Rate = Demand / 1.25

Excess Demand = Demand - Meter Rate

Queue = Excess Demand * 29 feet/vehicle

ATTACHMENT 61

Existing & Existing With Project (Phase 1) Street Segment Comparison

Existing + Project Analysis

Road	Segment	Class.	Existing			Existing + Project (Phase 1)			ΔV/C	Is this impact Significant?
			LOS	Volume	V/C	LOS	Volume	V/C		
Del Mar Heights Rd.	Mango Drive to Portofino Drive	5-M	B	21,314	0.474	B	22,235	0.494	0.020	*NO*
	Portofino Drive to I-5 Southbound Ramps	5-PA	C	36,086	0.722	C	37,314	0.746	0.025	*NO*
	I-5 Southbound Ramps and I-5 Northbound Ramps	5-PA	D	40,090	0.802	D	42,239	0.845	0.043	*NO*
	I-5 Northbound Ramps to High Bluff Drive	PA	D	51,625	0.860	E	55,616	0.927	0.067	*YES*
	High Bluff Drive to Third Avenue	PA	C	37,910	0.632	C	42,515	0.709	0.077	*NO*
	Third Avenue to First Avenue	PA	C	37,910	0.632	C	41,492	0.692	0.060	*NO*
	First Avenue to El Camino Real	PA	C	37,910	0.632	C	40,469	0.674	0.043	*NO*
	El Camino Real to Carmel Country Road	PA	B	32,674	0.545	C	35,437	0.591	0.046	*NO*
	Carmel Country Road to Torrey Ridge Road	PA	A	21,658	0.361	A	22,988	0.383	0.022	*NO*
	Torrey Ridge Road to Lansdale Drive	PA	A	19,071	0.318	A	19,992	0.333	0.015	*NO*
	Lansdale Drive to Carmel Canyon Road	PA	A	15,188	0.253	A	15,700	0.262	0.009	*NO*
El Camino Real	Via de la Valle to San Dieguito Road	2-Ca	F	15,579	1.039	F	15,886	1.059	0.020	*YES*
	San Dieguito Road to Derby Downs Road	4-M	A	13,915	0.348	A	14,324	0.358	0.010	*NO*
	Derby Downs Road to Half Mile Drive	4-M	B	15,333	0.383	B	15,742	0.394	0.010	*NO*
	Half Mile Drive to Quarter Mile Drive	4-M	A	13,516	0.338	A	14,028	0.351	0.013	*NO*
	Quarter Mile Drive to Del Mar Heights Road	4-M	A	14,925	0.373	B	15,539	0.388	0.015	*NO*
	Del Mar Heights Road to Townsgate Drive	6-M	A	14,731	0.295	A	16,266	0.325	0.031	*NO*
	Townsgate Drive to High Bluff Drive	6-M	A	15,425	0.309	A	16,755	0.335	0.027	*NO*
	High Bluff Drive to Valley Centre Drive	6-M	A	19,364	0.387	B	20,285	0.406	0.018	*NO*
	Valley Centre Drive to Carmel Valley Road	5-M	C	27,589	0.613	C	28,203	0.627	0.014	*NO*
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	4-M	B	15,932	0.398	B	16,955	0.424	0.026	*NO*
	Townsgate Drive to Carmel Creek Road	4-M	A	13,878	0.347	A	14,697	0.367	0.020	*NO*
	Carmel Creek Road to Carmel Canyon Road	4-M	A	13,137	0.328	A	13,649	0.341	0.013	*NO*
	Carmel Canyon Road to SR-56 Westbound Ramps	4-M	B	20,553	0.514	B	20,962	0.524	0.010	*NO*
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Road	4-M	A	12,224	0.306	A	12,429	0.311	0.005	*NO*
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	4-M	A	11,206	0.280	A	11,513	0.288	0.008	*NO*
	Carmel Grove Road to SR-56 Westbound Ramps	4-M	A	14,862	0.372	B	15,169	0.379	0.008	*NO*
Valley Centre Drive	Carmel View Road to Carmel Creek Road	4-C	B	10,875	0.363	B	10,977	0.366	0.003	*NO*
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	PA	C	43,375	0.723	C	43,580	0.726	0.003	*NO*
High Bluff Drive	Del Mar Heights Road to El Camino Real	2-Ca	C	9,842	0.656	D	10,149	0.677	0.020	*NO*
Via de la Valle	San Andres Drive to El Camino Real (West)	2-Cb	F	24,400	2.440	F	24,605	2.460	0.020	*YES*

Legend:

LOS= Level of Service

V/C= Volume to Capacity Ratio

ΔV/C= Change in V/C ratio

ATTACHMENT 62

Existing & Existing With Project (Phase 1 & 2) Street Segment Comparison

Existing + Project Analysis

Road	Segment	Class.	Existing			Existing + Project (Phase 1 & 2)			ΔV/C	Is this impact Significant?
			LOS	Volume	V/C	LOS	Volume	V/C		
Del Mar Heights Rd.	Mango Drive to Portofino Drive	5-M	B	21,314	0.474	B	22,937	0.510	0.036	*NO*
	Portofino Drive to I-5 Southbound Ramps	5-PA	C	36,086	0.722	C	38,250	0.765	0.043	*NO*
	I-5 Southbound Ramps and I-5 Northbound Ramps	5-PA	D	40,090	0.802	D	43,876	0.878	0.076	*NO*
	I-5 Northbound Ramps to High Bluff Drive	PA	D	51,625	0.860	E	58,657	0.978	0.117	*YES*
	High Bluff Drive to Third Avenue	PA	C	37,910	0.632	C	46,024	0.767	0.135	*NO*
	Third Avenue to First Avenue	PA	C	37,910	0.632	C	45,302	0.755	0.123	*NO*
	First Avenue to El Camino Real	PA	C	37,910	0.632	C	45,302	0.755	0.123	*NO*
	El Camino Real to Carmel Country Road	PA	B	32,674	0.545	C	37,542	0.626	0.081	*NO*
	Carmel Country Road to Torrey Ridge Road	PA	A	21,658	0.361	A	24,002	0.400	0.039	*NO*
	Torrey Ridge Road to Lansdale Drive	PA	A	19,071	0.318	A	20,694	0.345	0.027	*NO*
	Lansdale Drive to Carmel Canyon Road	PA	A	15,188	0.253	A	16,090	0.268	0.015	*NO*
El Camino Real	Via de la Valle to San Dieguito Road	2-Ca	F	15,579	1.039	F	16,120	1.075	0.036	*YES*
	San Dieguito Road to Derby Downs Road	4-M	A	13,915	0.348	A	14,636	0.366	0.018	*NO*
	Derby Downs Road to Half Mile Drive	4-M	B	15,333	0.383	B	16,054	0.401	0.018	*NO*
	Half Mile Drive to Quarter Mile Drive	4-M	A	13,516	0.338	A	14,418	0.360	0.023	*NO*
	Quarter Mile Drive to Del Mar Heights Road	4-M	A	14,925	0.373	B	16,007	0.400	0.027	*NO*
	Del Mar Heights Road to Townsgate Drive	6-M	A	14,731	0.295	A	17,436	0.349	0.054	*NO*
	Townsgate Drive to High Bluff Drive	6-M	A	15,425	0.309	A	17,769	0.355	0.047	*NO*
	High Bluff Drive to Valley Centre Drive	6-M	A	19,364	0.387	B	20,987	0.420	0.032	*NO*
	Valley Centre Drive to Carmel Valley Road	5-M	C	27,589	0.613	C	28,671	0.637	0.024	*NO*
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	4-M	B	15,932	0.398	B	17,735	0.443	0.045	*NO*
	Townsgate Drive to Carmel Creek Road	4-M	A	13,878	0.347	B	15,320	0.383	0.036	*NO*
	Carmel Creek Road to Carmel Canyon Road	4-M	A	13,137	0.328	A	14,039	0.351	0.023	*NO*
	Carmel Canyon Road to SR-56 Westbound Ramps	4-M	B	20,553	0.514	C	21,274	0.532	0.018	*NO*
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Road	4-M	A	12,224	0.306	A	12,585	0.315	0.009	*NO*
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	4-M	A	11,206	0.280	A	11,747	0.294	0.014	*NO*
	Carmel Grove Road to SR-56 Westbound Ramps	4-M	A	14,862	0.372	B	15,403	0.385	0.014	*NO*
Valley Centre Drive	Carmel View Road to Carmel Creek Road	4-C	B	10,875	0.363	B	11,055	0.369	0.006	*NO*
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	PA	C	43,375	0.723	C	43,736	0.729	0.006	*NO*
High Bluff Drive	Del Mar Heights Road to El Camino Real	2-Ca	C	9,842	0.656	D	10,383	0.692	0.036	*NO*
Via de la Valle	San Andres Drive to El Camino Real (West)	2-Cb	F	24,400	2.440	F	24,761	2.476	0.036	*YES*

Legend:

LOS= Level of Service

V/C= Volume to Capacity Ratio

ΔV/C= Change in V/C ratio

ATTACHMENT 63

Existing & Existing With Project (Buildout) Street Segment Comparison

Existing + Project Analysis

Road	Segment	Class.	Existing			Existing + Project (Buildout)			ΔV/C	Is this impact Significant?
			LOS	Volume	V/C	LOS	Volume	V/C		
Del Mar Heights Rd.	Mango Drive to Portofino Drive	5-M	B	21,314	0.474	B	23,461	0.521	0.048	*NO*
	Portofino Drive to I-5 Southbound Ramps	5-PA	C	36,086	0.722	C	38,948	0.779	0.057	*NO*
	I-5 Southbound Ramps and I-5 Northbound Ramps	5-PA	D	40,090	0.802	E	45,099	0.902	0.100	***YES***
	I-5 Northbound Ramps to High Bluff Drive	PA	D	51,625	0.860	F	60,928	1.015	0.155	***YES***
	High Bluff Drive to Third Avenue	PA	C	37,910	0.632	D	48,644	0.811	0.179	*NO*
	Third Avenue to First Avenue	PA	C	37,910	0.632	C	47,690	0.795	0.163	*NO*
	First Avenue to El Camino Real	PA	C	37,910	0.632	C	47,690	0.795	0.163	*NO*
	El Camino Real to Carmel Country Road	PA	B	32,674	0.545	C	39,115	0.652	0.107	*NO*
	Carmel Country Road to Torrey Ridge Road	PA	A	21,658	0.361	A	24,759	0.413	0.052	*NO*
	Torrey Ridge Road to Lansdale Drive	PA	A	19,071	0.318	A	21,218	0.354	0.036	*NO*
	Lansdale Drive to Carmel Canyon Road	PA	A	15,188	0.253	A	16,381	0.273	0.020	*NO*
El Camino Real	Via de la Valle to San Dieguito Road	2-Ca	F	15,579	1.039	F	16,295	1.086	0.048	***YES***
	San Dieguito Road to Derby Downs Road	4-M	A	13,915	0.348	A	14,869	0.372	0.024	*NO*
	Derby Downs Road to Half Mile Drive	4-M	B	15,333	0.383	B	16,287	0.407	0.024	*NO*
	Half Mile Drive to Quarter Mile Drive	4-M	A	13,516	0.338	A	14,709	0.368	0.030	*NO*
	Quarter Mile Drive to Del Mar Heights Road	4-M	A	14,925	0.373	B	16,356	0.409	0.036	*NO*
	Del Mar Heights Road to Townsgate Drive	6-M	A	14,731	0.295	A	19,502	0.390	0.095	*NO*
	Townsgate Drive to High Bluff Drive	6-M	A	15,425	0.309	A	18,526	0.371	0.062	*NO*
	High Bluff Drive to Valley Centre Drive	6-M	A	19,364	0.387	B	21,511	0.430	0.043	*NO*
	Valley Centre Drive to Carmel Valley Road	5-M	C	27,589	0.613	C	29,020	0.645	0.032	*NO*
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	4-M	B	15,932	0.398	B	18,317	0.458	0.060	*NO*
	Townsgate Drive to Carmel Creek Road	4-M	A	13,878	0.347	B	15,786	0.395	0.048	*NO*
	Carmel Creek Road to Carmel Canyon Road	4-M	A	13,137	0.328	A	14,330	0.358	0.030	*NO*
	Carmel Canyon Road to SR-56 Westbound Ramps	4-M	B	20,553	0.514	C	21,507	0.538	0.024	*NO*
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Road	4-M	A	12,224	0.306	A	12,701	0.318	0.012	*NO*
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	4-M	A	11,206	0.280	A	11,922	0.298	0.018	*NO*
	Carmel Grove Road to SR-56 Westbound Ramps	4-M	A	14,862	0.372	B	15,578	0.389	0.018	*NO*
Valley Centre Drive	Carmel View Road to Carmel Creek Road	4-C	B	10,875	0.363	B	11,114	0.370	0.008	*NO*
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	PA	C	43,375	0.723	C	43,852	0.731	0.008	*NO*
High Bluff Drive	Del Mar Heights Road to El Camino Real	2-Ca	C	9,842	0.656	D	10,558	0.704	0.048	*NO*
Via de la Valle	San Andres Drive to El Camino Real (West)	2-Cb	F	24,400	2.440	F	24,877	2.488	0.048	***YES***

Legend:

LOS= Level of Service

V/C= Volume to Capacity Ratio

ΔV/C= Change in V/C ratio

ATTACHMENT 64

Existing & Existing + Project (Phase 1) Intersection LOS Summary

#	Intersection	Existing				Existing + Project (Phase 1)							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		D	LOS	D	LOS	D	LOS			D	LOS		
1	El Camino Real / Via de la Valle	30.3	C	37.3	D	30.6	C	0.3	No	38.4	D	1.1	No
2	El Camino Real / San Dieguito Road	17.4	B	25.4	C	17.5	B	0.1	No	26.3	C	0.9	No
3	El Camino Real / Derby Downs Road	4.9	A	5.5	A	4.9	A	0.0	No	5.5	A	0.0	No
4	El Camino Real / Half Mile Drive	21.6	C	18.3	B	21.9	C	0.3	No	19.5	B	1.2	No
5	El Camino Real / Quarter Mile Drive	20.4	C	14.1	B	20.5	C	0.1	No	15.2	B	1.1	No
6	Del Mar Heights Road / Mango Drive	35.2	D	35.4	D	36.1	D	0.9	No	38.4	D	3.0	No
7	Del Mar Heights Road / Portofino Drive	9.4	A	9.2	A	9.5	A	0.1	No	9.2	A	0.0	No
8	Del Mar Heights Road / I-5 SB Ramps	20.4	C	20.3	C	24.0	C	3.6	No	22.4	C	2.1	No
9	Del Mar Heights Road / I-5 NB Ramps	31.1	C	34.2	C	35.9	D	4.8	No	37.2	D	3.0	No
10	Del Mar Heights Road / High Bluff Drive	28.8	C	39.2	D	29.3	C	0.5	No	44.6	D	5.4	No
11	Del Mar Heights Road / Third Avenue	DNE	DNE	DNE	DNE	6.1	A	N/A	No	11.7	B	N/A	No
12	Del Mar Heights Road / First Avenue	DNE	DNE	DNE	DNE	5.0	A	N/A	No	11.3	B	N/A	No
13	Del Mar Heights Road / El Camino Real	31.4	C	29.1	C	34.2	C	2.8	No	32.8	C	3.7	No
14	Del Mar Heights Road / Carmel Country Rd	28.6	C	25.0	C	30.5	C	1.9	No	26.8	C	1.8	No
15	Del Mar Heights Road / Torrey Ridge Drive	25.8	C	9.8	A	28.4	C	2.6	No	10.9	B	1.1	No
16	Del Mar Heights Road / Lansdale Drive	23.9	C	17.1	B	25.2	C	1.3	No	17.6	B	0.5	No
17	Del Mar Heights Road / Carmel Canyon Rd	15.9	B	11.3	B	16.0	B	0.1	No	11.5	B	0.2	No
18	El Camino Real / Del Mar Highlands Town Ctr.	8.3	A	14.8	B	16.4	B	8.1	No	24.4	C	9.6	No
19	Carmel Country Road / Townsgate Drive	28.9	C	25.5	C	29.8	C	0.9	No	26.0	C	0.5	No
20	El Camino Real / Townsgate Drive	22.9	C	18.5	B	23.7	C	0.8	No	19.1	B	0.6	No
21	Carmel Country Road / Carmel Creek Rd	51.7	D	28.3	C	53.2	D	1.5	No	29.6	C	1.3	No
22	El Camino Real / High Bluff Drive	27.0	C	32.5	C	27.3	C	0.3	No	33.6	C	1.1	No
23	Carmel View Road / High Bluff Drive	8.3	A	9.0	A	8.5	A	0.2	No	9.3	A	0.3	No
24	Carmel Creek Road / Carmel Grove Rd	27.3	C	20.1	C	27.3	C	0.0	No	20.2	C	0.1	No
25	Carmel Valley Road / I-5 SB Ramps	20.4	C	27.9	C	20.8	C	0.4	No	28.1	C	0.2	No
26	Carmel Valley Road / I-5 NB Ramps	14.8	B	22.0	C	14.9	B	0.1	No	22.2	C	0.2	No
27	El Camino Real / Valley Centre Drive	25.1	C	23.2	C	25.2	C	0.1	No	23.6	C	0.4	No
28	El Camino Real / Carmel Valley Rd	19.9	B	25.4	C	19.9	B	0.0	No	25.9	C	0.5	No
29	El Camino Real / SR-56 EB On Ramp	17.9	B	28.8	C	18.2	B	0.3	No	30.5	C	1.7	No
30	Carmel View Road / Valley Centre Drive	7.6	A	6.7	A	7.6	A	0.0	No	6.7	A	0.0	No
31	Carmel Creek Road / SR-56 WB Ramp	52.5	D	27.3	C	53.3	D	0.8	No	27.6	C	0.3	No
32	Carmel Creek Road / SR-56 EB Ramps	14.4	B	22.1	C	14.4	B	0.0	No	22.3	C	0.2	No
33	Carmel Country Road / Carmel Canyon Rd	37.2	D	28.5	C	37.2	D	0.0	No	28.7	C	0.2	No
34	Carmel Country Road / SR-56 WB Ramps	17.4	B	11.6	B	17.4	B	0.0	No	11.7	B	0.1	No
35	Carmel Country Road / SR-56 EB Ramps	15.8	B	13.9	B	15.8	B	0.0	No	14.0	B	0.1	No
36	Carmel Creek Road / Del Mar Trail	41.6	E	20.1	C	43.6	E	2.0	No	21.1	C	1.0	No

Notes:

LOS = Level of Service

Δ = Change

S = Significant

D= Delay

DNE = Does Not Exist

N/A = Not Applicable

ATTACHMENT 65

Existing & Existing + Project (Phase 1 & 2) Intersection LOS Summary

#	Intersection	Existing				Existing + Project (Phase 1 & 2)							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		D	LOS	D	LOS	D	LOS			D	LOS		
1	El Camino Real / Via de la Valle	30.3	C	37.3	D	30.8	C	0.5	No	39.6	D	2.3	No
2	El Camino Real / San Dieguito Road	17.4	B	25.4	C	17.6	B	0.2	No	26.8	C	1.4	No
3	El Camino Real / Derby Downs Road	4.9	A	5.5	A	4.9	A	0.0	No	5.5	A	0.0	No
4	El Camino Real / Half Mile Drive	21.6	C	18.3	B	22.0	C	0.4	No	21.7	C	3.4	No
5	El Camino Real / Quarter Mile Drive	20.4	C	14.1	B	20.6	C	0.2	No	15.5	B	1.4	No
6	Del Mar Heights Road / Mango Drive	35.2	D	35.4	D	36.7	D	1.5	No	39.2	D	3.8	No
7	Del Mar Heights Road / Portofino Drive	9.4	A	9.2	A	9.6	A	0.2	No	9.3	A	0.1	No
8	Del Mar Heights Road / I-5 SB Ramps	20.4	C	20.3	C	24.1	C	3.7	No	24.3	C	4.0	No
9	Del Mar Heights Road / I-5 NB Ramps	31.1	C	34.2	C	37.4	D	6.3	No	41.7	D	7.5	No
10	Del Mar Heights Road / High Bluff Drive	28.8	C	39.2	D	30.2	C	1.4	No	51.9	D	12.7	No
11	Del Mar Heights Road / Third Avenue	DNE	DNE	DNE	DNE	8.1	A	N/A	No	14.9	B	N/A	No
12	Del Mar Heights Road / First Avenue	DNE	DNE	DNE	DNE	7.6	A	N/A	No	15.8	B	N/A	No
13	Del Mar Heights Road / El Camino Real	31.4	C	29.1	C	35.8	D	4.4	No	38.6	D	9.5	No
14	Del Mar Heights Road / Carmel Country Rd	28.6	C	25.0	C	31.0	C	2.4	No	28.8	C	3.8	No
15	Del Mar Heights Road / Torrey Ridge Drive	25.8	C	9.8	A	28.7	C	2.9	No	11.1	B	1.3	No
16	Del Mar Heights Road / Lansdale Drive	23.9	C	17.1	B	25.5	C	1.6	No	18.0	B	0.9	No
17	Del Mar Heights Road / Carmel Canyon Rd	15.9	B	11.3	B	16.1	B	0.2	No	11.6	B	0.3	No
18	El Camino Real / Del Mar Highlands Town Ctr.	8.3	A	14.8	B	18.2	B	9.9	No	29.4	C	14.6	No
19	Carmel Country Road / Townsgate Drive	28.9	C	25.5	C	30.1	C	1.2	No	27.7	C	2.2	No
20	El Camino Real / Townsgate Drive	22.9	C	18.5	B	23.8	C	0.9	No	19.5	B	1.0	No
21	Carmel Country Road / Carmel Creek Rd	51.7	D	28.3	C	53.9	D	2.2	No	30.4	C	2.1	No
22	El Camino Real / High Bluff Drive	27.0	C	32.5	C	27.3	C	0.3	No	34.4	C	1.9	No
23	Carmel View Road / High Bluff Drive	8.3	A	9.0	A	8.6	A	0.3	No	9.5	A	0.5	No
24	Carmel Creek Road / Carmel Grove Rd	27.3	C	20.1	C	27.3	C	0.0	No	20.3	C	0.2	No
25	Carmel Valley Road / I-5 SB Ramps	20.4	C	27.9	C	20.9	C	0.5	No	28.5	C	0.6	No
26	Carmel Valley Road / I-5 NB Ramps	14.8	B	22.0	C	14.9	B	0.1	No	22.4	C	0.4	No
27	El Camino Real / Valley Centre Drive	25.1	C	23.2	C	25.2	C	0.1	No	23.9	C	0.7	No
28	El Camino Real / Carmel Valley Rd	19.9	B	25.4	C	20.0	B	0.1	No	26.2	C	0.8	No
29	El Camino Real / SR-56 EB On Ramp	17.9	B	28.8	C	18.3	B	0.4	No	31.0	C	2.2	No
30	Carmel View Road / Valley Centre Drive	7.6	A	6.7	A	7.6	A	0.0	No	6.7	A	0.0	No
31	Carmel Creek Road / SR-56 WB Ramp	52.5	D	27.3	C	53.6	D	1.1	No	27.4	C	0.1	No
32	Carmel Creek Road / SR-56 EB Ramps	14.4	B	22.1	C	14.5	B	0.1	No	22.3	C	0.2	No
33	Carmel Country Road / Carmel Canyon Rd	37.2	D	28.5	C	37.3	D	0.1	No	29.0	C	0.5	No
34	Carmel Country Road / SR-56 WB Ramps	17.4	B	11.6	B	17.4	B	0.0	No	11.7	B	0.1	No
35	Carmel Country Road / SR-56 EB Ramps	15.8	B	13.9	B	15.8	B	0.0	No	14.1	B	0.2	No
36	Carmel Creek Road / Del Mar Trail	41.6	E	20.1	C	44.5	E	2.9	Yes	22.0	C	1.9	No

Notes:

LOS = Level of Service

Δ = Change

S = Significant

D= Delay

DNE = Does Not Exist

N/A = Not Applicable

ATTACHMENT 66

Existing & Existing + Project (Buildout) Intersection LOS Summary

#	Intersection	Existing				Existing + Project (Buildout)							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		D	LOS	D	LOS	D	LOS			D	LOS		
1	El Camino Real / Via de la Valle	30.3	C	37.3	D	31.1	C	0.8	No	40.0	D	2.7	No
2	El Camino Real / San Dieguito Road	17.4	B	25.4	C	17.7	B	0.3	No	27.2	C	1.8	No
3	El Camino Real / Derby Downs Road	4.9	A	5.5	A	4.9	A	0.0	No	5.5	A	0.0	No
4	El Camino Real / Half Mile Drive	21.6	C	18.3	B	22.0	C	0.4	No	18.4	B	0.1	No
5	El Camino Real / Quarter Mile Drive	20.4	C	14.1	B	20.6	C	0.2	No	15.6	B	1.5	No
6	Del Mar Heights Road / Mango Drive	35.2	D	35.4	D	37.0	D	1.8	No	39.9	D	4.5	No
7	Del Mar Heights Road / Portofino Drive	9.4	A	9.2	A	9.6	A	0.2	No	9.4	A	0.2	No
8	Del Mar Heights Road / I-5 SB Ramps	20.4	C	20.3	C	24.4	C	4.0	No	25.4	C	5.1	No
9	Del Mar Heights Road / I-5 NB Ramps	31.1	C	34.2	C	38.7	D	7.6	No	46.7	D	12.5	No
10	Del Mar Heights Road / High Bluff Drive	28.8	C	39.2	D	31.5	C	2.7	No	52.1	D	12.9	No
11	Del Mar Heights Road / Third Avenue	DNE	DNE	DNE	DNE	8.9	A	N/A	No	18.8	B	N/A	No
12	Del Mar Heights Road / First Avenue	DNE	DNE	DNE	DNE	8.4	A	N/A	No	19.2	B	N/A	No
13	Del Mar Heights Road / El Camino Real	31.4	C	29.1	C	36.7	D	5.3	No	44.9	D	15.8	No
14	Del Mar Heights Road / Carmel Country Rd	28.6	C	25.0	C	31.5	C	2.9	No	30.1	C	5.1	No
15	Del Mar Heights Road / Torrey Ridge Drive	25.8	C	9.8	A	28.8	C	3.0	No	12.8	B	3.0	No
16	Del Mar Heights Road / Lansdale Drive	23.9	C	17.1	B	25.2	C	1.3	No	18.2	B	1.1	No
17	Del Mar Heights Road / Carmel Canyon Rd	15.9	B	11.3	B	16.2	B	0.3	No	11.6	B	0.3	No
18	El Camino Real / Del Mar Highlands Town Ctr.	8.3	A	14.8	B	20.3	C	12.0	No	31.2	C	16.4	No
19	Carmel Country Road / Townsgate Drive	28.9	C	25.5	C	30.3	C	1.4	No	28.3	C	2.8	No
20	El Camino Real / Townsgate Drive	22.9	C	18.5	B	23.8	C	0.9	No	19.7	B	1.2	No
21	Carmel Country Road / Carmel Creek Rd	51.7	D	28.3	C	54.5	D	2.8	No	30.9	C	2.6	No
22	El Camino Real / High Bluff Drive	27.0	C	32.5	C	27.5	C	0.5	No	35.0	C	2.5	No
23	Carmel View Road / High Bluff Drive	8.3	A	9.0	A	8.7	A	0.4	No	9.7	A	0.7	No
24	Carmel Creek Road / Carmel Grove Rd	27.3	C	20.1	C	27.4	C	0.1	No	20.3	C	0.2	No
25	Carmel Valley Road / I-5 SB Ramps	20.4	C	27.9	C	20.9	C	0.5	No	28.9	C	1.0	No
26	Carmel Valley Road / I-5 NB Ramps	14.8	B	22.0	C	14.9	B	0.1	No	22.6	C	0.6	No
27	El Camino Real / Valley Centre Drive	25.1	C	23.2	C	25.3	C	0.2	No	24.0	C	0.8	No
28	El Camino Real / Carmel Valley Rd	19.9	B	25.4	C	20.1	C	0.2	No	26.3	C	0.9	No
29	El Camino Real / SR-56 EB On Ramp	17.9	B	28.8	C	18.4	B	0.5	No	32.1	C	3.3	No
30	Carmel View Road / Valley Centre Drive	7.6	A	6.7	A	7.6	A	0.0	No	6.7	A	0.0	No
31	Carmel Creek Road / SR-56 WB Ramp	52.5	D	27.3	C	54.5	D	2.0	No	27.7	C	0.4	No
32	Carmel Creek Road / SR-56 EB Ramps	14.4	B	22.1	C	14.5	B	0.1	No	22.4	C	0.3	No
33	Carmel Country Road / Carmel Canyon Rd	37.2	D	28.5	C	37.4	D	0.2	No	28.7	C	0.2	No
34	Carmel Country Road / SR-56 WB Ramps	17.4	B	11.6	B	17.5	B	0.1	No	11.8	B	0.2	No
35	Carmel Country Road / SR-56 EB Ramps	15.8	B	13.9	B	15.9	B	0.1	No	14.1	B	0.2	No
36	Carmel Creek Road / Del Mar Trail	41.6	E	20.1	C	45.7	E	4.1	Yes	22.5	C	2.4	No

Notes:

LOS = Level of Service

Δ = Change

S = Significant

D= Delay

N/A = Not Applicable

DNE = Does Not Exist

ATTACHMENT 67

Existing & Existing With Project (Phase 1)

Freeway Level of Service Summary

Segment	Lanes	Capacity	Dir.	Existing		Existing + Project (Phase 1)		Δ	Sig.?
				V/C	LOS	V/C	LOS		
I-5									
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	NB	0.6319	C	0.6340	C	0.0020	NO
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	SB	0.6523	C	0.6544	C	0.0021	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	NB	0.6447	C	0.6472	C	0.0025	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	SB	0.6655	C	0.6681	C	0.0026	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	NB	0.5565	B	0.5607	B	0.0043	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	SB	0.5744	B	0.5788	B	0.0044	NO
SR-56/ Carmel Mountain Road	9-GP+1-M	22,830	NB	0.5746	B	0.5766	B	0.0020	NO
SR-56/ Carmel Mountain Road	8-GP+1-M	20,480	SB	0.6290	C	0.6313	C	0.0022	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	NB	0.5582	B	0.5598	B	0.0016	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	SB	0.5482	B	0.5498	B	0.0016	NO
SR-56									
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	6,500	EB	0.8144	D	0.8165	D	0.0021	NO
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	6,500	WB	0.8352	D	0.8373	D	0.0021	NO
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	6,500	EB	0.7641	C	0.7662	C	0.0021	NO
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	6,500	WB	0.7836	C	0.7857	C	0.0021	NO

Legend:
Dir.= Direction
V/C= Volume to Capacity Ratio
LOS= Level of Service
Sig.?= Is this significant?
#-GP = # of General Purpose Lanes with LOS E capacity of 2,350 veh/hr/ln
#-M = # of Managed Lanes (Capacity for LOS "C" assumed at 1680 veh/hr/ln taken from Caltrans Guide, December 2002)
#-AX = # of Auxilary lane with LOS E capacity of 1,800 veh/hr/ln
#-HOV = # of High Occupancy Vehicle lane with LOS E capacity of 1,600 veh/hr/ln

ATTACHMENT 68

Existing & Existing With Project (Phase 1 & 2)

Freeway Level of Service Summary

Segment	Lanes	Capacity	Dir.	Existing		Existing + Project (Phase 1 & 2)		Δ	Sig.?
				V/C	LOS	V/C	LOS		
I-5									
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	NB	0.6319	C	0.6355	C	0.0036	NO
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	SB	0.6523	C	0.6560	C	0.0037	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	NB	0.6447	C	0.6491	C	0.0044	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	SB	0.6655	C	0.6701	C	0.0045	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	NB	0.5565	B	0.5640	B	0.0075	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	SB	0.5744	B	0.5821	B	0.0077	NO
SR-56/ Carmel Mountain Road	9-GP+1-M	22,830	NB	0.5746	B	0.5782	B	0.0036	NO
SR-56/ Carmel Mountain Road	8-GP+1-M	20,480	SB	0.6290	C	0.6330	C	0.0039	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	NB	0.5582	B	0.5610	B	0.0028	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	SB	0.5482	B	0.5509	B	0.0027	NO
SR-56									
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	6,500	EB	0.8144	D	0.8180	D	0.0036	NO
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	6,500	WB	0.8352	D	0.8389	D	0.0037	NO
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	6,500	EB	0.7641	C	0.7678	C	0.0036	NO
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	6,500	WB	0.7836	C	0.7873	C	0.0037	NO

Legend:
Dir.= Direction
V/C= Volume to Capacity Ratio
LOS= Level of Service
Sig.?= Is this significant?
#-GP = # of General Purpose Lanes with LOS E capacity of 2,350 veh/hr/ln
#-M = # of Managed Lanes (Capacity for LOS "C" assumed at 1680 veh/hr/ln taken from Caltrans Guide, December 2002)
#-AX = # of Auxilary lane with LOS E capacity of 1,800 veh/hr/ln
#-HOV = # of High Occupancy Vehicle lane with LOS E capacity of 1,600 veh/hr/ln

ATTACHMENT 69

Existing & Existing With Project (Build-out)

Freeway Level of Service Summary

Segment	Lanes	Capacity	Dir.	Existing		Existing + Project (Build-out)		Δ	Sig.?
				V/C	LOS	V/C	LOS		
I-5									
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	NB	0.6319	C	0.6367	C	0.0048	NO
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	SB	0.6523	C	0.6572	C	0.0049	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	NB	0.6447	C	0.6506	C	0.0058	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	SB	0.6655	C	0.6715	C	0.0060	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	NB	0.5565	B	0.5664	B	0.0099	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	SB	0.5744	B	0.5846	B	0.0102	NO
SR-56/ Carmel Mountain Road	9-GP+1-M	22,830	NB	0.5746	B	0.5793	B	0.0048	NO
SR-56/ Carmel Mountain Road	8-GP+1-M	20,480	SB	0.6290	C	0.6342	C	0.0052	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	NB	0.5582	B	0.5619	B	0.0037	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	SB	0.5482	B	0.5518	B	0.0036	NO
SR-56									
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	6,500	EB	0.8144	D	0.8192	D	0.0048	NO
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	6,500	WB	0.8352	D	0.8401	D	0.0049	NO
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	6,500	EB	0.7641	C	0.7689	C	0.0048	NO
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	6,500	WB	0.7836	C	0.7885	C	0.0049	NO

Legend:
Dir.= Direction
V/C= Volume to Capacity Ratio
LOS= Level of Service
Sig.?= Is this significant?
#-GP = # of General Purpose Lanes with LOS E capacity of 2,350 veh/hr/ln
#-M = # of Managed Lanes (Capacity for LOS "C" assumed at 1680 veh/hr/ln taken from Caltrans Guide, December 2002)
#-AX = # of Auxilary lane with LOS E capacity of 1,800 veh/hr/ln
#-HOV = # of High Occupancy Vehicle lane with LOS E capacity of 1,600 veh/hr/ln

ATTACHMENT 70

Existing & Existing With Project Ramp Meter Comparison

(Phase 1)

Most Restrictive Meter Rate

Location		Existing		Existing + Project (Phase 1)		∇	S
		Delay (Min)	Queue (Ft)	Delay (Min)	Queue (Ft)		
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound Loop)	AM	6.20	1,102	7.99	1,421	1.79	NO
	PM	0.00	0	0.00	0	0.00	NO
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	0.00	0	0.00	0	0.00	NO
	PM	0.00	0	0.00	0	0.00	NO
Del Mar Heights Rd. / I-5 NB on Ramp	AM	Meter is not turned on				0.00	NO
	PM	0.00	0	0.00	0	0.00	NO

Notes:

Δ = Change in Delay (minutes)

S = Significant, the allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS E is 2 min.

S = Significant, the allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS F is 1 min.

Meter rate is based on the most restrictive meter rate provided by Caltrans, see Appendix C.

ATTACHMENT 71

Existing & Existing With Project Ramp Meter Comparison

(Phase 1 & 2)

Most Restrictive Meter Rate

Location		Existing		Existing + Project (Phase 1 & 2)		∇	S
		Delay (Min)	Queue (Ft)	Delay (Min)	Queue (Ft)		
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound Loop)	AM	6.20	1,102	10.03	1,784	3.83	NO
	PM	0.00	0	0.00	0	0.00	NO
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	0.00	0	0.00	0	0.00	NO
	PM	0.00	0	0.00	0	0.00	NO
Del Mar Heights Rd. / I-5 NB on Ramp	AM	Meter is not turned on				0.00	NO
	PM	0.00	0	0.00	0	0.00	NO

Notes:

Δ = Change in Delay (minutes)

S = Significant, the allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS E is 2 min.

S = Significant, the allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS F is 1 min.

Meter rate is based on the most restrictive meter rate provided by Caltrans, see Appendix C.

ATTACHMENT 72

Existing & Existing With Project (Buildout) Ramp Meter Comparison

Most Restrictive Meter Rate

Location		Existing		Existing With Project (Buildout)		∇	S
		Delay (Min)	Queue (Ft)	Delay (Min)	Queue (Ft)		
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound Loop)	AM	6.20	1,102	12.55	2,233	6.36	NO
	PM	0.00	0	0.73	131	0.73	NO
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	0.00	0	0.00	0	0.00	NO
	PM	0.00	0	0.00	0	0.00	NO
Del Mar Heights Rd. / I-5 NB on Ramp	AM	Meter is not turned on				0.00	NO
	PM	0.00	0	0.00	0	0.00	NO

Notes:

Δ = Change in Delay (minutes)

S = Significant, if change in delay is greater than 2 minutes and delay is greater than 15 minutes

Meter rate is based on the most restrictive meter rate provided by Caltrans, see Appendix C.

ATTACHMENT 73

Near Term With & Without Project (Phase 1)
Street Segment Comparison

Road	Segment	Class.	Near Term			Near Term + Project (Phase 1)			ΔV/C	Is this impact Significant?
			LOS	Volume	V/C	LOS	Volume	V/C		
Del Mar Heights Rd.	Mango Drive to Portofino Drive	5-M	B	21,953	0.488	B	22,875	0.508	0.020	*NO*
	Portofino Drive to I-5 Southbound Ramps	5-PA	C	37,169	0.743	C	38,398	0.768	0.025	*NO*
	I-5 SB Ramps and I-5 NB Ramps	5-PA	D	41,213	0.824	D	43,364	0.867	0.043	*NO*
	I-5 Northbound Ramps to High Bluff Drive	PA	D	54,775	0.913	E	58,770	0.980	0.067	*YES*
	High Bluff Drive to Third Avenue	PA	C	40,648	0.677	C	45,259	0.754	0.077	*NO*
	Thirth Avenue to First Avenue	PA	C	40,648	0.677	C	44,234	0.737	0.060	*NO*
	First Avenue to El Camino Real	PA	C	40,648	0.677	C	43,210	0.720	0.043	*NO*
	El Camino Real to Carmel Country Road	PA	B	33,654	0.561	C	36,420	0.607	0.046	*NO*
	Carmel Country Road to Torrey Ridge Road	PA	A	22,308	0.372	A	23,640	0.394	0.022	*NO*
	Torrey Ridge Road to Lansdale Drive	PA	A	19,643	0.327	A	20,565	0.343	0.015	*NO*
	Lansdale Drive to Carmel Canyon Road	PA	A	15,644	0.261	A	16,156	0.269	0.009	*NO*
El Camino Real	Via de la Valle to San Dieguito Road	2-Ca	F	16,235	1.082	F	16,543	1.103	0.020	*YES*
	San Dieguito Road to Derby Downs Road	4-M	A	14,332	0.358	A	14,742	0.369	0.010	*NO*
	Derby Downs Road to Half Mile Drive	4-M	B	15,793	0.395	B	16,203	0.405	0.010	*NO*
	Half Mile Drive to Quarter Mile Drive	4-M	A	13,921	0.348	A	14,434	0.361	0.013	*NO*
	Quarter Mile Drive to Del Mar Heights Road	4-M	B	15,373	0.384	B	15,987	0.400	0.015	*NO*
	Del Mar Heights Road to Townsgate Drive	6-M	A	17,014	0.340	A	18,551	0.371	0.031	*NO*
	Townsgate Drive to High Bluff Drive	6-M	A	16,662	0.333	A	17,994	0.360	0.027	*NO*
	High Bluff Drive to Valley Centre Drive	6-M	B	21,035	0.421	B	21,957	0.439	0.018	*NO*
	Valley Centre Drive to Carmel Valley Road	5-M	C	30,131	0.670	C	30,745	0.683	0.014	*NO*
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	4-M	B	16,410	0.410	B	17,434	0.436	0.026	*NO*
	Townsgate Drive to Carmel Creek Road	4-M	A	14,294	0.357	B	15,114	0.378	0.020	*NO*
	Carmel Creek Road to Carmel Canyon Road	4-M	A	13,531	0.338	A	14,043	0.351	0.013	*NO*
	Carmel Canyon Road to SR-56 WB Ramps	4-M	C	21,170	0.529	C	21,579	0.539	0.010	*NO*
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Rd.	4-M	A	12,591	0.315	A	12,796	0.320	0.005	*NO*
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	4-M	A	11,542	0.289	A	11,850	0.296	0.008	*NO*
	Carmel Grove Road to SR-56 WB Ramps	4-M	B	15,933	0.398	B	16,240	0.406	0.008	*NO*
Valley Centre Drive	Carmel View Road to Carmel Creek Road	4-C	B	11,826	0.394	B	11,929	0.398	0.003	*NO*
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	PA	C	45,968	0.766	C	46,173	0.770	0.003	*NO*
High Bluff Drive	Del Mar Heights Road to El Camino Real	2-Ca	D	10,137	0.676	D	10,445	0.696	0.020	*NO*
Via de la Valle	San Andres Drive to El Camino Real (West)	2-Cb	F	26,732	2.673	F	26,937	2.694	0.020	*YES*

Legend:

LOS= Level of Service

V/C= Volume to Capacity Ratio

ΔV/C= Change in V/C ratio

5-M = 5 lane Major with LOS E capacity of 45,000 ADT

5-PA = 5 lane Primary Arterial with LOS E capacity of 50,000 ADT

4-M=4 lane Major

PA = 6 lane Primary Arterial

2-Ca=2 lane collector

6-M = 6 lane Major

2-Cb = 2 lane Collector with no fronting property

Near Term With & Without Project (Phase 1 & 2)
Street Segment Comparison

Road	Segment	Class.	Near Term			Near Term + Project (Phase 1 & 2)			ΔV/C	Is this impact Significant?
			LOS	Volume	V/C	LOS	Volume	V/C		
Del Mar Heights Rd.	Mango Drive to Portofino Drive	5-M	B	21,953	0.488	B	23,576	0.524	0.036	*NO*
	Portofino Drive to I-5 Southbound Ramps	5-PA	C	37,169	0.743	C	39,332	0.787	0.043	*NO*
	I-5 SB Ramps and I-5 NB Ramps	5-PA	D	41,213	0.824	D	44,999	0.900	0.076	*NO*
	I-5 Northbound Ramps to High Bluff Drive	PA	D	54,775	0.913	F	61,806	1.030	0.117	*YES*
	High Bluff Drive to Third Avenue	PA	C	40,648	0.677	C	48,762	0.813	0.135	*NO*
	Thirth Avenue to First Avenue	PA	C	40,648	0.677	C	48,041	0.801	0.123	*NO*
	First Avenue to El Camino Real	PA	C	40,648	0.677	C	48,041	0.801	0.123	*NO*
	El Camino Real to Carmel Country Road	PA	B	33,654	0.561	C	38,522	0.642	0.081	*NO*
	Carmel Country Road to Torrey Ridge Road	PA	A	22,308	0.372	A	24,652	0.411	0.039	*NO*
	Torrey Ridge Road to Lansdale Drive	PA	A	19,643	0.327	A	21,266	0.354	0.027	*NO*
	Lansdale Drive to Carmel Canyon Road	PA	A	15,644	0.261	A	16,545	0.276	0.015	*NO*
El Camino Real	Via de la Valle to San Dieguito Road	2-Ca	F	16,235	1.082	F	16,776	1.118	0.036	*YES*
	San Dieguito Road to Derby Downs Road	4-M	A	14,332	0.358	B	15,054	0.376	0.018	*NO*
	Derby Downs Road to Half Mile Drive	4-M	B	15,793	0.395	B	16,514	0.413	0.018	*NO*
	Half Mile Drive to Quarter Mile Drive	4-M	A	13,921	0.348	A	14,823	0.371	0.023	*NO*
	Quarter Mile Drive to Del Mar Heights Road	4-M	B	15,373	0.384	B	16,455	0.411	0.027	*NO*
	Del Mar Heights Road to Townsgate Drive	6-M	A	17,014	0.340	A	19,718	0.394	0.054	*NO*
	Townsgate Drive to High Bluff Drive	6-M	A	16,662	0.333	A	19,006	0.380	0.047	*NO*
	High Bluff Drive to Valley Centre Drive	6-M	B	21,035	0.421	B	22,658	0.453	0.032	*NO*
	Valley Centre Drive to Carmel Valley Road	5-M	C	30,131	0.670	C	31,212	0.694	0.024	*NO*
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	4-M	B	16,410	0.410	B	18,213	0.455	0.045	*NO*
	Townsgate Drive to Carmel Creek Road	4-M	A	14,294	0.357	B	15,737	0.393	0.036	*NO*
	Carmel Creek Road to Carmel Canyon Road	4-M	A	13,531	0.338	A	14,433	0.361	0.023	*NO*
	Carmel Canyon Road to SR-56 WB Ramps	4-M	C	21,170	0.529	C	21,891	0.547	0.018	*NO*
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Rd.	4-M	A	12,591	0.315	A	12,951	0.324	0.009	*NO*
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	4-M	A	11,542	0.289	A	12,083	0.302	0.014	*NO*
	Carmel Grove Road to SR-56 WB Ramps	4-M	B	15,933	0.398	B	16,474	0.412	0.014	*NO*
Valley Centre Drive	Carmel View Road to Carmel Creek Road	4-C	B	11,826	0.394	B	12,007	0.400	0.006	*NO*
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	PA	C	45,968	0.766	C	46,329	0.772	0.006	*NO*
High Bluff Drive	Del Mar Heights Road to El Camino Real	2-Ca	D	10,137	0.676	D	10,678	0.712	0.036	*NO*
Via de la Valle	San Andres Drive to El Camino Real (West)	2-Cb	F	26,732	2.673	F	27,093	2.709	0.036	*YES*

Legend:

LOS= Level of Service

V/C= Volume to Capacity Ratio

ΔV/C= Change in V/C ratio

5-M = 5 lane Major with LOS E capacity of 45,000 ADT

5-PA = 5 lane Primary Arterial with LOS E capacity of 50,000 ADT

4-M=4 lane Major

PA = 6 lane Primary Arterial

2-Ca=2 lane collector

6-M = 6 lane Major

2-Cb = 2 lane Collector with no fronting property

ATTACHMENT 75

Near Term With & Withou Project (Build-out)
Street Segment Comparison

Road	Segment	Class.	Near Term			Near Term + Project (Build-out)			ΔV/C	Is this impact Significant?
			LOS	Volume	V/C	LOS	Volume	V/C		
Del Mar Heights Rd.	Mango Drive to Portofino Drive	5-M	B	21,953	0.488	B	24,100	0.536	0.048	*NO*
	Portofino Drive to I-5 Southbound Ramps	5-PA	C	37,169	0.743	D	40,031	0.801	0.057	*NO*
	I-5 SB Ramps and I-5 NB Ramps	5-PA	D	41,213	0.824	E	46,222	0.924	0.100	*YES*
	I-5 Northbound Ramps to High Bluff Drive	PA	D	54,775	0.913	F	64,078	1.068	0.155	*YES*
	High Bluff Drive to Third Avenue	PA	C	40,648	0.677	D	51,383	0.856	0.179	*NO*
	Thirth Avenue to First Avenue	PA	C	40,648	0.677	D	50,428	0.840	0.163	*NO*
	First Avenue to El Camino Real	PA	C	40,648	0.677	D	50,428	0.840	0.163	*NO*
	El Camino Real to Carmel Country Road	PA	B	33,654	0.561	C	40,572	0.676	0.115	*NO*
	Carmel Country Road to Torrey Ridge Road	PA	A	22,308	0.372	B	25,409	0.423	0.052	*NO*
	Torrey Ridge Road to Lansdale Drive	PA	A	19,643	0.327	A	21,790	0.363	0.036	*NO*
	Lansdale Drive to Carmel Canyon Road	PA	A	15,644	0.261	A	16,836	0.281	0.020	*NO*
El Camino Real	Via de la Valle to San Dieguito Road	2-Ca	F	16,235	1.082	F	16,951	1.130	0.048	*YES*
	San Dieguito Road to Derby Downs Road	4-M	A	14,332	0.358	B	15,287	0.382	0.024	*NO*
	Derby Downs Road to Half Mile Drive	4-M	B	15,793	0.395	B	16,747	0.419	0.024	*NO*
	Half Mile Drive to Quarter Mile Drive	4-M	A	13,921	0.348	B	15,114	0.378	0.030	*NO*
	Quarter Mile Drive to Del Mar Heights Road	4-M	B	15,373	0.384	B	16,804	0.420	0.036	*NO*
	Del Mar Heights Road to Townsgate Drive	6-M	A	17,014	0.340	B	21,785	0.436	0.095	*NO*
	Townsgate Drive to High Bluff Drive	6-M	A	16,662	0.333	A	19,763	0.395	0.062	*NO*
	High Bluff Drive to Valley Centre Drive	6-M	B	21,035	0.421	B	23,182	0.464	0.043	*NO*
	Valley Centre Drive to Carmel Valley Road	5-M	C	30,131	0.670	C	31,562	0.701	0.032	*NO*
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	4-M	B	16,410	0.410	B	18,795	0.470	0.060	*NO*
	Townsgate Drive to Carmel Creek Road	4-M	A	14,294	0.357	B	16,203	0.405	0.048	*NO*
	Carmel Creek Road to Carmel Canyon Road	4-M	A	13,531	0.338	A	14,724	0.368	0.030	*NO*
	Carmel Canyon Road to SR-56 WB Ramps	4-M	C	21,170	0.529	C	22,124	0.553	0.024	*NO*
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Rd.	4-M	A	12,591	0.315	A	13,068	0.327	0.012	*NO*
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	4-M	A	11,542	0.289	A	12,258	0.306	0.018	*NO*
	Carmel Grove Road to SR-56 WB Ramps	4-M	B	15,933	0.398	B	16,648	0.416	0.018	*NO*
Valley Centre Drive	Carmel View Road to Carmel Creek Road	4-C	B	11,826	0.394	B	12,065	0.402	0.008	*NO*
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	PA	C	45,968	0.766	C	46,445	0.774	0.008	*NO*
High Bluff Drive	Del Mar Heights Road to El Camino Real	2-Ca	D	10,137	0.676	D	10,853	0.724	0.048	*NO*
Via de la Valle	San Andres Drive to El Camino Real (West)	2-Cb	F	26,732	2.673	F	27,209	2.721	0.048	*YES*

Legend:

LOS= Level of Service

V/C= Volume to Capacity Ratio

ΔV/C= Change in V/C ratio

5-M = 5 lane Major with LOS E capacity of 45,000 ADT

5-PA = 5 lane Primary Arterial with LOS E capacity of 50,000 ADT

4-M=4 lane Major

PA = 6 lane Primary Arterial

2-Ca=2 lane collector

6-M = 6 lane Major

2-Cb = 2 lane Collector with no fronting property

ATTACHMENT 76

Near Term With & Without Project (Phase 1) Intersection LOS Summary

#	Intersection	Near Term				Near Term + Project (Phase 1)							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		D	LOS	D	LOS	D	LOS			D	LOS		
1	El Camino Real / Via de la Valle	33.6	C	43.8	D	33.8	C	0.2	N	45.4	D	1.6	N
2	El Camino Real / San Dieguito Road	17.8	B	26.4	C	17.9	B	0.1	N	27.3	C	0.9	N
3	El Camino Real / Derby Downs Road	4.9	A	5.5	A	4.9	A	0.0	N	5.6	A	0.1	N
4	El Camino Real / Half Mile Drive	18.5	B	17.6	B	18.6	B	0.1	N	17.8	B	0.2	N
5	El Camino Real / Quarter Mile Drive	20.6	C	15.5	B	20.8	C	0.2	N	16	B	0.5	N
6	Del Mar Heights Road / Mango Drive	36.9	D	36.9	D	38.2	D	1.3	N	40.0	D	3.1	N
7	Del Mar Heights Road / Portofino Drive	9.4	A	9.2	A	9.6	A	0.2	N	9.3	A	0.1	N
8	Del Mar Heights Road / I-5 SB Ramps	24.8	C	23	C	29.2	C	4.4	N	24.6	C	1.6	N
9	Del Mar Heights Road / I-5 NB Ramps	41.4	D	38.6	D	47.6	D	6.2	N	43.8	D	5.2	N
10	Del Mar Heights Road / High Bluff Drive	30.8	C	46.8	D	32.1	C	1.3	N	52.9	D	6.1	N
11	Del Mar Heights Road / Third Avenue	DNE	DNE	DNE	DNE	6.1	A	0.0	N	11.3	B	0.0	N
12	Del Mar Heights Road / First Avenue	DNE	DNE	DNE	DNE	5.2	A	0.0	N	11	B	0.0	N
13	Del Mar Heights Road / El Camino Real	33.5	C	33.2	C	36.7	D	3.2	N	38.7	D	5.5	N
14	Del Mar Heights Road / Carmel Country Rd	29.3	C	25.4	C	31.2	C	1.9	N	27.8	C	2.4	N
15	Del Mar Heights Road / Torrey Ridge Drive	26.4	C	9.9	A	29.3	C	2.9	N	10.9	B	1.0	N
16	Del Mar Heights Road / Lansdale Drive	25.3	C	17.3	B	25.5	C	0.2	N	17.8	B	0.5	N
17	Del Mar Heights Road / Carmel Canyon Rd	16.4	B	11.5	B	16.5	B	0.1	N	11.6	B	0.1	N
18	El Camino Real / Del Mar Highlands Town Ctr.	8.4	A	16.0	B	16.8	B	8.4	N	26.1	C	10.1	N
19	Carmel Country Road / Townsgate Drive	30.3	C	26.1	C	30.9	C	0.6	N	26.4	C	0.3	N
20	El Camino Real / Townsgate Drive	24.4	C	22	C	24.5	C	0.1	N	23.7	C	1.7	N
21	Carmel Country Road / Carmel Creek Rd	62.3	E	29.2	C	62.5	E	0.2	N	30.6	C	1.4	N
22	El Camino Real / High Bluff Drive	27.4	C	33.4	C	27.6	C	0.2	N	34.4	C	1.0	N
23	Carmel View Road / High Bluff Drive	8.4	A	9.1	A	8.6	A	0.2	N	9.5	A	0.4	N
24	Carmel Creek Road / Carmel Grove Rd	28.3	C	20.4	C	28.3	C	0.0	N	20.6	C	0.2	N
25	Carmel Valley Road / I-5 SB Ramps	22.7	C	33.6	C	23.3	C	0.6	N	34.1	C	0.5	N
26	Carmel Valley Road / I-5 NB Ramps	15.8	B	25.6	C	15.9	B	0.1	N	26.1	C	0.5	N
27	El Camino Real / Valley Centre Drive	28.9	C	28.8	C	29	C	0.1	N	30.3	C	1.5	N
28	El Camino Real / Carmel Valley Rd	22.4	C	34.4	C	22.4	C	0.0	N	35.4	D	1.0	N
29	El Camino Real / SR-56 EB On Ramp	20.4	C	47.8	D	20.5	C	0.1	N	49.6	D	1.8	N
30	Carmel View Road / Valley Centre Drive	7.7	A	6.7	A	7.7	A	0.0	N	6.7	A	0.0	N
31	Carmel Creek Road / SR-56 WB Ramp	52.4	D	28.8	C	53.9	D	1.5	N	29	C	0.2	N
32	Carmel Creek Road / SR-56 EB Ramps	15.9	B	32.1	C	16.0	B	0.1	N	32.2	C	0.1	N
33	Carmel Country Road / Carmel Canyon Rd	40	D	29.3	C	40.0	D	0.0	N	29.5	C	0.2	N
34	Carmel Country Road / SR-56 WB Ramps	17.9	B	11.9	B	17.9	B	0.0	N	11.9	B	0.0	N
35	Carmel Country Road / SR-56 EB Ramps	16.1	B	14.1	B	16.1	B	0.0	N	14.2	B	0.1	N
36	Carmel Creek Road / Del Mar Trail	47.9	E	21.7	C	50.8	F	2.9	Y	22.8	C	1.1	N

Notes:

LOS = Level of Service

Δ = Change

S = Significant

D= Delay

DNE = Does not Exist

For Intersection #36, the worst approach delay and level of service was reported.

ATTACHMENT 77

Near Term With & Without Project (Phase 1 & 2) Intersection Summary

#	Intersection	Near Term				Near Term + Project (Phase 1 & 2)							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		D	LOS	D	LOS	D	LOS			D	LOS		
1	El Camino Real / Via de la Valle	33.6	C	43.8	D	34.1	C	0.5	N	46.7	D	2.9	N
2	El Camino Real / San Dieguito Road	17.8	B	26.4	C	18.1	B	0.3	N	28.0	C	1.6	N
3	El Camino Real / Derby Downs Road	4.9	A	5.5	A	4.9	A	0.0	N	5.5	A	0.0	N
4	El Camino Real / Half Mile Drive	18.5	B	17.6	B	18.7	B	0.2	N	19.8	B	2.2	N
5	El Camino Real / Quarter Mile Drive	20.6	C	15.5	B	20.8	C	0.2	N	15.9	B	0.4	N
6	Del Mar Heights Road / Mango Drive	36.9	D	36.9	D	38.6	D	1.7	N	41.1	D	4.2	N
7	Del Mar Heights Road / Portofino Drive	9.4	A	9.2	A	9.6	A	0.2	N	9.4	A	0.2	N
8	Del Mar Heights Road / I-5 SB Ramps	24.8	C	23.0	C	30.6	C	5.8	N	27.8	C	4.8	N
9	Del Mar Heights Road / I-5 NB Ramps	41.4	D	38.6	D	50.2	D	8.8	N	50.8	D	12.2	N
10	Del Mar Heights Road / High Bluff Drive	30.8	C	46.8	D	33.2	C	2.4	N	63.6	E	16.8	Y
11	Del Mar Heights Road / Third Avenue	DNE	DNE	DNE	DNE	8.2	A	0.0	N	14.5	B	0.0	N
12	Del Mar Heights Road / First Avenue	DNE	DNE	DNE	DNE	7.4	A	0.0	N	15.3	B	0.0	N
13	Del Mar Heights Road / El Camino Real	33.5	C	33.2	C	38.9	D	5.4	N	64.9	E	31.7	Y
14	Del Mar Heights Road / Carmel Country Rd	29.3	C	25.4	C	31.8	C	2.5	N	29.4	C	4.0	N
15	Del Mar Heights Road / Torrey Ridge Drive	26.4	C	9.9	A	29.6	C	3.2	N	12.6	B	2.7	N
16	Del Mar Heights Road / Lansdale Drive	25.3	C	17.3	B	25.9	C	0.6	N	18.1	B	0.8	N
17	Del Mar Heights Road / Carmel Canyon Rd	16.4	B	11.5	B	16.6	B	0.2	N	11.7	B	0.2	N
18	El Camino Real / Del Mar Highlands Town Ctr.	8.4	A	16.0	B	19.5	B	11.1	N	31.9	C	15.9	N
19	Carmel Country Road / Townsgate Drive	30.3	C	26.1	C	31.1	C	0.8	N	27.0	C	0.9	N
20	El Camino Real / Townsgate Drive	24.4	C	22.0	C	24.6	C	0.2	N	25.8	C	3.8	N
21	Carmel Country Road / Carmel Creek Rd	62.3	E	29.2	C	62.7	E	0.4	N	31.4	C	2.2	N
22	El Camino Real / High Bluff Drive	27.4	C	33.4	C	27.8	C	0.4	N	35.2	D	1.8	N
23	Carmel View Road / High Bluff Drive	8.4	A	9.1	A	8.7	A	0.3	N	9.7	A	0.6	N
24	Carmel Creek Road / Carmel Grove Rd	28.3	C	20.4	C	28.3	C	0.0	N	20.7	C	0.3	N
25	Carmel Valley Road / I-5 SB Ramps	22.7	C	33.6	C	23.4	C	0.7	N	34.9	C	1.3	N
26	Carmel Valley Road / I-5 NB Ramps	15.8	B	25.6	C	15.9	B	0.1	N	26.5	C	0.9	N
27	El Camino Real / Valley Centre Drive	28.9	C	28.8	C	29.0	C	0.1	N	31.1	C	2.3	N
28	El Camino Real / Carmel Valley Rd	22.4	C	34.4	C	22.5	C	0.1	N	35.9	D	1.5	N
29	El Camino Real / SR-56 EB On Ramp	20.4	C	47.8	D	20.6	C	0.2	N	50.6	D	2.8	N
30	Carmel View Road / Valley Centre Drive	7.7	A	6.7	A	7.7	A	0.0	N	6.7	A	0.0	N
31	Carmel Creek Road / SR-56 WB Ramp	52.4	D	28.8	C	54.2	D	1.8	N	29.3	C	0.5	N
32	Carmel Creek Road / SR-56 EB Ramps	15.9	B	32.1	C	16.0	B	0.1	N	32.4	C	0.3	N
33	Carmel Country Road / Carmel Canyon Rd	40.0	D	29.3	C	40.2	D	0.2	N	29.7	C	0.4	N
34	Carmel Country Road / SR-56 WB Ramps	17.9	B	11.9	B	18.0	B	0.1	N	12.0	B	0.1	N
35	Carmel Country Road / SR-56 EB Ramps	16.1	B	14.1	B	16.2	B	0.1	N	14.3	B	0.2	N
36	Carmel Creek Road / Del Mar Trail	47.9	E	21.7	C	51.9	F	4.0	Y	23.8	C	2.1	N

Notes:

LOS = Level of Service

Δ = Change

S = Significant

D= Delay

DNE = Does not Exist

For Intersection #36, the worst approach delay and level of service is reported.

ATTACHMENT 78

Near Term With & Without Project (Build-out) Intersection LOS Summary

#	Intersection	Near Term				Near Term + Project (Build-out)							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		D	LOS	D	LOS	D	LOS			D	LOS		
1	El Camino Real / Via de la Valle	33.6	C	43.8	D	34.4	C	0.8	N	47.4	D	3.6	N
2	El Camino Real / San Dieguito Road	17.8	B	26.4	C	18.2	B	0.4	N	28.4	C	2.0	N
3	El Camino Real / Derby Downs Road	4.9	A	5.5	A	4.9	A	0.0	N	5.6	A	0.1	N
4	El Camino Real / Half Mile Drive	18.5	B	17.6	B	18.7	B	0.2	N	18.2	B	0.6	N
5	El Camino Real / Quarter Mile Drive	20.6	C	15.5	B	20.9	C	0.3	N	16.2	B	0.7	N
6	Del Mar Heights Road / Mango Drive	36.9	D	36.9	D	39.1	D	2.2	N	41.8	D	4.9	N
7	Del Mar Heights Road / Portofino Drive	9.4	A	9.2	A	9.7	A	0.3	N	9.5	A	0.3	N
8	Del Mar Heights Road / I-5 SB Ramps	24.8	C	23	C	31.2	C	6.4	N	30.3	C	7.3	N
9	Del Mar Heights Road / I-5 NB Ramps	41.4	D	38.6	D	52.3	D	10.9	N	57.7	E	19.1	Y
10	Del Mar Heights Road / High Bluff Drive	30.8	C	46.8	D	35.1	D	4.3	N	74	E	27.2	Y
11	Del Mar Heights Road / Third Avenue	DNE	DNE	DNE	DNE	9	A	0.0	N	19.1	B	0.0	N
12	Del Mar Heights Road / First Avenue	DNE	DNE	DNE	DNE	8.2	A	0.0	N	18.8	B	0.0	N
13	Del Mar Heights Road / El Camino Real	33.5	C	33.2	C	40.2	D	6.7	N	78.3	E	45.1	Y
14	Del Mar Heights Road / Carmel Country Rd	29.3	C	25.4	C	32.2	C	2.9	N	31	C	5.6	N
15	Del Mar Heights Road / Torrey Ridge Drive	26.4	C	9.9	A	29.7	C	3.3	N	12.9	B	3.0	N
16	Del Mar Heights Road / Lansdale Drive	25.3	C	17.3	B	26.2	C	0.9	N	18.4	B	1.1	N
17	Del Mar Heights Road / Carmel Canyon Rd	16.4	B	11.5	B	16.7	B	0.3	N	11.8	B	0.3	N
18	El Camino Real / Del Mar Highlands Town Ctr.	8.4	A	16.0	B	21.1	C	12.7	N	33.6	C	17.6	N
19	Carmel Country Road / Townsgate Drive	30.3	C	26.1	C	31.4	C	1.1	N	27.5	C	1.4	N
20	El Camino Real / Townsgate Drive	24.4	C	22	C	24.8	C	0.4	N	26.2	C	4.2	N
21	Carmel Country Road / Carmel Creek Rd	62.3	E	29.2	C	63.6	E	1.3	N	31.9	C	2.7	N
22	El Camino Real / High Bluff Drive	27.4	C	33.4	C	27.9	C	0.5	N	35.9	D	2.5	N
23	Carmel View Road / High Bluff Drive	8.4	A	9.1	A	8.7	A	0.3	N	9.9	A	0.8	N
24	Carmel Creek Road / Carmel Grove Rd	28.3	C	20.4	C	28.4	C	0.1	N	20.7	C	0.3	N
25	Carmel Valley Road / I-5 SB Ramps	22.7	C	33.6	C	23.4	C	0.7	N	35.5	D	1.9	N
26	Carmel Valley Road / I-5 NB Ramps	15.8	B	25.6	C	15.9	B	0.1	N	26.9	C	1.3	N
27	El Camino Real / Valley Centre Drive	28.9	C	28.8	C	29.2	C	0.3	N	31.7	C	2.9	N
28	El Camino Real / Carmel Valley Rd	22.4	C	34.4	C	22.7	C	0.3	N	36.1	D	1.7	N
29	El Camino Real / SR-56 EB On Ramp	20.4	C	47.8	D	20.7	C	0.3	N	51.7	D	3.9	N
30	Carmel View Road / Valley Centre Drive	7.7	A	6.7	A	7.7	A	0.0	N	6.7	A	0.0	N
31	Carmel Creek Road / SR-56 WB Ramp	52.4	D	28.8	C	54.2	D	1.8	N	29.4	C	0.6	N
32	Carmel Creek Road / SR-56 EB Ramps	15.9	B	32.1	C	16	B	0.1	N	32.5	C	0.4	N
33	Carmel Country Road / Carmel Canyon Rd	40	D	29.3	C	40.4	D	0.4	N	29.4	C	0.1	N
34	Carmel Country Road / SR-56 WB Ramps	17.9	B	11.9	B	18	B	0.1	N	12.1	B	0.2	N
35	Carmel Country Road / SR-56 EB Ramps	16.1	B	14.1	B	16.3	B	0.2	N	14.3	B	0.2	N
36	Carmel Creek Road / Del Mar Trail	47.9	E	21.7	C	53	F	5.1	Y	24.5	C	2.8	N

Notes:

LOS = Level of Service

Δ = Change

S = Significant

D= Delay

DNE = Does not Exist

For Intersection #36, the worst approach delay and level of service is reported.

ATTACHMENT 79

Near Term With & Without Project (Phase 1)

Freeway Level of Service Summary

Segment	Lanes	Capacity	Dir.	Near Term		Near Term with Project (Phase 1)		Δ	Sig.?
				V/C	LOS	V/C	LOS		
I-5									
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	NB	0.6354	C	0.6375	C	0.0020	NO
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	SB	0.6558	C	0.6579	C	0.0021	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	NB	0.6481	C	0.6506	C	0.0025	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	SB	0.6688	C	0.6714	C	0.0026	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	NB	0.5596	B	0.5638	B	0.0043	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	SB	0.5774	B	0.5818	B	0.0044	NO
SR-56/ Carmel Mountain Road	9-GP+1-M	22,830	NB	0.5778	B	0.5798	B	0.0020	NO
SR-56/ Carmel Mountain Road	8-GP+1-M	20,480	SB	0.6325	C	0.6348	C	0.0022	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	NB	0.5613	B	0.5629	B	0.0016	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	SB	0.5512	B	0.5528	B	0.0016	NO
SR-56									
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	6,500	EB	0.8461	D	0.8481	D	0.0021	NO
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	6,500	WB	0.8676	D	0.8697	D	0.0021	NO
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	6,500	EB	0.7881	C	0.7901	D	0.0021	NO
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	6,500	WB	0.8082	D	0.8103	D	0.0021	NO

Legend:
Dir.= Direction
V/C= Volume to Capacity Ratio
LOS= Level of Service
Sig.?= Is this significant?
#-GP= # of General Purpose Lanes with LOS E capacity of 2,350 veh/hr/ln.
#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1,680 veh/hr/ln taken from Caltrans Guide, December 2002)
AX = Auxiliary Lane with LOS "E" capacity of 1,800 veh/hr/ln.
HOV = High Occupancy Vehicle lane with LOS"E" capacity of 1,600 veh/hr/ln.

ATTACHMENT 80

Near Term With & Without Project (Phase 1 & 2)

Freeway Level of Service Summary

Segment	Lanes	Capacity	Dir.	Near Term		Near Term + Project (Phase 1 & 2)		Δ	Sig.?
				V/C	LOS	V/C	LOS		
I-5									
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	NB	0.6354	C	0.6390	C	0.0036	NO
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	SB	0.6558	C	0.6595	C	0.0037	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	NB	0.6481	C	0.6525	C	0.0044	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	SB	0.6688	C	0.6734	C	0.0045	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	NB	0.5596	B	0.5670	B	0.0075	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	SB	0.5774	B	0.5852	B	0.0077	NO
SR-56/ Carmel Mountain Road	9-GP+1-M	22,830	NB	0.5778	B	0.5814	B	0.0036	NO
SR-56/ Carmel Mountain Road	8-GP+1-M	20,480	SB	0.6325	C	0.6365	C	0.0039	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	NB	0.5613	B	0.5641	B	0.0028	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	SB	0.5512	B	0.5540	B	0.0027	NO
SR-56									
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	6,500	EB	0.8461	D	0.8497	D	0.0036	NO
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	6,500	WB	0.8676	D	0.8713	D	0.0037	NO
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	6,500	EB	0.7881	C	0.7917	D	0.0036	NO
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	6,500	WB	0.8082	D	0.8119	D	0.0037	NO

Legend:
Dir.= Direction
V/C= Volume to Capacity Ratio
LOS= Level of Service
Sig.?= Is this significant?
#-GP= # of General Purpose Lanes with LOS E capacity of 2,350 veh/hr/ln.
#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1,680 veh/hr/ln taken from Caltrans Guide, December 2002)
AX = Auxiliary Lane with LOS "E" capacity of 1,800 veh/hr/ln.
HOV = High Occupancy Vehicle lane with LOS"E" capacity of 1,600 veh/hr/ln.

ATTACHMENT 81

Near Term With & Without Project (Build-out)

Freeway Level of Service Summary

Segment	Lanes	Capacity	Dir.	Near Term		Near Term + Project (Build-out)		Δ	Sig.?
				V/C	LOS	V/C	LOS		
I-5									
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	NB	0.6354	C	0.6402	C	0.0048	NO
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	SB	0.6558	C	0.6607	C	0.0049	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	NB	0.6481	C	0.6539	C	0.0058	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	SB	0.6688	C	0.6748	C	0.0060	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	NB	0.5596	B	0.5695	B	0.0099	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	SB	0.5774	B	0.5877	B	0.0102	NO
SR-56/ Carmel Mountain Road	9-GP+1-M	22,830	NB	0.5778	B	0.5825	B	0.0048	NO
SR-56/ Carmel Mountain Road	8-GP+1-M	20,480	SB	0.6325	C	0.6377	C	0.0052	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	NB	0.5613	B	0.5650	B	0.0037	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	SB	0.5512	B	0.5549	B	0.0036	NO
SR-56									
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	6,500	EB	0.8461	D	0.8509	D	0.0048	NO
El Camino Real / Carmel Creek Rd.	2-GP + 1-AX	6,500	WB	0.8676	D	0.8725	D	0.0049	NO
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	6,500	EB	0.7881	C	0.7929	D	0.0048	NO
Carmel Creek Rd. / Carmel Country Rd.	2-GP + 1-AX	6,500	WB	0.8082	D	0.8131	D	0.0049	NO

Legend:
Dir.= Direction
V/C= Volume to Capacity Ratio
LOS= Level of Service
Sig.?= Is this significant?
#-GP= # of General Purpose Lanes with LOS E capacity of 2,350 veh/hr/ln.
#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1,680 veh/hr/ln taken from Caltrans Guide, December 2002)
AX = Auxiliary Lane with LOS "E" capacity of 1,800 veh/hr/ln.
HOV = High Occupancy Vehicle lane with LOS"E" capacity of 1,600 veh/hr/ln.

ATTACHMENT 82

Near Term With & Without Project Ramp Meter Analysis

(Phase 1)

Most Restrictive Meter Rate

Location		Near Term		Near Term + Project (Phase 1)		∇	S
		Delay (Min)	Queue (Ft)	Delay (Min)	Queue (Ft)		
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound Loop)	AM	9.29	1,653	11.09	1,972	1.79	NO
	PM	0.00	0	3.02	537	3.02	NO
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	0.00	0	0.00	0	0.00	NO
	PM	0.00	0	0.00	0	0.00	NO
Del Mar Heights Rd. / I-5 NB on Ramp	AM	Meter is not turned on				0.00	NO
	PM	0.00	0	1.11	319	1.11	NO

Notes:

Δ = Change in Delay (minutes)

S = Significant, the allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS E is 2 min.

S = Significant, the allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS F is 1 min.

Meter rates are based on the most restrictive meter rate provided by Caltrans, see Appendix C

ATTACHMENT 83

Near Term With & Without Project Ramp Meter Analysis

(Phase 1 & 2)

Most Restrictive Meter Rate

Location		Near Term		Near Term + Project (Phase 1 & 2)		∇	S
		Delay (Min)	Queue (Ft)	Delay (Min)	Queue (Ft)		
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound Loop)	AM	9.29	1,653	13.13	2,335	3.83	NO
	PM	0.00	0	8.80	1,566	8.80	NO
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	0.00	0	0.00	0	0.00	NO
	PM	0.00	0	0.00	0	0.00	NO
Del Mar Heights Rd. / I-5 NB on Ramp	AM	Meter is not turned on				0.00	NO
	PM	0.00	0	2.93	841	2.93	NO

Notes:

Δ = Change in Delay (minutes)

S = Significant, the allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS E is 2 min.

S = Significant, the allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS F is 1 min.

Meter rates are based on the most restrictive meter rate provided by Caltrans, see Appendix C

ATTACHMENT 84

Near Term With & Without Project Ramp Meter Analysis

(Build-out)

Most Restrictive Meter Rate

Location		Near Term		Near Term + Project (Buildout)		∇	S
		Delay (Min)	Queue (Ft)	Delay (Min)	Queue (Ft)		
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound Loop)	AM	9.29	1,653	15.65	2,784	6.36	NO
	PM	0.00	0	11.90	2,117	11.90	NO
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	0.00	0	0.00	0	0.00	NO
	PM	0.00	0	0.00	0	0.00	NO
Del Mar Heights Rd. / I-5 NB on Ramp	AM	Meter is not turned on				0.00	NO
	PM	0.00	0	3.90	1,117	3.90	NO

Notes:

Δ = Change in Delay (minutes)

S = Significant, the allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS E is 2 min.

S = Significant, the allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS F is 1 min.

Meter rates are based on the most restrictive meter rate provided by Caltrans, see Appendix C

ATTACHMENT 85

Year 2030 Without & Year 2030 With Project (Buildout)
Street Segment Comparison

Road	Segment	Class.	Year 2030			Year 2030 + Project (Buildout)			ΔV/C	Is this impact Significant?
			LOS	Volume	V/C	LOS	Volume	V/C		
Del Mar Heights Rd.	Mango Drive to Portofino Drive	5-M	D	36,000	0.800	D	38,147	0.848	0.048	*NO*
	Portofino Drive to I-5 Southbound Ramps	5-PA	C	39,580	0.792	D	42,442	0.849	0.057	*NO*
	I-5 SB Ramps and I-5 NB Ramps	5-PA	C	37,820	0.756	D	42,829	0.857	0.100	*NO*
	I-5 Northbound Ramps to High Bluff Drive	PA	D	51,800	0.863	F	61,103	1.018	0.155	*YES*
	High Bluff Drive to Third Avenue	PA	C	42,770	0.713	D	53,504	0.892	0.179	*NO*
	Thirth Avenue to First Avenue	PA	C	42,770	0.713	D	52,550	0.876	0.163	*NO*
	First Avenue to El Camino Real	PA	C	42,770	0.713	D	52,550	0.876	0.163	*NO*
	El Camino Real to Carmel Country Road	PA	C	38,370	0.640	C	45,288	0.755	0.115	*NO*
	Carmel Country Road to Torrey Ridge Road	PA	B	34,400	0.573	C	37,501	0.625	0.052	*NO*
	Torrey Ridge Road to Lansdale Drive	PA	B	34,400	0.573	C	36,547	0.609	0.036	*NO*
	Lansdale Drive to Carmel Canyon Road	PA	B	34,400	0.573	C	35,593	0.593	0.020	*NO*
El Camino Real	Via de la Valle to San Dieguito Road	2-Ca	F	31,320	2.088	F	32,036	2.136	0.048	*YES*
	San Dieguito Road to Derby Downs Road	4-M	C	29,000	0.725	C	29,954	0.749	0.024	*NO*
	Derby Downs Road to Half Mile Drive	4-M	C	29,000	0.725	C	29,954	0.749	0.024	*NO*
	Half Mile Drive to Quarter Mile Drive	4-M	C	29,000	0.725	D	30,193	0.755	0.030	*NO*
	Quarter Mile Drive to Del Mar Heights Road	4-M	C	29,000	0.725	D	30,431	0.761	0.036	*NO*
	Del Mar Heights Road to Townsgate Drive	6-M	B	23,000	0.460	B	27,771	0.555	0.095	*NO*
	Townsgate Drive to High Bluff Drive	6-M	B	26,000	0.520	C	29,101	0.582	0.062	*NO*
	High Bluff Drive to Valley Centre Drive	6-M	C	35,620	0.712	C	37,767	0.755	0.043	*NO*
	Valley Centre Drive to Carmel Valley Road	5-M	D	36,470	0.810	D	37,901	0.842	0.032	*NO*
Carmel Country Road	Del Mar Heights Road to Townsgate Drive	4-M	C	22,280	0.557	C	24,665	0.617	0.060	*NO*
	Townsgate Drive to Carmel Creek Road	4-M	B	18,800	0.470	B	20,708	0.518	0.048	*NO*
	Carmel Creek Road to Carmel Canyon Road	4-M	A	13,590	0.340	A	14,783	0.370	0.030	*NO*
	Carmel Canyon Road to SR-56 WB Ramps	4-M	C	26,000	0.650	C	26,954	0.674	0.024	*NO*
Carmel Canyon Road	Del Mar Heights Road to Carmel Country Rd.	4-M	A	13,000	0.325	A	13,477	0.337	0.012	*NO*
Carmel Creek Road	Carmel Country Road to Carmel Grove Road	4-M	B	15,000	0.375	B	15,716	0.393	0.018	*NO*
	Carmel Grove Road to SR-56 WB Ramps	4-M	B	17,000	0.425	B	17,716	0.443	0.018	*NO*
Valley Centre Drive	Carmel View Road to Carmel Creek Road	4-C	D	20,000	0.667	D	20,239	0.675	0.008	*NO*
Carmel Valley Road	I-5 Northbound Ramps to El Camino Real	PA	C	43,020	0.717	C	43,497	0.725	0.008	*NO*
High Bluff Drive	Del Mar Heights Road to El Camino Real	2-Ca	D	11,700	0.780	D	12,416	0.828	0.048	*NO*
Via de la Valle	San Andres Drive to El Camino Real (West)	2-Cb	F	33,100	3.310	F	33,577	3.358	0.048	*YES*

Legend:

LOS= Level of Service

V/C= Volume to Capacity Ratio

ΔV/C= Change in V/C ratio

5-M = 5 lane Major with LOS E capacity of 45,000 ADT

5-PA = 5 lane Primary Arterial with LOS E capacity of 50,000 ADT

4-M=4 lane Major

PA = 6 lane Primary Arterial

2-Ca=2 lane collector

6-M = 6 lane Major

2-Cb = 2 lane Collector with no fronting property

ATTACHMENT 86

Year 2030 With & Without Project (Buildout) Intersection Summary

#	Intersection	Year 2030				Year 2030 + Project (Buildout)							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		D	LOS	D	LOS	D	LOS			D	LOS		
1	El Camino Real / Via de la Valle	27.1	C	23	C	28	C	0.9	No	23.6	C	0.6	No
2	El Camino Real / San Dieguito Road	27.6	C	48.1	D	28.6	C	1.0	No	52.2	D	4.1	No
3	El Camino Real / Derby Downs Road	5.0	A	5.8	A	5.7	A	0.7	No	5.8	A	0.0	No
4	El Camino Real / Half Mile Drive	18.7	B	17.4	B	18.7	B	0.0	No	18.6	B	1.2	No
5	El Camino Real / Quarter Mile Drive	21.1	C	16.3	B	21.5	C	0.4	No	16.6	B	0.3	No
6	Del Mar Heights Road / Mango Drive	46.1	D	42.0	D	48.7	D	2.6	No	45.0	D	3.0	No
7	Del Mar Heights Road / Portofino Drive	9.9	A	9.6	A	10.1	B	0.2	No	9.9	A	0.3	No
8	Del Mar Heights Road / I-5 SB Ramps	28.3	C	22.3	C	35	D	6.7	No	26.9	C	4.6	No
9	Del Mar Heights Road / I-5 NB Ramps	69.1	E	57.0	E	108.3	F	39.2	Yes	99.7	F	42.7	Yes
10	Del Mar Heights Road / High Bluff Drive	51.6	D	51.2	D	62.4	E	10.8	Yes	92.6	F	41.4	Yes
11	Del Mar Heights Road / Third Avenue	DNE	DNE	DNE	DNE	9.0	A	0.0	No	18.3	B	0.0	No
12	Del Mar Heights Road / First Avenue	DNE	DNE	DNE	DNE	8.2	A	0.0	No	18.8	B	0.0	No
13	Del Mar Heights Road / El Camino Real	42.3	D	45.5	D	51.1	D	8.8	No	86.4	F	40.9	Yes
14	Del Mar Heights Road / Carmel Country Rd	37.5	D	39.8	D	45.2	D	7.7	No	51.2	D	11.4	No
15	Del Mar Heights Road / Torrey Ridge Drive	32.2	C	13.2	B	36.0	D	3.8	No	14.6	B	1.4	No
16	Del Mar Heights Road / Lansdale Drive	37.7	D	18.2	B	44.2	D	6.5	No	20.7	C	2.5	No
17	Del Mar Heights Road / Carmel Canyon Rd	33.4	C	18.7	B	35.6	D	2.2	No	19.3	B	0.6	No
18	El Camino Real / Del Mar Highlands Town Ctr.	9.1	A	16.6	B	21.6	C	12.5	No	36.5	D	19.9	No
19	Carmel Country Road / Townsgate Drive	34.4	C	32.8	C	36.3	D	1.9	No	35.1	D	2.3	No
20	El Camino Real / Townsgate Drive	26.9	C	29.3	C	28.1	C	1.2	No	33.1	C	3.8	No
21	Carmel Country Road / Carmel Creek Rd	49.3	D	25.3	C	53.4	D	4.1	No	27.7	C	2.4	No
22	El Camino Real / High Bluff Drive	29.0	C	38.5	D	29.5	C	0.5	No	45.1	D	6.6	No
23	Carmel View Road / High Bluff Drive	8.9	A	9.8	A	9.3	A	0.4	No	10.7	B	0.9	No
24	Carmel Creek Road / Carmel Grove Rd	27.6	C	20.2	C	27.6	C	0.0	No	20.4	C	0.2	No
25	Carmel Valley Road / I-5 SB Ramps	24.8	C	29.7	C	26.3	C	1.5	No	30.3	C	0.6	No
26	Carmel Valley Road / I-5 NB Ramps	30.2	C	26.4	C	30.3	C	0.1	No	26.7	C	0.3	No
27	El Camino Real / Valley Centre Drive	30.1	C	40.1	D	30.2	C	0.1	No	42.3	D	2.2	No
28	El Camino Real / Carmel Valley Rd	23.5	C	20.4	C	23.9	C	0.4	No	22.3	C	1.9	No
29	El Camino Real / SR-56 EB On Ramp	27.2	C	88.5	F	27.7	C	0.5	No	94.9	F	6.4	Yes
30	Carmel View Road / Valley Centre Drive	8.0	A	6.5	A	8.0	A	0.0	No	6.5	A	0.0	No
31	Carmel Creek Road / SR-56 WB Ramp	48.2	D	49	D	48.5	D	0.3	No	49.6	D	0.6	No
32	Carmel Creek Road / SR-56 EB Ramps	18.1	B	25.2	C	18.3	B	0.2	No	25.5	C	0.3	No
33	Carmel Country Road / Carmel Canyon Rd	47.7	D	42	D	49.5	D	1.8	No	42.1	D	0.1	No
34	Carmel Country Road / SR-56 WB Ramps	20.9	C	13.8	B	21.1	C	0.2	No	13.8	B	0.0	No
35	Carmel Country Road / SR-56 EB Ramps	21.4	C	21.0	C	21.7	C	0.3	No	21.6	C	0.6	No
36	Carmel Creek Road / Del Mar Trail	43.3	E	20.6	C	47.7	E	4.4	Yes	23.2	C	2.6	No

Notes:

LOS = Level of Service

Δ = Change

S = Significant

D= Delay

DNE = Does not exist

For Intersection #36, the worst approach delay and level of service is reported.

ATTACHMENT 87

Long Term Cumulative (Year 2030) With & Without Project Freeway Summary

(Build-out)

Segment	Lanes	Capacity	Dir.	Year 2030		Year 2030 + Project (Buildout)		Δ	Sig.?
				V/C	LOS	V/C	LOS		
I-5									
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	NB	0.7376	C	0.7424	C	0.0048	NO
Lomas Santa Fe Drive/Via De La Valle	4-GP+1-AX+1-HOV	12,800	SB	0.7614	C	0.7663	C	0.0049	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	NB	0.7779	C	0.7837	C	0.0058	NO
Via De La Valle/Del Mar Heights Rd.	5-GP+1-M	13,450	SB	0.8030	D	0.8090	D	0.0060	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	NB	0.6969	C	0.7068	C	0.0099	NO
Del Mar Heights Rd./ SR-56	6-GP+1-M	15,780	SB	0.7193	C	0.7296	C	0.0102	NO
SR-56/ Carmel Mountain Road	9-GP+1-M	22,830	NB	0.8178	D	0.8226	D	0.0048	NO
SR-56/ Carmel Mountain Road	8-GP+1-M	20,480	SB	0.8953	D	0.9005	D	0.0052	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	NB	0.7553	C	0.7590	C	0.0037	NO
Carmel Mountain Road/ I-805 Merge	10	23,500	SB	0.7418	C	0.7454	C	0.0036	NO
SR-56									
El Camino Real / Carmel Creek Rd.	3-GP + 1-AX	8,850	EB	0.9845	E	0.9881	E	0.0035	NO
El Camino Real / Carmel Creek Rd.	3-GP + 1-AX	8,850	WB	1.0096	F	1.0132	F	0.0036	NO
Carmel Creek Rd. / Carmel Country Rd.	3-GP + 1-AX	8,850	EB	0.9026	D	0.9061	D	0.0035	NO
Carmel Creek Rd. / Carmel Country Rd.	3-GP + 1-AX	8,850	WB	0.9256	E	0.9292	E	0.0036	NO

Legend:
Dir.= Direction
V/C= Volume to Capacity Ratio
LOS= Level of Service
Sig.?= Is this significant?
#-GP= # of General Purpose Lanes with LOS E capacity of 2,350 veh/hr/ln.
#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1,680 veh/hr/ln taken from Caltrans Guide, December 2002)
AX = Auxiliary Lane with LOS "E" capacity of 1,800 veh/hr/ln.
HOV = High Occupancy Vehicle lane with LOS"E" capacity of 1,600 veh/hr/ln.

Year 2030 With & Without Project Ramp Meter Analysis

Most Restrictive Meter Rate

Location		Year 2030		Year 2030 With Project (Buildout)		∇	S
		Delay (Min)	Queue (Ft)	Delay (Min)	Queue (Ft)		
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound Loop)	AM	40.27	7,163	46.63	8,294	6.36	YES
	PM	5.22	928	26.58	4,727	21.36	YES
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	0.00	0	0.00	0	0.00	NO
	PM	0.00	0	0.00	0	0.00	NO
Del Mar Heights Rd. / I-5 NB on Ramp	AM	0.00	0	1.16	334	1.16	NO
	PM	8.30	2,378	14.92	4,278	6.63	YES
El Camino Real / SR-56 EB on Ramp	AM	0.00	0	0.00	0	0.00	NO
	PM	3.93	2,277	4.65	2,697	0.73	NO
Carmel Country Rd. / SR-56 EB on Ramp	AM	0.00	0	0.00	0	0.00	NO
	PM	0.00	0	0.00	0	0.00	NO

Notes:
Δ = Change in Delay (minutes)
S = Significant, if change in delay is greater than 2 minutes and delay is greater than 15 minutes
Meter rates are based on the most restrictive meter rate provided by Caltrans, see Appendix C

15 Minute Max. Meter Rate

Location		Year 2030		Year 2030 With Project (Buildout)		∇	S
		Delay (Min)	Queue (Ft)	Delay (Min)	Queue (Ft)		
Del Mar Heights Rd. / I-5 SB on Ramp (Westbound Loop)	AM	15.0	3,567	19.8	4,698	4.8	YES
	PM	15.0	2,320	39.6	6,119	24.6	YES
Del Mar Heights Rd. / I-5 SB on Ramp (Eastbound)	AM	15.0	2,291	15.0	2,291	0.0	NO
	PM	15.0	1,740	15.0	1,740	0.0	NO
Del Mar Heights Rd. / I-5 NB on Ramp	AM	15.0	3,393	17.5	3,959	2.5	YES
	PM	15.0	3,915	22.3	5,815	7.3	YES
El Camino Real / SR-56 EB on Ramp	AM	15.0	4,060	15.5	4,191	0.5	NO
	PM	15.0	7,415	15.8	7,830	0.8	NO
Carmel Country Rd. / SR-56 EB on Ramp	AM	15.0	1,914	92.0	11,745	77.0	NO
	PM	15.0	1,711	97.4	11,107	82.4	NO

Notes:
Δ = Change in Delay (minutes)
S = Significant, the allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS E is 2 min.
S = Significant, the allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS F is 1 min.

ATTACHMENT 89

Transportation Mitigation Phasing Plan

#	Location	Responsible Party	Improvement	Impact Fully Mitigated?	When Impact is Signficant?
Project Phase 1 10,245 ADT with 851 AM (728 in / 122 out) & 1,195 PM (344 in / 852 out) Peak Hour Trips Prior to issuance of first building permit, the following improvements shall be assured to the satisfaction of the City Engineer					
10	Del Mar Heights Rd. / High Bluff Dr.	One Paseo	Widen to provide a dedicated Northbound Right Turn Lane	Yes	Phase 1&2
11	Del Mar Heights Road / Third Avenue	One Paseo	Project Access to be Signalized: Add two left turn lanes and one right turn lane in the NB direction; Widen to add a WB left turn lane and an EB right turn lane.	Yes	Phase 1
12	Del Mar Heights Road / First Avenue	One Paseo	Project Access to be Signalized: Add one left turn lane and one right turn lane in the NB direction; Widen to provide two WB left turn lanes and an EB right turn lane.	Yes	Phase 1
13	Del Mar Heights Rd. / El Camino Real	One Paseo	Widen to provide a 365 foot long dedicated EB right turn lane	Yes	Phase 1 & 2
18	El Camino Real / Del Mar Highlands Town Center	One Paseo	Modify Signalized Intersection and Add EB leg: In the EB direction, provide a dedicated left turn lane and a left/through/right turn lane. In the NB direction, widen for a dual left turn lane; in the SB direction, widen for a right turn lane.	Yes	Phase 1
A	El Camino Real (Via de la Valle to San Dieguito Rd.)	City of San Diego CIP/One Paseo	Widen to a 4 lane major	Partially*	Phase 1
9	Del Mar Heights Rd. / I-5 NB Ramps	One Paseo	Modify I-5 NB On/Off Ramps: Widen Off-Ramp to include dual left and shared through/right and right turn lane at intersection; Extend WB right turn pocket by 845 feet; Reconfigure median on bridge to extend EB dual left turn pocket to 400 feet.	Partially	Project Buildout
BB	I-5 NB Ramp Meter / Del Mar Heights Road	One Paseo	Widen to provide HOV lane to NB on ramp	Yes	Project Buildout
B	Del Mar Heights Rd. (I-5 SB Ramps to I-5 NB Ramps) Bridge	One Paseo	Reconfigure median on bridge to extend EB dual left turn pocket to 400 feet.	Partially	Project Buildout
C	Del Mar Heights Rd. (I-5 NB Ramps to High Bluff Dr.)	One Paseo	Extend WB right turn pocket at I-5 NB ramps by 845 feet.	Partially	Phase 1
D	Via de la Valle (San Andres Dr. to El Camino Real)	One Paseo & Other Projects	Contribute fair share (17.2%) towards the widening to a 4 lane Major.	Partially*	Phase 1
36	Carmel Creek / Del Mar Trail	One Paseo	Signalize Intersection	Yes	Phase 1
Project Phase 2 18,030 ADT with 1,127 AM (867 in / 260 out) & 2,014 PM (769 in / 1,245 out) Peak Hour Trips Prior to issuance of first building permit in Phase 2, the following improvements shall be assured to the satisfaction of the City Engineer					
10	Del Mar Heights Rd. / High Bluff Dr.	One Paseo	Widen Del Mar Heights Road on north side receiving lanes and restripe and modify signal to provide third left turn lane in the NB direction. Modify EB & WB left turn lanes to dual left turn lanes. Widen EB approach by 2 feet on the south side to accommodate dual EB & WB left turn lanes.	Yes	Phase 1&2
Project Buildout 23,854 ADT with 1,377 AM (944 in / 433 out) & 2,568 PM (1,111 in / 1,456 out) Peak Hour Trips Prior to issuance of first building permit in Phase 3, the following fair share contributions shall be made to the satisfaction of the City Engineer					
AA	I-5 SB (Loop) Ramp Meter / Del Mar Heights Road	One Paseo & Other Projects	Contribute fair share (31.7%) towards widening to add an HOV lane to the on-ramp.	Partially	Project Buildout
29	El Camino Real / SR-56 EB On Ramp	One Paseo & Other Projects	Contribute fair share (3.1%) of the cost of the following improvement: Widen & Restripe EB approach to provide 1 left, 1 through/left, 1 through, and 2 dedicated right turn lanes	Yes	Project Buildout

Notes:
* Notwithstanding the applicant's fair share financial contribution, the timing of these improvements are uncertain and cannot be assured prior to the issuance of the first project building permit, therefore the impact is considered significant and partially mitigated.
AA & BB = Ramp Meters
All improvements and contributions are to be assured to the satisfaction of the City Engineer.
A,B,C, D = Street Segments
#'s = Intersections

ATTACHMENT 90

Intersection Levels of Service With & Without Mitigation
(Reduced Main Street Alternative)

Near Term + Project (Phase 1 & 2)

Number	Intersection	Control	Without Mitigation				With Mitigation			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
9	Del Mar Heights Road / I-5 NB Ramps*	Signalized	50.2	D	52.1	D	42.1	D	39.3	D
10	Del Mar Heights Road / High Bluff Drive*	Signalized	33.2	C	56.5	E	26.3	C	40.1	D
11	Del Mar Heights Road / Third Avenue*	Signalized	8.2	A	14.9	B	8.2	A	14.4	B
12	Del Mar Heights Road / First Avenue*	Signalized	7.4	A	15.9	B	4.5	A	15.0	B
13	Del Mar Heights Road / El Camino Real*	Signalized	38.9	D	65.7	E	36.9	D	45.6	D
29	El Camino Real / SR-56 EB On-Ramp	Signalized	20.6	C	50.7	D	20.3	C	33.6	C
36	Carmel Creek Road / Del Mar Trail**	Signalized	51.9	F	23.8	C	17.4	B	11.0	B

Near Term + Project (Build-out)

Number	Intersection	Control	Without Mitigation				With Mitigation			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
9	Del Mar Heights Road / I-5 NB Ramps*	Signalized	52.3	D	57.7	E	47.8	D	42.4	D
10	Del Mar Heights Road / High Bluff Drive*	Signalized	35.1	D	74.0	E	26.7	C	42.4	D
11	Del Mar Heights Road / Third Avenue*	Signalized	9.0	A	19.1	B	8.7	A	18.7	B
12	Del Mar Heights Road / First Avenue*	Signalized	8.2	A	18.8	B	7.5	A	16.3	B
13	Del Mar Heights Road / El Camino Real*	Signalized	40.2	D	78.3	E	37.1	D	47.4	D
29	El Camino Real / SR-56 EB On-Ramp	Signalized	20.7	C	51.7	D	20.4	C	33.9	C
36	Carmel Creek Road / Del Mar Trail**	Signalized	53.0	F	24.5	C	17.4	B	11.3	B

Year 2030 + Project (Build-out)

Number	Intersection	Control	Without Mitigation				With Mitigation			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
9	Del Mar Heights Road / I-5 NB Ramps*	Signalized	108.3	F	99.7	F	90.5	F	72.8	E
10	Del Mar Heights Road / High Bluff Drive*	Signalized	62.4	E	92.6	F	35.8	D	47.3	D
11	Del Mar Heights Road / Third Avenue*	Signalized	9.0	A	18.3	B	8.2	A	17.4	B
12	Del Mar Heights Road / First Avenue*	Signalized	8.2	A	18.8	B	5.3	A	17.2	B
13	Del Mar Heights Road / El Camino Real*	Signalized	58.0	E	86.4	F	52.5	D	53.2	D
29	El Camino Real / SR-56 EB On-Ramp	Signalized	27.7	C	94.9	F	27.6	C	48.9	D
36	Carmel Creek Road / Del Mar Trail**	Signalized	47.7	E	23.2	C	19.6	B	11.2	B

Notes:

LOS = Level of Service

* = Signals are coordinated.

Orange indicates unacceptable level of service.

**Intersection #36 is two-way stop controlled without mitigation.

ATTACHMENT 91

Street Segments Levels of Service With Mitigation
(Reduced Main Street Alternative)

Near Term + Project (Phase 1 & 2)

Road	Segment	Jurisd.	Class.	Cap.	Volume	V/C	LOS
Del Mar Heights Rd.	I-5 SB Ramps and I-5 NB Ramps	SD	5-PA	50,000	44,999	0.90	D
	I-5 Northbound Ramps to High Bluff Drive	SD	PA	60,000	61,806	1.03	F
Via de la Valle	San Andres Drive to El Camino Real (West)	SD	4-M	40,000	27,093	0.68	C

Near Term + Project (Build-out)

Road	Segment	Jurisd.	Class.	Cap.	Volume	V/C	LOS
Del Mar Heights Rd.	I-5 SB Ramps and I-5 NB Ramps	SD	5-PA	50,000	46,222	0.92	E
	I-5 Northbound Ramps to High Bluff Drive	SD	PA	60,000	64,078	1.07	F
Via de la Valle	San Andres Drive to El Camino Real (West)	SD	4-M	40,000	27,209	0.68	C

Year 2030 + Project

Road	Segment	Jurisd.	Class.	Cap.	Volume	V/C	LOS
Del Mar Heights Rd.	I-5 SB Ramps and I-5 NB Ramps	SD	5-PA	50,000	42,829	0.86	D
	I-5 Northbound Ramps to High Bluff Drive	SD	PA	60,000	61,103	1.02	F
Via de la Valle	San Andres Drive to El Camino Real (West)	SD	4-M	40,000	33,577	0.84	D

Legend:

SD= City of San Diego
Cap.= Capacity
Class.= Classification
LOS= Level of Service
V/C= Volume to Capacity Ratio

5-PA = 5 lane Prime Arterial has LOS E capacity of 50,000 ADT
PA = 6 lane Prime Arterial
4-M=4 lane Major

ATTACHMENT 92

Summary of Mitigation

(Intersections)

Location	Intersection	Direct or Cumulative Significant Impact?	Mitigation Responsibility	Description	Impact Fully or Partially Mitigated?	Current Estimated Cost of Improvement	Fair Share Percentage	Current Estimated Fair Share Contribution*
# 10	Del Mar Heights Rd. / High Bluff Dr.	Direct & Cumulative	One Paseo to construct	Widen to provide dedicated NB right turn lane at Phase 1 & widen Del Mar Heights Rd. on north side receiving lanes and restripe NB left and rephase signal to provide triple left. Modify EB & WB left turn lanes to dual left turn lanes. Widen EB approach by 2 feet on the south side to occomodate the EB & WB dual lefts.	Fully Mitigated	$532,700	100.0%	$532,700
# 13	Del Mar Heights Rd. / El Camino Real	Direct & Cumulative	One Paseo to construct	Widen to provide dedicated 365 foot long EB right turn lane	Fully Mitigated	$463,400	100.0%	$463,400
# 36	Carmel Creek Rd. / Del Mar Trail	Direct & Cumulative	One Paseo to construct	Signalize	Fully Mitigated	$200,000	100%	$200,000
#9	Del Mar Heights Rd. / I-5 NB Ramps	Direct & Cumulative	One Paseo	Modify I-5 NB On/Off Ramps:Widen & Restripe off-ramp to include dual left, a shared through/right and right turn lanes.Extend WB right turn pocket by 845 feet; Reconfigure median on bridge to extend dual left turn pocket to 400 feet. ①	Partially Mitigated	$1,045,000	100.0%	$1,045,000
# 29	El Camino Real / SR-56 EB On-Ramp	Cumulative	One Paseo & Other Projects	Widen & Restripe the EB approach to provide 1 left, 1 through/left, I through, and 2 dedicated right turn lanes	Fully Mitigated	$305,100	3.1%	$9,500
						TOTAL ESTIMATED COST		**$2,250,600**

* The actual dollar amount of the fair share contribution will depend on the cost estimate current at the time the payment is made, satisfactory to the City Engineer.

Note: ① Caltrans has identified improvements for the I-5 / Del Mar Heights Road interchange and SR-56 EB on-ramp at El Camino Real as the result of their continuing efforts to implement the I-5 / SR-56 connectors project as well as the I-5 North Coast Corridor project.

ATTACHMENT 93

Summary of Mitigation

(Street Segments & Ramp Meters)

Road	Street Segment	Direct or Cumulative Significant Impact?	Mitigation Responsibility	Description	Impact Mitigated?[2]	Current Estimated Cost of Improvement	Fair Share Percentage	Current Estimated Fair Share Contribution[1]
Del Mar Heights Rd.	I-5 SB Ramps to I-5 NB Ramps (Bridge)	Direct ①	One Paseo to construct	Reconfigure median on bridge to extend EB to NB dual left turn pocket to 400 feet	Partially	Cost is included in Int. # 9	100%	Cost is included in Int. # 9
El Camino Real	Via de la Valle to San Dieguito Road	Direct & Cumulative	City of San Diego CIP (T-12.3)	Widen to 4 lane Major	Partially	$5,800,000	4.3%	$249,400
Del Mar Heights Rd.	I-5 NB Ramps to High Bluff Dr.	Direct & Cumulative	One Paseo to construct	Widen to lengthen by 845 feet the WB right turn pocket at I-5 NB ramps and modify raised median.	Partially	Cost is included in Int. # 9	100%	Cost is included in Int. # 9
Via de la Valle	San Andres Dr. to El Camino Real	Direct & Cumulative	One Paseo & Other Projects	Widen to 4 lane Major	Partially	$15,800,000	17.2%	$2,715,400*
I-5 Southbound (Loop) Ramp Meter / Del Mar Heights Road		Cumulative	One Paseo & Other Projects	Widen to add an HOV lane to the loop ramp	Partially	$350,000	31.7%	$111,000
I-5 Northbound Ramp Meter / Del Mar Heights Road		Cumulative	One Paseo to construct	Widen to add an HOV lane to the ramp	Yes	Cost is included in Int. # 9	29.3%	Cost is included in Int. # 9
						TOTAL ESTIMATED COST		$3,075,800

* 477 ADT x $5,692.61 per ADT = $2,715,400

[1] The actual dollar amount of the fair share contribution will depend on the cost estimate current at the time the payment is made, satisfactory to the City Engineer.

[2] These impacts are partially mitigated due to a fair share contribution towards the improvement such as El Camino Real and Via de la Valle and/or improvements are consistent with Caltrans I-5 North Coast Corridor project, however, not below a level of significance.

Note: ① Caltrans has identified improvements for the I-5 / Del Mar Heights Road interchange as the result of their continuing efforts to implement the I-5 / SR-56 connectors project as well as the I-5 North Coast Corridor project.

ATTACHMENT 94

Summary of Project Features

Location	Intersection	Responsibility	Description
# 11 & 12	Del Mar Heights Road / Third & First Avenue	One Paseo to construct	Signalize Third & First Avenue. Include single left turn lane at Third Ave in the WB direction. Include dual left turn lane at First Ave in WB direction. Include dedicated right turn lanes for both Third and First Ave in the EB direction. Widen Del Mar Heights Road to include curb, gutter & sidewalk
# 18	El Camino Real / Market Street/Del Mar Highlands Town Center	One Paseo to construct	Modify signal to include fourth leg for project access. Widen to provide SB right turn lane. Modify median to provide dual lefts in the NB direction. In the EB direction, provide dedicated left turn lane, and a shared left, through, right turn lane.