

December 21, 2018

Mr. Milton Economy
1052 Flager Ranch Road
Corona, CA 92881

LLG Reference: 2.18.4044.1

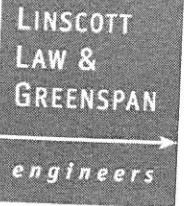
**Subject: Traffic Impact Assessment for the Proposed
Green River Promenade Fast-Food Project
Corona, California**

Dear Mr. Economy:

Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this Traffic Impact Assessment for the proposed Green River Promenade Fast-Food project (herein referred to as "Project") located in the City of Corona. The project site is a vacant pad located along the south side of Green River Road within the northern portion of the existing Green River Promenade shopping Center. *Figure 1* presents a Vicinity Map, which illustrates the general location of the project site and depicts the surrounding street system. *Figure 2* presents the existing aerial site plan for the site, which depicts the location of the proposed Project site (Pad 120) as well as the other vacant fast-food pad (Pad 119) within the center. It should be noted that this Traffic Impact Assessment does not specifically analyze the Pad 119 fast-food development, but Pad 119 is included in the "Project Buildout" traffic analysis. Furthermore, it should be noted that two (2) fast-food pads (Pad 119 and Pad 120) were entitled as a 3,500 square-foot (SF) Retail shops building (Pad 120) and a 4,000 SF high-turnover sit down restaurant (Pad 119) as part of the approval of the entire Green River Promenade development.

This letter report will outline the traffic generation forecast potential for the proposed fast-food Project (Pad 120) versus the entitled development of the vacant pad site (3,500 SF retail building) and assess whether the proposed Project will create any potential traffic impacts on the surrounding transportation system.

Figure 3 presents the site plan for the proposed fast-food Project, prepared by David York, Architect. As presented on *Figure 3*, the proposed fast-food Project will consist of a 2,242 SF fast-food restaurant with drive-through window. Project access is proposed along Green River Road via two (2) existing stop-controlled driveways and along Dominguez Ranch Road via one (1) existing stop-controlled driveway.



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EXHIBIT I

Project Traffic Generation Forecast Comparison Analysis

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation rates used in the traffic forecasting procedure are found in the 10th Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE) [Washington D.C., 2017].

Table 1 presents the trip generation potential for the proposed Project (and Pad 119) and was estimated using the ITE rates for Land Use Code 934: Fast-Food Restaurant with Drive-Through Window. In addition, the trip generation potential for the two (2) entitled land uses were estimated using the ITE equation/rates for Land Use Code 820: Shopping Center (Pad 120) and High Turnover sit Down Restaurant Land Use Code 932: High Turnover sit Down Restaurant (Pad 119). It should be noted that the Pad 120 retail trip generation rates are based on the ITE 820 regression equation for the entire center square-footage (i.e. 92,089 SF).

Review of the middle portion of *Table 1* shows that the proposed Project (Pad 120) is forecast to generate 598 net greater weekday daily trips, 39 net greater weekday AM peak hour trips (+19 inbound, +20 outbound), and 23 net greater weekday PM peak hour trips (+13 inbound, +10 outbound) compared to the 3,500 SF entitled retail land use.

Review of the bottom portion of *Table 1* shows that the other fast-food restaurant pad (Pad 119) is forecast to generate 329 net greater weekday daily trips, 6 net greater weekday AM peak hour trips (+1 inbound, +5 outbound), and 12 net greater weekday PM peak hour trips (+3 inbound, +9 outbound) compared to the 4,000 SF entitled high turnover sit down restaurant land use.

From a "trip budgeting" point of view, the weekday AM and PM peak hours typically govern as traffic studies focus the potential impact of a development project during the weekday AM peak hour and PM peak hour. While daily traffic is of interest, it is not the basis of peak hour service level calculations that are conducted during the preparation of traffic studies.

A qualitative assessment of the addition of 39 net AM peak hour Project trips and 23 net PM peak hour Project trips, when distributed throughout the project vicinity, would result in essentially no more than 19 net new AM or PM peak hour trips assigned to any of the surrounding intersections or roadways.

Using the “50 trip threshold” criteria as indicated in the City of Corona Traffic Impact Study Guidelines as the basis for requiring the preparation of a traffic impact analysis, the proposed Project would not require the preparation of a traffic impact analysis or comprehensive traffic impact assessment.

As a result, based on the net traffic generation potential of the proposed Green River Promenade Fast-Food project (Pad 120), the proposed 2,242 SF Fast-Food Restaurant with Drive-Through window will not significantly impact the surrounding transportation system.

Site Access Analysis

As presented in *Figure 3*, site access is proposed along Green River Road via two (2) existing stop-controlled driveways [one right-in/right-out driveway (Driveway 1) and one right-in/right-out/left-in driveway (Driveway 2)] and along Dominguez Ranch Road via one (1) existing full movement stop-controlled driveway. In support of the site access analysis, level of service calculations have been conducted at the three (3) existing Project driveways along Green River Road and Dominguez Ranch Road for Existing and Project buildout (Year 2020) conditions. *Figure 4* presents the existing AM and PM peak hour traffic volumes at the Project driveways while *Figure 5* presents the Project buildout (Year 2020) AM and PM peak hour traffic volumes at the Project driveways along Green River Road and Dominguez Ranch Road, which consist of the proposed Project (Pad 120) traffic generation assigned to the existing peak hour traffic volume data with 4% ambient growth (2% per year) plus Pad 119 traffic. It should be noted that the gross Project traffic generation (both Pads 120 and 119) were applied to the three (3) site driveways.

Appendix A contains the existing traffic count data at the three (3) existing Green River Promenade driveways that will experience Project traffic.

In conformance with City of Corona requirements, AM peak hour and PM peak hour operating conditions for the proposed Project driveways serving the site were evaluated using the methodology outlined in *Chapter 20 of the HCM 6* for unsignalized intersections. This methodology estimates the average control delay for each of the subject movements and determines the level of service for each movement. For one-way stop-controlled (minor street stop-controlled) intersections, this methodology estimates the worst side street delay, measured in seconds per vehicle and determines the level of service for that approach. The HCM control delay value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance.

Table 2, attached, summarizes the levels of service (LOS) at the three (3) existing Green River Promenade driveways for Existing (2018) and Project Buildout (Year 2020) traffic conditions. As shown in column (2) of **Table 2**, the three (3) existing Green River Promenade driveways are forecast to operate at acceptable levels of service LOS C or better during the AM and PM peak hours under Project Buildout (Year 2020) traffic conditions.

Appendix B contains the HCM/LOS calculation worksheets for the three (3) existing Green River Promenade driveways.

Conclusion and Findings

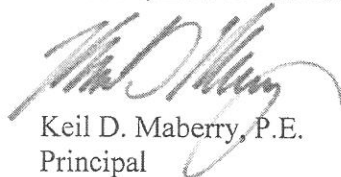
Based on the net traffic generation potential of the proposed Green River Promenade Fast-Food Restaurant Project (Pad 120), the proposed 2,242 SF fast-food restaurant with drive-through window does not require the preparation of a traffic impact analysis report and will not significantly impact the surrounding transportation system or the three (3) existing Green River Promenade driveways.

* * * * *

We appreciate the opportunity to provide this traffic impact assessment letter. Should you have any questions, please call me at (949) 825-6175.

Very truly yours,

Linscott, Law & Greenspan, Engineers


Keil D. Maberry, P.E.
Principal

Attachments



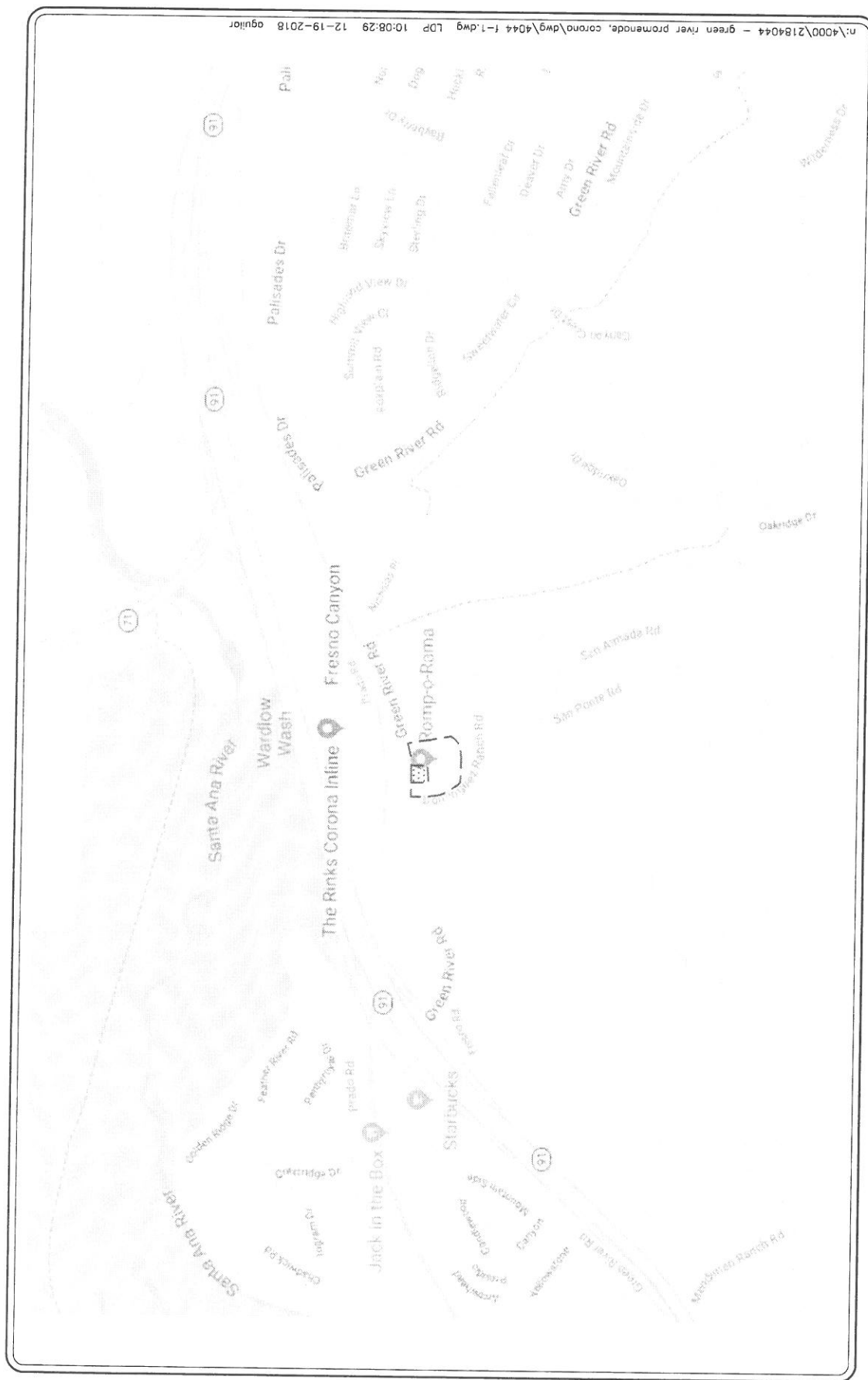
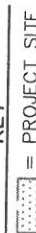


FIGURE 1

VICINITY MAP
GREEN RIVER PROMENADE FAST-FOOD, CORONA

SOURCE: GOOGLE

KEY



LINSCOTT
LAW &
GREENSPAN

n:\4000\2184044 - green river promenade, corona\dwg\4044 f-2.dwg LDP 08:32:34 12-19-2018 aguilor



FIGURE 2

EXISTING AERIAL SITE PLAN
GREEN RIVER PROMENADE FAST-FOOD, CORONA

SOURCE: GOOGLE

KEY

[Patterned Box] = PROPOSED PROJECT (PAD 120)

[Patterned Box] = PAD 119



NO SCALE

LINSCOTT
LAW &
GREENSPAN
engineers



SOURCE: GOOGLE

KEY

[Pattern] = PROPOSED PROJECT (PAD 120)
[Pattern] = PAD 119

XX/YY = AM/PM TRAFFIC VOLUMES



NO SCALE

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FIGURE 4

EXISTING AM/PM PEAK HOUR
TRAFFIC VOLUMES

GREEN RIVER PROMENADE FAST-FOOD, CORONA

TABLE 1
PROJECT TRAFFIC GENERATION RATES AND FORECAST¹
GREEN RIVER PROMENADE FAST-FOOD, CORONA

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<u>Generation Factors:</u>							
▪ 820: Shopping Center (TE/TSF) ²	61.73	62%	38%	2.15	48%	52%	5.55
▪ 932: High Turnover Sit Down Restaurant (TE/TSF)	112.18	55%	45%	9.94	62%	38%	9.77
▪ 934: Fast Food Restaurant with Drive-Through Window (TE/TSF)	470.95	51%	49%	40.19	52%	48%	32.67
<u>Pad 120 (Proposed Project) Generation Forecast:</u>							
▪ Pad 120 (Proposed Project) Fast Food (2,242 SF)	1,056	46	44	90	38	35	73
Pass-by Rates (Daily: 25%, AM: 49% PM: 50%) ³	<u>-264</u>	<u>-23</u>	<u>-21</u>	<u>-44</u>	<u>-19</u>	<u>-18</u>	<u>-37</u>
<i>Pad 120 (Proposed Project) Subtotal</i>	792	23	23	46	19	17	36
▪ Entitled Retail (3,500 SF)	216	5	3	8	9	10	19
Pass-by Rates (Daily: 10%, AM: 10% PM: 34%) ⁴	<u>-22</u>	<u>-1</u>	<u>0</u>	<u>-1</u>	<u>-3</u>	<u>-3</u>	<u>-6</u>
<i>Entitled Retail Subtotal</i>	194	4	3	7	6	7	13
Pad 120 (Proposed Project) Net Trip Generation (A)	598	19	20	39	13	10	23
<u>Pad 119 Generation Forecast:</u>							
▪ Pad 119 Fast Food (2,077 SF)	978	42	41	83	35	33	68
Pass-by Rates (Daily: 25%, AM: 49% PM: 50%) ³	<u>-245</u>	<u>-21</u>	<u>-20</u>	<u>-41</u>	<u>-18</u>	<u>-16</u>	<u>-34</u>
<i>Pad 119 Subtotal</i>	733	21	21	42	17	17	34
▪ Entitled Restaurant (4,000 SF)	449	22	18	40	24	15	39
Pass-by Rates (Daily: 10%, AM: 10% PM: 43%) ⁵	<u>-45</u>	<u>-2</u>	<u>-2</u>	<u>-4</u>	<u>-10</u>	<u>-7</u>	<u>-17</u>
<i>Entitled Restaurant Subtotal</i>	404	20	16	36	14	8	22
Pad 119 Net Trip Generation (B)	329	1	5	6	3	9	12
Total Net Traffic Generation Forecast (A + B)	927	20	25	45	16	19	35

Notes:

- TE/TSF = Trip ends per thousand square feet

¹ Source: *Trip Generation, 10th Edition*, Institute of Transportation Engineers, (ITE) [Washington, D.C. (2017)].

² Trip Generation rates based on a square-footage of 92,089 SF and the following equations:
Daily: $\ln(T) = 0.68 \cdot \ln(X) + 5.57$
AM Peak Hour: $T = 0.50 \cdot X + 151.78$
PM Peak Hour: $\ln(T) = 0.74 \cdot \ln(X) + 2.89$

³ Consistent with the *Trip Generation Handbook, 3rd Edition*, Institute of Transportation Engineers, (ITE) [Washington, D.C. (2014)]. Pass-by reductions for fast food restaurant with drive through window consist of the following: estimated 25% daily, 49% AM, and 50% PM.

⁴ Consistent with the *Trip Generation Handbook, 3rd Edition*, Institute of Transportation Engineers, (ITE) [Washington, D.C. (2014)]. Pass-by reductions for shopping center consist of the following: estimated 10% daily, estimated 10% AM, and 34% PM.

⁵ Consistent with the *Trip Generation Handbook, 3rd Edition*, Institute of Transportation Engineers, (ITE) [Washington, D.C. (2014)]. Pass-by reductions for high turnover sit down restaurant consist of the following: estimated 10% daily, estimated 10% AM, and 43% PM.

TABLE 2
PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY
GREEN RIVER PROMENADE FAST-FOOD, CORONA

Key Intersection	Time Period	(1) Existing (Year 2018) Traffic Conditions		(2) Year 2020 With Project Buildout Traffic Conditions	
		Delay (s/v)	LOS	Delay (s/v)	LOS
1. Driveway 1 at Green River Road	AM	9.8	A	10.1	B
	PM	19.8	C	22.6	C
2. Driveway 2 at Green River Road	AM	9.8	A	10.1	B
	PM	18.6	C	20.7	C
3. Dominguez Ranch Road Driveway 3	AM	10.8	B	11.4	B
	PM	9.1	A	9.5	A

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service
- **Bold Delay/LOS values** indicate adverse service levels

APPENDIX A

EXISTING TRAFFIC COUNT DATA

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Driveway 1
E/W: Green River Road
Weather: Clear

File Name : 01_COR_DW1_Green River Road AM
Site Code : 05718914
Start Date : 12/4/2018
Page No : 1

Groups Printed- Total Volume

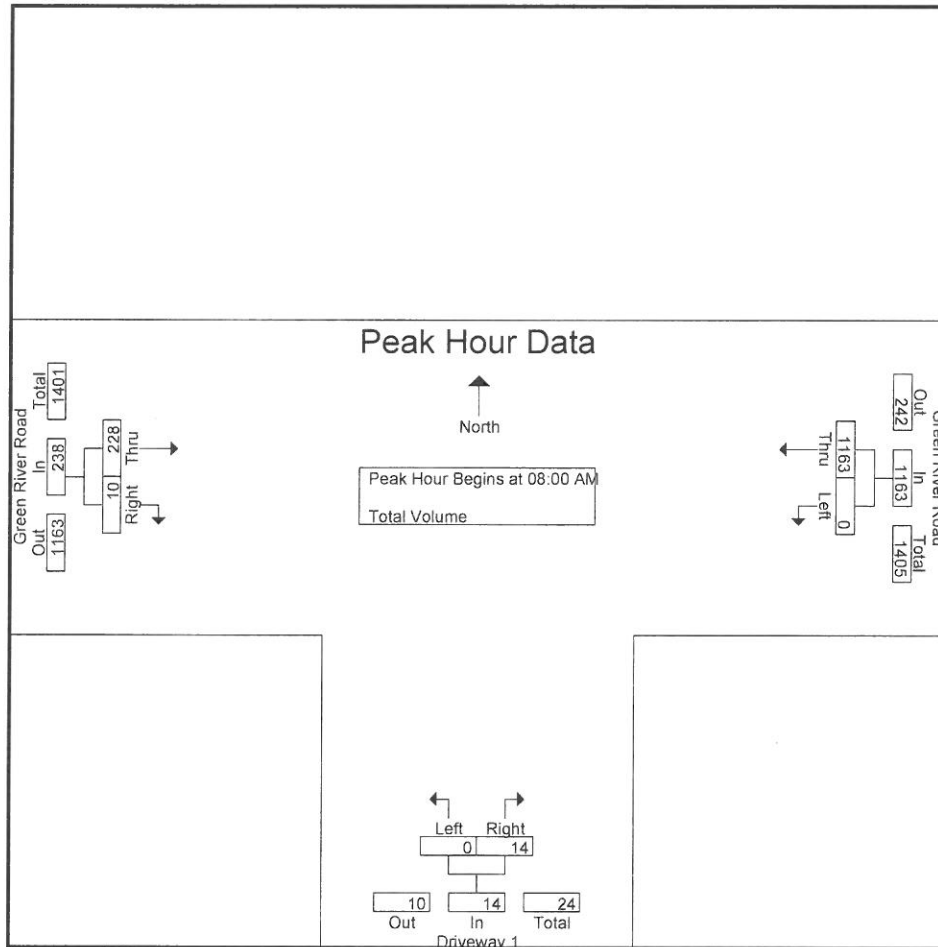
Start Time	Green River Road Westbound			Driveway 1 Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	274	274	0	4	4	78	0	78	356
07:15 AM	0	208	208	0	1	1	74	0	74	283
07:30 AM	0	252	252	0	4	4	76	1	77	333
07:45 AM	0	217	217	0	3	3	54	3	57	277
Total	0	951	951	0	12	12	282	4	286	1249
08:00 AM	0	283	283	0	1	1	44	3	47	331
08:15 AM	0	267	267	0	3	3	57	0	57	327
08:30 AM	0	293	293	0	4	4	72	6	78	375
08:45 AM	0	320	320	0	6	6	55	1	56	382
Total	0	1163	1163	0	14	14	228	10	238	1415
Grand Total	0	2114	2114	0	26	26	510	14	524	2664
Apprch %	0	100		0	100		97.3	2.7		
Total %	0	79.4	79.4	0	1	1	19.1	0.5	19.7	

	Green River Road Westbound			Driveway 1 Northbound			Green River Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	283	283	0	1	1	44	3	47	331
08:15 AM	0	267	267	0	3	3	57	0	57	327
08:30 AM	0	293	293	0	4	4	72	6	78	375
08:45 AM	0	320	320	0	6	6	55	1	56	382
Total Volume	0	1163	1163	0	14	14	228	10	238	1415
% App. Total	0	100		0	100		95.8	4.2		
PHF	.000	.909	.909	.000	.583	.583	.792	.417	.763	.926

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Driveway 1
E/W: Green River Road
Weather: Clear

File Name : 01_COR_DW1_Green River Road AM
Site Code : 05718914
Start Date : 12/4/2018
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			07:00 AM		
+0 mins.	0	283	283	0	1	1	78	0	78
+15 mins.	0	267	267	0	3	3	74	0	74
+30 mins.	0	293	293	0	4	4	76	1	77
+45 mins.	0	320	320	0	6	6	54	3	57
Total Volume	0	1163	1163	0	14	14	282	4	286
% App. Total	0	100		0	100		98.6	1.4	
PHF	.000	.909	.909	.000	.583	.583	.904	.333	.917

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Driveway 1
E/W: Green River Road
Weather: Clear

File Name : 01_COR_DW1_Green River Road PM
Site Code : 05718914
Start Date : 12/4/2018
Page No : 1

Groups Printed- Total Volume

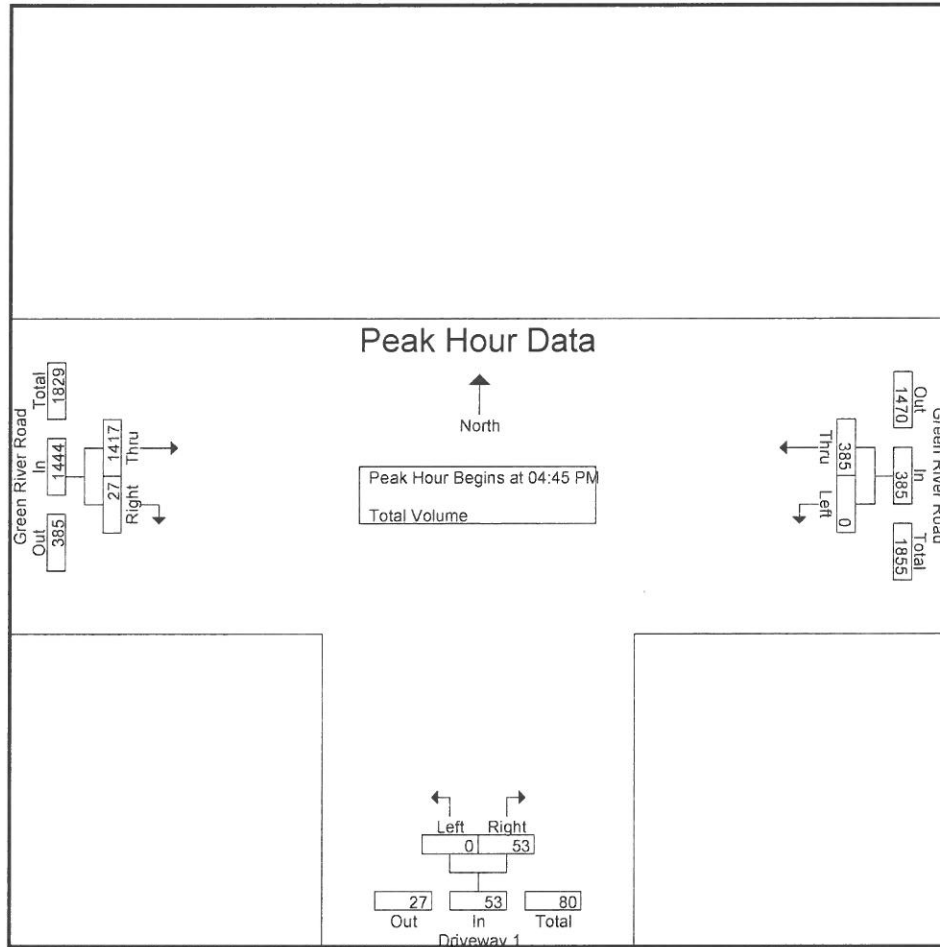
	Green River Road Westbound			Driveway 1 Northbound			Green River Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	78	78	0	14	14	293	5	298	390
04:15 PM	0	87	87	0	9	9	316	3	319	415
04:30 PM	0	80	80	0	13	13	344	6	350	443
04:45 PM	0	101	101	0	16	16	349	13	362	479
Total	0	346	346	0	52	52	1302	27	1329	1727
05:00 PM	0	100	100	0	11	11	344	5	349	460
05:15 PM	0	93	93	0	13	13	356	5	361	467
05:30 PM	0	91	91	0	13	13	368	4	372	476
05:45 PM	0	82	82	0	16	16	327	5	332	430
Total	0	366	366	0	53	53	1395	19	1414	1833
Grand Total	0	712	712	0	105	105	2697	46	2743	3560
Apprch %	0	100		0	100		98.3	1.7		
Total %	0	20	20	0	2.9	2.9	75.8	1.3	77.1	

	Green River Road Westbound			Driveway 1 Northbound			Green River Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	101	101	0	16	16	349	13	362	479
05:00 PM	0	100	100	0	11	11	344	5	349	460
05:15 PM	0	93	93	0	13	13	356	5	361	467
05:30 PM	0	91	91	0	13	13	368	4	372	476
Total Volume	0	385	385	0	53	53	1417	27	1444	1882
% App. Total	0	100		0	100		98.1	1.9		
PHF	.000	.953	.953	.000	.828	.828	.963	.519	.970	.982

Counts Unlimited
PO Box 1178
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City of Corona
N/S: Driveway 1
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:30 PM			04:45 PM		
+0 mins.	0	101	101	0	13	13	349	13	362
+15 mins.	0	100	100	0	16	16	344	5	349
+30 mins.	0	93	93	0	11	11	356	5	361
+45 mins.	0	91	91	0	13	13	368	4	372
Total Volume	0	385	385	0	53	53	1417	27	1444
% App. Total	0	100		0	100		98.1	1.9	
PHF	.000	.953	.953	.000	.828	.828	.963	.519	.970

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Driveway 2
E/W: Green River Road
Weather: Clear

File Name : 02_COR_DW2_Green River Road AM
Site Code : 05718914
Start Date : 12/4/2018
Page No : 1

Groups Printed- Total Volume

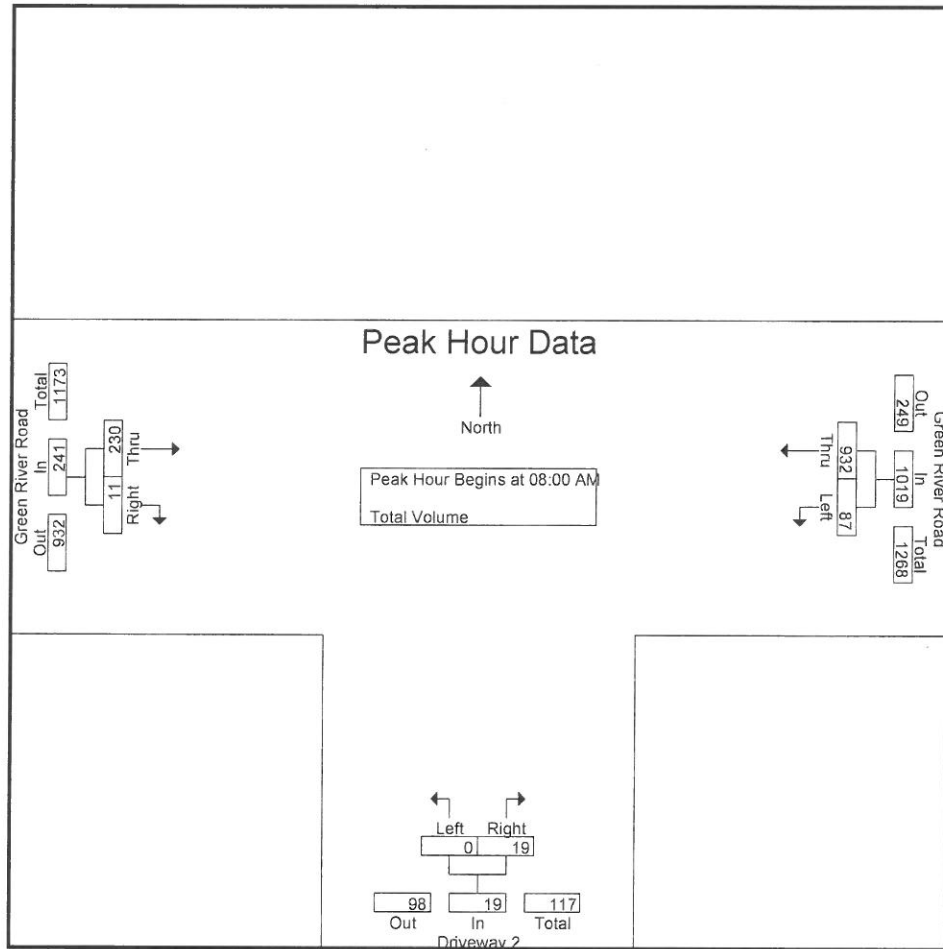
Start Time	Green River Road Westbound			Driveway 2 Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	8	247	255	0	0	0	68	6	74	329
07:15 AM	7	199	206	0	1	1	80	0	80	287
07:30 AM	12	202	214	0	2	2	73	3	76	292
07:45 AM	5	214	219	0	1	1	58	3	61	281
Total	32	862	894	0	4	4	279	12	291	1189
08:00 AM	11	224	235	0	1	1	43	4	47	283
08:15 AM	8	220	228	0	4	4	60	2	62	294
08:30 AM	26	243	269	0	3	3	69	3	72	344
08:45 AM	42	245	287	0	11	11	58	2	60	358
Total	87	932	1019	0	19	19	230	11	241	1279
Grand Total	119	1794	1913	0	23	23	509	23	532	2468
Apprch %	6.2	93.8		0	100		95.7	4.3		
Total %	4.8	72.7	77.5	0	0.9	0.9	20.6	0.9	21.6	

	Green River Road Westbound			Driveway 2 Northbound			Green River Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	11	224	235	0	1	1	43	4	47	283
08:15 AM	8	220	228	0	4	4	60	2	62	294
08:30 AM	26	243	269	0	3	3	69	3	72	344
08:45 AM	42	245	287	0	11	11	58	2	60	358
Total Volume	87	932	1019	0	19	19	230	11	241	1279
% App. Total	8.5	91.5		0	100		95.4	4.6		
PHF	.518	.951	.888	.000	.432	.432	.833	.688	.837	.893

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Driveway 2
E/W: Green River Road
Weather: Clear

File Name : 02_COR_DW2_Green River Road AM
Site Code : 05718914
Start Date : 12/4/2018
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			07:00 AM		
+0 mins.	11	224	235	0	1	1	68	6	74
+15 mins.	8	220	228	0	4	4	80	0	80
+30 mins.	26	243	269	0	3	3	73	3	76
+45 mins.	42	245	287	0	11	11	58	3	61
Total Volume	87	932	1019	0	19	19	279	12	291
% App. Total	8.5	91.5		0	100		95.9	4.1	
PHF	.518	.951	.888	.000	.432	.432	.872	.500	.909

Counts Unlimited
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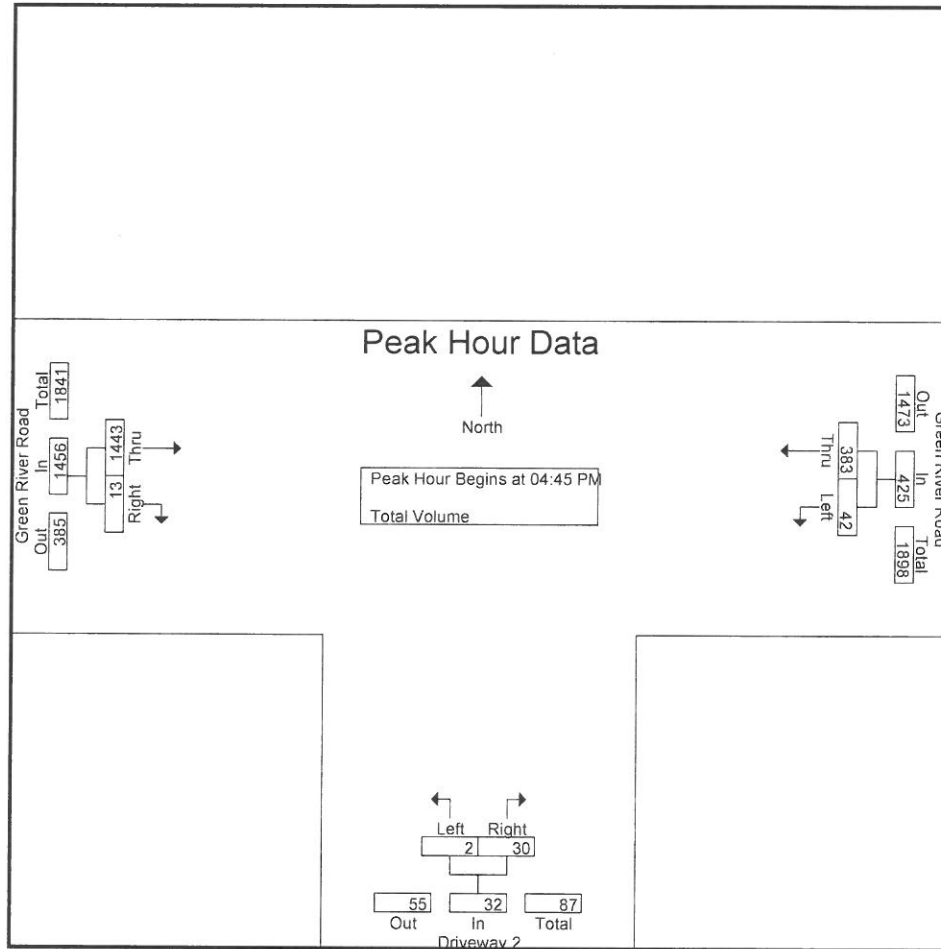
Groups Printed- Total Volume

Start Time	Green River Road Westbound			Driveway 2 Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	4	77	81	1	13	14	304	5	309	404
04:15 PM	13	84	97	0	7	7	313	6	319	423
04:30 PM	6	81	87	0	16	16	359	1	360	463
04:45 PM	3	100	103	0	9	9	364	4	368	480
Total	26	342	368	1	45	46	1340	16	1356	1770
05:00 PM	10	98	108	0	5	5	344	5	349	462
05:15 PM	20	96	116	0	10	10	367	0	367	493
05:30 PM	9	89	98	2	6	8	368	4	372	478
05:45 PM	12	81	93	1	13	14	342	3	345	452
Total	51	364	415	3	34	37	1421	12	1433	1885
Grand Total	77	706	783	4	79	83	2761	28	2789	3655
Apprch %	9.8	90.2		4.8	95.2		99	1		
Total %	2.1	19.3	21.4	0.1	2.2	2.3	75.5	0.8	76.3	

	Green River Road Westbound			Driveway 2 Northbound			Green River Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	3	100	103	0	9	9	364	4	368	480
05:00 PM	10	98	108	0	5	5	344	5	349	462
05:15 PM	20	96	116	0	10	10	367	0	367	493
05:30 PM	9	89	98	2	6	8	368	4	372	478
Total Volume	42	383	425	2	30	32	1443	13	1456	1913
% App. Total	9.9	90.1		6.2	93.8		99.1	0.9		
PHF	.525	.958	.916	.250	.750	.800	.980	.650	.978	.970

City of Corona
N/S: Driveway 2
E/W: Green River Road
Weather: Clear

File Name : 02_COR_DW2_Green River Road PM
Site Code : 05718914
Start Date : 12/4/2018
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:00 PM			04:45 PM		
+0 mins.	3	100	103	1	13	14	364	4	368
+15 mins.	10	98	108	0	7	7	344	5	349
+30 mins.	20	96	116	0	16	16	367	0	367
+45 mins.	9	89	98	0	9	9	368	4	372
Total Volume	42	383	425	1	45	46	1443	13	1456
% App. Total	9.9	90.1		2.2	97.8		99.1	0.9	
PHF	.525	.958	.916	.250	.703	.719	.980	.650	.978

Counts Unlimited
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Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Dominguez Ranch Road
E/W: Driveway 3
Weather: Clear

File Name : 03_COR_Dominguez Ranch_DW3 AM
Site Code : 05718914
Start Date : 12/4/2018
Page No : 1

Groups Printed- Total Volume

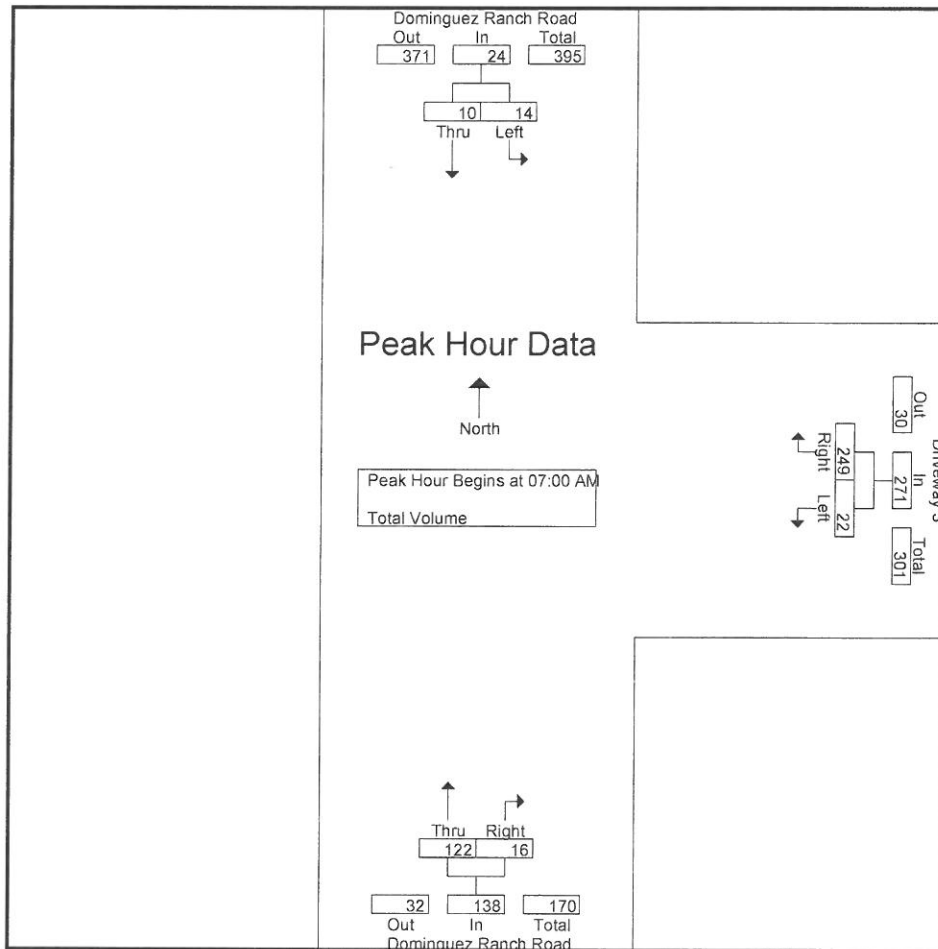
Start Time	Dominguez Ranch Road Southbound			Driveway 3 Westbound			Dominguez Ranch Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	4	4	8	5	50	55	38	4	42	105
07:15 AM	1	2	3	1	70	71	36	4	40	114
07:30 AM	5	2	7	4	63	67	26	3	29	103
07:45 AM	4	2	6	12	66	78	22	5	27	111
Total	14	10	24	22	249	271	122	16	138	433
08:00 AM	4	2	6	4	56	60	19	7	26	92
08:15 AM	1	5	6	5	39	44	16	2	18	68
08:30 AM	4	1	5	7	45	52	23	1	24	81
08:45 AM	11	11	22	4	22	26	19	0	19	67
Total	20	19	39	20	162	182	77	10	87	308
Grand Total	34	29	63	42	411	453	199	26	225	741
Apprch %	54	46		9.3	90.7		88.4	11.6		
Total %	4.6	3.9	8.5	5.7	55.5	61.1	26.9	3.5	30.4	

	Dominguez Ranch Road Southbound			Driveway 3 Westbound			Dominguez Ranch Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	4	4	8	5	50	55	38	4	42	105
07:15 AM	1	2	3	1	70	71	36	4	40	114
07:30 AM	5	2	7	4	63	67	26	3	29	103
07:45 AM	4	2	6	12	66	78	22	5	27	111
Total Volume	14	10	24	22	249	271	122	16	138	433
% App. Total	58.3	41.7		8.1	91.9		88.4	11.6		
PHF	.700	.625	.750	.458	.889	.869	.803	.800	.821	.950

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City of Corona
N/S: Dominguez Ranch Road
E/W: Driveway 3
Weather: Clear

File Name : 03_COR_Dominguez Ranch_DW3 AM
Site Code : 05718914
Start Date : 12/4/2018
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			07:15 AM			07:00 AM		
+0 mins.	4	2	6	1	70	71	38	4	42
+15 mins.	1	5	6	4	63	67	36	4	40
+30 mins.	4	1	5	12	66	78	26	3	29
+45 mins.	11	11	22	4	56	60	22	5	27
Total Volume	20	19	39	21	255	276	122	16	138
% App. Total	51.3	48.7		7.6	92.4		88.4	11.6	
PHF	.455	.432	.443	.438	.911	.885	.803	.800	.821

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City of Corona
N/S: Dominguez Ranch Road
E/W: Driveway 3
Weather: Clear

File Name : 03_COR_Dominguez Ranch_DW3 PM
Site Code : 05718914
Start Date : 12/4/2018
Page No : 1

Groups Printed- Total Volume

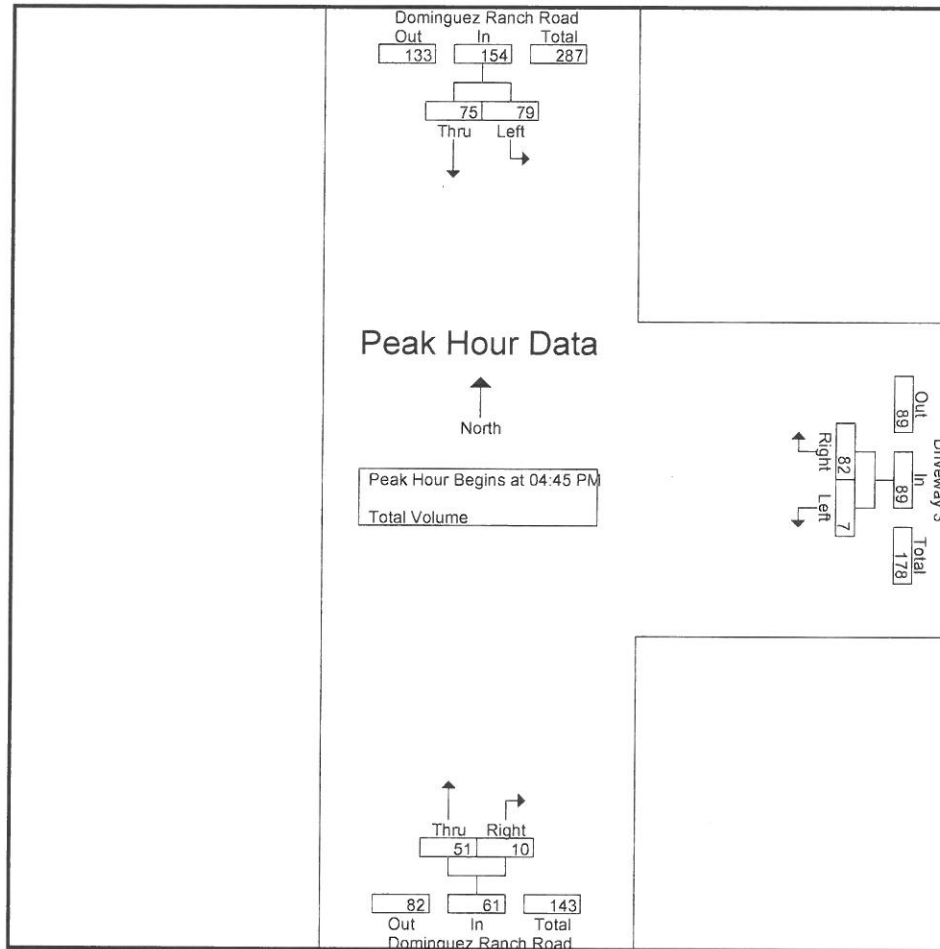
	Dominguez Ranch Road Southbound			Driveway 3 Westbound			Dominguez Ranch Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	31	10	41	0	29	29	13	1	14	84
04:15 PM	24	13	37	0	27	27	6	0	6	70
04:30 PM	17	9	26	0	15	15	7	0	7	48
04:45 PM	17	17	34	0	17	17	21	2	23	74
Total	89	49	138	0	88	88	47	3	50	276
05:00 PM	17	16	33	2	25	27	11	4	15	75
05:15 PM	19	23	42	4	23	27	10	3	13	82
05:30 PM	26	19	45	1	17	18	9	1	10	73
05:45 PM	19	14	33	3	12	15	7	4	11	59
Total	81	72	153	10	77	87	37	12	49	289
Grand Total	170	121	291	10	165	175	84	15	99	565
Apprch %	58.4	41.6		5.7	94.3		84.8	15.2		
Total %	30.1	21.4	51.5	1.8	29.2	31	14.9	2.7	17.5	

	Dominguez Ranch Road Southbound			Driveway 3 Westbound			Dominguez Ranch Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	17	17	34	0	17	17	21	2	23	74
05:00 PM	17	16	33	2	25	27	11	4	15	75
05:15 PM	19	23	42	4	23	27	10	3	13	82
05:30 PM	26	19	45	1	17	18	9	1	10	73
Total Volume	79	75	154	7	82	89	51	10	61	304
% App. Total	51.3	48.7		7.9	92.1		83.6	16.4		
PHF	.760	.815	.856	.438	.820	.824	.607	.625	.663	.927

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City of Corona
N/S: Dominguez Ranch Road
E/W: Driveway 3
Weather: Clear

File Name : 03_COR_Dominguez Ranch_DW3 PM
Site Code : 05718914
Start Date : 12/4/2018
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	17	17	34	0	17	17	21	2	23
+15 mins.	17	16	33	2	25	27	11	4	15
+30 mins.	19	23	42	4	23	27	10	3	13
+45 mins.	26	19	45	1	17	18	9	1	10
Total Volume	79	75	154	7	82	89	51	10	61
% App. Total	51.3	48.7		7.9	92.1		83.6	16.4	
PHF	.760	.815	.856	.438	.820	.824	.607	.625	.663

APPENDIX B

PROJECT DRIVEWAY
LEVEL OF SERVICE CALCULATIONS




APPENDIX B-1

EXISTING TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: Driveway 1 at Green River Road

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.020

Intersection Setup

Name	Driveway 1		Green River Road		Green River Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Driveway 1		Green River Road		Green River Road	
Base Volume Input [veh/h]	0	14	228	10	0	1163
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	14	228	10	0	1163
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	60	3	0	306
Total Analysis Volume [veh/h]	0	15	240	11	0	1224
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0




Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	9.79	0.00	0.00	0.00	0.00
Movement LOS		A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.06	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	1.50	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.79		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.10					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 2: Driveway 2 at Green River Road

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.026

Intersection Setup

Name	Driveway 2		Green River Road		Green River Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Driveway 2		Green River Road		Green River Road	
Base Volume Input [veh/h]	0	19	230	11	87	1163
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	19	230	11	87	1163
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	61	3	23	306
Total Analysis Volume [veh/h]	0	20	242	12	92	1224
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0




Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.03	0.00	0.00	0.10	0.01
d_M, Delay for Movement [s/veh]	0.00	9.79	0.00	0.00	9.56	0.00
Movement LOS		A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.08	0.00	0.00	0.35	0.00
95th-Percentile Queue Length [ft/ln]	0.00	2.00	0.00	0.00	8.70	0.00
d_A, Approach Delay [s/veh]	9.79		0.00		0.67	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.68					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: Dominguez Ranch Road at Driveway 3

Control Type:	Two-way stop	Delay (sec / veh):	11.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.029

Intersection Setup

Name	Dominguez Ranch Road		Dominguez Ranch Road		Driveway 3	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dominguez Ranch Road		Dominguez Ranch Road		Driveway 3	
Base Volume Input [veh/h]	122	16	14	10	22	249
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	122	16	14	10	22	249
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	4	4	3	6	66
Total Analysis Volume [veh/h]	128	17	15	11	23	262
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.03	0.29
d_M, Delay for Movement [s/veh]	0.00	0.00	7.53	0.00	11.31	10.78
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.03	0.00	1.36	1.36
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.79	0.00	34.03	34.03
d_A, Approach Delay [s/veh]	0.00		4.34		10.82	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	7.01					
Intersection LOS	B					

Intersection Level Of Service Report

Intersection 1: Driveway 1 at Green River Road

Control Type:	Two-way stop	Delay (sec / veh):	19.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.187

Intersection Setup

Name	Driveway 1		Green River Road		Green River Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	└		└			
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Driveway 1		Green River Road		Green River Road	
Base Volume Input [veh/h]	0	53	1417	27	0	385
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	53	1417	27	0	385
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	14	373	7	0	101
Total Analysis Volume [veh/h]	0	56	1492	28	0	405
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0




Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.19	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	19.79	0.00	0.00	0.00	0.00
Movement LOS		C	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.68	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	16.90	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	19.79		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.56					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 2: Driveway 2 at Green River Road

Control Type:	Two-way stop	Delay (sec / veh):	26.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.205

Intersection Setup

Name	Driveway 2		Green River Road		Green River Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Driveway 2		Green River Road		Green River Road	
Base Volume Input [veh/h]	0	32	1443	13	42	383
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	32	1443	13	42	383
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	8	380	3	11	101
Total Analysis Volume [veh/h]	0	34	1519	14	44	403
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0




Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.11	0.02	0.00	0.21	0.00
d_M, Delay for Movement [s/veh]	0.00	18.56	0.00	0.00	26.05	0.00
Movement LOS		C	A	A	D	A
95th-Percentile Queue Length [veh/ln]	0.00	0.38	0.00	0.00	0.75	0.00
95th-Percentile Queue Length [ft/ln]	0.00	9.50	0.00	0.00	18.69	0.00
d_A, Approach Delay [s/veh]	18.56		0.00		2.56	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.88					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 3: Dominguez Ranch Road at Driveway 3

Control Type:	Two-way stop	Delay (sec / veh):	10.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Dominguez Ranch Road		Dominguez Ranch Road		Driveway 3	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dominguez Ranch Road		Dominguez Ranch Road		Driveway 3	
Base Volume Input [veh/h]	51	10	79	75	7	82
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	51	10	79	75	7	82
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	3	21	20	2	22
Total Analysis Volume [veh/h]	54	11	83	79	7	86
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.01	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	7.48	0.00	10.93	8.97
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.00	0.32	0.32
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.28	0.00	7.96	7.96
d_A, Approach Delay [s/veh]	0.00		3.83		9.12	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.59					
Intersection LOS	B					




APPENDIX B-II

PROJECT BUILDOUT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: Driveway 1 at Green River Road

Control Type:	Two-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.051

Intersection Setup

Name	Driveway 1		Green River Road		Green River Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Driveway 1		Green River Road		Green River Road	
Base Volume Input [veh/h]	0	36	254	28	0	1210
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	36	254	28	0	1210
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	9	67	7	0	318
Total Analysis Volume [veh/h]	0	38	267	29	0	1274
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.05	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	10.12	0.00	0.00	0.00	0.00
Movement LOS		B	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.16	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	4.04	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.12		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.24					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 2: Driveway 2 at Green River Road

Control Type:	Two-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.165

Intersection Setup

Name	Driveway 2		Green River Road		Green River Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Driveway 2		Green River Road		Green River Road	
Base Volume Input [veh/h]	0	40	261	28	131	1210
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	40	261	28	131	1210
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	11	69	7	34	318
Total Analysis Volume [veh/h]	0	42	275	29	138	1274
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0




Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.06	0.00	0.00	0.17	0.01
d_M, Delay for Movement [s/veh]	0.00	10.06	0.00	0.00	10.15	0.00
Movement LOS		B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.18	0.00	0.00	0.59	0.00
95th-Percentile Queue Length [ft/ln]	0.00	4.42	0.00	0.00	14.73	0.00
d_A, Approach Delay [s/veh]	10.06		0.00		0.99	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.04					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 3: Dominguez Ranch Road at Driveway 3

Control Type:	Two-way stop	Delay (sec / veh):	11.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.040

Intersection Setup

Name	Dominguez Ranch Road		Dominguez Ranch Road		Driveway 3	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dominguez Ranch Road		Dominguez Ranch Road		Driveway 3	
Base Volume Input [veh/h]	127	25	14	10	30	283
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	127	25	14	10	30	283
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	7	4	3	8	74
Total Analysis Volume [veh/h]	134	26	15	11	32	298
Pedestrian Volume [ped/h]						

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.04	0.33
d_M, Delay for Movement [s/veh]	0.00	0.00	7.56	0.00	11.92	11.38
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.03	0.00	1.73	1.73
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.80	0.00	43.26	43.26
d_A, Approach Delay [s/veh]	0.00		4.36		11.43	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	7.53					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 1: Driveway 1 at Green River Road

Control Type:	Two-way stop	Delay (sec / veh):	22.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.268

Intersection Setup

Name	Driveway 1		Green River Road		Green River Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↱		↻↻↻		↻↻↻	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Driveway 1		Green River Road		Green River Road	
Base Volume Input [veh/h]	0	71	1488	42	0	400
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	71	1488	42	0	400
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	19	392	11	0	105
Total Analysis Volume [veh/h]	0	75	1566	44	0	421
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.27	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	22.55	0.00	0.00	0.00	0.00
Movement LOS		C	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	1.06	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	26.43	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	22.55		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.80					
Intersection LOS	C					

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Corona
N/S: Driveway 1
E/W: Green River Road
Weather: Clear

File Name : 01_COR_DW1_Green River Road AM
Site Code : 05718914
Start Date : 12/4/2018
Page No : 1

Groups Printed- Total Volume




Start Time	Green River Road Westbound			Driveway 1 Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	274	274	0	4	4	78	0	78	356
07:15 AM	0	208	208	0	1	1	74	0	74	283
07:30 AM	0	252	252	0	4	4	76	1	77	333
07:45 AM	0	217	217	0	3	3	54	3	57	277
Total	0	951	951	0	12	12	282	4	286	1249
08:00 AM	0	283	283	0	1	1	44	3	47	331
08:15 AM	0	267	267	0	3	3	57	0	57	327
08:30 AM	0	293	293	0	4	4	72	6	78	375
08:45 AM	0	320	320	0	6	6	55	1	56	382
Total	0	1163	1163	0	14	14	228	10	238	1415
Grand Total	0	2114	2114	0	26	26	510	14	524	2664
Apprch %	0	100		0	100		97.3	2.7		
Total %	0	79.4	79.4	0	1	1	19.1	0.5	19.7	

	Green River Road Westbound			Driveway 1 Northbound			Green River Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	283	283	0	1	1	44	3	47	331
08:15 AM	0	267	267	0	3	3	57	0	57	327
08:30 AM	0	293	293	0	4	4	72	6	78	375
08:45 AM	0	320	320	0	6	6	55	1	56	382
Total Volume	0	1163	1163	0	14	14	228	10	238	1415
% App. Total	0	100		0	100		95.8	4.2		
PHF	.000	.909	.909	.000	.583	.583	.792	.417	.763	.926

Intersection Level Of Service Report
Intersection 2: Driveway 2 at Green River Road

Control Type:	Two-way stop	Delay (sec / veh):	37.1
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.431

Intersection Setup

Name	Driveway 2		Green River Road		Green River Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Driveway 2		Green River Road		Green River Road	
Base Volume Input [veh/h]	0	49	1519	27	79	398
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	49	1519	27	79	398
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	13	400	7	21	105
Total Analysis Volume [veh/h]	0	52	1599	28	83	419
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0




Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.18	0.02	0.00	0.43	0.00
d_M, Delay for Movement [s/veh]	0.00	20.65	0.00	0.00	37.12	0.00
Movement LOS		C	A	A	E	A
95th-Percentile Queue Length [veh/ln]	0.00	0.66	0.00	0.00	1.98	0.00
95th-Percentile Queue Length [ft/ln]	0.00	16.60	0.00	0.00	49.59	0.00
d_A, Approach Delay [s/veh]	20.65		0.00		6.14	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.91					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 3: Dominguez Ranch Road at Driveway 3

Control Type:	Two-way stop	Delay (sec / veh):	11.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.023

Intersection Setup

Name	Dominguez Ranch Road		Dominguez Ranch Road		Driveway 3	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dominguez Ranch Road		Dominguez Ranch Road		Driveway 3	
Base Volume Input [veh/h]	53	18	79	78	14	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	53	18	79	78	14	109
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	5	21	21	4	29
Total Analysis Volume [veh/h]	56	19	83	82	15	115
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.02	0.12
d_M, Delay for Movement [s/veh]	0.00	0.00	7.50	0.00	11.22	9.22
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.00	0.48	0.48
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.31	0.00	12.00	12.00
d_A, Approach Delay [s/veh]	0.00		3.77		9.45	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.00					
Intersection LOS	B					