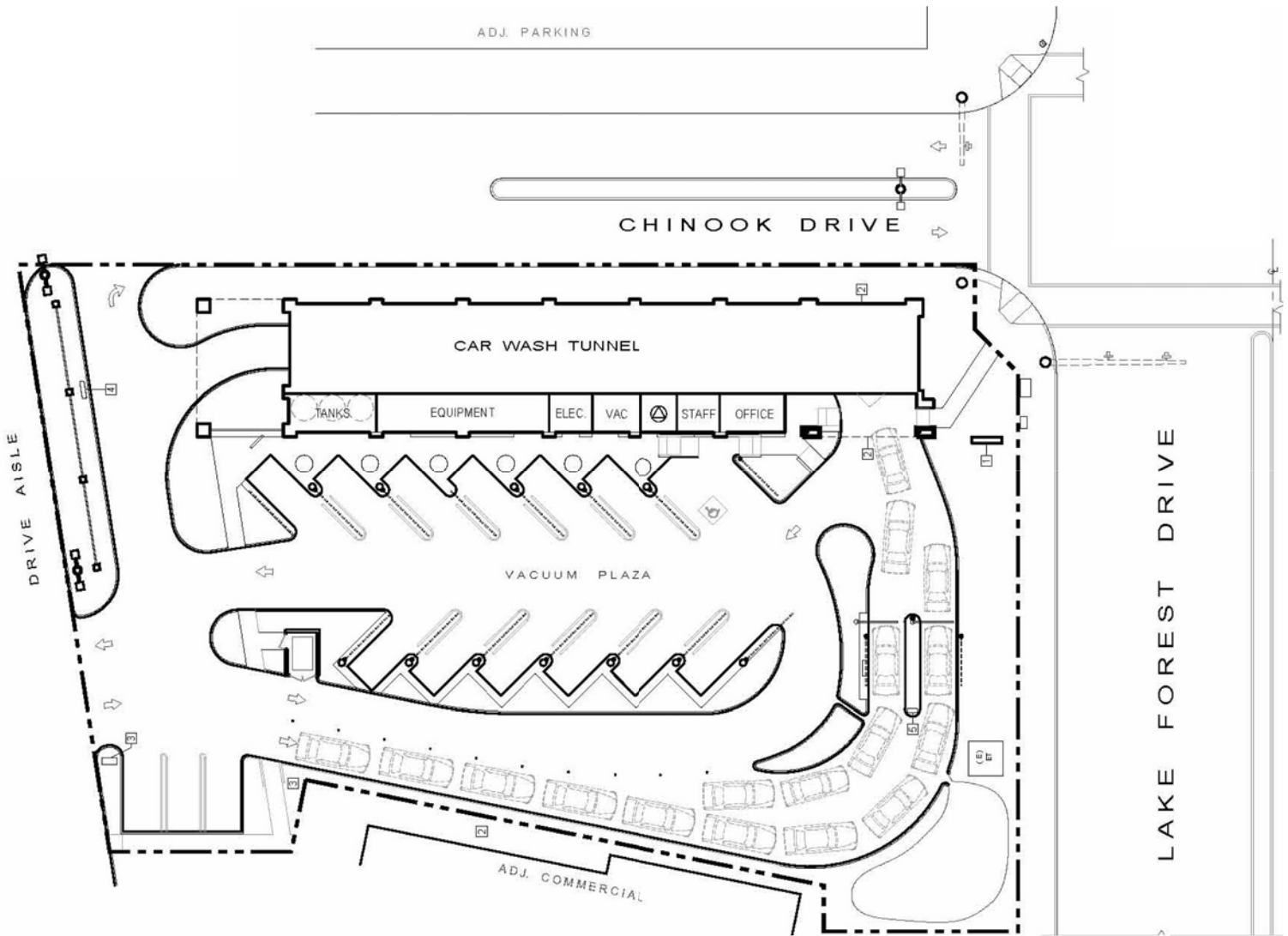


PC Attachment 5

21781 LAKE FOREST DRIVE H2GO EXPRESS CAR WASH TRAFFIC QUEUING STUDY City of Lake Forest, California



June 4, 2020

Mr. Brett Blanchard
H2GO EXPRESS CAR WASH
27525 Puerta Real, Suite 100-205
Mission Viejo, CA 92691

**Subject: 21781 Lake Forest Drive H2GO Express Car Wash Traffic Queuing Study,
City of Lake Forest**

Dear Mr. Blanchard:

Introduction

RK ENGINEERING GROUP, INC. (RK) has completed a queuing study for the proposed H2GO Express Car Wash to be located at 21781 Lake Forest Drive, in the City of Lake Forest. The project would consist of constructing and operating an automated self-serve drive-thru car wash with 13 self-service vacuum parking spaces. The project is located within the existing Heritage Hill Plaza shopping center.

The purpose of this queuing study is to determine whether the proposed project's site design and circulation plan would be adequate to accommodate the expected vehicle queues at the proposed car wash tunnel entrance and vacuum plaza.

RK has utilized existing car wash queuing data, previously observed at other similar express car wash locations, to estimate the future demand at the project site. RK has reviewed the proposed drive-thru lane capacity, on-site circulation, and vehicular access and has provided recommendations to help reduce potential vehicle conflicts in the shared parking lot and public right-of-way.

An aerial location map of the project is shown in Exhibit A and the proposed site plan is shown in Exhibit B.

On-Site Circulation

The site plan, provided in Exhibit B, shows the proposed on-site circulation plan. The project is located within the Heritage Hill Plaza shopping center, which can be accessed via Chinook Drive. From there, the project will be served via one (1) full-access driveway along the internal drive aisle of the shopping center and one (1) exit only drive aisle along Chinook Drive.

The drive-thru entrance is located at the northwest corner of the project site, and is designed to provide vehicular flow in a counter-clockwise direction. Vehicles will enter the drive-thru via dual inbound lanes and be served by dual pay stations, one for each lane. Drivers will then merge into one lane after the pay station and prior to entering the car wash tunnel. Upon exiting the drive-thru lane, drivers have the option of turning left to access the vacuum plaza or turning right to exit the site. The vacuum plaza is served by a single one-way drive aisle, which provides vehicular access to 13 self-service vacuum parking spaces.

Car Wash Tunnel Drive-Thru Aisle Queuing

The drive-thru entry lane provide queuing capacity for approximately 18 vehicles to queue from the beginning of the drive-thru aisle to the car wash tunnel entrance; providing. The drive-thru capacity is based on typical vehicle spacing in a drive-thru of about 20 feet per vehicle. Drive aisle queues generally have shorter vehicle spacing than queues found on conventional highways due to the slower speeds, shorter headway, and less truck use.

To help determine the expected queue of the proposed H2GO Express Car Wash, RK performed observed traffic counts at three (3) existing car wash facilities in Santa Ana to obtain reference data on automated car wash queues.

Table 1 shows the results of the observed queuing survey during weekday conditions.

Table 2 shows the results of the observed queuing survey during a typical Saturday.

TABLE 1
Observed Car Wash Queuing - Weekday

Observed Car Wash Location¹	Peak Hour 95th Percentile Queue (Vehicles)
Scrub Bot Express Car Wash (1807 Main Street)	3
Zaroo Express Car Wash (1205 W. 17th Street)	2
Santa Ana Express Car Wash (202 E. First Street)	5
Maximum	5

¹ Weekday observed traffic counts conducted on Thursday, March 14, 2019.

TABLE 2
Observed Car Wash Queuing - Saturday

Observed Car Wash Location¹	Peak Hour 95th Percentile Queue (Vehicles)
Scrub Bot Express Car Wash (1807 Main Street)	5
Zaroo Express Car Wash (1205 W. 17th Street)	6
Santa Ana Express Car Wash (202 E. First Street)	14
Maximum	14

¹ Saturday observed traffic counts conducted on Saturday, March 16, 2019.

Queuing surveys were performed during the peak traffic generating hour observed on both weekday and Saturday conditions. The 95th percentile queue is calculated for each site and represents the maximum amount of vehicles stacked behind the car wash tunnel 95 percent of the time or less. The 95th percentile is typically considered the design queue for which the site should be designed to accommodate traffic. The average vehicle length, including headway, is considered 20 feet for queuing analysis purposes.

Based on the observed queuing surveys of other similar car washes, the project is expected to accommodate the maximum observed 95th percentile queue of 14 vehicles.

Vacuum Plaza Queuing

The vacuum plaza will consist of 13 self-service vacuum parking spaces. In the event that all 13 self-service vacuum parking spaces are occupied, vehicles will be able to queue in the dedicated vacuum plaza entry lane. The vacuum plaza entry lane is approximately 155 feet in length and provides enough storage space for approximately 7 vehicles to queue before blocking the three (3) internal parking stalls on the H2GO site. An additional 45 feet of queueing space is available on the H2GO site for vehicles to queue without impeding the internal drive aisles of the Heritage Hill Shopping Center. Thus the total queueing space provided within the H2GO site for vehicles to stage before entering the vacuum plaza area would accommodate up to 9 cars.

RK has provided recommendations to help improve on-site circulation and reduce the potential for vehicle conflicts during times of peak demand at the vacuum plaza. Signing, striping and parking lot attendants are recommended to help direct vehicle queuing. Exhibit C provides a graphical illustration of the proposed design recommendations.

Findings

1. The capacity of the drive-thru queue would allow approximately 18 vehicles to queue on-site without infringing on the right-of-way or other internal drive aisles within the Heritage Hill Plaza.
2. Based on the referenced data of similar express car wash locations, the proposed H2GO Express Car Wash project may experience a maximum 95th percentile queue of approximately 14 vehicles. Thus indicating the express car wash drive-thru design is adequate to accommodate the peak queueing demand.
3. RK has made recommendations to help minimize potential queues within the vacuum plaza and prevent back-up within the site. Further information is provided in the Recommendations section of this report.

Recommendations

1. Parking lot attendants should be provided to regulate traffic operations on the site during peak times. H2GO employees should be trained as traffic directors to assist in

parking lot operations and move vehicles along when the drive-thru queue and vacuum plaza are full. The attendant should direct vehicles to available parking spaces and shall ensure that at no time are vehicles backed onto the internal drive aisle of Heritage Hill Plaza shopping center. The attendant should also assist in keeping the drive-thru exit clear to maintain the egress of the vehicles from the car wash.

2. Signing, pavement markings and parking lot attendants are recommended to help direct on-site vehicle circulation, as shown on Exhibit C.
3. To help prevent vehicular conflicts between the tunnel entry lane and vacuum plaza entry lane, 28 inch traffic cones are recommended to be used to delineate the two drive aisles during peak times. The traffic cones are recommended, as opposed to fixed delineators or bollards, to allow for more flexibility to control circulation on an as needed basis.
4. The City of Lake Forest should periodically monitor the site to ensure satisfactory operations.
5. Recommendations are graphically illustrated on Exhibit C.

Conclusion

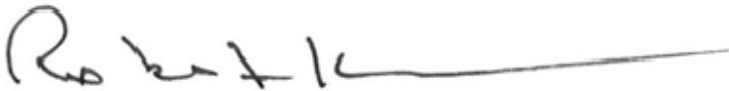
This report concludes that based on data from other similar and nearby car wash establishments, the proposed H2GO express car wash project can accommodate the forecast maximum drive-thru queue during peak times.

The project is not expected to result in design issues that would cause excessive vehicle queuing. As a result, the existing flow of traffic is not expected to be disrupted with implementation of the proposed project. Additional recommendations are provided to help further improve on-site circulation.

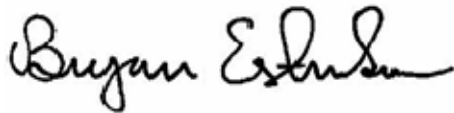
In order to reduce the potential for overflow queuing, the recommendations in this report should be implemented. Parking lot attendants should be provided to monitor traffic operations and direct vehicles. The City of Lake Forest should periodically monitor the site to ensure satisfactory operations.

RK Engineering Group, Inc. appreciates this opportunity to work with H2GO EXPRESS CAR WASH on this project. If you have any questions regarding this study or need further review, please call us at (949) 474-0809.

Sincerely,
RK ENGINEERING GROUP, INC.



Robert Kahn, P.E.
Principal



Bryan Estrada
Senior Associate

Attachment
/rk15589.1.doc
JN:2737-2019-01

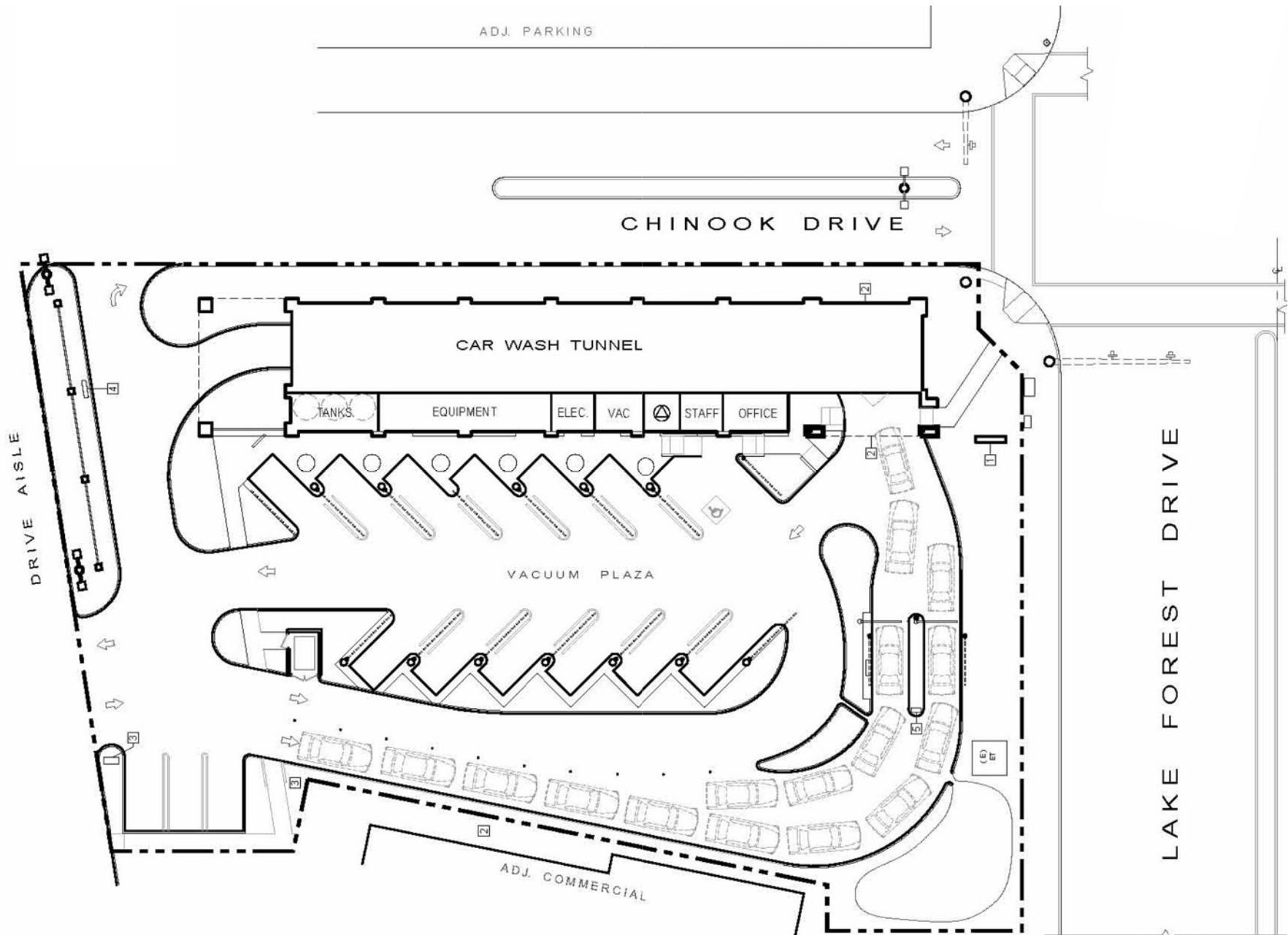
Exhibits

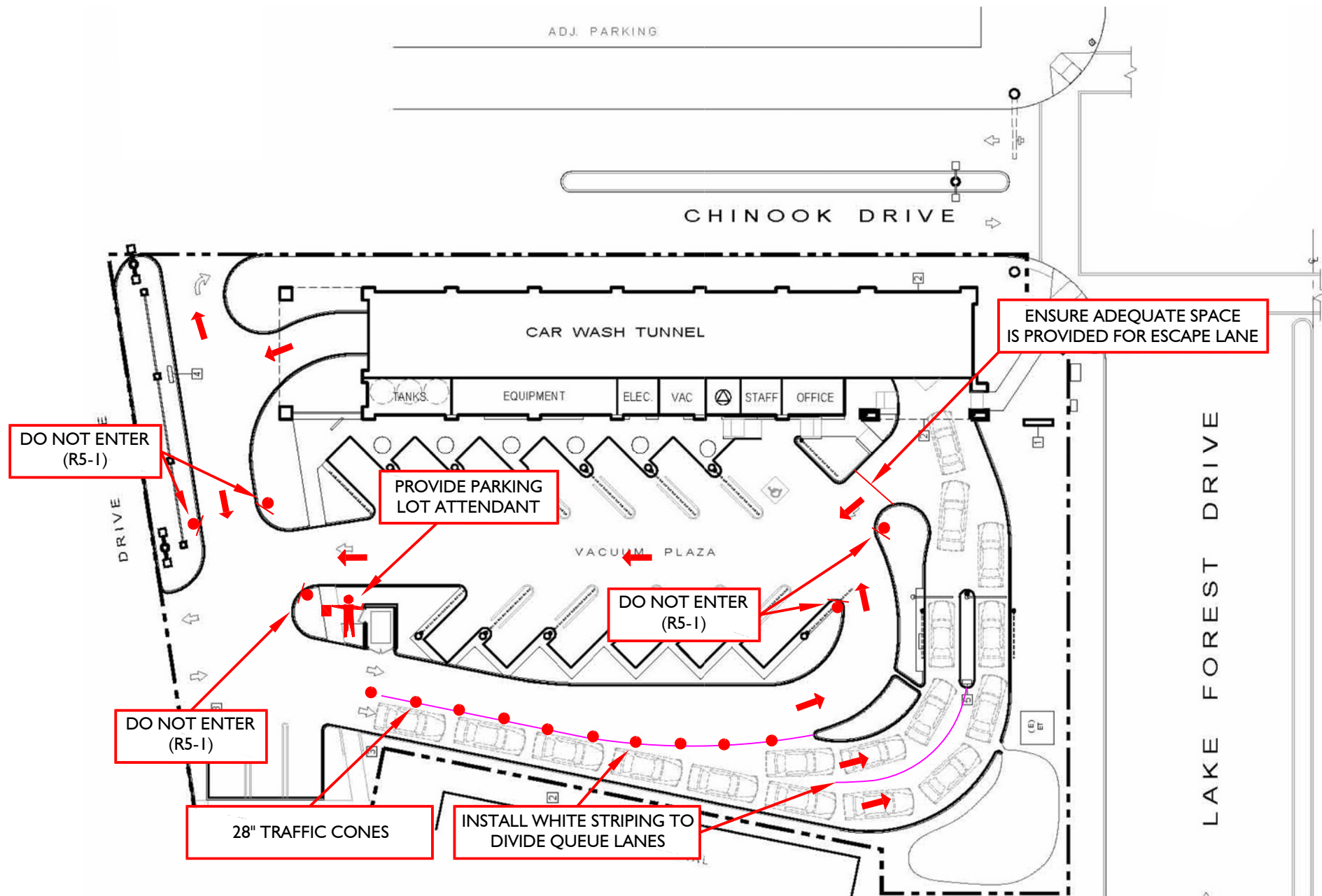


Legend:

 = Project Site Boundary







Appendices

Appendix A

Referenced Car Wash Queuing Data



City: Santa Ana
 Location: Scrub Bot Express, 1807 Main St
 Date: 3/14/2019
 Count Type: Driveway Count

	15-Min			Hourly			Peak Hour		
	Entering	Exiting	Total	In	Out	Total	In	Out	Total
6:00	0	0	0						
6:15	0	0	0						
6:30	0	0	0						
6:45	1	0	1		1	0	12	10	22
7:00	3	1	4		4	1			
7:15	3	1	4		7	2			
7:30	4	5	9		11	7			
7:45	2	3	5		12	10			
8:00	1	2	3		10	11			
8:15	2	1	3		9	11			
8:30	2	1	3		7	7			
8:45	0	1	1		5	5			
9:00	2	5	7		6	8			
9:15	3	3	6		7	10			
9:30	2	0	2		7	9			
9:45	3	4	7		10	12			
10:00	9	9	18		17	16			
10:15	8	3	11		22	16			
10:30	9	9	18		29	25			
10:45	13	5	18		39	26			
11:00	11	9	20		41	26			
11:15	8	6	14		41	29			
11:30	12	7	19		44	27			
11:45	10	8	18		41	30			
12:00	11	7	18		41	28			
12:15	14	9	23		47	31			
12:30	11	11	22		46	35			
12:45	15	15	30		51	42			
13:00	12	13	25		52	48	100		
13:15	8	12	20		46	51			
13:30	12	9	21		47	49			
13:45	13	15	28		45	49			
14:00	12	12	24		45	48			
14:15	10	7	17		47	43			
14:30	8	9	17		43	43			
14:45	8	11	19		38	39			
15:00	14	13	27		40	40			
15:15	9	10	19		39	43			
15:30	8	18	26		39	52			
15:45	8	12	20		39	53			
16:00	12	9	21		37	49			
16:15	8	16	24		36	55	36	55	91
16:30	7	12	19		35	49			
16:45	7	5	12		34	42			
17:00	8	3	11		30	36			
17:15	11	7	18		33	27			
17:30	6	3	9		32	18			
17:45	9	9	18		34	22			
18:00	5	6	11		31	25			
18:15	8	9	17		28	27			
18:30	5	6	11		27	30			
18:45	1	9	10		19	30			
19:00	2	5	7		16	29			
19:15	1	3	4		9	23			
19:30	0	1	1		4	18			
19:45	0	0	0		3	9			
20:00	1	0	1		2	4			
20:15	1	2	3		2	3			
20:30	0	1	1		2	3			
20:45	0	0	0		2	3			
TOTAL	373	372	745						



City: Santa Ana
 Location: Scrub Bot Express, 1807 Main St
 Date: 3/16/2019
 Count Type: Driveway Count

	15-min Count Data			Hourly			Peak Hour		
	Entering	Exiting	Total	In	Out	Total	In	Out	Total
6:00	0	0	0						
6:15	0	0	0						
6:30	1	0	1						
6:45	1	0	1		2	0	2		
7:00	4	0	4		6	0	6		
7:15	6	2	8		12	2	14		
7:30	11	3	14		22	5	27		
7:45	5	7	12		26	12	38		
8:00	4	7	11		26	19	45		
8:15	3	7	10		23	24	47		
8:30	0	1	1		12	22	34		
8:45	1	3	4		8	18	26		
9:00	0	3	3		4	14	18		
9:15	9	2	11		10	9	19		
9:30	9	9	18		19	17	36		
9:45	7	6	13		25	20	45		
10:00	14	13	27		39	30	69		
10:15	16	9	25		46	37	83		
10:30	6	12	18		43	40	83		
10:45	14	12	26		50	46	96		
11:00	10	13	23		46	46	92		
11:15	12	9	21		42	46	88		
11:30	10	14	24		46	48	94		
11:45	14	9	23		46	45	91		
12:00	16	9	25		52	41	93		
12:15	15	11	26		55	43	98		
12:30	15	16	31		60	45	105		
12:45	11	14	25		57	50	107		
13:00	10	14	24		51	55	106		
13:15	13	15	28		49	59	108		
13:30	11	13	24		45	56	101		
13:45	27	23	50		61	65	126	69	64
14:00	18	13	31		69	64	133		133
14:15	1	3	4		57	52	109		
14:30	13	12	25		59	51	110		
14:45	6	7	13		38	35	73		
15:00	11	10	21		31	32	63		
15:15	10	12	22		40	41	81		
15:30	12	15	27		39	44	83		
15:45	9	10	19		42	47	89		
16:00	15	10	25		46	47	93		
16:15	16	10	26		52	45	97		
16:30	6	18	24		46	48	94		
16:45	4	12	16		41	50	91		
17:00	10	8	18		36	48	84		
17:15	15	9	24		35	47	82		
17:30	13	10	23		42	39	81		
17:45	8	16	24		46	43	89		
18:00	17	11	28		53	46	99		
18:15	11	12	23		49	49	98		
18:30	8	6	14		44	45	89		
18:45	2	12	14		38	41	79		
19:00	3	6	9		24	36	60		
19:15	2	5	7		15	29	44		
19:30	2	3	5		9	26	35		
19:45	2	3	5		9	17	26		
20:00	4	1	5		10	12	22		
20:15	2	3	5		10	10	20		
20:30	3	5	8		11	12	23		
20:45	0	0	0		9	9	18		
TOTAL	498	498	996						

City: Santa Ana

Location: Scrub Bot Express, 1807 Main St

Date: 3/14/2019, 3/16/2019

Count Type: Queue Count

Weekday - 3/14/19	
Vehicles in Queue	
12:00	3
12:05	1
12:10	2
12:15	2
12:20	3
12:25	1
12:30	0
12:35	2
12:40	1
12:45	2
12:50	3
12:55	1

3.00

Weekend - 3/16/19	
Vehicles in Queue	
13:15	3
13:20	1
13:25	2
13:30	5
13:35	2
13:40	4
13:45	4
13:50	3
13:55	2
14:00	5
14:05	3
14:10	4

5.00



City: Santa Ana
 Location: Zaroo Express Car Wash, 1205 W. 17th St
 Date: 3/14/2019
 Count Type: Driveway Count

	15-Min			Hourly			Peak Hour		
		Exiting	Total	In	Out	Total	In	Out	Total
7:00	0	0	0						
7:15	0	0	0						
7:30	0	0	0						
7:45	1	0	1		1	0	1		
8:00	4	2	6		5	2	7		
8:15	3	2	5		8	4	12		
8:30	5	4	9		13	8	21		
8:45	3	4	7		15	12	27		
9:00	1	4	5		12	14	26		
9:15	6	1	7		15	13	28		
9:30	2	2	4		12	11	23		
9:45	4	4	8		13	11	24		
10:00	3	6	9		15	13	28		
10:15	3	4	7		12	16	28		
10:30	3	1	4		13	15	28		
10:45	6	2	8		15	13	28		
11:00	5	6	11		17	13	30		
11:15	6	6	12		20	15	35		
11:30	2	5	7		19	19	38		
11:45	11	3	14		24	20	44		
12:00	12	11	23		31	25	56		
12:15	9	6	15		34	25	59		
12:30	6	14	20		38	34	72		
12:45	3	7	10		30	38	68		
13:00	7	3	10		25	30	55		
13:15	3	3	6		19	27	46		
13:30	7	8	15		20	21	41		
13:45	3	4	7		20	18	38		
14:00	5	7	12		18	22	40		
14:15	8	7	15		23	26	49		
14:30	6	3	9		22	21	43		
14:45	13	11	24		32	28	60		
15:00	10	6	16		37	27	64		
15:15	12	8	20		41	28	69		
15:30	14	13	27		49	38	87		
15:45	5	13	18		41	40	81		
16:00	9	9	18		40	43	83		
16:15	14	9	23		42	44	86		
16:30	8	7	15		36	38	74		
16:45	10	14	24		41	39	80		
17:00	4	11	15		36	41	77		
17:15	11	7	18		33	39	72		
17:30	10	10	20		35	42	77		
17:45	6	7	13		31	35	66		
18:00	11	7	18		38	31	69		
18:15	8	8	16		35	32	67		
18:30	11	9	20		36	31	67		
18:45	13	13	26		43	37	80		
19:00	2	9	11		34	39	73		
19:15	8	8	16		34	39	73		
19:30	5	9	14		28	39	67		
19:45	1	4	5		16	30	46		
20:00	0	1	1		14	22	36		
20:15	0	0	0		6	14	20		
20:30	0	0	0		1	5	6		
20:45	0	0	0		0	1	1		
21:00	0	0	0		0	0	0		
21:15	0	0	0		0	0	0		
21:30	0	0	0		0	0	0		
21:45	0	0	0		0	0	0		
TOTAL	322	322	644						



City: Santa Ana
 Location: Zaroo Express Car Wash, 1205 W. 17th St
 Date: 3/16/2019
 Count Type: Driveway Count

	15-Min			Hourly			Peak Hour		
	Entering	Exiting	Total	In	Out	Total	In	Out	Total
7:00	0	0	0						
7:15	0	0	0						
7:30	0	0	0						
7:45	3	0	3		3	0	3		
8:00	10	5	15		13	5	18		
8:15	9	2	11		22	7	29		
8:30	11	10	21		33	17	50		
8:45	9	8	17		39	25	64		
9:00	8	6	14		37	26	63		
9:15	10	9	19		38	33	71		
9:30	10	14	24		37	37	74		
9:45	11	7	18		39	36	75		
10:00	13	14	27		44	44	88		
10:15	21	12	33		55	47	102		
10:30	14	16	30		59	49	108		
10:45	18	11	29		66	53	119		
11:00	17	20	37		70	59	129		
11:15	15	12	27		64	59	123		
11:30	10	15	25		60	58	118		
11:45	22	15	37		64	62	126		
12:00	11	13	24		58	55	113		
12:15	22	22	44		65	65	130		
12:30	18	13	31		73	63	136		
12:45	13	23	36		64	71	135		
13:00	16	10	26		69	68	137		
13:15	16	13	29		63	59	122		
13:30	16	17	33		61	63	124		
13:45	14	14	28		62	54	116		
14:00	8	20	28		54	64	118		
14:15	17	11	28		55	62	117		
14:30	18	23	41		57	68	125		
14:45	17	8	25		60	62	122	69	68
15:00	13	21	34		65	63	128		137
15:15	15	15	30		63	67	130		
15:30	17	10	27		62	54	116		
15:45	12	13	25		57	59	116		
16:00	12	18	30		56	56	112		
16:15	14	10	24		55	51	106		
16:30	12	17	29		50	58	108		
16:45	9	9	18		47	54	101		
17:00	10	12	22		45	48	93		
17:15	12	11	23		43	49	92		
17:30	12	11	23		43	43	86		
17:45	11	11	22		45	45	90		
18:00	12	11	23		47	44	91		
18:15	9	7	16		44	40	84		
18:30	9	18	27		41	47	88		
18:45	8	10	18		38	46	84		
19:00	6	14	20		32	49	81		
19:15	5	6	11		28	48	76		
19:30	2	5	7		21	35	56		
19:45	1	2	3		14	27	41		
20:00	0	2	2		8	15	23		
20:15	0	1	1		3	10	13		
20:30	0	1	1		1	6	7		
20:45	0	0	0		0	4	4		
21:00	0	0	0		0	2	2		
21:15	0	0	0		0	1	1		
21:30	0	0	0		0	0	0		
21:45	0	0	0		0	0	0		
TOTAL	598	598	1196						

City: Santa Ana

Location: Zaroo Express Car Wash, 1205 W. 17th St

Date: 3/14/2019, 3/16/2019

Count Type: Queue Count

Weekday - 3/14/19	
	Vehicles in Queue
14:45	2
14:50	2
14:55	0
15:00	1
15:05	0
15:10	1
15:15	1
15:20	1
15:25	0
15:30	0
15:35	0
15:40	1

Weekend - 3/16/19	
	Vehicles in Queue
12:15	1
12:20	3
12:25	1
12:30	4
12:35	6
12:40	4
12:45	3
12:50	3
12:55	1
13:00	0
13:05	5
13:10	6



City: Santa Ana
Location: Santa Ana Express Cars Wash, 202 E. First St
Date: 3/14/2019
Count Type: Driveway Count

	15-Min			Hourly			Peak Hour		
	Entering	Exiting	Total	In	Out	Total	In	Out	Total
6:00	0	0	0						
6:15	0	0	0						
6:30	2	1	3						
6:45	3	0	3		5	1	6		
7:00	4	3	7		9	4	13		
7:15	2	3	5		11	7	18		
7:30	3	4	7		12	10	22		
7:45	11	2	13		20	12	32	49	49
8:00	11	8	19		27	17	44		98
8:15	15	11	26		40	25	65		
8:30	11	13	24		48	34	82		
8:45	12	17	29		49	49	98		
9:00	3	6	9		41	47	88		
9:15	3	7	10		29	43	72		
9:30	10	6	16		28	36	64		
9:45	9	6	15		25	25	50		
10:00	8	9	17		30	28	58		
10:15	9	11	20		36	32	68		
10:30	11	4	15		37	30	67		
10:45	8	11	19		36	35	71		
11:00	8	9	17		36	35	71		
11:15	13	8	21		40	32	72		
11:30	13	16	29		42	44	86		
11:45	15	15	30		49	48	97		
12:00	17	16	33		58	55	113		
12:15	12	13	25		57	60	117		
12:30	18	11	29		62	55	117		
12:45	19	17	36		66	57	123		
13:00	13	14	27		62	55	117		
13:15	15	13	28		65	55	120		
13:30	13	21	34		60	65	125		
13:45	10	18	28		51	66	117		
14:00	13	10	23		51	62	113		
14:15	14	13	27		50	62	112		
14:30	13	15	28		50	56	106		
14:45	18	13	31		58	51	109		
15:00	20	13	33		65	54	119		
15:15	16	20	36		67	61	128		
15:30	18	14	32		72	60	132		
15:45	17	23	40		71	70	141		
16:00	10	12	22		61	69	130		
16:15	16	13	29		61	62	123		
16:30	12	16	28		55	64	119		
16:45	8	9	17		46	50	96		
17:00	10	9	19		46	47	93	85	70
17:15	20	18	38		50	52	102		155
17:30	18	15	33		56	51	107		
17:45	28	19	47		76	61	137		
18:00	19	18	37		85	70	155		
18:15	16	22	38		81	74	155		
18:30	16	23	39		79	82	161		
18:45	11	17	28		62	80	142		
19:00	12	9	21		55	71	126		
19:15	10	12	22		49	61	110		
19:30	14	14	28		47	52	99		
19:45	13	9	22		49	44	93		
20:00	4	8	12		41	43	84		
20:15	2	5	7		33	36	69		
20:30	5	5	10		24	27	51		
20:45	1	2	3		12	20	32		
TOTAL	675	669	1344						



City: Santa Ana
 Location: Santa Ana Express Cars Wash, 202 E. First St
 Date: 3/16/2019
 Count Type: Driveway Count

	15-Min			Hourly			Peak Hour		
	Entering	Exiting	Total	In	Out	Total	In	Out	Total
6:00	1	0	1						
6:15	0	0	0						
6:30	3	1	4						
6:45	6	0	6		10	1			11
7:00	12	7	19		21	8			29
7:15	21	9	30		42	17			59
7:30	20	13	33		59	29			88
7:45	24	8	32		77	37			114
8:00	22	15	37		87	45			132
8:15	23	21	44		89	57			146
8:30	21	23	44		90	67			157
8:45	24	19	43		90	78			168
9:00	38	42	80		106	105			211
9:15	17	19	36		100	103			203
9:30	23	20	43		102	100			202
9:45	11	11	22		89	92			181
10:00	13	12	25		64	62			126
10:15	27	23	50		74	66			140
10:30	31	26	57		82	72			154
10:45	31	30	61		102	91			193
11:00	28	33	61		117	112			229
11:15	21	24	45		111	113			224
11:30	30	22	52		110	109			219
11:45	22	25	47		101	104			205
12:00	31	26	57		104	97			201
12:15	35	35	70		118	108			226
12:30	28	24	52		116	110			226
12:45	21	29	50		115	114			229
13:00	27	30	57		111	118			229
13:15	27	17	44		103	100			203
13:30	17	17	34		92	93			185
13:45	34	26	60		105	90	111	118	229
14:00	29	20	49		107	80			187
14:15	29	29	58		109	92			201
14:30	25	27	52		117	102			219
14:45	21	27	48		104	103			207
15:00	25	29	54		100	112			212
15:15	21	18	39		92	101			193
15:30	33	26	59		100	100			200
15:45	22	24	46		101	97			198
16:00	31	28	59		107	96			203
16:15	23	28	51		109	106			215
16:30	23	25	48		99	105			204
16:45	25	25	50		102	106			208
17:00	24	23	47		95	101			196
17:15	19	29	48		91	102			193
17:30	30	19	49		98	96			194
17:45	26	27	53		99	98			197
18:00	20	27	47		95	102			197
18:15	24	27	51		100	100			200
18:30	12	22	34		82	103			185
18:45	16	23	39		72	99			171
19:00	17	14	31		69	86			155
19:15	11	18	29		56	77			133
19:30	5	15	20		49	70			119
19:45	13	13	26		46	60			106
20:00	11	14	25		40	60			100
20:15	9	11	20		38	53			91
20:30	7	12	19		40	50			90
20:45	3	10	13		30	47			77
TOTAL	1243	1217	2460						

City: Santa Ana

Location: Santa Ana Express Car Wash, 202 E. First St

Date: 3/14/2019, 3/16/2019

Count Type: Queue Count

	Weekday - 3/14/19
	Vehicles in Queue
17:45	3
17:50	2
17:55	3
18:00	2
18:05	2
18:10	1
18:15	4
18:20	1
18:25	1
18:30	3
18:35	5
18:40	4

	Weekend - 3/16/19
	Vehicles in Queue
12:00	3
12:05	7
12:10	4
12:15	4
12:20	8
12:25	10
12:30	13
12:35	11
12:40	14
12:45	13
12:50	14
12:55	9