

# TRAFFIC IMPACT STUDY

**CORONA COMMERCIAL PROJECT  
CITY OF CORONA  
RIVERSIDE COUNTY, CALIFORNIA**

This Traffic Impact Analysis has been prepared under the supervision of  
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# LSA

June 2020

# EXHIBIT J

# **TRAFFIC IMPACT STUDY**

**CORONA COMMERCIAL PROJECT**

**CITY OF CORONA**

**RIVERSIDE COUNTY, CALIFORNIA**

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Project No. CZ11902



June 2020

## EXECUTIVE SUMMARY

The proposed Corona Commercial Project will include an express car wash (a Quick Quack Car Wash), two fast-food restaurants with drive-through windows (a Raising Cane's Chicken Fingers and a Habit Burger Grill), and a high turnover sit-down restaurant. The project site is located near the corner of the intersection of Main Street and Parkridge Avenue in the City of Corona. Access to the project site will be provided via two driveways, one on Parkridge Avenue and the other on Main Street. Both the driveways will operate as full-access driveways. The project is anticipated to be completed and in operation no later than year 2021.

The proposed project is anticipated to generate 40 net trips in the a.m. peak hour, 189 net trips in the p.m. peak hour, and 2,356 net daily trips.

The study area for the project was finalized based on the criteria stated in the City of Corona Public Works Department *Traffic Impact Study Guidelines* and discussions with City staff. The study area includes five intersections and four roadway segments.

The City's guidelines require traffic conditions to be analyzed for the weekday peak hour conditions for intersections and weekday daily conditions for segments. Therefore, traffic conditions were examined for the weekday daily, a.m., and p.m. peak hour conditions under the following scenarios:

- Existing Conditions;
- Existing with Project Conditions;
- Project Opening Year (2021) without Project Conditions; and
- Project Opening Year (2021) with Project Conditions.

## EXISTING CONDITIONS SUMMARY

Based on the significance criteria as discussed in the "Significance Threshold" section of this report, all study intersections and roadway segments are forecast to operate at a satisfactory LOS under existing without and with project conditions. Therefore, the project will not have any potentially significant impacts requiring mitigations. Additionally, with the implementation of the project design features along Main Street and Parkridge Avenue, the project will actually improve the overall traffic operations as compared to anticipated conditions without the project.

Queues for some of the turn movements at study area intersections are projected to exceed the existing available turn-pocket storage lengths both under existing without and with project conditions. However, this can be resolved by providing adequate storage lengths for such turn movements as recommended as part of the project improvements. At the intersection of DPSS Building Driveway – Cota Street/Parkridge Avenue, for the westbound left-turn queue, there is adequate storage room available along the first through lane to accommodate the additional queuing. The project is adding a second through lane along Parkridge Avenue that will help alleviate any minor spillover queuing concerns. Additionally, as shown in the queuing analysis results, the westbound left-turn queue will not block the eastbound left-turn movement at Project Driveway 1.

## PROJECT OPENING YEAR (2021) CONDITIONS SUMMARY

Based on the significance criteria as discussed in the “Significance Threshold” section of this report, all study intersections are forecast to operate at a satisfactory LOS under project opening year without and with project conditions. Though two roadway segments are forecast to operate at an unsatisfactory LOS under project opening year without project conditions, all roadway segments are forecast to operate at a satisfactory LOS under project opening year with project conditions due to improvements constructed as part of the project. Therefore, the project shall not have any potentially significant impacts requiring mitigations. Additionally, with the implementation of the project design features along Main Street and Parkridge Avenue, the project will actually improve the overall traffic operations as compared to anticipated conditions without the project.

Queues for some of the turn movements at study area intersections are projected to exceed the existing available turn-pocket storage lengths both under project opening year without and with project conditions. However, this can be resolved by providing adequate storage lengths for such turn movements as recommended as part of the project improvements. At the intersection of DPSS Building Driveway – Cota Street/Parkridge Avenue, for the westbound left-turn queue, there is adequate storage room available along the first through lane to accommodate the additional queuing. The project is adding a second through lane along Parkridge Avenue that will help alleviate any minor spillover queuing concerns. Additionally, as shown in the queuing analysis results, the westbound left-turn queue will not block the eastbound left-turn movement at Project Driveway 1.

## VMT EVALUATION

As stated in the *Draft City of Corona CEQA Assessment – VMT Analysis Guidelines* (dated November 15, 2018), projects, such as local-serving retail less than 50,000 square feet, which serve the local community and have the potential to reduce VMT, are exempted from a VMT assessment. Since this project has a much lower square footage (12,264 square feet for all uses combined) than the above threshold, a detailed VMT analysis is not required for this project.

## DRIVE-THROUGH STACKING ANALYSIS

Weekday and weekend queuing assessments were performed for all the three proposed facilities (Habit Burger, Raising Cane’s, and Quick Quack) to analyze the potential drive-through queuing that could be expected behind the pick-up window (for the Habit Burger and Raising Cane’s) and order board (for the Quick Quack).

Based on the stacking analysis, the proposed site plan provides sufficient on-site vehicle queue storage at the drive-through for each of the three proposed facilities.

## INTERNAL SITE CIRCULATION ANALYSIS

Trash pick-up trucks will not interfere with the drive-through operations for any of the facilities or the overall site circulation. Waste Management, Inc. (the applicable vendor for this project) has approved the trash enclosures and their locations, as well as the travel routes for trash pick-up trucks within the project site.

Since loading and unloading for each facility will occur during the non-operational hours for each facility, there will be no circulation issues.

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- C: VOLUME DEVELOPMENT WORKSHEETS
- D: LEVEL OF SERVICE WORKSHEETS
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- F: STACKING COUNT SHEETS
- G: RAISING CANE'S QUEUING ANALYSIS STUDY
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## 1.0 INTRODUCTION

This Traffic Impact Study (TIS) has been prepared to assess the potential circulation impacts associated with the proposed Corona Commercial Project (project) to be located near the corner of the intersection of Main Street and Parkridge Avenue in the City of Corona (City). Figure 1-1 illustrates the regional and project location. (Figures and tables are located at the end of each chapter.) The project will be open no later than the year 2021.

This report is intended to satisfy the requirements established by the City of Corona Public Works Department *Traffic Impact Study Guidelines* (dated July 2006), as well as the requirements for the disclosure of potential impacts and mitigation measures pursuant to the California Environmental Quality Act (CEQA). The scope of work for this TIS, including trip generation, trip distribution, study area, and analysis methodologies, is consistent with the Scoping Agreement set forth in Appendix A.

The City's guidelines require traffic conditions to be analyzed for the weekday peak hour conditions for intersections and weekday daily conditions for segments. Therefore, this study examines traffic operations in the vicinity of the proposed project under the following four scenarios:

- Existing Conditions;
- Existing with Project Conditions;
- Project Opening Year (2021) without Project Conditions; and
- Project Opening Year (2021) with Project Conditions.

Traffic conditions were examined for the weekday daily, a.m., and p.m. peak hour conditions. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 6:00 and 9:00 a.m. The p.m. peak hour is the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m. Roadway segments were analyzed using daily volume counts and comparisons were made to the daily service volume standards provided by the City.

### 1.1 PROJECT DESCRIPTION

The proposed project will include an express car wash, two fast-food restaurants with drive-through windows, and a high turnover sit-down restaurant. Access to the project site will be provided via two driveways; one on Parkridge Avenue and the other on Main Street. Both the driveways will be full-access driveways. Figure 1-2 illustrates the conceptual site plan for the project. The sit-down restaurant will be located in Pad A. The fast-food restaurants will be located in pads B and D. The potential tenant for Pad B will be Raising Cane's Chicken Fingers and that for Pad D will be The Habit Burger Grill. The car wash will be located in Pad C. The potential tenant for the car wash will be Quick Quack Car Wash.

### 1.2 STUDY AREA

The study area is consistent with the City's Scoping Agreement (Appendix A). Based on the City's TIS Guidelines, the study area shall generally include any key intersection of "Collector" or higher classification street with "Collector" or higher classification streets, on which the proposed project

will add 50 or more peak hour trips. Roadway segments adjacent to the project and between study intersection and/or project driveways also need to be analyzed. As such, the following intersections and roadway segments have been included in the study.

### 1.2.1 Study Intersections

1. Riverside County Department of Public Social Services (DPSS) Building Driveway – Cota Street/Parkridge Avenue (Norco/Corona);
2. Project Driveway 1 – Shopping Center Driveway/Parkridge Avenue (Corona);
3. Hamner Avenue/Mountain Avenue – Hidden Valley Parkway (Norco);
4. Project Driveway 2 – Alamilla’s Driveway/Main Street (Corona); and
5. Main Street/Parkridge Avenue (Corona).

Figure 1-3 illustrates the locations of all analysis intersections.

### 1.2.2 Roadway Segments

1. Parkridge Avenue between DPSS Building Driveway – Cota Street and Project Driveway 1 – Shopping Center Driveway (Corona);
2. Parkridge Avenue between Project Driveway 1 – Shopping Center Driveway and Main Street (Corona);
3. Main Street – Hamner Avenue between Mountain Avenue – Hidden Valley Parkway and Project Driveway 2- Alamilla’s Driveway (Norco/Corona); and
4. Main Street between Project Driveway 2 – Alamilla’s Driveway and Parkridge Avenue (Corona).

## 1.3 LIST OF CHAPTER 1.0 FIGURES

- Figure 1-1: Regional and Project Location
- Figure 1-2: Conceptual Site Plan
- Figure 1-3: Study Area Intersections

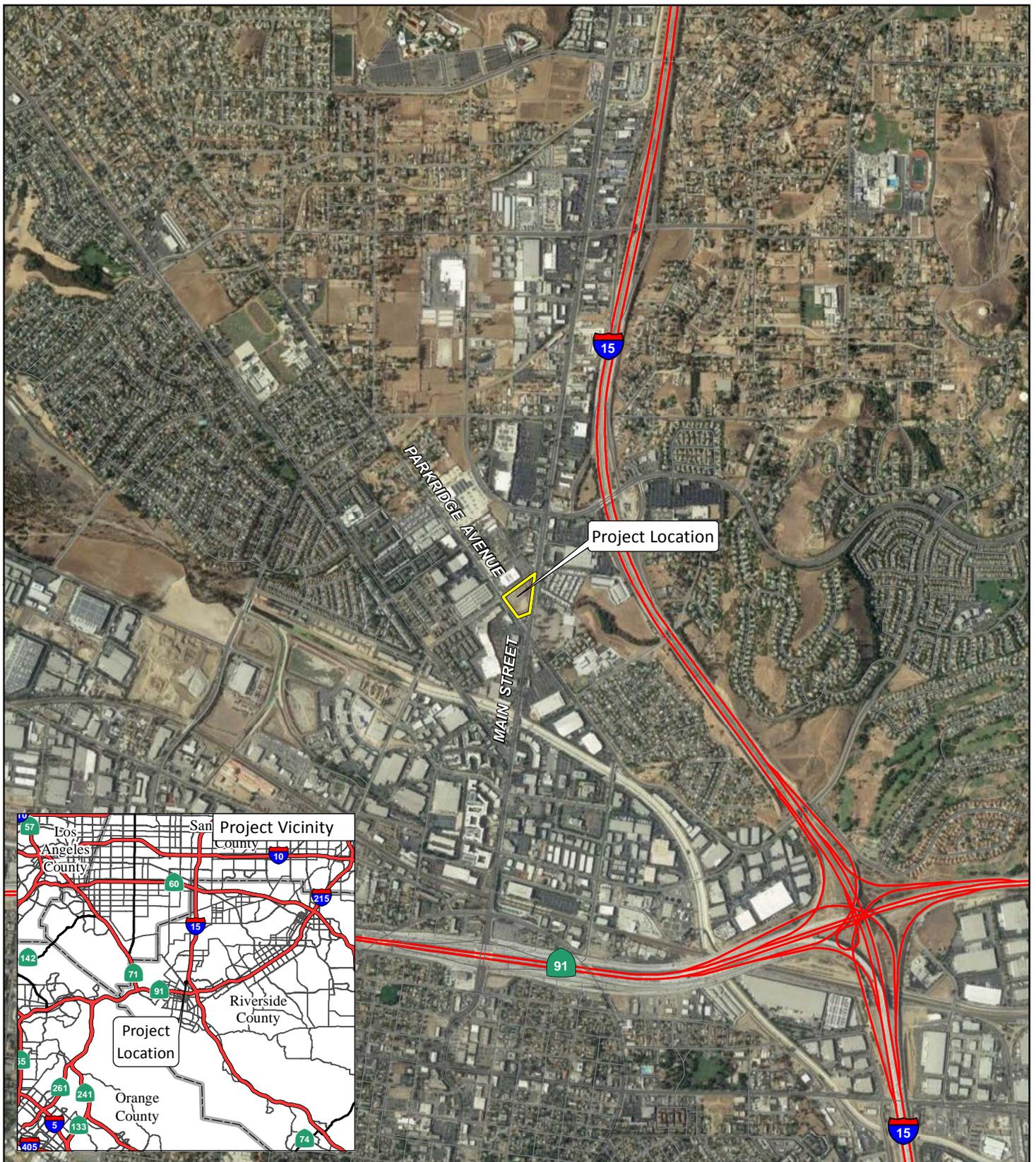
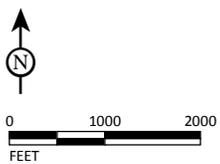


FIGURE 1-1

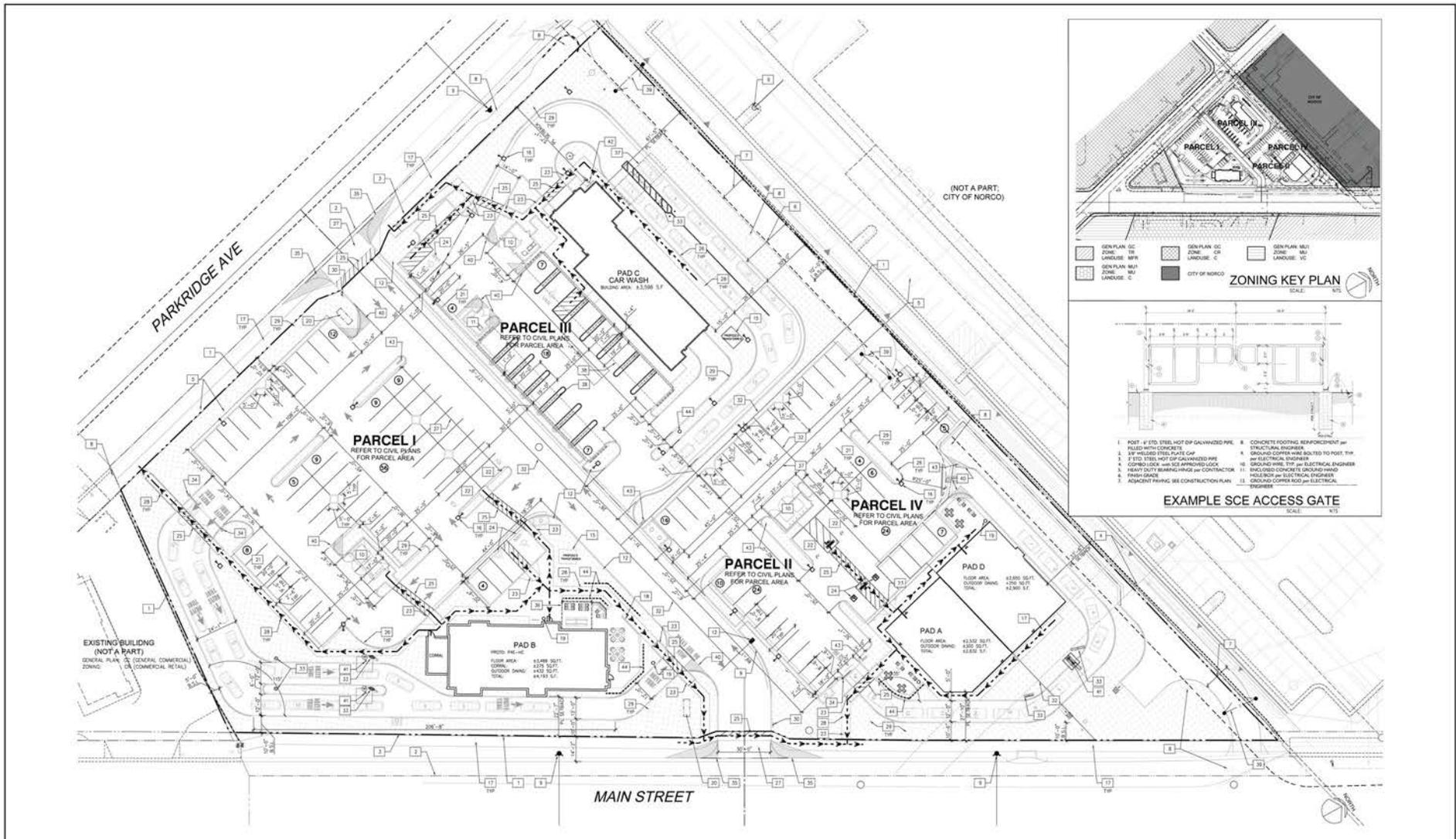
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SOURCE: ESRI Streetmap, 2013; Google Earth, 2018.

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Corona Commercial Project  
 Traffic Impact Study  
 Regional and Project Location



LSA

FIGURE 1-2

Corona Commercial Project  
Traffic Impact Study

Conceptual Site Plan

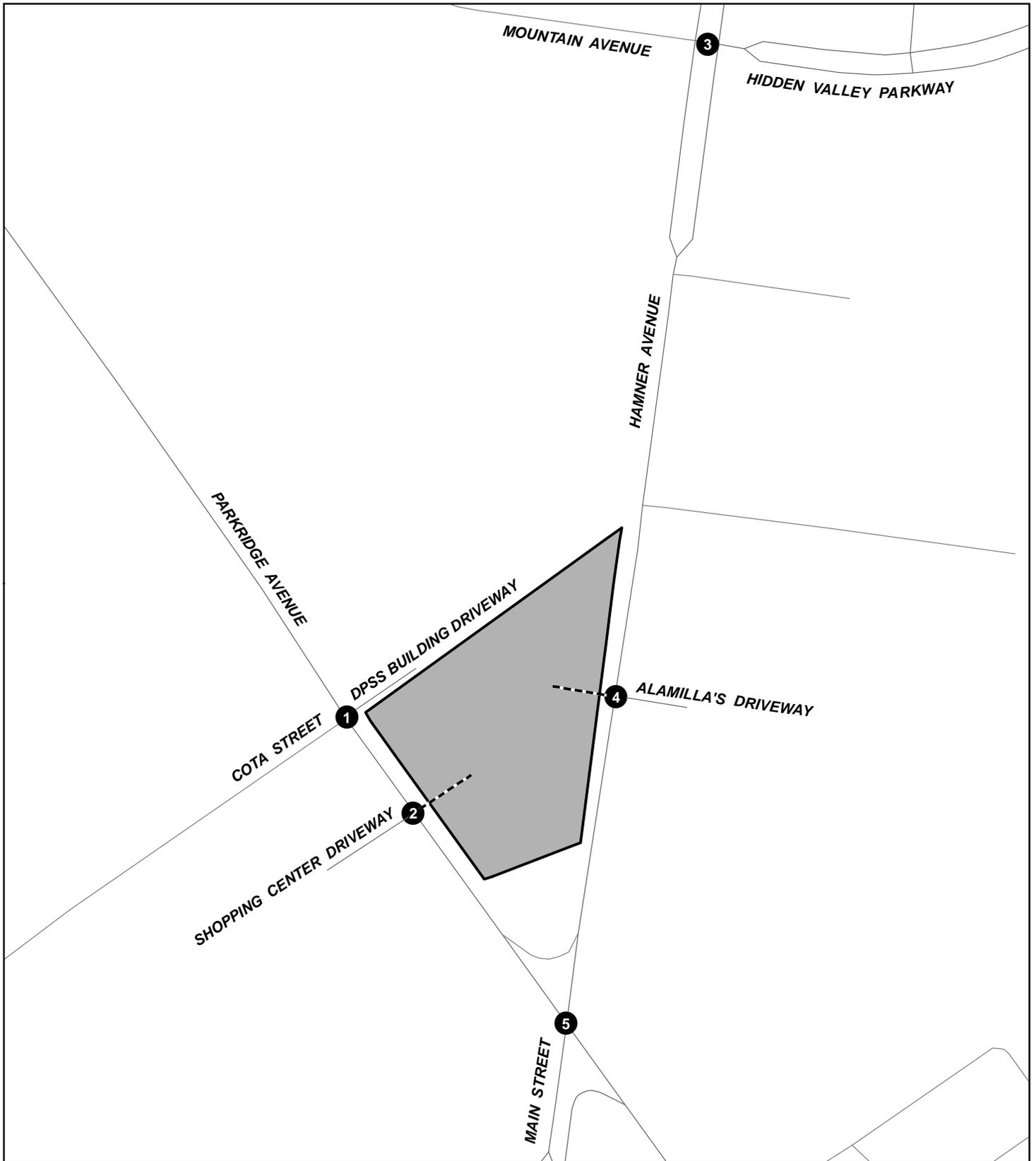


FIGURE 1-3

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LEGEND

- Project Site
- Study Area Intersection
- Project Driveway



SOURCE: ESRI Streetmap, 2013.

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Corona Commercial Project  
 Traffic Impact Study  
 Study Area Intersections

## 2.0 ANALYSIS METHODOLOGY

### 2.1 LEVEL OF SERVICE DEFINITIONS

Level of service (LOS) can be characterized for the whole intersection, each intersection approach, and by each lane group. Control delay alone is used to characterize LOS for the entire intersection. Control delay quantifies the increase in travel time due to the traffic signal control, and is a surrogate measure of driver discomfort and fuel consumption.

A complete description of the meaning of LOS can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual* (HCM). The HCM establishes LOS A through F for intersections. A description of LOS for signalized and unsignalized intersections is summarized in Table 2-A. A description of LOS for roadway segments is summarized in Table 2-B.

Table 2-C shows the LOS criteria for unsignalized and signalized intersections. Table 2-D summarizes the LOS criteria used to evaluate roadway segments based on the daily capacity for each functional classification as per the City's TIS guidelines. The daily traffic volumes represent the total vehicles (both directions) traveling on a roadway segment within 24 hours.

For all study area intersections, the *Highway Capacity Manual 6<sup>th</sup> Edition* (HCM 6) analysis methodologies were used to determine intersection LOS. Intersection LOS was calculated using Synchro 10 software, which uses the HCM 6 methodologies.

### 2.2 LEVEL OF SERVICE PROCEDURES AND THRESHOLDS

Study intersections and roadway segments analyzed in this report are under the jurisdiction of the cities of Corona and Norco. The following level of service thresholds have been stated in the City of Corona TIS guidelines:

- LOS C or better for local intersections in residential/industrial areas.
- LOS D or better on collector and arterial intersections.
- LOS E is permitted for the following intersections:
  - Lincoln Avenue at State Route 91 (SR-91);
  - Main Street at SR-91;
  - McKinley Avenue at SR-91;
  - Hidden Valley Parkway at Interstate 15 (I-15);
  - Cajalco Road at I-15;
  - Weirick Road at I-15; and
  - Other locations as approved by the City Engineer.

As stated in Policy 6.1.6 of the *City of Corona General Plan* (adopted March 2004), for roadway segments in Corona, LOS C has been considered as the standard for local and collector streets in

residential areas, LOS D has been considered as the standard for arterial streets, and LOS E at some key locations, such as heavily traveled freeway interchanges. The City of Norco uses LOS D as its minimum level of service criterion for intersections and roadway segments.

### 2.3 PROJECT SIGNIFICANCE THRESHOLD

At study intersections and roadway segments under the jurisdiction of the City, the determination of a significant circulation impact occurs at study intersections or roadway segments where the LOS falls below the acceptable threshold or if the project contributes to an existing deficiency.

Since the City of Norco does not have its own TIA guidelines, for study intersections and roadway segments under its jurisdictions, the determination of a significant circulation impact is based on the impact criteria contained in the Riverside County Transportation Department *Traffic Impact Analysis Preparation Guide* (dated April 2008), which states that a significant impact occurs at a study intersection or roadway segment when the peak hour LOS falls below the target LOS with the addition of project traffic or when a project contributes to an unsatisfactory condition.

### 2.4 LIST OF CHAPTER 2.0 TABLES

- Table 2-A: Intersection Level of Service Definitions
- Table 2-B: Roadway Segment Level of Service Definitions
- Table 2-C: Level of Service Criteria for Unsignalized and Signalized Intersections
- Table 2-D: Roadway Segment Capacity and Levels of Service

**Table 2-A: Intersection Level of Service Definitions**

LOS	Description
A	Traffic operations with a control delay of 10 seconds per vehicle or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If LOS A is the result of favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
B	Traffic operations with control delay between 10 seconds per vehicle and 20 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
C	Traffic operations with control delay between 20 and 35 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of the insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
D	Traffic operations with control delay between 35 and 55 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
E	Traffic operations with control delay between 55 and 80 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
F	Traffic operations with control delay exceeding 80 seconds per vehicle or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: *Highway Capacity Manual* (6<sup>th</sup> Edition)

**Table 2-B: Roadway Segment Level of Service Definitions**

LOS	Description
A	Describes primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control Delay at the boundary intersection is minimal. The travel speed exceeds 80% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
B	Describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted, and control delay at the boundary is not significant. The travel speed is between 67% and 80% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
C	Describes stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersection may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
D	Indicates a less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
E	Characterized by unstable operation and significant delay. Such operations may be due to some combination of adverse progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
F	Characterized by flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is between 30% or less of the base free-flow speed, and the volume-to-capacity ratio is greater than 1.0.

Source: *Highway Capacity Manual* (6<sup>th</sup> Edition)

**Table 2-C: Level of Service Criteria for Unsignalized and Signalized Intersections**

Level of Service	Unsignalized Intersection Average Delay per Vehicle (sec.)	Signalized Intersection Average Delay per Vehicle (sec.)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Source: *Highway Capacity Manual* (6<sup>th</sup> Edition)

**Table 2-D: Roadway Segment Capacity and Levels of Service**

Type of Roadway	Maximum Two-Way Traffic Volume (ADT)			
	Number of Lanes	LOS C	LOS D	LOS E
Collector	2	10,400	11,700	13,000
Secondary	4	20,700	23,300	25,900
Major	4	27,300	30,700	34,100
Arterial	2	14,400	16,200	18,000
Arterial	4	28,700	32,300	35,900
Mountain Arterial	2	12,900	14,500	16,100
Mountain Arterial	3	16,700	18,800	20,900
Mountain Arterial	4	29,800	33,500	37,200
Urban Arterial	4	28,700	32,300	35,900
Urban Arterial	6	43,100	48,500	53,900
Urban Arterial	8	57,400	64,600	71,800
Expressway	4	32,700	36,800	40,900
Expressway	6	49,000	55,200	61,300
Expressway	8	65,400	73,500	81,700
Freeway	4	61,200	68,900	76,500
Freeway	6	94,000	105,800	117,500
Freeway	8	128,400	144,500	160,500
Freeway	10	160,500	180,500	200,600
Ramp	1	16,000	18,000	20,000

Source: City of Corona Public Works Department *Traffic Impact Study Guidelines* (dated July 2006)

## 3.0 CIRCULATION NETWORK SETTING

### 3.1 EXISTING CIRCULATION NETWORK

Figure 3-1 illustrates existing study intersection geometrics and traffic control. Within the City of Corona, all major roadways are classified based on the roadway functional classifications in the City's General Plan. Figure 3-2 illustrates roadway classifications as per the City's General Plan. Table 3-A summarizes the classifications and the number of mid-block arterial lanes on major roadways in the TIS study area. Following is a brief description of these roadways:

- **Parkridge Avenue:** Based on the City's General Plan, Parkridge Avenue is classified as Secondary. Within the study area, Parkridge Avenue is a three-lane divided road (two eastbound lanes and one westbound lane) with a two-way left-turn median. There are shared bike lanes in this segment. However, there is no provision for on-street parking.
- **Main Street – Hamner Avenue:** Based on the City's General Plan, Main Street – Hamner Avenue is classified as a Major Arterial. Within the study area, it is a four-lane divided road, with a raised median between Mountain Avenue – Hidden Valley Parkway and Gateway Market Place and a two-way left-turn median. There are no bike lanes or on-street parking in this segment.

### 3.2 EXISTING WITH PROJECT CIRCULATION NETWORK

The project will implement improvements along its frontages on Main Street and Parkridge Avenue. Figure 3-3 illustrates the conceptual striping plan with all the project improvements. As shown in Figure 3-3, the project would widen both Main Street and Parkridge Avenue to their full cross-sections and construct curbs, gutters, and sidewalks along the project frontages on these roads. The project would construct an additional southbound lane along Main Street, while on Parkridge Avenue, it will construct an additional westbound lane. On Main Street, the additional southbound lane would be added along the project frontage and the striping will be merged with the existing striping that extends till Gateway Marketplace in the north. Within these limits, slurry seal is not necessary where deviation from existing striping does not occur. Along Parkridge Avenue, paving will be required to widen the street in the northwest side along the project frontage. Additionally, as illustrated in Figure 3-3, the project will be removing the two-way-left-turn lane (TWLTL) along the project frontage up to east of the project driveway and adding a turn pocket of 25 feet for the eastbound left-turn ingress movement into the project site. Figure 3-4 illustrates existing with project study intersection geometrics and traffic control.

### 3.3 BICYCLE, PEDESTRIAN, AND TRANSIT FACILITIES

Figure 3-5 illustrates the planned bicycle facilities in the City and shows that a Class III bike route is proposed along Main Street within the study area. Pedestrian facilities include sidewalks, pedestrian trails, and multi-purpose trails.

Public transit plays a key role in the City's circulation system. Much of the available public transportation in the City is provided by the Riverside Transit Agency (RTA) via fixed route bus services. The City provides transit services through the Corona Cruiser, the local fixed route bus service. The nearest bus stop is located at the intersection of Main Street/Parkridge Avenue. The

RTA Route 3 and the Corona Cruiser Blue Route run along the project site. Commuter rail service in the City is provided by Metrolink; the North Main Corona Metrolink station is located about a mile away from the site. Another element of transit is demand-responsive service, which operates on an “as-needed” and “where needed” basis rather than on fixed routes and schedules. Figure 3-6 illustrates the fixed route transit services operating within the City.

### **3.4 LIST OF CHAPTER 3.0 FIGURES AND TABLES**

- Figure 3-1: Existing Study Intersection Geometrics and Traffic Control
- Figure 3-2: Roadway Functional Classification System – City of Corona
- Figure 3-3: Conceptual Striping Plan
- Figure 3-4: Existing with Project Study Intersection Geometrics and Traffic Control
- Figure 3-5: Planned Bicycle Facilities – City of Corona
- Figure 3-6: Public Transit – City of Corona
- Table 3-A: City of Corona General Plan Roadway Segment Classification

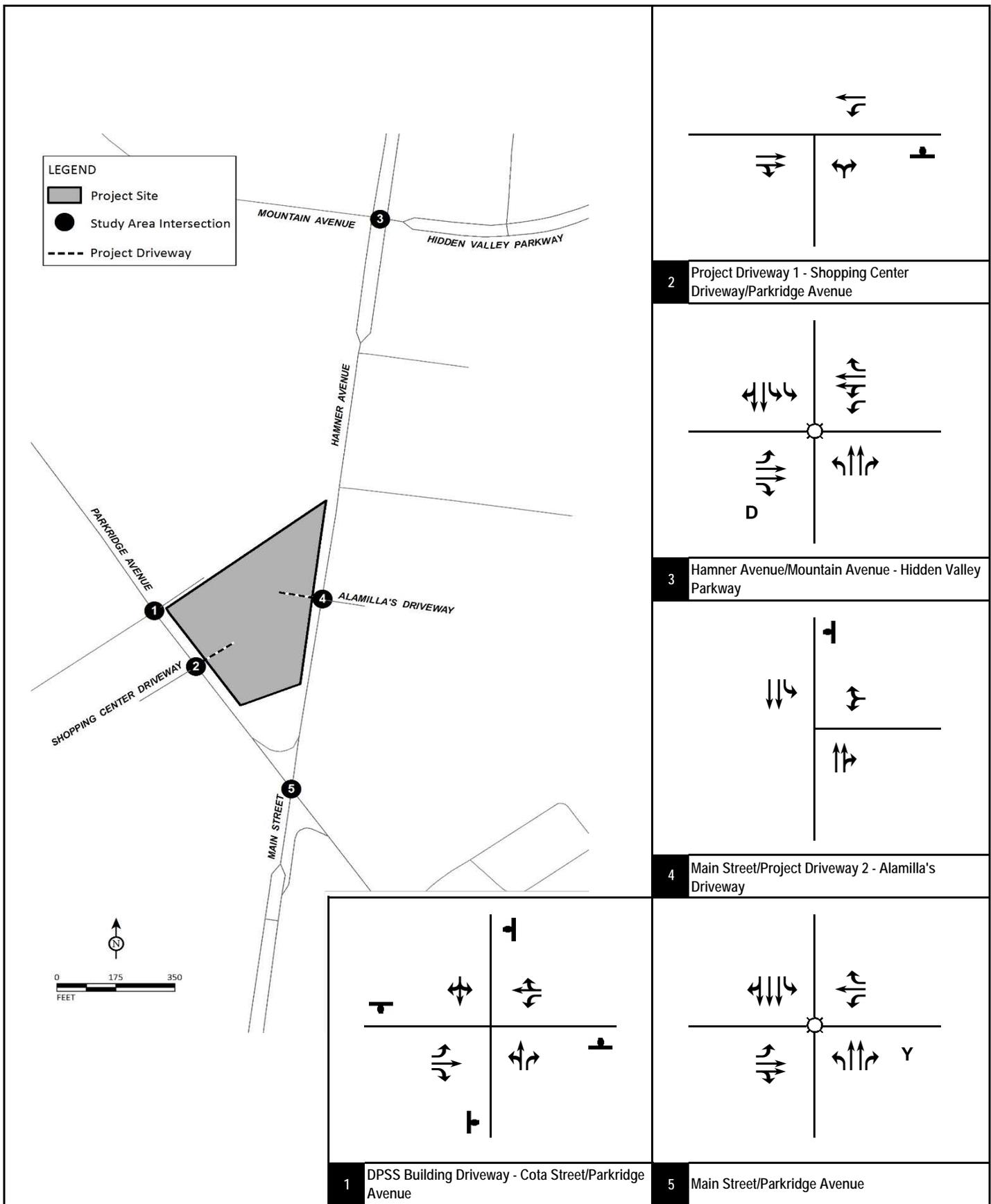


FIGURE 3-1



Legend

Stop Sign

D De-facto Right Turn

Signal

Y Yield

Corona Commercial Project  
Traffic Impact Study

Existing Study Intersection Geometrics and Traffic Control

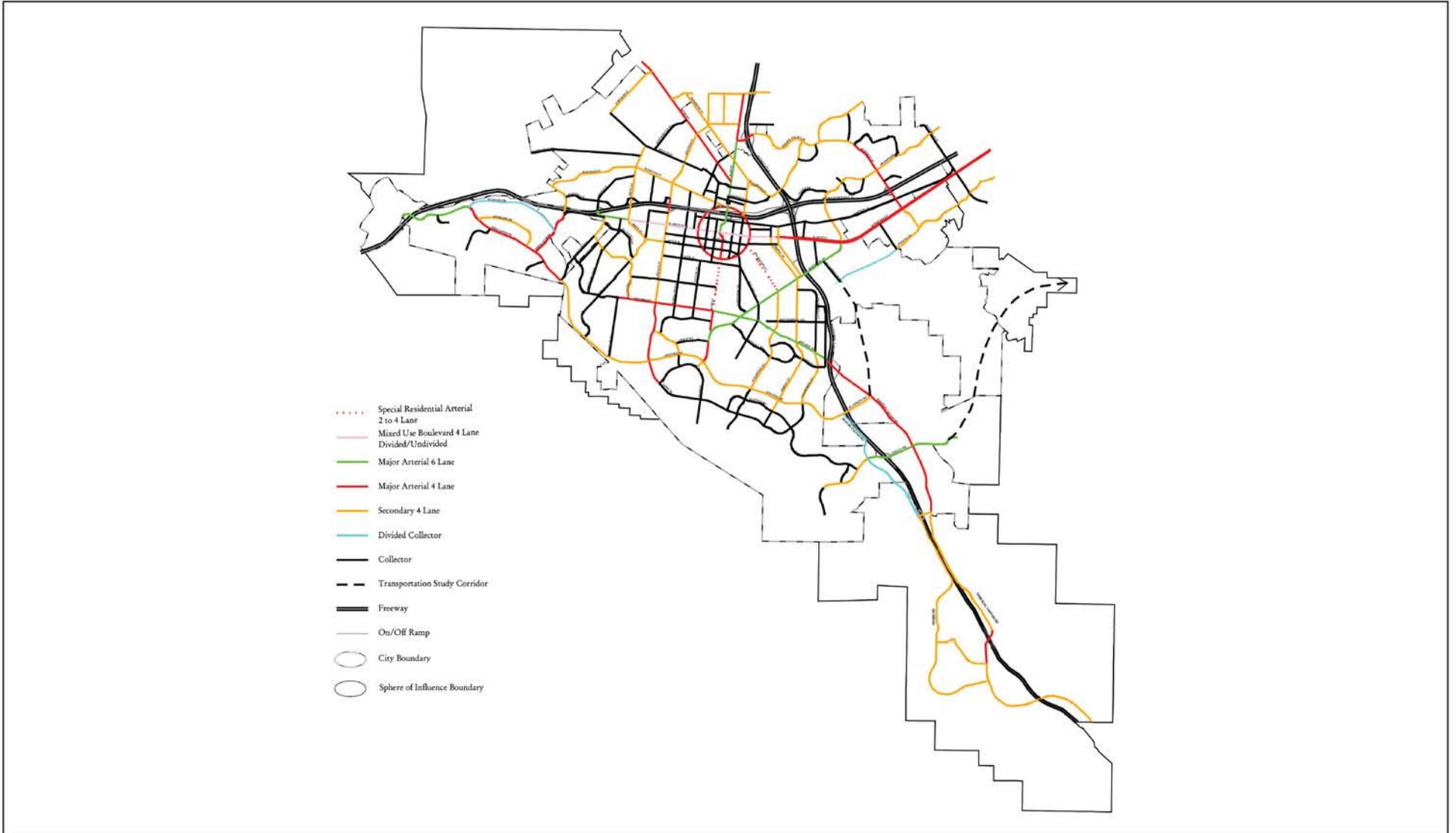


FIGURE 3-2

LSA



Corona Commercial Project  
 Traffic Impact Study

Roadway Functional Classification System - City of Corona



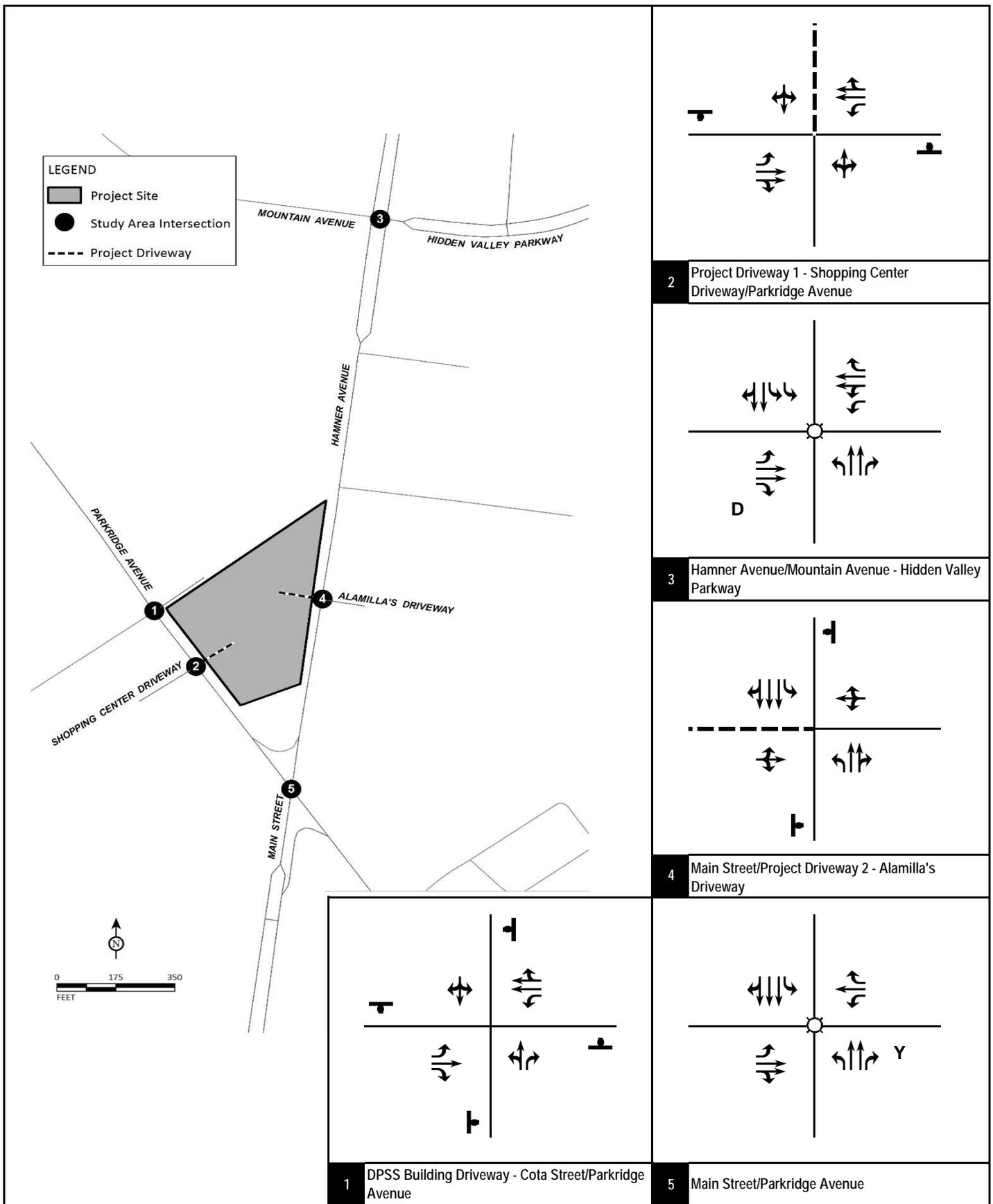


FIGURE 3-4



Legend

⊥ Stop Sign

D De-facto Right Turn

⊙ Signal

Y Yield

Existing with Project Study Intersection Geometrics and Traffic Control

Corona Commercial Project  
Traffic Impact Study

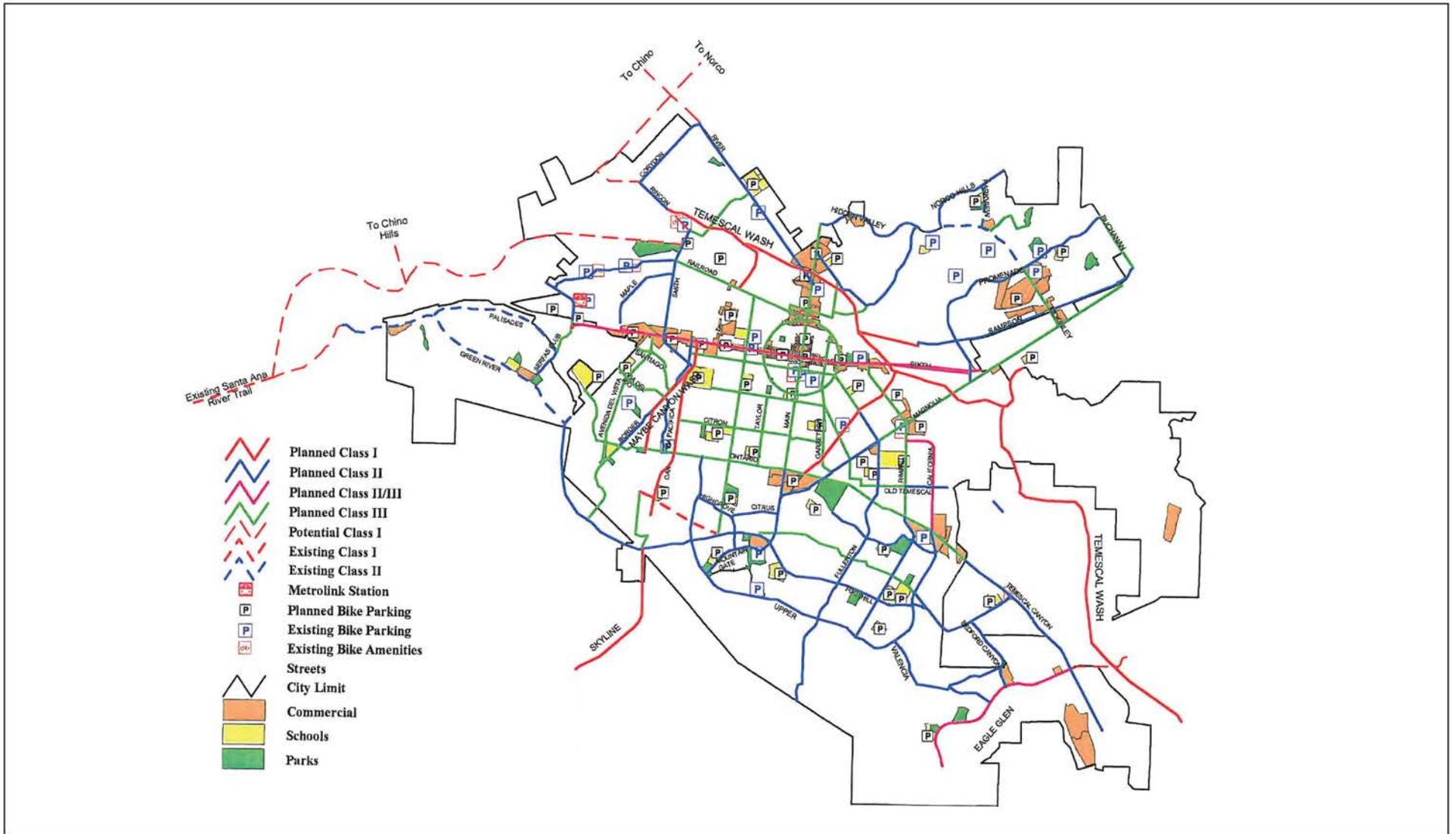


FIGURE 3-5

LSA



Corona Commercial Project  
Traffic Impact Study

Planned Bicycle Facilities - City of Corona

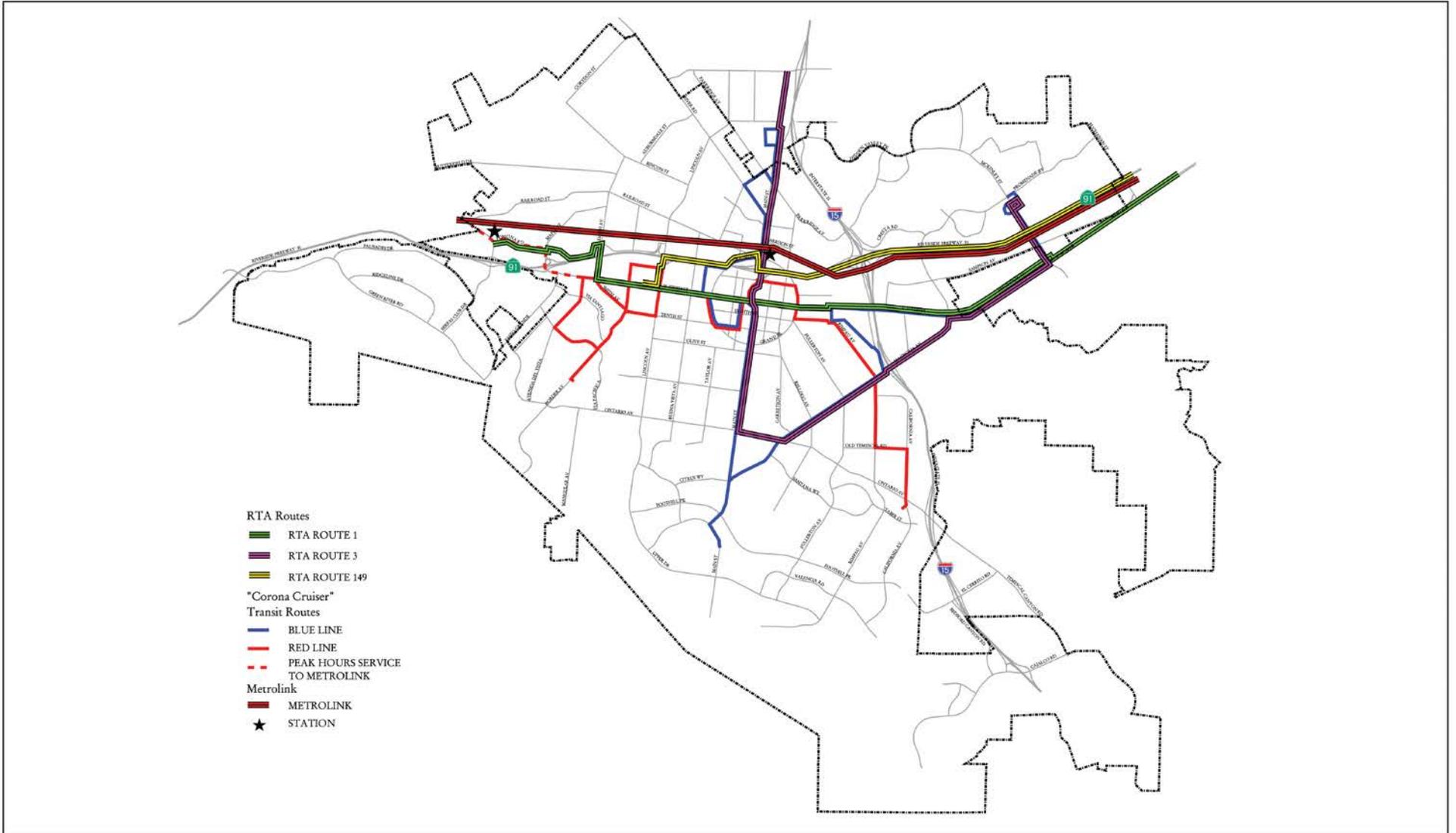


FIGURE 3-6

LSA



Corona Commercial Project  
Traffic Impact Study

Public Transit - City of Corona

**Table 3-A - City of Corona General Plan Roadway Segment Classification**

Roadway	#	Segment	Existing Condition Number of Lanes	Existing with Project Condition Number of Lanes	Jurisdiction	General Plan Classification <sup>4</sup>
Parkridge Avenue	1	between DPSS Building Driveway - Cota Street and Project Driveway 1 - Shopping Center Driveway <sup>1</sup>	3	4	Corona	Secondary
	2	between Project Driveway 1 - Shopping Center Driveway and Main Street <sup>1</sup>	3	4	Corona	Secondary
Main Street - Hamner Avenue	3	between Mountain Avenue – Hidden Valley Parkway and Project Driveway 2 – Alamilla’s Driveway <sup>2</sup>	4	5	Norco/Corona	Major Arterial
Main Street	4	between Project Driveway 2 – Alamilla’s Driveway and Parkridge Avenue <sup>3</sup>	4	5	Corona	Major Arterial

**Notes:**

<sup>1</sup>This segment has 3 lanes under existing conditions. However, there will be an additional westbound lane under with project conditions. Hence, under with project conditions, the segment will have 4 lanes.

<sup>2</sup>Under existing conditions, this segment has 5 lanes between Mountain Avenue - Hamner Avenue and Gateway Market Place and 4 lanes between Gateway Market Place and Project Driveway 2 - Alamilla's Driveway. However, there will be an additional southbound lane along the project frontage under with project conditions. Hence, under with project conditions, the segment will have 5 lanes throughout.

<sup>3</sup>This segment has 4 lanes under existing conditions. However, there will be an additional southbound lane along the project frontage under with project conditions. Hence, under with project conditions, the segment will have 5 lanes.

<sup>4</sup>Classifications for the segments have been obtained from the *City of Corona General Plan*, adopted March 17, 2004.

## 4.0 TRAFFIC VOLUMES FOR WITHOUT PROJECT SCENARIOS

### 4.1 EXISTING TRAFFIC VOLUMES

For all intersections and roadway segments, existing traffic volumes are based on counts collected by Counts Unlimited in November 2018 and May 2019. Daily tube counts were collected for roadway segments while a.m. and p.m. peak hour turning movement counts were collected at study intersections. Detailed count sheets are included in Appendix B.

Since 2019 has been considered as the year for existing conditions in this analysis, for intersections where November 2018 counts were conducted, a 2.0 percent growth rate was applied to the November 2018 counts. Vehicle classification counts were conducted at the intersection of Hamner Avenue/Mountain Avenue – Hidden Valley Parkway. At this location, counts were converted to Passenger Car Equivalent (PCE) volumes. The concept of PCEs accounts for the larger impact of trucks on traffic operations. It does so by assigning each type of truck a PCE factor that represents the number of passenger vehicles that could travel through an intersection in the same time that a particular type of truck could. PCE volumes at study intersections were computed using a factor of 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with four or more axles.

The percentage of trucks at the intersections of Project Driveway 2 – Alamilla’s Driveway/Main Street (Corona) and Main Street/Parkridge Avenue was determined based on truck percentages derived from the adjacent intersection of Hamner Avenue/Mountain Avenue – Hidden Valley Parkway. At these locations, truck PCE volumes were computed using a PCE factor of 2.0 for all trucks, consistent with the HCM 6 methodologies.

Figure 4-1 illustrates existing peak hour traffic volumes at study intersections. Table 4-A summarizes the existing roadway segment daily traffic volumes.

### 4.2 PROJECT OPENING YEAR (2021) WITHOUT PROJECT TRAFFIC VOLUMES

Consistent with the City’s Scoping Agreement process (Appendix A), traffic volumes for project opening year without project conditions were developed by applying a 2.0 percent per annum growth rate to existing without project traffic volumes and adding trips from cumulative projects in the area. The methodology was applied to both study intersections and roadway segments.

Information concerning cumulative projects in the vicinity of the proposed project was obtained from City staff and the adjacent jurisdiction of the City of Norco. Table 4-B lists the cumulative projects included in this analysis. Figure 4-2 illustrates the cumulative project locations. While for some cumulative projects, the trip generation was obtained from traffic studies prepared for these projects, for others, the trip generation was developed using rates from the Institute of Transportation Engineers *Trip Generation Manual* (10<sup>th</sup> Edition). As illustrated in Table 4-B, the cumulative projects are anticipated to generate 695 trips in the a.m. peak hour, 826 trips in the p.m. peak hour, and 10,197 daily trips. Trips from the cumulative projects were assigned to the roadway network based on their locations in relation to surrounding land uses and regional arterials. Figure 4-3 illustrates peak hour cumulative project trips at study intersections. Figure 4-4 illustrates peak

hour traffic volumes at study intersections under opening year without project conditions. Table 4-C illustrates opening year without project daily volumes for study area roadway segments.

Detailed volume development worksheets are included in Appendix C.

### **4.3 LIST OF CHAPTER 4.0 FIGURES AND TABLES**

- Figure 4-1: Existing Peak Hour Traffic Volumes
- Figure 4-2: Cumulative Project Locations
- Figure 4-3: Cumulative Projects Trip Assignment
- Figure 4-4: Project Opening Year (2021) without Project Peak Hour Traffic Volumes
- Table 4-A: Existing Roadway Segment Daily Traffic Volumes
- Table 4-B: Cumulative Projects Trip Generation
- Table 4-C: Project Opening Year (2021) Daily Traffic Volumes

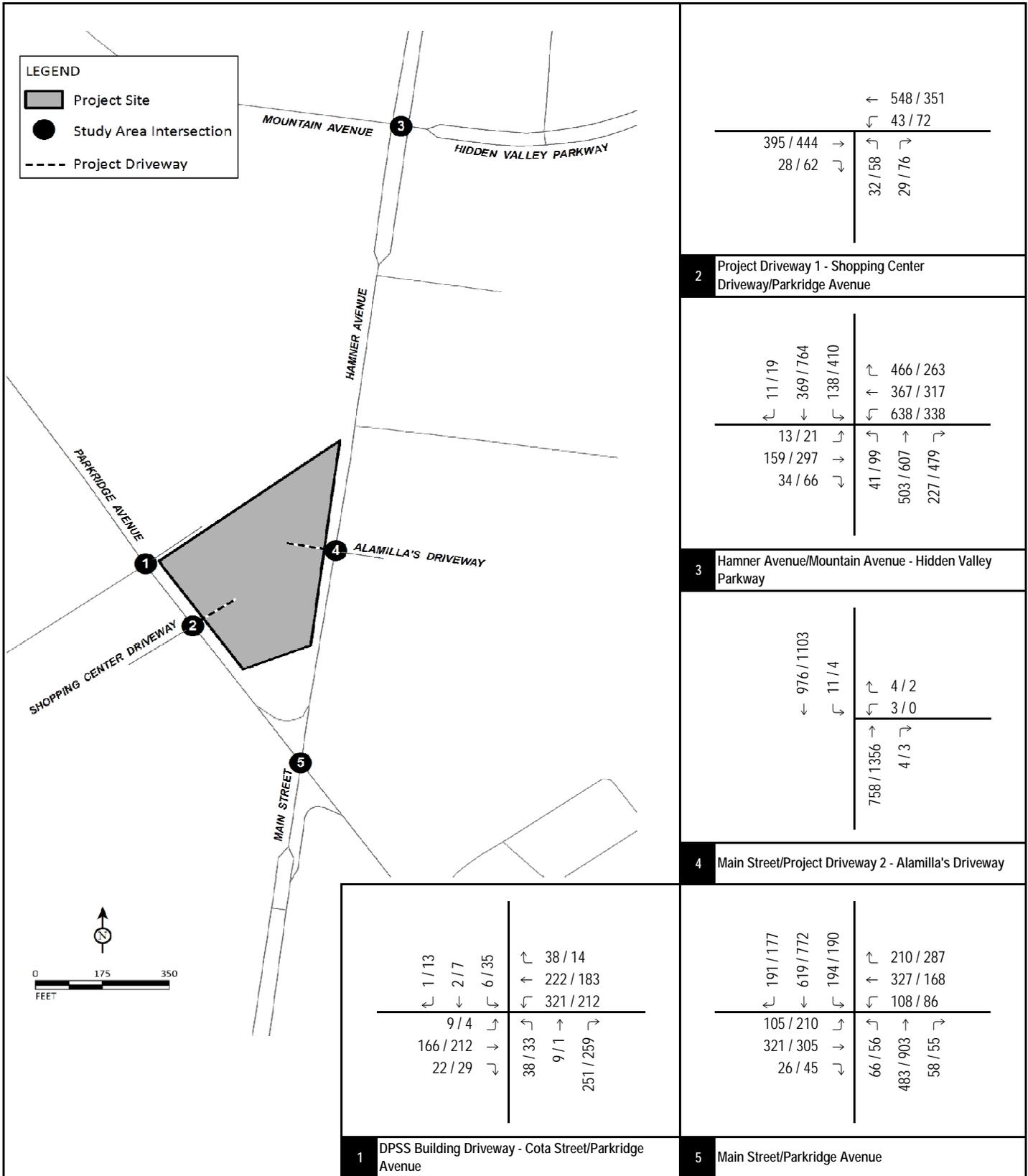


FIGURE 4-1



XXXX / YYYY  
AM / PM Peak Hour PCE Volumes

Corona Commercial Project  
Traffic Impact Study

Existing Peak Hour Traffic Volumes

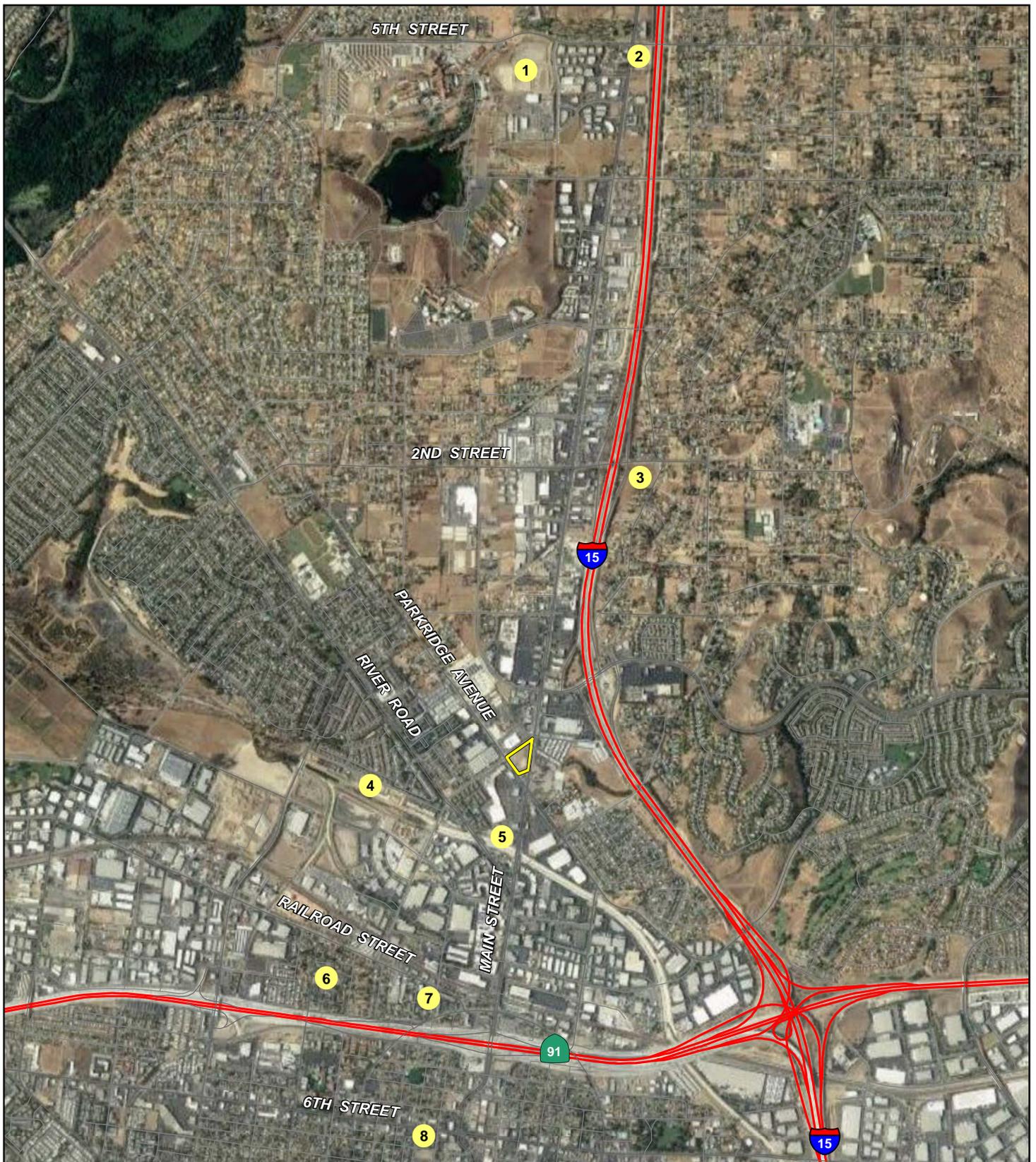


FIGURE 4-2

LSA

LEGEND

-  Project Site
-  Cumulative Project



SOURCE: ESRI Streetmap, 2013; Google Earth, 2018.

I:\CZI1902\Reports\Traffic\fig4-2\_Cumul\_Proj.mxd (7/5/2019)

*Corona Commercial Project  
Traffic Impact Study  
Cumulative Project Locations*

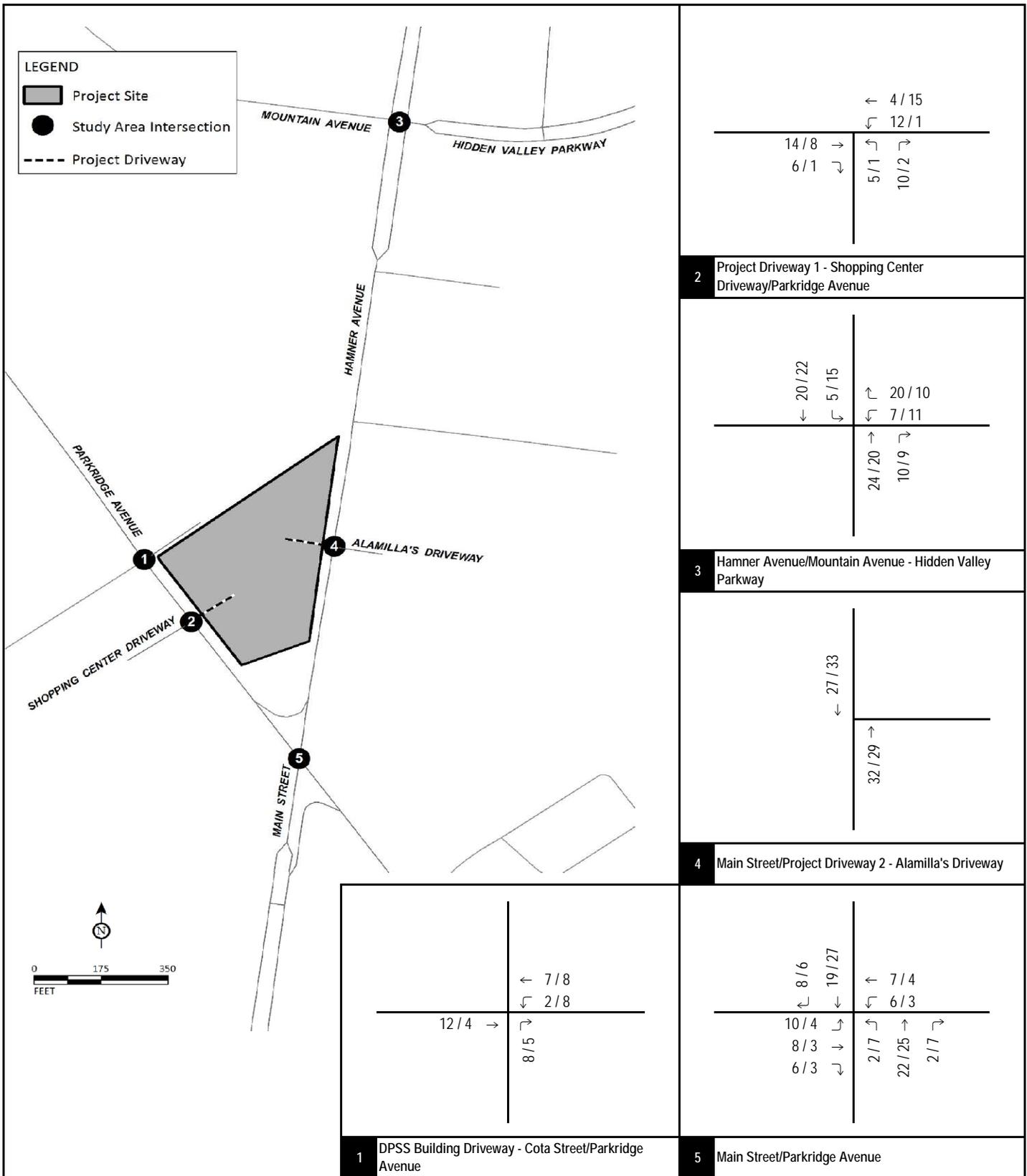


FIGURE 4-3



XX / YY  
AM / PM Peak Hour Traffic Volumes

Corona Commercial Project  
Traffic Impact Study

Cumulative Projects Trip Assignment



Table 4-A - Existing Roadway Segment Daily Traffic Volumes

Roadway	#	Segment	Existing ADT	Net Project Trips	Pass-by Trips	Existing With Project ADT
Parkridge Avenue	1	between DPSS Building Driveway - Cota Street and Project Driveway 1 - Shopping Center Driveway	11,040	354	0	11,394
	2	between Project Driveway 1 - Shopping Center Driveway and Main Street	11,524	826	28	12,378
Main Street - Hamner Avenue	3	between Mountain Avenue – Hidden Valley Parkway and Project Driveway 2 – Alamilla’s Driveway	30,410	708	0	31,118
Main Street	4	between Project Driveway 2 – Alamilla’s Driveway and Parkridge Avenue	30,385	472	17	30,874

Table 4-B - Cumulative Projects Trip Generation

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
<b>1. Shea Properties Warehousing Development</b>								
Warehousing Trip Generation	361.19 TSF	85	25	110	30	85	115	1,290
Manufacturing Trip Generation	63.74 TSF	35	10	45	15	30	45	245
Total Trip Generation <sup>1</sup>		120	35	155	45	115	160	1,535
<b>2. Hotel</b>								
Trips/Unit <sup>2</sup> Trip Generation	80 Rooms	0.28 22	0.19 15	0.47 37	0.31 25	0.29 23	0.60 48	8.36 669
<b>3. Norco Zone Change</b>								
Shopping Center Trip Generation	85.00 TSF	52	33	85	152	165	317	3,650
Pass-by Trips		0	0	0	(43)	(43)	(86)	(86)
Net New Trips		52	33	85	109	122	231	3,564
Hotel Trip Generation	95 Rooms	37	27	64	32	35	67	847
Total Trip Generation <sup>3</sup>		89	60	149	141	157	298	4,411
<b>4. Boardwalk Townhomes</b>								
Trips/Unit <sup>4</sup> Trip Generation	148 DU	0.11 16	0.35 52	0.46 68	0.35 52	0.21 31	0.56 83	7.32 1,083
<b>5. Pivot Charter School</b>								
Trip Generation <sup>5</sup>	99 STU	58	51	109	5	9	14	183
<b>6. Buena Vista Senior Apartments</b>								
Trips/Unit <sup>6</sup> Trip Generation	64 DU	0.07 4	0.13 8	0.20 12	0.14 9	0.12 8	0.26 17	3.70 237
<b>7. DPR17-004</b>								
Trips/Unit <sup>4</sup> Trip Generation	4 DU	0.11 0	0.35 1	0.46 1	0.35 1	0.21 1	0.56 2	7.32 29
<b>8. Medical Office Buildings</b>								
Trips/Unit <sup>7</sup> Trip Generation	58.90 TSF	2.17 128	0.61 36	2.78 164	0.97 57	2.49 147	3.46 204	34.80 2,050
<b>Total Trip Generation</b>		<b>437</b>	<b>258</b>	<b>695</b>	<b>335</b>	<b>491</b>	<b>826</b>	<b>10,197</b>

Notes:

TSF= Thousand Square Feet; DU=Dwelling Units; STU = Students

<sup>1</sup> Trip Generation obtained from the Memo for the *Norco Warehousing Development Traffic Impact Study* prepared by R.A.Smith National in February 2017.

<sup>2</sup> Rates based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition) for Land Use 310 – “Hotel”, Setting/Location - “General Urban/Suburban.”

<sup>3</sup> Trip generation obtained from the *Norco Zone Change Traffic Impact Analysis* prepared by LSA in January 2011.

<sup>4</sup> Rates based on the ITE *Trip Generation Manual* (10th Edition) for Land Use 221 – “Multifamily Housing (Low-Rise)”, Setting/Location - “General Urban/Suburban.”

<sup>5</sup> Trip generation obtained from the *Pivot Charter School Trip Generation Assessment* prepared by Urban Crossroads in April 2019.

<sup>6</sup> Rates based on the ITE *Trip Generation Manual* (10th Edition) for Land Use 252 – “Senior Adult Housing - Attached”, Setting/Location - “General Urban/Suburban.”

<sup>7</sup> Rates based on the ITE *Trip Generation Manual* (10th Edition) for Land Use 720 – “Medical-Dental Office Building”, Setting/Location - “General Urban/Suburban.”

Table 4-C - Project Opening Year (2021) Daily Traffic Volumes

Roadway	#	Segment	Existing (2019) ADT	2019 - 2021 Growth	Cumulative Projects Trips	Project Opening Year (2021) Without Project	Project Trips	Pass-By Trips	Project Opening Year (2021) With Project ADT
Parkridge Avenue	1	between DPSS Building Driveway - Cota Street and Project Driveway 1 - Shopping Center Driveway	11,040	442	282	11,764	354	0	12,118
	2	between Project Driveway 1 - Shopping Center Driveway and Main Street	11,524	461	300	12,285	826	28	13,139
Main Street - Hamner Avenue	3	between Mountain Avenue – Hidden Valley Parkway and Project Driveway 2 – Alamilla’s Driveway	30,410	1,216	780	32,407	708	0	33,115
Main Street	4	between Project Driveway 2 – Alamilla’s Driveway and Parkridge Avenue	30,385	1,215	780	32,381	472	17	32,870

## 5.0 PROJECT TRAFFIC

### 5.1 PROJECT TRIP GENERATION

Total vehicle trip generation for the proposed project was developed as follows:

- Pad A is proposed to be a high turnover sit-down restaurant. Trip generation for Pad A was developed using rates from the ITE *Trip Generation Manual* (10th Edition) for Land Use 932 – “High-Turnover (Sit-Down) Restaurant.”
- Pad B is proposed to be a Raising Cane’s Chicken Fingers restaurant. Trip generation for Pad B was developed using rates from the ITE *Trip Generation Manual* (10th Edition) for Land Use 934 – “Fast-Food Restaurant with Drive-Through Window.” However, since Raising Cane’s is not open during the a.m. peak hour, an a.m. peak hour trip generation was not developed for Pad B.
- Pad C is proposed to be a car wash facility, the potential tenant being Quick Quack Car Wash. Trip generation for the car wash facility was developed using rates from the ITE *Trip Generation Manual* (10<sup>th</sup> Edition) for Land Uses 948 – “Automated Car Wash.” Only p.m. peak hour rates are available for this land use in the ITE manual. However, a.m. and daily rates are provided in the manual for a similar land use, “Car Wash and Detail Center” (Land Use 949). Thus, the a.m. peak hour and daily rates for Land Use 948 were obtained by using the p.m. peak hour trip generation rate ratio between Land Use 948 and Land Use 949 and applying the ratio to the a.m. peak hour and daily rates for Land Use 949.
- Pad D is proposed to be a Habit Burger restaurant. Trip generation for Pad D was developed based on counts obtained at a similar Habit Burger restaurant in the City of Moreno Valley. Counts were collected on two weekdays (January 29 and January 30, 2020). The higher of the two counts was used as a conservative approach. Detailed counts sheets are included in Appendix B. Since Habit Burger is not open during the a.m. peak hour, an a.m. peak hour trip generation was not developed for Pad B.

For car washes and restaurants, a certain percentage of external trips are pass-by trips. A pass-by trip is a trip where an intermediate stop is made on the way from the origin to the primary destination of the trip without making a route diversion. Pass-by trips are not actually “new” trips added to the surrounding circulation system. For the proposed project, pass-by trips would occur both on Parkridge Avenue and Main Street en route to a final destination.

Pass-by rates for all land uses were determined based on discussion with City staff. The project pass-by trip assignment has been developed based on traffic counts collected on the adjacent street system. Figure 5-1 illustrates the pass-by trip assignment that has been developed based on existing traffic volumes.

After deducting the pass-by trips from the gross project trips, the net project trips were attained. As shown in Table 5-A, overall, the project is anticipated to generate 40 net trips in the a.m. peak hour, 189 net trips in the p.m. peak hour, and 2,356 net daily trips.

## 5.2 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of project trips is based on the regional roadway network and the location of residential, employment, and commercial centers in relation to the proposed project. Figure 5-2 illustrates the trip distribution for the proposed project at the study intersections. The project trip generation was applied to the trip distribution patterns to develop the project trip assignment. Figure 5-3 illustrates the net project trip assignment.

## 5.3 LIST OF CHAPTER 5.0 FIGURES AND TABLES

- Figure 5-1: Pass-by Trip Assignment
- Figure 5-2: Project Trip Distribution
- Figure 5-3: Net Project Trip Assignment
- Table 5-A: Project Trip Generation

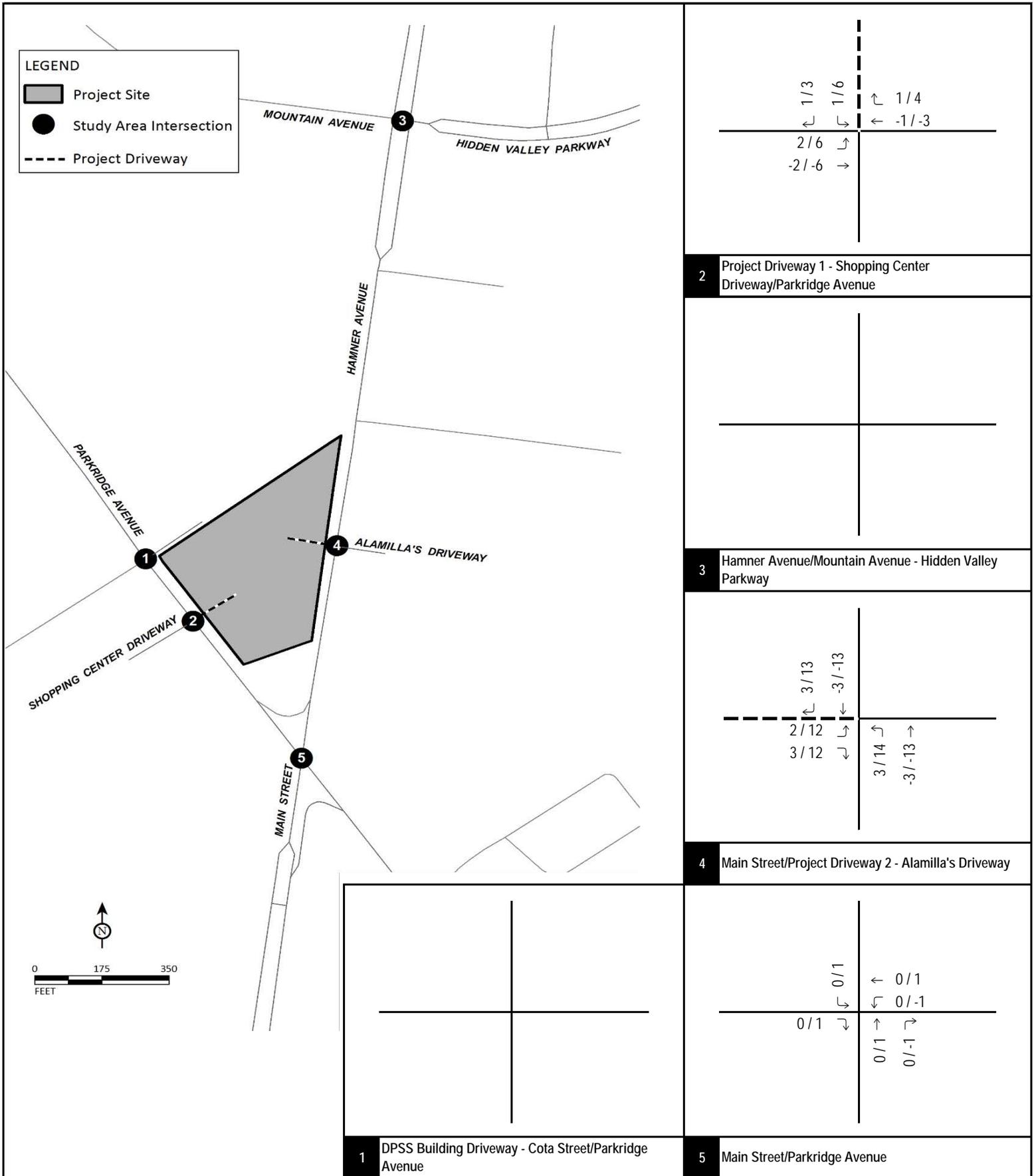


FIGURE 5-1



XX / YY  
AM / PM Peak Hour Trips

----- Project Driveway

Corona Commercial Project  
Traffic Impact Study  
Pass-by Trip Assignment

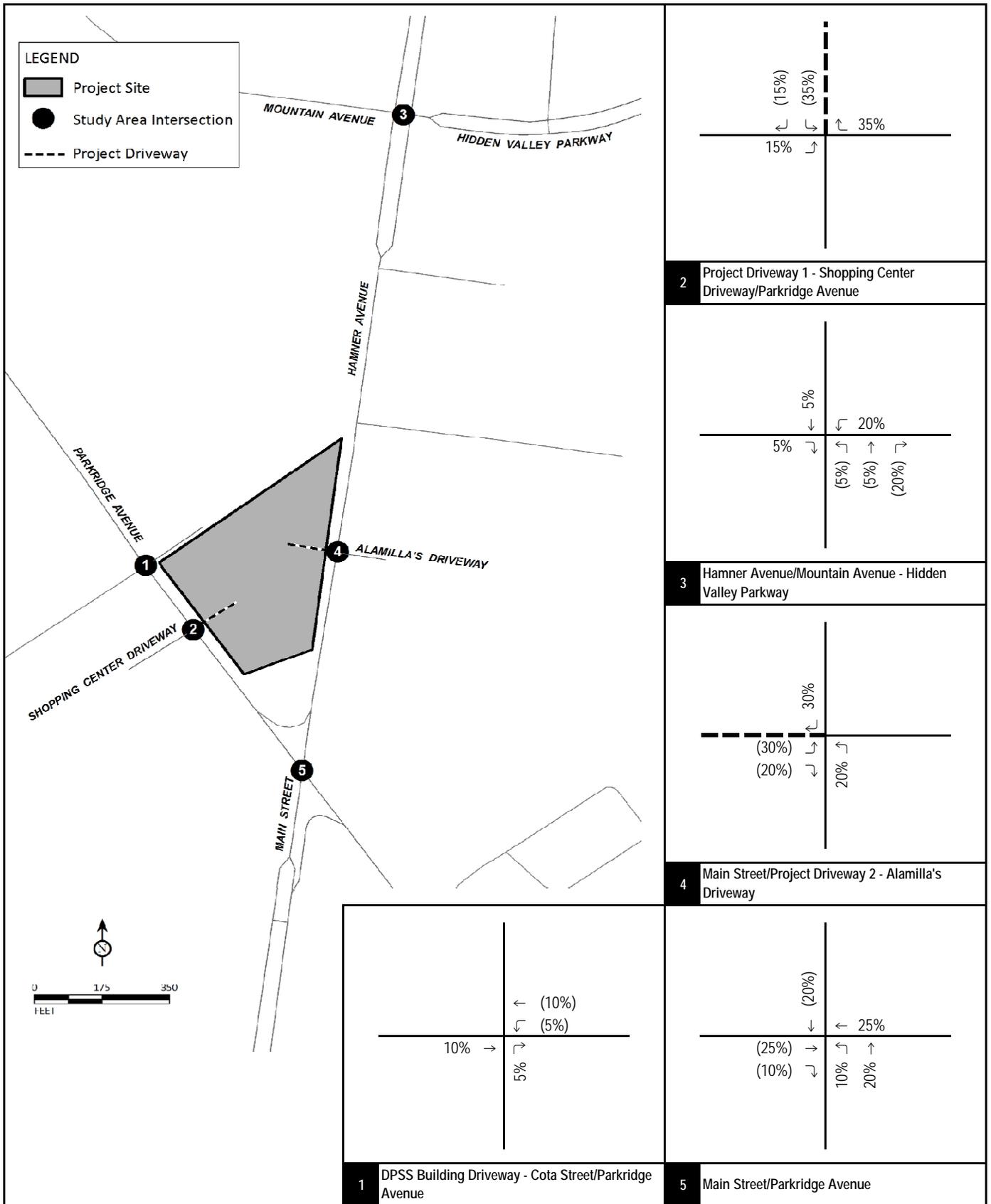


FIGURE 5-2



XX% (YY%)  
Inbound% (Outbound%) Distribution

----- Project Driveway

Corona Commercial Project  
Project Trip Distribution

Project Trip Distribution

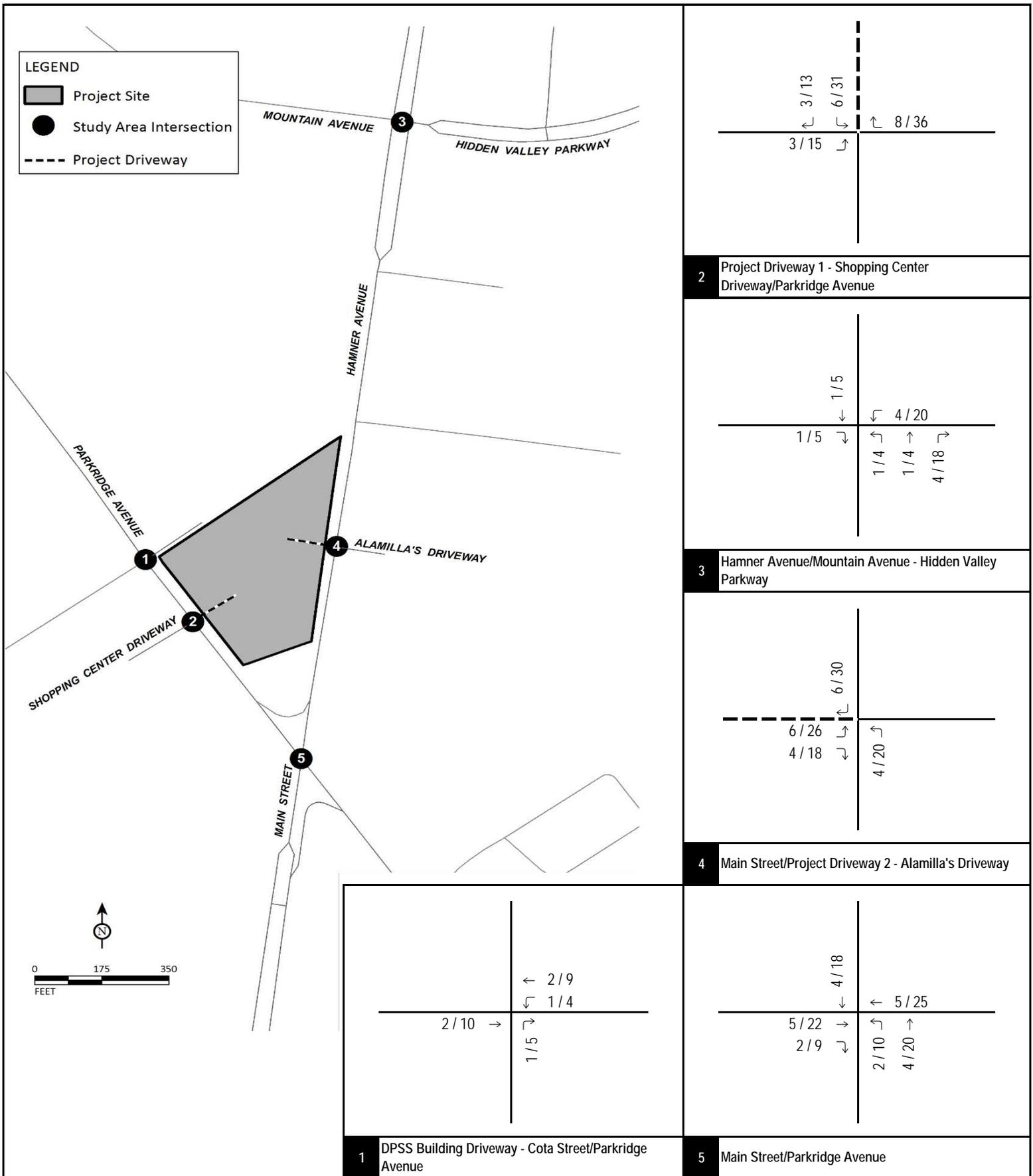


FIGURE 5-3

**LSA**

XX / YY  
AM / PM Peak Hour Trips

----- Project Driveway

Corona Commercial Project  
Traffic Impact Study  
Net Project Trip Assignment

**Table 5-A - Project Trip Generation**

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Pad A - High Turnover (Sit-Down) Restaurant	2.53 TSF							
Trips/Unit <sup>1</sup>		5.47	4.47	9.94	6.06	3.71	9.77	112.18
Trip Generation		14	11	25	15	9	24	284
Pass-by Trips <sup>2</sup>		(4)	(3)	(7)	(4)	(2)	(6)	(71)
Net External Trips		10	8	18	11	7	18	213
Pad B - Raising Cane's	3.49 TSF							
Trips/Unit <sup>3</sup>		-	-	-	16.99	15.68	32.67	470.95
Trip Generation		-	-	-	59	55	114	1,642
Pass-by Trips <sup>2</sup>		-	-	-	(15)	(14)	(29)	(411)
Net Trip Generation		-	-	-	44	41	85	1,231
Pad C - Quick Quack Car Wash	3.60 TSF							
Trips/Unit <sup>4</sup>		4.49	4.49	8.98	7.10	7.10	14.20	163.09
Trip Generation		16	16	32	26	26	52	586
Pass-by Trips <sup>2</sup>		(5)	(5)	(10)	(8)	(8)	(16)	(176)
Net External Trips		11	11	22	18	18	36	410
Pad D - The Habit Burger Grill	2.65 TSF							
Trip Generation <sup>5</sup>		-	-	-	38	29	67	669
Pass-by Trips <sup>2</sup>		-	-	-	(10)	(7)	(17)	(167)
Net Trip Generation		-	-	-	28	22	50	502
<b>Gross Trip Generation</b>		30	27	57	138	119	257	3,181
<b>Total Pass-by Trips</b>		(9)	(8)	(17)	(37)	(31)	(68)	(825)
<b>Total Net Trip Generation</b>		21	19	40	101	88	189	2,356

Notes:

TSF = Thousand Square Feet

- 1 Trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition) for Land Use 932 - "High-Turnover (Sit-Down) Restaurant", Setting/Location - "General Urban/Suburban."
- 2 Peak hour and daily pass-by rates obtained based on discussions with City staff.
- 3 Trip generation rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 934 - "Fast-Food Restaurant with Drive-Through Window", Setting/Location - "General Urban/Suburban." Raising Cane's is not open during the a.m. peak hour.
- 4 Trip generation rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 948 - "Automated Car Wash", Setting/Location - "General Urban/Suburban." Only p.m. peak hour rates are available for this land use in the ITE manual. The a.m. peak hour and daily rates were obtained by using the p.m. peak hour trip generation rate ratio between Land Use 948 and Land Use 949 - "Car Wash and Detail Center" and applying the ratio to the a.m. peak hour and daily rates for Land Use 949. Also, the p.m. peak hour splits for Land Use 948 were used for the a.m. peak hour.
- 5 Trip generation developed based on survey counts at a similar Habit Burger Grill facility in the City of Moreno Valley. The counts were performed on two weekdays (January 29, 2020 and January 30, 2020). The higher of the two counts was used as a conservative approach.

## 6.0 TRAFFIC VOLUMES FOR WITH PROJECT SCENARIOS

Existing and project opening year with project traffic volumes were developed by adding project traffic to the corresponding without project scenarios. Figures 6-1 and 6-2 illustrate “with project” peak hour traffic volumes at study intersections under existing and project opening year conditions, respectively. Previously referenced Tables 4-A and 4-C summarize the “with project” roadway segment daily traffic volumes under existing and project opening year conditions.

Detailed volume development worksheets are included in Appendix C.

### 6.1 LIST OF CHAPTER 6.0 FIGURES

- Figure 6-1: Existing with Project Peak Hour Traffic Volumes
- Figure 6-2: Project Opening Year (2021) with Project Peak Hour Traffic Volumes

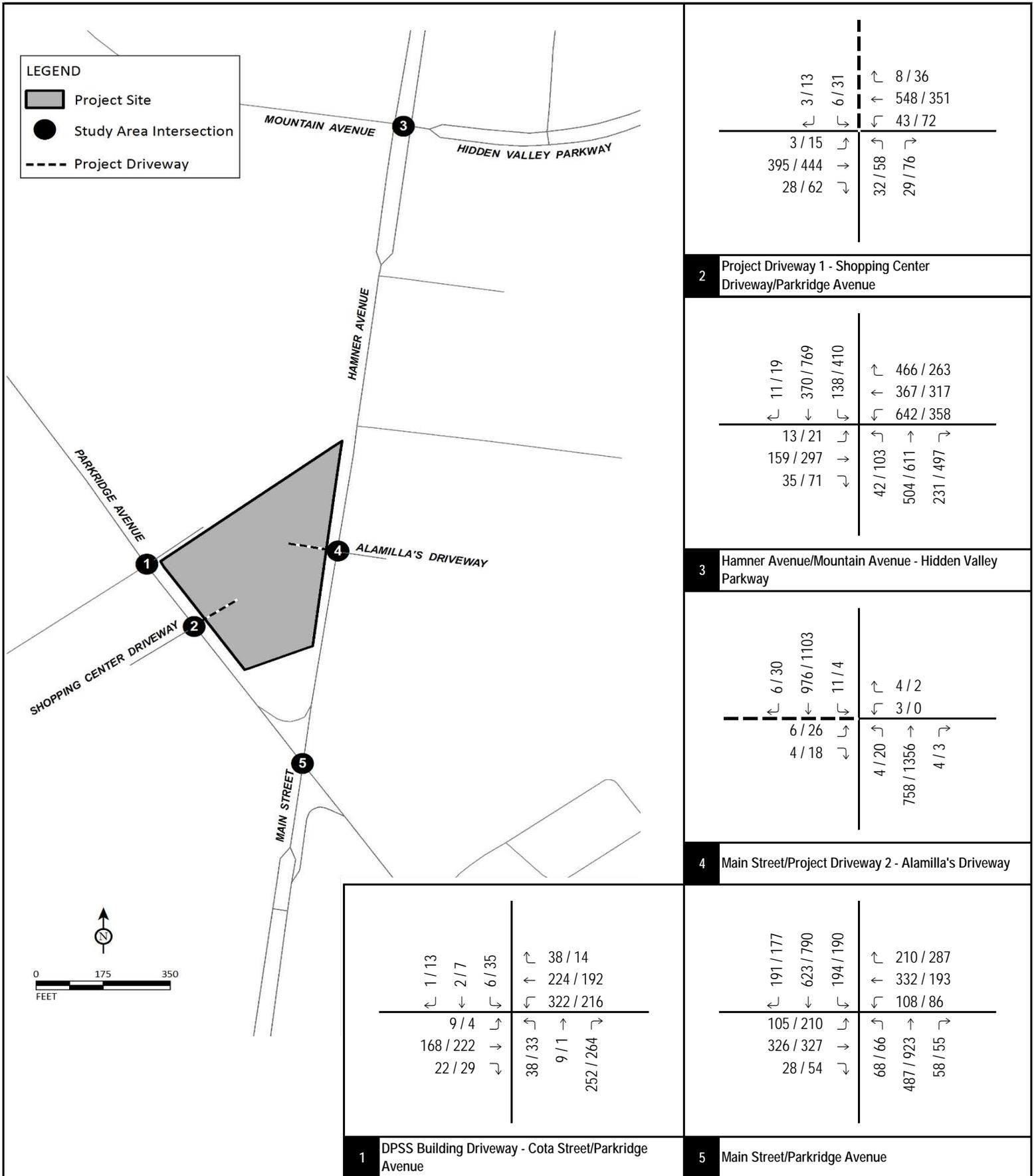


FIGURE 6-1



XXXX / YYYY  
AM / PM Peak Hour PCE Volumes

----- Project Driveway

Corona Commercial Project  
Traffic Impact Study

Existing with Project Peak Hour Traffic Volumes

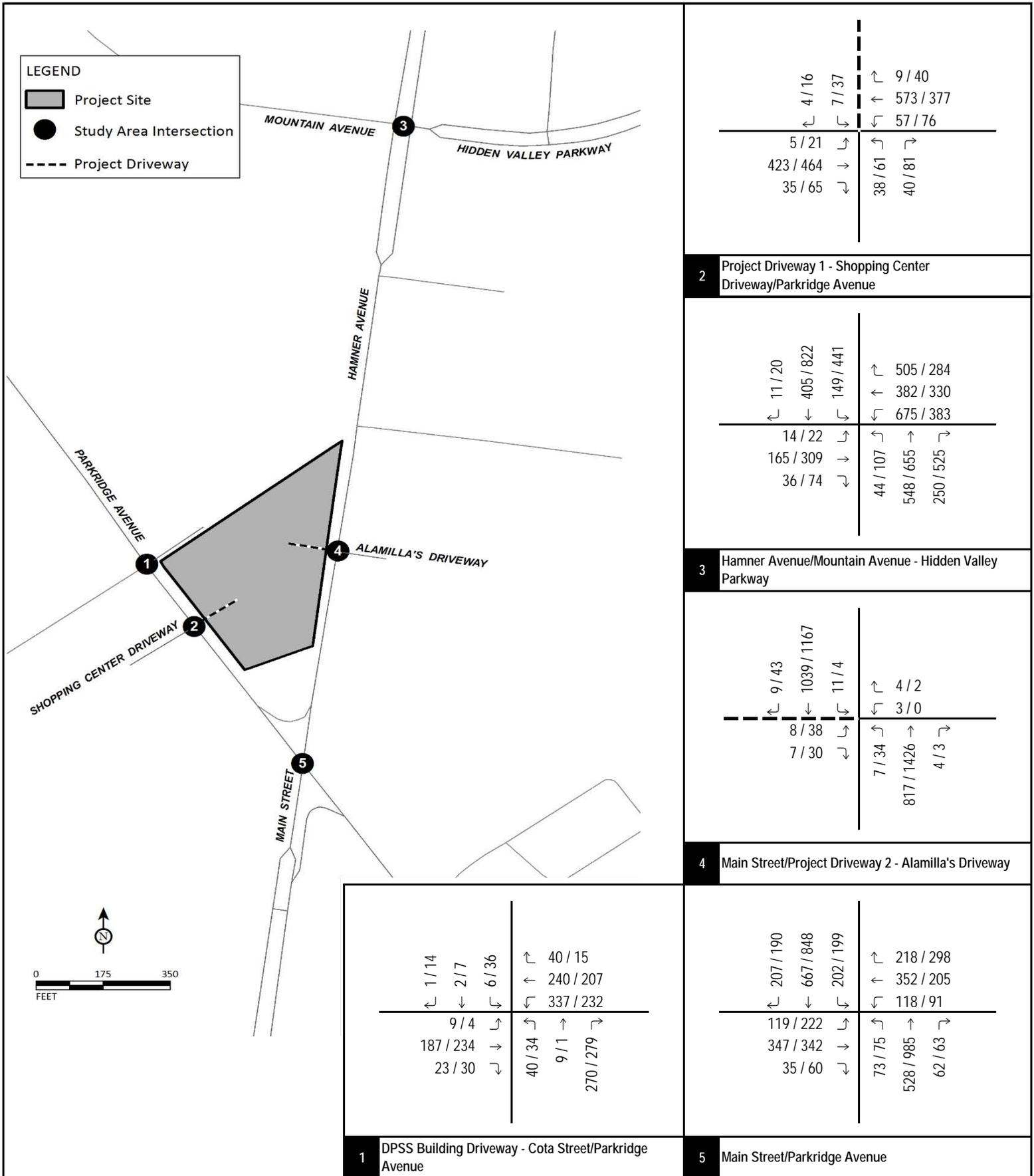


FIGURE 6-2



XXXX / YYYY  
AM / PM Peak Hour PCE Volumes

----- Project Driveway

Corona Commercial Project  
Traffic Impact Study

Project Opening Year (2021) with Project Peak Hour Traffic Volumes

## **7.0 INTERSECTION AND ROADWAY SEGMENT LEVELS OF SERVICE**

### **7.1 EXISTING LEVELS OF SERVICE**

#### **7.1.1 Study Intersections**

Previously referenced Figure 3-1 illustrates existing study intersection geometrics and traffic control. An intersection LOS analysis was conducted for existing conditions using the methodologies previously discussed. Table 7-A summarizes the results of this analysis and shows that all study intersections are currently operating at a satisfactory LOS.

#### **7.1.2 Roadway Segments**

A roadway segment LOS analysis was conducted for existing conditions using the methodologies previously discussed. The levels of service were calculated using the criteria contained in the “Analysis Methodology” section of this report. Table 7-B summarizes the results of this analysis and shows that all roadway segments are currently operating at a satisfactory LOS.

### **7.2 EXISTING WITH PROJECT LEVELS OF SERVICE**

Previously referenced Figure 3-3 illustrates existing with project study intersection geometrics and traffic control. Analysis of the existing with project scenario is provided for CEQA compliance to identify direct project impacts if the project were to be built and in operation today. This scenario eliminates the effects of ambient growth and other cumulative projects and deals specifically with project impacts.

#### **7.2.1 Study Intersections**

An intersection LOS analysis was conducted for existing with project conditions using the methodologies previously discussed. Table 7-A summarizes the results of this analysis and shows that all study intersections are currently forecast to operate at a satisfactory LOS under existing with project conditions.

#### **7.2.2 Roadway Segments**

A roadway segment LOS analysis was conducted for existing with project conditions using the methodologies previously discussed. The levels of service were calculated using the criteria contained in the “Analysis Methodology” section of this report. Table 7-B summarizes the results of this analysis and shows that all roadway segments are forecast to operate at a satisfactory LOS under existing with project conditions.

### **7.3 PROJECT OPENING YEAR (2021) WITHOUT PROJECT LEVELS OF SERVICE**

#### **7.3.1 Study Intersections**

An intersection LOS analysis was conducted for project opening year without project conditions using the methodologies previously discussed. Table 7-C summarizes the results of this analysis and shows that all study intersections are forecast to operate at a satisfactory LOS under project opening year without project conditions.

### 7.3.2 Roadway Segments

A roadway segment LOS analysis was conducted for project opening year without project conditions using the methodologies previously discussed. The levels of service were calculated using the criteria contained in the “Analysis Methodology” section of this report. Table 7-D summarizes the results of this analysis and shows that the following roadway segments are forecast to operate at an unsatisfactory LOS under project opening year without project conditions:

- Main Street – Hamner Avenue between Mountain Avenue – Hidden Valley Parkway and Project Driveway 2 – Alamilla’s Driveway; and
- Main Street between Project Driveway 2 – Alamilla’s Driveway and Parkridge Avenue.

## 7.4 PROJECT OPENING YEAR (2021) WITH PROJECT LEVELS OF SERVICE

### 7.4.1 Study Intersections

An intersection LOS analysis was conducted for project opening year with project conditions using the methodologies previously discussed. Table 7-C summarizes the results of this analysis and shows that all study intersections are forecast to operate at a satisfactory LOS under project opening year with project conditions.

### 7.4.2 Roadway Segments

A roadway segment LOS analysis was conducted for project opening year with project conditions using the methodologies previously discussed. The levels of service were calculated using the criteria contained in the “Analysis Methodology” section of this report. Table 7-D summarizes the results of this analysis and shows that all roadway segments are forecast to operate at a satisfactory LOS under project opening year with project conditions. The roadway segments that were identified to operate at an unsatisfactory LOS under without project condition will be improved based on roadway widening as part of the project.

## 7.5 LIST OF CHAPTER 7.0 TABLES

- Table 7-A: Existing Intersection Levels of Service
- Table 7-B: Existing Roadway Segment Levels of Service
- Table 7-C: Project Opening Year (2021) Intersection Levels of Service
- Table 7-D: Project Opening Year (2021) Roadway Segment Levels of Service

Table 7-A - Existing Intersection Levels of Service

Intersection	Jurisdiction	Control	LOS Standard	Without Project				With Project				Significant Impact
				A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		
				Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	
1 . DPSS Building Driveway - Cota Street/Parkridge Avenue	Norco/Corona	AWSC	D	17.2	C	16.6	C	16.2	C	16.4	C	No
2 . Project Driveway 1 - Shopping Center Driveway/Parkridge Avenue	Corona	OWSC/TWSC <sup>1</sup>	D	14.4	B	15.4	C	18.5	C	21.0	C	No
3 . Hamner Avenue/Mountain Avenue - Hidden Valley Parkway	Norco	Signal	D	28.2	C	36.6	D	28.3	C	38.9	D	No
4 . Main Street/Project Driveway 2 - Alamilla's Driveway	Corona	OWSC/TWSC <sup>1</sup>	D	11.6	B	12.0	B	14.6	B	17.2	C	No
5 . Main Street/Parkridge Avenue	Corona	Signal	D	28.8	C	35.5	D	28.9	C	39.4	D	No

Notes:

OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; AWSC = All-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC and TWSC intersections, reported delay is for worst-case movement).

<sup>1</sup> This intersection operates as a OWSC intersection under without project conditions. However, under with project conditions, it operates as a TWSC intersection.

Table 7-B - Existing Roadway Segment Levels of Service

Roadway Segment	Classification <sup>4</sup>	Without Project			With Project		
		Roadway Capacity	Daily Volume	LOS	Roadway Capacity	Daily Volume	LOS
<b>Segments on Parkridge Avenue</b>							
1 . between DPSS Building Driveway - Cota Street and Project Driveway 1 - Shopping Center Driveway <sup>1</sup>	Secondary	19,500	11,100	C	25,900	11,400	C
2 . between Project Driveway 1 - Shopping Center Driveway and Main Street <sup>1</sup>	Secondary	19,500	11,600	C	25,900	12,400	C
<b>Segment on Main Street-Hammer Avenue</b>							
1 . between Mountain Avenue – Hidden Valley Parkway and Project Driveway 2 – Alamilla’s Driveway <sup>2</sup>	Major Arterial	34,100	30,500	D	42,700	31,200	C
<b>Segment on Main Street</b>							
1 . between Project Driveway 2 – Alamilla’s Driveway and Parkridge Avenue <sup>3</sup>	Major Arterial	34,100	30,400	D	42,700	30,900	C

Notes:

LOS = Level of Service

<sup>1</sup> This segment has 3 lanes under existing conditions. However, there will be an additional westbound lane under with project conditions. Hence, under with project conditions, the segment will have 4 lanes.

<sup>2</sup> Under existing conditions, this segment has 5 lanes between Mountain Avenue - Hammer Avenue and Gateway Market Place and 4 lanes between Gateway Market Place and Project Driveway 2 - Alamilla’s Driveway. However, there will be an additional southbound lane along the project frontage under with project conditions. Hence, under with project conditions, the segment will have 5 lanes throughout.

<sup>3</sup> This segment has 4 lanes under existing conditions. However, there will be an additional southbound lane along the project frontage under with project conditions.

<sup>4</sup> Hence, under with project conditions, the segment will have 5 lanes.

<sup>4</sup> Classifications for the segments have been obtained from the City of Corona General Plan, adopted March 17, 2004.

Table 7-C - Project Opening Year (2021) Intersection Levels of Service

Intersection	Jurisdiction	Control	LOS Standard	Without Project				With Project				Significant Impact
				A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		
				Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	
1 . DPSS Building Driveway - Cota Street/Parkridge Avenue	Norco/Corona	AWSC	D	19.9	C	18.5	C	18.5	C	18.2	C	No
2 . Project Driveway 1 - Shopping Center Driveway/Parkridge Avenue	Corona	OWSC/TWSC <sup>1</sup>	D	15.5	C	16.4	C	20.3	C	24.0	C	No
3 . Hamner Avenue/Mountain Avenue - Hidden Valley Parkway	Norco	Signal	D	30.7	C	42.2	D	30.8	C	44.9	D	No
4 . Main Street/Project Driveway 2 - Alamilla's Driveway	Corona	OWSC/TWSC <sup>1</sup>	D	11.9	B	12.5	B	15.5	C	19.2	C	No
5 . Main Street/Parkridge Avenue	Corona	Signal	D	29.8	C	37.6	D	29.9	C	44.0	D	No

Notes:

OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; AWSC = All-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC and TWSC intersections, reported delay is for worst-case movement).

<sup>1</sup> This intersection operates as a OWSC intersection under without project conditions. However, under with project conditions, it operates as a TWSC intersection.

Table 7-D - Project Opening Year (2021) Roadway Segment Levels of Service

Roadway Segment	Classification <sup>4</sup>	Without Project			With Project		
		Roadway Capacity	Daily Volume	LOS	Roadway Capacity	Daily Volume	LOS
<b>Segments on Parkridge Avenue</b>							
1 . between DPSS Building Driveway - Cota Street and Project Driveway 1 - Shopping Center Driveway <sup>1</sup>	Secondary	19,500	11,800	C	25,900	12,200	C
2 . between Project Driveway 1 - Shopping Center Driveway and Main Street <sup>1</sup>	Secondary	19,500	12,300	C	25,900	13,200	C
<b>Segment on Main Street-Hammer Avenue</b>							
1 . between Mountain Avenue – Hidden Valley Parkway and Project Driveway 2 – Alamilla’s Driveway <sup>2</sup>	Major Arterial	34,100	32,500	E *	42,700	33,200	C
<b>Segment on Main Street</b>							
1 . between Project Driveway 2 – Alamilla’s Driveway and Parkridge Avenue <sup>3</sup>	Major Arterial	34,100	32,400	E *	42,700	32,900	C

Notes:

- LOS = Level of Service
- \* Exceeds LOS Standard

<sup>1</sup> This segment has 3 lanes under existing conditions. However, there will be an additional westbound lane under with project conditions. Hence, under with project conditions, the segment will have 4 lanes.

<sup>2</sup> Under existing conditions, this segment has 5 lanes between Mountain Avenue - Hammer Avenue and Gateway Market Place and 4 lanes between Gateway Market Place and Project Driveway 2 - Alamilla's Driveway. However, there will be an additional southbound lane along the project frontage under with project conditions. Hence, under with project conditions, the segment will have 5 lanes throughout.

<sup>3</sup> This segment has 4 lanes under existing conditions. However, there will be an additional southbound lane along the project frontage under with project conditions. Hence, under with project conditions, the segment will have 5 lanes.

<sup>4</sup> Classifications for the segments have been obtained from the City of Corona General Plan, adopted March 17, 2004.

## 8.0 QUEUING ANALYSIS

City staff requested a queuing analysis at the two project driveways and the intersections of DPSS Building Driveway – Cota Street/Parkridge Avenue and Main Street/Parkridge Avenue. Tables 8-A and 8-B list the available turn-pocket storage lengths and summarize the 95<sup>th</sup> percentile back-of-queue lengths at the study intersections under existing and project opening year conditions. The queues for the signalized intersections have been reported from Synchro. For unsignalized intersections, the SimTraffic queues have been reported since Synchro does not appropriately report queues at unsignalized intersections. As shown in Tables 8-A and 8-B, queues are projected to exceed the existing available turn-pocket storage lengths under existing and project opening year conditions for some of the turn movements. Following is a detailed discussion regarding the findings from the queuing analysis:

- **DPSS Building Driveway – Cota Street/Parkridge Avenue:** Based on the queuing analysis, the maximum queue length for the westbound left-turn queues under with project conditions is approximately 4 cars (25 feet per car for a total of 100 feet). Although, the existing turn pocket length is 50 feet, there is adequate room available beyond the left-turn pocket along the first through lane to accommodate the additional queuing. It should be noted that the project is adding a second through lane along Parkridge Avenue that will help alleviate any minor spillover queuing concerns. Therefore, the westbound left-turn pocket need not be extended further.
- **Project Driveway 1 – Shopping Center Driveway/Parkridge Avenue:** As shown in Tables 8-A and 8-B, the eastbound left-turn queue into the project at this intersection is one car (25 feet). The driveway is located approximately 125 feet from the adjacent intersection of DPSS Building Driveway – Cota Street/Parkridge Avenue. As described above, the maximum back of length queue at that intersection will be 100 feet for the westbound left-turn. There will be a spillover of approximately 50 feet, which will stack up in the first through lane. The project is adding a second through lane that will help address any minor queuing deficiencies. Therefore, the queues at the intersection of DPSS Building Driveway – Cota Street/Parkridge Avenue will not block the eastbound left-turn movement at Project Driveway 1. There will be adequate room available to accommodate the one car queue for this movement.
- **Main Street/Parkridge Avenue:** As shown in Tables 8-A and 8-B, the southbound left, eastbound left, and westbound left-turn queues are anticipated to exceed the available storage under with project conditions. Recommended improvements at this intersection have been discussed in the next chapter.

Detailed queuing worksheets are included in Appendix E.

### 8.1 LIST OF CHAPTER 8.0 TABLES

- Table 8-A: Existing Queuing Analysis
- Table 8-B: Project Opening Year (2021) Queuing Analysis

Table 8-A - Existing Queuing Analysis

Intersection	Movement	Storage Length <sup>3</sup> (ft/ln)	Without Project <sup>4</sup>		With Project <sup>4</sup>	
			AM	PM	AM	PM
1 . DPSS Building Driveway - Cota Street/Parkridge Avenue AWSC	NBR	100	65	80	65	80
	EBL	100	20	15	35	20
	EBR	210	40	40	35	45
	WBL	50	<b>90</b>	<b>80</b>	<b>95</b>	<b>85</b>
2 . Project Driveway 1 - Shopping Center Driveway/Parkridge Avenue OWSC/TWSC <sup>1</sup>	EBL <sup>2</sup>	-	-	-	15	25
	WBL <sup>2</sup>	-	40	50	45	65
4 . Main Street/Project Driveway 2 - Alamilla's Driveway OWSC/TWSC <sup>1</sup>	NBL <sup>2</sup>	-	-	-	10	30
	SBL <sup>2</sup>	-	20	0	25	15
5 . Main Street/Parkridge Avenue Signal	NBL	160	75	70	75	80
	NBR	200	0	0	0	0
	SBL	105	<b>195</b>	<b>230</b>	<b>195</b>	<b>205</b>
	EBL	85	<b>125</b>	<b>250</b>	<b>125</b>	<b>210</b>
	WBL	90	<b>110</b>	<b>100</b>	<b>110</b>	<b>100</b>
	WBR	125	50	110	50	80

Notes:

ft/ln = feet per lane

OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; AWSC = All-Way Stop Control

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; R = Right

**Bold** = Queue exceeds available storage.

<sup>1</sup> This intersection operates as a OWSC intersection under without project conditions. However, under with project conditions, it operates as a TWSC intersection.

<sup>2</sup> This movement occurs from a two-way-left-turn lane. So, there is no definite storage length for this movement.

<sup>3</sup> Storage length for all movements obtained from Google Earth measurements.

<sup>4</sup> All queues reported are 95th percentile queues. Queues for signalized intersections have been reported from Synchro, while queues for unsignalized intersections have been reported from SimTraffic.

Table 8-B - Project Opening Year (2021) Queuing Analysis

Intersection	Movement	Storage Length <sup>3</sup> (ft/ln)	Without Project <sup>4</sup>		With Project <sup>4</sup>	
			AM	PM	AM	PM
1 . DPSS Building Driveway - Cota Street/Parkridge Avenue AWSC	NBR	100	90	75	70	85
	EBL	100	25	25	30	15
	EBR	210	50	45	35	45
	WBL	50	<b>110</b>	<b>85</b>	<b>90</b>	<b>85</b>
2 . Project Driveway 1 - Shopping Center Driveway/Parkridge Avenue OWSC/TWSC <sup>1</sup>	EBL <sup>2</sup>	-	-	-	25	20
	WBL <sup>2</sup>	-	45	55	60	60
4 . Main Street/Project Driveway 2 - Alamilla's Driveway OWSC/TWSC <sup>1</sup>	NBL <sup>2</sup>	-	-	-	25	50
	SBL <sup>2</sup>	-	35	30	30	20
5 . Main Street/Parkridge Avenue Signal	NBL	160	80	80	80	90
	NBR	200	0	0	0	0
	SBL	105	<b>205</b>	<b>240</b>	<b>205</b>	<b>220</b>
	EBL	85	<b>145</b>	<b>265</b>	<b>145</b>	<b>230</b>
	WBL	90	<b>115</b>	<b>105</b>	<b>115</b>	<b>100</b>
	WBR	125	50	125	50	90

Notes:

ft/ln = feet per lane

OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; AWSC = All-Way Stop Control

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; R = Right

**Bold** = Queue exceeds available storage.

<sup>1</sup> This intersection operates as a OWSC intersection under without project conditions. However, under with project conditions, it operates as a TWSC intersection.

<sup>2</sup> This movement occurs from a two-way-left-turn lane. So, there is no definite storage length for this movement.

<sup>3</sup> Storage length for all movements obtained from Google Earth measurements.

<sup>4</sup> All queues reported are 95th percentile queues. Queues for signalized intersections have been reported from Synchro, while queues for unsignalized intersections have been reported from SimTraffic.

## 9.0 CIRCULATION IMPROVEMENTS

As illustrated in previously referenced Tables 7-A through 7-D, all study intersections and roadway segments are forecast to operate at a satisfactory LOS under existing and project opening year with project conditions. Therefore, the project will not have any potentially significant impacts requiring mitigations. Additionally, as seen in the aforementioned tables, with the implementation of the project design features along Main Street and Parkridge Avenue, the project will actually improve the overall traffic operations as compared to anticipated conditions without the project.

However, as shown in previously referenced Tables 8-A and 8-B, the queues at several intersections exceed the available storage lengths both under existing and project opening year conditions. Based on these results, improvements at this intersection have been recommended as follows:

- **Main Street/Parkridge Avenue:** Increase the storage length of the southbound left-turn lane on Main Street from 105 feet to 220 feet. Increase the storage length of the eastbound left-turn lane on Parkridge Avenue from 85 feet to 230 feet. Increase the storage length of the westbound left-turn lane on Parkridge Avenue from 90 feet to 115 feet. Previously referenced Figure 3-3 illustrates the conceptual striping plan with the proposed mitigation measures to demonstrate the feasibility of the proposed improvements.

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## 10.0 VMT EVALUATION

On December 28, 2018, the California Office of Administrative Law cleared the revised CEQA guidelines for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on vehicle miles traveled (VMT). Lead agencies are allowed to opt-in to the revised transportation guidelines, but the new guidelines must be used starting July 1, 2020.

As stated in the *Draft City of Corona CEQA Assessment – VMT Analysis Guidelines* (dated November 15, 2018), projects, such as local-serving retail less than 50,000 square feet (sf), which serve the local community and have the potential to reduce VMT, are exempted from a VMT assessment. Since this project has a much lower square footage (12,264 sf for all uses combined) than the 50,000-square foot threshold, a detailed VMT analysis is not required for this project.

## 11.0 DRIVE-THROUGH STACKING ANALYSIS

City staff requested both a weekday and a weekend queuing assessment for all the three proposed facilities (Habit Burger, Raising Cane's Chicken Fingers, and Quick Quack Car Wash) to analyze the potential drive-through queuing that could be expected behind the pick-up window (for the Habit Burger and Raising Cane's) or order board (for the Quick Quack).

### 11.1 HABIT BURGER DRIVE-THROUGH STACKING ANALYSIS

Weekday and weekend stacking counts were collected by Counts Unlimited from a similar Habit Burger restaurant located in Moreno Valley. The surveyed facility is a drive-through facility of approximately similar size and is located on major streets next to freeway ramps similar to the proposed project. The stacking counts were collected on two typical weekdays (January 29 and 30, 2020) and two typical weekends (February 01 and 02, 2020) between 10 a.m. and midnight. The data was collected at five-minute intervals. Detailed stacking count sheets are included in Appendix F.

Table 11-A summarizes the maximum queues behind the pick-up window. The entire queue length encompasses the queue forming at the pick-up window, from the pick-up window to the order board, from the order board to the drive-through entrance, and any remaining queues from the drive-through entrance into the parking lot. The maximum queue observed was 8 vehicles on a typical weekday (January 29, 2020) and 9 vehicles on a typical weekend (February 01, 2020).

The proposed site plan provides an approximate queuing space for 14 vehicles in the drive-through lane. Thus, under worst-case scenario, there will be adequate room for 6 additional vehicles in the drive-through lane on a typical weekday and 5 on a typical weekend. Therefore, sufficient on-site vehicle queue storage is provided in the drive-through lane for the new Habit Burger restaurant in the proposed project.

### 11.2 RAISING CANE'S DRIVE-THROUGH STACKING ANALYSIS

The stacking analysis for this facility has been developed based on the information provided in the *Drive-through Queuing Analysis for the Proposed Raising Cane's Project Located at 1215 Ontario Avenue in the City of Corona* prepared by Kimley Horn in April 2019. Weekday and weekend queue lengths were obtained from Tables 1 and 2 respectively in the study. The study has been included in Appendix G.

Table 11-B summarizes the maximum queues behind the pick-up window. The entire queue length encompasses the queue forming at the pick-up window, from the pick-up window to the order board, from the order board to the drive-through entrance, and any remaining queues from the drive-through entrance into the parking lot. The maximum queue observed was 16 vehicles on a typical weekday and 17 vehicles on a typical weekend.

The proposed site plan provides an approximate queuing space for 23 vehicles in the drive-through lane. Thus, under worst-case scenario, there will be room for 7 additional vehicles in the drive-through lane on a typical weekday and 6 on a typical weekend. Therefore, sufficient on-site vehicle

queue storage is provided in the drive-through lane for the new Raising Cane's facility in the proposed project.

### **11.3 QUICK QUACK CAR WASH DRIVE-THROUGH STACKING ANALYSIS**

Weekday and weekend stacking counts were collected by Counts Unlimited from a similar Quick Quack Car Wash facility located in Moreno Valley. The surveyed facility is of approximately similar size, is located on major streets next to the freeway ramps, and would be expected to have similar drive-through queues as the proposed facility. The stacking counts were collected on two typical weekdays (July 9 and 10, 2019) and two typical weekends (July 13 and 20, 2019) during the hours of operation of the facility (between 7 a.m. and 9 p.m.). The data was collected at five-minute intervals. Detailed stacking count sheets are included in Appendix F.

Table 11-C summarizes the maximum queues comprising the entire queue length from the queue forming at the car wash entrance to the order board, and any remaining queues from the entrance into the parking lot. The maximum queue observed was 8 vehicles on a typical weekday (both July 9 and 10, 2019) and 10 vehicles on a typical weekend (July 13, 2019).

The proposed site plan provides an approximate queuing space for 18 vehicles for the car wash facility. Thus, under worst-case scenario, there will be room for 10 additional vehicles on a typical weekday and 8 on a typical weekend. Therefore, sufficient on-site vehicle queue storage is provided for the new Quick Quack Car Wash facility in the proposed project.

### **11.4 LIST OF CHAPTER 11.0 TABLES**

- Table 11-A: Habit Burger Drive-Through Stacking Analysis
- Table 11-B: Raising Cane's Drive-Through Stacking Analysis
- Table 11-C: Quick Quack Drive-Through Stacking Analysis

**Table 11-A - Habit Burger Grill Drive-Through Stacking Analysis**

Habit Burger Facility - Moreno Valley, CA				
Time Period	Weekday 1 (01/29/2020)	Weekday 2 (01/30/2020)	Weekend 1 (02/01/2020)	Weekend 2 (02/02/2020)
	Max Queue @ Drive- Through <sup>1</sup>			
10:00 AM - 10:15 AM	0	0	0	0
10:15 AM - 10:30 AM	0	0	0	1
10:30 AM - 10:45 AM	2	1	0	1
10:45 AM - 11:00 AM	0	1	3	0
11:00 AM - 11:15 AM	1	2	3	1
11:15 AM - 11:30 AM	4	3	5	0
11:30 AM - 11:45 AM	1	2	3	2
11:45 AM - 12:00 PM	2	3	3	4
12:00 PM - 12:15 PM	5	7	4	1
12:15 PM - 12:30 PM	5	4	5	1
12:30 PM - 12:45 PM	8	5	6	4
12:45 PM - 1:00 PM	6	1	6	4
1:00 PM - 1:15 PM	3	7	2	5
1:15 PM - 1:30 PM	5	5	6	4
1:30 PM - 1:45 PM	4	3	5	3
1:45 PM - 2:00 PM	4	2	6	4
2:00 PM - 2:15 PM	5	1	4	3
2:15 PM - 2:30 PM	7	2	6	2
2:30 PM - 2:45 PM	2	1	6	6
2:45 PM - 3:00 PM	5	3	8	8
3:00 PM - 3:15 PM	4	2	9	3
3:15 PM - 3:30 PM	2	4	3	2
3:30 PM - 3:45 PM	2	4	4	4
3:45 PM - 4:00 PM	2	1	3	4
4:00 PM - 4:15 PM	3	3	4	1
4:15 PM - 4:30 PM	2	1	4	3
4:30 PM - 4:45 PM	6	4	5	4
4:45 PM - 5:00 PM	5	3	3	1
5:00 PM - 5:15 PM	1	5	4	2
5:15 PM - 5:30 PM	6	3	4	6
5:30 PM - 5:45 PM	3	3	3	3
5:45 PM - 6:00 PM	1	3	4	4

Time Period	Weekday 1 (01/29/2020)	Weekday 2 (01/30/2020)	Weekend 1 (02/01/2020)	Weekend 2 (02/02/2020)
	Max Queue @ Drive- Through <sup>1</sup>			
6:00 PM - 6:15 PM	4	3	4	6
6:15 PM - 6:30 PM	4	4	4	3
6:30 PM - 6:45 PM	5	6	5	0
6:45 PM - 7:00 PM	4	6	7	2
7:00 PM - 7:15 PM	4	6	5	0
7:15 PM - 7:30 PM	7	2	2	2
7:30 PM - 7:45 PM	5	3	4	3
7:45 PM - 8:00 PM	5	3	5	2
8:00 PM - 8:15 PM	0	4	2	2
8:15 PM - 8:30 PM	5	2	3	1
8:30 PM - 8:45 PM	3	3	5	1
8:45 PM - 9:00 PM	2	2	1	3
9:00 PM - 9:15 PM	3	2	1	3
9:15 PM - 9:30 PM	1	1	0	2
9:30 PM - 9:45 PM	3	2	4	2
9:45 PM - 10:00 PM	1	2	3	2
10:00 PM - 10:15 PM	2	4	2	1
10:15 PM - 10:30 PM	2	2	6	2
10:30 PM - 10:45 PM	1	2	2	1
10:45 PM - 11:00 PM	1	1	0	2
11:00 PM - 11:15 PM	1	1	0	0
11:15 PM - 11:30 PM	0	1	0	0
11:30 PM - 11:45 PM	0	0	0	0
11:45 PM - 12:00 AM	0	0	0	0
<b>Average</b>	3	3	4	2
<b>Peak</b>	8	7	9	8

**Notes:**

Shading indicates peak drive-through queue length.

<sup>1</sup>Queue lengths based on stacking counts collected by Counts Unlimited.

**Table 11-B - Raising Cane's Drive-Through Stacking Analysis**

Raising Cane's Facilities Located in Laguna Hills, Orange, and Riverside		
Time Period	Typical Weekday	Typical Weekend
	Max Queue @ Drive-Through <sup>1</sup>	Max Queue @ Drive-Through <sup>1</sup>
11:00 AM - 11:15 AM	4	6
11:15 AM - 11:30 AM	6	6
11:30 AM - 11:45 AM	5	12
11:45 AM - 12:00 PM	14	12
12:00 PM - 12:15 PM	15	11
12:15 PM - 12:30 PM	13	10
12:30 PM - 12:45 PM	<b>16</b>	13
12:45 PM - 1:00 PM	13	12
1:00 PM - 1:15 PM	11	14
1:15 PM - 1:30 PM	9	13
1:30 PM - 1:45 PM	7	13
1:45 PM - 2:00 PM	6	10
2:00 PM - 2:15 PM	5	8
2:15 PM - 2:30 PM	6	10
4:00 PM - 4:15 PM	8	11
4:15 PM - 4:30 PM	9	11
4:30 PM - 4:45 PM	9	9
4:45 PM - 5:00 PM	10	8
5:00 PM - 5:15 PM	8	9
5:15 PM - 5:30 PM	9	12
5:30 PM - 5:45 PM	10	11
5:45 PM - 6:00 PM	13	13
6:00 PM - 6:15 PM	11	12
6:15 PM - 6:30 PM	13	13
6:30 PM - 6:45 PM	14	10
6:45 PM - 7:00 PM	14	11
7:00 PM - 7:15 PM	14	13
7:15 PM - 7:30 PM	14	13

Time Period	Typical Weekday	Typical Weekend
	Max Queue @ Drive-Through <sup>1</sup>	Max Queue @ Drive-Through <sup>1</sup>
7:30 PM - 7:45 PM	12	16
7:45 PM - 8:00 PM	12	11
8:00 PM - 8:15 PM	13	10
8:15 PM - 8:30 PM	12	12
8:30 PM - 8:45 PM	10	13
8:45 PM - 9:00 PM	8	17
9:00 PM - 9:15 PM	10	17
9:15 PM - 9:30 PM	12	15
<b>Average</b>	10	12
<b>Peak</b>	16	17

**Notes:**

Shading indicates peak drive-through queue length.

<sup>1</sup>Queue lengths based on the 'Drive-through Queuing Analysis' for the Proposed Raising Cane's Project Located at 1215 Ontario Avenue in the City of Corona ' prepared by Kimley Horn in April 2019.

Table 11-C - Quick Quack Stacking Analysis

Quick Quack Facility - Moreno Valley, CA				
Time Period	Weekday 1	Weekday 2	Weekend 1	Weekend 2
	Max Queue @ Drive-Through <sup>1</sup>			
7:00 AM - 7:15 AM	0	2	5	4
7:15 AM - 7:30 AM	1	1	7	2
7:30 AM - 7:45 AM	1	4	6	5
7:45 AM - 8:00 AM	1	0	3	3
8:00 AM - 8:15 AM	2	4	1	3
8:15 AM - 8:30 AM	1	2	7	4
8:30 AM - 8:45 AM	1	4	3	8
8:45 AM - 9:00 AM	3	2	3	4
9:00 AM - 9:15 AM	1	1	3	3
9:15 AM - 9:30 AM	7	2	7	4
9:30 AM - 9:45 AM	4	5	5	2
9:45 AM - 10:00 AM	2	5	4	5
10:00 AM - 10:15 AM	4	5	5	8
10:15 AM - 10:30 AM	1	4	7	4
10:30 AM - 10:45 AM	4	4	5	5
10:45 AM - 11:00 AM	4	8	8	4
11:00 AM - 11:15 AM	4	2	4	6
11:15 AM - 11:30 AM	7	2	8	6
11:30 AM - 11:45 AM	4	2	3	5
11:45 AM - 12:00 PM	2	4	5	5
12:00 PM - 12:15 PM	4	7	3	6
12:15 PM - 12:30 PM	3	6	7	4
12:30 PM - 12:45 PM	4	4	2	7
12:45 PM - 1:00 PM	4	6	5	4
1:00 PM - 1:15 PM	7	5	3	7
1:15 PM - 1:30 PM	4	8	10	5
1:30 PM - 1:45 PM	3	5	5	5
1:45 PM - 2:00 PM	7	2	5	9
2:00 PM - 2:15 PM	3	6	4	8
2:15 PM - 2:30 PM	2	3	4	7
2:30 PM - 2:45 PM	3	4	4	5
2:45 PM - 3:00 PM	3	5	2	8
3:00 PM - 3:15 PM	2	2	5	4
3:15 PM - 3:30 PM	4	4	5	4

Time Period	Weekday 1	Weekday 2	Weekend 1	Weekend 2
	Max Queue @ Drive-Through <sup>1</sup>			
3:30 PM - 3:45 PM	5	8	3	6
3:45 PM - 4:00 PM	1	3	5	4
4:00 PM - 4:15 PM	2	4	4	7
4:15 PM - 4:30 PM	3	6	3	4
4:30 PM - 4:45 PM	2	3	3	7
4:45 PM - 5:00 PM	4	5	3	7
5:00 PM - 5:15 PM	3	6	3	7
5:15 PM - 5:30 PM	3	4	3	6
5:30 PM - 5:45 PM	2	5	4	5
5:45 PM - 6:00 PM	3	3	4	4
6:00 PM - 6:15 PM	8	7	2	4
6:15 PM - 6:30 PM	5	4	4	3
6:30 PM - 6:45 PM	4	5	5	6
6:45 PM - 7:00 PM	4	4	5	6
7:00 PM - 7:15 PM	2	7	6	4
7:15 PM - 7:30 PM	2	3	5	4
7:30 PM - 7:45 PM	3	4	3	4
7:45 PM - 8:00 PM	2	6	3	4
8:00 PM - 8:15 PM	4	3	3	5
8:15 PM - 8:30 PM	3	7	4	5
8:30 PM - 8:45 PM	4	4	3	3
8:45 PM - 9:00 PM	1	1	5	2
<b>Average</b>	3	4	4	5
<b>Peak</b>	8	8	10	9

**Notes:**

Shading indicates peak drive-through queue length.

<sup>1</sup>Queue lengths based on stacking counts collected by Counts Unlimited.

## 12.0 INTERNAL SITE CIRCULATION ANALYSIS

The City has requested evaluation of circulation issues for the entire center with respect to trash pick-up trucks and delivery trucks.

Trash pick-up trucks will not interfere with the drive-through operations for any of the facilities or the overall site circulation. Waste Management, Inc. (the applicable vendor for this project) has approved the trash enclosures and their locations, as well as the travel routes for trash pick-up trucks within the project site. A copy of the email approval has been included in Appendix H. Figures illustrating the circulation of trash pick-up trucks for the different facilities within the project site have also been provided in Appendix H. For these figures, the Wayne Titan Front Loading – Truck templates have been used.

Since loading and unloading for each facility will occur during the non-operational hours for each facility, there will be no circulation issues for delivery trucks. Ingress and egress movements as well as internal circulation for delivery trucks are illustrated in figures included in Appendix I. For the truck turning figures, the large Interstate Semitrailer (WB-62) templates have been used as a conservative approach. As illustrated in the figures, the trucks will have adequate turning radii to ingress and egress using the project driveways on Main Street and Parkridge Avenue. Additionally, adequate space is available on-site for delivery trucks to park during delivery operations.

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**APPENDIX A:**

**SCOPING AGREEMENT**



CARLSBAD  
FRESNO  
IRVINE  
LOS ANGELES  
PALM SPRINGS  
POINT RICHMOND  
RIVERSIDE  
ROSEVILLE  
SAN LUIS OBISPO

February 08, 2020

Mr. Aaron Cox, PMP, MBA  
Associate Engineer - Traffic  
City of Corona  
400 S. Vicentia Ave., Ste. 210  
Corona, California 92822

Subject: Traffic Impact Study Scoping Letter for the Corona Commercial Project Traffic Impact Study (LSA Project No. CZI1902)

Dear Dennis,

LSA will be preparing a traffic impact study (TIS) for the proposed Corona Commercial Project (project) to be located at the northwest corner of the intersection of Main Street and Parkridge Avenue in the City of Corona (City). Attached is Exhibit F, the “Traffic Impact Study Scope – City of Corona” form from the City of Corona Public Works Department *Traffic Impact Study Guidelines*, dated July 2006, for your review.

The proposed project will include an automated car wash, two fast-food restaurants with drive-through windows and a high turnover sit-down restaurant. Attached Figure 1 illustrates the regional and project location. Figure 2 illustrates the conceptual site plan for the project. The sit-down restaurant will be located in Pad A. The fast-food restaurants will be located in pads B and D. The potential tenant for Pad B will be Raising Cane’s Chicken Fingers, while the potential tenant for Pad D will be The Habit Burger Grill. Figure 3 illustrates the proposed study area intersections.

LSA anticipates that the following scope of work will be required to conduct the traffic study for the proposed project.

## SCOPE OF WORK

### Trip Generation

Total vehicle trip generation for the proposed project was developed as follows:

- Pad A is proposed to be a high turnover sit-down restaurant. Trip generation for Pad A was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition) for Land Use 932 – “High-Turnover (Sit-Down) Restaurant.”
- Pad B is proposed to be a Raising Cane’s Chicken Fingers restaurant. Trip generation for Pad B was developed using rates from the ITE *Trip Generation Manual* (10th Edition) for Land Use 934 – “Fast-Food Restaurant with Drive-Through Window.” However, since Raising Cane’s is not open during the a.m. peak hour, an a.m. peak hour trip generation was not developed for Pad B.

- Pad C is proposed to be a car wash facility, the potential tenant being Quick Quack Car Wash. Trip generation for the car wash facility was developed using rates from the ITE *Trip Generation Manual* (10th Edition) for Land Uses 948 - "Automated Car Wash." Since only p.m. peak hour rates are available for this land use in the ITE manual, the a.m. peak hour and daily rates were obtained by using the p.m. peak hour trip generation rate ratio between Land Use 948 and Land Use 949 - "Car Wash and Detail Center" and applying the ratio to the a.m. peak hour and daily rates for Land Use 949.
- Pad D is proposed to be a Habit Burger Grill facility. Trip generation for Pad D was developed based on counts obtained at a similar Habit Burger facility in the City of Moreno Valley. Counts were collected on two weekdays (January 29 and January 30, 2020). The higher of the two counts was used as a conservative approach. Detailed counts sheets are included in Appendix A. Since Habit Burger is not open during the a.m. peak hour, an a.m. peak hour trip generation was not developed for Pad B.

For car washes and restaurants, a certain percentage of external trips are pass-by trips. A pass-by trip is a trip where an intermediate stop is made on the way from the origin to the primary destination of the trip without making a route diversion. Pass-by rates for all land uses were determined based on discussion with City staff. As shown in Table A, overall, the project is anticipated to generate 40 net trips in the a.m. peak hour, 189 net trips in the p.m. peak hour, and 2,356 net daily trips.

The distribution of project trips is based on the regional roadway network and the location of residential, employment and commercial centers in relation to the proposed project. Figure 4 illustrates the project trip distribution. The project trip generation was applied to the trip distribution patterns to develop the project trip assignment. The net project trip assignment is illustrated in Figure 5.

The TIS will be prepared to satisfy the requirements established by the City's TIS guidelines, as well as the requirements for the disclosure of potential impacts and mitigation measures pursuant to the California Environmental Quality Act (CEQA). Based on the TIS guidelines, the study area shall generally include any key intersection of "collector" to "collector" or higher classification streets, on which the proposed project will add 50 or more peak hour trips from the project site. Roadway segments adjacent to the project and between study intersection and/or project driveways also need to be analyzed. City staff also recommended inclusion of some additional intersections and roadway segments. As such, LSA proposes to include the following intersections in the study:

1. Cota Street – DPSS Building Driveway/Parkridge Avenue;
2. Project Driveway 1 – Shopping Center Driveway/Parkridge Avenue;
3. Hamner Avenue/Mountain Avenue – Hidden Valley Parkway;
4. Main Street/Project Driveway 2 – Alamilla's Driveway; and
5. Main Street/Parkridge Avenue.

The roadway segments to be analyzed are as follows:

1. Parkridge Avenue, between Cota Street and Shopping Center Driveway – Project Driveway 1;
2. Parkridge Avenue, between Shopping Center Driveway – Project Driveway 1 and Main Street;
3. Main Street – Hamner Avenue, between Mountain Avenue – Hidden Valley Parkway and Project Driveway 2 – Alamilla’s Driveway; and
4. Main Street, between Project Driveway 2 – Alamilla’s Driveway and Parkridge Avenue.

### Analysis Scenarios

The TIS for the proposed project will be prepared to meet the requirements of the City. LSA proposes to analyze a.m. and p.m. peak hour traffic operations at the study intersections for the following scenarios:

- Existing Conditions;
- Existing with Project Conditions;
- Project Opening Year without Project Conditions; and
- Project Opening Year with Project Conditions.

### Volume Development and Analysis Methodology

Traffic volumes for existing year traffic conditions will be based on existing a.m. and p.m. peak hour traffic counts collected for the intersections identified for the analysis. As per the City’s TIS guidelines, the a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 6:00 and 9:00 a.m., while the p.m. peak hour is defined as the one hour of highest traffic volume occurring between 4:00 and 6:00 p.m.

Project opening year without project traffic volumes will be developed by applying an annual growth rate to existing peak hour traffic volumes and by adding traffic volumes from approved and pending development projects in the study area. The project opening year will be 2021. As per discussion with City staff, a growth rate of 2 percent will be used. The list of cumulative projects considered for the analysis has been included in Table B. Cumulative project locations have been illustrated in Figure 6.

Existing and project opening year with project traffic volumes will be developed by adding project traffic to the corresponding without project scenarios.

The TIS will analyze study intersections during the a.m. and p.m. peak hours. Intersection levels of service (LOS) will be calculated using the *Highway Capacity Manual 6* (HCM 6) analysis methodologies and using *Synchro 10* software.

### Project Impact Assessment and Mitigation Measures

Intersection LOS without the project will be compared to the intersection LOS plus the project for each of the analysis scenarios to determine potential project impacts. Determination of the significance of project impacts will be made based on the City’s LOS standard and threshold of significance criteria. At significantly affected intersections, mitigation measures will be

recommended to improve intersection performance to satisfactory conditions. Mitigation measures may include intersection turn lanes, signalization, and segment lane additions. The LOS with mitigation will be calculated and summarized, along with a comparison of the LOS without mitigation.

### Signal Warrant Analysis

As part of the analysis, if a deficiency is identified at any of the unsignalized intersections, a peak hour signal warrant analysis will be conducted. Peak hour approach volumes for the study intersections will be examined to determine whether signalization may be warranted at an unsignalized study intersection as per the criteria defined in the California supplement of the *Manual on Uniform Traffic Control Devices (CA-MUTCD)*.

### Fair Share

LSA will evaluate whether the mitigation measures identified in the TIS are included as part of the Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) or the City's Development Impact Fees (DIF.) For all mitigation measures proposed by the TIA, the fair share must be calculated as per the City's TIS guidelines.

### Drive-through Stacking Analysis

A queuing/stacking assessment will be conducted for the car wash and the two fast-food restaurants for both weekdays and weekends. Stacking surveys will be conducted at existing similar facilities and these counts will be used for the stacking analysis for the proposed developments.

### Queuing Analysis

As requested by City staff, a queuing analysis will be performed to determine the 95th percentile queues at the two project driveways and the intersections of Cota Street – DPSS Building Driveway/Parkridge Avenue and Main Street/Parkridge Avenue.

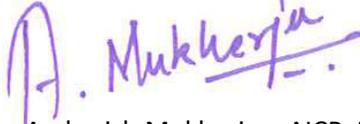
### Vehicles Miles Travelled (VMT) Analysis

LSA will be performing a VMT analysis based on the *Draft City of Corona CEQA Assessment – VMT Analysis Guidelines* (dated November 2018) and if required, will propose VMT mitigation measures accordingly.

If you have any questions, please do not hesitate to contact me at (951) 781-9310 or email me at [Ambarish.Mukherjee@lsa.net](mailto:Ambarish.Mukherjee@lsa.net).

Sincerely,

**LSA ASSOCIATES, INC.**



Ambarish Mukherjee, AICP, P.E.  
Associate/Senior Transportation Planner

Attachments:

- Exhibit F: Traffic Impact Study Scope – City of Corona
- Table A: Project Trip Generation
- Table B: Cumulative Projects
- Figure 1: Regional and Project Location
- Figure 2: Conceptual Site Plan
- Figure 3: Study Area Intersections
- Figure 4: Project Trip Distribution
- Figure 5: Project Trip Assignment
- Figure 6: Cumulative Project Locations
- Appendix A: The Habit Burger Grill Trip Generation Counts

## Exhibit F

### Traffic Impact Study Scope – City of Corona

Project Name:	Corona Commercial Project
Project Address:	Northwest Corner of Main Street and Parkridge Avenue
Project Description:	The project will include a car wash, two fast-food restaurants with drive-through windows, and a high turnover sit-down restaurant.
Case Number:	

	Consultant	Developer
Name:	LSA Associates, Inc.	Costanzo Investments
Address:	1500 Iowa Avenue, Suite 200 Riverside, CA 92507	17 Corporate Drive, Suite 250, Newport Beach, CA 92660
Telephone:	951-781-9310	949-566-8021
E-mail:	ambarish.mukerjee@lsa.net	ccostanzo@costanzoinv.com

#### **A. Trip Generation**

Proposed Land Use	General Commercial	Previous Land Use	Vacant
Existing Zoning	Commercial	Proposed Zoning	Commercial

	In	Out	Total
AM Peak Hour	21	19	40
PM Peak Hour	101	88	189

#### **B. Trip Distribution**

Attach graphical representation

#### **C. Background Traffic**

Project Opening year:	2021	Growth Rate:	2%
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#### **D. Study Intersections**

1) Cota Street - DPSS Building Driveway/Parkridge Avenue	
2) Project Driveway 1 - Shopping Center Driveway/Parkridge Avenue	
3) Hamner Avenue/Mountain Avenue - Hidden Valley Parkway	
4) Main Street/Project Driveway 2 - Alamilla's Driveway	
5) Main Street/Parkridge Avenue	

#### **E. Specific Issues to be addressed in the Study**


#### **Approved By:**

City of Corona Traffic Engineering:	
Date:	

TABLE

**Table A - Project Trip Generation**

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Pad A - High Turnover (Sit-Down) Restaurant	2.53 TSF							
Trips/Unit <sup>1</sup>		5.47	4.47	9.94	6.06	3.71	9.77	112.18
Trip Generation		14	11	25	15	9	24	284
Pass-by Trips <sup>2</sup>		(4)	(3)	(7)	(4)	(2)	(6)	(71)
Net External Trips		10	8	18	11	7	18	213
Pad B - Raising Cane's	3.49 TSF							
Trips/Unit <sup>3</sup>		-	-	-	16.99	15.68	32.67	470.95
Trip Generation		-	-	-	59	55	114	1,642
Pass-by Trips <sup>2</sup>		-	-	-	(15)	(14)	(29)	(411)
Net Trip Generation		-	-	-	44	41	85	1,231
Pad C - Quick Quack Car Wash	3.60 TSF							
Trips/Unit <sup>4</sup>		4.49	4.49	8.98	7.10	7.10	14.20	163.09
Trip Generation		16	16	32	26	26	52	586
Pass-by Trips <sup>2</sup>		(5)	(5)	(10)	(8)	(8)	(16)	(176)
Net External Trips		11	11	22	18	18	36	410
Pad D - The Habit Burger Grill	2.65 TSF							
Trip Generation <sup>5</sup>		-	-	-	38	29	67	669
Pass-by Trips <sup>2</sup>		-	-	-	(10)	(7)	(17)	(167)
Net Trip Generation		-	-	-	28	22	50	502
<b>Gross Trip Generation</b>		30	27	57	138	119	257	3,181
<b>Total Pass-by Trips</b>		(9)	(8)	(17)	(37)	(31)	(68)	(825)
<b>Total Net Trip Generation</b>		21	19	40	101	88	189	2,356

Notes:

TSF = Thousand Square Feet

- <sup>1</sup> Trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition) for Land Use 932 - "High-Turnover (Sit-Down) Restaurant", Setting/Location - "General Urban/Suburban."
- <sup>2</sup> Peak hour and daily pass-by rates obtained based on discussions with City staff.
- <sup>3</sup> Trip generation rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 934 - "Fast-Food Restaurant with Drive-Through Window", Setting/Location - "General Urban/Suburban." Raising Cane's is not open during the a.m. peak hour.
- <sup>4</sup> Trip generation rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 948 - "Automated Car Wash", Setting/Location - "General Urban/Suburban." Only p.m. peak hour rates are available for this land use in the ITE manual. The a.m. peak hour and daily rates were obtained by using the p.m. peak hour trip generation rate ratio between Land Use 948 and Land Use 949 - "Car Wash and Detail Center" and applying the ratio to the a.m. peak hour and daily rates for Land Use 949. Also, the p.m. peak hour splits for Land Use 948 were used for the a.m. peak hour.
- <sup>5</sup> Trip generation developed based on survey counts at a similar Habit Burger Grill facility in the City of Moreno Valley. The counts were performed on two weekdays (January 29, 2020 and January 30, 2020). The higher of the two counts was used as a conservative approach.

FIGURES

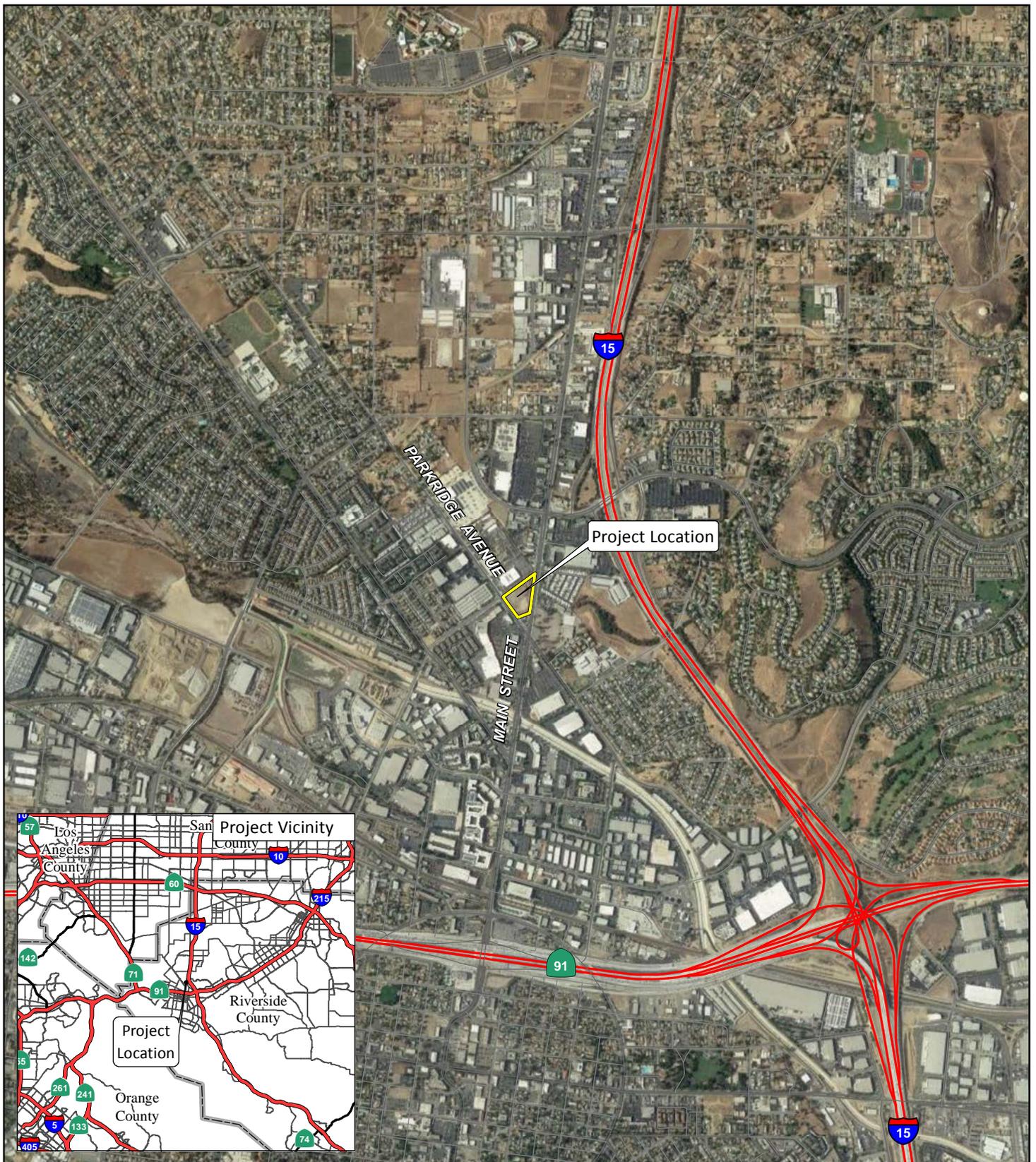
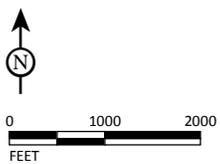


FIGURE 1

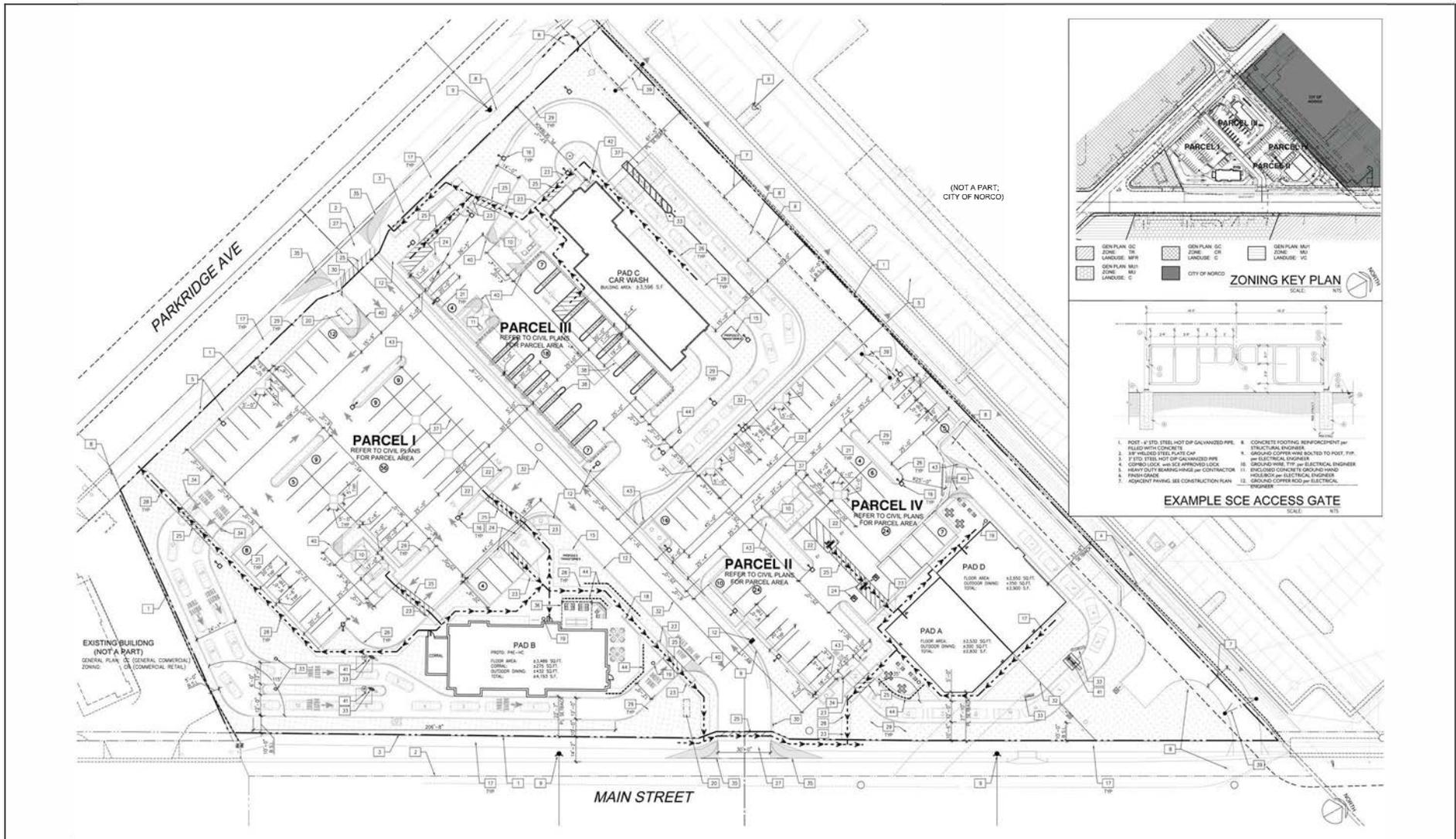
LSA



SOURCE: ESRI Streetmap, 2013; Google Earth, 2018.

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Corona Commercial Project  
 Traffic Impact Study  
 Regional and Project Location



LSA

FIGURE 2

Corona Commercial Project  
Traffic Impact Study

Conceptual Site Plan

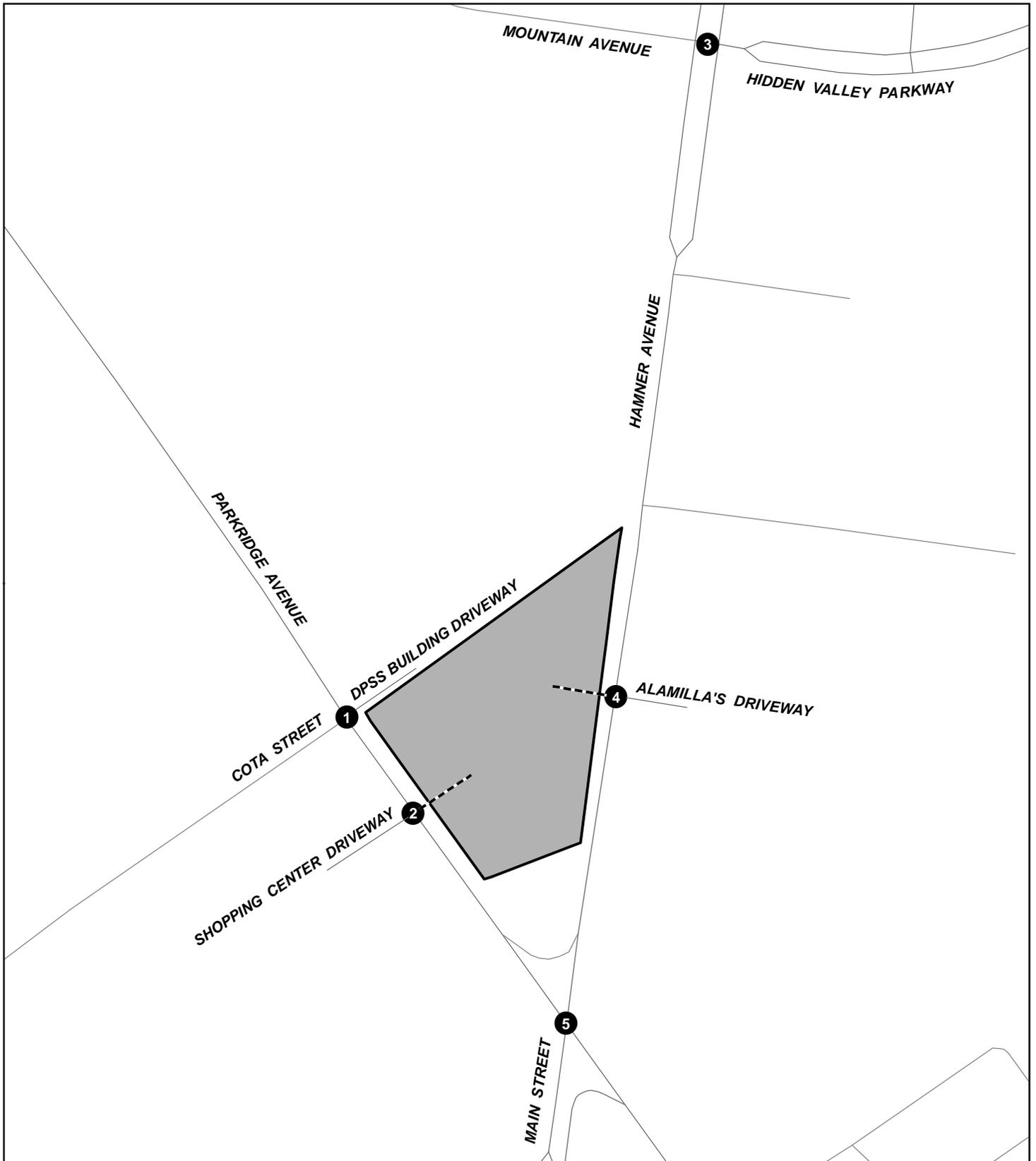


FIGURE 3

LSA

LEGEND

- Project Site
- Study Area Intersection
- Project Driveway



SOURCE: ESRI Streetmap, 2013.

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Corona Commercial Project  
 Traffic Impact Study  
 Study Area Intersections

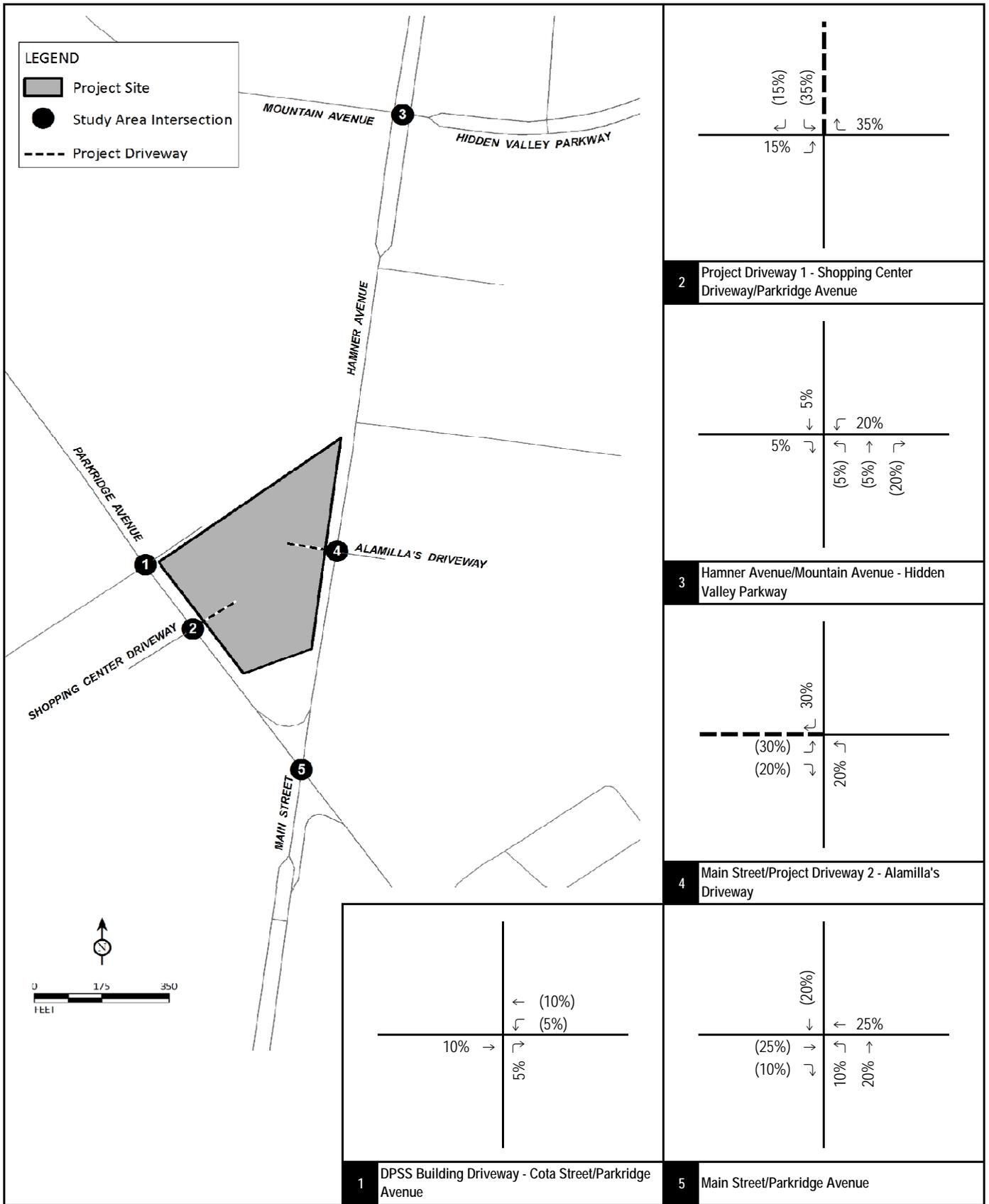


FIGURE 4



XX% (YY%)  
Inbound% (Outbound%) Distribution

----- Project Driveway

Corona Commercial Project  
Project Trip Distribution

Project Trip Distribution

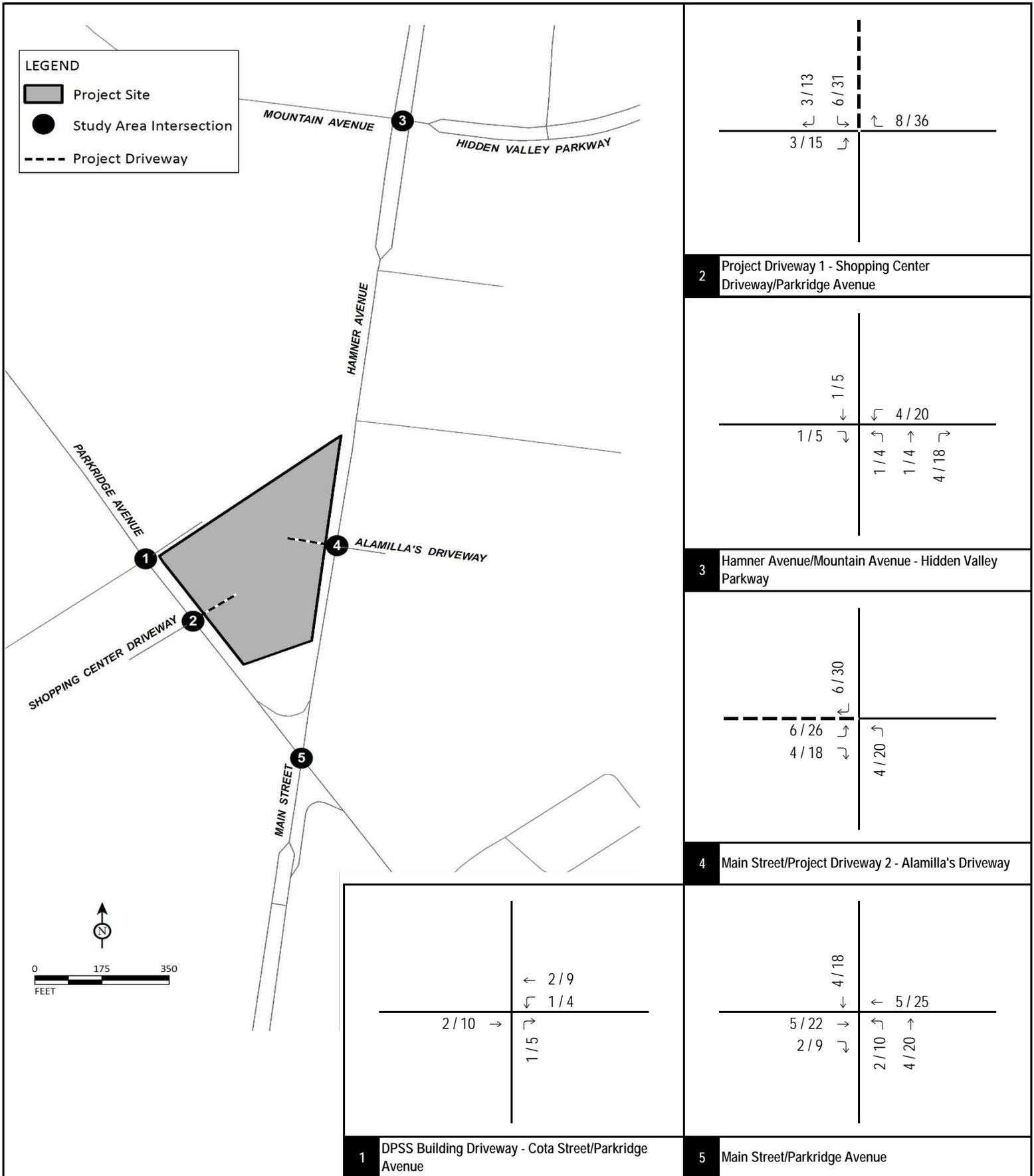


FIGURE 5



XX / YY  
AM / PM Peak Hour Trips

----- Project Driveway

Corona Commercial Project  
Traffic Impact Study  
Net Project Trip Assignment

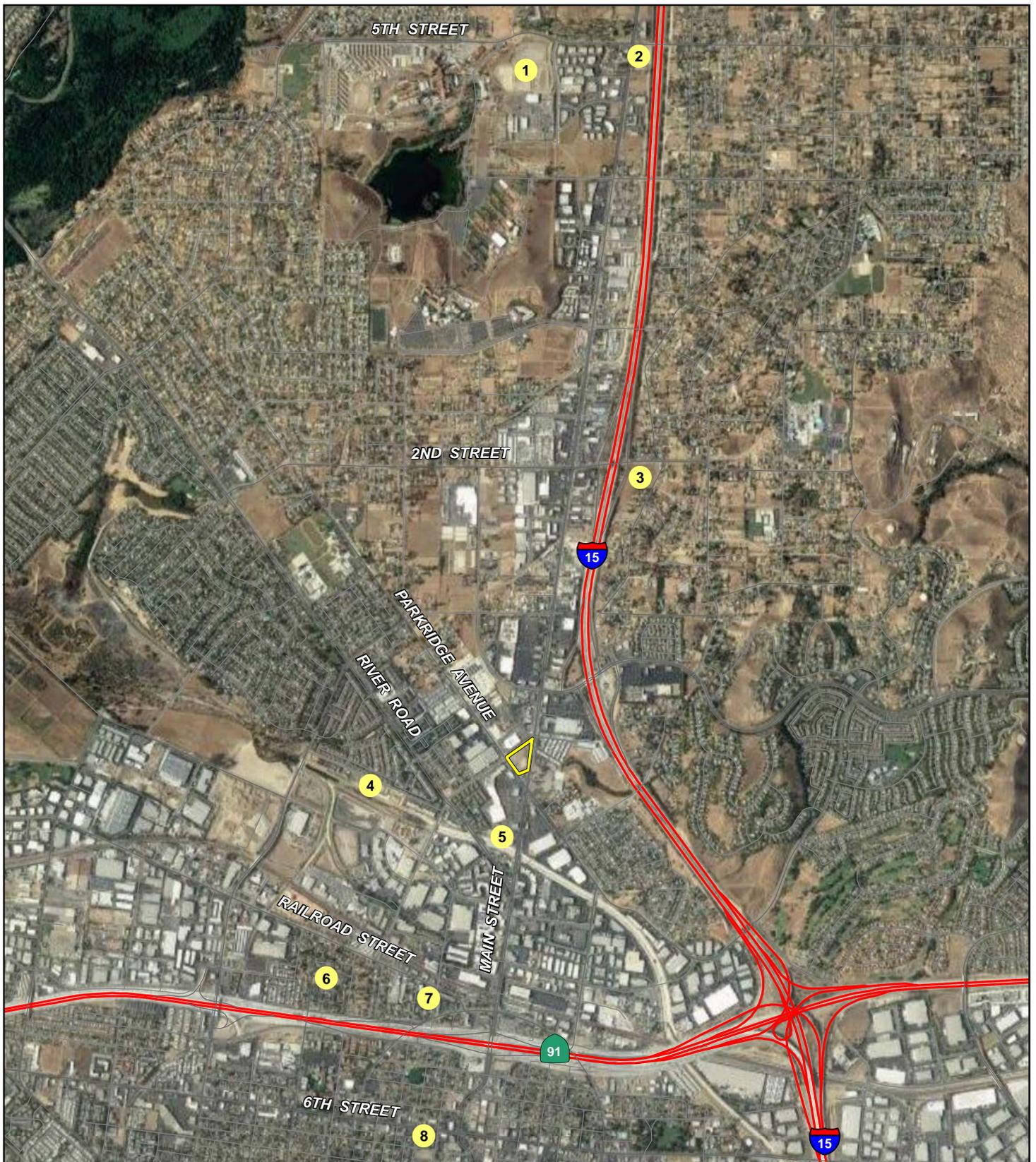


FIGURE 6

LSA

LEGEND

- Project Site
- Cumulative Project



SOURCE: ESRI Streetmap, 2013; Google Earth, 2018.

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Corona Commercial Project  
Traffic Impact Study  
Cumulative Project Locations

**APPENDIX A**

**THE HABIT BURGER GRILL TRIP GENERATION COUNTS**



City: Moreno Valley  
Location: 12560 Day St/The Habit  
Date: 1/29/2020  
Count Type: Trip Generation Count

	Entering	Exiting	Total
10:00	0	0	0
10:15	0	0	0
10:30	4	1	5
10:45	5	2	7
11:00	7	0	7
11:15	8	7	15
11:30	5	4	9
11:45	9	4	13
12:00	15	3	18
12:15	18	8	26
12:30	6	9	15
12:45	20	14	34
13:00	11	22	33
13:15	1	13	14
13:30	9	8	17
13:45	11	4	15
14:00	4	10	14
14:15	12	6	18
14:30	13	6	19
14:45	9	9	18
15:00	7	6	13
15:15	4	12	16
15:30	12	7	19
15:45	8	9	17
16:00	8	8	16
16:15	4	7	11
16:30	7	9	16
16:45	7	7	14
17:00	4	8	12
17:15	8	7	15
17:30	5	9	14
17:45	8	7	15
18:00	6	6	12
18:15	9	8	17
18:30	6	7	13
18:45	10	7	17
19:00	3	6	9
19:15	0	11	11
19:30	12	5	17



City: Moreno Valley  
Location: 12560 Day St/The Habit  
Date: 1/29/2020  
Count Type: Trip Generation Count

	Entering	Exiting	Total
19:45	2	3	5
20:00	5	4	9
20:15	5	4	9
20:30	13	12	25
20:45	4	5	9
21:00	3	10	13
21:15	1	1	2
21:30	5	4	9
21:45	1	3	4
22:00	0	3	3
22:15	0	5	5
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	2	3	5
23:30	0	0	0
23:45	0	0	0
<b>TOTAL</b>	<b>336</b>	<b>333</b>	<b>669</b>



City: Moreno Valley  
Location: 12560 Day St/The Habit  
Date: 1/30/2020  
Count Type: Trip Generation Count

	Entering	Exiting	Total
10:00	1	0	1
10:15	0	2	2
10:30	5	1	6
10:45	3	1	4
11:00	3	3	6
11:15	8	3	11
11:30	7	4	11
11:45	16	7	23
12:00	9	5	14
12:15	13	10	23
12:30	4	4	8
12:45	2	2	4
13:00	11	5	16
13:15	7	7	14
13:30	8	5	13
13:45	2	5	7
14:00	6	8	14
14:15	7	8	15
14:30	7	9	16
14:45	6	6	12
15:00	8	7	15
15:15	10	11	21
15:30	10	5	15
15:45	4	11	15
16:00	4	9	13
16:15	7	8	15
16:30	14	5	19
16:45	7	4	11
17:00	10	7	17
17:15	7	13	20
17:30	1	3	4
17:45	1	5	6
18:00	7	8	15
18:15	9	7	16
18:30	16	4	20
18:45	3	5	8
19:00	6	10	16
19:15	10	7	17
19:30	5	5	10



City: Moreno Valley  
Location: 12560 Day St/The Habit  
Date: 1/30/2020  
Count Type: Trip Generation Count

	Entering	Exiting	Total
19:45	3	6	9
20:00	5	6	11
20:15	0	7	7
20:30	0	5	5
20:45	5	3	8
21:00	0	3	3
21:15	2	5	7
21:30	3	4	7
21:45	6	3	9
22:00	0	3	3
22:15	0	2	2
22:30	0	7	7
22:45	1	2	3
23:00	0	1	1
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
<b>TOTAL</b>	<b>289</b>	<b>286</b>	<b>575</b>

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**APPENDIX B:**

**TRAFFIC COUNT SHEETS**

City of Irvine  
 N/S: Cota Street  
 E/W: Parkridge Avenue  
 Weather: Clear

File Name : 01\_COR\_Cota\_Parkridge AM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 1

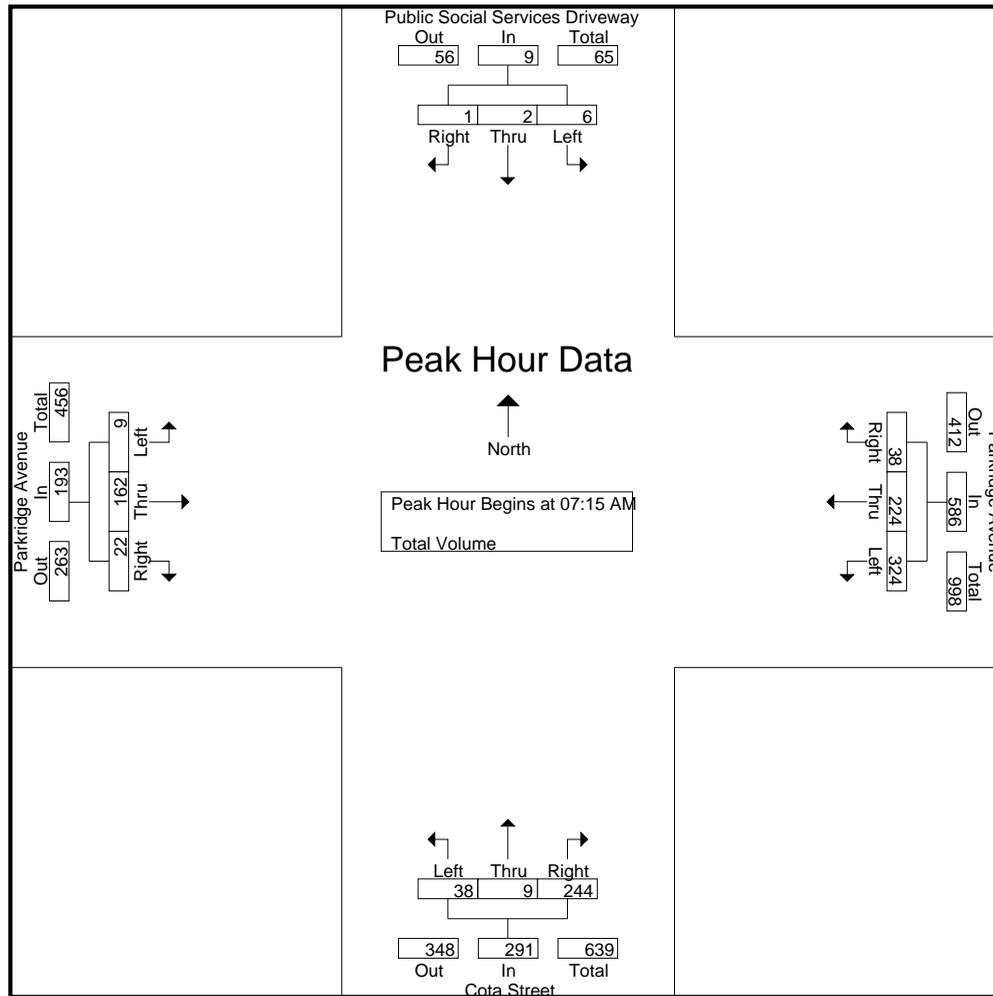
Groups Printed- Total Volume

Start Time	Public Social Services Driveway Southbound				Parkridge Avenue Westbound				Cota Street Northbound				Parkridge Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
06:00 AM	0	0	0	0	26	28	0	54	3	0	14	17	0	9	0	9	80
06:15 AM	0	0	0	0	38	30	1	69	1	0	24	25	0	14	2	16	110
06:30 AM	1	0	0	1	41	40	0	81	1	1	18	20	0	7	1	8	110
06:45 AM	0	0	0	0	70	41	0	111	8	0	28	36	0	20	2	22	169
Total	1	0	0	1	175	139	1	315	13	1	84	98	0	50	5	55	469
07:00 AM	1	0	0	1	64	50	5	119	5	0	49	54	1	32	2	35	209
07:15 AM	0	0	0	0	67	70	13	150	15	5	54	74	8	43	6	57	281
07:30 AM	3	0	0	3	91	67	9	167	12	0	50	62	0	59	10	69	301
07:45 AM	3	1	0	4	95	52	10	157	7	3	73	83	1	34	5	40	284
Total	7	1	0	8	317	239	37	593	39	8	226	273	10	168	23	201	1075
08:00 AM	0	1	1	2	71	35	6	112	4	1	67	72	0	26	1	27	213
08:15 AM	3	1	1	5	57	29	6	92	4	2	25	31	1	31	6	38	166
08:30 AM	0	4	0	4	40	42	4	86	3	3	22	28	0	14	4	18	136
08:45 AM	1	0	0	1	38	31	10	79	2	2	17	21	1	20	6	27	128
Total	4	6	2	12	206	137	26	369	13	8	131	152	2	91	17	110	643
Grand Total	12	7	2	21	698	515	64	1277	65	17	441	523	12	309	45	366	2187
Apprch %	57.1	33.3	9.5		54.7	40.3	5		12.4	3.3	84.3		3.3	84.4	12.3		
Total %	0.5	0.3	0.1	1	31.9	23.5	2.9	58.4	3	0.8	20.2	23.9	0.5	14.1	2.1	16.7	

Start Time	Public Social Services Driveway Southbound				Parkridge Avenue Westbound				Cota Street Northbound				Parkridge Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	67	<b>70</b>	<b>13</b>	150	<b>15</b>	<b>5</b>	54	74	<b>8</b>	43	6	57	281
07:30 AM	3	0	0	3	91	67	9	167	12	0	50	62	0	<b>59</b>	<b>10</b>	<b>69</b>	<b>301</b>
07:45 AM	3	1	0	4	<b>95</b>	52	10	157	7	3	<b>73</b>	<b>83</b>	1	34	5	40	284
08:00 AM	0	1	1	2	71	35	6	112	4	1	67	72	0	26	1	27	213
Total Volume	6	2	1	9	324	224	38	586	38	9	244	291	9	162	22	193	1079
% App. Total	66.7	22.2	11.1		55.3	38.2	6.5		13.1	3.1	83.8		4.7	83.9	11.4		
PHF	.500	.500	.250	.563	.853	.800	.731	.877	.633	.450	.836	.877	.281	.686	.550	.699	.896

City of Irvine  
 N/S: Cota Street  
 E/W: Parkridge Avenue  
 Weather: Clear

File Name : 01\_COR\_Cota\_Parkridge AM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 2



Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:00 AM				07:15 AM				07:00 AM			
+0 mins.	3	1	0	4	64	50	5	119	15	5	54	74	1	32	2	35
+15 mins.	0	1	1	2	67	70	13	150	12	0	50	62	8	43	6	57
+30 mins.	3	1	1	5	91	67	9	167	7	3	73	83	0	59	10	69
+45 mins.	0	4	0	4	95	52	10	157	4	1	67	72	1	34	5	40
Total Volume	6	7	2	15	317	239	37	593	38	9	244	291	10	168	23	201
% App. Total	40	46.7	13.3		53.5	40.3	6.2		13.1	3.1	83.8		5	83.6	11.4	
PHF	.500	.438	.500	.750	.834	.854	.712	.888	.633	.450	.836	.877	.313	.712	.575	.728

City of Irvine  
 N/S: Cota Street  
 E/W: Parkridge Avenue  
 Weather: Clear

File Name : 01\_COR\_Cota\_Parkridge PM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 1

Groups Printed- Total Volume

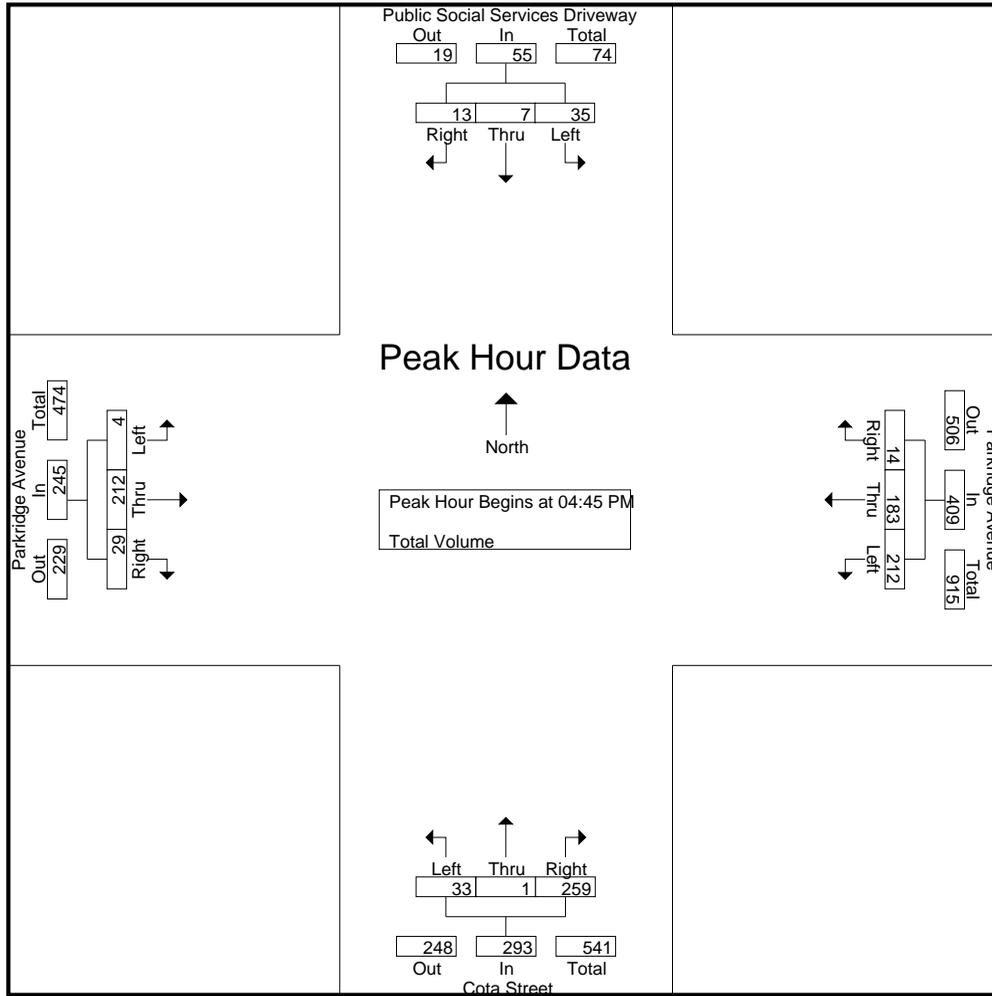
Start Time	Public Social Services Driveway Southbound				Parkridge Avenue Westbound				Cota Street Northbound				Parkridge Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	0	1	4	54	35	6	95	4	2	61	67	0	66	7	73	239
04:15 PM	6	1	0	7	45	37	5	87	9	1	48	58	1	60	4	65	217
04:30 PM	1	3	1	5	53	34	3	90	10	0	58	68	1	70	6	77	240
04:45 PM	2	2	2	6	59	37	5	101	11	0	66	77	2	48	5	55	239
Total	12	6	4	22	211	143	19	373	34	3	233	270	4	244	22	270	935
05:00 PM	5	1	1	7	53	50	4	107	4	1	72	77	1	45	5	51	242
05:15 PM	3	0	3	6	47	46	2	95	9	0	63	72	1	46	7	54	227
05:30 PM	25	4	7	36	53	50	3	106	9	0	58	67	0	73	12	85	294
05:45 PM	2	1	1	4	56	31	0	87	8	0	46	54	0	30	5	35	180
Total	35	6	12	53	209	177	9	395	30	1	239	270	2	194	29	225	943
Grand Total	47	12	16	75	420	320	28	768	64	4	472	540	6	438	51	495	1878
Apprch %	62.7	16	21.3		54.7	41.7	3.6		11.9	0.7	87.4		1.2	88.5	10.3		
Total %	2.5	0.6	0.9	4	22.4	17	1.5	40.9	3.4	0.2	25.1	28.8	0.3	23.3	2.7	26.4	

Start Time	Public Social Services Driveway Southbound				Parkridge Avenue Westbound				Cota Street Northbound				Parkridge Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	2	2	2	6	<b>59</b>	37	5	101	11	0	66	77	2	48	5	55	239
05:00 PM	5	1	1	7	53	<b>50</b>	4	107	4	1	72	77	1	45	5	51	242
05:15 PM	3	0	3	6	47	46	2	95	9	0	63	72	1	46	7	54	227
05:30 PM	<b>25</b>	<b>4</b>	<b>7</b>	<b>36</b>	53	50	3	106	9	0	58	67	0	<b>73</b>	<b>12</b>	<b>85</b>	<b>294</b>
Total Volume	35	7	13	55	212	183	14	409	33	1	259	293	4	212	29	245	1002
% App. Total	63.6	12.7	23.6		51.8	44.7	3.4		11.3	0.3	88.4		1.6	86.5	11.8		
PHF	.350	.438	.464	.382	.898	.915	.700	.956	.750	.250	.899	.951	.500	.726	.604	.721	.852

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

City of Irvine  
 N/S: Cota Street  
 E/W: Parkridge Avenue  
 Weather: Clear

File Name : 01\_COR\_Cota\_Parkridge PM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 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				04:30 PM				04:00 PM							
+0 mins.	2	2	2	6	<b>59</b>	37	<b>5</b>	101	10	0	58	68	0	66	<b>7</b>	73
+15 mins.	5	1	1	7	53	<b>50</b>	4	<b>107</b>	<b>11</b>	0	66	<b>77</b>	1	60	4	65
+30 mins.	3	0	3	6	47	46	2	95	4	<b>1</b>	<b>72</b>	77	1	<b>70</b>	6	<b>77</b>
+45 mins.	<b>25</b>	<b>4</b>	<b>7</b>	<b>36</b>	53	50	3	106	9	0	63	72	<b>2</b>	48	5	55
Total Volume	35	7	13	55	212	183	14	409	34	1	259	294	4	244	22	270
% App. Total	63.6	12.7	23.6		51.8	44.7	3.4		11.6	0.3	88.1		1.5	90.4	8.1	
PHF	.350	.438	.464	.382	.898	.915	.700	.956	.773	.250	.899	.955	.500	.871	.786	.877

Location: Corona  
 N/S: Cota Street  
 E/W: Parkridge Avenue



Date: 5/2/2019  
 Day: Thursday

PEDESTRIANS

	North Leg Public Social Services DW	East Leg Parkridge Avenue	South Leg Cota Street	West Leg Parkridge Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:00 AM	0	0	1	0	1
6:15 AM	0	0	1	1	2
6:30 AM	1	1	0	0	2
6:45 AM	0	1	1	2	4
7:00 AM	1	0	0	1	2
7:15 AM	0	0	0	0	0
7:30 AM	1	1	0	1	3
7:45 AM	0	0	1	0	1
8:00 AM	1	0	0	1	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	1	0	1
8:45 AM	0	2	0	0	2
TOTAL VOLUMES:	4	5	5	6	20

	North Leg Public Social Services DW	East Leg Parkridge Avenue	South Leg Cota Street	West Leg Parkridge Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	2	1	1	4
4:15 PM	2	3	0	2	7
4:30 PM	0	0	1	1	2
4:45 PM	0	0	2	0	2
5:00 PM	0	3	1	2	6
5:15 PM	0	0	1	0	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	2	8	6	6	22

Location: Corona  
 N/S: Cota Street  
 E/W: Parkridge Avenue



Date: 5/2/2019  
 Day: Thursday

BICYCLES

	Southbound Public Social Services DW			Westbound Parkridge Avenue			Northbound Cota Street			Eastbound Parkridge Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	0	0	1	1	0	0	0	0	3

	Southbound Public Social Services DW			Westbound Parkridge Avenue			Northbound Cota Street			Eastbound Parkridge Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	1	1	1	1	0	0	0	0	1	6

City of Corona  
 N/S: Parkridge Avenue  
 E/W: Driveway  
 Weather: Clear

File Name : 02\_COR\_Parkridge\_Driveway AM  
 Site Code : 00318878  
 Start Date : 11/15/2018  
 Page No : 1

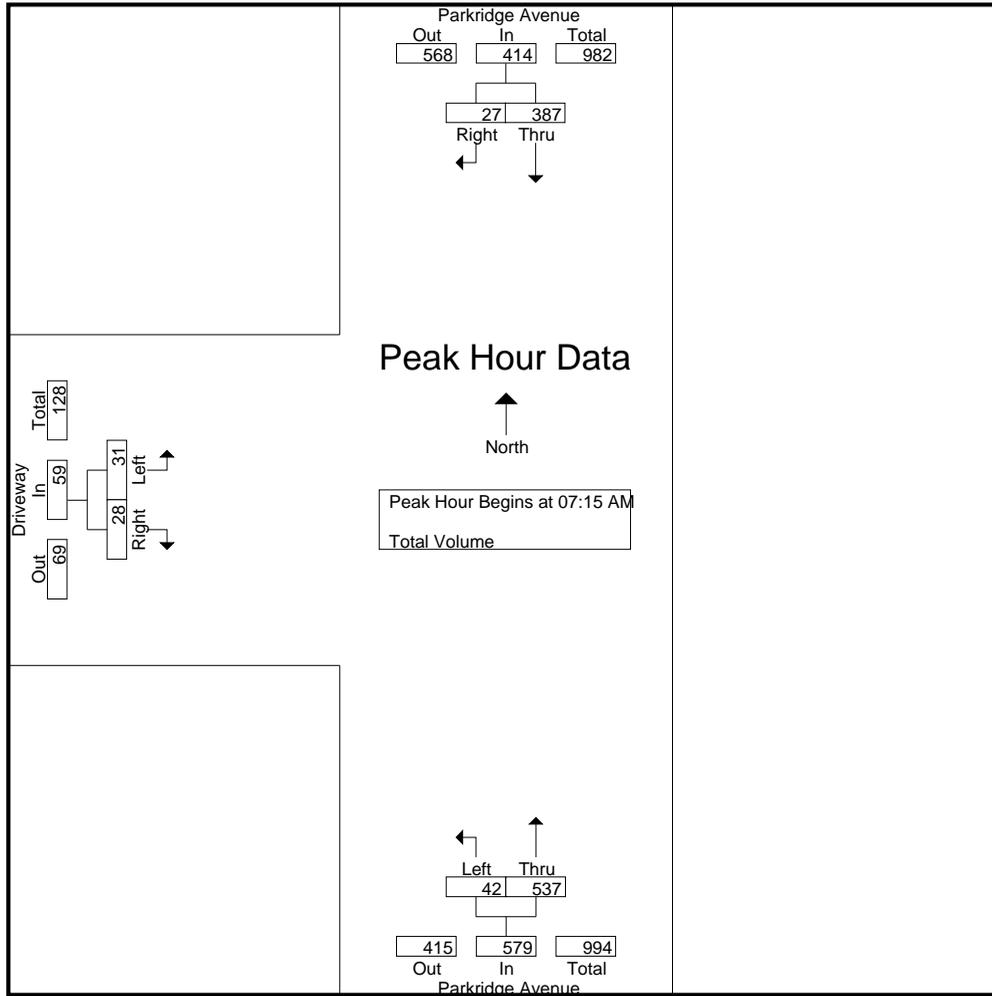
Groups Printed- Total Volume

Start Time	Parkridge Avenue Southbound			Parkridge Avenue Northbound			Driveway Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
06:00 AM	30	2	32	3	68	71	4	1	5	108
06:15 AM	27	1	28	6	56	62	2	1	3	93
06:30 AM	32	2	34	9	84	93	6	4	10	137
06:45 AM	57	3	60	3	121	124	8	1	9	193
Total	146	8	154	21	329	350	20	7	27	531
07:00 AM	71	2	73	9	96	105	5	8	13	191
07:15 AM	89	5	94	10	156	166	5	4	9	269
07:30 AM	100	7	107	8	143	151	8	3	11	269
07:45 AM	111	9	120	11	132	143	9	15	24	287
Total	371	23	394	38	527	565	27	30	57	1016
08:00 AM	87	6	93	13	106	119	9	6	15	227
08:15 AM	38	5	43	12	74	86	6	6	12	141
08:30 AM	50	1	51	8	57	65	9	5	14	130
08:45 AM	38	4	42	10	74	84	6	7	13	139
Total	213	16	229	43	311	354	30	24	54	637
Grand Total	730	47	777	102	1167	1269	77	61	138	2184
Apprch %	94	6		8	92		55.8	44.2		
Total %	33.4	2.2	35.6	4.7	53.4	58.1	3.5	2.8	6.3	

Start Time	Parkridge Avenue Southbound			Parkridge Avenue Northbound			Driveway Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	89	5	94	10	<b>156</b>	<b>166</b>	5	4	9	269
07:30 AM	100	7	107	8	143	151	8	3	11	269
07:45 AM	<b>111</b>	<b>9</b>	<b>120</b>	11	132	143	<b>9</b>	<b>15</b>	<b>24</b>	<b>287</b>
08:00 AM	87	6	93	<b>13</b>	106	119	9	6	15	227
Total Volume	387	27	414	42	537	579	31	28	59	1052
% App. Total	93.5	6.5		7.3	92.7		52.5	47.5		
PHF	.872	.750	.863	.808	.861	.872	.861	.467	.615	.916

City of Corona  
 N/S: Parkridge Avenue  
 E/W: Driveway  
 Weather: Clear

File Name : 02\_COR\_Parkridge\_Driveway AM  
 Site Code : 00318878  
 Start Date : 11/15/2018  
 Page No : 2



Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:45 AM		
+0 mins.	89	5	94	10	<b>156</b>	<b>166</b>	<b>9</b>	<b>15</b>	<b>24</b>
+15 mins.	100	7	107	8	143	151	9	6	15
+30 mins.	<b>111</b>	<b>9</b>	<b>120</b>	11	132	143	6	6	12
+45 mins.	87	6	93	<b>13</b>	106	119	9	5	14
Total Volume	387	27	414	42	537	579	33	32	65
% App. Total	93.5	6.5		7.3	92.7		50.8	49.2	
PHF	.872	.750	.863	.808	.861	.872	.917	.533	.677

City of Corona  
 N/S: Parkridge Avenue  
 E/W: Driveway  
 Weather: Clear

File Name : 02\_COR\_Parkridge\_Driveway PM  
 Site Code : 00318878  
 Start Date : 11/15/2018  
 Page No : 1

Groups Printed- Total Volume

Start Time	Parkridge Avenue Southbound			Parkridge Avenue Northbound			Driveway Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	122	15	137	20	89	109	9	21	30	276
04:15 PM	99	9	108	25	93	118	13	19	32	258
04:30 PM	114	11	125	23	59	82	15	16	31	238
04:45 PM	97	13	110	15	57	72	11	17	28	210
Total	432	48	480	83	298	381	48	73	121	982
05:00 PM	101	16	117	14	90	104	11	17	28	249
05:15 PM	107	18	125	13	80	93	13	21	34	252
05:30 PM	122	14	136	19	77	96	12	20	32	264
05:45 PM	83	9	92	24	75	99	16	16	32	223
Total	413	57	470	70	322	392	52	74	126	988
Grand Total	845	105	950	153	620	773	100	147	247	1970
Apprch %	88.9	11.1		19.8	80.2		40.5	59.5		
Total %	42.9	5.3	48.2	7.8	31.5	39.2	5.1	7.5	12.5	

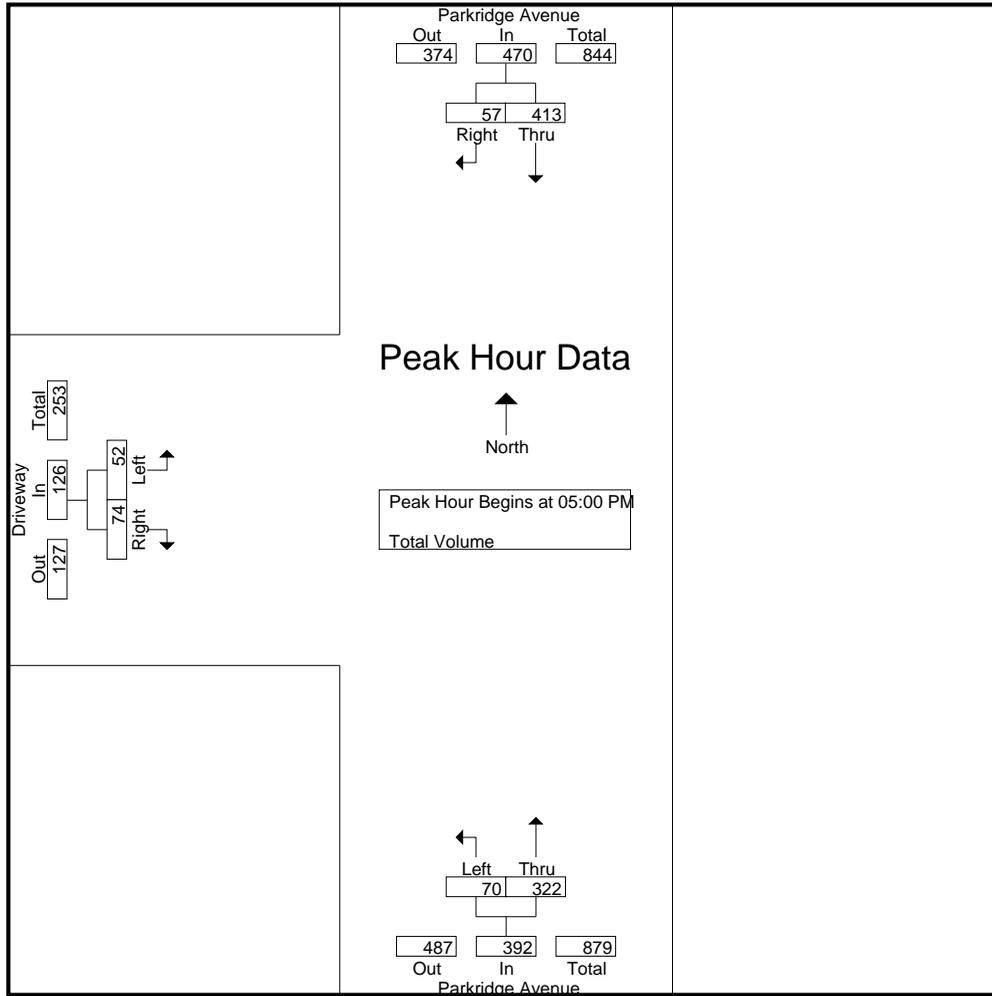
Start Time	Parkridge Avenue Southbound			Parkridge Avenue Northbound			Driveway Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
05:00 PM	101	16	117	14	<b>90</b>	<b>104</b>	11	17	28	249
05:15 PM	107	<b>18</b>	125	13	80	93	13	<b>21</b>	<b>34</b>	252
05:30 PM	<b>122</b>	14	<b>136</b>	19	77	96	12	20	32	<b>264</b>
05:45 PM	83	9	92	<b>24</b>	75	99	<b>16</b>	16	32	223
Total Volume	413	57	470	70	322	392	52	74	126	988
% App. Total	87.9	12.1		17.9	82.1		41.3	58.7		
PHF	.846	.792	.864	.729	.894	.942	.813	.881	.926	.936

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

City of Corona  
 N/S: Parkridge Avenue  
 E/W: Driveway  
 Weather: Clear

File Name : 02\_COR\_Parkridge\_Driveway PM  
 Site Code : 00318878  
 Start Date : 11/15/2018  
 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			05:00 PM			05:00 PM		
+0 mins.	97	13	110	14	<b>90</b>	<b>104</b>	11	17	28
+15 mins.	101	16	117	13	80	93	13	<b>21</b>	<b>34</b>
+30 mins.	107	<b>18</b>	125	19	77	96	12	20	32
+45 mins.	<b>122</b>	14	<b>136</b>	<b>24</b>	75	99	<b>16</b>	16	32
Total Volume	427	61	488	70	322	392	52	74	126
% App. Total	87.5	12.5		17.9	82.1		41.3	58.7	
PHF	.875	.847	.897	.729	.894	.942	.813	.881	.926

Location: Corona  
 N/S: Parkridge Avenue  
 E/W: Driveway



Date: 11/15/2018  
 Day: Thursday

**PEDESTRIANS**

	North Leg Parkridge Avenue	East Leg Dead End	South Leg Parkridge Avenue	West Leg Driveway	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:00 AM	0	0	0	0	0
6:15 AM	0	0	0	0	0
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Parkridge Avenue	East Leg Dead End	South Leg Parkridge Avenue	West Leg Driveway	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	1	1
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	1	1
4:45 PM	0	0	0	6	6
5:00 PM	0	0	0	4	4
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	2	2
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	14	14

Location: Corona  
 N/S: Parkridge Avenue  
 E/W: Driveway



Date: 11/15/2018  
 Day: Thursday

BICYCLES

	Southbound Parkridge Avenue			Westbound Dead End			Northbound Parkridge Avenue			Eastbound Driveway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Parkridge Avenue			Westbound Dead End			Northbound Parkridge Avenue			Eastbound Driveway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:30 PM	0	2	0	0	0	0	0	1	0	0	0	0	3
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	1	2
5:00 PM	0	3	0	0	0	0	0	0	0	0	0	2	5
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	7	0	0	0	0	0	2	0	0	0	3	12

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley AM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 1

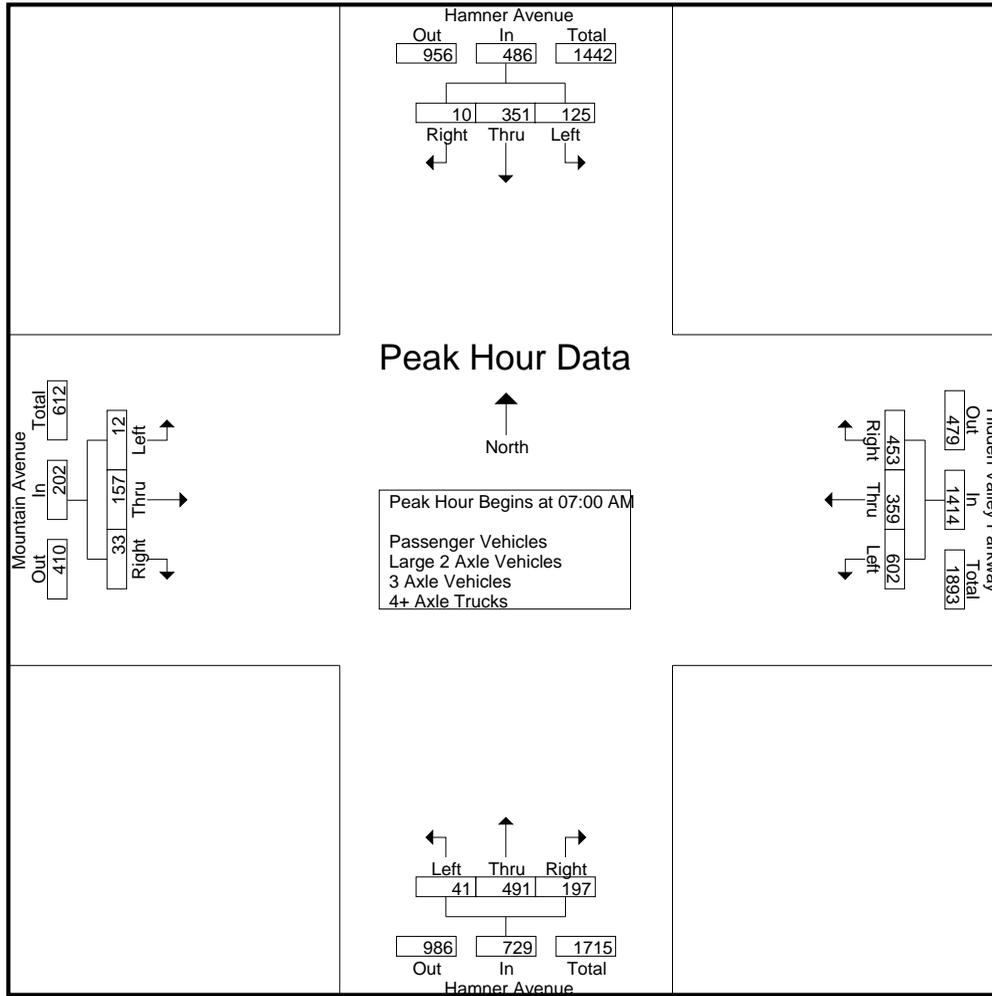
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
06:00 AM	10	26	1	37	97	85	34	216	7	28	32	67	1	15	1	17	337
06:15 AM	15	39	2	56	117	56	30	203	4	27	45	76	2	21	4	27	362
06:30 AM	19	39	0	58	106	68	49	223	8	67	37	112	1	21	4	26	419
06:45 AM	13	47	2	62	163	114	100	377	6	94	41	141	0	30	6	36	616
<b>Total</b>	<b>57</b>	<b>151</b>	<b>5</b>	<b>213</b>	<b>483</b>	<b>323</b>	<b>213</b>	<b>1019</b>	<b>25</b>	<b>216</b>	<b>155</b>	<b>396</b>	<b>4</b>	<b>87</b>	<b>15</b>	<b>106</b>	<b>1734</b>
07:00 AM	26	60	2	88	116	87	91	294	5	110	58	173	2	26	10	38	593
07:15 AM	26	95	5	126	155	101	133	389	6	126	46	178	1	39	4	44	737
07:30 AM	36	95	0	131	162	87	122	371	16	116	48	180	3	35	8	46	728
07:45 AM	37	101	3	141	169	84	107	360	14	139	45	198	6	57	11	74	773
<b>Total</b>	<b>125</b>	<b>351</b>	<b>10</b>	<b>486</b>	<b>602</b>	<b>359</b>	<b>453</b>	<b>1414</b>	<b>41</b>	<b>491</b>	<b>197</b>	<b>729</b>	<b>12</b>	<b>157</b>	<b>33</b>	<b>202</b>	<b>2831</b>
08:00 AM	31	73	6	110	96	69	89	254	8	116	49	173	3	30	10	43	580
08:15 AM	35	72	5	112	102	79	57	238	8	87	43	138	1	37	8	46	534
08:30 AM	44	83	4	131	112	79	65	256	20	77	49	146	3	31	9	43	576
08:45 AM	47	109	2	158	120	84	79	283	14	89	36	139	6	39	10	55	635
<b>Total</b>	<b>157</b>	<b>337</b>	<b>17</b>	<b>511</b>	<b>430</b>	<b>311</b>	<b>290</b>	<b>1031</b>	<b>50</b>	<b>369</b>	<b>177</b>	<b>596</b>	<b>13</b>	<b>137</b>	<b>37</b>	<b>187</b>	<b>2325</b>
<b>Grand Total</b>	<b>339</b>	<b>839</b>	<b>32</b>	<b>1210</b>	<b>1515</b>	<b>993</b>	<b>956</b>	<b>3464</b>	<b>116</b>	<b>1076</b>	<b>529</b>	<b>1721</b>	<b>29</b>	<b>381</b>	<b>85</b>	<b>495</b>	<b>6890</b>
Apprch %	28	69.3	2.6		43.7	28.7	27.6		6.7	62.5	30.7		5.9	77	17.2		
Total %	4.9	12.2	0.5	17.6	22	14.4	13.9	50.3	1.7	15.6	7.7	25	0.4	5.5	1.2	7.2	
Passenger Vehicles	314	771	31	1116	1438	966	930	3334	113	1018	480	1611	26	368	81	475	6536
% Passenger Vehicles	92.6	91.9	96.9	92.2	94.9	97.3	97.3	96.2	97.4	94.6	90.7	93.6	89.7	96.6	95.3	96	94.9
Large 2 Axle Vehicles	22	60	0	82	45	21	19	85	3	52	16	71	2	11	3	16	254
% Large 2 Axle Vehicles	6.5	7.2	0	6.8	3	2.1	2	2.5	2.6	4.8	3	4.1	6.9	2.9	3.5	3.2	3.7
3 Axle Vehicles	1	3	1	5	12	1	4	17	0	2	6	8	1	0	0	1	31
% 3 Axle Vehicles	0.3	0.4	3.1	0.4	0.8	0.1	0.4	0.5	0	0.2	1.1	0.5	3.4	0	0	0.2	0.4
4+ Axle Trucks	2	5	0	7	20	5	3	28	0	4	27	31	0	2	1	3	69
% 4+ Axle Trucks	0.6	0.6	0	0.6	1.3	0.5	0.3	0.8	0	0.4	5.1	1.8	0	0.5	1.2	0.6	1

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	26	60	2	88	116	87	91	294	5	110	<b>58</b>	173	2	26	10	38	593
07:15 AM	26	95	<b>5</b>	126	155	<b>101</b>	<b>133</b>	<b>389</b>	6	126	46	178	1	39	4	44	737
07:30 AM	36	95	0	131	162	87	122	371	<b>16</b>	116	48	180	3	35	8	46	728
07:45 AM	<b>37</b>	<b>101</b>	3	<b>141</b>	<b>169</b>	84	107	360	14	<b>139</b>	45	<b>198</b>	<b>6</b>	<b>57</b>	<b>11</b>	<b>74</b>	<b>773</b>
<b>Total Volume</b>	<b>125</b>	<b>351</b>	<b>10</b>	<b>486</b>	<b>602</b>	<b>359</b>	<b>453</b>	<b>1414</b>	<b>41</b>	<b>491</b>	<b>197</b>	<b>729</b>	<b>12</b>	<b>157</b>	<b>33</b>	<b>202</b>	<b>2831</b>
% App. Total	25.7	72.2	2.1		42.6	25.4	32		5.6	67.4	27		5.9	77.7	16.3		
PHF	.845	.869	.500	.862	.891	.889	.852	.909	.641	.883	.849	.920	.500	.689	.750	.682	.916

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley AM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
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Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	08:00 AM				06:45 AM				07:00 AM				07:30 AM			
+0 mins.	31	73	6	110	<b>163</b>	<b>114</b>	100	377	5	110	<b>58</b>	173	3	35	8	46
+15 mins.	35	72	5	112	116	87	91	294	6	126	46	178	<b>6</b>	<b>57</b>	<b>11</b>	<b>74</b>
+30 mins.	44	83	4	131	155	101	<b>133</b>	<b>389</b>	<b>16</b>	116	48	180	3	30	10	43
+45 mins.	<b>47</b>	<b>109</b>	2	<b>158</b>	162	87	122	371	14	<b>139</b>	45	<b>198</b>	1	37	8	46
Total Volume	157	337	17	511	596	389	446	1431	41	491	197	729	13	159	37	209
% App. Total	30.7	65.9	3.3		41.6	27.2	31.2		5.6	67.4	27		6.2	76.1	17.7	
PHF	.835	.773	.708	.809	.914	.853	.838	.920	.641	.883	.849	.920	.542	.697	.841	.706

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley AM  
 Site Code : 00319286  
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 Page No : 1

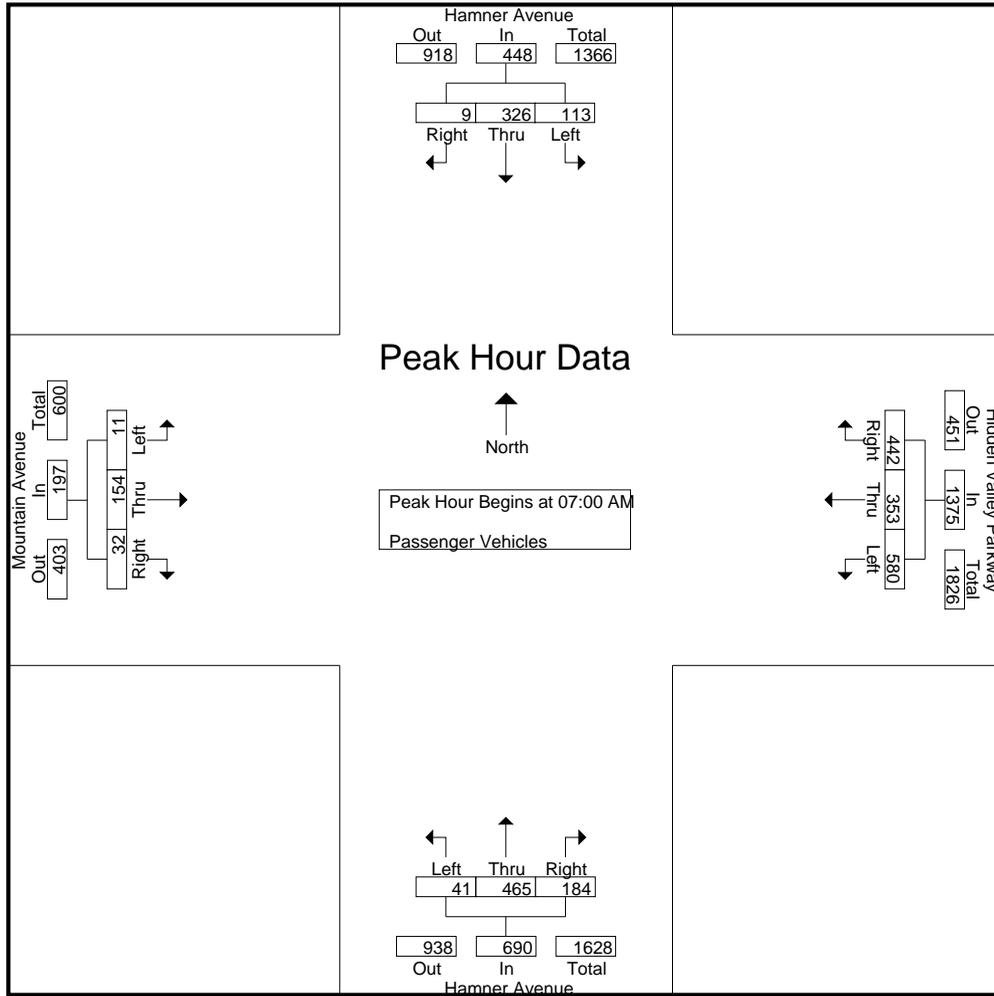
Groups Printed- Passenger Vehicles

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
06:00 AM	10	25	1	36	92	79	32	203	7	27	30	64	1	13	1	15	318
06:15 AM	12	31	2	45	108	52	30	190	3	24	41	68	2	20	4	26	329
06:30 AM	17	34	0	51	101	67	49	217	8	67	32	107	1	20	4	25	400
06:45 AM	9	42	2	53	152	112	97	361	6	90	34	130	0	29	6	35	579
Total	48	132	5	185	453	310	208	971	24	208	137	369	4	82	15	101	1626
07:00 AM	24	58	2	84	111	87	87	285	5	107	56	168	1	26	9	36	573
07:15 AM	24	85	5	114	149	99	130	378	6	120	44	170	1	38	4	43	705
07:30 AM	30	87	0	117	158	85	120	363	16	107	41	164	3	34	8	45	689
07:45 AM	35	96	2	133	162	82	105	349	14	131	43	188	6	56	11	73	743
Total	113	326	9	448	580	353	442	1375	41	465	184	690	11	154	32	197	2710
08:00 AM	30	66	6	102	92	66	86	244	8	110	41	159	3	28	10	41	546
08:15 AM	34	66	5	105	99	78	56	233	8	83	42	133	1	37	7	45	516
08:30 AM	42	78	4	124	101	77	61	239	19	71	45	135	3	29	8	40	538
08:45 AM	47	103	2	152	113	82	77	272	13	81	31	125	4	38	9	51	600
Total	153	313	17	483	405	303	280	988	48	345	159	552	11	132	34	177	2200
Grand Total	314	771	31	1116	1438	966	930	3334	113	1018	480	1611	26	368	81	475	6536
Apprch %	28.1	69.1	2.8		43.1	29	27.9		7	63.2	29.8		5.5	77.5	17.1		
Total %	4.8	11.8	0.5	17.1	22	14.8	14.2	51	1.7	15.6	7.3	24.6	0.4	5.6	1.2	7.3	

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	24	58	2	84	111	87	87	285	5	107	<b>56</b>	168	1	26	9	36	573
07:15 AM	24	85	<b>5</b>	114	149	<b>99</b>	<b>130</b>	<b>378</b>	6	120	44	170	1	38	4	43	705
07:30 AM	30	87	0	117	158	85	120	363	<b>16</b>	107	41	164	3	34	8	45	689
07:45 AM	<b>35</b>	<b>96</b>	2	<b>133</b>	<b>162</b>	82	105	349	14	<b>131</b>	43	<b>188</b>	<b>6</b>	<b>56</b>	<b>11</b>	<b>73</b>	<b>743</b>
Total Volume	113	326	9	448	580	353	442	1375	41	465	184	690	11	154	32	197	2710
% App. Total	25.2	72.8	2		42.2	25.7	32.1		5.9	67.4	26.7		5.6	78.2	16.2		
PHF	.807	.849	.450	.842	.895	.891	.850	.909	.641	.887	.821	.918	.458	.688	.727	.675	.912

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley AM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM				06:45 AM				07:00 AM				07:00 AM			
+0 mins.	24	58	2	84	152	<b>112</b>	97	361	5	107	<b>56</b>	168	1	26	9	36
+15 mins.	24	85	<b>5</b>	114	111	87	87	285	6	120	44	170	1	38	4	43
+30 mins.	30	87	0	117	149	99	<b>130</b>	<b>378</b>	<b>16</b>	107	41	164	3	34	8	45
+45 mins.	<b>35</b>	<b>96</b>	2	<b>133</b>	<b>158</b>	85	120	363	14	<b>131</b>	43	<b>188</b>	<b>6</b>	<b>56</b>	<b>11</b>	<b>73</b>
Total Volume	113	326	9	448	570	383	434	1387	41	465	184	690	11	154	32	197
% App. Total	25.2	72.8	2		41.1	27.6	31.3		5.9	67.4	26.7		5.6	78.2	16.2	
PHF	.807	.849	.450	.842	.902	.855	.835	.917	.641	.887	.821	.918	.458	.688	.727	.675

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

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 Site Code : 00319286  
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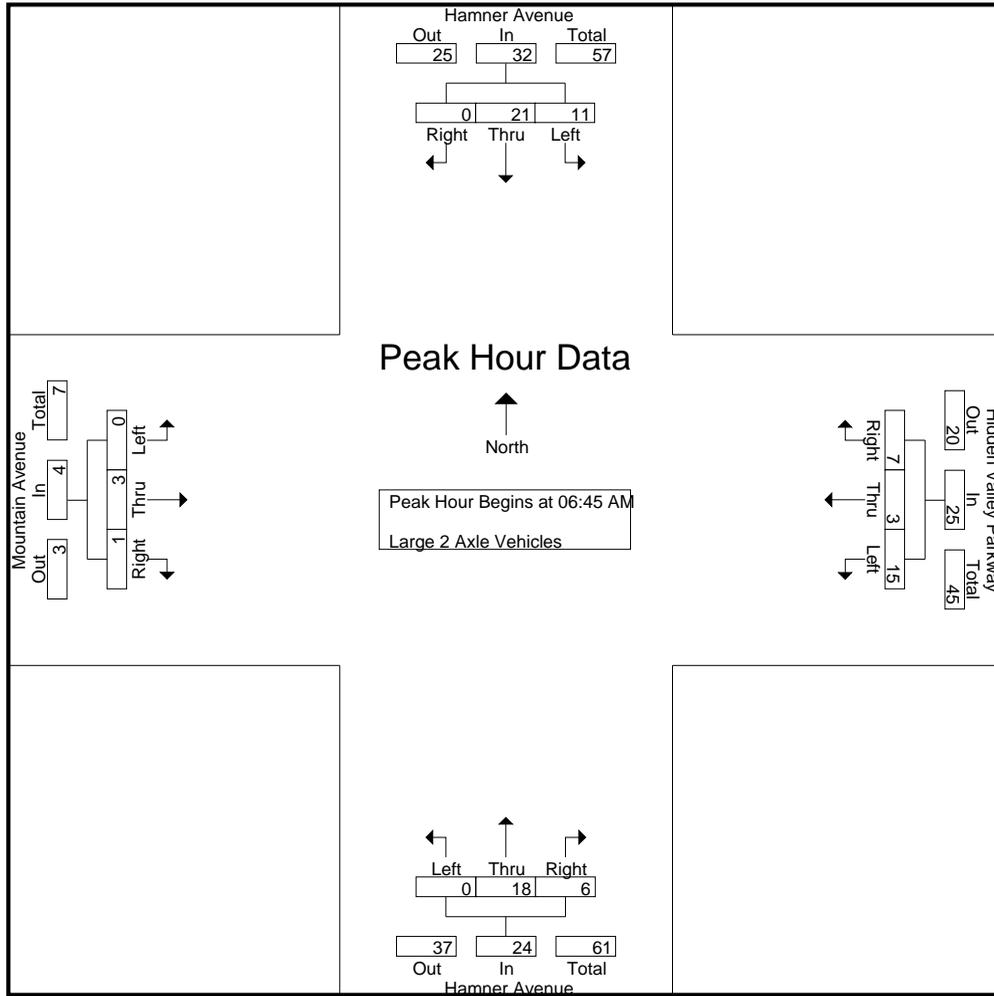
Groups Printed- Large 2 Axle Vehicles

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
06:00 AM	0	1	0	1	2	5	2	9	0	1	0	1	0	2	0	2	13
06:15 AM	3	8	0	11	7	3	0	10	1	2	2	5	0	1	0	1	27
06:30 AM	2	5	0	7	3	1	0	4	0	0	0	0	0	1	0	1	12
06:45 AM	3	4	0	7	7	1	2	10	0	4	3	7	0	1	0	1	25
Total	8	18	0	26	19	10	4	33	1	7	5	13	0	5	0	5	77
07:00 AM	1	2	0	3	4	0	2	6	0	1	0	1	0	0	1	1	11
07:15 AM	2	9	0	11	2	1	1	4	0	6	0	6	0	1	0	1	22
07:30 AM	5	6	0	11	2	1	2	5	0	7	3	10	0	1	0	1	27
07:45 AM	2	5	0	7	4	2	1	7	0	8	1	9	0	1	0	1	24
Total	10	22	0	32	12	4	6	22	0	22	4	26	0	3	1	4	84
08:00 AM	1	5	0	6	3	2	2	7	0	6	5	11	0	1	0	1	25
08:15 AM	1	4	0	5	0	1	1	2	0	4	1	5	0	0	1	1	13
08:30 AM	2	5	0	7	7	2	4	13	1	6	0	7	0	2	0	2	29
08:45 AM	0	6	0	6	4	2	2	8	1	7	1	9	2	0	1	3	26
Total	4	20	0	24	14	7	9	30	2	23	7	32	2	3	2	7	93
Grand Total	22	60	0	82	45	21	19	85	3	52	16	71	2	11	3	16	254
Apprch %	26.8	73.2	0		52.9	24.7	22.4		4.2	73.2	22.5		12.5	68.8	18.8		
Total %	8.7	23.6	0	32.3	17.7	8.3	7.5	33.5	1.2	20.5	6.3	28	0.8	4.3	1.2	6.3	

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:45 AM																	
06:45 AM	3	4	0	7	7	1	2	10	0	4	3	7	0	1	0	1	25
07:00 AM	1	2	0	3	4	0	2	6	0	1	0	1	0	0	1	1	11
07:15 AM	2	9	0	11	2	1	1	4	0	6	0	6	0	1	0	1	22
07:30 AM	5	6	0	11	2	1	2	5	0	7	3	10	0	1	0	1	27
Total Volume	11	21	0	32	15	3	7	25	0	18	6	24	0	3	1	4	85
% App. Total	34.4	65.6	0		60	12	28		0	75	25		0	75	25		
PHF	.550	.583	.000	.727	.536	.750	.875	.625	.000	.643	.500	.600	.000	.750	.250	1.00	.787

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley AM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	06:45 AM				06:00 AM				07:00 AM				06:00 AM			
+0 mins.	3	4	0	7	2	5	2	9	0	1	0	1	0	2	0	2
+15 mins.	1	2	0	3	7	3	0	10	0	6	0	6	0	1	0	1
+30 mins.	2	9	0	11	3	1	0	4	0	7	3	10	0	1	0	1
+45 mins.	5	6	0	11	7	1	2	10	0	8	1	9	0	1	0	1
Total Volume	11	21	0	32	19	10	4	33	0	22	4	26	0	5	0	5
% App. Total	34.4	65.6	0		57.6	30.3	12.1		0	84.6	15.4		0	100	0	
PHF	.550	.583	.000	.727	.679	.500	.500	.825	.000	.688	.333	.650	.000	.625	.000	.625

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley AM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 1

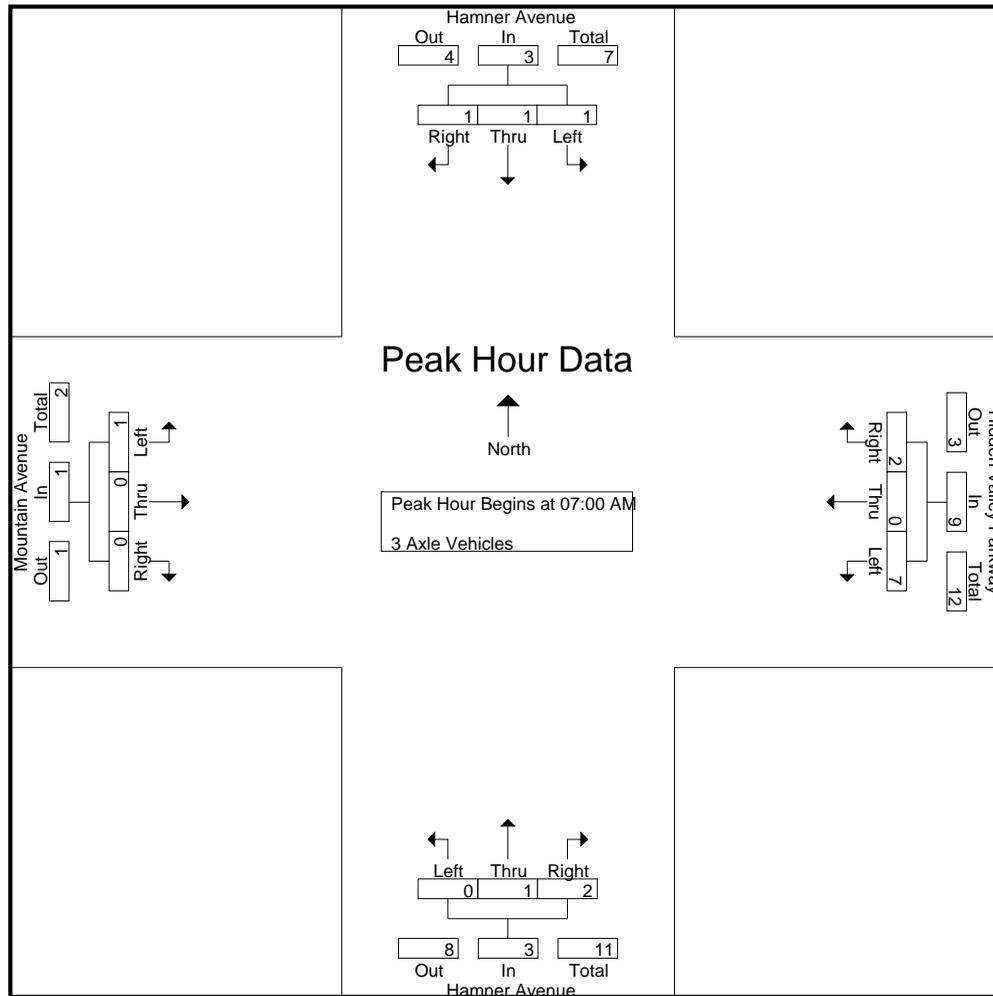
Groups Printed- 3 Axle Vehicles

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
06:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
06:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
06:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
06:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>
07:00 AM	1	0	0	1	1	0	1	2	0	0	0	0	1	0	0	1	4
07:15 AM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
07:30 AM	0	1	0	1	1	0	0	1	0	1	2	3	0	0	0	0	5
07:45 AM	0	0	1	1	3	0	1	4	0	0	0	0	0	0	0	0	5
<b>Total</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>7</b>	<b>0</b>	<b>2</b>	<b>9</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>16</b>
08:00 AM	0	1	0	1	0	0	1	1	0	0	1	1	0	0	0	0	3
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0	3
08:45 AM	0	0	0	0	2	0	0	2	0	1	1	2	0	0	0	0	4
<b>Total</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>
<b>Grand Total</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>5</b>	<b>12</b>	<b>1</b>	<b>4</b>	<b>17</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>8</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>31</b>
Apprch %	20	60	20		70.6	5.9	23.5		0	25	75		100	0	0		
Total %	3.2	9.7	3.2	16.1	38.7	3.2	12.9	54.8	0	6.5	19.4	25.8	3.2	0	0	3.2	

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	0	0	1	1	0	1	2	0	0	0	0	1	0	0	1	4
07:15 AM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
07:30 AM	0	1	0	1	1	0	0	1	0	1	2	3	0	0	0	0	5
07:45 AM	0	0	1	1	3	0	1	4	0	0	0	0	0	0	0	0	5
<b>Total Volume</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>7</b>	<b>0</b>	<b>2</b>	<b>9</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>16</b>
% App. Total	33.3	33.3	33.3		77.8	0	22.2		0	33.3	66.7		100	0	0		
PHF	.250	.250	.250	.750	.583	.000	.500	.563	.000	.250	.250	.250	.250	.000	.000	.250	.800

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley AM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				06:45 AM				06:15 AM			
+0 mins.	1	0	0	1	1	0	1	2	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	1	1	3	0	1	4	0	1	2	3	1	0	0	1
Total Volume	1	1	1	3	7	0	2	9	0	1	2	3	1	0	0	1
% App. Total	33.3	33.3	33.3		77.8	0	22.2		0	33.3	66.7		100	0	0	
PHF	.250	.250	.250	.750	.583	.000	.500	.563	.000	.250	.250	.250	.250	.000	.000	.250

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley AM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 1

Groups Printed- 4+ Axle Trucks

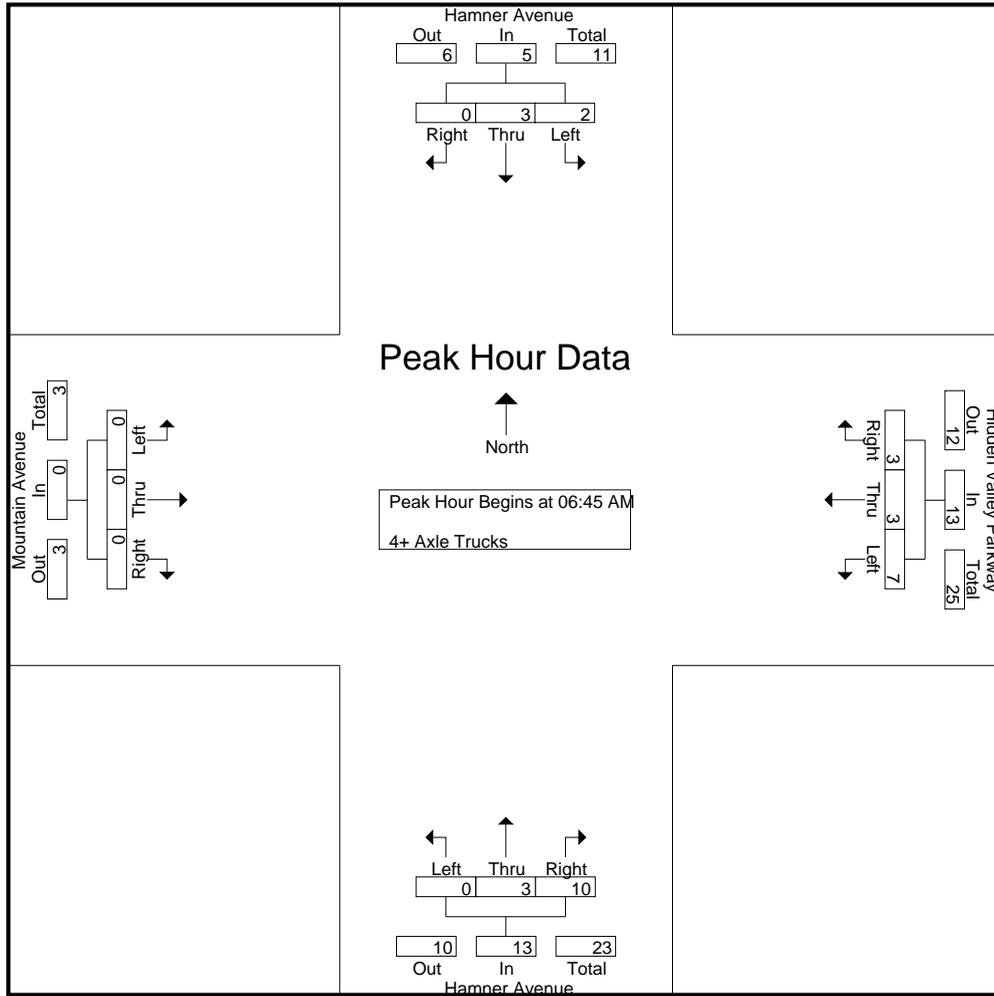
Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
06:00 AM	0	0	0	0	2	1	0	3	0	0	2	2	0	0	0	0	5
06:15 AM	0	0	0	0	2	0	0	2	0	1	2	3	0	0	0	0	5
06:30 AM	0	0	0	0	2	0	0	2	0	0	4	4	0	0	0	0	6
06:45 AM	1	1	0	2	4	1	0	5	0	0	4	4	0	0	0	0	11
Total	1	1	0	2	10	2	0	12	0	1	12	13	0	0	0	0	27
07:00 AM	0	0	0	0	0	0	1	1	0	2	2	4	0	0	0	0	5
07:15 AM	0	1	0	1	2	1	2	5	0	0	2	2	0	0	0	0	8
07:30 AM	1	1	0	2	1	1	0	2	0	1	2	3	0	0	0	0	7
07:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	1	2	0	3	3	2	3	8	0	3	7	10	0	0	0	0	21
08:00 AM	0	1	0	1	1	1	0	2	0	0	2	2	0	1	0	1	6
08:15 AM	0	1	0	1	3	0	0	3	0	0	0	0	0	0	0	0	4
08:30 AM	0	0	0	0	2	0	0	2	0	0	3	3	0	0	1	1	6
08:45 AM	0	0	0	0	1	0	0	1	0	0	3	3	0	1	0	1	5
Total	0	2	0	2	7	1	0	8	0	0	8	8	0	2	1	3	21
Grand Total	2	5	0	7	20	5	3	28	0	4	27	31	0	2	1	3	69
Apprch %	28.6	71.4	0		71.4	17.9	10.7		0	12.9	87.1		0	66.7	33.3		
Total %	2.9	7.2	0	10.1	29	7.2	4.3	40.6	0	5.8	39.1	44.9	0	2.9	1.4	4.3	

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
06:45 AM	1	1	0	2	4	1	0	5	0	0	4	4	0	0	0	0	11
07:00 AM	0	0	0	0	0	0	1	1	0	2	2	4	0	0	0	0	5
07:15 AM	0	1	0	1	2	1	2	5	0	0	2	2	0	0	0	0	8
07:30 AM	1	1	0	2	1	1	0	2	0	1	2	3	0	0	0	0	7
Total Volume	2	3	0	5	7	3	3	13	0	3	10	13	0	0	0	0	31
% App. Total	40	60	0		53.8	23.1	23.1		0	23.1	76.9		0	0	0		
PHF	.500	.750	.000	.625	.438	.750	.375	.650	.000	.375	.625	.813	.000	.000	.000	.000	.705

Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 06:45 AM

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley AM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	06:45 AM				06:30 AM				06:15 AM				06:00 AM			
+0 mins.	1	1	0	2	2	0	0	2	0	1	2	3	0	0	0	0
+15 mins.	0	0	0	0	4	1	0	5	0	0	4	4	0	0	0	0
+30 mins.	0	1	0	1	0	0	1	1	0	0	4	4	0	0	0	0
+45 mins.	1	1	0	2	2	1	2	5	0	2	2	4	0	0	0	0
Total Volume	2	3	0	5	8	2	3	13	0	3	12	15	0	0	0	0
% App. Total	40	60	0		61.5	15.4	23.1		0	20	80		0	0	0	
PHF	.500	.750	.000	.625	.500	.500	.375	.650	.000	.375	.750	.938	.000	.000	.000	.000

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley PM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 1

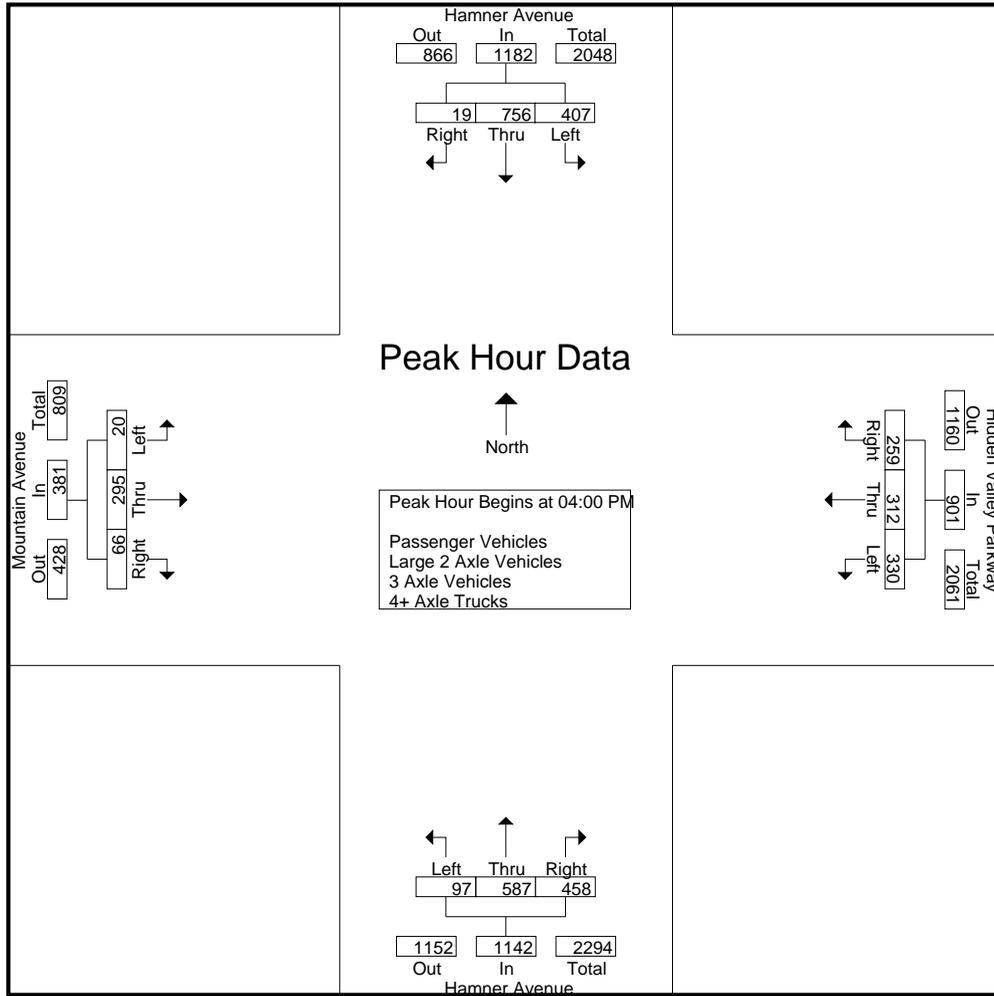
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	105	201	8	314	82	71	63	216	24	163	125	312	5	65	14	84	926
04:15 PM	108	190	4	302	82	79	78	239	20	133	92	245	3	73	19	95	881
04:30 PM	96	186	3	285	82	67	63	212	33	146	127	306	9	75	18	102	905
04:45 PM	98	179	4	281	84	95	55	234	20	145	114	279	3	82	15	100	894
<b>Total</b>	<b>407</b>	<b>756</b>	<b>19</b>	<b>1182</b>	<b>330</b>	<b>312</b>	<b>259</b>	<b>901</b>	<b>97</b>	<b>587</b>	<b>458</b>	<b>1142</b>	<b>20</b>	<b>295</b>	<b>66</b>	<b>381</b>	<b>3606</b>
05:00 PM	93	134	2	229	96	71	63	230	35	154	140	329	6	75	19	100	888
05:15 PM	98	174	3	275	76	74	67	217	27	141	113	281	7	78	13	98	871
05:30 PM	89	161	3	253	97	63	80	240	18	157	101	276	5	53	15	73	842
05:45 PM	102	157	4	263	81	76	65	222	19	126	119	264	3	66	16	85	834
<b>Total</b>	<b>382</b>	<b>626</b>	<b>12</b>	<b>1020</b>	<b>350</b>	<b>284</b>	<b>275</b>	<b>909</b>	<b>99</b>	<b>578</b>	<b>473</b>	<b>1150</b>	<b>21</b>	<b>272</b>	<b>63</b>	<b>356</b>	<b>3435</b>
<b>Grand Total</b>	<b>789</b>	<b>1382</b>	<b>31</b>	<b>2202</b>	<b>680</b>	<b>596</b>	<b>534</b>	<b>1810</b>	<b>196</b>	<b>1165</b>	<b>931</b>	<b>2292</b>	<b>41</b>	<b>567</b>	<b>129</b>	<b>737</b>	<b>7041</b>
Apprch %	35.8	62.8	1.4		37.6	32.9	29.5		8.6	50.8	40.6		5.6	76.9	17.5		
Total %	11.2	19.6	0.4	31.3	9.7	8.5	7.6	25.7	2.8	16.5	13.2	32.6	0.6	8.1	1.8	10.5	
Passenger Vehicles	781	1362	31	2174	660	586	522	1768	193	1135	901	2229	40	561	128	729	6900
% Passenger Vehicles	99	98.6	100	98.7	97.1	98.3	97.8	97.7	98.5	97.4	96.8	97.3	97.6	98.9	99.2	98.9	98
Large 2 Axle Vehicles	7	18	0	25	8	9	11	28	2	23	13	38	1	6	1	8	99
% Large 2 Axle Vehicles	0.9	1.3	0	1.1	1.2	1.5	2.1	1.5	1	2	1.4	1.7	2.4	1.1	0.8	1.1	1.4
3 Axle Vehicles	1	0	0	1	4	0	1	5	0	1	5	6	0	0	0	0	12
% 3 Axle Vehicles	0.1	0	0	0	0.6	0	0.2	0.3	0	0.1	0.5	0.3	0	0	0	0	0.2
4+ Axle Trucks	0	2	0	2	8	1	0	9	1	6	12	19	0	0	0	0	30
% 4+ Axle Trucks	0	0.1	0	0.1	1.2	0.2	0	0.5	0.5	0.5	1.3	0.8	0	0	0	0	0.4

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	105	<b>201</b>	<b>8</b>	<b>314</b>	82	71	63	216	24	<b>163</b>	125	<b>312</b>	5	65	14	84	<b>926</b>
04:15 PM	<b>108</b>	190	4	302	82	79	<b>78</b>	<b>239</b>	20	133	92	245	3	73	<b>19</b>	95	881
04:30 PM	96	186	3	285	82	67	63	212	<b>33</b>	146	<b>127</b>	306	<b>9</b>	75	18	<b>102</b>	905
04:45 PM	98	179	4	281	<b>84</b>	<b>95</b>	55	234	20	145	114	279	3	<b>82</b>	15	100	894
Total Volume	407	756	19	1182	330	312	259	901	97	587	458	1142	20	295	66	381	3606
% App. Total	34.4	64	1.6		36.6	34.6	28.7		8.5	51.4	40.1		5.2	77.4	17.3		
PHF	.942	.940	.594	.941	.982	.821	.830	.942	.735	.900	.902	.915	.556	.899	.868	.934	.974

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley PM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 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:

	04:00 PM				04:45 PM				04:30 PM				04:30 PM			
+0 mins.	105	<b>201</b>	<b>8</b>	<b>314</b>	84	<b>95</b>	55	234	33	146	127	306	<b>9</b>	75	18	<b>102</b>
+15 mins.	<b>108</b>	190	4	302	96	71	63	230	20	145	114	279	3	<b>82</b>	15	100
+30 mins.	96	186	3	285	76	74	67	217	<b>35</b>	<b>154</b>	<b>140</b>	<b>329</b>	6	75	<b>19</b>	100
+45 mins.	98	179	4	281	<b>97</b>	63	<b>80</b>	<b>240</b>	27	141	113	281	7	78	13	98
Total Volume	407	756	19	1182	353	303	265	921	115	586	494	1195	25	310	65	400
% App. Total	34.4	64	1.6		38.3	32.9	28.8		9.6	49	41.3		6.2	77.5	16.2	
PHF	.942	.940	.594	.941	.910	.797	.828	.959	.821	.951	.882	.908	.694	.945	.855	.980

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley PM  
 Site Code : 00319286  
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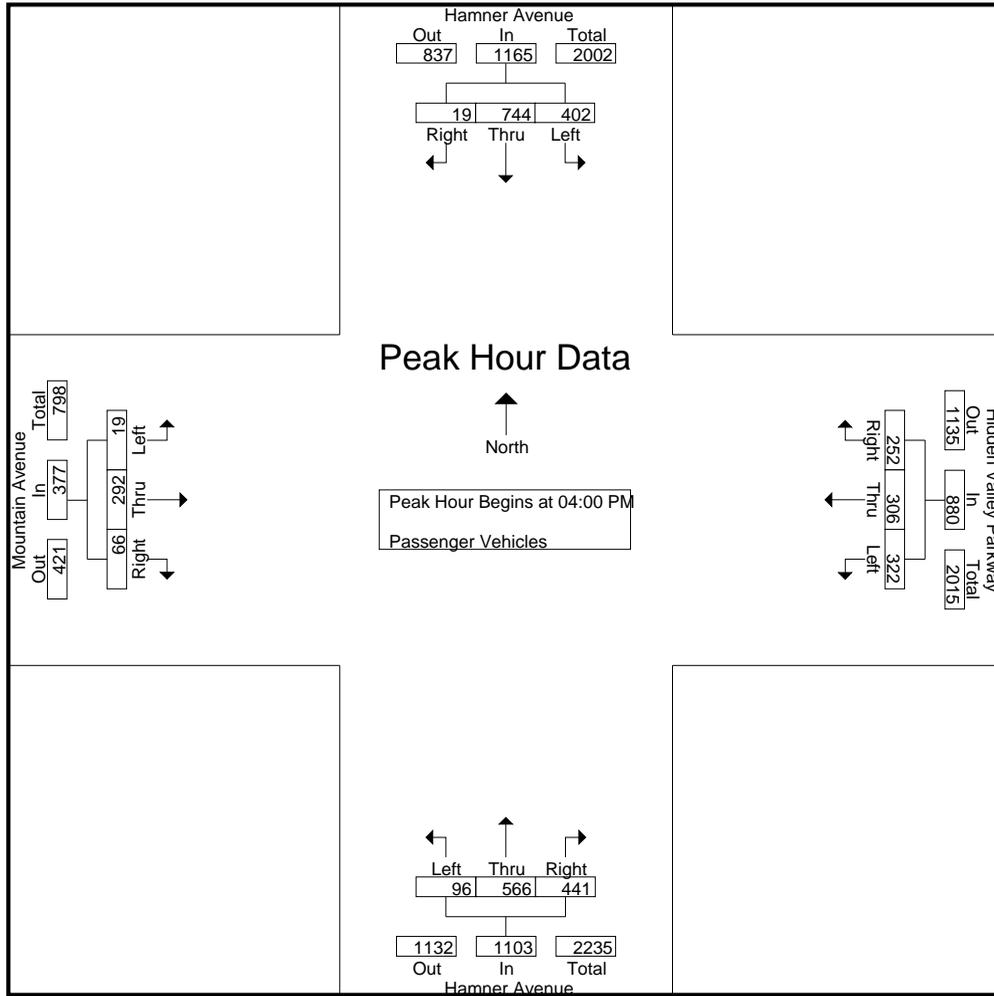
Groups Printed- Passenger Vehicles

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	104	195	8	307	80	71	59	210	24	156	121	301	5	65	14	84	902
04:15 PM	104	188	4	296	80	77	78	235	19	130	85	234	3	72	19	94	859
04:30 PM	96	186	3	285	79	65	60	204	33	138	123	294	8	74	18	100	883
04:45 PM	98	175	4	277	83	93	55	231	20	142	112	274	3	81	15	99	881
Total	402	744	19	1165	322	306	252	880	96	566	441	1103	19	292	66	377	3525
05:00 PM	92	133	2	227	93	69	62	224	34	152	137	323	6	75	19	100	874
05:15 PM	96	171	3	270	71	74	66	211	26	139	107	272	7	77	13	97	850
05:30 PM	89	158	3	250	95	62	79	236	18	154	99	271	5	53	14	72	829
05:45 PM	102	156	4	262	79	75	63	217	19	124	117	260	3	64	16	83	822
Total	379	618	12	1009	338	280	270	888	97	569	460	1126	21	269	62	352	3375
Grand Total	781	1362	31	2174	660	586	522	1768	193	1135	901	2229	40	561	128	729	6900
Apprch %	35.9	62.6	1.4		37.3	33.1	29.5		8.7	50.9	40.4		5.5	77	17.6		
Total %	11.3	19.7	0.4	31.5	9.6	8.5	7.6	25.6	2.8	16.4	13.1	32.3	0.6	8.1	1.9	10.6	

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	<b>104</b>	<b>195</b>	<b>8</b>	<b>307</b>	80	71	59	210	24	<b>156</b>	121	<b>301</b>	5	65	14	84	<b>902</b>
04:15 PM	104	188	4	296	80	77	<b>78</b>	<b>235</b>	19	130	85	234	3	72	<b>19</b>	94	859
04:30 PM	96	186	3	285	79	65	60	204	<b>33</b>	138	<b>123</b>	294	<b>8</b>	74	18	<b>100</b>	883
04:45 PM	98	175	4	277	<b>83</b>	<b>93</b>	55	231	20	142	112	274	3	<b>81</b>	15	99	881
Total Volume	402	744	19	1165	322	306	252	880	96	566	441	1103	19	292	66	377	3525
% App. Total	34.5	63.9	1.6		36.6	34.8	28.6		8.7	51.3	40		5	77.5	17.5		
PHF	.966	.954	.594	.949	.970	.823	.808	.936	.727	.907	.896	.916	.594	.901	.868	.943	.977

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley PM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	<b>104</b>	<b>195</b>	<b>8</b>	<b>307</b>	80	71	59	210	24	<b>156</b>	121	<b>301</b>	5	65	14	84
+15 mins.	104	188	4	296	80	77	<b>78</b>	<b>235</b>	19	130	85	234	3	72	<b>19</b>	94
+30 mins.	96	186	3	285	79	65	60	204	<b>33</b>	138	<b>123</b>	294	<b>8</b>	74	18	<b>100</b>
+45 mins.	98	175	4	277	<b>83</b>	<b>93</b>	55	231	20	142	112	274	3	<b>81</b>	15	99
Total Volume	402	744	19	1165	322	306	252	880	96	566	441	1103	19	292	66	377
% App. Total	34.5	63.9	1.6		36.6	34.8	28.6		8.7	51.3	40		5	77.5	17.5	
PHF	.966	.954	.594	.949	.970	.823	.808	.936	.727	.907	.896	.916	.594	.901	.868	.943

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley PM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 1

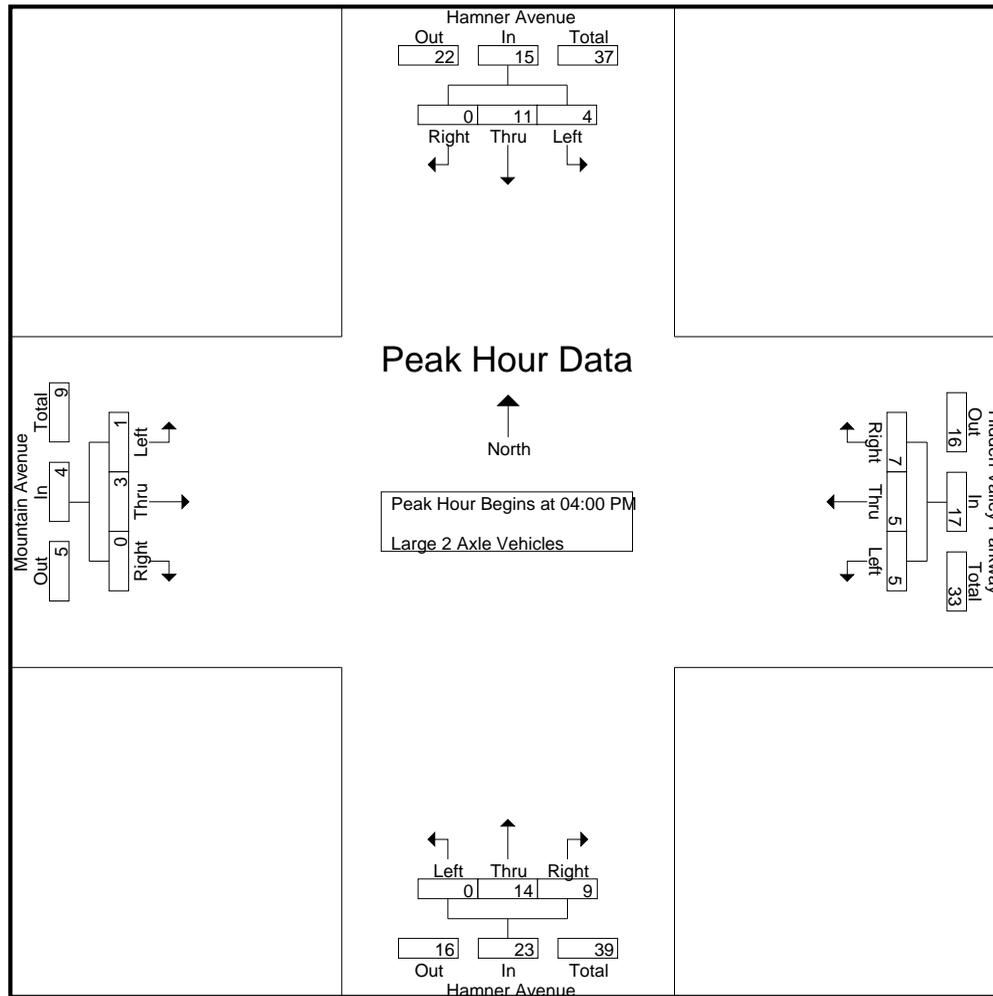
Groups Printed- Large 2 Axle Vehicles

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	6	0	7	0	0	4	4	0	4	1	5	0	0	0	0	16
04:15 PM	3	2	0	5	2	2	0	4	0	2	3	5	0	1	0	1	15
04:30 PM	0	0	0	0	2	2	3	7	0	6	4	10	1	1	0	2	19
04:45 PM	0	3	0	3	1	1	0	2	0	2	1	3	0	1	0	1	9
Total	4	11	0	15	5	5	7	17	0	14	9	23	1	3	0	4	59
05:00 PM	1	1	0	2	2	2	0	4	1	2	1	4	0	0	0	0	10
05:15 PM	2	3	0	5	0	0	1	1	1	2	2	5	0	1	0	1	12
05:30 PM	0	2	0	2	0	1	1	2	0	3	1	4	0	0	1	1	9
05:45 PM	0	1	0	1	1	1	2	4	0	2	0	2	0	2	0	2	9
Total	3	7	0	10	3	4	4	11	2	9	4	15	0	3	1	4	40
Grand Total	7	18	0	25	8	9	11	28	2	23	13	38	1	6	1	8	99
Apprch %	28	72	0		28.6	32.1	39.3		5.3	60.5	34.2		12.5	75	12.5		
Total %	7.1	18.2	0	25.3	8.1	9.1	11.1	28.3	2	23.2	13.1	38.4	1	6.1	1	8.1	

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	6	0	7	0	0	4	4	0	4	1	5	0	0	0	0	16
04:15 PM	3	2	0	5	2	2	0	4	0	2	3	5	0	1	0	1	15
04:30 PM	0	0	0	0	2	2	3	7	0	6	4	10	1	1	0	2	19
04:45 PM	0	3	0	3	1	1	0	2	0	2	1	3	0	1	0	1	9
Total Volume	4	11	0	15	5	5	7	17	0	14	9	23	1	3	0	4	59
% App. Total	26.7	73.3	0		29.4	29.4	41.2		0	60.9	39.1		25	75	0		
PHF	.333	.458	.000	.536	.625	.625	.438	.607	.000	.583	.563	.575	.250	.750	.000	.500	.776

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley PM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	1	6	0	7	0	0	4	4	0	4	1	5	0	0	0	0
+15 mins.	3	2	0	5	2	2	0	4	0	2	3	5	0	1	0	1
+30 mins.	0	0	0	0	2	2	3	7	0	6	4	10	1	1	0	2
+45 mins.	0	3	0	3	1	1	0	2	0	2	1	3	0	1	0	1
Total Volume	4	11	0	15	5	5	7	17	0	14	9	23	1	3	0	4
% App. Total	26.7	73.3	0		29.4	29.4	41.2		0	60.9	39.1		25	75	0	
PHF	.333	.458	.000	.536	.625	.625	.438	.607	.000	.583	.563	.575	.250	.750	.000	.500

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley PM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	1	0	0	1	0	1	0	1	0	0	0	0	3
05:00 PM	0	0	0	0	1	0	1	2	0	0	2	2	0	0	0	0	4
05:15 PM	0	0	0	0	2	0	0	2	0	0	3	3	0	0	0	0	5
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	3	0	1	4	0	0	5	5	0	0	0	0	9
Grand Total	1	0	0	1	4	0	1	5	0	1	5	6	0	0	0	0	12
Apprch %	100	0	0		80	0	20		0	16.7	83.3		0	0	0		
Total %	8.3	0	0	8.3	33.3	0	8.3	41.7	0	8.3	41.7	50	0	0	0	0	

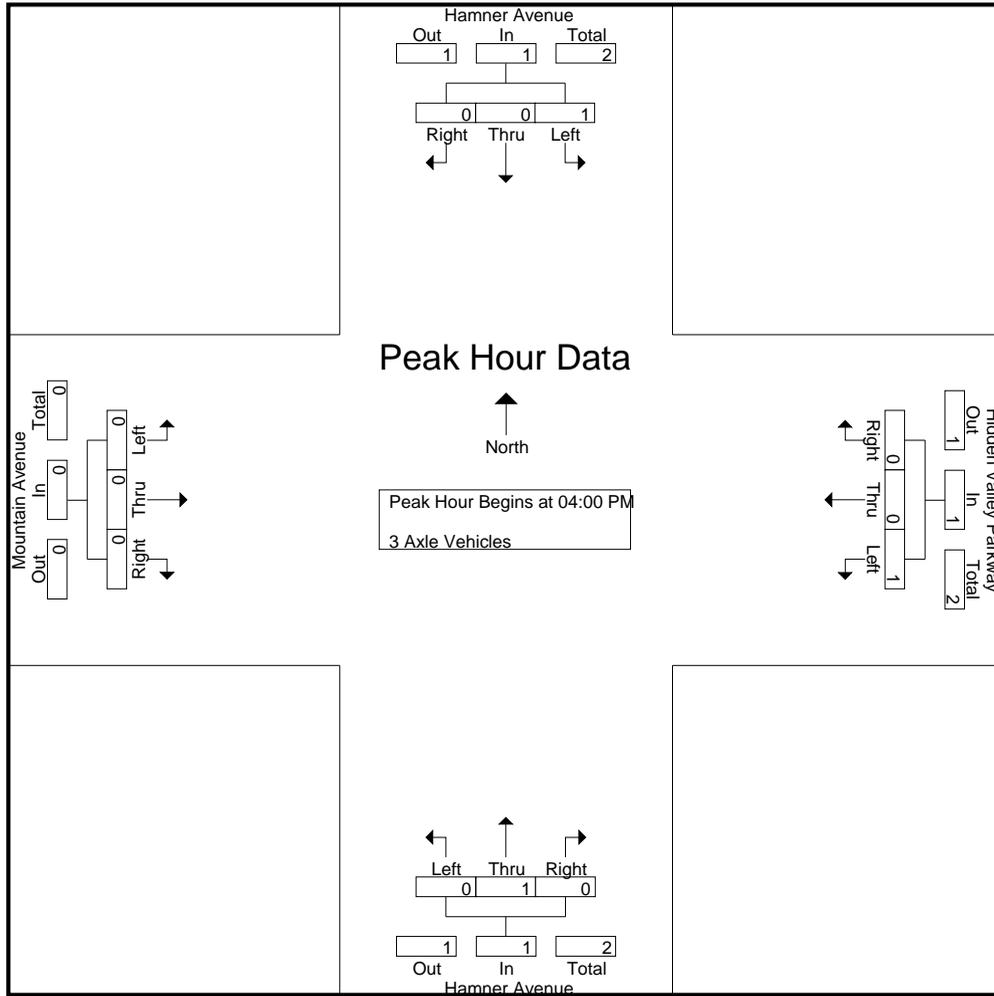
Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	1	0	0	1	0	1	0	1	0	0	0	0	3
% App. Total	100	0	0		100	0	0		0	100	0		0	0	0		
PHF	.250	.000	.000	.250	.250	.000	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.375

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley PM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
+15 mins.	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	1	0	0	1	0	1	0	1	0	0	0	0
% App. Total	100	0	0	0	100	0	0	0	0	100	0	0	0	0	0	0
PHF	.250	.000	.000	.250	.250	.000	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley PM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 1

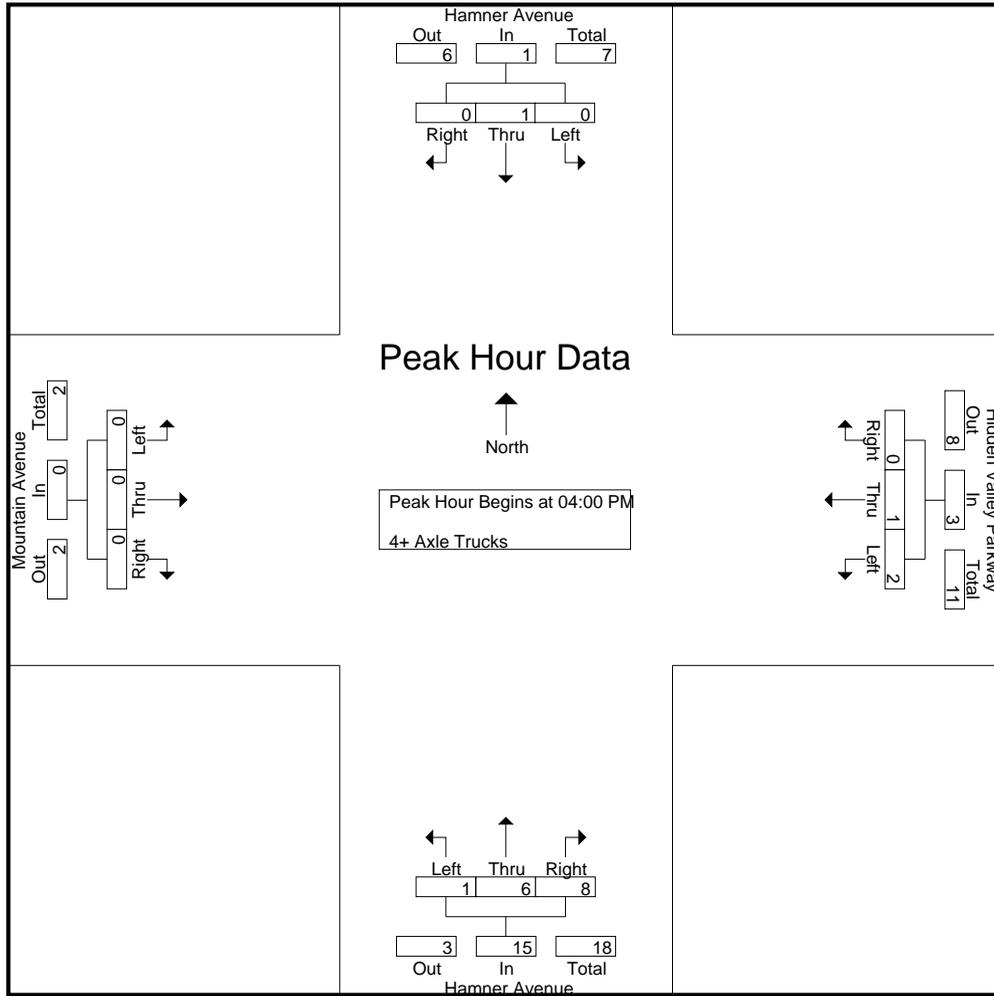
Groups Printed- 4+ Axle Trucks

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	1	0	0	1	0	3	3	6	0	0	0	0	7
04:15 PM	0	0	0	0	0	0	0	0	1	0	4	5	0	0	0	0	5
04:30 PM	0	0	0	0	1	0	0	1	0	2	0	2	0	0	0	0	3
04:45 PM	0	1	0	1	0	1	0	1	0	1	1	2	0	0	0	0	4
Total	0	1	0	1	2	1	0	3	1	6	8	15	0	0	0	0	19
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	3	0	0	3	0	0	1	1	0	0	0	0	4
05:30 PM	0	1	0	1	2	0	0	2	0	0	1	1	0	0	0	0	4
05:45 PM	0	0	0	0	1	0	0	1	0	0	2	2	0	0	0	0	3
Total	0	1	0	1	6	0	0	6	0	0	4	4	0	0	0	0	11
Grand Total	0	2	0	2	8	1	0	9	1	6	12	19	0	0	0	0	30
Apprch %	0	100	0		88.9	11.1	0		5.3	31.6	63.2		0	0	0		
Total %	0	6.7	0	6.7	26.7	3.3	0	30	3.3	20	40	63.3	0	0	0	0	

Start Time	Hamner Avenue Southbound				Hidden Valley Parkway Westbound				Hamner Avenue Northbound				Mountain Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	1	0	0	1	0	3	3	6	0	0	0	0	7
04:15 PM	0	0	0	0	0	0	0	0	1	0	4	5	0	0	0	0	5
04:30 PM	0	0	0	0	1	0	0	1	0	2	0	2	0	0	0	0	3
04:45 PM	0	1	0	1	0	1	0	1	0	1	1	2	0	0	0	0	4
Total Volume	0	1	0	1	2	1	0	3	1	6	8	15	0	0	0	0	19
% App. Total	0	100	0		66.7	33.3	0		6.7	40	53.3		0	0	0		
PHF	.000	.250	.000	.250	.500	.250	.000	.750	.250	.500	.500	.625	.000	.000	.000	.000	.679

City of Norco  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway  
 Weather: Clear

File Name : 02\_NOR\_Hamner\_Mountain\_Hidden Valley PM  
 Site Code : 00319286  
 Start Date : 5/2/2019  
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	1	0	0	1	0	3	3	6	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	1	0	4	5	0	0	0	0
+30 mins.	0	0	0	0	1	0	0	1	0	2	0	2	0	0	0	0
+45 mins.	0	1	0	1	0	1	0	1	0	1	1	2	0	0	0	0
Total Volume	0	1	0	1	2	1	0	3	1	6	8	15	0	0	0	0
% App. Total	0	100	0	0	66.7	33.3	0	0	6.7	40	53.3	100	0	0	0	0
PHF	.000	.250	.000	.250	.500	.250	.000	.750	.250	.500	.500	.625	.000	.000	.000	.000

Location: Corona  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway



Date: 5/2/2019  
 Day: Thursday

**PEDESTRIANS**

	North Leg Hamner Avenue	East Leg Hidden Valley Parkway	South Leg Hamner Avenue	West Leg Mountain Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:00 AM	0	0	0	0	0
6:15 AM	0	0	0	0	0
6:30 AM	0	0	0	1	1
6:45 AM	0	0	0	1	1
7:00 AM	0	1	0	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	1	1
7:45 AM	0	0	0	0	0
8:00 AM	0	1	0	0	1
8:15 AM	0	0	0	1	1
8:30 AM	0	0	2	1	3
8:45 AM	1	0	0	2	3
<b>TOTAL VOLUMES:</b>	1	2	2	7	12

	North Leg Hamner Avenue	East Leg Hidden Valley Parkway	South Leg Hamner Avenue	West Leg Mountain Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	0	0	2	3
4:15 PM	0	0	0	0	0
4:30 PM	0	3	1	0	4
4:45 PM	0	1	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	1	0	0	0	1
5:45 PM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	2	4	1	2	9

Location: Corona  
 N/S: Hamner Avenue  
 E/W: Mountain Ave/Hidden Valley Parkway



Date: 5/2/2019  
 Day: Thursday

BICYCLES

	Southbound Hamner Avenue			Westbound Hidden Valley Parkway			Northbound Hamner Avenue			Eastbound Mountain Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	0	0	0	0	0	0	0	0	0	3

	Southbound Hamner Avenue			Westbound Hidden Valley Parkway			Northbound Hamner Avenue			Eastbound Mountain Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	1	0	0	0	1	1	1	2	0	0	6

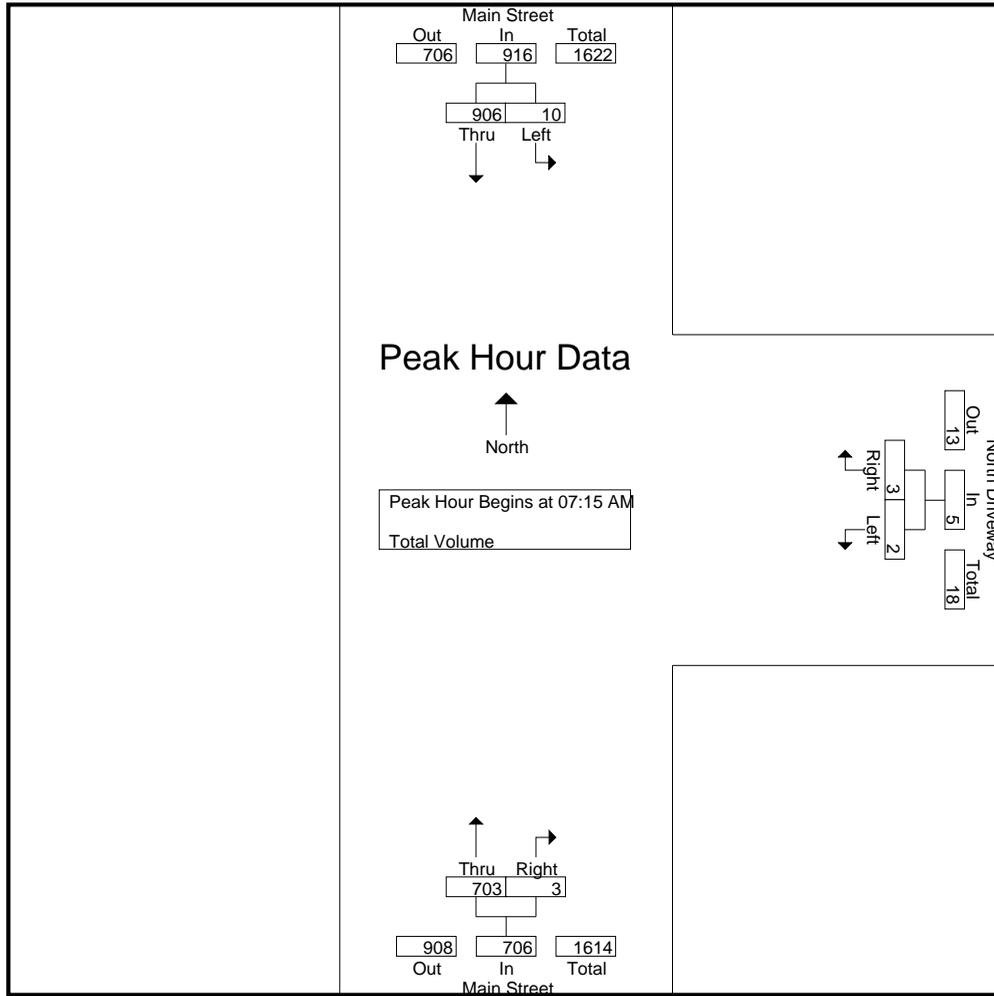
City of Corona  
 N/S: Main Street  
 E/W: North Driveway  
 Weather: Clear

File Name : 03\_COR\_Main\_Driveway AM  
 Site Code : 00318878  
 Start Date : 11/15/2018  
 Page No : 1

Groups Printed- Total Volume

Start Time	Main Street Southbound			North Driveway Westbound			Main Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
06:00 AM	0	137	137	0	0	0	67	0	67	204
06:15 AM	0	143	143	0	0	0	86	0	86	229
06:30 AM	0	183	183	0	0	0	111	0	111	294
06:45 AM	0	217	217	0	0	0	132	0	132	349
Total	0	680	680	0	0	0	396	0	396	1076
07:00 AM	0	208	208	0	0	0	147	0	147	355
07:15 AM	2	213	215	1	1	2	170	1	171	388
07:30 AM	1	245	246	0	0	0	187	0	187	433
07:45 AM	3	248	251	0	0	0	180	2	182	433
Total	6	914	920	1	1	2	684	3	687	1609
08:00 AM	4	200	204	1	2	3	166	0	166	373
08:15 AM	3	203	206	2	0	2	138	2	140	348
08:30 AM	1	162	163	2	3	5	154	1	155	323
08:45 AM	0	196	196	0	0	0	127	3	130	326
Total	8	761	769	5	5	10	585	6	591	1370
Grand Total	14	2355	2369	6	6	12	1665	9	1674	4055
Apprch %	0.6	99.4		50	50		99.5	0.5		
Total %	0.3	58.1	58.4	0.1	0.1	0.3	41.1	0.2	41.3	

Start Time	Main Street Southbound			North Driveway Westbound			Main Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	2	213	215	1	1	2	170	1	171	388
07:30 AM	1	245	246	0	0	0	<b>187</b>	0	<b>187</b>	<b>433</b>
07:45 AM	3	<b>248</b>	<b>251</b>	0	0	0	180	<b>2</b>	182	433
08:00 AM	4	200	204	1	<b>2</b>	<b>3</b>	166	0	166	373
Total Volume	10	906	916	2	3	5	703	3	706	1627
% App. Total	1.1	98.9		40	60		99.6	0.4		
PHF	.625	.913	.912	.500	.375	.417	.940	.375	.944	.939



Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:45 AM			07:15 AM		
+0 mins.	0	208	208	0	0	0	170	1	171
+15 mins.	2	213	215	1	2	3	<b>187</b>	0	<b>187</b>
+30 mins.	1	245	246	<b>2</b>	0	2	180	<b>2</b>	182
+45 mins.	<b>3</b>	<b>248</b>	<b>251</b>	2	<b>3</b>	<b>5</b>	166	0	166
Total Volume	6	914	920	5	5	10	703	3	706
% App. Total	0.7	99.3		50	50		99.6	0.4	
PHF	.500	.921	.916	.625	.417	.500	.940	.375	.944

City of Corona  
 N/S: Main Street  
 E/W: North Driveway  
 Weather: Clear

File Name : 03\_COR\_Main\_N Driveway PM  
 Site Code : 00318878  
 Start Date : 11/15/2018  
 Page No : 1

Groups Printed- Total Volume

Start Time	Main Street Southbound			North Driveway Westbound			Main Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	279	279	0	0	0	291	2	293	572
04:15 PM	2	301	303	1	0	1	279	2	281	585
04:30 PM	0	283	283	1	1	2	348	2	350	635
04:45 PM	0	276	276	0	2	2	266	0	266	544
<b>Total</b>	<b>2</b>	<b>1139</b>	<b>1141</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>1184</b>	<b>6</b>	<b>1190</b>	<b>2336</b>
05:00 PM	0	282	282	0	0	0	285	0	285	567
05:15 PM	0	243	243	0	0	0	313	0	313	556
05:30 PM	1	265	266	0	0	0	339	0	339	605
05:45 PM	2	263	265	0	1	1	359	2	361	627
<b>Total</b>	<b>3</b>	<b>1053</b>	<b>1056</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1296</b>	<b>2</b>	<b>1298</b>	<b>2355</b>
Grand Total	5	2192	2197	2	4	6	2480	8	2488	4691
Apprch %	0.2	99.8		33.3	66.7		99.7	0.3		
Total %	0.1	46.7	46.8	0	0.1	0.1	52.9	0.2	53	

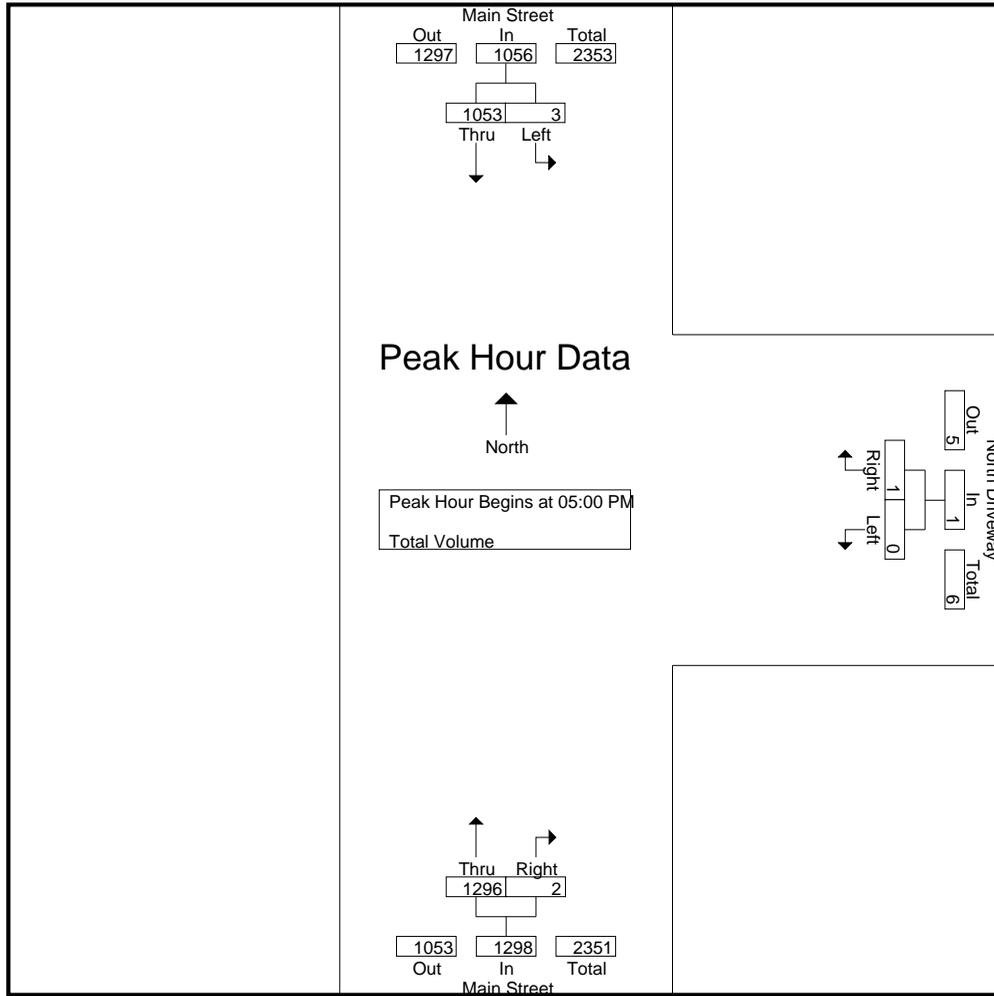
Start Time	Main Street Southbound			North Driveway Westbound			Main Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
05:00 PM	0	<b>282</b>	<b>282</b>	0	0	0	285	0	285	567
05:15 PM	0	243	243	0	0	0	313	0	313	556
05:30 PM	1	265	266	0	0	0	339	0	339	605
05:45 PM	<b>2</b>	263	265	0	<b>1</b>	<b>1</b>	<b>359</b>	<b>2</b>	<b>361</b>	<b>627</b>
Total Volume	3	1053	1056	0	1	1	1296	2	1298	2355
% App. Total	0.3	99.7		0	100		99.8	0.2		
PHF	.375	.934	.936	.000	.250	.250	.903	.250	.899	.939

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

City of Corona  
 N/S: Main Street  
 E/W: North Driveway  
 Weather: Clear

File Name : 03\_COR\_Main\_N Driveway PM  
 Site Code : 00318878  
 Start Date : 11/15/2018  
 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:

	04:15 PM			04:00 PM			05:00 PM		
+0 mins.	2	301	303	0	0	0	285	0	285
+15 mins.	0	283	283	1	0	1	313	0	313
+30 mins.	0	276	276	1	1	2	339	0	339
+45 mins.	0	282	282	0	2	2	359	2	361
Total Volume	2	1142	1144	2	3	5	1296	2	1298
% App. Total	0.2	99.8		40	60		99.8	0.2	
PHF	.250	.949	.944	.500	.375	.625	.903	.250	.899

Location: Corona  
 N/S: Main Street  
 E/W: North Driveway



Date: 11/15/2018  
 Day: Thursday

PEDESTRIANS

	North Leg Main Street	East Leg North Driveway	South Leg Main Street	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:00 AM	0	0	0	0	0
6:15 AM	0	0	0	0	0
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	1	5	0	0	6
7:15 AM	0	1	0	0	1
7:30 AM	0	2	0	0	2
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	1	1
8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	0	1
8:45 AM	0	1	0	0	1
TOTAL VOLUMES:	1	10	0	1	12

	North Leg Main Street	East Leg North Driveway	South Leg Main Street	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	2	3
4:30 PM	0	2	0	0	2
4:45 PM	1	3	0	0	4
5:00 PM	0	1	0	0	1
5:15 PM	0	1	0	0	1
5:30 PM	0	0	0	1	1
5:45 PM	0	1	0	0	1
TOTAL VOLUMES:	1	9	0	3	13

Location: Corona  
 N/S: Main Street  
 E/W: North Driveway



Date: 11/15/2018  
 Day: Thursday

BICYCLES

	Southbound Main Street			Westbound North Driveway			Northbound Main Street			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
TOTAL VOLUMES:	0	5	0	0	0	0	0	2	0	0	0	0	7

	Southbound Main Street			Westbound North Driveway			Northbound Main Street			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	2	0	0	0	0	3

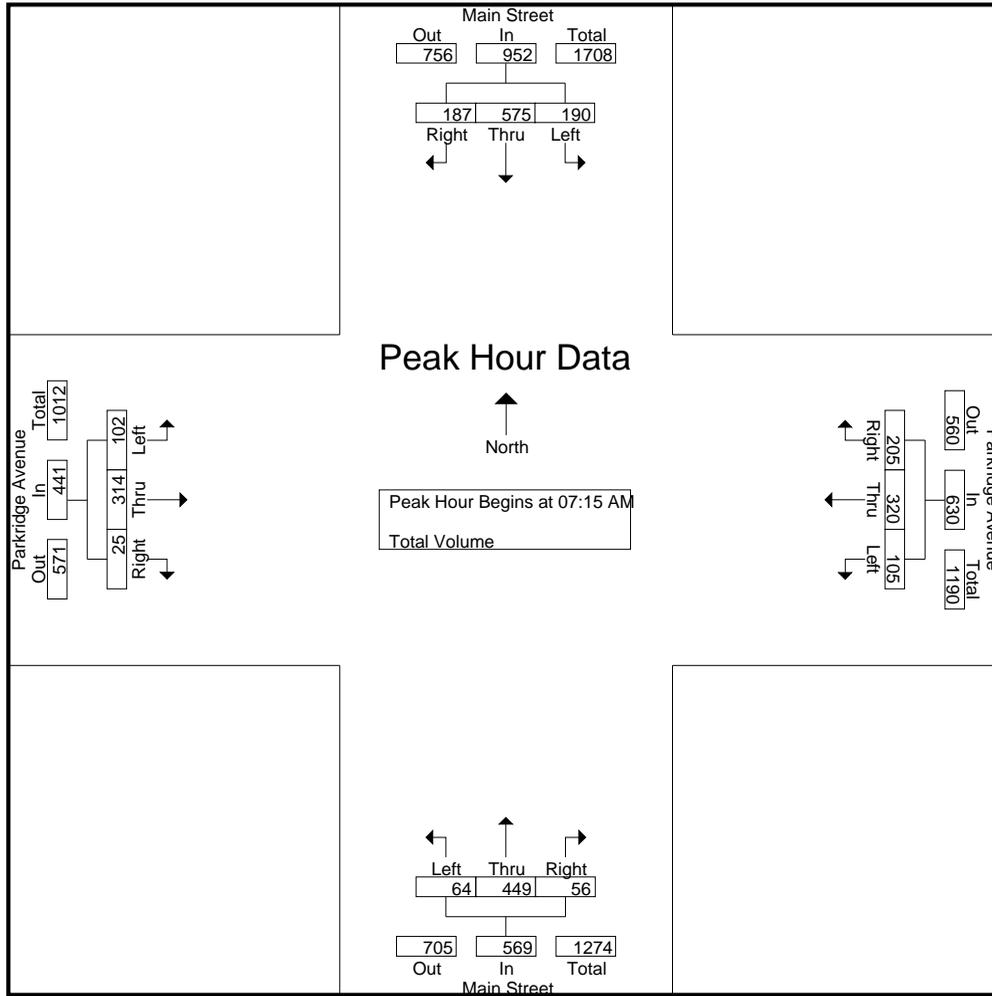
City of Corona  
 N/S: Main Street  
 E/W: Parkridge Avenue  
 Weather: Clear

File Name : 01\_COR\_Main\_Parkridge AM  
 Site Code : 00318878  
 Start Date : 11/15/2018  
 Page No : 1

Groups Printed- Total Volume

Start Time	Main Street Southbound				Parkridge Avenue Westbound				Main Street Northbound				Parkridge Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
06:00 AM	27	66	35	128	11	29	12	52	2	33	2	37	11	12	2	25	242
06:15 AM	48	92	41	181	9	38	40	87	5	58	5	68	13	19	3	35	371
06:30 AM	43	81	41	165	8	42	25	75	7	61	5	73	11	23	1	35	348
06:45 AM	44	115	57	216	15	51	40	106	6	70	4	80	11	31	7	49	451
Total	162	354	174	690	43	160	117	320	20	222	16	258	46	85	13	144	1412
07:00 AM	51	116	44	211	7	63	43	113	7	82	11	100	28	58	2	88	512
07:15 AM	47	128	50	225	24	87	63	174	22	96	14	132	21	60	7	88	619
07:30 AM	48	152	48	248	24	94	46	164	13	127	14	154	23	85	5	113	679
07:45 AM	53	165	45	263	31	63	56	150	12	114	15	141	33	95	7	135	689
Total	199	561	187	947	86	307	208	601	54	419	54	527	105	298	21	424	2499
08:00 AM	42	130	44	216	26	76	40	142	17	112	13	142	25	74	6	105	605
08:15 AM	44	137	36	217	30	47	41	118	6	77	6	89	20	31	12	63	487
08:30 AM	19	111	26	156	17	31	30	78	16	105	12	133	22	27	6	55	422
08:45 AM	41	132	42	215	19	29	29	77	17	82	9	108	22	27	4	53	453
Total	146	510	148	804	92	183	140	415	56	376	40	472	89	159	28	276	1967
Grand Total	507	1425	509	2441	221	650	465	1336	130	1017	110	1257	240	542	62	844	5878
Apprch %	20.8	58.4	20.9		16.5	48.7	34.8		10.3	80.9	8.8		28.4	64.2	7.3		
Total %	8.6	24.2	8.7	41.5	3.8	11.1	7.9	22.7	2.2	17.3	1.9	21.4	4.1	9.2	1.1	14.4	

Start Time	Main Street Southbound				Parkridge Avenue Westbound				Main Street Northbound				Parkridge Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	47	128	<b>50</b>	225	24	87	<b>63</b>	<b>174</b>	<b>22</b>	96	14	132	21	60	<b>7</b>	88	619
07:30 AM	48	152	48	248	24	<b>94</b>	46	164	13	<b>127</b>	14	<b>154</b>	23	85	5	113	679
07:45 AM	<b>53</b>	<b>165</b>	45	<b>263</b>	<b>31</b>	63	56	150	12	114	<b>15</b>	141	<b>33</b>	<b>95</b>	7	<b>135</b>	<b>689</b>
08:00 AM	42	130	44	216	26	76	40	142	17	112	13	142	25	74	6	105	605
Total Volume	190	575	187	952	105	320	205	630	64	449	56	569	102	314	25	441	2592
% App. Total	20	60.4	19.6		16.7	50.8	32.5		11.2	78.9	9.8		23.1	71.2	5.7		
PHF	.896	.871	.935	.905	.847	.851	.813	.905	.727	.884	.933	.924	.773	.826	.893	.817	.940



Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	47	128	<b>50</b>	225	24	87	<b>63</b>	<b>174</b>	<b>22</b>	96	14	132	21	60	<b>7</b>	88
+15 mins.	48	152	48	248	24	<b>94</b>	46	164	13	<b>127</b>	14	<b>154</b>	23	85	5	113
+30 mins.	<b>53</b>	<b>165</b>	45	<b>263</b>	<b>31</b>	63	56	150	12	114	<b>15</b>	141	<b>33</b>	<b>95</b>	7	<b>135</b>
+45 mins.	42	130	44	216	26	76	40	142	17	112	13	142	25	74	6	105
Total Volume	190	575	187	952	105	320	205	630	64	449	56	569	102	314	25	441
% App. Total	20	60.4	19.6		16.7	50.8	32.5		11.2	78.9	9.8		23.1	71.2	5.7	
PHF	.896	.871	.935	.905	.847	.851	.813	.905	.727	.884	.933	.924	.773	.826	.893	.817

City of Corona  
 N/S: Main Street  
 E/W: Parkridge Avenue  
 Weather: Clear

File Name : 01\_COR\_Main\_Parkridge PM  
 Site Code : 00318878  
 Start Date : 11/15/2018  
 Page No : 1

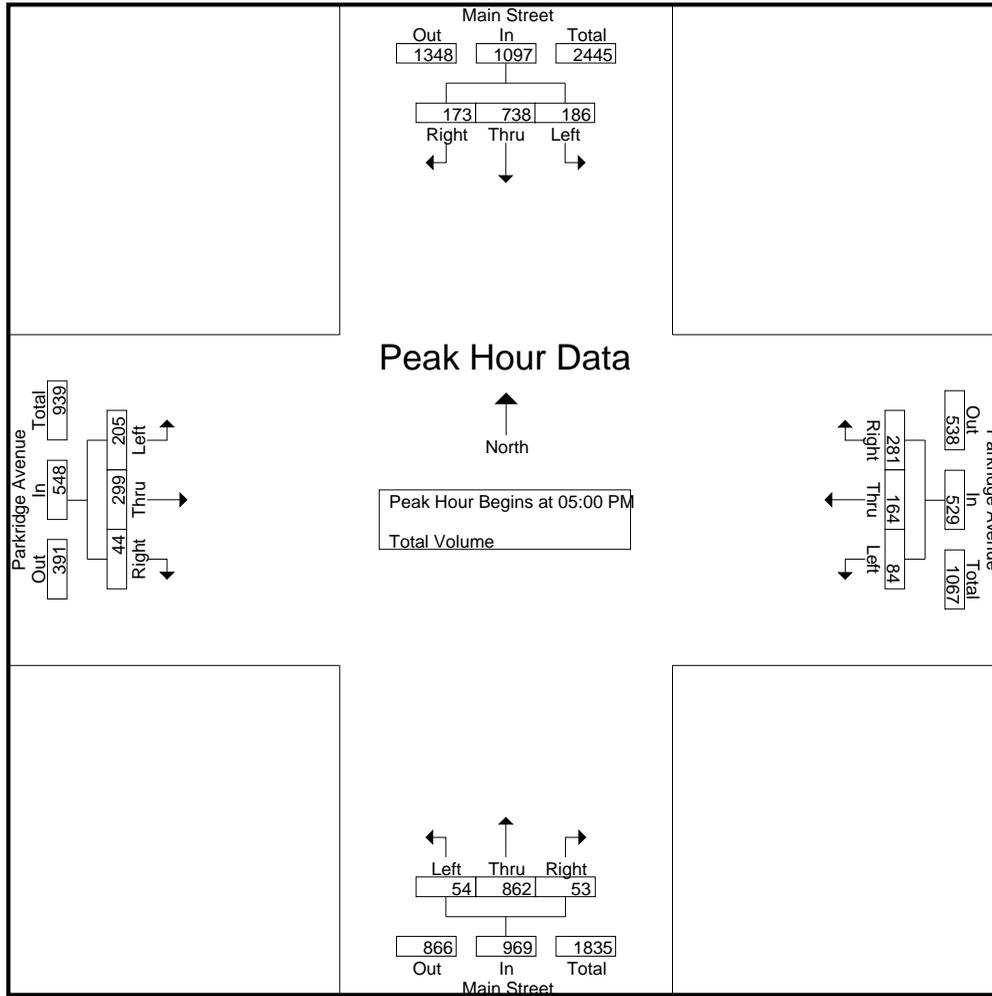
Groups Printed- Total Volume

Start Time	Main Street Southbound				Parkridge Avenue Westbound				Main Street Northbound				Parkridge Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	43	178	49	270	19	42	51	112	23	181	30	234	61	91	20	172	788
04:15 PM	49	207	55	311	22	46	53	121	10	209	15	234	40	69	16	125	791
04:30 PM	48	202	40	290	23	38	86	147	17	202	13	232	50	90	13	153	822
04:45 PM	43	174	31	248	17	18	49	84	12	157	13	182	32	76	10	118	632
<b>Total</b>	<b>183</b>	<b>761</b>	<b>175</b>	<b>1119</b>	<b>81</b>	<b>144</b>	<b>239</b>	<b>464</b>	<b>62</b>	<b>749</b>	<b>71</b>	<b>882</b>	<b>183</b>	<b>326</b>	<b>59</b>	<b>568</b>	<b>3033</b>
05:00 PM	50	187	50	287	29	45	64	138	8	190	10	208	41	88	13	142	775
05:15 PM	41	196	34	271	14	43	63	120	9	220	10	239	58	60	8	126	756
05:30 PM	43	157	47	247	25	35	70	130	21	209	18	248	63	86	17	166	791
05:45 PM	52	198	42	292	16	41	84	141	16	243	15	274	43	65	6	114	821
<b>Total</b>	<b>186</b>	<b>738</b>	<b>173</b>	<b>1097</b>	<b>84</b>	<b>164</b>	<b>281</b>	<b>529</b>	<b>54</b>	<b>862</b>	<b>53</b>	<b>969</b>	<b>205</b>	<b>299</b>	<b>44</b>	<b>548</b>	<b>3143</b>
<b>Grand Total</b>	<b>369</b>	<b>1499</b>	<b>348</b>	<b>2216</b>	<b>165</b>	<b>308</b>	<b>520</b>	<b>993</b>	<b>116</b>	<b>1611</b>	<b>124</b>	<b>1851</b>	<b>388</b>	<b>625</b>	<b>103</b>	<b>1116</b>	<b>6176</b>
Apprch %	16.7	67.6	15.7		16.6	31	52.4		6.3	87	6.7		34.8	56	9.2		
Total %	6	24.3	5.6	35.9	2.7	5	8.4	16.1	1.9	26.1	2	30	6.3	10.1	1.7	18.1	

Start Time	Main Street Southbound				Parkridge Avenue Westbound				Main Street Northbound				Parkridge Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	50	187	<b>50</b>	287	<b>29</b>	<b>45</b>	64	138	8	190	10	208	41	<b>88</b>	13	142	775
05:15 PM	41	196	34	271	14	43	63	120	9	220	10	239	58	60	8	126	756
05:30 PM	43	157	47	247	25	35	70	130	<b>21</b>	<b>209</b>	<b>18</b>	<b>248</b>	<b>63</b>	<b>86</b>	<b>17</b>	<b>166</b>	791
05:45 PM	<b>52</b>	<b>198</b>	42	<b>292</b>	16	41	<b>84</b>	<b>141</b>	16	<b>243</b>	15	<b>274</b>	43	65	6	114	<b>821</b>
Total Volume	186	738	173	1097	84	164	281	529	54	862	53	969	205	299	44	548	3143
% App. Total	17	67.3	15.8		15.9	31	53.1		5.6	89	5.5		37.4	54.6	8		
PHF	.894	.932	.865	.939	.724	.911	.836	.938	.643	.887	.736	.884	.813	.849	.647	.825	.957

City of Corona  
 N/S: Main Street  
 E/W: Parkridge Avenue  
 Weather: Clear

File Name : 01\_COR\_Main\_Parkridge PM  
 Site Code : 00318878  
 Start Date : 11/15/2018  
 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:

	04:15 PM				05:00 PM				05:00 PM				04:00 PM			
+0 mins.	49	<b>207</b>	<b>55</b>	<b>311</b>	<b>29</b>	<b>45</b>	64	138	8	190	10	208	<b>61</b>	<b>91</b>	<b>20</b>	<b>172</b>
+15 mins.	48	202	40	290	14	43	63	120	9	220	10	239	40	69	16	125
+30 mins.	43	174	31	248	25	35	70	130	<b>21</b>	209	<b>18</b>	248	50	90	13	153
+45 mins.	<b>50</b>	187	50	287	16	41	<b>84</b>	<b>141</b>	16	<b>243</b>	15	<b>274</b>	32	76	10	118
Total Volume	190	770	176	1136	84	164	281	529	54	862	53	969	183	326	59	568
% App. Total	16.7	67.8	15.5		15.9	31	53.1		5.6	89	5.5		32.2	57.4	10.4	
PHF	.950	.930	.800	.913	.724	.911	.836	.938	.643	.887	.736	.884	.750	.896	.738	.826

Location: Corona  
 N/S: Main Street  
 E/W: Parkridge Avenue



Date: 11/15/2018  
 Day: Thursday

**PEDESTRIANS**

	North Leg Main Street	East Leg Parkridge Avenue	South Leg Main Street	West Leg Parkridge Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:00 AM	0	0	1	0	1
6:15 AM	0	2	0	2	4
6:30 AM	0	1	3	0	4
6:45 AM	0	0	0	0	0
7:00 AM	0	1	0	0	1
7:15 AM	0	1	6	0	7
7:30 AM	3	0	3	3	9
7:45 AM	3	0	1	0	4
8:00 AM	0	0	10	0	10
8:15 AM	0	0	1	0	1
8:30 AM	0	0	1	0	1
8:45 AM	0	1	2	0	3
<b>TOTAL VOLUMES:</b>	6	6	28	5	45

	North Leg Main Street	East Leg Parkridge Avenue	South Leg Main Street	West Leg Parkridge Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	0	4	0	5
4:15 PM	0	2	2	2	6
4:30 PM	0	0	5	0	5
4:45 PM	2	2	0	1	5
5:00 PM	0	0	0	0	0
5:15 PM	2	0	0	1	3
5:30 PM	0	0	3	0	3
5:45 PM	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	5	4	14	4	27

Location: Corona  
 N/S: Main Street  
 E/W: Parkridge Avenue



Date: 11/15/2018  
 Day: Thursday

BICYCLES

	Southbound Main Street			Westbound Parkridge Avenue			Northbound Main Street			Eastbound Parkridge Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	3	0	0	0	0	0	2	0	0	0	0	5

	Southbound Main Street			Westbound Parkridge Avenue			Northbound Main Street			Eastbound Parkridge Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	2	0	0	2	0	5

# Counts Unlimited, Inc.

City of Corona  
 Parkridge Avenue  
 B/ Cota Street - Shopping Center Driveway  
 24 Hour Directional Volume Count

PO Box 1178  
 Corona, CA 92878  
 Phone: (951) 268-6268  
 email: counts@countsunlimited.com

COR001  
 Site Code: 003-19286

Start Time	02-May-19 Thu	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		3	112			6	93				
12:15		5	93			9	83				
12:30		4	88			3	114				
12:45		6	86	18	379	10	98	28	388	46	767
01:00		4	78			7	78				
01:15		7	68			7	87				
01:30		1	133			2	84				
01:45		5	84	17	363	4	86	20	335	37	698
02:00		5	111			5	144				
02:15		1	130			5	95				
02:30		4	164			4	114				
02:45		4	86	14	491	8	126	22	479	36	970
03:00		2	112			5	109				
03:15		4	123			3	92				
03:30		5	118			5	82				
03:45		8	138	19	491	3	82	16	365	35	856
04:00		9	140			5	98				
04:15		8	118			6	103				
04:30		8	132			9	74				
04:45		7	121	32	511	15	72	35	347	67	858
05:00		11	124			19	96				
05:15		13	126			25	86				
05:30		11	182			31	115				
05:45		32	66	67	498	132	63	207	360	274	858
06:00		32	64			72	76				
06:15		28	65			58	63				
06:30		34	73			90	62				
06:45		60	56	154	258	129	70	349	271	503	529
07:00		70	58			97	61				
07:15		96	38			156	73				
07:30		107	50			156	73				
07:45		129	36	402	182	139	43	548	250	950	432
08:00		95	43			111	52				
08:15		49	40			87	52				
08:30		54	43			75	38				
08:45		45	25	243	151	71	46	344	188	587	339
09:00		77	26			58	40				
09:15		57	49			71	49				
09:30		68	28			58	34				
09:45		62	17	264	120	67	21	254	144	518	264
10:00		77	22			52	24				
10:15		69	18			72	32				
10:30		58	12			54	27				
10:45		79	4	283	56	62	19	240	102	523	158
11:00		88	7			70	14				
11:15		63	4			89	15				
11:30		111	8			72	13				
11:45		95	5	357	24	69	12	300	54	657	78
<b>Total</b>		1870	3524	1870	3524	2363	3283	2363	3283	4233	6807
<b>Combined Total</b>		5394		5394		5646		5646		11040	
AM Peak	-	07:15	-	-	-	07:15	-	-	-	-	-
Vol.	-	427	-	-	-	562	-	-	-	-	-
P.H.F.	-	0.828	-	-	-	0.901	-	-	-	-	-
PM Peak	-	-	04:45	-	-	-	02:00	-	-	-	-
Vol.	-	-	553	-	-	-	479	-	-	-	-
P.H.F.	-	-	0.760	-	-	-	0.832	-	-	-	-
Percentage		34.7%	65.3%			41.9%	58.1%				
ADT/AADT		ADT 11,040		AADT 11,040							

# Counts Unlimited, Inc.

City of Corona  
 Parkridge Avenue  
 B/ Shopping Center Driveway - Project Driveway 1  
 24 Hour Directional Volume Count

PO Box 1178  
 Corona, CA 92878  
 Phone: (951) 268-6268  
 email: counts@countsunlimited.com

COR002  
 Site Code: 003-19286

Start Time	02-May-19 Thu	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		3	117			6	96				
12:15		5	107			8	87				
12:30		4	100			3	119				
12:45		8	97	20	421	11	100	28	402	48	823
01:00		4	94			7	72				
01:15		8	79			7	81				
01:30		1	143			2	76				
01:45		5	91	18	407	4	92	20	321	38	728
02:00		5	127			5	135				
02:15		1	136			5	89				
02:30		4	183			4	116				
02:45		4	94	14	540	8	133	22	473	36	1013
03:00		2	125			5	118				
03:15		4	118			2	92				
03:30		5	126			5	86				
03:45		8	137	19	506	3	85	15	381	34	887
04:00		9	149			5	108				
04:15		8	127			6	115				
04:30		8	138			9	81				
04:45		7	123	32	537	15	76	35	380	67	917
05:00		11	134			19	100				
05:15		13	128			25	91				
05:30		10	195			32	126				
05:45		30	75	64	532	131	67	207	384	271	916
06:00		31	68			71	73				
06:15		28	72			62	65				
06:30		36	75			93	68				
06:45		58	61	153	276	124	75	350	281	503	557
07:00		75	56			102	63				
07:15		95	46			160	67				
07:30		102	55			155	71				
07:45		137	43	409	200	141	43	558	244	967	444
08:00		95	53			114	48				
08:15		48	43			91	53				
08:30		60	49			72	40				
08:45		47	32	250	177	76	45	353	186	603	363
09:00		86	30			65	39				
09:15		58	52			72	44				
09:30		67	28			56	33				
09:45		67	21	278	131	79	18	272	134	550	265
10:00		83	25			53	20				
10:15		77	21			74	32				
10:30		65	15			66	24				
10:45		74	7	299	68	61	19	254	95	553	163
11:00		99	7			73	14				
11:15		66	5			86	15				
11:30		116	8			80	12				
11:45		102	7	383	27	79	9	318	50	701	77
<b>Total</b>		1939	3822	1939	3822	2432	3331	2432	3331	4371	7153
<b>Combined Total</b>		5761		5761		5763		5763		11524	
AM Peak	-	07:15	-	-	-	07:15	-	-	-	-	-
Vol.	-	429	-	-	-	570	-	-	-	-	-
P.H.F.	-	0.783	-	-	-	0.891	-	-	-	-	-
PM Peak	-	-	04:45	-	-	-	02:00	-	-	-	-
Vol.	-	-	580	-	-	-	473	-	-	-	-
P.H.F.	-	-	0.744	-	-	-	0.876	-	-	-	-
Percentage		33.7%	66.3%			42.2%	57.8%				
ADT/AADT		ADT 11,524		AADT 11,524							

# Counts Unlimited, Inc.

City of Corona  
 Main Street  
 B/ Hidden Valley Parkway - Alamilla's Driveway  
 24 Hour Directional Volume Count

PO Box 1178  
 Corona, CA 92878  
 Phone: (951) 268-6268  
 email: counts@countsunlimited.com

COR003  
 Site Code: 003-19286

Start Time	02-May-19 Thu	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		19	274			19	<b>381</b>				
12:15		15	245			22	<b>371</b>				
12:30		17	276			17	<b>346</b>				
12:45		15	235	66	1030	13	<b>307</b>	71	1405	137	2435
01:00		19	231			15	280				
01:15		11	220			9	257				
01:30		13	199			12	240				
01:45		8	272	51	922	11	296	47	1073	98	1995
02:00		12	195			8	237				
02:15		8	246			8	271				
02:30		7	268			9	256				
02:45		9	274	36	983	23	264	48	1028	84	2011
03:00		8	233			19	284				
03:15		11	243			25	274				
03:30		9	324			31	270				
03:45		10	317	38	1117	37	302	112	1130	150	2247
04:00		15	277			55	266				
04:15		13	294			73	313				
04:30		27	348			84	299				
04:45		29	289	84	1208	76	291	288	1169	372	2377
05:00		35	<b>307</b>			87	314				
05:15		41	<b>328</b>			91	288				
05:30		42	<b>331</b>			101	259				
05:45		63	<b>356</b>	181	1322	197	282	476	1143	657	2465
06:00		67	292			137	292				
06:15		86	267			143	226				
06:30		111	188			183	228				
06:45		132	199	396	946	217	212	680	958	1076	1904
07:00		152	163			215	223				
07:15		191	147			247	198				
07:30		221	154			269	171				
07:45		201	110	765	574	294	159	1025	751	1790	1325
08:00		171	116			216	158				
08:15		149	108			218	149				
08:30		169	95			166	116				
08:45		130	90	619	409	214	132	814	555	1433	964
09:00		161	90			193	152				
09:15		188	71			213	124				
09:30		158	74			169	88				
09:45		178	52	685	287	222	87	797	451	1482	738
10:00		184	49			194	75				
10:15		203	45			213	74				
10:30		184	27			205	53				
10:45		224	38	795	159	249	56	861	258	1656	417
11:00		<b>236</b>	26			<b>259</b>	50				
11:15		<b>247</b>	20			<b>394</b>	28				
11:30		<b>227</b>	31			<b>334</b>	35				
11:45		<b>234</b>	13	944	90	<b>431</b>	32	1418	145	2362	235
Total		4660	9047	4660	9047	6637	10066	6637	10066	11297	19113
Combined Total		13707		13707		16703		16703		30410	
AM Peak	-	11:00	-	-	-	11:00	-	-	-	-	-
Vol.	-	944	-	-	-	1418	-	-	-	-	-
P.H.F.		0.955				0.823					
PM Peak	-	-	05:00	-	-	-	12:00	-	-	-	-
Vol.	-	-	1322	-	-	-	1405	-	-	-	-
P.H.F.			0.928				0.922				
Percentage		34.0%	66.0%			39.7%	60.3%				
ADT/AADT		ADT 30,410		AADT 30,410							

# Counts Unlimited, Inc.

City of Corona  
 Main Street  
 B/ Alamilla's Driveway - Parkridge Avenue  
 24 Hour Directional Volume Count

PO Box 1178  
 Corona, CA 92878  
 Phone: (951) 268-6268  
 email: counts@countsunlimited.com

COR004  
 Site Code: 003-19286

Start Time	02-May-19 Thu	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		19	274			19	<b>377</b>				
12:15		15	249			22	<b>368</b>				
12:30		17	274			17	<b>346</b>				
12:45		15	236	66	1033	13	<b>307</b>	71	1398	137	2431
01:00		19	229			15	277				
01:15		11	219			9	256				
01:30		13	198			12	239				
01:45		8	268	51	914	11	297	47	1069	98	1983
02:00		12	196			8	237				
02:15		8	245			8	270				
02:30		7	268			9	257				
02:45		9	276	36	985	23	265	48	1029	84	2014
03:00		8	234			19	286				
03:15		11	242			25	272				
03:30		9	323			31	270				
03:45		10	317	38	1116	37	302	112	1130	150	2246
04:00		15	277			55	266				
04:15		13	296			73	312				
04:30		27	348			84	300				
04:45		29	287	84	1208	76	291	288	1169	372	2377
05:00		35	<b>307</b>			87	314				
05:15		41	<b>328</b>			91	288				
05:30		42	<b>331</b>			101	258				
05:45		63	<b>357</b>	181	1323	197	278	476	1138	657	2461
06:00		67	292			137	290				
06:15		86	266			143	226				
06:30		111	189			183	229				
06:45		132	198	396	945	217	212	680	957	1076	1902
07:00		152	164			215	223				
07:15		190	146			246	198				
07:30		221	154			268	169				
07:45		203	111	766	575	293	158	1022	748	1788	1323
08:00		169	120			214	158				
08:15		151	111			217	151				
08:30		167	97			167	116				
08:45		133	89	620	417	214	131	812	556	1432	973
09:00		157	89			193	152				
09:15		187	71			212	123				
09:30		161	74			168	89				
09:45		175	52	680	286	220	87	793	451	1473	737
10:00		184	49			194	75				
10:15		203	45			215	74				
10:30		186	26			206	53				
10:45		224	38	797	158	250	56	865	258	1662	416
11:00		<b>236</b>	27			<b>257</b>	50				
11:15		<b>248</b>	20			<b>394</b>	28				
11:30		<b>227</b>	32			<b>329</b>	36				
11:45		<b>233</b>	13	944	92	<b>430</b>	33	1410	147	2354	239
Total		4659	9052	4659	9052	6624	10050	6624	10050	11283	19102
Combined Total		13711		13711		16674		16674		30385	
AM Peak	-	11:00	-	-	-	11:00	-	-	-	-	-
Vol.	-	944	-	-	-	1410	-	-	-	-	-
P.H.F.		0.952				0.820					
PM Peak	-	-	05:00	-	-	-	12:00	-	-	-	-
Vol.	-	-	1323	-	-	-	1398	-	-	-	-
P.H.F.			0.926				0.927				
Percentage		34.0%	66.0%			39.7%	60.3%				
ADT/AADT		ADT 30,385		AADT 30,385							



City: Moreno Valley  
Location: 12560 Day St/The Habit  
Date: 1/29/2020  
Count Type: Trip Generation Count

	Entering	Exiting	Total
10:00	0	0	0
10:15	0	0	0
10:30	4	1	5
10:45	5	2	7
11:00	7	0	7
11:15	8	7	15
11:30	5	4	9
11:45	9	4	13
12:00	15	3	18
12:15	18	8	26
12:30	6	9	15
12:45	20	14	34
13:00	11	22	33
13:15	1	13	14
13:30	9	8	17
13:45	11	4	15
14:00	4	10	14
14:15	12	6	18
14:30	13	6	19
14:45	9	9	18
15:00	7	6	13
15:15	4	12	16
15:30	12	7	19
15:45	8	9	17
16:00	8	8	16
16:15	4	7	11
16:30	7	9	16
16:45	7	7	14
17:00	4	8	12
17:15	8	7	15
17:30	5	9	14
17:45	8	7	15
18:00	6	6	12
18:15	9	8	17
18:30	6	7	13
18:45	10	7	17
19:00	3	6	9
19:15	0	11	11
19:30	12	5	17



City: Moreno Valley  
Location: 12560 Day St/The Habit  
Date: 1/29/2020  
Count Type: Trip Generation Count

	Entering	Exiting	Total
19:45	2	3	5
20:00	5	4	9
20:15	5	4	9
20:30	13	12	25
20:45	4	5	9
21:00	3	10	13
21:15	1	1	2
21:30	5	4	9
21:45	1	3	4
22:00	0	3	3
22:15	0	5	5
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	2	3	5
23:30	0	0	0
23:45	0	0	0
<b>TOTAL</b>	<b>336</b>	<b>333</b>	<b>669</b>



City: Moreno Valley  
Location: 12560 Day St/The Habit  
Date: 1/30/2020  
Count Type: Trip Generation Count

	Entering	Exiting	Total
10:00	1	0	1
10:15	0	2	2
10:30	5	1	6
10:45	3	1	4
11:00	3	3	6
11:15	8	3	11
11:30	7	4	11
11:45	16	7	23
12:00	9	5	14
12:15	13	10	23
12:30	4	4	8
12:45	2	2	4
13:00	11	5	16
13:15	7	7	14
13:30	8	5	13
13:45	2	5	7
14:00	6	8	14
14:15	7	8	15
14:30	7	9	16
14:45	6	6	12
15:00	8	7	15
15:15	10	11	21
15:30	10	5	15
15:45	4	11	15
16:00	4	9	13
16:15	7	8	15
16:30	14	5	19
16:45	7	4	11
17:00	10	7	17
17:15	7	13	20
17:30	1	3	4
17:45	1	5	6
18:00	7	8	15
18:15	9	7	16
18:30	16	4	20
18:45	3	5	8
19:00	6	10	16
19:15	10	7	17
19:30	5	5	10



City: Moreno Valley  
Location: 12560 Day St/The Habit  
Date: 1/30/2020  
Count Type: Trip Generation Count

	Entering	Exiting	Total
19:45	3	6	9
20:00	5	6	11
20:15	0	7	7
20:30	0	5	5
20:45	5	3	8
21:00	0	3	3
21:15	2	5	7
21:30	3	4	7
21:45	6	3	9
22:00	0	3	3
22:15	0	2	2
22:30	0	7	7
22:45	1	2	3
23:00	0	1	1
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
<b>TOTAL</b>	<b>289</b>	<b>286</b>	<b>575</b>

---

## APPENDIX C:

# VOLUME DEVELOPMENT WORKSHEETS

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	AM Peak Hour			PM Peak Hour				
	Existing Without Project	Net Project Trips	Pass-By Trips	Existing With Project	Existing Without Project	Net Project Trips	Pass-By Trips	Existing With Project
<b>1 DPSS Building Driveway - Cota Street/Parkridge Avenue</b>								
NBL	38	0	0	38	33	0	0	33
NBT	9	0	0	9	1	0	0	1
NBR	251	1	0	252	259	5	0	264
SBL	6	0	0	6	35	0	0	35
SBT	2	0	0	2	7	0	0	7
SBR	1	0	0	1	13	0	0	13
EBL	9	0	0	9	4	0	0	4
EBT	166	2	0	168	212	10	0	222
EBR	22	0	0	22	29	0	0	29
WBL	321	1	0	322	212	4	0	216
WBT	222	2	0	224	183	9	0	192
WBR	38	0	0	38	14	0	0	14
North Leg								
Approach	9	0	0	9	55	0	0	55
Departure	56	0	0	56	19	0	0	19
Total	65	0	0	65	74	0	0	74
South Leg								
Approach	298	1	0	299	293	5	0	298
Departure	345	1	0	346	248	4	0	252
Total	643	2	0	645	541	9	0	550
East Leg								
Approach	581	3	0	584	409	13	0	422
Departure	423	3	0	426	506	15	0	521
Total	1,004	6	0	1,010	915	28	0	943
West Leg								
Approach	197	2	0	199	245	10	0	255
Departure	261	2	0	263	229	9	0	238
Total	458	4	0	462	474	19	0	493
Total Approaches								
Approach	1,085	6	0	1,091	1,002	28	0	1,030
Departure	1,085	6	0	1,091	1,002	28	0	1,030
Total	2,170	12	0	2,182	2,004	56	0	2,060

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	AM Peak Hour			PM Peak Hour				
	Existing Without Project	Net Project Trips	Pass-By Trips	Existing With Project	Existing Without Project	Net Project Trips	Pass-By Trips	Existing With Project
<b>2 Project Driveway 1 - Shopping Center Driveway/Parkridge Avenue</b>								
NBL	32	0	0	32	58	0	0	58
NBT	0	0	0	0	0	0	0	0
NBR	29	0	0	29	76	0	0	76
SBL	0	6	1	6	0	31	6	31
SBT	0	0	0	0	0	0	0	0
SBR	0	3	1	3	0	13	3	13
EBL	0	3	2	3	0	15	6	15
EBT	395	0	-2	395	444	0	-6	444
EBR	28	0	0	28	62	0	0	62
WBL	43	0	0	43	72	0	0	72
WBT	548	0	-1	548	351	0	-3	351
WBR	0	8	1	8	0	36	4	36
North Leg								
Approach	0	9	2	9	0	44	9	44
Departure	0	11	3	11	0	51	10	51
Total	0	20	5	20	0	95	19	95
South Leg								
Approach	61	0	0	61	134	0	0	134
Departure	71	0	0	71	134	0	0	134
Total	132	0	0	132	268	0	0	268
East Leg								
Approach	591	8	0	599	423	36	1	459
Departure	424	6	-1	430	520	31	0	551
Total	1,015	14	-1	1,029	943	67	1	1,010
West Leg								
Approach	423	3	0	426	506	15	0	521
Departure	580	3	0	583	409	13	0	422
Total	1,003	6	0	1,009	915	28	0	943
Total Approaches								
Approach	1,075	20	2	1,095	1,063	95	10	1,158
Departure	1,075	20	2	1,095	1,063	95	10	1,158
Total	2,150	40	4	2,190	2,126	190	20	2,316

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	AM Peak Hour			PM Peak Hour				
	Existing Without Project	Net Project Trips	Pass-By Trips	Existing With Project	Existing Without Project	Net Project Trips	Pass-By Trips	Existing With Project
<b>3 Hamner Avenue/Mountain Avenue - Hidden Valley Parkway</b>								
NBL	41	1	0	42	99	4	0	103
NBT	503	1	0	504	607	4	0	611
NBR	227	4	0	231	479	18	0	497
SBL	138	0	0	138	410	0	0	410
SBT	369	1	0	370	764	5	0	769
SBR	11	0	0	11	19	0	0	19
EBL	13	0	0	13	21	0	0	21
EBT	159	0	0	159	297	0	0	297
EBR	34	1	0	35	66	5	0	71
WBL	638	4	0	642	338	20	0	358
WBT	367	0	0	367	317	0	0	317
WBR	466	0	0	466	263	0	0	263
North Leg								
Approach	518	1	0	519	1,193	5	0	1,198
Departure	982	1	0	983	891	4	0	895
Total	1,500	2	0	1,502	2,084	9	0	2,093
South Leg								
Approach	771	6	0	777	1,185	26	0	1,211
Departure	1,041	6	0	1,047	1,168	30	0	1,198
Total	1,812	12	0	1,824	2,353	56	0	2,409
East Leg								
Approach	1,471	4	0	1,475	918	20	0	938
Departure	524	4	0	528	1,186	18	0	1,204
Total	1,995	8	0	2,003	2,104	38	0	2,142
West Leg								
Approach	206	1	0	207	384	5	0	389
Departure	419	1	0	420	435	4	0	439
Total	625	2	0	627	819	9	0	828
Total Approaches								
Approach	2,966	12	0	2,978	3,680	56	0	3,736
Departure	2,966	12	0	2,978	3,680	56	0	3,736
Total	5,932	24	0	5,956	7,360	112	0	7,472

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	AM Peak Hour			PM Peak Hour				
	Existing Without Project	Net Project Trips	Pass-By Trips	Existing With Project	Existing Without Project	Net Project Trips	Pass-By Trips	Existing With Project
<b>4 Main Street/Project Driveway 2 - Alamilla's Driveway</b>								
NBL	0	4	3	4	0	20	14	20
NBT	758	0	-3	758	1,356	0	-13	1,356
NBR	4	0	0	4	3	0	0	3
SBL	11	0	0	11	4	0	0	4
SBT	976	0	-3	976	1,103	0	-13	1,103
SBR	0	6	3	6	0	30	13	30
EBL	0	6	2	6	0	26	12	26
EBT	0	0	0	0	0	0	0	0
EBR	0	4	3	4	0	18	12	18
WBL	3	0	0	3	0	0	0	0
WBT	0	0	0	0	0	0	0	0
WBR	4	0	0	4	2	0	0	2
North Leg								
Approach	987	6	0	993	1,107	30	0	1,137
Departure	762	6	-1	768	1,358	26	-1	1,384
Total	1,749	12	-1	1,761	2,465	56	-1	2,521
South Leg								
Approach	762	4	0	766	1,359	20	1	1,379
Departure	979	4	0	983	1,103	18	-1	1,121
Total	1,741	8	0	1,749	2,462	38	0	2,500
East Leg								
Approach	7	0	0	7	2	0	0	2
Departure	15	0	0	15	7	0	0	7
Total	22	0	0	22	9	0	0	9
West Leg								
Approach	0	10	5	10	0	44	24	44
Departure	0	10	6	10	0	50	27	50
Total	0	20	11	20	0	94	51	94
Total Approaches								
Approach	1,756	20	5	1,776	2,468	94	25	2,562
Departure	1,756	20	5	1,776	2,468	94	25	2,562
Total	3,512	40	10	3,552	4,936	188	50	5,124

**Table C-1 - Existing Peak Hour PCE Volume Summary**

	AM Peak Hour			PM Peak Hour				
	Existing Without Project	Net Project Trips	Pass-By Trips	Existing With Project	Existing Without Project	Net Project Trips	Pass-By Trips	Existing With Project
<b>5 Main Street/Parkridge Avenue</b>								
NBL	66	2	0	68	56	10	0	66
NBT	483	4	0	487	903	20	1	923
NBR	58	0	0	58	55	0	-1	55
SBL	194	0	0	194	190	0	1	190
SBT	619	4	0	623	772	18	0	790
SBR	191	0	0	191	177	0	0	177
EBL	105	0	0	105	210	0	0	210
EBT	321	5	0	326	305	22	0	327
EBR	26	2	0	28	45	9	1	54
WBL	108	0	0	108	86	0	-1	86
WBT	327	5	0	332	168	25	1	193
WBR	210	0	0	210	287	0	0	287
<b>North Leg</b>								
Approach	1,004	4	0	1,008	1,139	18	1	1,157
Departure	798	4	0	802	1,400	20	1	1,420
Total	1,802	8	0	1,810	2,539	38	2	2,577
<b>South Leg</b>								
Approach	607	6	0	613	1,014	30	0	1,044
Departure	753	6	0	759	903	27	0	930
Total	1,360	12	0	1,372	1,917	57	0	1,974
<b>East Leg</b>								
Approach	645	5	0	650	541	25	0	566
Departure	573	5	0	578	550	22	0	572
Total	1,218	10	0	1,228	1,091	47	0	1,138
<b>West Leg</b>								
Approach	452	7	0	459	560	31	1	591
Departure	584	7	0	591	401	35	1	436
Total	1,036	14	0	1,050	961	66	2	1,027
<b>Total Approaches</b>								
Approach	2,708	22	0	2,730	3,254	104	2	3,358
Departure	2,708	22	0	2,730	3,254	104	2	3,358
Total	5,416	44	0	5,460	6,508	208	4	6,716

**Table C-2 - Project Opening Year (2021) Peak Hour PCE Volume Summary**

	AM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	Cumulative Project Trips	OY Without Project	Net Project Trips	Pass-By Trips	OY With Project
<b>1 DPSS Building Driveway - Cota Street/Parkridge Avenue</b>							
NBL	38	2	0	40	0	0	40
NBT	9	0	0	9	0	0	9
NBR	251	10	8	269	1	0	270
SBL	6	0	0	6	0	0	6
SBT	2	0	0	2	0	0	2
SBR	1	0	0	1	0	0	1
EBL	9	0	0	9	0	0	9
EBT	166	7	12	185	2	0	187
EBR	22	1	0	23	0	0	23
WBL	321	13	2	336	1	0	337
WBT	222	9	7	238	2	0	240
WBR	38	2	0	40	0	0	40
North Leg							
Approach	9	0	0	9	0	0	9
Departure	56	2	0	58	0	0	58
Total	65	2	0	67	0	0	67
South Leg							
Approach	298	12	8	318	1	0	319
Departure	345	14	2	361	1	0	362
Total	643	26	10	679	2	0	681
East Leg							
Approach	581	24	9	614	3	0	617
Departure	423	17	20	460	3	0	463
Total	1,004	41	29	1,074	6	0	1,080
West Leg							
Approach	197	8	12	217	2	0	219
Departure	261	11	7	279	2	0	281
Total	458	19	19	496	4	0	500
Total Approaches							
Approach	1,085	44	29	1,158	6	0	1,164
Departure	1,085	44	29	1,158	6	0	1,164
Total	2,170	88	58	2,316	12	0	2,328

**Table C-2 - Project Opening Year (2021) Peak Hour PCE Volume Summary**

	AM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	Cumulative Project Trips	OY Without Project	Net Project Trips	Pass-By Trips	OY With Project
<b>2</b>	<b>Project Driveway 1 - Shopping Center Driveway/Parkridge Avenue</b>						
NBL	32	1	5	38	0	0	38
NBT	0	0	0	0	0	0	0
NBR	29	1	10	40	0	0	40
SBL	0	0	0	0	6	1	7
SBT	0	0	0	0	0	0	0
SBR	0	0	0	0	3	1	4
EBL	0	0	0	0	3	2	5
EBT	395	16	14	425	0	-2	423
EBR	28	1	6	35	0	0	35
WBL	43	2	12	57	0	0	57
WBT	548	22	4	574	0	-1	573
WBR	0	0	0	0	8	1	9
North Leg							
Approach	0	0	0	0	9	2	11
Departure	0	0	0	0	11	3	14
Total	0	0	0	0	20	5	25
South Leg							
Approach	61	2	15	78	0	0	78
Departure	71	3	18	92	0	0	92
Total	132	5	33	170	0	0	170
East Leg							
Approach	591	24	16	631	8	0	639
Departure	424	17	24	465	6	-1	470
Total	1,015	41	40	1,096	14	-1	1,109
West Leg							
Approach	423	17	20	460	3	0	463
Departure	580	23	9	612	3	0	615
Total	1,003	40	29	1,072	6	0	1,078
Total Approaches							
Approach	1,075	43	51	1,169	20	2	1,191
Departure	1,075	43	51	1,169	20	2	1,191
Total	2,150	86	102	2,338	40	4	2,382

**Table C-2 - Project Opening Year (2021) Peak Hour PCE Volume Summary**

	AM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	Cumulative Project Trips	OY Without Project	Net Project Trips	Pass-By Trips	OY With Project
<b>3 Hamner Avenue/Mountain Avenue - Hidden Valley Parkway</b>							
NBL	41	2	0	43	1	0	44
NBT	503	20	24	547	1	0	548
NBR	227	9	10	246	4	0	250
SBL	138	6	5	149	0	0	149
SBT	369	15	20	404	1	0	405
SBR	11	0	0	11	0	0	11
EBL	13	1	0	14	0	0	14
EBT	159	6	0	165	0	0	165
EBR	34	1	0	35	1	0	36
WBL	638	26	7	671	4	0	675
WBT	367	15	0	382	0	0	382
WBR	466	19	20	505	0	0	505
North Leg							
Approach	518	21	25	564	1	0	565
Departure	982	40	44	1,066	1	0	1,067
Total	1,500	61	69	1,630	2	0	1,632
South Leg							
Approach	771	31	34	836	6	0	842
Departure	1,041	42	27	1,110	6	0	1,116
Total	1,812	73	61	1,946	12	0	1,958
East Leg							
Approach	1,471	60	27	1,558	4	0	1,562
Departure	524	21	15	560	4	0	564
Total	1,995	81	42	2,118	8	0	2,126
West Leg							
Approach	206	8	0	214	1	0	215
Departure	419	17	0	436	1	0	437
Total	625	25	0	650	2	0	652
Total Approaches							
Approach	2,966	120	86	3,172	12	0	3,184
Departure	2,966	120	86	3,172	12	0	3,184
Total	5,932	240	172	6,344	24	0	6,368

**Table C-2 - Project Opening Year (2021) Peak Hour PCE Volume Summary**

	AM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	Cumulative Project Trips	OY Without Project	Net Project Trips	Pass-By Trips	OY With Project
<b>4 Main Street/Project Driveway 2 - Alamilla's Driveway</b>							
NBL	0	0	0	0	4	3	7
NBT	758	30	32	820	0	-3	817
NBR	4	0	0	4	0	0	4
SBL	11	0	0	11	0	0	11
SBT	976	39	27	1,042	0	-3	1,039
SBR	0	0	0	0	6	3	9
EBL	0	0	0	0	6	2	8
EBT	0	0	0	0	0	0	0
EBR	0	0	0	0	4	3	7
WBL	3	0	0	3	0	0	3
WBT	0	0	0	0	0	0	0
WBR	4	0	0	4	0	0	4
North Leg							
Approach	987	39	27	1,053	6	0	1,059
Departure	762	30	32	824	6	-1	829
Total	1,749	69	59	1,877	12	-1	1,888
South Leg							
Approach	762	30	32	824	4	0	828
Departure	979	39	27	1,045	4	0	1,049
Total	1,741	69	59	1,869	8	0	1,877
East Leg							
Approach	7	0	0	7	0	0	7
Departure	15	0	0	15	0	0	15
Total	22	0	0	22	0	0	22
West Leg							
Approach	0	0	0	0	10	5	15
Departure	0	0	0	0	10	6	16
Total	0	0	0	0	20	11	31
Total Approaches							
Approach	1,756	69	59	1,884	20	5	1,909
Departure	1,756	69	59	1,884	20	5	1,909
Total	3,512	138	118	3,768	40	10	3,818

**Table C-2 - Project Opening Year (2021) Peak Hour PCE Volume Summary**

	AM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	Cumulative Project Trips	OY Without Project	Net Project Trips	Pass-By Trips	OY With Project
<b>5 Main Street/Parkridge Avenue</b>							
NBL	66	3	2	71	2	0	73
NBT	483	19	22	524	4	0	528
NBR	58	2	2	62	0	0	62
SBL	194	8	0	202	0	0	202
SBT	619	25	19	663	4	0	667
SBR	191	8	8	207	0	0	207
EBL	105	4	10	119	0	0	119
EBT	321	13	8	342	5	0	347
EBR	26	1	6	33	2	0	35
WBL	108	4	6	118	0	0	118
WBT	327	13	7	347	5	0	352
WBR	210	8	0	218	0	0	218
North Leg							
Approach	1,004	41	27	1,072	4	0	1,076
Departure	798	31	32	861	4	0	865
Total	1,802	72	59	1,933	8	0	1,941
South Leg							
Approach	607	24	26	657	6	0	663
Departure	753	30	31	814	6	0	820
Total	1,360	54	57	1,471	12	0	1,483
East Leg							
Approach	645	25	13	683	5	0	688
Departure	573	23	10	606	5	0	611
Total	1,218	48	23	1,289	10	0	1,299
West Leg							
Approach	452	18	24	494	7	0	501
Departure	584	24	17	625	7	0	632
Total	1,036	42	41	1,119	14	0	1,133
Total Approaches							
Approach	2,708	108	90	2,906	22	0	2,928
Departure	2,708	108	90	2,906	22	0	2,928
Total	5,416	216	180	5,812	44	0	5,856

**Table C-2 - Project Opening Year (2021) Peak Hour PCE Volume Summary**

	PM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	Cumulative Project Trips	OY Without Project	Net Project Trips	Pass-By Trips	OY With Project
<b>1 DPSS Building Driveway - Cota Street/Parkridge Avenue</b>							
NBL	33	1	0	34	0	0	34
NBT	1	0	0	1	0	0	1
NBR	259	10	5	274	5	0	279
SBL	35	1	0	36	0	0	36
SBT	7	0	0	7	0	0	7
SBR	13	1	0	14	0	0	14
EBL	4	0	0	4	0	0	4
EBT	212	8	4	224	10	0	234
EBR	29	1	0	30	0	0	30
WBL	212	8	8	228	4	0	232
WBT	183	7	8	198	9	0	207
WBR	14	1	0	15	0	0	15
North Leg							
Approach	55	2	0	57	0	0	57
Departure	19	1	0	20	0	0	20
Total	74	3	0	77	0	0	77
South Leg							
Approach	293	11	5	309	5	0	314
Departure	248	9	8	265	4	0	269
Total	541	20	13	574	9	0	583
East Leg							
Approach	409	16	16	441	13	0	454
Departure	506	19	9	534	15	0	549
Total	915	35	25	975	28	0	1,003
West Leg							
Approach	245	9	4	258	10	0	268
Departure	229	9	8	246	9	0	255
Total	474	18	12	504	19	0	523
Total Approaches							
Approach	1,002	38	25	1,065	28	0	1,093
Departure	1,002	38	25	1,065	28	0	1,093
Total	2,004	76	50	2,130	56	0	2,186

**Table C-2 - Project Opening Year (2021) Peak Hour PCE Volume Summary**

	PM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	Cumulative Project Trips	OY Without Project	Net Project Trips	Pass-By Trips	OY With Project
<b>2</b>	<b>Project Driveway 1 - Shopping Center Driveway/Parkridge Avenue</b>						
NBL	58	2	1	61	0	0	61
NBT	0	0	0	0	0	0	0
NBR	76	3	2	81	0	0	81
SBL	0	0	0	0	31	6	37
SBT	0	0	0	0	0	0	0
SBR	0	0	0	0	13	3	16
EBL	0	0	0	0	15	6	21
EBT	444	18	8	470	0	-6	464
EBR	62	2	1	65	0	0	65
WBL	72	3	1	76	0	0	76
WBT	351	14	15	380	0	-3	377
WBR	0	0	0	0	36	4	40
North Leg							
Approach	0	0	0	0	44	9	53
Departure	0	0	0	0	51	10	61
Total	0	0	0	0	95	19	114
South Leg							
Approach	134	5	3	142	0	0	142
Departure	134	5	2	141	0	0	141
Total	268	10	5	283	0	0	283
East Leg							
Approach	423	17	16	456	36	1	493
Departure	520	21	10	551	31	0	582
Total	943	38	26	1,007	67	1	1,075
West Leg							
Approach	506	20	9	535	15	0	550
Departure	409	16	16	441	13	0	454
Total	915	36	25	976	28	0	1,004
Total Approaches							
Approach	1,063	42	28	1,133	95	10	1,238
Departure	1,063	42	28	1,133	95	10	1,238
Total	2,126	84	56	2,266	190	20	2,476

**Table C-2 - Project Opening Year (2021) Peak Hour PCE Volume Summary**

	PM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	Cumulative Project Trips	OY Without Project	Net Project Trips	Pass-By Trips	OY With Project
<b>3 Hamner Avenue/Mountain Avenue - Hidden Valley Parkway</b>							
NBL	99	4	0	103	4	0	107
NBT	607	24	20	651	4	0	655
NBR	479	19	9	507	18	0	525
SBL	410	16	15	441	0	0	441
SBT	764	31	22	817	5	0	822
SBR	19	1	0	20	0	0	20
EBL	21	1	0	22	0	0	22
EBT	297	12	0	309	0	0	309
EBR	66	3	0	69	5	0	74
WBL	338	14	11	363	20	0	383
WBT	317	13	0	330	0	0	330
WBR	263	11	10	284	0	0	284
North Leg							
Approach	1,193	48	37	1,278	5	0	1,283
Departure	891	36	30	957	4	0	961
Total	2,084	84	67	2,235	9	0	2,244
South Leg							
Approach	1,185	47	29	1,261	26	0	1,287
Departure	1,168	48	33	1,249	30	0	1,279
Total	2,353	95	62	2,510	56	0	2,566
East Leg							
Approach	918	38	21	977	20	0	997
Departure	1,186	47	24	1,257	18	0	1,275
Total	2,104	85	45	2,234	38	0	2,272
West Leg							
Approach	384	16	0	400	5	0	405
Departure	435	18	0	453	4	0	457
Total	819	34	0	853	9	0	862
Total Approaches							
Approach	3,680	149	87	3,916	56	0	3,972
Departure	3,680	149	87	3,916	56	0	3,972
Total	7,360	298	174	7,832	112	0	7,944

**Table C-2 - Project Opening Year (2021) Peak Hour PCE Volume Summary**

	PM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	Cumulative Project Trips	OY Without Project	Net Project Trips	Pass-By Trips	OY With Project
<b>4 Main Street/Project Driveway 2 - Alamilla's Driveway</b>							
NBL	0	0	0	0	20	14	34
NBT	1,356	54	29	1,439	0	-13	1,426
NBR	3	0	0	3	0	0	3
SBL	4	0	0	4	0	0	4
SBT	1,103	44	33	1,180	0	-13	1,167
SBR	0	0	0	0	30	13	43
EBL	0	0	0	0	26	12	38
EBT	0	0	0	0	0	0	0
EBR	0	0	0	0	18	12	30
WBL	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0
WBR	2	0	0	2	0	0	2
North Leg							
Approach	1,107	44	33	1,184	30	0	1,214
Departure	1,358	54	29	1,441	26	-1	1,466
Total	2,465	98	62	2,625	56	-1	2,680
South Leg							
Approach	1,359	54	29	1,442	20	1	1,463
Departure	1,103	44	33	1,180	18	-1	1,197
Total	2,462	98	62	2,622	38	0	2,660
East Leg							
Approach	2	0	0	2	0	0	2
Departure	7	0	0	7	0	0	7
Total	9	0	0	9	0	0	9
West Leg							
Approach	0	0	0	0	44	24	68
Departure	0	0	0	0	50	27	77
Total	0	0	0	0	94	51	145
Total Approaches							
Approach	2,468	98	62	2,628	94	25	2,747
Departure	2,468	98	62	2,628	94	25	2,747
Total	4,936	196	124	5,256	188	50	5,494

**Table C-2 - Project Opening Year (2021) Peak Hour PCE Volume Summary**

	PM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	Cumulative Project Trips	OY Without Project	Net Project Trips	Pass-By Trips	OY With Project
<b>5 Main Street/Parkridge Avenue</b>							
NBL	56	2	7	65	10	0	75
NBT	903	36	25	964	20	1	985
NBR	55	2	7	64	0	-1	63
SBL	190	8	0	198	0	1	199
SBT	772	31	27	830	18	0	848
SBR	177	7	6	190	0	0	190
EBL	210	8	4	222	0	0	222
EBT	305	12	3	320	22	0	342
EBR	45	2	3	50	9	1	60
WBL	86	3	3	92	0	-1	91
WBT	168	7	4	179	25	1	205
WBR	287	11	0	298	0	0	298
North Leg							
Approach	1,139	46	33	1,218	18	1	1,237
Departure	1,400	55	29	1,484	20	1	1,505
Total	2,539	101	62	2,702	38	2	2,742
South Leg							
Approach	1,014	40	39	1,093	30	0	1,123
Departure	903	36	33	972	27	0	999
Total	1,917	76	72	2,065	57	0	2,122
East Leg							
Approach	541	21	7	569	25	0	594
Departure	550	22	10	582	22	0	604
Total	1,091	43	17	1,151	47	0	1,198
West Leg							
Approach	560	22	10	592	31	1	624
Departure	401	16	17	434	35	1	470
Total	961	38	27	1,026	66	2	1,094
Total Approaches							
Approach	3,254	129	89	3,472	104	2	3,578
Departure	3,254	129	89	3,472	104	2	3,578
Total	6,508	258	178	6,944	208	4	7,156

## **APPENDIX D:**

### **LEVEL OF SERVICE WORKSHEETS**

Intersection	
Intersection Delay, s/veh	17.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗			↖	↗		↕	
Traffic Vol, veh/h	9	166	22	321	222	38	38	9	251	6	2	1
Future Vol, veh/h	9	166	22	321	222	38	38	9	251	6	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	184	24	357	247	42	42	10	279	7	2	1
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	3
HCM Control Delay	13.6	19.7	14.8	11.4
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1
Vol Left, %	81%	0%	100%	0%	0%	100%	0%	67%
Vol Thru, %	19%	0%	0%	100%	0%	0%	85%	22%
Vol Right, %	0%	100%	0%	0%	100%	0%	15%	11%
Sign Control	Stop							
Traffic Vol by Lane	47	251	9	166	22	321	260	9
LT Vol	38	0	9	0	0	321	0	6
Through Vol	9	0	0	166	0	0	222	2
RT Vol	0	251	0	0	22	0	38	1
Lane Flow Rate	52	279	10	184	24	357	289	10
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.109	0.497	0.022	0.371	0.044	0.682	0.503	0.023
Departure Headway (Hd)	7.533	6.418	7.745	7.235	6.521	6.879	6.267	8.457
Convergence, Y/N	Yes							
Cap	473	558	459	494	544	524	572	426
Service Time	5.323	4.207	5.541	5.031	4.317	4.652	4.04	6.157
HCM Lane V/C Ratio	0.11	0.5	0.022	0.372	0.044	0.681	0.505	0.023
HCM Control Delay	11.3	15.5	10.7	14.3	9.6	23.3	15.3	11.4
HCM Lane LOS	B	C	B	B	A	C	C	B
HCM 95th-tile Q	0.4	2.7	0.1	1.7	0.1	5.1	2.8	0.1

HCM 6th TWSC  
2: Shopping Center Driveway & Parkridge Avenue

Corona Commercial Project  
Existing NP - AM Peak Hour

Intersection						
Int Delay, s/veh	1.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑	↘	
Traffic Vol, veh/h	395	28	43	548	32	29
Future Vol, veh/h	395	28	43	548	32	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	429	30	47	596	35	32

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	459	0	1134 230
Stage 1	-	-	-	-	444 -
Stage 2	-	-	-	-	690 -
Critical Hdwy	-	-	4.1	-	6.6 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	1113	-	212 779
Stage 1	-	-	-	-	619 -
Stage 2	-	-	-	-	502 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1113	-	203 779
Mov Cap-2 Maneuver	-	-	-	-	325 -
Stage 1	-	-	-	-	593 -
Stage 2	-	-	-	-	502 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	14.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	450	-	-	1113	-
HCM Lane V/C Ratio	0.147	-	-	0.042	-
HCM Control Delay (s)	14.4	-	-	8.4	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

HCM 6th Signalized Intersection Summary  
 3: Hamner Avenue & Mountain Avenue/Hidden Valley Parkway

Corona Commercial Project  
 Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗	↘	↑↑	↗	↗↘	↑↗	
Traffic Volume (veh/h)	13	159	34	638	367	466	41	503	227	138	369	11
Future Volume (veh/h)	13	159	34	638	367	466	41	503	227	138	369	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	173	37	693	399	507	45	547	247	150	401	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	163	325	145	1268	666	564	157	958	427	306	950	28
Arrive On Green	0.09	0.09	0.09	0.35	0.35	0.35	0.09	0.27	0.27	0.09	0.27	0.27
Sat Flow, veh/h	1810	3610	1610	3619	1900	1610	1810	3610	1608	3510	3577	107
Grp Volume(v), veh/h	14	173	37	693	399	507	45	547	247	150	202	211
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1900	1610	1810	1805	1608	1755	1805	1879
Q Serve(g_s), s	0.5	3.5	1.7	11.9	13.3	23.1	1.8	10.1	10.3	3.1	7.1	7.2
Cycle Q Clear(g_c), s	0.5	3.5	1.7	11.9	13.3	23.1	1.8	10.1	10.3	3.1	7.1	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	163	325	145	1268	666	564	157	958	427	306	479	499
V/C Ratio(X)	0.09	0.53	0.26	0.55	0.60	0.90	0.29	0.57	0.58	0.49	0.42	0.42
Avail Cap(c_a), veh/h	434	865	386	1312	689	584	164	958	427	318	479	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	33.6	32.7	20.2	20.6	23.8	33.0	24.5	24.6	33.6	23.5	23.5
Incr Delay (d2), s/veh	0.2	1.4	0.9	0.4	1.4	16.5	1.0	2.5	5.6	1.2	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.6	0.7	4.8	5.8	10.7	0.8	4.5	4.4	1.4	3.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	34.9	33.6	20.6	22.0	40.3	34.0	27.0	30.2	34.8	26.2	26.1
LnGrp LOS	C	C	C	C	C	D	C	C	C	C	C	C
Approach Vol, veh/h		224			1599			839			563	
Approach Delay, s/veh		34.6			27.2			28.3			28.4	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	24.5		10.9	10.7	24.5		31.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	20.5		18.5	7.0	20.5		28.0				
Max Q Clear Time (g_c+I1), s	5.1	12.3		5.5	3.8	9.2		25.1				
Green Ext Time (p_c), s	0.1	2.9		0.9	0.0	1.8		2.0				

Intersection Summary

HCM 6th Ctrl Delay	28.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th TWSC  
4: Main Street & Alamilla's Driveway

Corona Commercial Project  
Existing NP - AM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↓		↘↗	↑↑
Traffic Vol, veh/h	3	4	758	4	11	976
Future Vol, veh/h	3	4	758	4	11	976
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	4	806	4	12	1038

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1354	408	0	0	813
Stage 1	811	-	-	-	-
Stage 2	543	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1
Critical Hdwy Stg 1	5.8	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	253	*803	-	-	1174
Stage 1	733	-	-	-	-
Stage 2	552	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	250	*800	-	-	1171
Mov Cap-2 Maneuver	392	-	-	-	-
Stage 1	724	-	-	-	-
Stage 2	552	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.6	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	553	1171
HCM Lane V/C Ratio	-	-	0.013	0.01
HCM Control Delay (s)	-	-	11.6	8.1
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th Signalized Intersection Summary  
5: Main Street & Parkridge Avenue

Corona Commercial Project  
Existing NP - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						 			  	
Traffic Volume (veh/h)	105	321	26	108	327	210	66	483	58	194	619	191
Future Volume (veh/h)	105	321	26	108	327	210	66	483	58	194	619	191
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	112	341	28	115	348	223	70	514	0	206	659	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	145	740	60	147	419	352	338	1311		246	1621	
Arrive On Green	0.08	0.22	0.22	0.08	0.22	0.22	0.19	0.36	0.00	0.14	0.31	0.00
Sat Flow, veh/h	1810	3371	275	1810	1900	1597	1810	3610	1610	1810	5358	0
Grp Volume(v), veh/h	112	182	187	115	348	223	70	514	0	206	659	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1841	1810	1900	1597	1810	1805	1610	1810	1729	0
Q Serve(g_s), s	4.9	7.0	7.1	5.0	14.0	7.1	2.6	8.5	0.0	8.9	8.0	0.0
Cycle Q Clear(g_c), s	4.9	7.0	7.1	5.0	14.0	7.1	2.6	8.5	0.0	8.9	8.0	0.0
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	145	396	404	147	419	352	338	1311		246	1621	
V/C Ratio(X)	0.77	0.46	0.46	0.78	0.83	0.63	0.21	0.39		0.84	0.41	
Avail Cap(c_a), veh/h	181	451	460	226	523	439	338	1311		294	1621	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.1	27.1	27.1	36.0	29.8	13.7	27.5	18.9	0.0	33.7	21.7	0.0
Incr Delay (d2), s/veh	14.7	0.8	0.8	9.2	9.0	2.0	0.3	0.9	0.0	16.3	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	3.0	3.1	2.5	7.2	2.6	1.1	3.5	0.0	4.9	3.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.8	27.9	28.0	45.2	38.7	15.7	27.8	19.8	0.0	50.0	22.4	0.0
LnGrp LOS	D	C	C	D	D	B	C	B		D	C	
Approach Vol, veh/h		481			686			584	A		865	A
Approach Delay, s/veh		33.3			32.3			20.8			29.0	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.9	33.1	10.5	21.6	18.9	29.0	10.4	21.6				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	13.0	21.0	10.0	20.0	9.0	25.0	8.0	22.0				
Max Q Clear Time (g_c+I1), s	10.9	10.5	7.0	9.1	4.6	10.0	6.9	16.0				
Green Ext Time (p_c), s	0.1	2.5	0.1	1.6	0.0	4.0	0.0	1.5				

Intersection Summary

HCM 6th Ctrl Delay	28.8
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	16.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↘	↙	↘			↙	↘		↕	
Traffic Vol, veh/h	4	212	29	212	183	14	33	1	259	35	7	13
Future Vol, veh/h	4	212	29	212	183	14	33	1	259	35	7	13
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	249	34	249	215	16	39	1	305	41	8	15
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	3
HCM Control Delay	16.7	16.7	17	12.6
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1
Vol Left, %	97%	0%	100%	0%	0%	100%	0%	64%
Vol Thru, %	3%	0%	0%	100%	0%	0%	93%	13%
Vol Right, %	0%	100%	0%	0%	100%	0%	7%	24%
Sign Control	Stop							
Traffic Vol by Lane	34	259	4	212	29	212	197	55
LT Vol	33	0	4	0	0	212	0	35
Through Vol	1	0	0	212	0	0	183	7
RT Vol	0	259	0	0	29	0	14	13
Lane Flow Rate	40	305	5	249	34	249	232	65
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.087	0.564	0.01	0.513	0.063	0.519	0.446	0.15
Departure Headway (Hd)	7.866	6.664	7.915	7.404	6.688	7.495	6.933	8.356
Convergence, Y/N	Yes							
Cap	456	542	452	486	535	481	519	428
Service Time	5.609	4.406	5.664	5.153	4.436	5.24	4.678	6.117
HCM Lane V/C Ratio	0.088	0.563	0.011	0.512	0.064	0.518	0.447	0.152
HCM Control Delay	11.4	17.7	10.7	17.7	9.9	18.1	15.2	12.6
HCM Lane LOS	B	C	B	C	A	C	C	B
HCM 95th-tile Q	0.3	3.5	0	2.9	0.2	2.9	2.3	0.5

HCM 6th TWSC  
2: Shopping Center Driveway & Parkridge Avenue

Corona Commercial Project  
Existing NP - PM Peak Hour

Intersection						
Int Delay, s/veh	2.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑	↘	
Traffic Vol, veh/h	444	62	72	351	58	76
Future Vol, veh/h	444	62	72	351	58	76
Conflicting Peds, #/hr	0	6	6	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	472	66	77	373	62	81

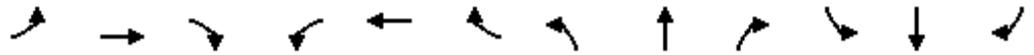
Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	544	0	1038
Stage 1	-	-	-	-	511
Stage 2	-	-	-	-	527
Critical Hdwy	-	-	4.1	-	6.6
Critical Hdwy Stg 1	-	-	-	-	5.8
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1035	-	244
Stage 1	-	-	-	-	573
Stage 2	-	-	-	-	596
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1029	-	224
Mov Cap-2 Maneuver	-	-	-	-	341
Stage 1	-	-	-	-	527
Stage 2	-	-	-	-	596

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	15.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	487	-	-	1029	-
HCM Lane V/C Ratio	0.293	-	-	0.074	-
HCM Control Delay (s)	15.4	-	-	8.8	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.2	-	-	0.2	-

HCM 6th Signalized Intersection Summary  
 3: Hamner Avenue & Mountain Avenue/Hidden Valley Parkway

Corona Commercial Project  
 Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗	↘	↑↑	↗	↗↘	↑↗	
Traffic Volume (veh/h)	21	297	66	338	317	263	99	607	479	410	764	19
Future Volume (veh/h)	21	297	66	338	317	263	99	607	479	410	764	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	22	306	68	377	286	271	102	626	494	423	788	20
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	232	464	206	756	397	336	146	1072	470	556	1348	34
Arrive On Green	0.13	0.13	0.13	0.21	0.21	0.21	0.08	0.30	0.30	0.16	0.37	0.37
Sat Flow, veh/h	1810	3610	1606	3619	1900	1608	1810	3610	1583	3510	3597	91
Grp Volume(v), veh/h	22	306	68	377	286	271	102	626	494	423	395	413
Grp Sat Flow(s),veh/h/ln	1810	1805	1606	1810	1900	1608	1810	1805	1583	1755	1805	1883
Q Serve(g_s), s	0.8	6.2	3.0	7.1	10.8	12.4	4.2	11.4	22.9	8.9	13.5	13.5
Cycle Q Clear(g_c), s	0.8	6.2	3.0	7.1	10.8	12.4	4.2	11.4	22.9	8.9	13.5	13.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	232	464	206	756	397	336	146	1072	470	556	676	706
V/C Ratio(X)	0.09	0.66	0.33	0.50	0.72	0.81	0.70	0.58	1.05	0.76	0.58	0.58
Avail Cap(c_a), veh/h	434	866	385	873	458	388	188	1072	470	637	676	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	32.0	30.6	26.9	28.4	29.0	34.6	23.1	27.1	31.1	19.3	19.3
Incr Delay (d2), s/veh	0.2	1.6	0.9	0.5	4.6	10.5	7.7	2.3	55.6	4.7	3.7	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.7	1.2	3.0	5.2	5.6	2.1	5.0	15.4	4.0	6.0	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	33.6	31.5	27.5	33.0	39.6	42.3	25.4	82.7	35.7	23.0	22.8
LnGrp LOS	C	C	C	C	C	D	D	C	F	D	C	C
Approach Vol, veh/h		396			934			1222			1231	
Approach Delay, s/veh		33.0			32.7			50.0			27.3	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.2	26.9		13.9	10.2	32.9		20.1				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	14.0	22.9		18.5	8.0	28.9		18.6				
Max Q Clear Time (g_c+I1), s	10.9	24.9		8.2	6.2	15.5		14.4				
Green Ext Time (p_c), s	0.5	0.0		1.6	0.0	4.3		1.7				

Intersection Summary

HCM 6th Ctrl Delay	36.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th TWSC  
4: Main Street & Alamilla's Driveway

Corona Commercial Project  
Existing NP - PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↓		↘↗	↑↑
Traffic Vol, veh/h	0	2	1356	3	4	1103
Future Vol, veh/h	0	2	1356	3	4	1103
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	1443	3	4	1173

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2043	726	0	0	1449
Stage 1	1448	-	-	-	-
Stage 2	595	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1
Critical Hdwy Stg 1	5.8	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	*117	*520	-	-	*781
Stage 1	*490	-	-	-	-
Stage 2	*519	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	*116	*519	-	-	*779
Mov Cap-2 Maneuver	*281	-	-	-	-
Stage 1	*487	-	-	-	-
Stage 2	*519	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	519	* 779
HCM Lane V/C Ratio	-	-	0.004	0.005
HCM Control Delay (s)	-	-	12	9.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

# HCM 6th Signalized Intersection Summary

## 5: Main Street & Parkridge Avenue

Corona Commercial Project  
Existing NP - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						 			 	
Traffic Volume (veh/h)	210	305	45	86	168	287	56	903	55	190	772	177
Future Volume (veh/h)	210	305	45	86	168	287	56	903	55	190	772	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	219	318	47	90	175	299	58	941	0	198	804	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	254	869	127	126	389	328	190	1223		251	1931	
Arrive On Green	0.14	0.28	0.28	0.07	0.20	0.20	0.11	0.34	0.00	0.14	0.37	0.00
Sat Flow, veh/h	1810	3158	462	1810	1900	1605	1810	3610	1610	1810	5358	0
Grp Volume(v), veh/h	219	180	185	90	175	299	58	941	0	198	804	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1815	1810	1900	1605	1810	1805	1610	1810	1729	0
Q Serve(g_s), s	10.7	7.2	7.4	4.4	7.3	16.4	2.7	21.0	0.0	9.5	10.4	0.0
Cycle Q Clear(g_c), s	10.7	7.2	7.4	4.4	7.3	16.4	2.7	21.0	0.0	9.5	10.4	0.0
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	254	497	500	126	389	328	190	1223		251	1931	
V/C Ratio(X)	0.86	0.36	0.37	0.71	0.45	0.91	0.30	0.77		0.79	0.42	
Avail Cap(c_a), veh/h	261	497	500	201	391	330	190	1223		251	1931	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.8	26.3	26.3	41.0	31.4	35.0	37.2	26.6	0.0	37.5	21.0	0.0
Incr Delay (d2), s/veh	24.0	0.4	0.5	7.3	0.8	28.0	0.9	4.7	0.0	15.6	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	3.1	3.2	2.2	3.4	8.8	1.2	9.5	0.0	5.2	4.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.8	26.7	26.8	48.3	32.2	63.0	38.1	31.3	0.0	53.1	21.7	0.0
LnGrp LOS	E	C	C	D	C	E	D	C		D	C	
Approach Vol, veh/h		584			564			999	A		1002	A
Approach Delay, s/veh		39.9			51.1			31.7			27.9	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.5	34.5	10.3	28.8	13.5	37.5	16.6	22.4				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	12.0	30.5	10.0	21.5	9.0	33.5	13.0	18.5				
Max Q Clear Time (g_c+I1), s	11.5	23.0	6.4	9.4	4.7	12.4	12.7	18.4				
Green Ext Time (p_c), s	0.0	3.8	0.1	1.6	0.0	5.7	0.0	0.0				

### Intersection Summary

HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

### Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th AWSC  
 1: Cota Street/DPSS Building Driveway & Parkridge Avenue

Corona Commercial Project  
 Existing WP - AM Peak Hour

Intersection	
Intersection Delay, s/veh	16.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↘	↙	↑↓			↙	↘		↕	
Traffic Vol, veh/h	9	168	22	322	224	38	38	9	252	6	2	1
Future Vol, veh/h	9	168	22	322	224	38	38	9	252	6	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	187	24	358	249	42	42	10	280	7	2	1
Number of Lanes	1	1	1	1	2	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	13.6	17.9	14.6	11.2
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	81%	0%	100%	0%	0%	100%	0%	0%	67%
Vol Thru, %	19%	0%	0%	100%	0%	0%	100%	66%	22%
Vol Right, %	0%	100%	0%	0%	100%	0%	0%	34%	11%
Sign Control	Stop								
Traffic Vol by Lane	47	252	9	168	22	322	149	113	9
LT Vol	38	0	9	0	0	322	0	0	6
Through Vol	9	0	0	168	0	0	149	75	2
RT Vol	0	252	0	0	22	0	0	38	1
Lane Flow Rate	52	280	10	187	24	358	166	125	10
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.108	0.493	0.021	0.374	0.044	0.683	0.293	0.213	0.023
Departure Headway (Hd)	7.449	6.344	7.727	7.217	6.503	6.873	6.365	6.126	8.312
Convergence, Y/N	Yes								
Cap	478	566	460	495	546	522	562	583	433
Service Time	5.235	4.128	5.524	5.014	4.299	4.645	4.137	3.897	6.012
HCM Lane V/C Ratio	0.109	0.495	0.022	0.378	0.044	0.686	0.295	0.214	0.023
HCM Control Delay	11.1	15.2	10.7	14.3	9.6	23.3	11.8	10.6	11.2
HCM Lane LOS	B	C	B	B	A	C	B	B	B
HCM 95th-tile Q	0.4	2.7	0.1	1.7	0.1	5.2	1.2	0.8	0.1

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↕↔		↔	↕↕			↕↔			↕↔	
Traffic Vol, veh/h	3	395	28	43	548	8	32	0	29	6	0	3
Future Vol, veh/h	3	395	28	43	548	8	32	0	29	6	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	25	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	429	30	47	596	9	35	0	32	7	0	3

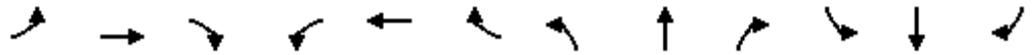
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	605	0	0	459	0	0	842	1149	230	916	1160	303
Stage 1	-	-	-	-	-	-	450	450	-	695	695	-
Stage 2	-	-	-	-	-	-	392	699	-	221	465	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	983	-	-	1113	-	-	261	200	779	230	197	699
Stage 1	-	-	-	-	-	-	564	575	-	403	447	-
Stage 2	-	-	-	-	-	-	610	445	-	767	566	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	983	-	-	1113	-	-	251	191	779	213	188	699
Mov Cap-2 Maneuver	-	-	-	-	-	-	251	191	-	213	188	-
Stage 1	-	-	-	-	-	-	562	573	-	402	428	-
Stage 2	-	-	-	-	-	-	582	426	-	734	564	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.6			16.8			18.5		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	370	983	-	-	1113	-	-	277
HCM Lane V/C Ratio	0.179	0.003	-	-	0.042	-	-	0.035
HCM Control Delay (s)	16.8	8.7	-	-	8.4	-	-	18.5
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0.1

HCM 6th Signalized Intersection Summary  
 3: Hamner Avenue & Mountain Avenue/Hidden Valley Parkway

Corona Commercial Project  
 Existing WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	159	35	642	367	466	42	504	231	138	370	11
Future Volume (veh/h)	13	159	35	642	367	466	42	504	231	138	370	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	173	38	698	399	507	46	548	251	150	402	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	163	325	145	1268	666	564	157	958	427	305	950	28
Arrive On Green	0.09	0.09	0.09	0.35	0.35	0.35	0.09	0.27	0.27	0.09	0.27	0.27
Sat Flow, veh/h	1810	3610	1610	3619	1900	1610	1810	3610	1608	3510	3577	107
Grp Volume(v), veh/h	14	173	38	698	399	507	46	548	251	150	202	212
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1900	1610	1810	1805	1608	1755	1805	1879
Q Serve(g_s), s	0.5	3.5	1.7	12.0	13.3	23.1	1.8	10.2	10.5	3.1	7.2	7.2
Cycle Q Clear(g_c), s	0.5	3.5	1.7	12.0	13.3	23.1	1.8	10.2	10.5	3.1	7.2	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	163	325	145	1268	666	564	157	958	427	305	479	499
V/C Ratio(X)	0.09	0.53	0.26	0.55	0.60	0.90	0.29	0.57	0.59	0.49	0.42	0.42
Avail Cap(c_a), veh/h	434	865	386	1312	689	584	164	958	427	318	479	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	33.6	32.7	20.2	20.6	23.8	33.0	24.6	24.7	33.6	23.5	23.5
Incr Delay (d2), s/veh	0.2	1.4	1.0	0.5	1.4	16.5	1.0	2.5	5.8	1.2	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.6	0.7	4.9	5.8	10.7	0.8	4.5	4.5	1.4	3.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	34.9	33.7	20.6	22.0	40.3	34.0	27.0	30.5	34.8	26.2	26.1
LnGrp LOS	C	C	C	C	C	D	C	C	C	C	C	C
Approach Vol, veh/h		225			1604			845			564	
Approach Delay, s/veh		34.6			27.2			28.4			28.5	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	24.5		10.9	10.7	24.5		31.1				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	20.5		18.5	7.0	20.5		28.0				
Max Q Clear Time (g_c+I1), s	5.1	12.5		5.5	3.8	9.2		25.1				
Green Ext Time (p_c), s	0.1	2.9		0.9	0.0	1.8		2.0				

Intersection Summary

HCM 6th Ctrl Delay	28.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th TWSC  
 4: Main Street & Project Driveway 2/Alamilla's Driveway

Corona Commercial Project  
 Existing WP - AM Peak Hour

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	6	0	4	3	0	4	4	758	4	11	976	6
Future Vol, veh/h	6	0	4	3	0	4	4	758	4	11	976	6
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	3	3	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	0	4	3	0	4	4	806	4	12	1038	6

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1477	1887	523	1258	1888	408	1045	0	0	813	0	0
Stage 1	1066	1066	-	819	819	-	-	-	-	-	-	-
Stage 2	411	821	-	439	1069	-	-	-	-	-	-	-
Critical Hdwy	6.95	6.5	7.1	6.95	6.5	6.9	5.3	-	-	4.1	-	-
Critical Hdwy Stg 1	7.3	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.65	4	3.9	3.65	4	3.3	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	*410	*192	431	*629	*192	*803	378	-	-	*1205	-	-
Stage 1	*186	*301	-	*726	*663	-	-	-	-	-	-	-
Stage 2	*726	*663	-	*540	*300	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	*401	*188	431	*612	*187	*800	378	-	-	*1202	-	-
Mov Cap-2 Maneuver	*401	*188	-	*612	*187	-	-	-	-	-	-	-
Stage 1	*184	*298	-	*717	*653	-	-	-	-	-	-	-
Stage 2	*714	*653	-	*529	*297	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14		10.1		0.1		0.1	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	378	-	-	412	707	*1202	-
HCM Lane V/C Ratio	0.011	-	-	0.026	0.011	0.01	-
HCM Control Delay (s)	14.6	-	-	14	10.1	8	-
HCM Lane LOS	B	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th Signalized Intersection Summary  
5: Main Street & Parkridge Avenue

Corona Commercial Project  
Existing WP - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						 			  	
Traffic Volume (veh/h)	105	326	28	108	332	210	68	487	58	194	623	191
Future Volume (veh/h)	105	326	28	108	332	210	68	487	58	194	623	191
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	112	347	30	115	353	223	72	518	0	206	663	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	145	742	64	147	422	355	335	1305		246	1621	
Arrive On Green	0.08	0.22	0.22	0.08	0.22	0.22	0.18	0.36	0.00	0.14	0.31	0.00
Sat Flow, veh/h	1810	3355	288	1810	1900	1597	1810	3610	1610	1810	5358	0
Grp Volume(v), veh/h	112	186	191	115	353	223	72	518	0	206	663	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1839	1810	1900	1597	1810	1805	1610	1810	1729	0
Q Serve(g_s), s	4.9	7.1	7.2	5.0	14.2	7.0	2.7	8.6	0.0	8.9	8.1	0.0
Cycle Q Clear(g_c), s	4.9	7.1	7.2	5.0	14.2	7.0	2.7	8.6	0.0	8.9	8.1	0.0
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	145	399	407	147	422	355	335	1305		246	1621	
V/C Ratio(X)	0.77	0.46	0.47	0.78	0.84	0.63	0.22	0.40		0.84	0.41	
Avail Cap(c_a), veh/h	181	451	460	226	523	439	335	1305		294	1621	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.1	27.0	27.1	36.0	29.7	13.6	27.7	19.0	0.0	33.7	21.7	0.0
Incr Delay (d2), s/veh	14.7	0.8	0.8	9.2	9.5	1.9	0.3	0.9	0.0	16.3	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	3.1	3.2	2.5	7.4	2.6	1.2	3.6	0.0	4.9	3.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.8	27.9	27.9	45.2	39.2	15.6	28.0	19.9	0.0	50.0	22.4	0.0
LnGrp LOS	D	C	C	D	D	B	C	B		D	C	
Approach Vol, veh/h		489			691			590	A		869	A
Approach Delay, s/veh		33.2			32.6			20.9			29.0	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.9	32.9	10.5	21.7	18.8	29.0	10.4	21.8				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	13.0	21.0	10.0	20.0	9.0	25.0	8.0	22.0				
Max Q Clear Time (g_c+I1), s	10.9	10.6	7.0	9.2	4.7	10.1	6.9	16.2				
Green Ext Time (p_c), s	0.1	2.5	0.1	1.6	0.0	4.0	0.0	1.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											28.9	
HCM 6th LOS											C	
<b>Notes</b>												
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Intersection	
Intersection Delay, s/veh	16.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↘	↙	↕			↖	↘		↕	
Traffic Vol, veh/h	4	222	29	216	192	14	33	1	264	35	7	13
Future Vol, veh/h	4	222	29	216	192	14	33	1	264	35	7	13
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	261	34	254	226	16	39	1	311	41	8	15
Number of Lanes	1	1	1	1	2	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	17.6	15.5	17.3	12.6
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	97%	0%	100%	0%	0%	100%	0%	0%	64%
Vol Thru, %	3%	0%	0%	100%	0%	0%	100%	82%	13%
Vol Right, %	0%	100%	0%	0%	100%	0%	0%	18%	24%
Sign Control	Stop								
Traffic Vol by Lane	34	264	4	222	29	216	128	78	55
LT Vol	33	0	4	0	0	216	0	0	35
Through Vol	1	0	0	222	0	0	128	64	7
RT Vol	0	264	0	0	29	0	0	14	13
Lane Flow Rate	40	311	5	261	34	254	151	92	65
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.087	0.575	0.01	0.541	0.064	0.534	0.295	0.176	0.15
Departure Headway (Hd)	7.859	6.666	7.972	7.459	6.741	7.558	7.047	6.918	8.322
Convergence, Y/N	Yes								
Cap	456	540	449	483	530	478	509	518	430
Service Time	5.609	4.414	5.727	5.214	4.495	5.307	4.795	4.667	6.086
HCM Lane V/C Ratio	0.088	0.576	0.011	0.54	0.064	0.531	0.297	0.178	0.151
HCM Control Delay	11.4	18.1	10.8	18.7	10	18.7	12.7	11.1	12.6
HCM Lane LOS	B	C	B	C	A	C	B	B	B
HCM 95th-tile Q	0.3	3.6	0	3.2	0.2	3.1	1.2	0.6	0.5

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↕↗		↵	↕↗			↕↗			↕↗	
Traffic Vol, veh/h	15	444	62	72	351	36	58	0	76	31	0	13
Future Vol, veh/h	15	444	62	72	351	36	58	0	76	31	0	13
Conflicting Peds, #/hr	0	0	6	6	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	25	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	16	472	66	77	373	38	62	0	81	33	0	14

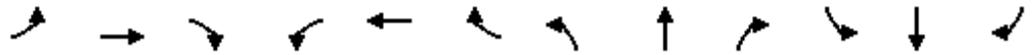
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	411	0	0	544	0	0	884	1108	275	814	1122	206
Stage 1	-	-	-	-	-	-	543	543	-	546	546	-
Stage 2	-	-	-	-	-	-	341	565	-	268	576	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1159	-	-	1035	-	-	243	212	729	273	208	807
Stage 1	-	-	-	-	-	-	497	523	-	495	521	-
Stage 2	-	-	-	-	-	-	653	511	-	720	505	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1159	-	-	1029	-	-	222	192	725	226	189	807
Mov Cap-2 Maneuver	-	-	-	-	-	-	222	192	-	226	189	-
Stage 1	-	-	-	-	-	-	488	513	-	488	482	-
Stage 2	-	-	-	-	-	-	594	473	-	631	495	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			1.4			21			20		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	366	1159	-	-	1029	-	-	287
HCM Lane V/C Ratio	0.389	0.014	-	-	0.074	-	-	0.163
HCM Control Delay (s)	21	8.1	-	-	8.8	-	-	20
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.8	0	-	-	0.2	-	-	0.6

HCM 6th Signalized Intersection Summary  
 3: Hamner Avenue & Mountain Avenue/Hidden Valley Parkway

Corona Commercial Project  
 Existing WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗	↘	↑↑	↗	↘↗	↑↗	
Traffic Volume (veh/h)	21	297	71	358	317	263	103	611	497	410	769	19
Future Volume (veh/h)	21	297	71	358	317	263	103	611	497	410	769	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	22	306	73	388	300	271	106	630	512	423	793	20
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	232	464	206	757	397	336	147	1068	468	561	1348	34
Arrive On Green	0.13	0.13	0.13	0.21	0.21	0.21	0.08	0.30	0.30	0.16	0.37	0.37
Sat Flow, veh/h	1810	3610	1606	3619	1900	1608	1810	3610	1583	3510	3598	91
Grp Volume(v), veh/h	22	306	73	388	300	271	106	630	512	423	398	415
Grp Sat Flow(s),veh/h/ln	1810	1805	1606	1810	1900	1608	1810	1805	1583	1755	1805	1883
Q Serve(g_s), s	0.8	6.2	3.2	7.4	11.5	12.4	4.4	11.5	22.9	8.9	13.7	13.7
Cycle Q Clear(g_c), s	0.8	6.2	3.2	7.4	11.5	12.4	4.4	11.5	22.9	8.9	13.7	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	232	464	206	757	397	336	147	1068	468	561	676	705
V/C Ratio(X)	0.09	0.66	0.35	0.51	0.75	0.81	0.72	0.59	1.09	0.75	0.59	0.59
Avail Cap(c_a), veh/h	432	863	384	869	456	386	185	1068	468	635	676	705
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	32.1	30.8	27.1	28.8	29.1	34.7	23.3	27.3	31.1	19.4	19.4
Incr Delay (d2), s/veh	0.2	1.6	1.0	0.5	6.1	10.5	9.8	2.4	69.3	4.5	3.7	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.8	1.3	3.1	5.7	5.6	2.3	5.0	17.2	4.0	6.1	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	33.7	31.8	27.7	34.9	39.7	44.5	25.7	96.6	35.6	23.2	23.0
LnGrp LOS	C	C	C	C	C	D	D	C	F	D	C	C
Approach Vol, veh/h		401			959			1248			1236	
Approach Delay, s/veh		33.2			33.3			56.4			27.3	
Approach LOS		C			C			E			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.4	26.9		13.9	10.3	33.0		20.2				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	14.0	22.9		18.5	7.9	29.0		18.6				
Max Q Clear Time (g_c+I1), s	10.9	24.9		8.2	6.4	15.7		14.4				
Green Ext Time (p_c), s	0.5	0.0		1.6	0.0	4.3		1.8				

Intersection Summary

HCM 6th Ctrl Delay	38.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th TWSC  
 4: Main Street & Project Driveway 2/Alamilla's Driveway

Corona Commercial Project  
 Existing WP - PM Peak Hour

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	26	0	18	0	0	2	20	1356	3	4	1103	30
Future Vol, veh/h	26	0	18	0	0	2	20	1356	3	4	1103	30
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	3	3	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	28	0	19	0	0	2	21	1443	3	4	1173	32

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1962	2689	604	1967	2704	726	1206	0	0	1449	0	0
Stage 1	1198	1198	-	1490	1490	-	-	-	-	-	-	-
Stage 2	764	1491	-	477	1214	-	-	-	-	-	-	-
Critical Hdwy	6.95	6.5	7.1	6.95	6.5	6.9	5.3	-	-	4.1	-	-
Critical Hdwy Stg 1	7.3	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.65	4	3.9	3.65	4	3.3	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	*470	*173	382	*470	*166	*520	316	-	-	*781	-	-
Stage 1	*150	*261	-	*470	*429	-	-	-	-	-	-	-
Stage 2	*470	*429	-	*512	*257	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	*443	*160	382	*421	*153	*519	316	-	-	*779	-	-
Mov Cap-2 Maneuver	*443	*160	-	*421	*153	-	-	-	-	-	-	-
Stage 1	*140	*259	-	*438	*400	-	-	-	-	-	-	-
Stage 2	*437	*400	-	*484	*255	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.7		12		0.2		0	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	316	-	-	416	519	*779	-	-
HCM Lane V/C Ratio	0.067	-	-	0.113	0.004	0.005	-	-
HCM Control Delay (s)	17.2	-	-	14.7	12	9.6	-	-
HCM Lane LOS	C	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.4	0	0	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th Signalized Intersection Summary  
5: Main Street & Parkridge Avenue

Corona Commercial Project  
Existing WP - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						 			 	  
Traffic Volume (veh/h)	210	327	54	86	193	287	66	923	55	190	790	177
Future Volume (veh/h)	210	327	54	86	193	287	66	923	55	190	790	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	219	341	56	90	201	299	69	961	0	198	823	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	257	861	140	126	389	328	247	1023		348	1758	
Arrive On Green	0.14	0.28	0.28	0.07	0.20	0.20	0.14	0.28	0.00	0.19	0.34	0.00
Sat Flow, veh/h	1810	3107	505	1810	1900	1605	1810	3610	1610	1810	5358	0
Grp Volume(v), veh/h	219	197	200	90	201	299	69	961	0	198	823	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1807	1810	1900	1605	1810	1805	1610	1810	1729	0
Q Serve(g_s), s	10.6	8.0	8.1	4.4	8.5	16.4	3.1	23.4	0.0	8.9	11.2	0.0
Cycle Q Clear(g_c), s	10.6	8.0	8.1	4.4	8.5	16.4	3.1	23.4	0.0	8.9	11.2	0.0
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	257	500	501	126	389	328	247	1023		348	1758	
V/C Ratio(X)	0.85	0.39	0.40	0.71	0.52	0.91	0.28	0.94		0.57	0.47	
Avail Cap(c_a), veh/h	322	500	501	201	391	330	247	1023		348	1758	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.7	26.4	26.5	41.0	31.8	35.0	34.9	31.5	0.0	33.0	23.4	0.0
Incr Delay (d2), s/veh	16.3	0.5	0.5	7.3	1.2	28.0	0.6	16.9	0.0	2.2	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	3.4	3.5	2.2	3.9	8.8	1.4	12.2	0.0	4.1	4.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.0	26.9	27.0	48.3	33.0	63.0	35.5	48.4	0.0	35.1	24.3	0.0
LnGrp LOS	D	C	C	D	C	E	D	D		D	C	
Approach Vol, veh/h		616			590			1030	A		1021	A
Approach Delay, s/veh		36.5			50.5			47.5			26.4	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.3	29.5	10.3	28.9	16.3	34.5	16.8	22.4				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	14.0	25.5	10.0	24.5	9.0	30.5	16.0	18.5				
Max Q Clear Time (g_c+I1), s	10.9	25.4	6.4	10.1	5.1	13.2	12.6	18.4				
Green Ext Time (p_c), s	0.2	0.1	0.1	2.0	0.0	5.4	0.2	0.0				

Intersection Summary

HCM 6th Ctrl Delay	39.4
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th AWSC  
 1: Cota Street/DPSS Building Driveway & Parkridge Avenue

Corona Commercial Project  
 Project OY (2021) NP - AM Peak Hour

Intersection	
Intersection Delay, s/veh	19.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↘	↙	↘			↙	↘		↕	
Traffic Vol, veh/h	9	185	23	336	238	40	40	9	269	6	2	1
Future Vol, veh/h	9	185	23	336	238	40	40	9	269	6	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	206	26	373	264	44	44	10	299	7	2	1
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	3
HCM Control Delay	15.1	23.3	16.7	11.8
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1
Vol Left, %	82%	0%	100%	0%	0%	100%	0%	67%
Vol Thru, %	18%	0%	0%	100%	0%	0%	86%	22%
Vol Right, %	0%	100%	0%	0%	100%	0%	14%	11%
Sign Control	Stop							
Traffic Vol by Lane	49	269	9	185	23	336	278	9
LT Vol	40	0	9	0	0	336	0	6
Through Vol	9	0	0	185	0	0	238	2
RT Vol	0	269	0	0	23	0	40	1
Lane Flow Rate	54	299	10	206	26	373	309	10
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.119	0.558	0.022	0.431	0.049	0.746	0.564	0.024
Departure Headway (Hd)	7.836	6.715	8.065	7.554	6.838	7.189	6.577	8.788
Convergence, Y/N	Yes							
Cap	458	538	444	477	523	508	553	407
Service Time	5.573	4.451	5.809	5.298	4.582	4.889	4.277	6.546
HCM Lane V/C Ratio	0.118	0.556	0.023	0.432	0.05	0.734	0.559	0.025
HCM Control Delay	11.6	17.6	11	15.9	9.9	28.1	17.4	11.8
HCM Lane LOS	B	C	B	C	A	D	C	B
HCM 95th-tile Q	0.4	3.4	0.1	2.1	0.2	6.3	3.5	0.1

HCM 6th TWSC  
 2: Shopping Center Driveway & Parkridge Avenue

Corona Commercial Project  
 Project OY (2021) NP - AM Peak Hour

Intersection						
Int Delay, s/veh	1.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑	↗	
Traffic Vol, veh/h	425	35	57	574	38	40
Future Vol, veh/h	425	35	57	574	38	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	462	38	62	624	41	43

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	500	0	1229 250
Stage 1	-	-	-	-	481 -
Stage 2	-	-	-	-	748 -
Critical Hdwy	-	-	4.1	-	6.6 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	1075	-	185 756
Stage 1	-	-	-	-	593 -
Stage 2	-	-	-	-	471 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1075	-	174 756
Mov Cap-2 Maneuver	-	-	-	-	292 -
Stage 1	-	-	-	-	559 -
Stage 2	-	-	-	-	471 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	15.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	426	-	-	1075	-
HCM Lane V/C Ratio	0.199	-	-	0.058	-
HCM Control Delay (s)	15.5	-	-	8.6	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.7	-	-	0.2	-

HCM 6th Signalized Intersection Summary  
 3: Hamner Avenue & Mountain Avenue/Hidden Valley Parkway

Corona Commercial Project  
 Project OY (2021) NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗	↘	↑↑	↗	↘↗	↑↑	↘
Traffic Volume (veh/h)	14	165	35	671	382	505	43	547	246	149	404	11
Future Volume (veh/h)	14	165	35	671	382	505	43	547	246	149	404	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	15	179	38	729	415	549	47	595	267	162	439	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	161	321	143	1295	680	576	157	946	421	305	940	26
Arrive On Green	0.09	0.09	0.09	0.36	0.36	0.36	0.09	0.26	0.26	0.09	0.26	0.26
Sat Flow, veh/h	1810	3610	1610	3619	1900	1610	1810	3610	1608	3510	3588	98
Grp Volume(v), veh/h	15	179	38	729	415	549	47	595	267	162	221	230
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1900	1610	1810	1805	1608	1755	1805	1881
Q Serve(g_s), s	0.6	3.7	1.7	12.7	14.0	26.0	1.9	11.4	11.5	3.5	8.0	8.1
Cycle Q Clear(g_c), s	0.6	3.7	1.7	12.7	14.0	26.0	1.9	11.4	11.5	3.5	8.0	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	161	321	143	1295	680	576	157	946	421	305	473	493
V/C Ratio(X)	0.09	0.56	0.27	0.56	0.61	0.95	0.30	0.63	0.63	0.53	0.47	0.47
Avail Cap(c_a), veh/h	428	854	381	1295	680	576	162	946	421	314	473	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	34.2	33.3	20.2	20.6	24.5	33.5	25.5	25.6	34.2	24.3	24.3
Incr Delay (d2), s/veh	0.2	1.5	1.0	0.6	1.6	26.2	1.1	3.2	7.1	1.6	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.7	0.7	5.2	6.2	13.4	0.9	5.1	5.0	1.5	3.7	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	35.7	34.2	20.8	22.2	50.7	34.5	28.7	32.6	35.8	27.6	27.5
LnGrp LOS	C	D	C	C	C	D	C	C	C	D	C	C
Approach Vol, veh/h		232			1693			909			613	
Approach Delay, s/veh		35.3			30.8			30.1			29.7	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	24.5		11.0	10.8	24.5		32.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	20.5		18.5	7.0	20.5		28.0				
Max Q Clear Time (g_c+I1), s	5.5	13.5		5.7	3.9	10.1		28.0				
Green Ext Time (p_c), s	0.1	2.8		0.9	0.0	1.9		0.0				

Intersection Summary

HCM 6th Ctrl Delay	30.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th TWSC  
4: Main Street & Alamilla's Driveway

Corona Commercial Project  
Project OY (2021) NP - AM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↓		Y	↑↑
Traffic Vol, veh/h	3	4	820	4	11	1042
Future Vol, veh/h	3	4	820	4	11	1042
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	4	872	4	12	1109

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1456	441	0	0	879	0
Stage 1	877	-	-	-	-	-
Stage 2	579	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	*230	*763	-	-	*1146	-
Stage 1	*720	-	-	-	-	-
Stage 2	*529	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	*227	*761	-	-	*1143	-
Mov Cap-2 Maneuver	*373	-	-	-	-	-
Stage 1	*710	-	-	-	-	-
Stage 2	*529	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	526	* 1143
HCM Lane V/C Ratio	-	-	0.014	0.01
HCM Control Delay (s)	-	-	11.9	8.2
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

# HCM 6th Signalized Intersection Summary

## 5: Main Street & Parkridge Avenue

Corona Commercial Project  
Project OY (2021) NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (veh/h)	119	342	33	118	347	218	71	524	62	202	663	207
Future Volume (veh/h)	119	342	33	118	347	218	71	524	62	202	663	207
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	127	364	35	126	369	232	76	557	0	215	705	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	160	761	73	160	435	366	308	1233		255	1621	
Arrive On Green	0.09	0.23	0.23	0.09	0.23	0.23	0.17	0.34	0.00	0.14	0.31	0.00
Sat Flow, veh/h	1810	3321	317	1810	1900	1598	1810	3610	1610	1810	5358	0
Grp Volume(v), veh/h	127	197	202	126	369	232	76	557	0	215	705	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1833	1810	1900	1598	1810	1805	1610	1810	1729	0
Q Serve(g_s), s	5.5	7.5	7.7	5.5	14.9	7.2	2.9	9.6	0.0	9.3	8.7	0.0
Cycle Q Clear(g_c), s	5.5	7.5	7.7	5.5	14.9	7.2	2.9	9.6	0.0	9.3	8.7	0.0
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	160	413	420	160	435	366	308	1233		255	1621	
V/C Ratio(X)	0.79	0.48	0.48	0.79	0.85	0.63	0.25	0.45		0.84	0.43	
Avail Cap(c_a), veh/h	181	451	458	226	523	439	308	1233		294	1621	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.7	26.7	26.7	35.7	29.5	13.1	28.8	20.5	0.0	33.5	21.9	0.0
Incr Delay (d2), s/veh	19.1	0.9	0.9	11.4	10.8	2.2	0.4	1.2	0.0	17.5	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	3.2	3.3	2.9	7.8	2.6	1.3	4.1	0.0	5.2	3.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.9	27.5	27.6	47.2	40.3	15.3	29.2	21.7	0.0	51.0	22.7	0.0
LnGrp LOS	D	C	C	D	D	B	C	C		D	C	
Approach Vol, veh/h		526			727			633	A		920	A
Approach Delay, s/veh		34.2			33.5			22.6			29.3	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.3	31.3	11.1	22.3	17.6	29.0	11.1	22.3				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	13.0	21.0	10.0	20.0	9.0	25.0	8.0	22.0				
Max Q Clear Time (g_c+I1), s	11.3	11.6	7.5	9.7	4.9	10.7	7.5	16.9				
Green Ext Time (p_c), s	0.1	2.5	0.1	1.7	0.0	4.2	0.0	1.5				

### Intersection Summary

HCM 6th Ctrl Delay	29.8
HCM 6th LOS	C

### Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	18.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗			↖	↗		↕	
Traffic Vol, veh/h	4	224	30	228	198	15	34	1	274	36	7	14
Future Vol, veh/h	4	224	30	228	198	15	34	1	274	36	7	14
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	264	35	268	233	18	40	1	322	42	8	16
Number of Lanes	1	1	1	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	3
HCM Control Delay	18.5	18.7	19.2	13.1
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1
Vol Left, %	97%	0%	100%	0%	0%	100%	0%	63%
Vol Thru, %	3%	0%	0%	100%	0%	0%	93%	12%
Vol Right, %	0%	100%	0%	0%	100%	0%	7%	25%
Sign Control	Stop							
Traffic Vol by Lane	35	274	4	224	30	228	213	57
LT Vol	34	0	4	0	0	228	0	36
Through Vol	1	0	0	224	0	0	198	7
RT Vol	0	274	0	0	30	0	15	14
Lane Flow Rate	41	322	5	264	35	268	251	67
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.093	0.617	0.011	0.56	0.068	0.574	0.497	0.162
Departure Headway (Hd)	8.097	6.892	8.167	7.655	6.937	7.702	7.139	8.67
Convergence, Y/N	Yes							
Cap	442	522	438	472	515	467	504	412
Service Time	5.855	4.649	5.929	5.416	4.698	5.461	4.898	6.451
HCM Lane V/C Ratio	0.093	0.617	0.011	0.559	0.068	0.574	0.498	0.163
HCM Control Delay	11.7	20.2	11	19.8	10.2	20.4	16.8	13.1
HCM Lane LOS	B	C	B	C	B	C	C	B
HCM 95th-tile Q	0.3	4.1	0	3.4	0.2	3.5	2.7	0.6

HCM 6th TWSC  
2: Shopping Center Driveway & Parkridge Avenue

Corona Commercial Project  
Project OY (2021) NP - PM Peak Hour

Intersection						
Int Delay, s/veh	2.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑	↘	
Traffic Vol, veh/h	470	65	76	380	61	81
Future Vol, veh/h	470	65	76	380	61	81
Conflicting Peds, #/hr	0	6	6	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	500	69	81	404	65	86

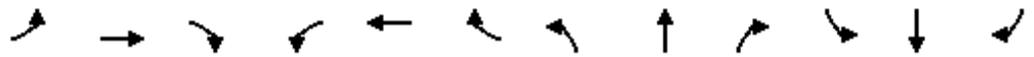
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	575	0	1107
Stage 1	-	-	-	-	541
Stage 2	-	-	-	-	566
Critical Hdwy	-	-	4.1	-	6.6
Critical Hdwy Stg 1	-	-	-	-	5.8
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1008	-	221
Stage 1	-	-	-	-	553
Stage 2	-	-	-	-	572
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1002	-	202
Mov Cap-2 Maneuver	-	-	-	-	319
Stage 1	-	-	-	-	505
Stage 2	-	-	-	-	572

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	16.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	465	-	-	1002	-
HCM Lane V/C Ratio	0.325	-	-	0.081	-
HCM Control Delay (s)	16.4	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.4	-	-	0.3	-

HCM 6th Signalized Intersection Summary  
 3: Hamner Avenue & Mountain Avenue/Hidden Valley Parkway

Corona Commercial Project  
 Project OY (2021) NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗	↘	↑↑	↗	↘↗	↑↗	
Traffic Volume (veh/h)	22	309	69	363	330	284	103	651	507	441	817	20
Future Volume (veh/h)	22	309	69	363	330	284	103	651	507	441	817	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	23	319	71	398	306	293	106	671	523	455	842	21
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	238	475	211	786	413	349	145	1051	461	550	1323	33
Arrive On Green	0.13	0.13	0.13	0.22	0.22	0.22	0.08	0.29	0.29	0.16	0.37	0.37
Sat Flow, veh/h	1810	3610	1606	3619	1900	1608	1810	3610	1583	3510	3599	90
Grp Volume(v), veh/h	23	319	71	398	306	293	106	671	523	455	422	441
Grp Sat Flow(s),veh/h/ln	1810	1805	1606	1810	1900	1608	1810	1805	1583	1755	1805	1884
Q Serve(g_s), s	0.9	6.6	3.2	7.6	11.8	13.7	4.5	12.7	22.9	9.9	15.2	15.2
Cycle Q Clear(g_c), s	0.9	6.6	3.2	7.6	11.8	13.7	4.5	12.7	22.9	9.9	15.2	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	238	475	211	786	413	349	145	1051	461	550	663	692
V/C Ratio(X)	0.10	0.67	0.34	0.51	0.74	0.84	0.73	0.64	1.13	0.83	0.64	0.64
Avail Cap(c_a), veh/h	426	849	378	856	449	380	184	1051	461	625	663	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	32.5	31.0	27.1	28.7	29.5	35.3	24.3	27.9	32.1	20.5	20.5
Incr Delay (d2), s/veh	0.2	1.7	0.9	0.5	6.0	14.4	10.3	3.0	84.1	8.2	4.6	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.9	1.2	3.2	5.9	6.5	2.4	5.6	19.0	4.7	6.9	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.2	34.2	31.9	27.6	34.7	43.8	45.7	27.2	112.0	40.3	25.1	25.0
LnGrp LOS	C	C	C	C	C	D	D	C	F	D	C	C
Approach Vol, veh/h		413			997			1300			1318	
Approach Delay, s/veh		33.6			34.5			62.8			30.3	
Approach LOS		C			C			E			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.3	26.9		14.3	10.3	32.9		21.1				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	14.0	22.9		18.5	8.0	28.9		18.6				
Max Q Clear Time (g_c+I1), s	11.9	24.9		8.6	6.5	17.2		15.7				
Green Ext Time (p_c), s	0.4	0.0		1.6	0.0	4.3		1.3				

Intersection Summary

HCM 6th Ctrl Delay	42.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th TWSC  
4: Main Street & Alamilla's Driveway

Corona Commercial Project  
Project OY (2021) NP - PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑		↘↗	↑↑
Traffic Vol, veh/h	0	2	1439	3	4	1180
Future Vol, veh/h	0	2	1439	3	4	1180
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	1531	3	4	1255

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2172	770	0	0	1537
Stage 1	1536	-	-	-	-
Stage 2	636	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1
Critical Hdwy Stg 1	5.8	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	*88	*485	-	-	*728
Stage 1	*458	-	-	-	-
Stage 2	*495	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	*87	*484	-	-	*726
Mov Cap-2 Maneuver	*255	-	-	-	-
Stage 1	*453	-	-	-	-
Stage 2	*495	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	484	*726
HCM Lane V/C Ratio	-	-	0.004	0.006
HCM Control Delay (s)	-	-	12.5	10
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

# HCM 6th Signalized Intersection Summary

## 5: Main Street & Parkridge Avenue

Corona Commercial Project  
Project OY (2021) NP - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						 			 	
Traffic Volume (veh/h)	222	320	50	92	179	298	65	964	64	198	830	190
Future Volume (veh/h)	222	320	50	92	179	298	65	964	64	198	830	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	231	333	52	96	186	310	68	1004	0	206	865	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	261	875	135	128	391	330	181	1223		241	1931	
Arrive On Green	0.14	0.28	0.28	0.07	0.21	0.21	0.10	0.34	0.00	0.13	0.37	0.00
Sat Flow, veh/h	1810	3132	484	1810	1900	1605	1810	3610	1610	1810	5358	0
Grp Volume(v), veh/h	231	191	194	96	186	310	68	1004	0	206	865	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1811	1810	1900	1605	1810	1805	1610	1810	1729	0
Q Serve(g_s), s	11.3	7.7	7.8	4.7	7.8	17.1	3.2	22.9	0.0	10.0	11.3	0.0
Cycle Q Clear(g_c), s	11.3	7.7	7.8	4.7	7.8	17.1	3.2	22.9	0.0	10.0	11.3	0.0
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	261	504	506	128	391	330	181	1223		241	1931	
V/C Ratio(X)	0.88	0.38	0.38	0.75	0.48	0.94	0.38	0.82		0.85	0.45	
Avail Cap(c_a), veh/h	261	504	506	201	391	330	181	1223		241	1931	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.8	26.1	26.2	41.0	31.5	35.2	37.9	27.2	0.0	38.1	21.3	0.0
Incr Delay (d2), s/veh	27.9	0.5	0.5	8.5	0.9	34.0	1.3	6.2	0.0	24.5	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	3.3	3.4	2.4	3.6	9.6	1.4	10.5	0.0	6.0	4.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.7	26.6	26.7	49.5	32.4	69.2	39.2	33.5	0.0	62.6	22.0	0.0
LnGrp LOS	E	C	C	D	C	E	D	C		E	C	
Approach Vol, veh/h		616			592			1072	A		1071	A
Approach Delay, s/veh		41.3			54.5			33.9			29.8	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	34.5	10.4	29.1	13.0	37.5	17.0	22.5				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	12.0	30.5	10.0	21.5	9.0	33.5	13.0	18.5				
Max Q Clear Time (g_c+I1), s	12.0	24.9	6.7	9.8	5.2	13.3	13.3	19.1				
Green Ext Time (p_c), s	0.0	3.2	0.1	1.7	0.0	6.1	0.0	0.0				

### Intersection Summary

HCM 6th Ctrl Delay	37.6
HCM 6th LOS	D

### Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th AWSC  
 1: Cota Street/DPSS Building Driveway & Parkridge Avenue

Corona Commercial Project  
 Project OY (2021) WP - AM Peak Hour

Intersection	
Intersection Delay, s/veh	18.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↘	↙	↕			↖	↘		↕	
Traffic Vol, veh/h	9	187	23	337	240	40	40	9	270	6	2	1
Future Vol, veh/h	9	187	23	337	240	40	40	9	270	6	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	208	26	374	267	44	44	10	300	7	2	1
Number of Lanes	1	1	1	1	2	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	15.2	20.8	16.4	11.6
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	82%	0%	100%	0%	0%	100%	0%	0%	67%
Vol Thru, %	18%	0%	0%	100%	0%	0%	100%	67%	22%
Vol Right, %	0%	100%	0%	0%	100%	0%	0%	33%	11%
Sign Control	Stop								
Traffic Vol by Lane	49	270	9	187	23	337	160	120	9
LT Vol	40	0	9	0	0	337	0	0	6
Through Vol	9	0	0	187	0	0	160	80	2
RT Vol	0	270	0	0	23	0	0	40	1
Lane Flow Rate	54	300	10	208	26	374	178	133	10
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.117	0.553	0.022	0.435	0.048	0.747	0.329	0.238	0.024
Departure Headway (Hd)	7.747	6.636	8.051	7.539	6.823	7.181	6.671	6.434	8.631
Convergence, Y/N	Yes								
Cap	463	543	445	478	525	506	542	561	415
Service Time	5.484	4.372	5.795	5.283	4.567	4.881	4.371	4.134	6.388
HCM Lane V/C Ratio	0.117	0.552	0.022	0.435	0.05	0.739	0.328	0.237	0.024
HCM Control Delay	11.5	17.3	11	16	9.9	28.2	12.6	11.1	11.6
HCM Lane LOS	B	C	B	C	A	D	B	B	B
HCM 95th-tile Q	0.4	3.3	0.1	2.2	0.2	6.3	1.4	0.9	0.1

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕↗		↖	↕↗			↕↗			↕↗	
Traffic Vol, veh/h	5	423	35	57	573	9	38	0	40	7	0	4
Future Vol, veh/h	5	423	35	57	573	9	38	0	40	7	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	25	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	460	38	62	623	10	41	0	43	8	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	633	0	0	498	0	0	925	1246	249	992	1260	317
Stage 1	-	-	-	-	-	-	489	489	-	752	752	-
Stage 2	-	-	-	-	-	-	436	757	-	240	508	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	960	-	-	1076	-	-	227	175	757	203	172	685
Stage 1	-	-	-	-	-	-	534	553	-	373	421	-
Stage 2	-	-	-	-	-	-	574	419	-	748	542	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	960	-	-	1076	-	-	215	164	757	182	161	685
Mov Cap-2 Maneuver	-	-	-	-	-	-	215	164	-	182	161	-
Stage 1	-	-	-	-	-	-	531	550	-	371	397	-
Stage 2	-	-	-	-	-	-	537	395	-	701	539	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.8			19.1			20.3		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	340	960	-	-	1076	-	-	248
HCM Lane V/C Ratio	0.249	0.006	-	-	0.058	-	-	0.048
HCM Control Delay (s)	19.1	8.8	-	-	8.6	-	-	20.3
HCM Lane LOS		C	A	-	-	A	-	C
HCM 95th %tile Q(veh)		1	0	-	-	0.2	-	0.2

HCM 6th Signalized Intersection Summary  
 3: Hamner Avenue & Mountain Avenue/Hidden Valley Parkway

Corona Commercial Project  
 Project OY (2021) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗	↘	↑↑	↗	↘↗	↑↗	
Traffic Volume (veh/h)	14	165	36	675	382	505	44	548	250	149	405	11
Future Volume (veh/h)	14	165	36	675	382	505	44	548	250	149	405	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	15	179	39	734	415	549	48	596	272	162	440	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	161	321	143	1295	680	576	157	946	421	305	940	26
Arrive On Green	0.09	0.09	0.09	0.36	0.36	0.36	0.09	0.26	0.26	0.09	0.26	0.26
Sat Flow, veh/h	1810	3610	1610	3619	1900	1610	1810	3610	1608	3510	3588	98
Grp Volume(v), veh/h	15	179	39	734	415	549	48	596	272	162	221	231
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1900	1610	1810	1805	1608	1755	1805	1881
Q Serve(g_s), s	0.6	3.7	1.8	12.8	14.0	26.0	1.9	11.4	11.8	3.5	8.1	8.1
Cycle Q Clear(g_c), s	0.6	3.7	1.8	12.8	14.0	26.0	1.9	11.4	11.8	3.5	8.1	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	161	321	143	1295	680	576	157	946	421	305	473	493
V/C Ratio(X)	0.09	0.56	0.27	0.57	0.61	0.95	0.31	0.63	0.65	0.53	0.47	0.47
Avail Cap(c_a), veh/h	428	854	381	1295	680	576	162	946	421	314	473	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	34.2	33.3	20.2	20.6	24.5	33.5	25.5	25.6	34.2	24.3	24.3
Incr Delay (d2), s/veh	0.2	1.5	1.0	0.6	1.6	26.2	1.1	3.2	7.4	1.6	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.7	0.7	5.2	6.2	13.4	0.9	5.1	5.2	1.5	3.7	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	35.7	34.3	20.8	22.2	50.7	34.6	28.7	33.1	35.8	27.6	27.5
LnGrp LOS	C	D	C	C	C	D	C	C	C	D	C	C
Approach Vol, veh/h		233			1698			916			614	
Approach Delay, s/veh		35.3			30.8			30.3			29.7	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	24.5		11.0	10.8	24.5		32.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	20.5		18.5	7.0	20.5		28.0				
Max Q Clear Time (g_c+I1), s	5.5	13.8		5.7	3.9	10.1		28.0				
Green Ext Time (p_c), s	0.1	2.8		1.0	0.0	1.9		0.0				

Intersection Summary

HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th TWSC  
4: Main Street & Project Driveway 2/Alamilla's Driveway

Corona Commercial Project  
Project OY (2021) WP - AM Peak Hour

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	8	0	7	3	0	4	7	817	4	11	1039	9
Future Vol, veh/h	8	0	7	3	0	4	7	817	4	11	1039	9
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	3	3	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	0	7	3	0	4	7	869	4	12	1105	10

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1584	2025	559	1354	2028	440	1116	0	0	876	0	0
Stage 1	1135	1135	-	888	888	-	-	-	-	-	-	-
Stage 2	449	890	-	466	1140	-	-	-	-	-	-	-
Critical Hdwy	6.95	6.5	7.1	6.95	6.5	6.9	5.3	-	-	4.1	-	-
Critical Hdwy Stg 1	7.3	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.65	4	3.9	3.65	4	3.3	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	*424	*179	409	*680	*178	*763	350	-	-	*1146	-	-
Stage 1	*166	*280	-	*690	*630	-	-	-	-	-	-	-
Stage 2	*690	*630	-	*520	*278	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	*411	*173	409	*650	*172	*761	350	-	-	*1143	-	-
Mov Cap-2 Maneuver	*411	*173	-	*650	*172	-	-	-	-	-	-	-
Stage 1	*163	*277	-	*675	*616	-	-	-	-	-	-	-
Stage 2	*673	*616	-	*505	*275	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.1	10.1	0.1	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	350	-	-	410	709	*1143	-
HCM Lane V/C Ratio	0.021	-	-	0.039	0.011	0.01	-
HCM Control Delay (s)	15.5	-	-	14.1	10.1	8.2	-
HCM Lane LOS	C	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	0	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

# HCM 6th Signalized Intersection Summary

## 5: Main Street & Parkridge Avenue

Corona Commercial Project  
Project OY (2021) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (veh/h)	119	347	35	118	352	218	73	528	62	202	667	207
Future Volume (veh/h)	119	347	35	118	352	218	73	528	62	202	667	207
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	127	369	37	126	374	232	78	562	0	215	710	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	160	765	76	160	439	369	304	1225		255	1621	
Arrive On Green	0.09	0.23	0.23	0.09	0.23	0.23	0.17	0.34	0.00	0.14	0.31	0.00
Sat Flow, veh/h	1810	3306	329	1810	1900	1598	1810	3610	1610	1810	5358	0
Grp Volume(v), veh/h	127	200	206	126	374	232	78	562	0	215	710	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1830	1810	1900	1598	1810	1805	1610	1810	1729	0
Q Serve(g_s), s	5.5	7.7	7.8	5.5	15.1	7.2	3.0	9.7	0.0	9.3	8.7	0.0
Cycle Q Clear(g_c), s	5.5	7.7	7.8	5.5	15.1	7.2	3.0	9.7	0.0	9.3	8.7	0.0
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	160	417	423	160	439	369	304	1225		255	1621	
V/C Ratio(X)	0.79	0.48	0.49	0.79	0.85	0.63	0.26	0.46		0.84	0.44	
Avail Cap(c_a), veh/h	181	451	458	226	523	439	304	1225		294	1621	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.7	26.6	26.6	35.7	29.4	13.0	28.9	20.7	0.0	33.5	21.9	0.0
Incr Delay (d2), s/veh	19.1	0.9	0.9	11.4	11.2	2.1	0.4	1.2	0.0	17.5	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	3.3	3.4	2.9	8.0	2.6	1.3	4.1	0.0	5.2	3.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.9	27.4	27.5	47.2	40.6	15.2	29.4	21.9	0.0	51.0	22.8	0.0
LnGrp LOS	D	C	C	D	D	B	C	C		D	C	
Approach Vol, veh/h		533			732			640	A		925	A
Approach Delay, s/veh		34.0			33.7			22.8			29.3	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.3	31.2	11.1	22.5	17.4	29.0	11.1	22.5				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	13.0	21.0	10.0	20.0	9.0	25.0	8.0	22.0				
Max Q Clear Time (g_c+I1), s	11.3	11.7	7.5	9.8	5.0	10.7	7.5	17.1				
Green Ext Time (p_c), s	0.1	2.5	0.1	1.7	0.0	4.2	0.0	1.4				

### Intersection Summary

HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

### Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	18.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↘	↙	↕			↖	↘		↕	
Traffic Vol, veh/h	4	234	30	232	207	15	34	1	279	36	7	14
Future Vol, veh/h	4	234	30	232	207	15	34	1	279	36	7	14
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	275	35	273	244	18	40	1	328	42	8	16
Number of Lanes	1	1	1	1	2	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	19.7	17	19.7	13.1
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	97%	0%	100%	0%	0%	100%	0%	0%	63%
Vol Thru, %	3%	0%	0%	100%	0%	0%	100%	82%	12%
Vol Right, %	0%	100%	0%	0%	100%	0%	0%	18%	25%
Sign Control	Stop								
Traffic Vol by Lane	35	279	4	234	30	232	138	84	57
LT Vol	34	0	4	0	0	232	0	0	36
Through Vol	1	0	0	234	0	0	138	69	7
RT Vol	0	279	0	0	30	0	0	15	14
Lane Flow Rate	41	328	5	275	35	273	162	99	67
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.093	0.628	0.011	0.59	0.069	0.589	0.327	0.196	0.161
Departure Headway (Hd)	8.089	6.893	8.223	7.709	6.989	7.767	7.255	7.126	8.625
Convergence, Y/N	Yes								
Cap	442	522	434	468	511	464	495	502	414
Service Time	5.85	4.653	5.99	5.476	4.756	5.529	5.016	4.888	6.408
HCM Lane V/C Ratio	0.093	0.628	0.012	0.588	0.068	0.588	0.327	0.197	0.162
HCM Control Delay	11.7	20.7	11.1	21.1	10.3	21.1	13.5	11.6	13.1
HCM Lane LOS	B	C	B	C	B	C	B	B	B
HCM 95th-tile Q	0.3	4.3	0	3.7	0.2	3.7	1.4	0.7	0.6

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗			↕			↕	
Traffic Vol, veh/h	21	464	65	76	377	40	61	0	81	37	0	16
Future Vol, veh/h	21	464	65	76	377	40	61	0	81	37	0	16
Conflicting Peds, #/hr	0	0	6	6	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	25	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	22	494	69	81	401	43	65	0	86	39	0	17

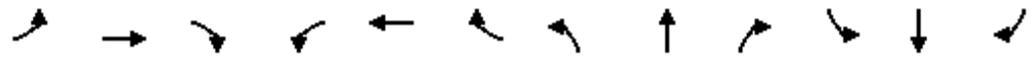
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	444	0	0	569	0	0	942	1185	288	876	1198	222
Stage 1	-	-	-	-	-	-	579	579	-	585	585	-
Stage 2	-	-	-	-	-	-	363	606	-	291	613	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1127	-	-	1013	-	-	221	191	715	246	187	788
Stage 1	-	-	-	-	-	-	473	504	-	469	501	-
Stage 2	-	-	-	-	-	-	634	490	-	698	486	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1127	-	-	1007	-	-	199	171	711	200	168	788
Mov Cap-2 Maneuver	-	-	-	-	-	-	199	171	-	200	168	-
Stage 1	-	-	-	-	-	-	461	491	-	460	461	-
Stage 2	-	-	-	-	-	-	570	451	-	601	473	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			1.4			24			22.8		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	338	1127	-	-	1007	-	-	258
HCM Lane V/C Ratio	0.447	0.02	-	-	0.08	-	-	0.219
HCM Control Delay (s)	24	8.3	-	-	8.9	-	-	22.8
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	2.2	0.1	-	-	0.3	-	-	0.8

HCM 6th Signalized Intersection Summary  
 3: Hamner Avenue & Mountain Avenue/Hidden Valley Parkway

Corona Commercial Project  
 Project OY (2021) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗	↘	↑↑	↗	↘↗	↑↗	
Traffic Volume (veh/h)	22	309	74	383	330	284	107	655	525	441	822	20
Future Volume (veh/h)	22	309	74	383	330	284	107	655	525	441	822	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	23	319	76	409	320	293	110	675	541	455	847	21
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	238	475	211	786	413	349	146	1048	460	555	1323	33
Arrive On Green	0.13	0.13	0.13	0.22	0.22	0.22	0.08	0.29	0.29	0.16	0.37	0.37
Sat Flow, veh/h	1810	3610	1606	3619	1900	1608	1810	3610	1583	3510	3600	89
Grp Volume(v), veh/h	23	319	76	409	320	293	110	675	541	455	425	443
Grp Sat Flow(s),veh/h/ln	1810	1805	1606	1810	1900	1608	1810	1805	1583	1755	1805	1884
Q Serve(g_s), s	0.9	6.6	3.4	7.9	12.5	13.8	4.7	12.9	22.9	9.9	15.3	15.4
Cycle Q Clear(g_c), s	0.9	6.6	3.4	7.9	12.5	13.8	4.7	12.9	22.9	9.9	15.3	15.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	238	475	211	786	413	349	146	1048	460	555	664	693
V/C Ratio(X)	0.10	0.67	0.36	0.52	0.78	0.84	0.75	0.64	1.18	0.82	0.64	0.64
Avail Cap(c_a), veh/h	424	847	377	853	448	379	181	1048	460	623	664	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	32.6	31.2	27.2	29.1	29.6	35.5	24.4	28.0	32.1	20.6	20.6
Incr Delay (d2), s/veh	0.2	1.7	1.0	0.5	7.7	14.4	12.9	3.0	100.4	7.8	4.7	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.9	1.3	3.3	6.4	6.5	2.5	5.7	21.0	4.7	7.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	34.3	32.3	27.8	36.8	44.0	48.4	27.5	128.4	39.9	25.3	25.1
LnGrp LOS	C	C	C	C	D	D	D	C	F	D	C	C
Approach Vol, veh/h		418			1022			1326			1323	
Approach Delay, s/veh		33.7			35.2			70.4			30.3	
Approach LOS		C			D			E			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.5	26.9		14.4	10.4	33.0		21.1				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	14.0	22.9		18.5	7.9	29.0		18.6				
Max Q Clear Time (g_c+I1), s	11.9	24.9		8.6	6.7	17.4		15.8				
Green Ext Time (p_c), s	0.4	0.0		1.7	0.0	4.3		1.4				

Intersection Summary

HCM 6th Ctrl Delay	44.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th TWSC  
 4: Main Street & Project Driveway 2/Alamilla's Driveway

Corona Commercial Project  
 Project OY (2021) WP - PM Peak Hour

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	38	0	30	0	0	2	34	1426	3	4	1167	43
Future Vol, veh/h	38	0	30	0	0	2	34	1426	3	4	1167	43
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	3	3	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	40	0	32	0	0	2	36	1517	3	4	1241	46

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	2104	2868	645	2098	2890	763	1288	0	0	1523	0	0
Stage 1	1273	1273	-	1594	1594	-	-	-	-	-	-	-
Stage 2	831	1595	-	504	1296	-	-	-	-	-	-	-
Critical Hdwy	6.95	6.5	7.1	6.95	6.5	6.9	5.3	-	-	4.1	-	-
Critical Hdwy Stg 1	7.3	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.65	4	3.9	3.65	4	3.3	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	*439	*136	360	*439	*127	*485	289	-	-	*728	-	-
Stage 1	*133	*241	-	*439	*400	-	-	-	-	-	-	-
Stage 2	*439	*400	-	*493	*234	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	*393	*118	360	*359	*110	*484	289	-	-	*726	-	-
Mov Cap-2 Maneuver	*393	*118	-	*359	*110	-	-	-	-	-	-	-
Stage 1	*116	*239	-	*383	*349	-	-	-	-	-	-	-
Stage 2	*382	*349	-	*447	*232	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	16.8		12.5		0.4		0	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	289	-	-	378	484	*726	-	-
HCM Lane V/C Ratio	0.125	-	-	0.191	0.004	0.006	-	-
HCM Control Delay (s)	19.2	-	-	16.8	12.5	10	-	-
HCM Lane LOS	C	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.7	0	0	-	-

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

# HCM 6th Signalized Intersection Summary

## 5: Main Street & Parkridge Avenue

Corona Commercial Project  
Project OY (2021) WP - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						 			 	
Traffic Volume (veh/h)	222	342	60	91	205	298	75	985	63	199	848	190
Future Volume (veh/h)	222	342	60	91	205	298	75	985	63	199	848	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	231	356	62	95	214	310	78	1026	0	207	883	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	269	872	150	128	391	330	234	1023		335	1758	
Arrive On Green	0.15	0.28	0.28	0.07	0.21	0.21	0.13	0.28	0.00	0.18	0.34	0.00
Sat Flow, veh/h	1810	3077	531	1810	1900	1605	1810	3610	1610	1810	5358	0
Grp Volume(v), veh/h	231	207	211	95	214	310	78	1026	0	207	883	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1802	1810	1900	1605	1810	1805	1610	1810	1729	0
Q Serve(g_s), s	11.2	8.4	8.5	4.6	9.1	17.1	3.5	25.5	0.0	9.5	12.2	0.0
Cycle Q Clear(g_c), s	11.2	8.4	8.5	4.6	9.1	17.1	3.5	25.5	0.0	9.5	12.2	0.0
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	269	512	511	128	391	330	234	1023		335	1758	
V/C Ratio(X)	0.86	0.41	0.41	0.74	0.55	0.94	0.33	1.00		0.62	0.50	
Avail Cap(c_a), veh/h	322	512	511	201	391	330	234	1023		335	1758	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.4	26.1	26.2	41.0	32.0	35.2	35.6	32.2	0.0	33.8	23.7	0.0
Incr Delay (d2), s/veh	17.9	0.5	0.5	8.3	1.6	34.0	0.8	28.9	0.0	3.4	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	3.6	3.7	2.3	4.3	9.6	1.6	14.8	0.0	4.4	5.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.3	26.6	26.7	49.3	33.6	69.2	36.5	61.1	0.0	37.2	24.7	0.0
LnGrp LOS	E	C	C	D	C	E	D	F		D	C	
Approach Vol, veh/h		649			619			1104	A		1090	A
Approach Delay, s/veh		36.9			53.9			59.4			27.1	
Approach LOS		D			D			E			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.6	29.5	10.3	29.5	15.6	34.5	17.4	22.5				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	14.0	25.5	10.0	24.5	9.0	30.5	16.0	18.5				
Max Q Clear Time (g_c+I1), s	11.5	27.5	6.6	10.5	5.5	14.2	13.2	19.1				
Green Ext Time (p_c), s	0.1	0.0	0.1	2.1	0.0	5.7	0.2	0.0				

### Intersection Summary

HCM 6th Ctrl Delay	44.0
HCM 6th LOS	D

### Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

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**APPENDIX E:**

**QUEUING WORKSHEETS**

## Queuing and Blocking Report

### Intersection: 1: Cota Street/DPSS Building Driveway & Parkridge Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	T	R	L	TR	LT	R	LTR
Maximum Queue (ft)	29	72	49	88	66	54	78	27
Average Queue (ft)	4	35	14	55	42	26	45	1
95th Queue (ft)	20	55	38	86	59	48	64	10
Link Distance (ft)		322	322		149	562		235
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100			50			100	
Storage Blk Time (%)				7	2			
Queuing Penalty (veh)				17	6			

### Intersection: 2: Shopping Center Driveway & Parkridge Avenue

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	22	31	76
Average Queue (ft)	1	13	34
95th Queue (ft)	8	38	64
Link Distance (ft)	149		116
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		50	
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

## Queuing and Blocking Report

### Intersection: 4: Main Street & Alamilla's Driveway

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	46	31
Average Queue (ft)	7	3
95th Queue (ft)	28	17
Link Distance (ft)	114	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Queues  
5: Main Street & Parkridge Avenue

Corona Commercial Project  
Existing NP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	112	369	115	348	223	70	514	62	206	862
v/c Ratio	0.60	0.45	0.56	0.78	0.41	0.36	0.43	0.10	0.75	0.41
Control Delay	49.3	27.4	44.2	40.5	6.0	38.6	24.2	0.3	50.5	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.3	27.4	44.2	40.5	6.0	38.6	24.2	0.3	50.5	18.0
Queue Length 50th (ft)	53	78	55	158	0	33	115	0	98	112
Queue Length 95th (ft)	#122	118	106	245	49	72	164	0	#192	151
Internal Link Dist (ft)		392		376			269			522
Turn Bay Length (ft)	85		90			160			105	
Base Capacity (vph)	191	897	225	522	597	203	1209	651	293	2085
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.41	0.51	0.67	0.37	0.34	0.43	0.10	0.70	0.41

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

## Queuing and Blocking Report

### Intersection: 1: Cota Street/DPSS Building Driveway & Parkridge Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	T	R	L	TR	LT	R	LTR
Maximum Queue (ft)	30	70	28	95	128	56	94	74
Average Queue (ft)	1	41	17	44	34	25	47	24
95th Queue (ft)	12	62	38	80	73	49	79	49
Link Distance (ft)		322	322		149	562		235
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100			50			100	
Storage Blk Time (%)				5	1		0	
Queuing Penalty (veh)				9	1		0	

### Intersection: 2: Shopping Center Driveway & Parkridge Avenue

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	20	53	131
Average Queue (ft)	1	20	53
95th Queue (ft)	8	46	97
Link Distance (ft)	149		116
Upstream Blk Time (%)			4
Queuing Penalty (veh)			0
Storage Bay Dist (ft)		50	
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

## Queuing and Blocking Report

### Intersection: 4: Main Street & Alamilla's Driveway

Movement	WB
Directions Served	LR
Maximum Queue (ft)	26
Average Queue (ft)	4
95th Queue (ft)	18
Link Distance (ft)	114
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queues  
5: Main Street & Parkridge Avenue

Corona Commercial Project  
Existing NP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	219	365	90	175	299	58	941	57	198	988
v/c Ratio	0.76	0.43	0.50	0.60	0.67	0.34	0.69	0.08	0.84	0.44
Control Delay	54.8	29.6	48.0	43.4	16.3	43.5	27.8	0.2	68.8	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.8	29.6	48.0	43.4	16.3	43.5	27.8	0.2	68.8	18.7
Queue Length 50th (ft)	116	87	49	93	31	31	248	0	111	146
Queue Length 95th (ft)	#246	130	97	151	107	69	323	0	#227	186
Internal Link Dist (ft)		392		376			269			522
Turn Bay Length (ft)	85		90			160			105	
Base Capacity (vph)	293	880	200	390	516	180	1362	707	240	2230
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.41	0.45	0.45	0.58	0.32	0.69	0.08	0.82	0.44

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

## Queuing and Blocking Report

### Intersection: 1: Cota Street/DPSS Building Driveway & Parkridge Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	29	74	28	97	48	66	55	75	30
Average Queue (ft)	10	41	14	57	25	33	22	41	8
95th Queue (ft)	33	64	35	95	36	55	48	64	30
Link Distance (ft)		322	322		154	154	562		238
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	100			50				100	
Storage Blk Time (%)				10	0				
Queuing Penalty (veh)				11	1				

### Intersection: 2: Shopping Center Driveway/Project Driveway 1 & Parkridge Avenue

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	30	31	92	30
Average Queue (ft)	1	17	34	8
95th Queue (ft)	12	42	67	30
Link Distance (ft)			117	80
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	50	50		
Storage Blk Time (%)	0	0		
Queuing Penalty (veh)	0	0		

## Queuing and Blocking Report

### Intersection: 4: Main Street & Project Driveway 2/Alamilla's Driveway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	26	24	24	22
Average Queue (ft)	5	7	2	6
95th Queue (ft)	21	25	10	22
Link Distance (ft)	96	114		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			50	50
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queues  
5: Main Street & Parkridge Avenue



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	112	377	115	353	223	72	518	62	206	866
v/c Ratio	0.60	0.46	0.56	0.78	0.41	0.37	0.43	0.10	0.75	0.41
Control Delay	49.4	27.5	44.2	41.0	6.0	38.9	24.3	0.3	50.5	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.4	27.5	44.2	41.0	6.0	38.9	24.3	0.3	50.5	18.0
Queue Length 50th (ft)	54	80	55	161	0	34	116	0	98	113
Queue Length 95th (ft)	#122	121	106	248	49	73	165	0	#192	152
Internal Link Dist (ft)		392		376			269			522
Turn Bay Length (ft)	85		90			160			105	
Base Capacity (vph)	190	897	225	522	597	203	1206	650	293	2087
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.42	0.51	0.68	0.37	0.35	0.43	0.10	0.70	0.41

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Queuing and Blocking Report

Intersection: 1: Cota Street/DPSS Building Driveway & Parkridge Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	29	116	50	96	47	45	31	95	55
Average Queue (ft)	3	51	20	46	27	27	24	50	31
95th Queue (ft)	17	92	42	84	41	43	44	78	48
Link Distance (ft)		322	322		154	154	562		238
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	100			50				100	
Storage Blk Time (%)		0		5	0			0	
Queuing Penalty (veh)		0		5	1			0	

Intersection: 2: Shopping Center Driveway/Project Driveway 1 & Parkridge Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	L	LTR	LTR
Maximum Queue (ft)	31	22	85	111	53
Average Queue (ft)	5	1	25	45	28
95th Queue (ft)	23	9	61	78	52
Link Distance (ft)		154		117	80
Upstream Blk Time (%)				0	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)	50		50		
Storage Blk Time (%)	0		1		
Queuing Penalty (veh)	0		1		

Queuing and Blocking Report

Intersection: 4: Main Street & Project Driveway 2/Alamilla's Driveway

Movement	EB	NB	SB
Directions Served	LTR	L	L
Maximum Queue (ft)	89	46	22
Average Queue (ft)	31	9	3
95th Queue (ft)	61	30	15
Link Distance (ft)	96		
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)		50	50
Storage Blk Time (%)		0	
Queuing Penalty (veh)		3	

Queues  
5: Main Street & Parkridge Avenue



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	219	397	90	201	299	69	961	57	198	1007
v/c Ratio	0.74	0.44	0.50	0.65	0.60	0.41	0.76	0.08	0.76	0.46
Control Delay	52.0	28.5	48.0	44.5	10.4	45.9	32.9	0.2	56.5	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.0	28.5	48.0	44.5	10.4	45.9	32.9	0.2	56.5	20.0
Queue Length 50th (ft)	117	95	49	107	7	37	267	0	108	151
Queue Length 95th (ft)	#210	134	97	171	76	79	#405	0	#203	203
Internal Link Dist (ft)		392		376			269			522
Turn Bay Length (ft)	85		90			160			105	
Base Capacity (vph)	324	974	200	390	552	180	1265	700	280	2179
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.41	0.45	0.52	0.54	0.38	0.76	0.08	0.71	0.46

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

## Queuing and Blocking Report

### Intersection: 1: Cota Street/DPSS Building Driveway & Parkridge Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	T	R	L	TR	LT	R	LTR
Maximum Queue (ft)	29	74	53	100	145	55	139	28
Average Queue (ft)	5	46	19	74	61	28	50	5
95th Queue (ft)	24	71	46	110	122	53	90	21
Link Distance (ft)		322	322		149	562		235
Upstream Blk Time (%)					0			
Queuing Penalty (veh)					0			
Storage Bay Dist (ft)	100			50			100	
Storage Blk Time (%)				17	3		1	
Queuing Penalty (veh)				47	12		0	

### Intersection: 2: Shopping Center Driveway & Parkridge Avenue

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (ft)	53	103
Average Queue (ft)	18	49
95th Queue (ft)	45	88
Link Distance (ft)		116
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)	50	
Storage Blk Time (%)	0	
Queuing Penalty (veh)	2	

## Queuing and Blocking Report

### Intersection: 4: Main Street & Alamilla's Driveway

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	26	31
Average Queue (ft)	7	8
95th Queue (ft)	25	31
Link Distance (ft)	114	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Queues  
5: Main Street & Parkridge Avenue

Corona Commercial Project  
Project OY (2021) NP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	127	399	126	369	232	76	557	66	215	925
v/c Ratio	0.68	0.43	0.61	0.79	0.41	0.39	0.52	0.11	0.77	0.48
Control Delay	54.9	25.9	46.4	41.3	5.9	39.4	26.5	0.4	52.3	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.9	25.9	46.4	41.3	5.9	39.4	26.5	0.4	52.3	19.5
Queue Length 50th (ft)	62	85	60	167	0	36	127	0	103	124
Queue Length 95th (ft)	#143	127	114	#261	50	77	178	0	#203	165
Internal Link Dist (ft)		392		376			269			522
Turn Bay Length (ft)	85		90			160			105	
Base Capacity (vph)	190	942	225	522	603	203	1072	597	293	1908
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.42	0.56	0.71	0.38	0.37	0.52	0.11	0.73	0.48

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Queuing and Blocking Report

Intersection: 1: Cota Street/DPSS Building Driveway & Parkridge Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	T	R	L	TR	LT	R	LTR
Maximum Queue (ft)	29	75	49	97	69	52	75	52
Average Queue (ft)	5	49	19	49	31	18	46	25
95th Queue (ft)	24	73	42	82	54	45	72	47
Link Distance (ft)		322	322		149	562		235
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100			50			100	
Storage Blk Time (%)				4	1			
Queuing Penalty (veh)				9	2			

Intersection: 2: Shopping Center Driveway & Parkridge Avenue

Movement	EB	WB	NB
Directions Served	TR	L	LR
Maximum Queue (ft)	22	53	131
Average Queue (ft)	3	25	64
95th Queue (ft)	15	52	118
Link Distance (ft)	149		116
Upstream Blk Time (%)			4
Queuing Penalty (veh)			0
Storage Bay Dist (ft)		50	
Storage Blk Time (%)		0	
Queuing Penalty (veh)		2	

## Queuing and Blocking Report

### Intersection: 4: Main Street & Alamilla's Driveway

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	26	31
Average Queue (ft)	5	7
95th Queue (ft)	21	28
Link Distance (ft)	114	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Queues  
5: Main Street & Parkridge Avenue

Corona Commercial Project  
Project OY (2021) NP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	231	385	96	186	310	68	1004	67	206	1063
v/c Ratio	0.79	0.44	0.53	0.62	0.70	0.40	0.75	0.10	0.87	0.48
Control Delay	57.1	29.5	49.0	44.0	18.6	45.2	30.1	0.3	72.3	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.1	29.5	49.0	44.0	18.6	45.2	30.1	0.3	72.3	19.5
Queue Length 50th (ft)	124	93	52	99	40	37	272	0	116	161
Queue Length 95th (ft)	#263	137	102	159	121	78	352	0	#239	203
Internal Link Dist (ft)		392		376			269			522
Turn Bay Length (ft)	85		90			160			105	
Base Capacity (vph)	294	889	200	390	510	180	1332	695	240	2196
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.43	0.48	0.48	0.61	0.38	0.75	0.10	0.86	0.48

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

## Queuing and Blocking Report

### Intersection: 1: Cota Street/DPSS Building Driveway & Parkridge Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	29	74	27	90	50	48	53	75	30
Average Queue (ft)	7	44	11	61	28	34	28	47	14
95th Queue (ft)	28	69	32	87	44	53	49	69	38
Link Distance (ft)		322	322		154	154	562		238
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	100			50				100	
Storage Blk Time (%)				10	0				
Queuing Penalty (veh)				12	1				

### Intersection: 2: Shopping Center Driveway/Project Driveway 1 & Parkridge Avenue

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	31	55	54	30
Average Queue (ft)	4	23	34	7
95th Queue (ft)	21	57	49	26
Link Distance (ft)			117	80
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	50	50		
Storage Blk Time (%)	0	1		
Queuing Penalty (veh)	0	4		

## Queuing and Blocking Report

### Intersection: 4: Main Street & Project Driveway 2/Alamilla's Driveway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	26	24	24	23
Average Queue (ft)	12	10	6	9
95th Queue (ft)	33	29	23	27
Link Distance (ft)	96	114		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			50	50
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queues  
5: Main Street & Parkridge Avenue

Corona Commercial Project  
Project OY (2021) WP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	127	406	126	374	232	78	562	66	215	930
v/c Ratio	0.69	0.43	0.61	0.80	0.41	0.40	0.53	0.11	0.77	0.49
Control Delay	55.3	25.9	46.4	41.5	5.8	39.7	26.6	0.4	52.3	19.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.3	25.9	46.4	41.5	5.8	39.7	26.6	0.4	52.3	19.6
Queue Length 50th (ft)	62	87	60	170	0	37	128	0	103	125
Queue Length 95th (ft)	#143	129	114	#268	50	78	181	0	#203	165
Internal Link Dist (ft)		392		376			269			522
Turn Bay Length (ft)	85		90			160			105	
Base Capacity (vph)	189	944	225	522	603	203	1067	595	293	1908
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.43	0.56	0.72	0.38	0.38	0.53	0.11	0.73	0.49

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

## Queuing and Blocking Report

### Intersection: 1: Cota Street/DPSS Building Driveway & Parkridge Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	27	108	51	89	46	47	54	118	54
Average Queue (ft)	1	52	20	52	25	30	27	51	30
95th Queue (ft)	11	89	43	85	36	48	53	84	44
Link Distance (ft)		322	322		154	154	562		238
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	100			50				100	
Storage Blk Time (%)		0		6	0			0	
Queuing Penalty (veh)		0		7	0			0	

### Intersection: 2: Shopping Center Driveway/Project Driveway 1 & Parkridge Avenue

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	31	54	94	54
Average Queue (ft)	3	25	44	30
95th Queue (ft)	18	56	79	51
Link Distance (ft)			117	80
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	50	50		
Storage Blk Time (%)	0	1		
Queuing Penalty (veh)	0	3		

## Queuing and Blocking Report

### Intersection: 4: Main Street & Project Driveway 2/Alamilla's Driveway

Movement	EB	NB	NB	SB
Directions Served	LTR	L	T	L
Maximum Queue (ft)	111	53	56	22
Average Queue (ft)	59	18	3	5
95th Queue (ft)	126	48	22	20
Link Distance (ft)	96		476	
Upstream Blk Time (%)	36			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)		50		50
Storage Blk Time (%)		3	0	
Queuing Penalty (veh)		20	0	

**Queues**  
**5: Main Street & Parkridge Avenue**

**Corona Commercial Project**  
 Project OY (2021) WP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	231	419	95	214	310	78	1026	66	207	1081
v/c Ratio	0.77	0.45	0.52	0.67	0.62	0.46	0.84	0.10	0.78	0.51
Control Delay	53.9	28.2	48.8	45.1	11.9	47.4	37.0	0.3	58.3	21.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.9	28.2	48.8	45.1	11.9	47.4	37.0	0.3	58.3	21.1
Queue Length 50th (ft)	123	99	52	114	16	42	300	0	114	171
Queue Length 95th (ft)	#227	141	100	181	90	87	#447	0	#216	221
Internal Link Dist (ft)		392		376			269			522
Turn Bay Length (ft)	85		90			160			105	
Base Capacity (vph)	324	976	200	390	547	180	1227	685	280	2133
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.43	0.47	0.55	0.57	0.43	0.84	0.10	0.74	0.51

**Intersection Summary**

# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

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## **APPENDIX F:**

# **STACKING COUNT SHEETS**

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
 CITY: Moreno Valley

DAY: Wednesday  
 DATE: 1/29/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
10:00	0	0	0	0
10:05	0	0	0	0
10:10	0	0	0	0
10:15	0	0	0	0
10:20	0	0	0	0
10:25	0	0	0	0
10:30	1	0	0	1
10:35	2	0	0	2
10:40	1	0	0	1
10:45	0	0	0	0
10:50	0	0	0	0
10:55	0	0	0	0
11:00	0	0	0	0
11:05	0	0	0	0
11:10	0	1	0	1
11:15	3	1	0	4
11:20	3	0	0	3
11:25	2	0	0	2
11:30	0	0	0	0
11:35	1	0	0	1
11:40	1	0	0	1
11:45	0	0	0	0
11:50	1	0	0	1
11:55	0	2	0	2
12:00	3	1	0	4
12:05	4	1	0	5
12:10	3	0	0	3
12:15	0	0	0	0
12:20	2	2	0	4
12:25	5	0	0	5
12:30	6	0	0	6
12:35	5	2	0	7
12:40	6	2	0	8
12:45	6	0	0	6
12:50	5	1	0	6
12:55	3	0	0	3
13:00	3	0	0	3
13:05	2	1	0	3
13:10	1	0	0	1
13:15	2	2	0	4
13:20	4	1	0	5
13:25	3	1	0	4
13:30	2	1	0	3
13:35	1	3	0	4
13:40	3	0	0	3
13:45	2	2	0	4
13:50	3	1	0	4
13:55	3	0	0	3
14:00	2	0	0	2
14:05	1	0	0	1
14:10	4	1	0	5

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
 CITY: Moreno Valley

DAY: Wednesday  
 DATE: 1/29/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
14:15	5	1	0	6
14:20	6	1	0	7
14:25	4	1	0	5
14:30	0	0	0	0
14:35	0	1	0	1
14:40	1	1	0	2
14:45	1	1	0	2
14:50	4	0	0	4
14:55	5	0	0	5
15:00	4	0	0	4
15:05	3	0	0	3
15:10	1	1	0	2
15:15	1	0	0	1
15:20	1	0	0	1
15:25	1	1	0	2
15:30	1	0	0	1
15:35	1	1	0	2
15:40	1	1	0	2
15:45	2	0	0	2
15:50	1	0	0	1
15:55	1	1	0	2
16:00	3	0	0	3
16:05	2	0	0	2
16:10	1	0	0	1
16:15	1	1	0	2
16:20	1	0	0	1
16:25	0	1	0	1
16:30	1	0	0	1
16:35	4	0	0	4
16:40	5	1	0	6
16:45	3	2	0	5
16:50	3	1	0	4
16:55	3	0	0	3
17:00	1	0	0	1
17:05	0	0	0	0
17:10	0	1	0	1
17:15	1	2	0	3
17:20	4	0	0	4
17:25	4	2	0	6
17:30	3	0	0	3
17:35	2	0	0	2
17:40	1	0	0	1
17:45	1	0	0	1
17:50	1	0	0	1
17:55	0	1	0	1
18:00	0	2	0	2
18:05	3	0	0	3
18:10	4	0	0	4
18:15	2	1	0	3
18:20	2	1	0	3
18:25	3	1	0	4

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
 CITY: Moreno Valley

DAY: Wednesday  
 DATE: 1/29/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
18:30	4	1	0	5
18:35	5	0	0	5
18:40	2	1	0	3
18:45	2	1	0	3
18:50	3	0	0	3
18:55	2	2	0	4
19:00	3	1	0	4
19:05	4	0	0	4
19:10	3	1	0	4
19:15	4	0	0	4
19:20	6	1	0	7
19:25	4	0	0	4
19:30	2	0	0	2
19:35	1	1	0	2
19:40	3	2	0	5
19:45	5	0	0	5
19:50	4	0	0	4
19:55	0	0	0	0
20:00	0	0	0	0
20:05	0	0	0	0
20:10	0	0	0	0
20:15	1	0	0	1
20:20	3	2	0	5
20:25	4	0	0	4
20:30	3	0	0	3
20:35	1	1	0	2
20:40	1	1	0	2
20:45	1	0	0	1
20:50	2	0	0	2
20:55	1	0	0	1
21:00	0	1	0	1
21:05	2	0	0	2
21:10	3	0	0	3
21:15	1	0	0	1
21:20	0	0	0	0
21:25	0	0	0	0
21:30	1	1	0	2
21:35	3	0	0	3
21:40	1	0	0	1
21:45	1	0	0	1
21:50	0	0	0	0
21:55	1	0	0	1
22:00	1	1	0	2
22:05	1	1	0	2
22:10	2	0	0	2
22:15	0	2	0	2
22:20	1	1	0	2
22:25	2	0	0	2
22:30	1	0	0	1
22:35	0	0	0	0
22:40	1	0	0	1

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
CITY: Moreno Valley

DAY: Wednesday  
DATE: 1/29/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
22:45	1	0	0	1
22:50	0	0	0	0
22:55	0	0	0	0
23:00	1	0	0	1
23:05	1	0	0	1
23:10	0	0	0	0
23:15	0	0	0	0
23:20	0	0	0	0
23:25	0	0	0	0
23:30	0	0	0	0
23:35	0	0	0	0
23:40	0	0	0	0
23:45	0	0	0	0
23:50	0	0	0	0
23:55	0	0	0	0

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
 CITY: Moreno Valley

DAY: Thursday  
 DATE: 1/30/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
10:00	0	0	0	0
10:05	0	0	0	0
10:10	0	0	0	0
10:15	0	0	0	0
10:20	0	0	0	0
10:25	0	0	0	0
10:30	0	0	0	0
10:35	0	1	0	1
10:40	1	0	0	1
10:45	1	0	0	1
10:50	0	0	0	0
10:55	0	1	0	1
11:00	1	0	0	1
11:05	0	1	0	1
11:10	2	0	0	2
11:15	2	1	0	3
11:20	1	2	0	3
11:25	3	0	0	3
11:30	2	0	0	2
11:35	0	1	0	1
11:40	2	0	0	2
11:45	2	0	0	2
11:50	1	1	0	2
11:55	1	2	0	3
12:00	5	2	0	7
12:05	4	0	0	4
12:10	3	0	0	3
12:15	2	0	0	2
12:20	1	1	0	2
12:25	3	1	0	4
12:30	5	0	0	5
12:35	1	1	0	2
12:40	1	1	0	2
12:45	0	1	0	1
12:50	0	0	0	0
12:55	0	0	0	0
13:00	2	1	0	3
13:05	4	1	0	5
13:10	6	1	0	7
13:15	4	1	0	5
13:20	3	2	0	5
13:25	4	0	0	4
13:30	2	1	0	3
13:35	2	0	0	2
13:40	1	1	0	2
13:45	1	1	0	2
13:50	1	0	0	1
13:55	0	0	0	0
14:00	0	0	0	0
14:05	0	1	0	1
14:10	0	1	0	1

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
 CITY: Moreno Valley

DAY: Thursday  
 DATE: 1/30/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
14:15	0	2	0	2
14:20	2	0	0	2
14:25	2	0	0	2
14:30	1	0	0	1
14:35	0	0	0	0
14:40	0	1	0	1
14:45	2	1	0	3
14:50	1	0	0	1
14:55	2	0	0	2
15:00	1	0	0	1
15:05	2	0	0	2
15:10	1	0	0	1
15:15	0	1	0	1
15:20	1	2	0	3
15:25	3	1	0	4
15:30	3	1	0	4
15:35	3	0	0	3
15:40	0	0	0	0
15:45	1	0	0	1
15:50	1	0	0	1
15:55	0	0	0	0
16:00	1	0	0	1
16:05	2	1	0	3
16:10	2	0	0	2
16:15	0	0	0	0
16:20	0	0	1	1
16:25	1	0	0	1
16:30	1	1	0	2
16:35	3	1	0	4
16:40	2	1	0	3
16:45	2	1	0	3
16:50	1	0	0	1
16:55	0	0	0	0
17:00	2	1	0	3
17:05	4	1	0	5
17:10	4	1	0	5
17:15	3	0	0	3
17:20	0	0	0	0
17:25	0	1	0	1
17:30	1	0	0	1
17:35	1	2	0	3
17:40	3	0	0	3
17:45	2	0	0	2
17:50	0	2	0	2
17:55	2	1	0	3
18:00	3	0	0	3
18:05	2	1	0	3
18:10	1	1	0	2
18:15	2	1	0	3
18:20	3	1	0	4

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
 CITY: Moreno Valley

DAY: Thursday  
 DATE: 1/30/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
18:25	3	0	0	3
18:30	1	1	0	2
18:35	2	0	0	2
18:40	2	4	0	6
18:45	5	1	0	6
18:50	6	0	0	6
18:55	3	0	0	3
19:00	5	1	0	6
19:05	5	0	0	5
19:10	2	0	0	2
19:15	0	0	0	0
19:20	0	1	0	1
19:25	1	1	0	2
19:30	1	2	0	3
19:35	1	1	0	2
19:40	2	0	0	2
19:45	2	1	0	3
19:50	3	0	0	3
19:55	2	0	0	2
20:00	3	0	0	3
20:05	2	2	0	4
20:10	3	1	0	4
20:15	2	0	0	2
20:20	2	0	0	2
20:25	2	0	0	2
20:30	0	1	0	1
20:35	0	2	0	2
20:40	2	1	0	3
20:45	1	1	0	2
20:50	1	1	0	2
20:55	1	1	0	2
21:00	1	1	0	2
21:05	2	0	0	2
21:10	0	1	0	1
21:15	1	0	0	1
21:20	0	0	0	0
21:25	1	0	0	1
21:30	1	1	0	2
21:35	1	0	0	1
21:40	0	0	0	0
21:45	1	1	0	2
21:50	2	0	0	2
21:55	1	1	0	2
22:00	2	1	0	3
22:05	3	1	0	4
22:10	3	0	0	3
22:15	2	0	0	2
22:20	0	1	0	1
22:25	0	0	0	0
22:30	1	0	0	1

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
CITY: Moreno Valley

DAY: Thursday  
DATE: 1/30/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
22:35	2	0	0	2
22:40	1	0	0	1
22:45	0	1	0	1
22:50	0	0	0	0
22:55	0	0	0	0
23:00	0	1	0	1
23:05	0	0	0	0
23:10	0	0	0	0
23:15	0	0	0	0
23:20	0	0	0	0
23:25	0	1	0	1
23:30	0	0	0	0
23:35	0	0	0	0
23:40	0	0	0	0
23:45	0	0	0	0
23:50	0	0	0	0
23:55	0	0	0	0

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
 CITY: Moreno Valley

DAY: Saturday  
 DATE: 2/1/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
10:00	0	0	0	0
10:05	0	0	0	0
10:10	0	0	0	0
10:15	0	0	0	0
10:20	0	0	0	0
10:25	0	0	0	0
10:30	0	0	0	0
10:35	0	0	0	0
10:40	0	0	0	0
10:45	1	0	0	1
10:50	0	1	0	1
10:55	2	1	0	3
11:00	3	0	0	3
11:05	1	1	0	2
11:10	0	0	0	0
11:15	1	0	0	1
11:20	2	2	0	4
11:25	4	1	0	5
11:30	3	0	0	3
11:35	2	0	0	2
11:40	0	1	0	1
11:45	1	0	0	1
11:50	1	2	0	3
11:55	3	0	0	3
12:00	3	1	0	4
12:05	3	0	0	3
12:10	1	1	0	2
12:15	2	1	0	3
12:20	3	1	0	4
12:25	2	3	0	5
12:30	4	1	0	5
12:35	4	2	0	6
12:40	6	0	0	6
12:45	5	1	0	6
12:50	2	1	0	3
12:55	1	1	0	2
13:00	1	1	0	2
13:05	2	0	0	2
13:10	0	1	0	1
13:15	2	2	0	4
13:20	4	2	0	6
13:25	6	0	0	6
13:30	4	1	0	5
13:35	4	1	0	5
13:40	4	0	0	4
13:45	5	1	0	6
13:50	5	0	0	5
13:55	2	0	0	2
14:00	0	0	0	0
14:05	0	1	0	1

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
 CITY: Moreno Valley

DAY: Saturday  
 DATE: 2/1/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
14:10	3	1	0	4
14:15	3	0	0	3
14:20	1	3	0	4
14:25	4	2	0	6
14:30	6	0	0	6
14:35	3	3	0	6
14:40	5	1	0	6
14:45	6	1	0	7
14:50	6	1	0	7
14:55	6	2	0	8
15:00	7	1	0	8
15:05	8	1	0	9
15:10	4	2	0	6
15:15	3	0	0	3
15:20	2	1	0	3
15:25	2	1	0	3
15:30	3	0	0	3
15:35	2	0	0	2
15:40	4	0	0	4
15:45	3	0	0	3
15:50	2	0	0	2
15:55	1	0	0	1
16:00	3	1	0	4
16:05	4	0	0	4
16:10	4	0	0	4
16:15	3	1	0	4
16:20	0	0	0	0
16:25	3	0	0	3
16:30	3	2	0	5
16:35	2	0	0	2
16:40	0	1	0	1
16:45	2	1	0	3
16:50	3	0	0	3
16:55	2	0	0	2
17:00	1	0	0	1
17:05	2	1	0	3
17:10	3	1	0	4
17:15	0	1	0	1
17:20	1	2	0	3
17:25	4	0	0	4
17:30	3	0	0	3
17:35	2	1	0	3
17:40	2	0	0	2
17:45	3	0	0	3
17:50	3	1	0	4
17:55	2	1	0	3
18:00	1	1	0	2
18:05	1	1	0	2
18:10	2	2	0	4
18:15	4	0	0	4

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
 CITY: Moreno Valley

DAY: Saturday  
 DATE: 2/1/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
18:20	3	0	0	3
18:25	2	1	0	3
18:30	2	1	0	3
18:35	3	1	0	4
18:40	5	0	0	5
18:45	6	1	0	7
18:50	6	0	0	6
18:55	1	2	0	3
19:00	4	1	0	5
19:05	4	0	0	4
19:10	2	1	0	3
19:15	1	0	0	1
19:20	1	1	0	2
19:25	1	0	0	1
19:30	0	2	0	2
19:35	1	2	0	3
19:40	3	1	0	4
19:45	4	1	0	5
19:50	3	0	0	3
19:55	3	0	0	3
20:00	2	0	0	2
20:05	1	0	0	1
20:10	0	2	0	2
20:15	2	1	0	3
20:20	3	0	0	3
20:25	1	2	0	3
20:30	4	1	0	5
20:35	4	0	0	4
20:40	2	0	0	2
20:45	0	0	0	0
20:50	0	0	0	0
20:55	0	1	0	1
21:00	1	0	0	1
21:05	1	0	0	1
21:10	0	0	0	0
21:15	0	0	0	0
21:20	0	0	0	0
21:25	0	0	0	0
21:30	1	1	0	2
21:35	3	1	0	4
21:40	3	1	0	4
21:45	3	0	0	3
21:50	3	0	0	3
21:55	1	1	0	2
22:00	2	0	0	2
22:05	2	0	0	2
22:10	0	0	0	0
22:15	2	1	0	3
22:20	4	2	0	6
22:25	4	1	0	5

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
CITY: Moreno Valley

DAY: Saturday  
DATE: 2/1/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
22:30	2	0	0	2
22:35	0	0	0	0
22:40	0	0	0	0
22:45	0	0	0	0
22:50	0	0	0	0
22:55	0	0	0	0
23:00	0	0	0	0
23:05	0	0	0	0
23:10	0	0	0	0
23:15	0	0	0	0
23:20	0	0	0	0
23:25	0	0	0	0
23:30	0	0	0	0
23:35	0	0	0	0
23:40	0	0	0	0
23:45	0	0	0	0
23:50	0	0	0	0
23:55	0	0	0	0

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
 CITY: Moreno Valley

DAY: Sunday  
 DATE: 2/2/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
10:00	0	0	0	0
10:05	0	0	0	0
10:10	0	0	0	0
10:15	0	0	0	0
10:20	0	0	0	0
10:25	1	0	0	1
10:30	1	0	0	1
10:35	1	0	0	1
10:40	0	0	0	0
10:45	0	0	0	0
10:50	0	0	0	0
10:55	0	0	0	0
11:00	1	0	0	1
11:05	1	0	0	1
11:10	0	0	0	0
11:15	0	0	0	0
11:20	0	0	0	0
11:25	0	0	0	0
11:30	0	1	0	1
11:35	1	0	0	1
11:40	1	1	0	2
11:45	3	1	0	4
11:50	4	0	0	4
11:55	2	0	0	2
12:00	1	0	0	1
12:05	1	0	0	1
12:10	0	1	0	1
12:15	1	0	0	1
12:20	1	0	0	1
12:25	1	0	0	1
12:30	1	0	0	1
12:35	2	0	0	2
12:40	4	0	0	4
12:45	3	0	0	3
12:50	1	1	0	2
12:55	3	1	0	4
13:00	4	0	0	4
13:05	2	1	0	3
13:10	4	1	0	5
13:15	4	0	0	4
13:20	2	0	0	2
13:25	1	1	0	2
13:30	3	0	0	3
13:35	2	1	0	3
13:40	2	0	0	2
13:45	1	1	0	2
13:50	3	1	0	4
13:55	4	0	0	4
14:00	3	0	0	3
14:05	2	0	0	2

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
 CITY: Moreno Valley

DAY: Sunday  
 DATE: 2/2/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
14:10	2	0	0	2
14:15	2	0	0	2
14:20	2	0	0	2
14:25	0	0	0	0
14:30	0	0	0	0
14:35	0	4	0	4
14:40	4	2	0	6
14:45	5	3	0	8
14:50	6	2	0	8
14:55	6	0	0	6
15:00	3	0	0	3
15:05	1	1	0	2
15:10	2	0	0	2
15:15	2	0	0	2
15:20	1	0	0	1
15:25	1	1	0	2
15:30	2	0	0	2
15:35	1	2	0	3
15:40	4	0	0	4
15:45	2	1	0	3
15:50	4	0	0	4
15:55	4	0	0	4
16:00	1	0	0	1
16:05	0	1	0	1
16:10	0	0	0	0
16:15	0	1	0	1
16:20	2	1	0	3
16:25	2	0	0	2
16:30	2	2	0	4
16:35	2	0	0	2
16:40	1	0	0	1
16:45	0	0	0	0
16:50	0	0	0	0
16:55	0	1	0	1
17:00	0	0	0	0
17:05	1	0	0	1
17:10	1	1	0	2
17:15	2	1	0	3
17:20	5	1	0	6
17:25	5	0	0	5
17:30	3	0	0	3
17:35	2	0	0	2
17:40	2	0	0	2
17:45	0	1	0	1
17:50	3	0	0	3
17:55	4	0	0	4
18:00	3	3	0	6
18:05	4	1	0	5
18:10	2	1	0	3
18:15	3	0	0	3

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
 CITY: Moreno Valley

DAY: Sunday  
 DATE: 2/2/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
18:20	1	1	0	2
18:25	0	0	0	0
18:30	0	0	0	0
18:35	0	0	0	0
18:40	0	0	0	0
18:45	1	1	0	2
18:50	2	0	0	2
18:55	1	0	0	1
19:00	0	0	0	0
19:05	0	0	0	0
19:10	0	0	0	0
19:15	0	1	0	1
19:20	1	0	0	1
19:25	1	1	0	2
19:30	2	0	0	2
19:35	2	0	0	2
19:40	2	1	0	3
19:45	2	0	0	2
19:50	1	0	0	1
19:55	1	0	0	1
20:00	0	0	0	0
20:05	1	1	0	2
20:10	2	0	0	2
20:15	1	0	0	1
20:20	0	0	0	0
20:25	1	0	0	1
20:30	0	0	0	0
20:35	0	1	0	1
20:40	1	0	0	1
20:45	0	0	0	0
20:50	0	1	0	1
20:55	2	1	0	3
21:00	3	0	0	3
21:05	1	0	0	1
21:10	0	1	0	1
21:15	2	0	0	2
21:20	0	1	0	1
21:25	1	1	0	2
21:30	2	0	0	2
21:35	1	0	0	1
21:40	0	1	0	1
21:45	1	0	0	1
21:50	1	0	0	1
21:55	2	0	0	2
22:00	0	1	0	1
22:05	0	1	0	1
22:10	1	0	0	1
22:15	1	1	0	2
22:20	2	0	0	2
22:25	2	0	0	2

## DRIVE THRU SURVEY

LOCATION: Habit Burger, 12560 Day St  
CITY: Moreno Valley

DAY: Sunday  
DATE: 2/2/2020

TIME	PickUp Window To Order Board	Order Board to DT Entrance	DT Entrance into Street	TOTAL
22:30	1	0	0	1
22:35	0	0	0	0
22:40	1	0	0	1
22:45	2	0	0	2
22:50	1	0	0	1
22:55	0	0	0	0
23:00	0	0	0	0
23:05	0	0	0	0
23:10	0	0	0	0
23:15	0	0	0	0
23:20	0	0	0	0
23:25	0	0	0	0
23:30	0	0	0	0
23:35	0	0	0	0
23:40	0	0	0	0
23:45	0	0	0	0
23:50	0	0	0	0
23:55	0	0	0	0

# DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Tuesday  
 DATE: 7/9/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
7:00	0	0	0	0
7:05	0	0	0	0
7:10	0	0	0	0
7:15	0	0	0	0
7:20	0	1	0	1
7:25	0	0	0	0
7:30	0	0	0	0
7:35	0	1	0	1
7:40	0	0	0	0
7:45	0	1	0	1
7:50	0	0	0	0
7:55	0	1	0	1
8:00	0	1	0	1
8:05	1	1	0	2
8:10	0	0	0	0
8:15	0	1	0	1
8:20	0	1	0	1
8:25	0	1	0	1
8:30	0	1	0	1
8:35	0	1	0	1
8:40	0	0	0	0
8:45	1	1	0	2
8:50	1	2	0	3
8:55	0	0	0	0
9:00	0	0	0	0
9:05	0	0	0	0
9:10	0	1	0	1
9:15	0	0	0	0
9:20	0	4	0	4
9:25	2	5	0	7
9:30	2	2	0	4
9:35	1	1	0	2
9:40	1	1	0	2
9:45	0	1	0	1
9:50	0	1	0	1
9:55	1	1	0	2
10:00	2	2	0	4
10:05	0	1	0	1
10:10	2	2	0	4
10:15	0	1	0	1
10:20	0	0	0	0
10:25	0	1	0	1
10:30	1	1	0	2
10:35	1	2	0	3
10:40	2	2	0	4

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Tuesday  
 DATE: 7/9/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
10:45	1	1	0	2
10:50	2	2	0	4
10:55	0	0	0	0
11:00	0	0	0	0
11:05	1	1	0	2
11:10	1	3	0	4
11:15	2	5	0	7
11:20	1	1	0	2
11:25	1	2	0	3
11:30	0	1	0	1
11:35	1	1	0	2
11:40	2	2	0	4
11:45	0	2	0	2
11:50	0	0	0	0
11:55	0	1	0	1
12:00	1	1	0	2
12:05	1	1	0	2
12:10	2	2	0	4
12:15	1	2	0	3
12:20	1	2	0	3
12:25	0	0	0	0
12:30	2	2	0	4
12:35	1	1	0	2
12:40	1	1	0	2
12:45	1	3	0	4
12:50	0	0	0	0
12:55	0	0	0	0
13:00	0	1	0	1
13:05	0	0	0	0
13:10	3	4	0	7
13:15	2	2	0	4
13:20	1	2	0	3
13:25	1	1	0	2
13:30	0	0	0	0
13:35	1	1	0	2
13:40	1	2	0	3
13:45	0	0	0	0
13:50	2	5	0	7
13:55	0	0	0	0
14:00	0	0	0	0
14:05	1	2	0	3
14:10	0	0	0	0
14:15	1	1	0	2
14:20	0	0	0	0
14:25	1	1	0	2

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Tuesday  
 DATE: 7/9/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
14:30	0	0	0	0
14:35	1	2	0	3
14:40	1	2	0	3
14:45	1	1	0	2
14:50	1	2	0	3
14:55	2	1	0	3
15:00	0	0	0	0
15:05	0	0	0	0
15:10	1	1	0	2
15:15	2	2	0	4
15:20	1	1	0	2
15:25	0	1	0	1
15:30	1	2	0	3
15:35	2	2	0	4
15:40	1	4	0	5
15:45	0	1	0	1
15:50	0	0	0	0
15:55	0	1	0	1
16:00	0	1	0	1
16:05	0	1	0	1
16:10	1	1	0	2
16:15	1	2	0	3
16:20	1	2	0	3
16:25	0	0	0	0
16:30	0	0	0	0
16:35	1	1	0	2
16:40	1	1	0	2
16:45	1	2	0	3
16:50	1	3	0	4
16:55	1	1	0	2
17:00	1	2	0	3
17:05	1	1	0	2
17:10	1	1	0	2
17:15	1	2	0	3
17:20	2	1	0	3
17:25	1	2	0	3
17:30	0	0	0	0
17:35	1	1	0	2
17:40	0	0	0	0
17:45	1	2	0	3
17:50	1	1	0	2
17:55	0	3	0	3
18:00	2	2	0	4
18:05	3	5	0	8
18:10	4	1	0	5

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Tuesday  
 DATE: 7/9/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
18:15	2	3	0	5
18:20	1	2	0	3
18:25	2	2	0	4
18:30	1	1	0	2
18:35	1	1	0	2
18:40	2	2	0	4
18:45	1	1	0	2
18:50	1	1	0	2
18:55	2	2	0	4
19:00	1	1	0	2
19:05	1	1	0	2
19:10	0	0	0	0
19:15	1	1	0	2
19:20	1	1	0	2
19:25	0	0	0	0
19:30	0	1	0	1
19:35	0	0	0	0
19:40	1	2	0	3
19:45	1	1	0	2
19:50	0	1	0	1
19:55	1	1	0	2
20:00	1	3	0	4
20:05	2	2	0	4
20:10	1	2	0	3
20:15	1	2	0	3
20:20	0	0	0	0
20:25	1	2	0	3
20:30	1	1	0	2
20:35	1	1	0	2
20:40	2	2	0	4
20:45	0	1	0	1
20:50	0	0	0	0
20:55	0	0	0	0

# DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Wednesday  
 DATE: 7/10/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
7:00	0	2	0	2
7:05	1	1	0	2
7:10	0	0	0	0
7:15	0	0	0	0
7:20	0	1	0	1
7:25	0	0	0	0
7:30	0	0	0	0
7:35	1	3	0	4
7:40	0	0	0	0
7:45	0	0	0	0
7:50	0	0	0	0
7:55	0	0	0	0
8:00	0	1	0	1
8:05	0	0	0	0
8:10	1	3	0	4
8:15	0	1	0	1
8:20	0	0	0	0
8:25	1	1	0	2
8:30	2	2	0	4
8:35	1	1	0	2
8:40	0	0	0	0
8:45	0	1	0	1
8:50	0	0	0	0
8:55	1	1	0	2
9:00	0	1	0	1
9:05	0	1	0	1
9:10	0	0	0	0
9:15	1	1	0	2
9:20	0	0	0	0
9:25	1	1	0	2
9:30	0	0	0	0
9:35	1	2	0	3
9:40	2	3	0	5
9:45	0	2	0	2
9:50	2	3	0	5
9:55	0	3	0	3
10:00	0	0	0	0
10:05	1	4	0	5
10:10	1	2	0	3
10:15	1	3	0	4
10:20	1	1	0	2
10:25	1	2	0	3
10:30	2	2	0	4
10:35	0	1	0	1
10:40	1	2	0	3

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Wednesday  
 DATE: 7/10/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
10:45	2	2	0	4
10:50	3	5	0	8
10:55	3	1	0	4
11:00	1	1	0	2
11:05	1	1	0	2
11:10	1	1	0	2
11:15	0	2	0	2
11:20	0	0	0	0
11:25	0	0	0	0
11:30	1	1	0	2
11:35	1	1	0	2
11:40	2	0	0	2
11:45	2	2	0	4
11:50	1	2	0	3
11:55	1	2	0	3
12:00	1	1	0	2
12:05	1	1	0	2
12:10	2	5	0	7
12:15	1	5	0	6
12:20	2	3	0	5
12:25	1	1	0	2
12:30	1	2	0	3
12:35	1	2	0	3
12:40	1	3	0	4
12:45	1	1	0	2
12:50	1	2	0	3
12:55	3	3	0	6
13:00	1	2	0	3
13:05	2	3	0	5
13:10	2	1	0	3
13:15	4	4	0	8
13:20	1	1	0	2
13:25	1	2	0	3
13:30	2	3	0	5
13:35	1	3	0	4
13:40	2	1	0	3
13:45	0	1	0	1
13:50	1	1	0	2
13:55	1	1	0	2
14:00	3	3	0	6
14:05	0	0	0	0
14:10	2	2	0	4
14:15	1	2	0	3
14:20	1	2	0	3
14:25	1	2	0	3

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Wednesday  
 DATE: 7/10/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
14:30	0	0	0	0
14:35	1	3	0	4
14:40	0	0	0	0
14:45	1	3	0	4
14:50	1	1	0	2
14:55	2	3	0	5
15:00	0	1	0	1
15:05	1	1	0	2
15:10	1	1	0	2
15:15	0	2	0	2
15:20	2	2	0	4
15:25	2	2	0	4
15:30	2	1	0	3
15:35	3	5	0	8
15:40	0	1	0	1
15:45	1	1	0	2
15:50	1	2	0	3
15:55	0	1	0	1
16:00	2	2	0	4
16:05	0	1	0	1
16:10	0	0	0	0
16:15	1	2	0	3
16:20	2	4	0	6
16:25	2	3	0	5
16:30	0	0	0	0
16:35	1	2	0	3
16:40	1	1	0	2
16:45	2	0	0	2
16:50	1	1	0	2
16:55	2	3	0	5
17:00	3	3	0	6
17:05	1	1	0	2
17:10	0	1	0	1
17:15	0	2	0	2
17:20	2	2	0	4
17:25	0	0	0	0
17:30	1	1	0	2
17:35	2	3	0	5
17:40	2	2	0	4
17:45	1	2	0	3
17:50	1	1	0	2
17:55	1	2	0	3
18:00	4	3	0	7
18:05	2	3	0	5
18:10	2	3	0	5

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Wednesday  
 DATE: 7/10/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
18:15	2	1	0	3
18:20	2	1	0	3
18:25	2	2	0	4
18:30	2	3	0	5
18:35	2	1	0	3
18:40	1	1	0	2
18:45	0	3	0	3
18:50	1	2	0	3
18:55	1	3	0	4
19:00	2	5	0	7
19:05	2	3	0	5
19:10	2	2	0	4
19:15	1	1	0	2
19:20	1	2	0	3
19:25	0	0	0	0
19:30	1	1	0	2
19:35	2	2	0	4
19:40	2	2	0	4
19:45	3	3	0	6
19:50	1	1	0	2
19:55	0	0	0	0
20:00	0	0	0	0
20:05	0	0	0	0
20:10	1	2	0	3
20:15	1	1	0	2
20:20	4	3	0	7
20:25	0	0	0	0
20:30	0	1	0	1
20:35	2	2	0	4
20:40	1	1	0	2
20:45	0	1	0	1
20:50	0	1	0	1
20:55	0	0	0	0

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Saturday  
 DATE: 7/13/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
7:00	3	2	0	5
7:05	1	1	0	2
7:10	1	1	0	2
7:15	3	4	0	7
7:20	2	2	0	4
7:25	0	0	0	0
7:30	1	1	0	2
7:35	1	1	0	2
7:40	3	3	0	6
7:45	0	1	0	1
7:50	1	1	0	2
7:55	1	2	0	3
8:00	0	0	0	0
8:05	0	0	0	0
8:10	0	1	0	1
8:15	2	3	0	5
8:20	2	5	0	7
8:25	2	3	0	5
8:30	1	2	0	3
8:35	1	1	0	2
8:40	1	1	0	2
8:45	0	0	0	0
8:50	1	1	0	2
8:55	2	1	0	3
9:00	0	0	0	0
9:05	1	1	0	2
9:10	1	2	0	3
9:15	2	2	0	4
9:20	3	0	0	3
9:25	2	5	0	7
9:30	0	2	0	2
9:35	1	4	0	5
9:40	2	3	0	5
9:45	2	2	0	4
9:50	2	2	0	4
9:55	2	2	0	4
10:00	2	3	0	5
10:05	1	3	0	4
10:10	1	1	0	2
10:15	1	2	0	3
10:20	1	2	0	3
10:25	3	4	0	7
10:30	4	1	0	5
10:35	1	1	0	2
10:40	1	1	0	2

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Saturday  
 DATE: 7/13/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
10:45	1	4	0	5
10:50	2	6	0	8
10:55	1	5	0	6
11:00	3	1	0	4
11:05	1	3	0	4
11:10	1	1	0	2
11:15	2	5	0	7
11:20	1	6	0	7
11:25	2	6	0	8
11:30	1	2	0	3
11:35	1	1	0	2
11:40	1	2	0	3
11:45	1	3	0	4
11:50	2	3	0	5
11:55	2	1	0	3
12:00	0	1	0	1
12:05	1	1	0	2
12:10	1	2	0	3
12:15	2	4	0	6
12:20	2	5	0	7
12:25	2	3	0	5
12:30	1	1	0	2
12:35	1	1	0	2
12:40	1	1	0	2
12:45	1	2	0	3
12:50	1	4	0	5
12:55	2	3	0	5
13:00	0	0	0	0
13:05	1	1	0	2
13:10	1	2	0	3
13:15	3	7	0	10
13:20	3	3	0	6
13:25	2	3	0	5
13:30	1	1	0	2
13:35	2	3	0	5
13:40	2	3	0	5
13:45	2	3	0	5
13:50	2	3	0	5
13:55	2	2	0	4
14:00	0	3	0	3
14:05	2	2	0	4
14:10	2	2	0	4
14:15	1	3	0	4
14:20	1	2	0	3
14:25	1	3	0	4

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Saturday  
 DATE: 7/13/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
14:30	1	1	0	2
14:35	1	2	0	3
14:40	2	2	0	4
14:45	1	1	0	2
14:50	1	1	0	2
14:55	1	0	0	1
15:00	0	1	0	1
15:05	1	3	0	4
15:10	2	3	0	5
15:15	1	1	0	2
15:20	2	3	0	5
15:25	2	1	0	3
15:30	1	2	0	3
15:35	1	1	0	2
15:40	0	0	0	0
15:45	1	1	0	2
15:50	1	4	0	5
15:55	2	3	0	5
16:00	1	1	0	2
16:05	0	4	0	4
16:10	1	3	0	4
16:15	1	2	0	3
16:20	0	0	0	0
16:25	1	1	0	2
16:30	1	2	0	3
16:35	2	1	0	3
16:40	1	2	0	3
16:45	0	1	0	1
16:50	2	1	0	3
16:55	1	1	0	2
17:00	0	2	0	2
17:05	0	2	0	2
17:10	1	2	0	3
17:15	2	1	0	3
17:20	0	0	0	0
17:25	0	0	0	0
17:30	0	1	0	1
17:35	2	2	0	4
17:40	1	3	0	4
17:45	2	2	0	4
17:50	1	2	0	3
17:55	1	1	0	2
18:00	1	1	0	2
18:05	0	1	0	1
18:10	1	1	0	2

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Saturday  
 DATE: 7/13/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
18:15	2	1	0	3
18:20	2	2	0	4
18:25	1	3	0	4
18:30	2	3	0	5
18:35	2	3	0	5
18:40	1	3	0	4
18:45	2	3	0	5
18:50	2	1	0	3
18:55	0	1	0	1
19:00	1	2	0	3
19:05	2	4	0	6
19:10	2	2	0	4
19:15	2	3	0	5
19:20	2	1	0	3
19:25	1	1	0	2
19:30	2	1	0	3
19:35	2	1	0	3
19:40	2	1	0	3
19:45	2	1	0	3
19:50	1	1	0	2
19:55	1	1	0	2
20:00	1	1	0	2
20:05	0	1	0	1
20:10	1	2	0	3
20:15	1	2	0	3
20:20	1	1	0	2
20:25	1	3	0	4
20:30	1	2	0	3
20:35	1	2	0	3
20:40	1	1	0	2
20:45	1	1	0	2
20:50	2	3	0	5
20:55	0	0	0	0

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Saturday  
 DATE: 7/20/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
7:00	1	3	0	4
7:05	1	1	0	2
7:10	0	1	0	1
7:15	0	1	0	1
7:20	0	1	0	1
7:25	1	1	0	2
7:30	1	0	0	1
7:35	2	3	0	5
7:40	2	2	0	4
7:45	1	2	0	3
7:50	0	0	0	0
7:55	1	2	0	3
8:00	0	0	0	0
8:05	1	2	0	3
8:10	1	2	0	3
8:15	1	1	0	2
8:20	2	2	0	4
8:25	2	2	0	4
8:30	3	5	0	8
8:35	1	4	0	5
8:40	1	3	0	4
8:45	2	2	0	4
8:50	1	2	0	3
8:55	1	1	0	2
9:00	1	1	0	2
9:05	1	2	0	3
9:10	1	2	0	3
9:15	1	1	0	2
9:20	2	2	0	4
9:25	1	2	0	3
9:30	1	1	0	2
9:35	0	0	0	0
9:40	1	1	0	2
9:45	2	3	0	5
9:50	2	2	0	4
9:55	1	1	0	2
10:00	1	2	0	3
10:05	3	5	0	8
10:10	1	1	0	2
10:15	1	3	0	4
10:20	2	2	0	4
10:25	1	2	0	3
10:30	1	1	0	2
10:35	1	2	0	3
10:40	2	3	0	5

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Saturday  
 DATE: 7/20/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
10:45	1	3	0	4
10:50	2	2	0	4
10:55	1	3	0	4
11:00	1	2	0	3
11:05	1	3	0	4
11:10	2	4	0	6
11:15	3	3	0	6
11:20	1	2	0	3
11:25	1	1	0	2
11:30	1	2	0	3
11:35	1	2	0	3
11:40	2	3	0	5
11:45	1	1	0	2
11:50	2	3	0	5
11:55	2	3	0	5
12:00	3	3	0	6
12:05	1	2	0	3
12:10	1	3	0	4
12:15	1	2	0	3
12:20	2	2	0	4
12:25	1	3	0	4
12:30	1	2	0	3
12:35	3	4	0	7
12:40	2	2	0	4
12:45	2	2	0	4
12:50	1	1	0	2
12:55	1	1	0	2
13:00	1	2	0	3
13:05	3	4	0	7
13:10	2	3	0	5
13:15	1	2	0	3
13:20	2	2	0	4
13:25	2	3	0	5
13:30	2	3	0	5
13:35	2	3	0	5
13:40	3	1	0	4
13:45	2	6	0	8
13:50	4	4	0	8
13:55	4	5	0	9
14:00	3	5	0	8
14:05	4	3	0	7
14:10	1	2	0	3
14:15	2	1	0	3
14:20	2	2	0	4
14:25	3	4	0	7

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Saturday  
 DATE: 7/20/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
14:30	2	3	0	5
14:35	2	2	0	4
14:40	2	3	0	5
14:45	3	3	0	6
14:50	4	3	0	7
14:55	3	5	0	8
15:00	2	2	0	4
15:05	2	2	0	4
15:10	1	2	0	3
15:15	1	2	0	3
15:20	1	1	0	2
15:25	2	2	0	4
15:30	3	3	0	6
15:35	2	3	0	5
15:40	1	1	0	2
15:45	1	2	0	3
15:50	1	3	0	4
15:55	1	2	0	3
16:00	2	2	0	4
16:05	2	2	0	4
16:10	3	4	0	7
16:15	2	1	0	3
16:20	2	2	0	4
16:25	1	2	0	3
16:30	2	3	0	5
16:35	2	3	0	5
16:40	3	4	0	7
16:45	3	4	0	7
16:50	3	4	0	7
16:55	2	2	0	4
17:00	3	4	0	7
17:05	3	3	0	6
17:10	2	3	0	5
17:15	3	3	0	6
17:20	2	2	0	4
17:25	2	2	0	4
17:30	2	1	0	3
17:35	2	2	0	4
17:40	2	3	0	5
17:45	1	1	0	2
17:50	2	2	0	4
17:55	0	1	0	1
18:00	1	1	0	2
18:05	1	3	0	4
18:10	1	3	0	4

## DRIVE THRU SURVEY

LOCATION: Quick Quack, 12830 Day Street  
 CITY: Moreno Valley

DAY: Saturday  
 DATE: 7/20/2019

TIME	Car Wash Entrance To Order Board	Order Board to Entrance	Entrance into Parking Lot	TOTAL
18:15	1	2	0	3
18:20	1	1	0	2
18:25	1	2	0	3
18:30	3	3	0	6
18:35	2	3	0	5
18:40	0	1	0	1
18:45	1	3	0	4
18:50	1	2	0	3
18:55	3	3	0	6
19:00	2	2	0	4
19:05	0	0	0	0
19:10	0	1	0	1
19:15	1	1	0	2
19:20	0	0	0	0
19:25	1	3	0	4
19:30	1	2	0	3
19:35	1	2	0	3
19:40	2	2	0	4
19:45	2	2	0	4
19:50	0	1	0	1
19:55	1	1	0	2
20:00	1	1	0	2
20:05	1	1	0	2
20:10	2	3	0	5
20:15	2	1	0	3
20:20	2	3	0	5
20:25	2	3	0	5
20:30	0	3	0	3
20:35	1	1	0	2
20:40	0	1	0	1
20:45	1	1	0	2
20:50	0	0	0	0
20:55	0	0	0	0

## **APPENDIX G:**

### **RAISING CANE'S QUEUING ANALYSIS STUDY**



April 5, 2019

Ms. Kristen Roberts  
Raising Cane's  
6800 Bishop Road  
Plano, TX 75024

Subject: *Drive-through Queuing Analysis for the Proposed Raising Cane's Project  
Located at 1215 Ontario Avenue in the City of Corona*

Dear Ms. Roberts:

This memorandum has been prepared to evaluate the drive-through queuing capacity of a proposed Raising Cane's restaurant located at 1215 Ontario Avenue in the City of Corona.

#### PROJECT DESCRIPTION

The project site is located on the north side of Ontario Avenue between Rimpau Avenue and California Avenue in the City of Corona. The site is bounded by Rimpau Park to the north and west, Del Taco to the east, and Ontario Avenue to the south. The site is currently occupied by a vacant commercial building. Raising Cane's proposes to demolish the existing building and develop a 4,086-square-foot quick-service restaurant with two drive-through lanes that merge into one drive-through lane after the order boards. The project location is shown on Figure 1. The proposed project site plan is shown on Figure 2.

Access to the Raising Cane's site would be provided primarily by two unsignalized driveways on Ontario Avenue:

- One existing shared driveway
- One proposed right-in-right-out only driveway

#### DRIVE-THROUGH QUEUING ANALYSIS

The City has requested that a drive-through queuing study be conducted for the proposed project, to evaluate the adequacy of the drive-through lane queuing capacity.

The opening to the drive-through lane would be located at the southeastern corner of the project site, and the drive-through lane would wrap around the building in a counter-clockwise direction. The drive-through would provide two side-by-side entry lanes and two order boards, which would allow Raising Cane's to take orders from two customers at the same time. After the order boards, the two lanes would merge back into a single drive-through lane prior to the pay and.

pick-up window. There will be approximately 560 feet of total queuing lane capacity (approximately 280 feet per lane) from the opening of the two drive-through lanes to the two order boards and approximately 120 feet from the order boards to the pick-up window. This would provide a total drive-through queue length of approximately 680 feet, for a drive-through queuing capacity of 27 to 34 vehicles, assuming 20 to 25 feet per vehicle, from the beginning of the drive-through lanes to the pick-up window.

## Queuing Data Collection

Drive-through queuing observations and counts were conducted at the following existing drive-through Raising Cane's sites:

- City of Laguna Hills: Northeast corner of El Toro Road and Avenida De La Carlota
- City of Orange: 2249 North Tustin Street
- City of Riverside: 11066 Magnolia Avenue

These sites do not have dual side-by-side drive-through lanes or dual order boards. The drive-through queuing capacity for the Laguna Hills and Orange sites is 7 to 9 vehicles, assuming 20 to 25 feet per vehicle. The drive-through queuing capacity for the Riverside site is 10 to 13 vehicles, assuming 20 to 25 feet per vehicle.

These sites were selected for queuing data collection because of the following site characteristics that are similar to the proposed project:

- A Raising Cane's restaurant with a drive-through lane;
- Located in Southern California;
- Located adjacent to or within a larger commercial center;

The drive-through activity was observed during the following times for the Raising Cane's sites on a typical weekday and Saturday:

- Laguna Hills Site:
  - 11:00 AM – 2:00 PM (lunch-time)
  - 4:00 PM – 7:00 PM (commute peak hour/dinner-time)
- Orange Site:
  - 12:00 PM – 2:30 PM (lunch-time)
  - 7:00 PM – 9:30 PM (dinner-time)
- Riverside Site:
  - 11:00 AM – 2:00 PM (lunch-time)
  - 4:00 PM – 7:00 PM (commute peak hour/dinner-time)

The results of the observations are summarized on Table 1 and Table 2 for a typical weekday and Saturday, respectively.

The data summaries on Tables 1 and 2 present the number of vehicles in the drive-through lane, broken down into 15-minute periods, based on the observed average queue, 85th percentile queue, and the peak queue for each of the data collection periods. A copy of the queuing data collection worksheets is provided in *Attachment A*.

### Queuing Observations

The queuing activity was observed to vary with an ebb and flow pattern throughout the data collection periods. The following vehicle movement and queuing observations of the drive-through operations at the study locations were made:

#### Laguna Hills Site

- The peak 15 minutes during the weekday lunch-time peak was from 12:15 PM to 12:30 PM, with an average queue of 9 vehicles and a peak queue of 15 vehicles.
- The peak 15 minutes during the weekday dinner-time peak was from 6:45 PM to 7:00 PM, with an average queue of 13 vehicles and a peak queue of 14 vehicles.
- The peak 15 minutes during the Saturday lunch-time peak was from 1:00 PM to 1:15 PM, with an average queue of 8 vehicles and a peak queue of 14 vehicles.
- The peak 15 minutes during the Saturday dinner-time peak was from 6:15 PM to 6:30 PM, with an average queue of 9 vehicles and a peak queue of 13 vehicles.

#### Orange Site

- The peak 15 minutes during the weekday lunch-time peak was from 12:45 PM to 1:00 PM, with an average queue of 10 vehicles and a peak queue of 16 vehicles.
- The peak 15 minutes during the weekday dinner-time peak was from 7:15 PM to 7:30 PM, with an average queue of 12 vehicles and a peak queue of 14 vehicles.
- The peak 15 minutes during the Saturday lunch-time peak was from 1:00 PM to 1:15 PM, with an average queue of 11 vehicles and a peak queue of 13 vehicles.
- The peak 15 minutes during the Saturday dinner-time peak was from 8:45 PM to 9:00 PM, with an average queue of 15 vehicles and a peak queue of 17 vehicles.

### Riverside Site

- The peak 15 minutes during the weekday lunch-time peak was from 12:30 PM to 12:45 PM, with an average queue of 8 vehicles and a peak queue of 12 vehicles.
- The peak 15 minutes during the weekday dinner-time peak was from 6:00 PM to 6:15 PM, with an average queue of 7 vehicles and a peak queue of 11 vehicles.
- The peak 15 minutes during the Saturday lunch-time peak was from 1:30 PM to 1:45 PM, with an average queue of 10 vehicles and a peak queue of 12 vehicles.
- The peak 15 minutes during the Saturday dinner-time peak was from 6:45 PM to 7:00 PM, with an average queue of 8 vehicles and a peak queue of 11 vehicles.

### General Observations

- At the Raising Cane's sites, spillovers outside the drive-through lane opening were observed to occur occasionally and to last briefly.
- On occasion, the spillover outside the drive-through lane was due to a delay at the order board, rather than a lack of capacity in the drive-through lane itself. A more-than-average delay at the order board (i.e., due to a large order, or indecisiveness on the part of the customer) would briefly hold up the movement of the queue, sometimes causing the remainder of the queue to extend beyond the drive-through lane opening. When the vehicle at the order board finished the ordering process and pulled forward, the remaining cars in the queue would once again move through the order and pick-up process at the normal pace, and the gap between the order board and the pick-up window would fill in.
- Some customers were observed to pull into the site; evaluate the wait time, based on the vehicle queue; and choose to park and go into the building, rather than join the existing queue.

### Drive-through Queue Length Calculation

To supplement the empirical data collected at the existing Raising Cane's restaurants in Laguna Hills, Orange, and Riverside, the drive-through queuing capacity was also analyzed using queuing analysis formulas published in the Institute of Transportation Engineers (ITE) Transportation Planning Handbook, 3rd Edition.

Raising Cane's typical service time in the drive-through is 2-1/2 minutes from the order board to the pick-up window, with a vehicle being processed and progressing through the order board, pay window and pick-up window every 35 to 40 seconds during the peak drive-through periods. Assuming the more conservative processing time of 40 seconds, and applying the ITE queuing formulas, the analysis indicates that the average queue length is estimated to be 9 vehicles, and that the probability that the queue would be exactly 34 vehicles would be 0.3%. The probability of exceeding 34 vehicles is estimated to be 3.1%. The queuing calculation worksheet and formulas are provided as *Attachment B* of this report.

The ITE queuing analysis assumes a single-lane drive-through for a more conservative approach. The occurrence of the drive-through queue extending beyond the opening of the drive-through lane is expected to be an infrequent occurrence, and of short duration. The use of dual side-by-side drive-through lanes with dual order boards would improve the service rate, which would lower the number of vehicles queuing in the drive-through, as described in the following section.

#### Side-by-Side Operational Features

The proposed side-by-side configuration would begin with a single drive-through lane at the southeastern corner of the building. The drive-through lane would branch out into two drive-through lanes along the eastern side of the building. Each drive-through lane would have its own order board. After the order boards, the two lanes would merge back into a single drive-through lane prior to the pay and pick-up window.

While regular customers who are familiar with the menu choices typically would complete the order part of the process in less than the average time, infrequent or new customers are more likely to dwell at the menu board before making their choices, slowing down the process for everyone behind them. As a result, the order board is considered to be the most significant bottleneck in the drive-through process.

The side-by-side ordering configuration, as proposed by Raising Cane's, would provide two lanes with a separate order board for each lane. This will increase the number of customers processed through the order board portion of the drive-through, and "keep the line moving" even if one customer takes a longer-than-average time to make their menu selections, allowing the restaurant to continue to take and complete orders from the other order lane. The newest customer to arrive at the drive-through entrance will naturally choose the empty lane or the shorter line, so that one customer who takes a longer time to order at one order board can be bypassed, thereby not holding up the entire drive-through line.

With the added efficiency of having two order boards and the ability to by-pass customers taking a longer-than-average time to order at the other order board, the service rate would increase, compared to a single drive-through lane, as more orders can be processed. The cooks would receive the orders at a more efficient rate, which allows them to continue cooking the food, rather than waiting for the slower customer to finish ordering. As a result of added efficiency in the cooking area, the efficiency at the pick-up window would increase, compared to a single drive-through lane, because the food would be processed by the cooking area at a more efficient rate.

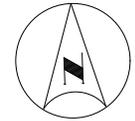
#### CONCLUSION

The proposed Raising Cane's duo drive-through lanes would provide a total queue length of approximately 680 feet, for a queuing capacity for 27 to 34 vehicles, assuming 20 to 25 feet per vehicle, from the beginning of the drive-through lanes to the pick-up window. Based on the drive-through queuing data collection and analysis presented in this memorandum, the overall average number of queued vehicles is estimated to be 9 (calculated at 8.67 and rounded up to 9) during the peak drive-through operations. The peak 85<sup>th</sup> percentile queue is estimated to be 17 vehicles during the peak 15-minute time period. The peak queue is estimated to be 17 vehicles during the peak 15-minute time period.

The side-by-side ordering configuration, as proposed by Raising Cane's, would provide two drive-through entry lanes at the southeastern corner of the building, with a separate order board for each lane. This would allow the ability to by-pass customers taking a longer-than-average time to order at the order board. The side-by-side ordering configuration would help address potential bottleneck issues at the order board, as well as reduce the service time at the drive-through as orders can be processed at a more efficient rate.



Trevor Briggs, P.E. (C87664)  
Project Engineer

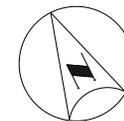


NOT TO SCALE

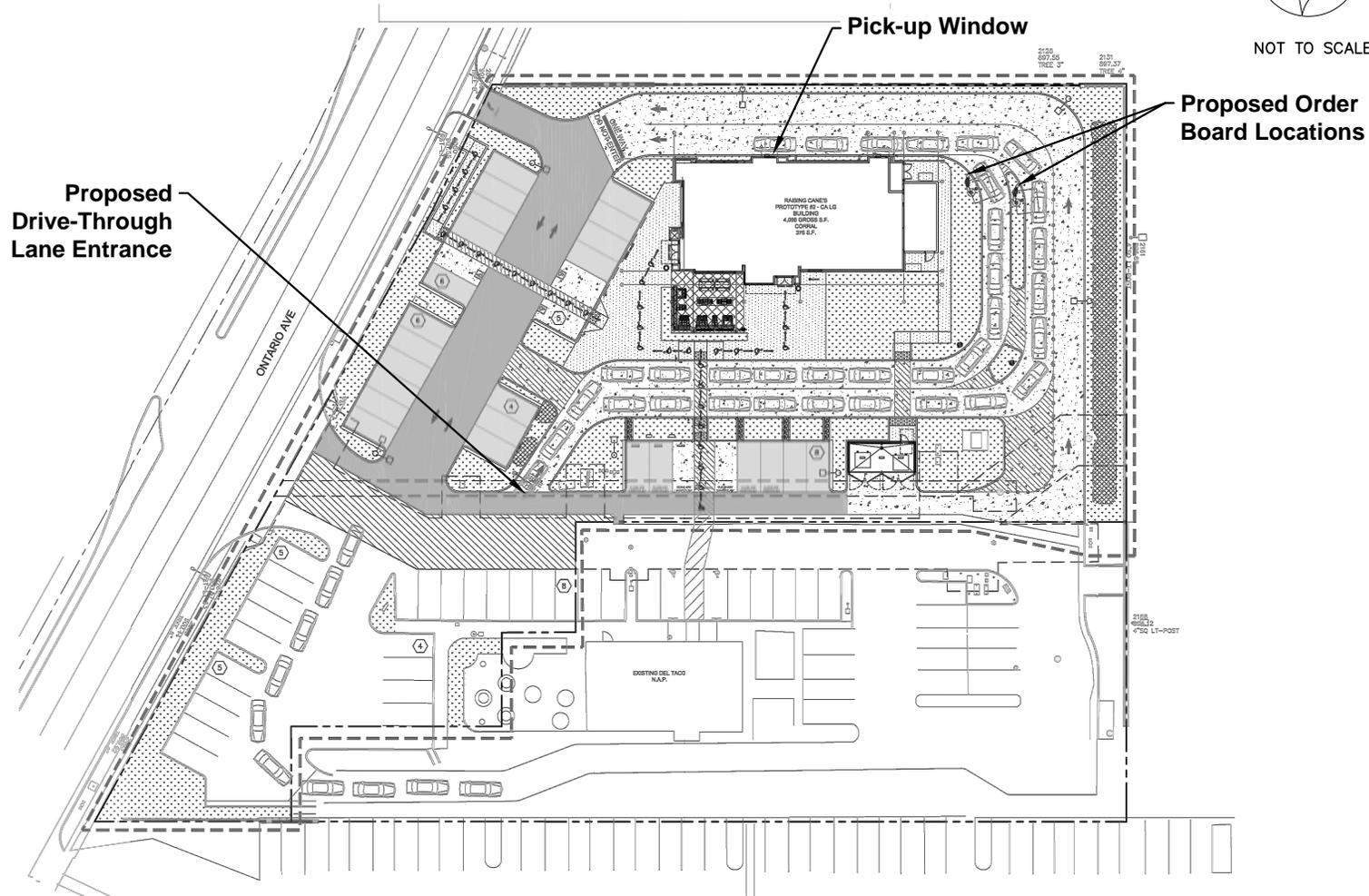
**Proposed  
Project Site**



**FIGURE 1  
PROJECT LOCATION**



NOT TO SCALE



**FIGURE 2**  
**PROJECT SITE PLAN**



TABLE 1  
SUMMARY OF DRIVE-THROUGH QUEUING DATA COLLECTION  
RAISING CANE'S - TYPICAL WEEKDAY  
AVERAGE, 85TH PERCENTILE, AND PEAK QUEUES

Time Period	Number of Drive-through Vehicles in the Queue								
	Average Queue			85th %-ile <sup>1</sup> Queue			Peak Queue		
	Laguna Hills	Orange	Riverside	Laguna Hills	Orange	Riverside	Laguna Hills	Orange	Riverside
<b>Lunch</b>									
11:00-11:15 AM	1.5		1.7	2.7		3.0	3		4
11:15-11:30 AM	1.7		3.1	2.0		5.0	3		6
11:30-11:45 AM	2.6		1.1	4.0		2.0	5		2
11:45-12:00 PM	4.1		3.0	7.2		4.0	11		5
12:00-12:15 PM	3.9	5.6	5.4	7.0	7.0	7.0	9	14	8
12:15-12:30 PM	9.0	6.6	4.9	13.0	8.0	7.9	15	13	9
12:30-12:45 PM	10.6	7.0	7.8	12.8	9.0	9.9	13	10	12
12:45-1:00 PM	7.0	9.7	5.6	9.0	13.0	6.9	9	16	7
1:00-1:15 PM	5.2	9.0	5.2	7.0	11.0	7.0	8	13	8
1:15-1:30 PM	5.8	6.6	6.6	8.0	9.0	9.0	10	11	10
1:30-1:45 PM	2.8	3.9	4.5	5.0	5.0	7.0	6	7	9
1:45-2:00 PM	3.5	3.6	5.0	4.5	5.0	6.0	6	6	7
2:00-2:15 PM		3.6			5.0			5	
2:15-2:30 PM		2.9			5.0			6	
Highest Value	10.6	9.7	7.8	13.0	13.0	9.9	15	16	12
<b>Dinner</b>									
4:00-4:15 PM	5.6		3.5	7.0		5.0	8		6
4:15-4:30 PM	6.2		2.0	8.0		3.0	9		4
4:30-4:45 PM	5.9		3.8	7.0		6.0	9		7
4:45-5:00 PM	5.5		6.2	7.0		9.0	9		10
5:00-5:15 PM	5.4		2.2	7.0		4.9	8		6
5:15-5:30 PM	5.8		3.6	7.0		6.0	9		8
5:30-5:45 PM	7.1		5.3	8.0		8.9	10		10
5:45-6:00 PM	10.9		2.7	12.0		4.0	13		6
6:00-6:15 PM	8.6		6.7	10.4		9.0	11		11
6:15-6:30 PM	10.8		6.3	12.0		7.9	13		9
6:30-6:45 PM	11.1		4.5	12.5		6.9	14		8
6:45-7:00 PM	12.8		3.1	14.0		4.0	14		5
7:00-7:15 PM		11.0			12.0			14	
7:15-7:30 PM		11.5			13.0			14	
7:30-7:45 PM		8.6			10.0			12	
7:45-8:00 PM		8.3			10.0			12	
8:00-8:15 PM		9.4			11.0			13	
8:15-8:30 PM		8.5			11.0			12	
8:30-8:45 PM		6.4			9.0			10	
8:45-9:00 PM		5.2			7.0			8	
9:00-9:15 PM		6.4			8.1			10	
9:15-9:30 PM		7.5			9.3			12	
Highest Value	12.8	11.5	6.7	14.0	13.0	9.0	14	14	11

Notes: <sup>1</sup> 85th percentile = The queue will be less than the queue shown 85% of the time.

TABLE 2  
SUMMARY OF DRIVE-THROUGH QUEUING DATA COLLECTION  
RAISING CANE'S - SATURDAY  
AVERAGE, 85TH PERCENTILE, AND PEAK QUEUES

Time Period	Number of Drive-through Vehicles in the Queue								
	Average Queue			85th %-ile * Queue			Peak Queue		
	Laguna Hills	Orange	Riverside	Laguna Hills	Orange	Riverside	Laguna Hills	Orange	Riverside
<b>Lunch</b>									
11:00-11:15 AM	3.0		2.3	4.3		5.8	5		6
11:15-11:30 AM	1.8		2.3	3.0		5.8	4		6
11:30-11:45 AM	5.3		4.9	8.0		6.0	12		9
11:45-12:00 PM	7.5		1.9	10.0		3.9	12		5
12:00-12:15 PM	4.7	5.5	8.0	5.0	8.0	10.0	6	9	11
12:15-12:30 PM	4.1	6.8	4.9	5.0	8.7	6.9	6	10	8
12:30-12:45 PM	8.2	5.8	6.7	12.0	7.1	7.9	13	9	9
12:45-1:00 PM	9.3	6.8	7.9	11.0	8.0	9.0	12	9	12
1:00-1:15 PM	7.2	10.4	8.6	9.0	12.0	9.9	14	13	11
1:15-1:30 PM	7.3	9.4	8.1	9.0	12.0	9.9	10	13	12
1:30-1:45 PM	6.9	8.5	9.5	9.0	11.0	10.0	10	13	12
1:45-2:00 PM	7.3	3.9	8.0	8.8	5.4	9.0	10	6	10
2:00-2:15 PM		5.0			7.0			8	
2:15-2:30 PM		6.4			8.0			10	
Highest Value	9.3	10.4	9.5	12.0	12.0	10.0	14	13	12
<b>Dinner</b>									
4:00-4:15 PM	6.2		5.8	8.5		8.9	11		10
4:15-4:30 PM	4.5		7.1	5.1		8.9	6		11
4:30-4:45 PM	2.0		4.9	3.0		6.0	4		9
4:45-5:00 PM	5.2		3.9	6.0		6.0	8		7
5:00-5:15 PM	5.6		4.7	7.0		7.0	9		8
5:15-5:30 PM	10.0		4.2	12.0		5.0	12		6
5:30-5:45 PM	6.1		3.7	7.3		5.0	11		6
5:45-6:00 PM	7.3		2.1	11.3		3.0	13		4
6:00-6:15 PM	8.7		2.9	11.0		6.0	12		7
6:15-6:30 PM	8.6		2.8	11.0		4.8	13		6
6:30-6:45 PM	6.0		7.2	7.3		9.0	10		10
6:45-7:00 PM	4.7		7.8	7.0		9.0	8		11
7:00-7:15 PM		9.2			10.5			13	
7:15-7:30 PM		11.6			13.0			13	
7:30-7:45 PM		10.8			13.0			16	
7:45-8:00 PM		4.2			6.0			11	
8:00-8:15 PM		5.4			8.0			10	
8:15-8:30 PM		8.9			11.0			12	
8:30-8:45 PM		8.8			11.0			13	
8:45-9:00 PM		15.0			17.0			17	
9:00-9:15 PM		12.4			16.0			17	
9:15-9:30 PM		9.3			11.4			15	
Highest Value	10.0	15.0	7.8	12.0	17.0	9.0	13	17	11

Notes: \* 85th percentile = The queue will be less than the queue shown 85% of the time.

**ATTACHMENT A**

**QUEUING DATA COLLECTION WORKSHEETS**

### Queue Study

Locations: 17-1215-001  
 City: Laguna Hills, CA

Day: Thursday  
 Date: 10/19/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
11:00:40 AM	1	1	2
11:01:23 AM	2	0	2
11:02:01 AM	2	1	3
11:02:40 AM	3	0	3
11:03:24 AM	2	0	2
11:04:38 AM	1	0	1
11:05:26 AM	0	0	0
11:07:48 AM	0	1	1
11:08:22 AM	1	0	1
11:09:33 AM	0	0	0
11:17:15 AM	0	1	1
11:17:26 AM	0	2	2
11:17:51 AM	1	1	2
11:19:12 AM	2	0	2
11:19:27 AM	1	0	1
11:20:08 AM	1	1	2
11:20:36 AM	2	0	2
11:21:05 AM	1	0	1
11:23:05 AM	1	1	2
11:23:17 AM	1	2	3
11:23:21 AM	1	1	2
11:24:06 AM	2	0	2
11:25:45 AM	2	0	2
11:26:53 AM	1	0	1
11:28:15 AM	0	1	1
11:28:45 AM	0	2	2
11:29:01 AM	1	1	2
11:29:47 AM	2	0	2
11:29:59 AM	1	0	1
11:30:19 AM	1	1	2
11:31:01 AM	1	0	1
11:31:55 AM	1	1	2
11:32:18 AM	2	0	2
11:32:25 AM	2	1	3
11:32:54 AM	2	2	4
11:33:07 AM	3	1	4
11:33:23 AM	2	2	4
11:33:59 AM	3	1	4
11:34:07 AM	2	1	3
11:34:49 AM	3	0	3
11:35:22 AM	3	1	4
11:36:02 AM	3	2	5
11:36:34 AM	3	1	4
11:36:51 AM	3	2	5
11:37:00 AM	3	1	4
11:37:27 AM	4	0	4
11:38:07 AM	3	0	3
11:38:39 AM	2	0	2
11:38:58 AM	1	0	1
11:39:19 AM	0	1	1
11:40:16 AM	1	0	1
11:41:34 AM	0	0	0
11:42:11 AM	0	1	1
11:42:50 AM	1	0	1
11:43:15 AM	1	1	2
11:43:43 AM	0	1	1
11:44:10 AM	1	0	1
11:44:26 AM	1	1	2
11:44:36 AM	1	2	3
11:44:56 AM	2	1	3
11:45:33 AM	3	1	4

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
4:00:00 PM	3	0	3
4:00:59 PM	3	1	4
4:01:32 PM	3	2	5
4:01:41 PM	4	2	6
4:02:23 PM	4	3	7
4:02:43 PM	3	3	6
4:03:01 PM	4	2	6
4:03:17 PM	4	3	7
4:03:26 PM	5	3	8
4:03:40 PM	4	3	7
4:03:59 PM	5	2	7
4:05:50 PM	4	2	6
4:06:01 PM	5	1	6
4:06:11 PM	5	2	7
4:06:32 PM	5	3	8
4:06:41 PM	4	3	7
4:07:16 PM	5	2	7
4:07:48 PM	4	2	6
4:08:16 PM	5	1	6
4:08:25 PM	4	2	6
4:08:47 PM	4	1	5
4:09:26 PM	4	2	6
4:09:37 PM	3	2	5
4:10:01 PM	4	2	6
4:10:17 PM	3	2	5
4:10:38 PM	4	1	5
4:11:02 PM	4	0	4
4:12:24 PM	4	1	5
4:13:11 PM	4	0	4
4:13:31 PM	4	1	5
4:13:40 PM	3	1	4
4:13:57 PM	3	2	5
4:14:15 PM	3	1	4
4:14:44 PM	3	0	3
4:15:06 PM	3	1	4
4:16:13 PM	4	0	4
4:16:39 PM	3	0	3
4:17:21 PM	3	1	4
4:17:28 PM	3	2	5
4:17:36 PM	2	2	4
4:17:59 PM	3	1	4
4:18:06 PM	3	2	5
4:18:12 PM	3	3	6
4:18:18 PM	3	4	7
4:18:34 PM	4	4	8
4:19:02 PM	4	5	9
4:19:11 PM	3	5	8
4:19:35 PM	4	4	8
4:19:45 PM	3	4	7
4:20:24 PM	4	3	7
4:20:31 PM	3	3	6
4:20:53 PM	4	2	6
4:21:12 PM	4	1	5
4:21:27 PM	4	2	6
4:22:17 PM	5	1	6
4:24:00 PM	4	1	5
4:25:15 PM	5	0	5
4:25:22 PM	5	1	6
4:26:43 PM	4	1	5
4:26:52 PM	4	2	6
4:27:01 PM	4	3	7

Locations: 17-1215-001  
 City: Laguna Hills, CA

Day: Thursday  
 Date: 10/19/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
11:45:36 AM	2	2	4
11:45:50 AM	3	1	4
11:46:20 AM	2	1	3
11:46:38 AM	3	0	3
11:46:47 AM	2	1	3
11:47:02 AM	2	2	4
11:47:22 AM	2	1	3
11:47:51 AM	3	0	3
11:48:00 AM	2	0	2
11:48:46 AM	1	0	1
11:50:58 AM	1	1	2
11:51:31 AM	2	0	2
11:51:40 AM	1	1	2
11:52:13 AM	2	0	2
11:52:42 AM	1	0	1
11:53:19 AM	1	1	2
11:53:40 AM	1	2	3
11:53:51 AM	2	1	3
11:54:32 AM	3	0	3
11:55:01 AM	2	1	3
11:55:17 AM	2	2	4
11:55:34 AM	1	2	3
11:56:04 AM	0	3	3
11:56:10 AM	0	4	4
11:56:42 AM	0	5	5
11:57:30 AM	0	6	6
11:57:42 AM	0	7	7
11:58:03 AM	1	7	8
11:58:39 AM	2	6	8
11:59:08 AM	2	7	9
11:59:17 AM	3	8	11
11:59:40 AM	4	7	11
12:00:00 PM	4	5	9
12:00:18 PM	3	5	8
12:00:29 PM	4	4	8
12:00:48 PM	3	4	7
12:00:58 PM	3	5	8
12:02:07 PM	4	4	8
12:02:12 PM	3	4	7
12:02:32 PM	3	3	6
12:03:07 PM	4	2	6
12:03:55 PM	4	1	5
12:04:05 PM	3	1	4
12:04:37 PM	4	0	4
12:04:56 PM	3	0	3
12:05:18 PM	2	1	3
12:05:56 PM	2	0	2
12:06:03 PM	1	0	1
12:06:23 PM	1	1	2
12:07:03 PM	2	0	2
12:07:11 PM	1	0	1
12:08:24 PM	0	1	1
12:08:51 PM	0	2	2
12:09:00 PM	1	2	3
12:09:43 PM	0	3	3
12:10:08 PM	1	2	3
12:10:41 PM	2	1	3
12:11:14 PM	3	0	3
12:11:29 PM	3	1	4
12:12:12 PM	3	2	5
12:12:29 PM	3	1	4
12:12:44 PM	2	1	3
12:12:58 PM	1	1	2
12:13:06 PM	2	0	2
12:13:14 PM	2	1	3
12:13:29 PM	1	1	2
12:14:11 PM	2	0	2

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
4:27:06 PM	4	4	8
4:27:29 PM	3	4	7
4:27:35 PM	3	5	8
4:27:49 PM	4	4	8
4:27:58 PM	3	4	7
4:28:27 PM	3	5	8
4:28:34 PM	4	4	8
4:29:14 PM	4	3	7
4:29:44 PM	4	2	6
4:30:25 PM	5	1	6
4:32:00 PM	4	2	6
4:32:25 PM	5	1	6
4:32:39 PM	4	1	5
4:33:19 PM	5	0	5
4:33:28 PM	4	0	4
4:33:38 PM	4	1	5
4:33:44 PM	4	2	6
4:33:58 PM	4	3	7
4:34:13 PM	5	2	7
4:34:29 PM	4	2	6
4:35:01 PM	4	3	7
4:35:19 PM	4	2	6
4:35:33 PM	4	3	7
4:35:53 PM	4	3	7
4:37:11 PM	3	3	6
4:37:21 PM	4	2	6
4:37:57 PM	4	1	5
4:38:25 PM	5	0	5
4:39:12 PM	4	0	4
4:39:36 PM	4	1	5
4:40:06 PM	4	0	4
4:40:19 PM	4	1	5
4:40:45 PM	3	2	5
4:40:58 PM	3	3	6
4:41:05 PM	4	2	6
4:41:16 PM	4	3	7
4:43:22 PM	4	3	7
4:43:47 PM	4	4	8
4:44:24 PM	4	5	9
4:45:06 PM	4	5	9
4:45:51 PM	3	4	7
4:46:16 PM	4	3	7
4:46:50 PM	3	3	6
4:47:52 PM	3	4	7
4:48:20 PM	2	4	6
4:48:32 PM	3	3	6
4:49:00 PM	3	2	5
4:49:31 PM	3	3	6
4:49:36 PM	3	4	7
4:49:50 PM	4	3	7
4:50:05 PM	3	3	6
4:50:23 PM	2	3	5
4:50:39 PM	3	2	5
4:50:51 PM	2	2	4
4:51:35 PM	3	2	5
4:52:04 PM	3	3	6
4:52:15 PM	3	4	7
4:52:26 PM	4	4	8
4:52:58 PM	4	3	7
4:53:21 PM	3	3	6
4:53:31 PM	4	2	6
4:53:47 PM	3	2	5
4:53:59 PM	3	3	6
4:54:05 PM	4	2	6
4:54:26 PM	3	2	5
4:54:39 PM	2	3	5
4:55:01 PM	3	2	5

Locations: 17-1215-001  
 City: Laguna Hills, CA

Day: Thursday  
 Date: 10/19/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:14:18 PM	1	0	1
12:16:09 PM	0	0	0
12:16:29 PM	0	1	1
12:16:36 PM	0	2	2
12:16:43 PM	0	3	3
12:17:12 PM	0	4	4
12:17:36 PM	1	3	4
12:17:49 PM	1	4	5
12:18:00 PM	1	5	6
12:18:07 PM	2	5	7
12:18:30 PM	2	6	8
12:18:43 PM	2	7	9
12:19:05 PM	2	7	9
12:19:16 PM	2	6	8
12:19:49 PM	3	5	8
12:20:20 PM	4	4	8
12:20:37 PM	3	5	8
12:21:10 PM	3	6	9
12:21:31 PM	4	6	10
12:21:52 PM	4	6	10
12:22:30 PM	4	7	11
12:22:42 PM	5	7	12
12:23:31 PM	5	8	13
12:24:12 PM	5	7	12
12:24:33 PM	4	7	11
12:25:01 PM	4	6	10
12:25:19 PM	4	7	11
12:26:09 PM	5	7	12
12:26:35 PM	5	8	13
12:27:00 PM	5	9	14
12:27:08 PM	5	10	15
12:28:02 PM	4	10	14
12:28:23 PM	3	10	13
12:28:34 PM	4	9	13
12:29:14 PM	3	9	12
12:30:22 PM	4	8	12
12:30:43 PM	3	9	12
12:30:51 PM	4	9	13
12:30:59 PM	3	10	13
12:31:33 PM	4	9	13
12:31:47 PM	4	8	12
12:32:13 PM	4	9	13
12:32:42 PM	3	9	12
12:33:38 PM	4	8	12
12:33:43 PM	3	8	11
12:34:02 PM	2	8	10
12:34:36 PM	1	9	10
12:35:03 PM	1	10	11
12:35:26 PM	0	10	10
12:35:52 PM	1	9	10
12:36:31 PM	2	9	11
12:37:06 PM	3	8	11
12:37:38 PM	4	9	13
12:37:52 PM	4	9	13
12:38:02 PM	3	9	12
12:38:32 PM	2	9	11
12:38:44 PM	3	8	11
12:39:23 PM	3	7	10
12:39:50 PM	2	8	10
12:40:19 PM	1	8	9
12:40:35 PM	1	7	8
12:41:09 PM	2	8	10
12:41:16 PM	3	7	10
12:41:42 PM	3	6	9
12:42:46 PM	3	7	10
12:43:08 PM	2	7	9
12:43:26 PM	2	6	8

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
4:55:43 PM	3	1	4
4:56:23 PM	3	0	3
4:56:41 PM	3	1	4
4:56:46 PM	3	2	5
4:56:59 PM	2	2	4
4:57:27 PM	3	2	5
4:57:52 PM	2	2	4
4:58:04 PM	3	2	5
4:58:44 PM	2	2	4
4:58:52 PM	3	1	4
4:59:18 PM	3	0	3
4:59:34 PM	3	1	4
4:59:40 PM	3	2	5
4:59:42 PM	3	3	6
5:00:01 PM	3	2	5
5:01:05 PM	4	1	5
5:01:20 PM	3	1	4
5:01:49 PM	4	0	4
5:03:00 PM	3	1	4
5:03:32 PM	4	0	4
5:03:49 PM	3	0	3
5:04:30 PM	3	1	4
5:04:40 PM	3	2	5
5:05:16 PM	3	1	4
5:05:18 PM	3	2	5
5:05:49 PM	4	2	6
5:07:07 PM	4	2	6
5:07:31 PM	5	1	6
5:07:40 PM	4	2	6
5:08:02 PM	3	2	5
5:08:10 PM	4	1	5
5:08:16 PM	4	2	6
5:08:33 PM	4	3	7
5:08:44 PM	5	2	7
5:09:15 PM	4	2	6
5:09:26 PM	4	3	7
5:09:38 PM	4	2	6
5:10:09 PM	4	1	5
5:10:38 PM	5	0	5
5:10:43 PM	5	1	6
5:10:49 PM	5	2	7
5:10:55 PM	4	2	6
5:11:06 PM	4	3	7
5:11:17 PM	5	3	8
5:11:36 PM	5	2	7
5:12:04 PM	4	2	6
5:12:28 PM	3	2	5
5:12:47 PM	4	2	6
5:13:07 PM	4	1	5
5:13:19 PM	3	1	4
5:13:44 PM	4	1	5
5:13:53 PM	3	1	4
5:14:59 PM	4	0	4
5:15:29 PM	4	1	5
5:16:03 PM	3	2	5
5:16:14 PM	3	1	4
5:17:06 PM	4	1	5
5:17:39 PM	3	1	4
5:18:00 PM	4	1	5
5:18:17 PM	3	1	4
5:18:39 PM	3	2	5
5:18:41 PM	2	2	4
5:19:24 PM	3	1	4
5:19:40 PM	3	2	5
5:20:27 PM	4	1	5
5:20:35 PM	3	2	5
5:20:47 PM	2	3	5

Locations: 17-1215-001  
 City: Laguna Hills, CA

Day: Thursday  
 Date: 10/19/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:43:53 PM	3	5	8
12:44:39 PM	3	6	9
12:44:43 PM	2	6	8
12:44:57 PM	1	6	7
12:45:15 PM	2	5	7
12:45:29 PM	1	5	6
12:45:46 PM	2	5	7
12:46:04 PM	3	5	8
12:46:18 PM	2	6	8
12:46:42 PM	1	6	7
12:46:56 PM	2	6	8
12:47:09 PM	2	7	9
12:47:37 PM	1	8	9
12:48:10 PM	0	8	8
12:48:44 PM	1	7	8
12:49:18 PM	1	8	9
12:49:30 PM	2	7	9
12:50:06 PM	2	6	8
12:50:25 PM	2	7	9
12:50:36 PM	3	6	9
12:50:45 PM	2	6	8
12:51:09 PM	3	5	8
12:51:21 PM	2	5	7
12:51:41 PM	2	6	8
12:51:48 PM	3	5	8
12:52:22 PM	3	6	9
12:52:29 PM	3	6	9
12:52:43 PM	2	6	8
12:52:50 PM	3	5	8
12:53:13 PM	2	5	7
12:53:23 PM	3	4	7
12:54:08 PM	3	3	6
12:54:28 PM	4	2	6
12:54:52 PM	3	2	5
12:55:06 PM	2	2	4
12:55:21 PM	1	3	4
12:55:46 PM	2	2	4
12:56:12 PM	3	1	4
12:57:32 PM	3	2	5
12:57:42 PM	4	3	7
12:58:11 PM	3	3	6
12:58:27 PM	2	3	5
12:58:36 PM	3	2	5
12:58:47 PM	3	3	6
12:59:08 PM	4	2	6
12:59:16 PM	3	2	5
1:00:07 PM	4	1	5
1:00:15 PM	3	2	5
1:00:33 PM	4	1	5
1:00:52 PM	3	1	4
1:01:03 PM	4	0	4
1:01:10 PM	4	1	5
1:01:43 PM	5	0	5
1:02:21 PM	4	0	4
1:02:42 PM	3	0	3
1:03:24 PM	2	1	3
1:03:51 PM	3	0	3
1:04:34 PM	3	1	4
1:04:39 PM	3	2	5
1:05:09 PM	3	3	6
1:05:18 PM	3	4	7
1:05:30 PM	4	3	7
1:05:39 PM	4	4	8
1:05:51 PM	3	4	7
1:06:06 PM	4	3	7
1:06:28 PM	3	3	6
1:07:41 PM	2	3	5

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
5:21:21 PM	2	4	6
5:21:30 PM	2	5	7
5:21:40 PM	3	4	7
5:22:02 PM	4	3	7
5:22:19 PM	3	3	6
5:23:17 PM	4	2	6
5:23:19 PM	3	2	5
5:23:30 PM	3	3	6
5:24:02 PM	4	2	6
5:24:25 PM	3	2	5
5:24:40 PM	2	3	5
5:24:57 PM	3	2	5
5:25:38 PM	3	3	6
5:25:47 PM	3	3	6
5:26:18 PM	3	4	7
5:26:31 PM	4	5	9
5:27:19 PM	4	4	8
5:28:00 PM	3	4	7
5:28:16 PM	4	3	7
5:28:57 PM	4	2	6
5:29:08 PM	4	3	7
5:29:17 PM	4	4	8
5:29:28 PM	5	3	8
5:31:01 PM	5	4	9
5:31:20 PM	5	5	10
5:32:26 PM	5	4	9
5:33:20 PM	4	4	8
5:33:32 PM	5	3	8
5:33:47 PM	5	2	7
5:34:05 PM	4	3	7
5:34:30 PM	3	3	6
5:35:17 PM	4	2	6
5:36:02 PM	5	1	6
5:36:54 PM	5	2	7
5:37:20 PM	5	3	8
5:38:15 PM	4	2	6
5:39:39 PM	4	1	5
5:39:58 PM	4	2	6
5:40:33 PM	5	1	6
5:40:55 PM	4	1	5
5:42:02 PM	4	2	6
5:42:10 PM	4	3	7
5:42:13 PM	4	4	8
5:42:31 PM	4	3	7
5:42:51 PM	4	4	8
5:43:39 PM	4	3	7
5:43:57 PM	3	4	7
5:44:08 PM	3	5	8
5:44:39 PM	4	4	8
5:44:49 PM	3	4	7
5:45:01 PM	3	5	8
5:45:17 PM	3	6	9
5:47:23 PM	4	6	10
5:47:49 PM	3	7	10
5:48:09 PM	4	6	10
5:48:56 PM	3	7	10
5:50:01 PM	4	8	12
5:51:02 PM	5	8	13
5:51:32 PM	5	8	13
5:52:01 PM	5	7	12
5:53:08 PM	5	6	11
5:53:54 PM	5	6	11
5:54:40 PM	5	6	11
5:55:46 PM	5	6	11
5:56:11 PM	4	7	11
5:56:44 PM	5	6	11
5:56:57 PM	5	6	11

Locations: 17-1215-001  
 City: Laguna Hills, CA

Day: Thursday  
 Date: 10/19/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:08:02 PM	3	2	5
1:08:23 PM	4	2	6
1:08:36 PM	4	3	7
1:09:07 PM	4	2	6
1:09:40 PM	4	3	7
1:10:25 PM	5	2	7
1:10:41 PM	4	1	5
1:10:49 PM	3	1	4
1:11:19 PM	4	0	4
1:12:40 PM	4	1	5
1:12:51 PM	3	1	4
1:12:57 PM	3	2	5
1:13:33 PM	4	1	5
1:13:59 PM	3	1	4
1:14:16 PM	4	1	5
1:14:28 PM	3	1	4
1:14:34 PM	3	2	5
1:14:41 PM	3	3	6
1:14:56 PM	3	4	7
1:15:40 PM	4	3	7
1:15:47 PM	4	4	8
1:16:06 PM	5	3	8
1:16:18 PM	5	4	9
1:16:23 PM	5	5	10
1:16:43 PM	5	5	10
1:17:19 PM	5	5	10
1:17:34 PM	4	5	9
1:17:49 PM	4	4	8
1:18:25 PM	5	3	8
1:18:37 PM	5	2	7
1:18:58 PM	5	1	6
1:19:33 PM	5	0	5
1:19:53 PM	5	1	6
1:20:07 PM	4	1	5
1:20:28 PM	5	0	5
1:20:48 PM	4	0	4
1:21:03 PM	4	1	5
1:21:09 PM	3	2	5
1:21:42 PM	4	1	5
1:21:54 PM	3	2	5
1:22:37 PM	2	3	5
1:22:51 PM	3	2	5
1:22:58 PM	2	2	4
1:23:34 PM	3	1	4
1:23:53 PM	3	2	5
1:24:01 PM	2	2	4
1:24:23 PM	3	1	4
1:24:54 PM	4	0	4
1:25:17 PM	4	1	5
1:25:50 PM	3	1	4
1:26:13 PM	2	1	3
1:26:21 PM	3	0	3
1:27:14 PM	3	1	4
1:27:23 PM	3	2	5
1:28:29 PM	3	3	6
1:28:30 PM	4	2	6
1:28:38 PM	5	1	6
1:29:53 PM	5	0	5
1:30:22 PM	5	1	6
1:30:46 PM	5	0	5
1:32:09 PM	4	0	4
1:32:11 PM	3	0	3
1:32:27 PM	2	0	2
1:32:40 PM	1	0	1
1:32:45 PM	0	1	1
1:33:00 PM	0	2	2
1:33:11 PM	1	1	2

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
5:57:48 PM	5	7	12
5:58:06 PM	5	6	11
5:58:22 PM	4	6	10
5:59:14 PM	5	6	11
6:00:00 PM	4	7	11
6:00:09 PM	5	6	11
6:01:23 PM	5	6	11
6:02:01 PM	5	6	11
6:02:33 PM	5	5	10
6:03:40 PM	5	4	9
6:04:39 PM	4	5	9
6:05:14 PM	3	6	9
6:05:30 PM	3	5	8
6:06:44 PM	2	5	7
6:06:55 PM	3	5	8
6:07:39 PM	2	6	8
6:07:56 PM	2	7	9
6:08:39 PM	3	6	9
6:08:51 PM	3	5	8
6:09:31 PM	4	4	8
6:09:42 PM	4	5	9
6:10:38 PM	4	6	10
6:11:19 PM	4	5	9
6:12:09 PM	3	5	8
6:12:44 PM	3	4	7
6:13:15 PM	3	3	6
6:13:54 PM	4	3	7
6:14:28 PM	3	3	6
6:14:52 PM	4	3	7
6:15:09 PM	4	4	8
6:15:35 PM	4	5	9
6:15:42 PM	4	6	10
6:15:59 PM	4	6	10
6:16:28 PM	3	7	10
6:16:51 PM	2	8	10
6:17:03 PM	3	7	10
6:17:49 PM	2	7	9
6:18:40 PM	3	6	9
6:19:02 PM	3	5	8
6:19:10 PM	3	6	9
6:19:38 PM	3	7	10
6:19:46 PM	4	6	10
6:20:15 PM	5	5	10
6:20:31 PM	5	6	11
6:20:40 PM	5	7	12
6:21:23 PM	5	7	12
6:21:32 PM	4	7	11
6:22:18 PM	4	7	11
6:22:58 PM	5	7	12
6:23:35 PM	4	8	12
6:24:13 PM	3	8	11
6:24:38 PM	4	8	12
6:25:17 PM	5	8	13
6:26:30 PM	4	7	11
6:26:49 PM	4	8	12
6:27:22 PM	3	9	12
6:28:28 PM	3	10	13
6:29:01 PM	4	9	13
6:29:10 PM	5	8	13
6:29:23 PM	5	7	12
6:30:26 PM	5	6	11
6:31:09 PM	5	6	11
6:32:38 PM	5	6	11
6:33:17 PM	5	7	12
6:33:27 PM	5	6	11
6:33:43 PM	4	6	10
6:34:05 PM	5	6	11

Locations: 17-1215-001  
 City: Laguna Hills, CA

Day: Thursday  
 Date: 10/19/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:34:14 PM	2	0	2
1:34:36 PM	1	0	1
1:35:49 PM	1	1	2
1:36:10 PM	1	2	3
1:36:32 PM	2	1	3
1:37:29 PM	2	0	2
1:38:26 PM	2	1	3
1:39:04 PM	1	1	2
1:39:38 PM	0	1	1
1:39:56 PM	1	0	1
1:41:11 PM	0	1	1
1:42:01 PM	1	0	1
1:42:14 PM	1	1	2
1:42:20 PM	1	2	3
1:43:10 PM	2	1	3
1:43:24 PM	2	2	4
1:43:33 PM	3	1	4
1:43:41 PM	3	2	5
1:43:49 PM	3	3	6
1:44:43 PM	2	3	5
1:44:46 PM	2	3	5
1:45:07 PM	1	3	4
1:46:33 PM	2	2	4
1:47:15 PM	2	1	3
1:47:49 PM	3	0	3
1:48:26 PM	3	1	4
1:49:08 PM	4	0	4
1:49:24 PM	3	0	3
1:49:35 PM	2	0	2
1:49:44 PM	2	1	3
1:49:55 PM	2	2	4
1:50:26 PM	2	1	3
1:50:45 PM	1	1	2
1:50:59 PM	2	0	2
1:51:18 PM	2	1	3
1:51:35 PM	3	1	4
1:52:12 PM	2	2	4
1:52:47 PM	1	2	3
1:53:02 PM	1	3	4
1:53:23 PM	2	2	4
1:53:33 PM	1	2	3
1:53:47 PM	2	1	3
1:54:39 PM	3	0	3
1:54:48 PM	3	1	4
1:54:52 PM	2	2	4
1:55:37 PM	2	1	3
1:55:54 PM	3	0	3
1:56:17 PM	3	1	4
1:56:45 PM	4	1	5
1:56:59 PM	5	0	5
1:57:53 PM	5	1	6
1:58:21 PM	4	1	5
1:58:30 PM	4	2	6
1:58:38 PM	3	2	5
1:58:50 PM	3	1	4
1:59:06 PM	2	1	3
1:59:15 PM	1	1	2
1:59:19 PM	2	0	2
1:59:59 PM	1	0	1

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
6:34:22 PM	5	7	12
6:35:23 PM	5	6	11
6:35:51 PM	5	7	12
6:36:25 PM	5	7	12
6:36:35 PM	5	8	13
6:36:49 PM	4	8	12
6:37:17 PM	5	8	13
6:37:38 PM	5	9	14
6:38:25 PM	4	9	13
6:39:15 PM	5	8	13
6:39:51 PM	4	8	12
6:40:14 PM	4	7	11
6:40:27 PM	4	6	10
6:40:41 PM	3	6	9
6:41:36 PM	4	5	9
6:41:59 PM	4	6	10
6:42:10 PM	5	5	10
6:42:21 PM	4	5	9
6:42:35 PM	4	6	10
6:42:54 PM	4	5	9
6:43:10 PM	4	6	10
6:43:41 PM	5	6	11
6:44:04 PM	5	7	12
6:44:44 PM	5	6	11
6:45:11 PM	4	7	11
6:45:42 PM	4	6	10
6:46:00 PM	5	7	12
6:46:52 PM	4	8	12
6:47:01 PM	5	8	13
6:48:12 PM	4	7	11
6:48:48 PM	4	7	11
6:49:10 PM	5	8	13
6:49:51 PM	5	8	13
6:50:23 PM	5	8	13
6:51:03 PM	5	9	14
6:51:53 PM	5	9	14
6:52:45 PM	5	9	14
6:53:19 PM	4	10	14
6:54:04 PM	4	9	13
6:54:11 PM	3	10	13
6:55:15 PM	4	10	14
6:55:55 PM	5	9	14
6:56:16 PM	4	9	13
6:57:50 PM	4	9	13
6:58:39 PM	5	9	14
6:59:01 PM	5	9	14
6:59:33 PM	4	9	13
7:00:30 PM	3	9	12

## Queue Study

Locations: 17-1215-001  
City: Laguna Hills, CA

Day: Saturday  
Date: 10/14/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
11:00:00 AM	1	0	1
11:00:27 AM	0	0	0
11:00:45 AM	0	1	1
11:01:10 AM	1	2	3
11:01:47 AM	2	1	3
11:02:30 AM	2	2	4
11:02:50 AM	2	3	5
11:02:55 AM	2	2	4
11:03:34 AM	3	1	4
11:04:10 AM	2	1	3
11:04:57 AM	2	2	4
11:05:12 AM	3	1	4
11:05:30 AM	3	2	5
11:06:08 AM	2	1	3
11:06:27 AM	3	1	4
11:06:38 AM	4	0	4
11:07:19 AM	4	1	5
11:08:13 AM	5	0	5
11:09:33 AM	4	0	4
11:10:11 AM	3	0	3
11:10:56 AM	2	0	2
11:11:19 AM	1	0	1
11:11:51 AM	1	1	2
11:12:54 AM	2	0	2
11:12:59 AM	1	0	1
11:14:55 AM	1	1	2
11:15:26 AM	0	1	1
11:15:55 AM	1	0	1
11:17:49 AM	0	1	1
11:17:52 AM	1	0	1
11:17:59 AM	1	1	2
11:19:18 AM	0	1	1
11:20:41 AM	1	2	3
11:21:15 AM	2	1	3
11:21:46 AM	3	0	3
11:22:10 AM	3	1	4
11:22:32 AM	3	0	3
11:23:06 AM	2	0	2
11:23:25 AM	1	0	1
11:23:41 AM	0	0	0
11:27:18 AM	0	1	1
11:28:47 AM	1	0	1
11:29:18 AM	1	1	2
11:29:34 AM	1	2	3
11:29:52 AM	1	1	2
11:30:27 AM	2	1	3
11:30:59 AM	2	0	2
11:31:40 AM	1	0	1
11:31:58 AM	0	0	0
11:32:35 AM	0	2	2
11:34:45 AM	1	1	2
11:35:00 AM	2	3	5
11:35:36 AM	1	3	4
11:35:55 AM	2	2	4
11:36:12 AM	1	2	3
11:36:28 AM	1	3	4
11:36:45 AM	2	3	5

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
4:00:00 PM	3	6	9
4:00:28 PM	2	6	8
4:00:52 PM	3	6	9
4:01:09 PM	4	7	11
4:01:43 PM	3	7	10
4:02:24 PM	4	6	10
4:02:34 PM	3	6	9
4:02:54 PM	3	5	8
4:03:19 PM	2	4	6
4:03:57 PM	3	3	6
4:04:10 PM	2	4	6
4:04:42 PM	3	3	6
4:04:56 PM	2	4	6
4:05:26 PM	3	3	6
4:05:43 PM	2	3	5
4:06:10 PM	1	3	4
4:06:15 PM	2	2	4
4:06:49 PM	3	1	4
4:07:23 PM	4	0	4
4:07:35 PM	4	1	5
4:07:49 PM	4	2	6
4:08:20 PM	5	1	6
4:08:40 PM	5	2	7
4:09:03 PM	4	2	6
4:09:22 PM	5	3	8
4:09:44 PM	4	3	7
4:09:58 PM	3	3	6
4:10:35 PM	2	3	5
4:10:45 PM	3	3	6
4:11:24 PM	2	3	5
4:11:30 PM	3	2	5
4:11:58 PM	2	3	5
4:12:18 PM	1	3	4
4:12:27 PM	2	3	5
4:12:44 PM	3	2	5
4:13:12 PM	4	1	5
4:14:17 PM	4	0	4
4:14:56 PM	3	0	3
4:15:07 PM	3	1	4
4:15:51 PM	2	1	3
4:16:10 PM	2	2	4
4:16:25 PM	2	3	5
4:16:41 PM	3	2	5
4:17:02 PM	4	1	5
4:17:34 PM	5	0	5
4:18:10 PM	5	1	6
4:18:20 PM	4	1	5
4:18:46 PM	4	2	6
4:19:00 PM	3	2	5
4:19:19 PM	4	1	5
4:19:39 PM	3	1	4
4:19:49 PM	3	2	5
4:20:07 PM	4	1	5
4:20:19 PM	3	2	5
4:20:50 PM	4	1	5
4:21:01 PM	3	1	4
4:21:09 PM	3	2	5

Locations: 17-1215-001  
 City: Laguna Hills,CA

Day: Saturday  
 Date: 10/14/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
11:37:05 AM	1	3	4
11:37:32 AM	1	6	7
11:38:45 AM	0	6	6
11:39:26 AM	1	7	8
11:39:59 AM	2	7	9
11:41:04 AM	1	11	12
11:41:24 AM	2	8	10
11:42:05 AM	3	5	8
11:43:12 AM	3	5	8
11:44:20 AM	2	6	8
11:44:47 AM	2	5	7
11:45:28 AM	3	6	9
11:45:46 AM	2	6	8
11:45:51 AM	3	6	9
11:46:29 AM	4	7	11
11:46:55 AM	3	7	10
11:47:12 AM	4	8	12
11:48:16 AM	5	7	12
11:48:26 AM	4	7	11
11:49:14 AM	5	4	9
11:49:28 AM	4	4	8
11:49:57 AM	5	3	8
11:50:59 AM	5	4	9
11:52:11 AM	5	5	10
11:52:51 AM	5	4	9
11:53:21 AM	4	3	7
11:54:19 AM	3	4	7
11:54:37 AM	3	3	6
11:54:57 AM	3	2	5
11:55:28 AM	3	2	5
11:55:48 AM	3	3	6
11:56:24 AM	2	3	5
11:56:41 AM	3	3	6
11:56:59 AM	2	2	4
11:57:23 AM	2	4	6
11:57:42 AM	1	4	5
11:57:59 AM	2	3	5
11:58:16 AM	2	4	6
11:58:31 AM	1	4	5
11:58:41 AM	2	3	5
11:58:59 AM	2	5	7
11:59:09 AM	1	6	7
11:59:35 AM	2	5	7
12:00:21 PM	2	4	6
12:01:04 PM	3	3	6
12:01:29 PM	4	2	6
12:01:39 PM	3	2	5
12:02:00 PM	4	1	5
12:02:15 PM	3	1	4
12:02:34 PM	3	2	5
12:02:49 PM	4	1	5
12:03:15 PM	3	1	4
12:03:27 PM	2	3	5
12:03:38 PM	3	2	5
12:04:01 PM	4	1	5
12:04:40 PM	3	0	3
12:05:30 PM	3	2	5
12:05:45 PM	2	2	4
12:06:15 PM	2	1	3
12:06:35 PM	1	2	3
12:06:46 PM	2	1	3
12:07:10 PM	2	2	4

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
4:21:25 PM	3	3	6
4:22:07 PM	4	2	6
4:22:19 PM	3	2	5
4:22:45 PM	4	1	5
4:23:04 PM	5	0	5
4:23:22 PM	5	1	6
4:24:17 PM	4	1	5
4:24:48 PM	5	0	5
4:25:28 PM	4	0	4
4:26:46 PM	3	0	3
4:26:58 PM	3	1	4
4:27:37 PM	2	1	3
4:28:33 PM	3	0	3
4:28:44 PM	2	0	2
4:29:43 PM	1	0	1
4:30:14 PM	0	0	0
4:31:46 PM	0	1	1
4:31:48 PM	0	2	2
4:32:31 PM	1	1	2
4:33:38 PM	2	0	2
4:33:51 PM	1	0	1
4:34:27 PM	1	1	2
4:34:58 PM	2	0	2
4:35:08 PM	1	0	1
4:35:58 PM	0	0	0
4:36:08 PM	0	1	1
4:37:40 PM	1	1	2
4:38:17 PM	2	0	2
4:39:21 PM	2	1	3
4:40:02 PM	3	0	3
4:40:12 PM	2	0	2
4:40:23 PM	2	1	3
4:40:34 PM	1	1	2
4:40:44 PM	1	2	3
4:40:57 PM	2	1	3
4:41:20 PM	3	0	3
4:41:32 PM	2	1	3
4:41:46 PM	1	1	2
4:42:15 PM	2	0	2
4:42:41 PM	1	0	1
4:43:02 PM	0	0	0
4:43:13 PM	0	1	1
4:43:28 PM	1	1	2
4:44:25 PM	1	2	3
4:44:40 PM	1	3	4
4:44:56 PM	0	4	4
4:45:25 PM	1	4	5
4:45:59 PM	1	4	5
4:46:20 PM	1	5	6
4:46:32 PM	2	4	6
4:46:52 PM	2	4	6
4:47:28 PM	1	4	5
4:48:26 PM	2	3	5
4:48:36 PM	1	5	6
4:49:44 PM	2	6	8
4:50:19 PM	1	6	7
4:50:46 PM	0	6	6
4:51:12 PM	1	5	6
4:51:56 PM	2	4	6
4:52:42 PM	3	4	7
4:53:21 PM	4	3	7
4:53:42 PM	4	2	6

Locations: 17-1215-001  
 City: Laguna Hills,CA

Day: Saturday  
 Date: 10/14/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:07:32 PM	3	1	4
12:07:50 PM	3	2	5
12:08:00 PM	2	2	4
12:08:15 PM	3	2	5
12:08:40 PM	2	3	5
12:08:50 PM	1	5	6
12:09:44 PM	1	4	5
12:10:09 PM	1	4	5
12:11:02 PM	2	3	5
12:11:21 PM	3	2	5
12:11:32 PM	4	1	5
12:11:47 PM	3	2	5
12:12:42 PM	4	1	5
12:13:22 PM	3	3	6
12:13:49 PM	2	3	5
12:13:57 PM	2	2	4
12:14:21 PM	3	2	5
12:14:30 PM	2	2	4
12:14:51 PM	1	2	3
12:15:08 PM	1	3	4
12:15:22 PM	1	4	5
12:15:42 PM	1	4	5
12:15:55 PM	1	4	5
12:16:37 PM	2	4	6
12:16:57 PM	1	4	5
12:17:18 PM	2	3	5
12:17:37 PM	1	3	4
12:18:04 PM	1	4	5
12:18:27 PM	2	3	5
12:19:07 PM	1	4	5
12:19:27 PM	0	4	4
12:19:40 PM	1	3	4
12:20:01 PM	2	2	4
12:20:43 PM	2	2	4
12:21:01 PM	3	1	4
12:21:36 PM	4	0	4
12:21:51 PM	3	0	3
12:22:10 PM	2	0	2
12:22:24 PM	2	1	3
12:22:33 PM	1	2	3
12:22:49 PM	2	1	3
12:23:12 PM	2	2	4
12:23:21 PM	2	1	3
12:23:41 PM	2	2	4
12:23:51 PM	2	3	5
12:23:59 PM	2	2	4
12:24:36 PM	3	1	4
12:24:52 PM	2	1	3
12:25:38 PM	1	2	3
12:26:13 PM	1	1	2
12:26:24 PM	1	2	3
12:26:39 PM	2	2	4
12:27:27 PM	3	1	4
12:28:11 PM	4	1	5
12:28:23 PM	3	3	6
12:28:37 PM	2	3	5
12:29:25 PM	2	2	4
12:29:39 PM	2	3	5
12:29:54 PM	3	2	5
12:30:14 PM	2	3	5
12:30:48 PM	1	4	5
12:31:15 PM	0	4	4

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
4:54:24 PM	3	2	5
4:54:53 PM	3	1	4
4:55:39 PM	3	0	3
4:55:53 PM	3	1	4
4:56:06 PM	2	1	3
4:56:21 PM	3	0	3
4:56:32 PM	3	1	4
4:56:47 PM	3	2	5
4:57:17 PM	3	3	6
4:57:57 PM	3	2	5
4:58:21 PM	4	1	5
4:59:03 PM	3	1	4
4:59:32 PM	3	2	5
4:59:48 PM	2	2	4
5:00:01 PM	3	1	4
5:00:40 PM	2	1	3
5:01:08 PM	3	0	3
5:01:29 PM	2	0	2
5:01:38 PM	2	1	3
5:01:52 PM	2	2	4
5:02:27 PM	2	3	5
5:02:43 PM	1	4	5
5:03:24 PM	2	4	6
5:04:00 PM	1	4	5
5:04:34 PM	2	3	5
5:04:55 PM	2	4	6
5:05:44 PM	3	4	7
5:05:49 PM	3	4	7
5:06:16 PM	2	4	6
5:06:51 PM	2	3	5
5:06:59 PM	1	4	5
5:07:10 PM	2	4	6
5:07:30 PM	3	3	6
5:08:48 PM	3	4	7
5:08:58 PM	2	4	6
5:09:11 PM	3	3	6
5:09:25 PM	3	4	7
5:09:51 PM	3	4	7
5:10:15 PM	2	4	6
5:10:39 PM	3	3	6
5:11:10 PM	2	3	5
5:11:40 PM	1	4	5
5:12:03 PM	2	3	5
5:12:16 PM	3	3	6
5:13:12 PM	2	5	7
5:14:24 PM	2	7	9
5:14:50 PM	3	6	9
5:15:13 PM	3	6	9
5:15:25 PM	2	5	7
5:16:16 PM	3	4	7
5:17:12 PM	4	5	9
5:18:13 PM	3	7	10
5:18:29 PM	2	7	9
5:18:39 PM	3	5	8
5:18:59 PM	3	7	10
5:19:15 PM	4	6	10
5:19:27 PM	4	8	12
5:19:41 PM	4	5	9
5:20:30 PM	3	7	10
5:20:42 PM	4	7	11
5:21:04 PM	3	8	11
5:21:42 PM	4	7	11

Locations: 17-1215-001  
 City: Laguna Hills, CA

Day: Saturday  
 Date: 10/14/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:31:26 PM	1	4	5
12:32:06 PM	2	3	5
12:33:10 PM	1	3	4
12:33:40 PM	2	3	5
12:35:10 PM	2	4	6
12:35:32 PM	3	4	7
12:35:51 PM	2	5	7
12:36:22 PM	2	5	7
12:36:50 PM	2	6	8
12:37:17 PM	1	6	7
12:37:44 PM	2	6	8
12:38:50 PM	1	7	8
12:39:07 PM	2	9	11
12:39:34 PM	2	7	9
12:40:41 PM	3	8	11
12:40:57 PM	3	9	12
12:41:21 PM	2	9	11
12:41:38 PM	3	10	13
12:42:17 PM	2	10	12
12:42:36 PM	3	9	12
12:42:50 PM	2	10	12
12:43:21 PM	1	9	10
12:43:41 PM	2	8	10
12:44:21 PM	2	5	7
12:44:44 PM	3	5	8
12:45:20 PM	2	5	7
12:45:46 PM	3	6	9
12:46:22 PM	2	6	8
12:46:56 PM	2	6	8
12:47:48 PM	3	5	8
12:48:11 PM	4	4	8
12:48:32 PM	3	9	12
12:48:49 PM	4	7	11
12:49:24 PM	4	4	8
12:50:08 PM	4	4	8
12:50:55 PM	3	4	7
12:51:43 PM	4	6	10
12:51:57 PM	3	7	10
12:52:18 PM	3	6	9
12:52:55 PM	2	6	8
12:52:59 PM	3	6	9
12:53:48 PM	2	6	8
12:54:00 PM	3	6	9
12:54:32 PM	4	5	9
12:55:21 PM	5	7	12
12:55:40 PM	4	7	11
12:55:56 PM	3	8	11
12:56:16 PM	3	6	9
12:56:45 PM	2	6	8
12:57:06 PM	3	6	9
12:57:44 PM	2	6	8
12:57:59 PM	3	7	10
12:58:25 PM	4	8	12
12:59:01 PM	4	8	12
12:59:24 PM	3	8	11
1:00:19 PM	4	10	14
1:00:28 PM	3	10	13
1:00:47 PM	2	7	9
1:01:06 PM	3	7	10
1:01:34 PM	3	4	7
1:02:14 PM	4	3	7
1:02:33 PM	3	3	6

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
5:21:54 PM	3	7	10
5:22:08 PM	4	8	12
5:22:35 PM	3	7	10
5:22:46 PM	4	7	11
5:23:06 PM	3	9	12
5:23:18 PM	4	8	12
5:24:13 PM	5	7	12
5:24:28 PM	4	8	12
5:24:56 PM	5	7	12
5:25:11 PM	4	6	10
5:25:28 PM	3	6	9
5:25:46 PM	4	7	11
5:26:10 PM	3	7	10
5:26:35 PM	4	6	10
5:26:51 PM	3	6	9
5:27:02 PM	2	7	9
5:27:53 PM	3	8	11
5:28:25 PM	2	8	10
5:28:46 PM	1	8	9
5:29:17 PM	2	6	8
5:29:38 PM	3	4	7
5:30:00 PM	4	4	8
5:30:11 PM	3	4	7
5:30:38 PM	4	3	7
5:31:19 PM	3	3	6
5:31:43 PM	4	2	6
5:31:56 PM	4	3	7
5:32:24 PM	2	4	6
5:32:37 PM	3	4	7
5:33:09 PM	2	5	7
5:34:07 PM	3	3	6
5:34:29 PM	3	4	7
5:35:42 PM	2	4	6
5:36:06 PM	1	5	6
5:36:47 PM	2	6	8
5:37:35 PM	2	5	7
5:38:30 PM	3	8	11
5:39:02 PM	3	5	8
5:39:37 PM	3	3	6
5:40:01 PM	2	3	5
5:40:23 PM	2	2	4
5:40:38 PM	2	3	5
5:41:17 PM	3	2	5
5:42:03 PM	4	1	5
5:42:30 PM	4	0	4
5:43:07 PM	3	0	3
5:43:30 PM	2	0	2
5:45:15 PM	1	0	1
5:45:45 PM	0	0	0
5:46:42 PM	0	1	1
5:47:10 PM	0	2	2
5:47:24 PM	0	3	3
5:47:58 PM	1	2	3
5:48:14 PM	1	3	4
5:48:38 PM	2	3	5
5:49:08 PM	3	4	7
5:49:32 PM	2	4	6
5:50:04 PM	1	6	7
5:50:19 PM	2	5	7
5:50:38 PM	2	7	9
5:50:50 PM	1	6	7
5:51:18 PM	2	6	8

Locations: 17-1215-001  
 City: Laguna Hills,CA

Day: Saturday  
 Date: 10/14/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:02:59 PM	4	4	8
1:03:17 PM	5	4	9
1:03:58 PM	4	5	9
1:04:15 PM	5	4	9
1:04:34 PM	4	4	8
1:04:48 PM	3	4	7
1:05:07 PM	5	3	8
1:05:42 PM	4	3	7
1:06:08 PM	3	4	7
1:06:21 PM	3	4	7
1:06:59 PM	2	4	6
1:07:25 PM	1	4	5
1:07:47 PM	2	4	6
1:08:06 PM	1	4	5
1:08:21 PM	2	3	5
1:08:38 PM	3	3	6
1:09:13 PM	2	3	5
1:09:39 PM	1	3	4
1:09:59 PM	2	5	7
1:10:27 PM	3	4	7
1:10:40 PM	2	4	6
1:10:58 PM	3	4	7
1:11:11 PM	2	5	7
1:11:49 PM	3	4	7
1:12:21 PM	2	5	7
1:12:55 PM	2	4	6
1:13:40 PM	3	5	8
1:14:00 PM	2	5	7
1:14:10 PM	3	4	7
1:14:30 PM	2	5	7
1:14:37 PM	3	4	7
1:14:55 PM	2	3	5
1:15:29 PM	2	4	6
1:15:52 PM	1	4	5
1:16:06 PM	2	3	5
1:16:22 PM	2	4	6
1:16:35 PM	1	5	6
1:17:15 PM	0	5	5
1:17:39 PM	1	5	6
1:18:05 PM	2	4	6
1:18:30 PM	3	4	7
1:18:49 PM	3	4	7
1:19:42 PM	4	5	9
1:20:13 PM	3	5	8
1:20:37 PM	5	4	9
1:20:57 PM	4	4	8
1:21:12 PM	3	7	10
1:22:19 PM	3	5	8
1:22:45 PM	2	5	7
1:22:59 PM	3	6	9
1:23:37 PM	2	7	9
1:23:51 PM	3	6	9
1:24:11 PM	3	5	8
1:24:22 PM	2	7	9
1:24:58 PM	1	8	9
1:25:14 PM	2	6	8
1:25:41 PM	2	5	7
1:25:58 PM	3	4	7
1:26:13 PM	2	6	8
1:27:01 PM	3	5	8
1:27:13 PM	2	4	6
1:27:34 PM	1	4	5

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
5:51:55 PM	3	6	9
5:52:42 PM	4	8	12
5:53:21 PM	5	8	13
5:55:28 PM	4	6	10
5:56:58 PM	5	6	11
5:57:18 PM	4	6	10
5:57:49 PM	5	7	12
5:58:22 PM	5	6	11
5:58:59 PM	4	6	10
5:59:30 PM	5	7	12
5:59:49 PM	4	6	10
6:00:23 PM	5	6	11
6:01:35 PM	4	5	9
6:02:06 PM	3	5	8
6:02:20 PM	4	5	9
6:02:47 PM	3	6	9
6:03:27 PM	4	6	10
6:03:58 PM	3	5	8
6:04:10 PM	2	5	7
6:04:19 PM	2	4	6
6:05:26 PM	3	5	8
6:05:56 PM	2	5	7
6:06:34 PM	3	4	7
6:07:01 PM	4	3	7
6:07:37 PM	5	2	7
6:08:41 PM	5	3	8
6:08:49 PM	5	4	9
6:09:48 PM	4	7	11
6:09:59 PM	5	6	11
6:10:26 PM	4	5	9
6:10:42 PM	5	7	12
6:11:15 PM	4	7	11
6:11:28 PM	4	7	11
6:11:54 PM	3	7	10
6:12:12 PM	4	6	10
6:12:35 PM	4	6	10
6:12:51 PM	3	5	8
6:13:11 PM	3	5	8
6:13:28 PM	2	5	7
6:13:48 PM	3	3	6
6:14:49 PM	4	3	7
6:15:04 PM	3	2	5
6:15:17 PM	3	3	6
6:15:28 PM	2	2	4
6:15:39 PM	3	3	6
6:15:52 PM	3	5	8
6:16:10 PM	3	4	7
6:16:33 PM	4	4	8
6:16:53 PM	5	6	11
6:17:22 PM	5	6	11
6:17:37 PM	5	8	13
6:17:52 PM	4	8	12
6:18:04 PM	5	5	10
6:18:23 PM	5	6	11
6:19:57 PM	5	6	11
6:20:48 PM	5	5	10
6:21:15 PM	4	5	9
6:21:36 PM	3	5	8
6:21:44 PM	4	5	9
6:21:59 PM	4	5	9
6:22:13 PM	4	4	8
6:22:29 PM	3	4	7

Locations: 17-1215-001  
 City: Laguna Hills,CA

Day: Saturday  
 Date: 10/14/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:28:20 PM	2	4	6
1:28:42 PM	2	5	7
1:28:59 PM	3	4	7
1:29:33 PM	4	4	8
1:29:47 PM	3	4	7
1:30:33 PM	4	3	7
1:30:48 PM	3	3	6
1:31:26 PM	3	4	7
1:31:45 PM	4	3	7
1:32:02 PM	3	3	6
1:32:37 PM	4	2	6
1:32:51 PM	3	2	5
1:33:09 PM	3	1	4
1:33:36 PM	3	2	5
1:33:46 PM	4	2	6
1:34:13 PM	4	3	7
1:34:25 PM	4	4	8
1:34:43 PM	5	4	9
1:35:03 PM	5	5	10
1:35:30 PM	4	4	8
1:36:12 PM	4	3	7
1:36:41 PM	3	3	6
1:37:03 PM	2	3	5
1:37:20 PM	3	4	7
1:38:01 PM	4	3	7
1:38:15 PM	5	4	9
1:38:38 PM	5	5	10
1:39:40 PM	4	5	9
1:40:14 PM	5	4	9
1:40:33 PM	4	4	8
1:40:43 PM	4	5	9
1:41:01 PM	5	4	9
1:41:17 PM	4	3	7
1:41:30 PM	3	2	5
1:42:00 PM	3	3	6
1:42:30 PM	2	3	5
1:42:35 PM	3	4	7
1:43:11 PM	2	4	6
1:43:38 PM	3	3	6
1:43:52 PM	2	3	5
1:44:49 PM	3	2	5
1:45:00 PM	3	3	6
1:46:30 PM	3	4	7
1:46:43 PM	2	4	6
1:47:17 PM	1	4	5
1:47:27 PM	2	3	5
1:47:49 PM	2	4	6
1:48:13 PM	1	5	6
1:48:36 PM	2	4	6
1:49:08 PM	1	5	6
1:49:42 PM	2	4	6
1:50:05 PM	2	4	6
1:50:52 PM	2	4	6
1:51:10 PM	3	4	7
1:51:44 PM	3	5	8
1:51:55 PM	3	3	6
1:52:06 PM	2	5	7
1:52:42 PM	3	5	8
1:52:58 PM	2	5	7
1:53:14 PM	3	4	7
1:53:32 PM	2	5	7
1:53:50 PM	1	5	6

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
6:22:46 PM	3	4	7
6:23:10 PM	4	4	8
6:23:27 PM	4	5	9
6:23:43 PM	5	5	10
6:24:01 PM	5	5	10
6:24:40 PM	4	5	9
6:24:48 PM	5	5	10
6:25:30 PM	4	5	9
6:25:46 PM	5	7	12
6:25:58 PM	4	7	11
6:26:10 PM	3	7	10
6:26:30 PM	2	7	9
6:26:41 PM	3	5	8
6:27:08 PM	2	5	7
6:27:50 PM	1	4	5
6:28:17 PM	2	4	6
6:29:19 PM	1	4	5
6:30:01 PM	2	3	5
6:30:10 PM	3	3	6
6:30:32 PM	4	3	7
6:31:00 PM	3	3	6
6:31:12 PM	4	2	6
6:31:44 PM	4	3	7
6:31:56 PM	5	3	8
6:32:13 PM	4	3	7
6:32:21 PM	5	2	7
6:32:43 PM	4	2	6
6:32:54 PM	4	3	7
6:33:16 PM	3	3	6
6:33:30 PM	4	2	6
6:33:38 PM	3	1	4
6:33:52 PM	3	2	5
6:34:17 PM	2	2	4
6:34:42 PM	3	2	5
6:35:01 PM	2	2	4
6:35:19 PM	1	2	3
6:35:29 PM	2	1	3
6:35:43 PM	2	2	4
6:35:55 PM	2	3	5
6:36:28 PM	3	2	5
6:36:42 PM	3	3	6
6:36:54 PM	4	2	6
6:37:23 PM	3	2	5
6:38:08 PM	3	3	6
6:38:36 PM	2	3	5
6:38:51 PM	3	2	5
6:39:09 PM	2	2	4
6:39:24 PM	2	1	3
6:39:53 PM	2	2	4
6:40:04 PM	3	2	5
6:40:20 PM	3	3	6
6:40:32 PM	2	3	5
6:40:50 PM	2	4	6
6:40:58 PM	3	4	7
6:41:21 PM	3	6	9
6:41:40 PM	4	5	9
6:42:42 PM	5	5	10
6:43:08 PM	4	5	9
6:43:26 PM	5	4	9
6:43:57 PM	4	4	8
6:44:14 PM	3	4	7
6:44:31 PM	4	3	7

Locations: 17-1215-001  
 City: Laguna Hills, CA

Day: Saturday  
 Date: 10/14/2017

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:54:05 PM	2	5	7
1:54:28 PM	3	4	7
1:54:59 PM	4	5	9
1:55:13 PM	3	5	8
1:56:03 PM	3	4	7
1:56:18 PM	3	5	8
1:56:31 PM	3	4	7
1:57:05 PM	3	5	8
1:57:37 PM	3	7	10
1:57:56 PM	4	6	10
1:58:31 PM	3	5	8
1:59:01 PM	4	4	8
1:59:25 PM	4	6	10
1:59:46 PM	5	5	10
2:00:00 PM	4	6	10

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
6:44:58 PM	3	4	7
6:45:12 PM	4	3	7
6:45:26 PM	3	3	6
6:45:47 PM	4	2	6
6:46:01 PM	3	2	5
6:46:15 PM	4	1	5
6:46:36 PM	4	2	6
6:46:58 PM	3	2	5
6:47:10 PM	3	3	6
6:47:29 PM	2	3	5
6:47:47 PM	2	4	6
6:47:58 PM	3	4	7
6:48:11 PM	3	5	8
6:48:40 PM	4	4	8
6:49:01 PM	3	4	7
6:49:16 PM	4	3	7
6:49:30 PM	3	3	6
6:49:43 PM	3	4	7
6:50:03 PM	4	3	7
6:50:26 PM	3	3	6
6:50:48 PM	3	2	5
6:51:49 PM	2	2	4
6:52:11 PM	3	1	4
6:52:39 PM	4	0	4
6:53:33 PM	4	1	5
6:53:44 PM	3	1	4
6:54:01 PM	4	0	4
6:54:29 PM	4	1	5
6:54:43 PM	3	1	4
6:54:59 PM	3	2	5
6:55:10 PM	4	1	5
6:55:39 PM	3	1	4
6:55:51 PM	3	2	5
6:56:04 PM	2	2	4
6:56:29 PM	2	1	3
6:56:42 PM	2	2	4
6:56:56 PM	3	1	4
6:57:09 PM	2	1	3
6:57:20 PM	3	0	3
6:57:46 PM	2	0	2
6:58:02 PM	1	0	1
6:58:39 PM	1	1	2
6:59:02 PM	0	1	1
6:59:17 PM	0	2	2
6:59:29 PM	1	1	2
7:00:00 PM	1	1	2

# Queue Study

Project: 18-1161  
City: Orange

Date: 8/22/2018  
Day: Wednesday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:00:00 PM	1	2	3
12:01:05 PM	1	3	4
12:01:10 PM	2	2	4
12:01:35 PM	1	3	4
12:01:50 PM	2	3	5
12:02:07 PM	2	3	5
12:02:49 PM	2	5	7
12:03:38 PM	3	4	7
12:04:03 PM	2	3	5
12:04:16 PM	1	5	6
12:04:34 PM	2	5	7
12:04:48 PM	2	4	6
12:05:08 PM	2	3	5
12:05:33 PM	2	3	5
12:05:46 PM	3	2	5
12:06:10 PM	2	2	4
12:06:30 PM	1	2	3
12:06:45 PM	2	1	3
12:06:53 PM	2	2	4
12:07:01 PM	2	3	5
12:07:14 PM	3	3	6
12:07:47 PM	3	2	5
12:08:01 PM	3	2	5
12:08:23 PM	4	1	5
12:08:38 PM	3	1	4
12:08:53 PM	2	1	3
12:09:14 PM	2	2	4
12:09:28 PM	3	1	4
12:09:33 PM	3	2	5
12:09:50 PM	3	2	5
12:10:05 PM	2	2	4
12:10:12 PM	3	1	4
12:10:21 PM	2	1	3
12:10:44 PM	2	2	4
12:10:49 PM	2	3	5
12:10:50 PM	2	3	5
12:11:07 PM	3	2	5
12:11:23 PM	3	3	6
12:11:37 PM	3	4	7
12:11:50 PM	4	3	7
12:12:01 PM	4	4	8
12:13:16 PM	4	3	7
12:13:21 PM	4	7	11
12:13:31 PM	4	8	12
12:13:43 PM	4	9	13
12:14:25 PM	4	10	14
12:15:39 PM	4	8	12

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
7:01:36 PM	4	10	14
7:01:49 PM	2	10	12
7:02:39 PM	2	10	12
7:03:06 PM	2	10	12
7:03:20 PM	2	9	11
7:03:31 PM	1	9	10
7:03:48 PM	2	9	11
7:03:55 PM	2	9	11
7:04:28 PM	2	9	11
7:04:48 PM	2	8	10
7:05:15 PM	1	7	8
7:05:23 PM	2	7	9
7:05:59 PM	3	8	11
7:06:31 PM	2	7	9
7:06:59 PM	1	7	8
7:07:13 PM	2	7	9
7:07:45 PM	3	8	11
7:08:17 PM	4	8	12
7:08:30 PM	3	9	12
7:08:55 PM	4	8	12
7:09:18 PM	4	9	13
7:09:56 PM	5	8	13
7:10:33 PM	5	9	14
7:10:56 PM	4	8	12
7:11:19 PM	4	8	12
7:11:34 PM	3	8	11
7:12:18 PM	3	8	11
7:13:07 PM	4	8	12
7:13:10 PM	3	6	9
7:13:31 PM	2	6	8
7:13:56 PM	3	8	11
7:14:07 PM	2	9	11
7:14:57 PM	3	9	12
7:15:03 PM	2	9	11
7:15:44 PM	2	9	11
7:16:07 PM	3	8	11
7:16:44 PM	4	9	13
7:17:17 PM	3	9	12
7:17:38 PM	2	9	11
7:17:51 PM	2	9	11
7:18:01 PM	3	8	11
7:18:31 PM	4	9	13
7:19:15 PM	5	8	13
7:19:25 PM	4	10	14
7:20:05 PM	3	10	13
7:20:21 PM	3	10	13
7:20:37 PM	2	10	12

Project: 18-1161  
 City: Orange

Date: 8/22/2018  
 Day: Wednesday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:15:50 PM	5	8	13
12:16:18 PM	5	7	12
12:16:41 PM	4	5	9
12:17:01 PM	3	5	8
12:17:22 PM	4	5	9
12:17:34 PM	3	3	6
12:17:55 PM	2	3	5
12:18:01 PM	2	3	5
12:18:34 PM	1	3	4
12:18:53 PM	1	3	4
12:19:21 PM	1	4	5
12:19:29 PM	2	5	7
12:19:49 PM	2	5	7
12:20:18 PM	3	3	6
12:20:31 PM	2	4	6
12:20:45 PM	2	4	6
12:20:59 PM	2	5	7
12:21:05 PM	2	6	8
12:21:27 PM	3	4	7
12:21:44 PM	2	4	6
12:21:54 PM	3	4	7
12:22:05 PM	2	4	6
12:22:12 PM	3	3	6
12:22:28 PM	2	3	5
12:22:43 PM	2	3	5
12:22:49 PM	3	2	5
12:22:57 PM	3	3	6
12:23:06 PM	2	3	5
12:23:23 PM	2	3	5
12:23:30 PM	0	3	3
12:24:02 PM	2	3	5
12:24:19 PM	2	4	6
12:24:30 PM	1	4	5
12:25:06 PM	1	3	4
12:25:25 PM	1	4	5
12:25:32 PM	1	4	5
12:26:00 PM	2	3	5
12:26:17 PM	2	4	6
12:26:35 PM	2	4	6
12:26:47 PM	1	4	5
12:27:45 PM	2	4	6
12:27:44 PM	3	3	6
12:27:58 PM	3	4	7
12:28:15 PM	3	5	8
12:28:37 PM	4	7	11
12:28:55 PM	4	7	11
12:29:27 PM	3	5	8
12:29:54 PM	2	5	7
12:30:12 PM	3	3	6
12:30:31 PM	2	3	5
12:30:50 PM	3	4	7

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
7:20:55 PM	4	10	14
7:21:22 PM	4	9	13
7:21:41 PM	3	10	13
7:21:53 PM	4	8	12
7:22:21 PM	5	9	14
7:22:35 PM	3	9	12
7:22:54 PM	2	9	11
7:23:09 PM	4	9	13
7:23:19 PM	3	9	12
7:23:34 PM	2	9	11
7:23:48 PM	2	9	11
7:24:05 PM	2	9	11
7:24:10 PM	3	9	12
7:24:44 PM	2	8	10
7:24:55 PM	3	8	11
7:25:03 PM	2	9	11
7:25:15 PM	3	8	11
7:25:28 PM	2	8	10
7:25:44 PM	2	9	11
7:25:58 PM	3	8	11
7:26:11 PM	2	9	11
7:26:35 PM	3	8	11
7:26:54 PM	4	7	11
7:27:07 PM	3	6	9
7:27:33 PM	3	6	9
7:27:47 PM	3	6	9
7:28:10 PM	3	7	10
7:29:10 PM	4	7	11
7:29:35 PM	5	7	12
7:29:47 PM	4	8	12
7:30:18 PM	5	7	12
7:30:42 PM	3	7	10
7:31:16 PM	4	7	11
7:31:42 PM	4	7	11
7:31:52 PM	5	6	11
7:32:04 PM	4	6	10
7:32:24 PM	3	6	9
7:32:36 PM	4	7	11
7:32:46 PM	3	7	10
7:33:05 PM	4	6	10
7:33:27 PM	3	7	10
7:33:40 PM	4	6	10
7:34:21 PM	4	5	9
7:34:52 PM	3	5	8
7:35:08 PM	3	5	8
7:36:07 PM	3	6	9
7:36:16 PM	3	5	8
7:36:36 PM	4	4	8
7:37:19 PM	5	3	8
7:37:43 PM	4	3	7
7:37:55 PM	5	2	7

Project: 18-1161  
 City: Orange

Date: 8/22/2018  
 Day: Wednesday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:31:40 PM	4	3	7
12:31:59 PM	4	3	7
12:32:25 PM	4	4	8
12:32:46 PM	3	4	7
12:33:06 PM	2	4	6
12:33:11 PM	2	3	5
12:33:26 PM	2	4	6
12:33:43 PM	1	4	5
12:33:55 PM	2	3	5
12:34:08 PM	2	4	6
12:34:15 PM	2	5	7
12:34:32 PM	2	5	7
12:34:50 PM	2	6	8
12:35:10 PM	3	6	9
12:35:22 PM	3	6	9
12:35:45 PM	3	4	7
12:36:17 PM	3	4	7
12:36:38 PM	3	4	7
12:36:54 PM	3	3	6
12:37:25 PM	3	6	9
12:38:05 PM	5	5	10
12:40:02 PM	5	4	9
12:40:39 PM	2	4	6
12:40:42 PM	3	3	6
12:41:08 PM	2	3	5
12:41:25 PM	2	4	6
12:41:39 PM	1	4	5
12:41:05 PM	2	6	8
12:42:28 PM	2	7	9
12:42:38 PM	3	6	9
12:43:34 PM	2	5	7
12:44:09 PM	2	6	8
12:44:46 PM	2	5	7
12:45:04 PM	2	5	7
12:45:30 PM	3	4	7
12:45:45 PM	2	4	6
12:46:01 PM	3	4	7
12:46:24 PM	4	5	9
12:47:00 PM	5	4	9
12:47:36 PM	4	4	8
12:47:54 PM	5	4	9
12:48:21 PM	4	4	8
12:48:49 PM	4	3	7
12:48:57 PM	4	3	7
12:49:23 PM	3	3	6
12:49:44 PM	5	2	7
12:49:59 PM	4	2	6
12:50:31 PM	3	3	6
12:50:47 PM	4	3	7
12:51:10 PM	3	6	9
12:51:38 PM	4	5	9

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
7:38:10 PM	5	3	8
7:38:37 PM	4	4	8
7:38:58 PM	3	4	7
7:39:14 PM	4	3	7
7:39:19 PM	4	3	7
7:40:02 PM	5	2	7
7:40:41 PM	5	3	8
7:41:36 PM	5	4	9
7:41:49 PM	5	4	9
7:42:06 PM	4	4	8
7:42:19 PM	4	4	8
7:42:41 PM	5	3	8
7:42:49 PM	4	3	7
7:43:01 PM	4	3	7
7:43:12 PM	4	4	8
7:43:30 PM	4	3	7
7:43:50 PM	4	4	8
7:44:09 PM	5	3	8
7:45:10 PM	5	4	9
7:45:39 PM	4	4	8
7:45:56 PM	5	3	8
7:46:04 PM	4	3	7
7:46:21 PM	4	4	8
7:46:30 PM	4	4	8
7:47:12 PM	3	4	7
7:47:46 PM	2	4	6
7:48:05 PM	3	4	7
7:48:10 PM	2	4	6
7:48:45 PM	2	4	6
7:49:02 PM	1	4	5
7:49:10 PM	2	5	7
7:49:37 PM	3	4	7
7:50:12 PM	4	3	7
7:50:21 PM	3	3	6
7:50:43 PM	4	3	7
7:51:02 PM	3	3	6
7:51:29 PM	3	3	6
7:51:42 PM	3	3	6
7:51:50 PM	3	4	7
7:52:00 PM	4	3	7
7:52:11 PM	4	4	8
7:53:04 PM	4	3	7
7:53:36 PM	5	6	11
7:54:08 PM	4	6	10
7:54:28 PM	5	7	12
7:54:42 PM	4	6	10
7:55:12 PM	3	6	9
7:55:33 PM	3	6	9
7:55:40 PM	2	6	8
7:55:49 PM	3	6	9
7:56:12 PM	3	6	9

Project: 18-1161  
 City: Orange

Date: 8/22/2018  
 Day: Wednesday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:51:59 PM	3	5	8
12:52:39 PM	3	5	8
12:52:58 PM	4	4	8
12:53:21 PM	4	6	10
12:53:30 PM	4	8	12
12:53:49 PM	5	11	16
12:54:21 PM	3	11	14
12:55:06 PM	4	10	14
12:55:36 PM	4	9	13
12:56:19 PM	3	9	12
12:56:35 PM	4	8	12
12:56:54 PM	4	8	12
12:57:25 PM	4	10	14
12:58:02 PM	5	8	13
12:59:14 PM	4	9	13
12:59:24 PM	4	9	13
12:59:57 PM	5	8	13
1:00:12 PM	4	9	13
1:00:32 PM	4	9	13
1:00:46 PM	4	7	11
1:00:59 PM	3	7	10
1:01:36 PM	4	6	10
1:01:49 PM	3	7	10
1:02:05 PM	4	6	10
1:02:26 PM	3	6	9
1:02:48 PM	2	8	10
1:03:01 PM	3	9	12
1:03:24 PM	2	9	11
1:03:40 PM	3	8	11
1:03:48 PM	3	8	11
1:04:13 PM	1	7	8
1:04:29 PM	2	8	10
1:05:06 PM	4	8	12
1:05:22 PM	3	7	10
1:05:45 PM	4	7	11
1:06:01 PM	2	7	9
1:06:39 PM	4	6	10
1:07:19 PM	2	6	8
1:07:34 PM	4	5	9
1:07:48 PM	4	5	9
1:07:58 PM	2	5	7
1:08:06 PM	4	7	11
1:08:34 PM	4	5	9
1:09:03 PM	5	4	9
1:09:36 PM	4	6	10
1:09:59 PM	5	6	11
1:10:09 PM	4	4	8
1:10:36 PM	3	4	7
1:10:53 PM	3	3	6
1:11:26 PM	3	2	5
1:12:01 PM	4	2	6

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
7:56:24 PM	4	6	10
7:57:00 PM	5	6	11
7:57:11 PM	4	6	10
7:57:34 PM	5	7	12
7:57:59 PM	4	8	12
7:58:30 PM	3	7	10
7:58:48 PM	4	6	10
7:59:11 PM	5	6	11
8:00:34 PM	5	7	12
8:01:21 PM	5	6	11
8:01:53 PM	4	6	10
8:02:21 PM	4	5	9
8:02:31 PM	4	6	10
8:02:50 PM	3	6	9
8:02:59 PM	2	6	8
8:03:22 PM	3	5	8
8:03:34 PM	2	6	8
8:03:46 PM	3	6	9
8:04:04 PM	2	7	9
8:04:30 PM	2	7	9
8:04:45 PM	2	7	9
8:05:17 PM	3	6	9
8:05:39 PM	2	9	11
8:05:51 PM	3	6	9
8:06:10 PM	2	6	8
8:06:37 PM	2	7	9
8:06:49 PM	3	7	10
8:07:03 PM	2	8	10
8:07:14 PM	1	8	9
8:07:41 PM	1	7	8
8:07:56 PM	2	6	8
8:08:30 PM	3	6	9
8:08:52 PM	3	5	8
8:09:11 PM	3	6	9
8:09:25 PM	2	6	8
8:09:41 PM	2	6	8
8:09:52 PM	3	6	9
8:10:41 PM	3	7	10
8:11:18 PM	3	7	10
8:11:41 PM	2	6	8
8:11:52 PM	3	7	10
8:12:16 PM	3	6	9
8:12:48 PM	3	7	10
8:12:59 PM	4	7	11
8:13:39 PM	4	8	12
8:14:19 PM	5	8	13
8:14:41 PM	4	8	12
8:15:02 PM	3	8	11
8:15:21 PM	4	8	12
8:15:59 PM	4	7	11
8:16:12 PM	4	7	11

Project: 18-1161  
 City: Orange

Date: 8/22/2018  
 Day: Wednesday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:12:30 PM	3	3	6
1:12:57 PM	3	3	6
1:13:05 PM	4	2	6
1:13:17 PM	3	2	5
1:13:28 PM	3	2	5
1:13:45 PM	3	3	6
1:13:58 PM	3	5	8
1:14:19 PM	3	6	9
1:14:52 PM	4	6	10
1:15:11 PM	4	5	9
1:15:26 PM	5	5	10
1:16:09 PM	5	5	10
1:16:37 PM	3	5	8
1:17:15 PM	3	6	9
1:17:38 PM	4	5	9
1:18:46 PM	4	4	8
1:18:58 PM	5	6	11
1:19:42 PM	4	6	10
1:20:30 PM	3	7	10
1:21:01 PM	2	7	9
1:21:09 PM	2	7	9
1:21:20 PM	2	6	8
1:21:42 PM	1	6	7
1:22:12 PM	0	6	6
1:22:34 PM	1	6	7
1:22:55 PM	2	5	7
1:23:33 PM	3	4	7
1:23:41 PM	2	4	6
1:23:49 PM	3	3	6
1:24:10 PM	2	3	5
1:24:12 PM	3	2	5
1:24:45 PM	3	3	6
1:24:57 PM	3	3	6
1:25:14 PM	3	4	7
1:25:42 PM	3	3	6
1:25:51 PM	2	3	5
1:26:03 PM	3	3	6
1:26:14 PM	2	3	5
1:26:20 PM	2	3	5
1:26:28 PM	3	2	5
1:26:47 PM	2	2	4
1:27:07 PM	3	1	4
1:27:25 PM	2	2	4
1:27:42 PM	2	3	5
1:27:53 PM	3	2	5
1:28:07 PM	2	2	4
1:28:23 PM	3	2	5
1:28:43 PM	3	3	6
1:28:42 PM	2	3	5
1:29:09 PM	1	3	4
1:29:42 PM	2	2	4

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
8:16:31 PM	3	7	10
8:16:54 PM	4	7	11
8:17:32 PM	5	7	12
8:17:53 PM	4	6	10
8:18:34 PM	4	6	10
8:18:47 PM	5	6	11
8:19:07 PM	3	7	10
8:19:34 PM	3	8	11
8:19:57 PM	3	7	10
8:20:23 PM	2	7	9
8:20:51 PM	3	7	10
8:21:08 PM	2	6	8
8:21:47 PM	2	6	8
8:21:55 PM	3	5	8
8:22:12 PM	2	5	7
8:22:34 PM	3	6	9
8:23:02 PM	3	6	9
8:23:09 PM	2	6	8
8:23:33 PM	2	6	8
8:23:54 PM	1	6	7
8:24:21 PM	1	5	6
8:24:56 PM	2	4	6
8:25:19 PM	2	4	6
8:25:28 PM	3	5	8
8:25:53 PM	3	5	8
8:26:06 PM	4	6	10
8:26:48 PM	5	6	11
8:27:02 PM	4	6	10
8:27:11 PM	5	5	10
8:27:40 PM	4	5	9
8:27:53 PM	4	4	8
8:28:14 PM	5	4	9
8:28:30 PM	3	2	5
8:28:46 PM	2	3	5
8:28:59 PM	2	4	6
8:29:00 PM	1	4	5
8:29:13 PM	2	3	5
8:29:39 PM	1	3	4
8:29:55 PM	2	2	4
8:30:01 PM	2	2	4
8:30:38 PM	3	1	4
8:30:43 PM	3	2	5
8:30:50 PM	2	2	4
8:30:59 PM	2	3	5
8:31:11 PM	2	3	5
8:31:48 PM	1	4	5
8:32:23 PM	2	4	6
8:32:31 PM	1	4	5
8:32:49 PM	2	4	6
8:32:59 PM	2	4	6
8:33:10 PM	2	5	7

Project: 18-1161  
 City: Orange

Date: 8/22/2018  
 Day: Wednesday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:29:54 PM	3	2	5
1:30:06 PM	2	2	4
1:30:30 PM	1	2	3
1:30:30 PM	1	2	3
1:30:57 PM	1	1	2
1:31:27 PM	2	0	2
1:31:33 PM	2	0	2
1:32:29 PM	2	0	2
1:33:28 PM	2	1	3
1:33:40 PM	2	2	4
1:33:42 PM	2	3	5
1:33:51 PM	1	3	4
1:34:06 PM	0	3	3
1:34:19 PM	1	2	3
1:34:39 PM	2	1	3
1:35:10 PM	3	0	3
1:35:28 PM	3	1	4
1:35:56 PM	4	1	5
1:36:08 PM	5	2	7
1:36:56 PM	3	2	5
1:37:09 PM	3	1	4
1:37:22 PM	3	2	5
1:37:39 PM	3	2	5
1:38:04 PM	2	2	4
1:38:34 PM	2	1	3
1:39:13 PM	3	0	3
1:39:19 PM	3	1	4
1:39:25 PM	3	1	4
1:39:40 PM	2	1	3
1:40:01 PM	2	1	3
1:40:24 PM	2	1	3
1:40:45 PM	1	2	3
1:41:11 PM	2	2	4
1:41:32 PM	2	1	3
1:41:45 PM	2	2	4
1:41:53 PM	3	2	5
1:42:21 PM	3	3	6
1:43:17 PM	4	2	6
1:43:29 PM	3	3	6
1:43:42 PM	3	2	5
1:44:18 PM	3	1	4
1:44:59 PM	4	0	4
1:45:10 PM	3	0	3
1:45:27 PM	2	0	2
1:45:36 PM	2	0	2
1:46:06 PM	2	0	2
1:46:53 PM	1	0	1
1:48:15 PM	0	1	1
1:49:02 PM	0	2	2
1:49:40 PM	1	2	3
1:50:28 PM	2	3	5

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
8:33:26 PM	2	5	7
8:33:48 PM	2	6	8
8:33:58 PM	1	6	7
8:34:13 PM	2	5	7
8:34:20 PM	1	5	6
8:35:02 PM	2	5	7
8:35:21 PM	2	6	8
8:35:48 PM	3	5	8
8:36:07 PM	4	5	9
8:36:40 PM	5	4	9
8:36:54 PM	5	4	9
8:37:06 PM	5	5	10
8:37:20 PM	5	5	10
8:37:41 PM	4	5	9
8:38:13 PM	3	5	8
8:38:34 PM	4	5	9
8:39:00 PM	5	5	10
8:39:23 PM	4	5	9
8:39:51 PM	3	5	8
8:40:19 PM	3	3	6
8:40:43 PM	2	4	6
8:41:05 PM	3	3	6
8:41:18 PM	2	3	5
8:41:26 PM	3	2	5
8:41:55 PM	2	2	4
8:42:09 PM	3	1	4
8:42:19 PM	2	1	3
8:42:25 PM	2	2	4
8:42:37 PM	1	3	4
8:42:49 PM	2	3	5
8:43:17 PM	2	3	5
8:43:32 PM	3	2	5
8:43:42 PM	3	3	6
8:43:56 PM	4	2	6
8:44:09 PM	4	3	7
8:44:17 PM	3	3	6
8:44:29 PM	4	3	7
8:44:46 PM	4	3	7
8:45:24 PM	5	2	7
8:45:32 PM	4	3	7
8:45:50 PM	3	3	6
8:46:04 PM	3	4	7
8:46:22 PM	3	3	6
8:46:47 PM	3	3	6
8:46:58 PM	4	2	6
8:47:07 PM	3	2	5
8:47:37 PM	4	1	5
8:48:04 PM	3	1	4
8:48:30 PM	3	0	3
8:49:06 PM	2	0	2
8:49:17 PM	2	0	2

Project: 18-1161  
 City: Orange

Date: 8/22/2018  
 Day: Wednesday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:50:57 PM	3	3	6
1:51:12 PM	3	2	5
1:51:33 PM	3	2	5
1:51:44 PM	4	1	5
1:51:50 PM	4	2	6
1:52:02 PM	4	2	6
1:52:07 PM	3	2	5
1:52:23 PM	2	2	4
1:52:32 PM	2	2	4
1:52:41 PM	3	1	4
1:52:44 PM	3	2	5
1:52:54 PM	3	2	5
1:53:10 PM	2	2	4
1:53:31 PM	2	3	5
1:53:51 PM	3	2	5
1:54:03 PM	2	3	5
1:54:21 PM	2	2	4
1:54:30 PM	2	2	4
1:54:36 PM	3	1	4
1:54:57 PM	2	1	3
1:55:10 PM	3	0	3
1:55:14 PM	2	2	4
1:55:25 PM	2	2	4
1:55:43 PM	1	2	3
1:55:50 PM	2	1	3
1:55:57 PM	2	1	3
1:56:23 PM	3	0	3
1:56:31 PM	3	0	3
1:56:44 PM	2	0	2
1:56:55 PM	2	1	3
1:57:07 PM	1	1	2
1:57:54 PM	1	2	3
1:57:59 PM	0	2	2
1:58:18 PM	1	2	3
1:58:35 PM	1	3	4
1:58:49 PM	2	2	4
1:58:57 PM	2	2	4
1:59:21 PM	1	2	3
1:59:32 PM	1	2	3
1:59:41 PM	2	1	3
1:59:49 PM	2	2	4
1:59:55 PM	2	3	5
2:00:03 PM	1	3	4
2:00:14 PM	2	2	4
2:00:21 PM	2	3	5
2:00:38 PM	3	2	5
2:00:47 PM	2	2	4
2:01:05 PM	2	3	5
2:01:22 PM	2	3	5
2:01:32 PM	2	2	4
2:01:49 PM	1	3	4

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
8:49:28 PM	2	1	3
8:49:45 PM	1	1	2
8:50:12 PM	2	0	2
8:50:24 PM	2	1	3
8:50:28 PM	2	2	4
8:50:59 PM	2	2	4
8:51:09 PM	1	2	3
8:51:44 PM	0	2	2
8:51:55 PM	0	3	3
8:52:29 PM	1	2	3
8:52:44 PM	1	3	4
8:52:52 PM	1	4	5
8:53:34 PM	1	5	6
8:53:42 PM	1	5	6
8:53:56 PM	2	5	7
8:54:19 PM	2	4	6
8:54:58 PM	3	3	6
8:55:21 PM	3	3	6
8:55:32 PM	3	4	7
8:55:51 PM	3	4	7
8:56:05 PM	2	4	6
8:56:15 PM	2	5	7
8:56:29 PM	3	4	7
8:56:53 PM	3	5	8
8:57:04 PM	2	5	7
8:57:29 PM	2	4	6
8:57:49 PM	2	4	6
8:58:10 PM	3	3	6
8:58:39 PM	3	4	7
8:59:01 PM	2	4	6
8:59:19 PM	3	4	7
9:00:11 PM	4	4	8
9:00:22 PM	4	5	9
9:00:31 PM	5	4	9
9:00:48 PM	5	5	10
9:01:12 PM	4	5	9
9:01:46 PM	5	5	10
9:02:37 PM	4	5	9
9:02:48 PM	5	4	9
9:03:45 PM	4	4	8
9:04:01 PM	3	4	7
9:04:15 PM	4	3	7
9:04:20 PM	4	4	8
9:04:25 PM	3	4	7
9:04:34 PM	4	4	8
9:04:45 PM	3	3	6
9:05:12 PM	4	2	6
9:05:18 PM	3	2	5
9:05:34 PM	3	3	6
9:05:46 PM	4	2	6
9:05:57 PM	3	3	6

Project: 18-1161  
 City: Orange

Date: 8/22/2018  
 Day: Wednesday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
2:02:12 PM	1	3	4
2:02:22 PM	2	2	4
2:02:56 PM	3	1	4
2:03:05 PM	3	1	4
2:03:10 PM	4	0	4
2:03:23 PM	3	1	4
2:03:39 PM	2	1	3
2:04:05 PM	2	2	4
2:04:10 PM	1	2	3
2:04:17 PM	2	1	3
2:04:39 PM	2	1	3
2:04:52 PM	3	2	5
2:05:01 PM	2	2	4
2:05:30 PM	2	2	4
2:05:42 PM	2	1	3
2:06:02 PM	1	2	3
2:06:22 PM	2	1	3
2:06:27 PM	2	2	4
2:00:35 PM	2	3	5
2:06:43 PM	3	2	5
2:07:27 PM	2	2	4
2:07:35 PM	3	2	5
2:07:55 PM	2	2	4
2:08:09 PM	3	1	4
2:08:24 PM	3	2	5
2:08:34 PM	2	2	4
2:08:54 PM	3	2	5
2:09:03 PM	3	2	5
2:09:10 PM	2	2	4
2:09:17 PM	3	1	4
2:09:46 PM	4	0	4
2:09:51 PM	3	0	3
2:10:37 PM	2	1	3
2:10:59 PM	2	1	3
2:11:17 PM	3	0	3
2:11:26 PM	2	0	2
2:11:46 PM	1	0	1
2:11:52 PM	1	0	1
2:11:56 PM	1	1	2
2:12:22 PM	2	1	3
2:12:46 PM	2	2	4
2:13:01 PM	3	1	4
2:13:11 PM	2	1	3
2:13:22 PM	3	0	3
2:13:49 PM	2	0	2
2:14:15 PM	1	1	2
2:14:36 PM	2	0	2
2:14:54 PM	2	1	3
2:15:08 PM	1	1	2
2:15:17 PM	2	0	2
2:15:36 PM	1	0	1

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
9:06:26 PM	3	2	5
9:06:39 PM	3	2	5
9:06:52 PM	2	3	5
9:07:19 PM	3	2	5
9:07:50 PM	3	2	5
9:08:15 PM	3	2	5
9:08:23 PM	3	3	6
9:08:28 PM	2	3	5
9:08:45 PM	3	2	5
9:08:51 PM	2	2	4
9:09:00 PM	2	3	5
9:09:19 PM	2	2	4
9:09:51 PM	1	2	3
9:09:57 PM	1	2	3
9:10:35 PM	2	3	5
9:10:55 PM	1	3	4
9:11:24 PM	2	3	5
9:11:41 PM	2	5	7
9:11:50 PM	2	6	8
9:12:14 PM	2	6	8
9:12:34 PM	2	6	8
9:13:02 PM	2	5	7
9:13:44 PM	2	4	6
9:13:51 PM	2	5	7
9:14:11 PM	1	5	6
9:14:39 PM	1	5	6
9:14:52 PM	2	5	7
9:15:24 PM	2	6	8
9:15:45 PM	3	5	8
9:16:20 PM	4	5	9
9:17:06 PM	4	6	10
9:17:52 PM	3	6	9
9:18:01 PM	2	6	8
9:18:11 PM	3	5	8
9:18:22 PM	2	5	7
9:18:50 PM	3	4	7
9:19:13 PM	4	4	8
9:19:37 PM	3	5	8
9:19:54 PM	4	4	8
9:20:21 PM	4	4	8
9:20:41 PM	5	4	9
9:21:35 PM	4	6	10
9:22:31 PM	5	5	10
9:22:50 PM	5	6	11
9:23:46 PM	4	6	10
9:23:55 PM	5	7	12
9:24:21 PM	3	6	9
9:24:51 PM	3	6	9
9:25:21 PM	3	4	7
9:25:36 PM	3	5	8
9:26:14 PM	3	4	7

Project: 18-1161  
 City: Orange

Date: 8/22/2018  
 Day: Wednesday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
2:15:54 PM	1	0	1
2:16:32 PM	1	1	2
2:17:21 PM	1	2	3
2:17:31 PM	2	1	3
2:17:50 PM	3	0	3
2:18:04 PM	3	0	3
2:18:27 PM	2	0	2
2:19:06 PM	1	0	1
2:19:34 PM	0	1	1
2:19:55 PM	1	1	2
2:20:05 PM	1	3	4
2:20:37 PM	1	4	5
2:20:45 PM	1	4	5
2:21:28 PM	2	3	5
2:21:52 PM	3	2	5
2:22:05 PM	3	3	6
2:22:27 PM	4	2	6
2:22:47 PM	4	2	6
2:22:56 PM	3	2	5
2:23:21 PM	3	2	5
2:23:33 PM	4	1	5
2:23:42 PM	3	1	4
2:23:51 PM	4	0	4
2:23:53 PM	3	0	3
2:24:25 PM	2	0	2
2:24:50 PM	2	1	3
2:25:31 PM	1	1	2
2:25:52 PM	0	1	1
2:26:02 PM	1	0	1
2:26:13 PM	1	1	2
2:26:49 PM	2	1	3
2:27:04 PM	2	1	3
2:27:20 PM	1	1	2
2:27:27 PM	1	1	2
2:27:50 PM	0	1	1
2:27:57 PM	1	0	1
2:28:36 PM	1	0	1
2:28:42 PM	1	1	2
2:29:31 PM	1	1	2
2:29:37 PM	1	2	3
2:29:53 PM	2	1	3

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
9:26:42 PM	4	3	7
9:27:03 PM	4	3	7
9:27:27 PM	3	2	5
9:27:43 PM	3	3	6
9:27:57 PM	2	3	5
9:28:21 PM	3	3	6
9:28:32 PM	3	4	7
9:28:41 PM	2	4	6
9:28:49 PM	2	4	6
9:29:09 PM	2	4	6
9:29:09 PM	2	3	5
9:29:32 PM	2	3	5
9:29:41 PM	3	2	5
9:29:59 PM	2	3	5
9:30:05 PM	2	3	5

# Queue Study

Project: 18-1161  
City: Orange

Date: 8/18/2018  
Day: Saturday

## 12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:02:39 PM	0	1	1
12:03:46 PM	2	1	3
12:04:53 PM	1	1	2
12:05:49 PM	2	1	3
12:06:12 PM	2	2	4
12:06:34 PM	1	2	3
12:06:44 PM	2	1	3
12:06:53 PM	2	2	4
12:07:00 PM	2	3	5
12:07:15 PM	2	2	4
12:07:37 PM	2	2	4
12:08:04 PM	3	2	5
12:08:23 PM	2	2	4
12:08:38 PM	2	2	4
12:08:57 PM	1	2	3
12:09:05 PM	2	3	5
12:09:22 PM	2	4	6
12:09:43 PM	3	3	6
12:09:17 PM	2	4	6
12:10:02 PM	2	4	6
12:10:18 PM	3	4	7
12:10:32 PM	3	4	7
12:10:53 PM	4	4	8
12:11:26 PM	5	3	8
12:11:38 PM	5	4	9
12:12:03 PM	4	5	9
12:12:19 PM	3	5	8
12:12:36 PM	4	4	8
12:13:04 PM	3	5	8
12:13:14 PM	3	4	7
12:13:38 PM	4	4	8
12:13:56 PM	3	4	7
12:14:12 PM	2	4	6
12:14:47 PM	2	4	6
12:14:58 PM	1	4	5
12:15:05 PM	1	4	5
12:16:10 PM	2	3	5
12:16:28 PM	2	4	6
12:16:43 PM	1	4	5
12:16:50 PM	1	4	5
12:17:05 PM	2	3	5
12:17:22 PM	1	4	5
12:17:41 PM	2	3	5
12:17:53 PM	2	3	5
12:18:16 PM	3	3	6
12:18:29 PM	3	4	7
12:18:57 PM	3	4	7

## 7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
7:01:58 PM	1	8	9
7:03:12 PM	0	8	8
7:03:33 PM	1	7	8
7:04:10 PM	2	7	9
7:04:21 PM	2	7	9
7:04:40 PM	3	7	10
7:04:53 PM	4	6	10
7:05:10 PM	3	6	9
7:05:17 PM	2	5	7
7:05:29 PM	2	7	9
7:06:15 PM	0	7	7
7:06:57 PM	2	6	8
7:07:21 PM	2	8	10
7:07:46 PM	3	10	13
7:08:36 PM	3	9	12
7:08:56 PM	2	9	11
7:09:28 PM	4	8	12
7:09:52 PM	3	7	10
7:10:11 PM	2	8	10
7:10:42 PM	3	8	11
7:11:01 PM	1	8	9
7:11:20 PM	3	7	10
7:11:31 PM	2	7	9
7:11:51 PM	2	7	9
7:12:07 PM	1	7	8
7:12:38 PM	0	7	7
7:12:46 PM	1	6	7
7:13:28 PM	2	7	9
7:13:50 PM	3	6	9
7:14:19 PM	4	5	9
7:14:43 PM	3	5	8
7:15:49 PM	3	6	9
7:16:08 PM	2	6	8
7:16:29 PM	1	6	7
7:16:50 PM	0	8	8
7:17:03 PM	1	9	10
7:17:38 PM	2	9	11
7:18:06 PM	2	10	12
7:18:13 PM	3	10	13
7:18:40 PM	4	9	13
7:19:36 PM	5	8	13
7:20:07 PM	5	7	12
7:20:27 PM	4	7	11
7:20:48 PM	3	9	12
7:21:28 PM	2	10	12
7:21:41 PM	2	11	13
7:22:00 PM	1	11	12

Project: 18-1161  
 City: Orange

Date: 8/18/2018  
 Day: Saturday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:19:20 PM	2	4	6
12:19:35 PM	3	4	7
12:19:58 PM	4	4	8
12:20:10 PM	3	4	7
12:20:46 PM	3	4	7
12:21:05 PM	2	4	6
12:21:15 PM	2	3	5
12:21:31 PM	1	3	4
12:21:38 PM	2	3	5
12:21:49 PM	2	4	6
12:22:21 PM	2	4	6
12:22:48 PM	1	4	5
12:22:59 PM	2	5	7
12:23:01 PM	2	5	7
12:23:32 PM	1	6	7
12:23:53 PM	1	6	7
12:24:24 PM	0	6	6
12:24:32 PM	1	5	6
12:25:00 PM	2	6	8
12:25:46 PM	3	5	8
12:26:27 PM	4	5	9
12:26:42 PM	3	5	8
12:27:06 PM	3	6	9
12:27:37 PM	3	5	8
12:27:52 PM	3	6	9
12:28:06 PM	3	7	10
12:28:31 PM	2	8	10
12:28:52 PM	2	8	10
12:29:03 PM	3	7	10
12:29:29 PM	2	6	8
12:29:57 PM	3	5	8
12:30:20 PM	2	5	7
12:30:32 PM	2	5	7
12:30:47 PM	2	6	8
12:31:11 PM	2	6	8
12:31:24 PM	2	6	8
12:31:57 PM	3	5	8
12:32:07 PM	2	5	7
12:32:21 PM	2	5	7
12:32:40 PM	3	4	7
12:32:58 PM	2	4	6
12:33:08 PM	3	3	6
12:33:19 PM	2	3	5
12:33:36 PM	3	2	5
12:33:56 PM	3	2	5
12:34:06 PM	4	1	5
12:34:16 PM	4	2	6
12:34:25 PM	3	3	6
12:34:39 PM	2	3	5
12:34:53 PM	2	3	5
12:35:03 PM	3	3	6

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
7:22:27 PM	0	11	11
7:22:55 PM	1	11	12
7:23:30 PM	2	10	12
7:23:58 PM	2	10	12
7:24:24 PM	3	9	12
7:24:40 PM	3	9	12
7:24:52 PM	2	9	11
7:25:03 PM	3	9	12
7:25:21 PM	3	9	12
7:25:59 PM	4	9	13
7:26:19 PM	4	9	13
7:26:48 PM	3	9	12
7:27:01 PM	2	10	12
7:27:33 PM	3	10	13
7:27:57 PM	4	9	13
7:29:43 PM	4	9	13
7:30:04 PM	3	9	12
7:30:17 PM	4	11	15
7:31:07 PM	4	10	14
7:31:17 PM	3	10	13
7:31:44 PM	3	10	13
7:31:59 PM	4	9	13
7:32:06 PM	3	9	12
7:32:16 PM	4	12	16
7:32:37 PM	2	11	13
7:32:57 PM	3	11	14
7:33:12 PM	3	10	13
7:33:57 PM	4	9	13
7:34:09 PM	3	9	12
7:34:41 PM	3	10	13
7:35:11 PM	4	10	14
7:35:21 PM	3	10	13
7:35:31 PM	2	10	12
7:35:50 PM	1	9	10
7:37:00 PM	2	10	12
7:37:15 PM	1	10	11
7:37:47 PM	2	9	11
7:38:05 PM	3	8	11
7:38:55 PM	3	8	11
7:39:16 PM	4	7	11
7:39:35 PM	3	7	10
7:39:57 PM	3	6	9
7:40:10 PM	2	6	8
7:40:49 PM	3	5	8
7:41:19 PM	2	5	7
7:41:41 PM	3	4	7
7:41:52 PM	2	6	8
7:42:14 PM	1	6	7
7:42:22 PM	2	5	7
7:42:31 PM	2	6	8
7:42:56 PM	4	5	9

Project: 18-1161  
 City: Orange

Date: 8/18/2018  
 Day: Saturday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:35:19 PM	3	3	6
12:35:25 PM	2	3	5
12:35:45 PM	1	3	4
12:35:52 PM	1	3	4
12:36:11 PM	2	2	4
12:36:19 PM	2	3	5
12:36:27 PM	2	4	6
12:36:44 PM	1	4	5
12:36:55 PM	2	3	5
12:37:04 PM	2	3	5
12:37:39 PM	2	3	5
12:38:05 PM	1	4	5
12:38:28 PM	0	4	4
12:39:12 PM	0	5	5
12:39:29 PM	1	4	5
12:39:59 PM	2	3	5
12:40:29 PM	3	3	6
12:40:50 PM	2	2	4
12:41:09 PM	3	2	5
12:41:21 PM	2	2	4
12:41:35 PM	2	3	5
12:42:15 PM	2	4	6
12:43:01 PM	3	4	7
12:43:40 PM	3	3	6
12:44:07 PM	3	5	8
12:44:24 PM	3	6	9
12:44:42 PM	2	6	8
12:45:20 PM	3	6	9
12:45:39 PM	2	6	8
12:45:56 PM	3	5	8
12:46:37 PM	2	6	8
12:47:00 PM	2	5	7
12:47:30 PM	3	5	8
12:47:52 PM	2	6	8
12:48:30 PM	2	6	8
12:49:23 PM	1	8	9
12:49:35 PM	2	6	8
12:49:51 PM	2	4	6
12:50:50 PM	2	5	7
12:51:10 PM	1	5	6
12:51:26 PM	2	6	8
12:51:44 PM	3	6	9
12:52:00 PM	2	6	8
12:52:19 PM	2	5	7
12:52:37 PM	2	5	7
12:52:53 PM	2	5	7
12:53:24 PM	3	5	8
12:53:37 PM	3	3	6
12:53:59 PM	3	4	7
12:54:30 PM	3	4	7
12:54:44 PM	3	4	7

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
7:43:07 PM	3	5	8
7:43:16 PM	3	6	9
7:43:33 PM	4	5	9
7:43:49 PM	3	5	8
7:43:55 PM	3	6	9
7:44:54 PM	4	5	9
7:45:14 PM	3	4	7
7:45:25 PM	4	3	7
7:45:40 PM	3	3	6
7:45:57 PM	3	2	5
7:46:16 PM	2	2	4
7:46:32 PM	2	3	5
7:46:42 PM	2	3	5
7:47:06 PM	3	2	5
7:47:40 PM	3	3	6
7:48:00 PM	3	2	5
7:48:24 PM	4	7	11
7:49:03 PM	4	2	6
7:49:09 PM	5	1	6
7:50:23 PM	5	2	7
7:51:21 PM	5	2	7
7:51:49 PM	4	2	6
7:52:07 PM	5	1	6
7:52:34 PM	4	1	5
7:52:47 PM	3	1	4
7:53:12 PM	3	1	4
7:53:40 PM	4	0	4
7:54:20 PM	3	0	3
7:54:18 PM	2	0	2
7:54:26 PM	1	0	1
7:55:35 PM	1	1	2
7:55:47 PM	1	2	3
7:56:08 PM	0	2	2
7:56:35 PM	1	1	2
7:57:02 PM	2	0	2
7:57:11 PM	2	0	2
7:57:38 PM	1	0	1
7:57:52 PM	1	1	2
7:58:14 PM	0	1	1
7:58:33 PM	0	2	2
7:58:45 PM	0	3	3
7:58:51 PM	1	2	3
7:59:00 PM	1	3	4
7:59:12 PM	2	2	4
7:59:38 PM	2	3	5
8:00:21 PM	2	3	5
8:00:30 PM	1	3	4
8:00:58 PM	1	2	3
8:01:28 PM	1	3	4
8:02:33 PM	1	2	3
8:02:49 PM	1	3	4

Project: 18-1161  
 City: Orange

Date: 8/18/2018  
 Day: Saturday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:54:58 PM	2	4	6
12:55:14 PM	3	3	6
12:55:40 PM	1	4	5
12:56:06 PM	0	4	4
12:56:27 PM	0	5	5
12:56:55 PM	1	6	7
12:57:18 PM	2	5	7
12:57:41 PM	1	5	6
12:58:10 PM	2	4	6
12:58:38 PM	3	3	6
12:58:50 PM	4	2	6
12:58:59 PM	3	1	4
12:59:10 PM	2	2	4
12:59:30 PM	3	3	6
12:59:45 PM	3	5	8
1:01:00 PM	2	5	7
1:01:38 PM	3	8	11
1:02:04 PM	4	7	11
1:02:20 PM	4	4	8
1:03:06 PM	3	8	11
1:04:10 PM	3	9	12
1:04:27 PM	3	5	8
1:04:56 PM	3	6	9
1:05:20 PM	4	6	10
1:05:53 PM	4	6	10
1:06:45 PM	4	6	10
1:07:27 PM	4	8	12
1:08:30 PM	3	9	12
1:09:18 PM	4	9	13
1:09:36 PM	4	9	13
1:09:54 PM	3	5	8
1:10:09 PM	3	9	12
1:10:25 PM	2	10	12
1:10:39 PM	3	10	13
1:11:04 PM	3	8	11
1:11:25 PM	3	9	12
1:11:32 PM	4	8	12
1:11:49 PM	3	9	12
1:12:05 PM	2	9	11
1:12:35 PM	2	7	9
1:13:13 PM	1	5	6
1:13:24 PM	1	5	6
1:13:34 PM	2	6	8
1:14:16 PM	2	9	11
1:14:24 PM	1	9	10
1:14:41 PM	1	11	12
1:14:42 PM	2	9	11
1:15:06 PM	1	9	10
1:15:25 PM	2	10	12
1:15:51 PM	3	9	12
1:16:25 PM	2	9	11

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
8:03:07 PM	2	2	4
8:03:22 PM	2	3	5
8:03:35 PM	3	2	5
8:03:45 PM	2	3	5
8:04:03 PM	3	2	5
8:04:28 PM	2	2	4
8:04:42 PM	2	2	4
8:05:06 PM	3	1	4
8:05:23 PM	3	2	5
8:05:41 PM	3	1	4
8:06:00 PM	3	2	5
8:06:10 PM	2	2	4
8:06:19 PM	2	3	5
8:06:32 PM	1	4	5
8:06:49 PM	2	3	5
8:07:08 PM	2	4	6
8:07:17 PM	2	4	6
8:07:38 PM	2	3	5
8:08:05 PM	2	3	5
8:08:45 PM	1	3	4
8:08:55 PM	1	4	5
8:09:07 PM	0	4	4
8:09:41 PM	1	3	4
8:10:40 PM	1	3	4
8:11:09 PM	2	2	4
8:11:17 PM	2	3	5
8:11:36 PM	2	4	6
8:11:45 PM	2	4	6
8:11:58 PM	2	5	7
8:12:09 PM	2	4	6
8:12:23 PM	3	5	8
8:12:39 PM	3	6	9
8:13:11 PM	3	6	9
8:13:19 PM	4	6	10
8:13:34 PM	3	6	9
8:13:53 PM	4	5	9
8:14:11 PM	3	5	8
8:14:36 PM	4	4	8
8:15:13 PM	4	4	8
8:15:24 PM	4	5	9
8:15:42 PM	3	6	9
8:16:09 PM	4	6	10
8:16:34 PM	4	5	9
8:16:51 PM	4	6	10
8:16:59 PM	3	6	9
8:17:14 PM	4	7	11
8:17:52 PM	5	6	11
8:18:29 PM	5	6	11
8:18:53 PM	4	8	12
8:19:10 PM	5	7	12
8:19:22 PM	4	6	10

Project: 18-1161  
 City: Orange

Date: 8/18/2018  
 Day: Saturday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:16:40 PM	3	9	12
1:17:07 PM	2	8	10
1:17:33 PM	2	8	10
1:17:56 PM	2	10	12
1:18:38 PM	2	11	13
1:18:53 PM	1	11	12
1:19:47 PM	0	11	11
1:19:54 PM	1	9	10
1:20:49 PM	2	9	11
1:21:18 PM	3	8	11
1:21:44 PM	3	8	11
1:22:15 PM	4	9	13
1:22:37 PM	5	8	13
1:23:05 PM	4	8	12
1:23:25 PM	4	7	11
1:23:49 PM	3	7	10
1:24:00 PM	2	7	9
1:24:20 PM	2	7	9
1:24:36 PM	2	7	9
1:24:55 PM	2	5	7
1:25:32 PM	3	4	7
1:26:01 PM	3	4	7
1:26:20 PM	3	5	8
1:26:39 PM	4	4	8
1:27:36 PM	2	4	6
1:27:45 PM	3	3	6
1:28:01 PM	2	4	6
1:28:13 PM	2	4	6
1:28:45 PM	2	4	6
1:28:54 PM	3	4	7
1:29:04 PM	3	4	7
1:29:08 PM	2	4	6
1:29:15 PM	3	4	7
1:29:17 PM	3	6	9
1:29:31 PM	2	6	8
1:29:55 PM	3	7	10
1:30:17 PM	2	7	9
1:30:30 PM	2	6	8
1:30:56 PM	3	5	8
1:31:42 PM	4	5	9
1:32:03 PM	3	6	9
1:32:30 PM	2	7	9
1:32:42 PM	2	8	10
1:32:50 PM	3	8	11
1:33:23 PM	4	8	12
1:33:55 PM	3	8	11
1:34:08 PM	4	9	13
1:34:30 PM	3	8	11
1:34:58 PM	3	7	10
1:35:13 PM	3	7	10
1:35:33 PM	2	8	10

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
8:19:49 PM	5	7	12
8:20:20 PM	3	7	10
8:21:21 PM	3	7	10
8:21:34 PM	3	8	11
8:21:48 PM	3	8	11
8:22:41 PM	3	8	11
8:23:52 PM	1	6	7
8:23:52 PM	2	7	9
8:24:25 PM	2	5	7
8:24:54 PM	2	5	7
8:25:20 PM	2	4	6
8:25:36 PM	3	3	6
8:16:04 PM	2	4	6
8:16:18 PM	2	5	7
8:16:52 PM	2	4	6
8:27:29 PM	1	6	7
8:28:13 PM	1	6	7
8:28:51 PM	2	6	8
8:29:07 PM	3	6	9
8:29:53 PM	3	4	7
8:30:19 PM	1	7	8
8:30:34 PM	3	6	9
8:31:10 PM	3	4	7
8:31:42 PM	2	4	6
8:32:18 PM	3	2	5
8:32:36 PM	4	1	5
8:33:10 PM	3	2	5
8:33:29 PM	2	3	5
8:34:03 PM	1	6	7
8:34:16 PM	0	6	6
8:34:37 PM	1	5	6
8:35:12 PM	1	6	7
8:35:21 PM	1	6	7
8:35:40 PM	2	7	9
8:35:57 PM	1	7	8
8:36:37 PM	2	6	8
8:37:00 PM	2	6	8
8:37:30 PM	3	6	9
8:37:50 PM	3	7	10
8:38:15 PM	3	6	9
8:38:33 PM	2	6	8
8:38:47 PM	2	6	8
8:39:17 PM	2	9	11
8:39:35 PM	1	9	10
8:40:25 PM	2	8	10
8:40:46 PM	3	7	10
8:41:08 PM	2	7	9
8:41:16 PM	3	9	12
8:41:30 PM	3	9	12
8:41:43 PM	4	6	10
8:42:27 PM	5	6	11

Project: 18-1161  
 City: Orange

Date: 8/18/2018  
 Day: Saturday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:35:50 PM	3	9	12
1:36:08 PM	2	9	11
1:36:22 PM	3	7	10
1:37:02 PM	3	5	8
1:37:51 PM	2	5	7
1:38:05 PM	3	4	7
1:38:30 PM	2	4	6
1:39:01 PM	3	3	6
1:39:24 PM	3	2	5
1:39:43 PM	3	4	7
1:40:07 PM	3	6	9
1:40:20 PM	3	6	9
1:40:32 PM	4	5	9
1:41:19 PM	3	5	8
1:41:34 PM	4	5	9
1:42:04 PM	3	4	7
1:42:24 PM	4	4	8
1:42:38 PM	4	5	9
1:42:53 PM	3	5	8
1:43:16 PM	2	5	7
1:43:32 PM	2	5	7
1:43:45 PM	3	4	7
1:43:58 PM	2	4	6
1:44:21 PM	2	4	6
1:44:39 PM	3	3	6
1:44:59 PM	3	2	5
1:45:17 PM	3	3	6
1:45:31 PM	3	3	6
1:45:46 PM	3	3	6
1:46:11 PM	4	2	6
1:46:47 PM	4	2	6
1:47:00 PM	3	2	5
1:47:15 PM	3	2	5
1:47:26 PM	4	1	5
1:47:37 PM	4	2	6
1:47:54 PM	3	3	6
1:48:06 PM	4	2	6
1:48:29 PM	3	2	5
1:48:52 PM	2	2	4
1:49:10 PM	2	2	4
1:49:24 PM	3	1	4
1:49:39 PM	2	2	4
1:49:48 PM	3	1	4
1:50:18 PM	3	0	3
1:50:42 PM	2	0	2
1:50:51 PM	2	2	4
1:51:14 PM	1	2	3
1:51:31 PM	1	2	3
1:52:40 PM	2	1	3
1:51:54 PM	1	2	3
1:52:02 PM	3	0	3

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
8:42:37 PM	4	8	12
8:42:59 PM	3	8	11
8:43:27 PM	4	9	13
8:43:54 PM	2	9	11
8:44:28 PM	1	9	10
8:44:39 PM	2	9	11
8:44:53 PM	3	8	11
8:45:10 PM	2	10	12
8:45:20 PM	2	10	12
8:45:49 PM	3	12	15
8:46:10 PM	2	11	13
8:46:33 PM	2	12	14
8:47:09 PM	3	12	15
8:47:33 PM	3	13	16
8:47:45 PM	4	13	17
8:48:53 PM	5	12	17
8:49:03 PM	4	11	15
8:49:33 PM	3	12	15
8:49:49 PM	4	12	16
8:50:08 PM	3	11	14
8:50:44 PM	4	12	16
8:51:43 PM	4	10	14
8:51:55 PM	5	10	15
8:52:46 PM	5	11	16
8:53:47 PM	5	10	15
8:54:38 PM	5	12	17
8:55:06 PM	4	12	16
8:55:25 PM	4	9	13
8:55:41 PM	4	9	13
8:56:23 PM	4	9	13
8:57:59 PM	5	11	16
8:58:16 PM	5	12	17
8:58:46 PM	5	12	17
8:59:22 PM	5	11	16
8:59:48 PM	5	10	15
9:00:45 PM	4	12	16
9:01:28 PM	5	11	16
9:02:19 PM	5	12	17
9:02:49 PM	5	11	16
9:03:36 PM	5	11	16
9:04:05 PM	5	10	15
9:04:45 PM	4	11	15
9:05:02 PM	4	10	14
9:05:42 PM	3	10	13
9:05:53 PM	3	10	13
9:06:02 PM	4	10	14
9:06:13 PM	3	10	13
9:06:22 PM	3	13	16
9:06:38 PM	3	12	15
9:06:53 PM	3	12	15
9:07:20 PM	3	11	14

Project: 18-1161  
 City: Orange

Date: 8/18/2018  
 Day: Saturday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:52:28 PM	1	0	1
1:52:38 PM	2	1	3
1:53:10 PM	3	2	5
1:53:23 PM	2	2	4
1:53:49 PM	2	2	4
1:53:58 PM	3	2	5
1:54:29 PM	3	1	4
1:54:42 PM	3	0	3
1:54:59 PM	3	2	5
1:55:22 PM	2	2	4
1:55:30 PM	1	2	3
1:55:43 PM	2	1	3
1:56:19 PM	3	0	3
1:56:27 PM	2	0	2
1:57:08 PM	2	0	2
1:57:26 PM	2	1	3
1:57:35 PM	1	1	2
1:57:41 PM	1	2	3
1:57:48 PM	1	3	4
1:57:53 PM	0	3	3
1:58:02 PM	1	2	3
1:58:11 PM	1	3	4
1:58:42 PM	2	2	4
1:59:00 PM	2	2	4
1:59:11 PM	3	1	4
1:59:42 PM	2	0	2
1:59:55 PM	2	2	4
2:00:00 PM	1	2	3
2:00:59 PM	1	2	3
2:01:27 PM	2	1	3
2:01:57 PM	3	2	5
2:02:06 PM	3	3	6
2:02:24 PM	4	2	6
2:02:51 PM	3	2	5
2:03:20 PM	3	2	5
2:03:41 PM	2	1	3
2:04:00 PM	3	0	3
2:04:25 PM	3	0	3
2:05:00 PM	3	2	5
2:06:05 PM	3	2	5
2:06:43 PM	2	2	4
2:07:16 PM	2	1	3
2:07:50 PM	2	0	2
2:08:25 PM	2	2	4
2:08:50 PM	3	2	5
2:09:46 PM	4	1	5
2:10:10 PM	4	3	7
2:10:36 PM	5	3	8
2:10:48 PM	4	3	7
2:11:05 PM	4	4	8
2:12:04 PM	3	4	7

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
9:07:49 PM	3	10	13
9:08:16 PM	2	9	11
9:08:49 PM	3	8	11
9:08:59 PM	2	7	9
9:09:20 PM	2	7	9
9:10:01 PM	3	8	11
9:10:18 PM	2	8	10
9:10:40 PM	2	7	9
9:11:12 PM	2	7	9
9:11:28 PM	3	7	10
9:12:47 PM	3	6	9
9:13:26 PM	2	6	8
9:13:51 PM	3	5	8
9:14:40 PM	3	4	7
9:15:01 PM	2	5	7
9:15:24 PM	3	6	9
9:16:04 PM	2	6	8
9:16:33 PM	1	8	9
9:17:09 PM	0	8	8
9:17:45 PM	1	7	8
9:18:33 PM	1	6	7
9:19:02 PM	2	5	7
9:19:20 PM	1	5	6
9:20:01 PM	2	5	7
9:20:29 PM	3	4	7
9:21:21 PM	3	5	8
9:21:29 PM	2	5	7
9:21:38 PM	2	6	8
9:21:48 PM	1	7	8
9:22:40 PM	2	8	10
9:23:36 PM	1	8	9
9:23:50 PM	2	7	9
9:24:04 PM	2	7	9
9:24:22 PM	2	8	10
9:24:41 PM	3	9	12
9:25:08 PM	3	11	14
9:25:17 PM	3	12	15
9:25:29 PM	2	11	13
9:25:47 PM	2	10	12
9:26:06 PM	1	9	10
9:26:44 PM	0	10	10
9:26:58 PM	2	9	11
9:27:43 PM	2	8	10
9:28:28 PM	2	7	9
9:29:10 PM	2	8	10
9:30:44 PM	2	8	10

Project: 18-1161  
 City: Orange

Date: 8/18/2018  
 Day: Saturday

12:00 PM - 2:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
2:13:30 PM	4	4	8
2:13:55 PM	2	4	6
2:14:21 PM	2	4	6
2:14:51 PM	1	4	5
2:15:18 PM	2	4	6
2:15:50 PM	1	5	6
2:16:05 PM	2	4	6
2:16:19 PM	3	3	6
2:16:44 PM	2	3	5
2:16:56 PM	3	3	6
2:17:07 PM	2	4	6
2:17:16 PM	2	4	6
2:17:26 PM	1	4	5
2:17:37 PM	2	3	5
2:18:17 PM	3	2	5
2:18:42 PM	2	2	4
2:18:54 PM	2	3	5
2:19:04 PM	3	2	5
2:19:30 PM	4	2	6
2:19:56 PM	4	2	6
2:19:59 PM	4	3	7
2:20:50 PM	4	4	8
2:21:10 PM	3	2	5
2:21:26 PM	3	2	5
2:21:34 PM	3	1	4
2:21:41 PM	3	1	4
2:22:26 PM	4	0	4
2:22:44 PM	4	1	5
2:22:56 PM	4	2	6
2:23:43 PM	4	3	7
2:24:49 PM	5	3	8
2:25:11 PM	4	5	9
2:25:40 PM	4	4	8
2:26:03 PM	3	4	7
2:26:18 PM	3	6	9
2:26:33 PM	2	6	8
2:26:45 PM	3	5	8
2:27:44 PM	4	6	10
2:27:52 PM	3	6	9
2:28:09 PM	2	6	8
2:28:21 PM	3	6	9
2:28:49 PM	3	5	8
2:29:19 PM	3	4	7
2:29:48 PM	3	3	6

7:00PM - 9:30 PM

Arrival Time	Pick-up to Order Board	Behind Order Board	Total

### Queue Study

Project: 11066 Magnolia Ave Riverside  
 City: Riverside, CA

Date: 3/27/2019  
 Day: Wednesday

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
11:00 AM	0	0	0
11:01 AM	0	0	0
11:02 AM	0	0	0
11:03 AM	0	0	0
11:04 AM	0	0	0
11:05 AM	0	1	1
11:06 AM	0	1	1
11:07 AM	1	2	3
11:08 AM	1	3	4
11:09 AM	2	1	3
11:10 AM	3	1	4
11:11 AM	3	0	3
11:12 AM	2	0	2
11:13 AM	1	1	2
11:14 AM	0	3	3
11:15 AM	1	4	5
11:16 AM	2	2	4
11:17 AM	3	0	3
11:18 AM	2	0	2
11:19 AM	0	0	0
11:20 AM	0	2	2
11:21 AM	1	1	2
11:22 AM	1	2	3
11:23 AM	4	1	5
11:24 AM	4	2	6
11:25 AM	4	1	5
11:26 AM	2	1	3
11:27 AM	1	2	3
11:28 AM	1	1	2
11:29 AM	1	0	1
11:30 AM	1	1	2
11:31 AM	1	0	1
11:32 AM	0	0	0
11:33 AM	1	0	1
11:34 AM	1	0	1
11:35 AM	1	1	2
11:36 AM	2	0	2
11:37 AM	0	1	1
11:38 AM	1	0	1
11:39 AM	1	1	2
11:40 AM	0	0	0
11:41 AM	0	0	0
11:42 AM	0	1	1
11:43 AM	0	1	1
11:44 AM	1	0	1
11:45 AM	1	1	2
11:46 AM	1	2	3
11:47 AM	2	1	3
11:48 AM	3	0	3
11:49 AM	2	0	2
11:50 AM	1	1	2
11:51 AM	1	1	2
11:52 AM	1	3	4
11:53 AM	3	1	4
11:54 AM	3	2	5
11:55 AM	3	0	3
11:56 AM	2	1	3
11:57 AM	1	0	1
11:58 AM	1	3	4
11:59 AM	1	3	4
12:00 PM	1	3	4
12:01 PM	2	1	3
12:02 PM	1	6	7
12:03 PM	3	5	8
12:04 PM	3	4	7
12:05 PM	4	3	7

Time: (by min)	Pick-up to Order Board	Behind Order Board	Total
4:00 PM	1	2	3
4:01 PM	1	1	2
4:02 PM	3	2	5
4:03 PM	3	3	6
4:04 PM	4	2	6
4:05 PM	3	1	4
4:06 PM	2	2	4
4:07 PM	4	1	5
4:08 PM	3	0	3
4:09 PM	1	0	1
4:10 PM	1	2	3
4:11 PM	2	2	4
4:12 PM	2	1	3
4:13 PM	2	0	2
4:14 PM	1	1	2
4:15 PM	1	0	1
4:16 PM	0	0	0
4:17 PM	0	0	0
4:18 PM	0	4	4
4:19 PM	1	3	4
4:20 PM	1	2	3
4:21 PM	2	0	2
4:22 PM	1	0	1
4:23 PM	1	1	2
4:24 PM	2	1	3
4:25 PM	2	1	3
4:26 PM	2	1	3
4:27 PM	1	1	2
4:28 PM	1	0	1
4:29 PM	0	1	1
4:30 PM	1	1	2
4:31 PM	0	3	3
4:32 PM	2	1	3
4:33 PM	2	1	3
4:34 PM	1	1	2
4:35 PM	1	0	1
4:36 PM	1	0	1
4:37 PM	0	3	3
4:38 PM	1	6	7
4:39 PM	2	5	7
4:40 PM	1	4	5
4:41 PM	2	4	6
4:42 PM	2	4	6
4:43 PM	1	3	4
4:44 PM	3	1	4
4:45 PM	3	1	4
4:46 PM	3	2	5
4:47 PM	4	2	6
4:48 PM	6	3	9
4:49 PM	6	2	8
4:50 PM	6	3	9
4:51 PM	6	4	10
4:52 PM	6	3	9
4:53 PM	5	3	8
4:54 PM	5	2	7
4:55 PM	3	2	5
4:56 PM	2	1	3
4:57 PM	3	0	3
4:58 PM	2	1	3
4:59 PM	3	1	4
5:00 PM	4	2	6
5:01 PM	4	1	5
5:02 PM	4	1	5
5:03 PM	2	0	2
5:04 PM	1	1	2
5:05 PM	1	0	1

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:06 PM	6	1	7
12:07 PM	4	3	7
12:08 PM	6	1	7
12:09 PM	4	0	4
12:10 PM	2	1	3
12:11 PM	1	4	5
12:12 PM	2	2	4
12:13 PM	2	1	3
12:14 PM	2	3	5
12:15 PM	2	3	5
12:16 PM	2	2	4
12:17 PM	2	2	4
12:18 PM	2	2	4
12:19 PM	1	3	4
12:20 PM	2	1	3
12:21 PM	2	1	3
12:22 PM	1	1	2
12:23 PM	1	2	3
12:24 PM	1	3	4
12:25 PM	1	5	6
12:26 PM	1	7	8
12:27 PM	2	6	8
12:28 PM	3	6	9
12:29 PM	2	5	7
12:30 PM	0	6	6
12:31 PM	2	6	8
12:32 PM	3	4	7
12:33 PM	3	4	7
12:34 PM	3	3	6
12:35 PM	2	3	5
12:36 PM	2	3	5
12:37 PM	1	5	6
12:38 PM	1	8	9
12:39 PM	2	5	7
12:40 PM	3	9	12
12:41 PM	5	6	11
12:42 PM	4	5	9
12:43 PM	5	4	9
12:44 PM	5	5	10
12:45 PM	3	3	6
12:46 PM	4	3	7
12:47 PM	3	3	6
12:48 PM	3	4	7
12:49 PM	3	4	7
12:50 PM	3	3	6
12:51 PM	1	4	5
12:52 PM	2	3	5
12:53 PM	2	3	5
12:54 PM	2	4	6
12:55 PM	1	4	5
12:56 PM	2	3	5
12:57 PM	4	1	5
12:58 PM	2	3	5
12:59 PM	3	1	4
1:00 PM	1	2	3
1:01 PM	1	2	3
1:02 PM	1	5	6
1:03 PM	2	4	6
1:04 PM	3	2	5
1:05 PM	2	3	5
1:06 PM	2	2	4
1:07 PM	4	0	4
1:08 PM	1	1	2
1:09 PM	1	3	4
1:10 PM	2	5	7
1:11 PM	3	5	8
1:12 PM	3	4	7
1:13 PM	3	4	7
1:14 PM	2	5	7
1:15 PM	2	4	6

Time: (by min)	Pick-up to Order Board	Behind Order Board	Total
5:06 PM	1	0	1
5:07 PM	0	0	0
5:08 PM	0	0	0
5:09 PM	0	0	0
5:10 PM	0	1	1
5:11 PM	1	0	1
5:12 PM	1	1	2
5:13 PM	1	3	4
5:14 PM	3	0	3
5:15 PM	2	0	2
5:16 PM	2	1	3
5:17 PM	2	0	2
5:18 PM	1	0	1
5:19 PM	0	1	1
5:20 PM	0	2	2
5:21 PM	2	1	3
5:22 PM	2	2	4
5:23 PM	2	1	3
5:24 PM	2	1	3
5:25 PM	2	4	6
5:26 PM	2	2	4
5:27 PM	1	5	6
5:28 PM	3	5	8
5:29 PM	1	5	6
5:30 PM	1	5	6
5:31 PM	2	6	8
5:32 PM	4	5	9
5:33 PM	5	4	9
5:34 PM	5	5	10
5:35 PM	5	3	8
5:36 PM	3	3	6
5:37 PM	2	3	5
5:38 PM	1	3	4
5:39 PM	2	3	5
5:40 PM	2	1	3
5:41 PM	2	1	3
5:42 PM	1	1	2
5:43 PM	1	0	1
5:44 PM	0	0	0
5:45 PM	0	1	1
5:46 PM	1	0	1
5:47 PM	0	1	1
5:48 PM	0	1	1
5:49 PM	1	3	4
5:50 PM	3	1	4
5:51 PM	1	2	3
5:52 PM	2	0	2
5:53 PM	1	1	2
5:54 PM	2	2	4
5:55 PM	2	1	3
5:56 PM	2	0	2
5:57 PM	2	2	4
5:58 PM	4	2	6
5:59 PM	1	2	3
6:00 PM	0	2	2
6:01 PM	2	3	5
6:02 PM	2	4	6
6:03 PM	2	3	5
6:04 PM	2	3	5
6:05 PM	2	2	4
6:06 PM	2	4	6
6:07 PM	3	5	8
6:08 PM	2	5	7
6:09 PM	2	5	7
6:10 PM	3	6	9
6:11 PM	3	6	9
6:12 PM	4	7	11
6:13 PM	3	6	9
6:14 PM	2	6	8
6:15 PM	4	5	9

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:16 PM	2	4	6
1:17 PM	3	2	5
1:18 PM	4	1	5
1:19 PM	3	0	3
1:20 PM	2	3	5
1:21 PM	1	4	5
1:22 PM	1	4	5
1:23 PM	2	5	7
1:24 PM	3	7	10
1:25 PM	4	5	9
1:26 PM	3	6	9
1:27 PM	4	6	10
1:28 PM	1	5	6
1:29 PM	3	5	8
1:30 PM	3	6	9
1:31 PM	2	5	7
1:32 PM	3	4	7
1:33 PM	4	3	7
1:34 PM	4	2	6
1:35 PM	4	3	7
1:36 PM	4	2	6
1:37 PM	4	1	5
1:38 PM	4	1	5
1:39 PM	1	1	2
1:40 PM	1	0	1
1:41 PM	0	0	0
1:42 PM	0	0	0
1:43 PM	0	3	3
1:44 PM	2	1	3
1:45 PM	1	2	3
1:46 PM	2	3	5
1:47 PM	0	3	3
1:48 PM	0	5	5
1:49 PM	1	6	7
1:50 PM	2	3	5
1:51 PM	2	3	5
1:52 PM	1	3	4
1:53 PM	1	3	4
1:54 PM	1	4	5
1:55 PM	2	4	6
1:56 PM	2	4	6
1:57 PM	4	2	6
1:58 PM	3	3	6
1:59 PM	2	3	5

Time: (by min)	Pick-up to Order Board	Behind Order Board	Total
6:16 PM	2	5	7
6:17 PM	3	5	8
6:18 PM	4	5	9
6:19 PM	3	4	7
6:20 PM	3	4	7
6:21 PM	2	5	7
6:22 PM	4	3	7
6:23 PM	4	1	5
6:24 PM	3	1	4
6:25 PM	3	1	4
6:26 PM	1	3	4
6:27 PM	2	2	4
6:28 PM	2	3	5
6:29 PM	1	6	7
6:30 PM	2	5	7
6:31 PM	3	5	8
6:32 PM	3	4	7
6:33 PM	3	3	6
6:34 PM	2	3	5
6:35 PM	1	2	3
6:36 PM	2	1	3
6:37 PM	2	0	2
6:38 PM	1	1	2
6:39 PM	1	0	1
6:40 PM	1	2	3
6:41 PM	1	4	5
6:42 PM	1	3	4
6:43 PM	3	3	6
6:44 PM	2	3	5
6:45 PM	3	1	4
6:46 PM	2	1	3
6:47 PM	2	0	2
6:48 PM	1	0	1
6:49 PM	0	1	1
6:50 PM	1	1	2
6:51 PM	1	1	2
6:52 PM	2	2	4
6:53 PM	2	3	5
6:54 PM	1	3	4
6:55 PM	1	2	3
6:56 PM	2	1	3
6:57 PM	1	3	4
6:58 PM	1	3	4
6:59 PM	2	2	4

### Queue Study

Project: 11066 Magnolia Ave Riverside  
 City: Riverside, CA

Date: 3/30/2019  
 Day: Saturday

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
11:00 AM	0	0	0
11:01 AM	1	0	1
11:02 AM	1	0	1
11:03 AM	1	0	1
11:04 AM	0	0	0
11:05 AM	0	0	0
11:06 AM	1	1	2
11:07 AM	2	0	2
11:08 AM	1	0	1
11:09 AM	1	0	1
11:10 AM	1	3	4
11:11 AM	3	1	4
11:12 AM	3	3	6
11:13 AM	3	3	6
11:14 AM	4	2	6
11:15 AM	5	1	6
11:16 AM	5	1	6
11:17 AM	5	1	6
11:18 AM	4	0	4
11:19 AM	4	0	4
11:20 AM	3	0	3
11:21 AM	2	0	2
11:22 AM	0	0	0
11:23 AM	1	0	1
11:24 AM	1	0	1
11:25 AM	0	0	0
11:26 AM	0	0	0
11:27 AM	0	0	0
11:28 AM	1	0	1
11:29 AM	1	0	1
11:30 AM	1	1	2
11:31 AM	2	1	3
11:32 AM	2	2	4
11:33 AM	4	0	4
11:34 AM	3	0	3
11:35 AM	4	1	5
11:36 AM	5	1	6
11:37 AM	5	1	6
11:38 AM	6	3	9
11:39 AM	7	2	9
11:40 AM	6	0	6
11:41 AM	6	0	6
11:42 AM	5	1	6
11:43 AM	3	0	3
11:44 AM	1	0	1
11:45 AM	2	0	2
11:46 AM	0	0	0
11:47 AM	0	0	0
11:48 AM	1	1	2
11:49 AM	1	0	1
11:50 AM	1	0	1
11:51 AM	1	0	1
11:52 AM	0	0	0
11:53 AM	1	0	1
11:54 AM	3	0	3
11:55 AM	4	0	4
11:56 AM	3	0	3
11:57 AM	2	0	2
11:58 AM	3	1	4
11:59 AM	3	2	5
12:00 PM	3	2	5
12:01 PM	5	1	6
12:02 PM	5	1	6
12:03 PM	4	3	7
12:04 PM	4	2	6
12:05 PM	5	1	6
12:06 PM	7	3	10
12:07 PM	8	3	11

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
4:00 PM	1	1	2
4:01 PM	2	1	3
4:02 PM	1	0	1
4:03 PM	2	0	2
4:04 PM	3	0	3
4:05 PM	3	0	3
4:06 PM	5	1	6
4:07 PM	5	3	8
4:08 PM	5	5	10
4:09 PM	5	4	9
4:10 PM	4	3	7
4:11 PM	5	3	8
4:12 PM	6	3	9
4:13 PM	5	3	8
4:14 PM	4	4	8
4:15 PM	3	4	7
4:16 PM	5	2	7
4:17 PM	6	1	7
4:18 PM	5	2	7
4:19 PM	5	0	5
4:20 PM	4	1	5
4:21 PM	2	3	5
4:22 PM	3	4	7
4:23 PM	5	6	11
4:24 PM	6	3	9
4:25 PM	5	4	9
4:26 PM	6	2	8
4:27 PM	5	3	8
4:28 PM	4	2	6
4:29 PM	2	4	6
4:30 PM	3	1	4
4:31 PM	4	1	5
4:32 PM	4	0	4
4:33 PM	3	0	3
4:34 PM	4	0	4
4:35 PM	3	2	5
4:36 PM	4	2	6
4:37 PM	5	4	9
4:38 PM	3	2	5
4:39 PM	5	2	7
4:40 PM	3	1	4
4:41 PM	5	0	5
4:42 PM	5	1	6
4:43 PM	3	1	4
4:44 PM	2	0	2
4:45 PM	3	1	4
4:46 PM	2	0	2
4:47 PM	2	0	2
4:48 PM	2	0	2
4:49 PM	1	1	2
4:50 PM	1	2	3
4:51 PM	2	0	2
4:52 PM	1	2	3
4:53 PM	2	1	3
4:54 PM	3	3	6
4:55 PM	4	1	5
4:56 PM	3	3	6
4:57 PM	4	3	7
4:58 PM	4	1	5
4:59 PM	4	2	6
5:00 PM	6	0	6
5:01 PM	7	1	8
5:02 PM	6	1	7
5:03 PM	5	2	7
5:04 PM	6	1	7
5:05 PM	5	1	6
5:06 PM	4	1	5
5:07 PM	4	1	5

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
12:08 PM	6	3	9
12:09 PM	7	1	8
12:10 PM	7	2	9
12:11 PM	7	3	10
12:12 PM	6	4	10
12:13 PM	6	4	10
12:14 PM	4	3	7
12:15 PM	6	2	8
12:16 PM	4	2	6
12:17 PM	3	4	7
12:18 PM	3	2	5
12:19 PM	4	2	6
12:20 PM	4	3	7
12:21 PM	3	3	6
12:22 PM	4	2	6
12:23 PM	4	2	6
12:24 PM	5	0	5
12:25 PM	1	0	1
12:26 PM	1	0	1
12:27 PM	0	0	0
12:28 PM	3	2	5
12:29 PM	3	1	4
12:30 PM	2	2	4
12:31 PM	3	2	5
12:32 PM	5	1	6
12:33 PM	4	3	7
12:34 PM	4	3	7
12:35 PM	4	3	7
12:36 PM	4	3	7
12:37 PM	5	2	7
12:38 PM	6	2	8
12:39 PM	6	1	7
12:40 PM	5	1	6
12:41 PM	5	1	6
12:42 PM	4	1	5
12:43 PM	7	2	9
12:44 PM	7	2	9
12:45 PM	6	2	8
12:46 PM	5	1	6
12:47 PM	6	1	7
12:48 PM	6	2	8
12:49 PM	6	1	7
12:50 PM	4	1	5
12:51 PM	4	4	8
12:52 PM	4	3	7
12:53 PM	5	2	7
12:54 PM	6	2	8
12:55 PM	5	2	7
12:56 PM	6	3	9
12:57 PM	4	5	9
12:58 PM	6	6	12
12:59 PM	5	6	11
1:00 PM	3	7	10
1:01 PM	5	5	10
1:02 PM	3	6	9
1:03 PM	3	4	7
1:04 PM	6	5	11
1:05 PM	4	5	9
1:06 PM	5	3	8
1:07 PM	6	3	9
1:08 PM	5	3	8
1:09 PM	4	5	9
1:10 PM	5	3	8
1:11 PM	5	2	7
1:12 PM	6	2	8
1:13 PM	4	4	8
1:14 PM	6	2	8
1:15 PM	6	3	9
1:16 PM	6	3	9
1:17 PM	6	2	8
1:18 PM	6	2	8
1:19 PM	4	2	6

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
5:08 PM	3	0	3
5:09 PM	3	0	3
5:10 PM	2	0	2
5:11 PM	2	0	2
5:12 PM	1	2	3
5:13 PM	2	1	3
5:14 PM	3	1	4
5:15 PM	3	3	6
5:16 PM	4	2	6
5:17 PM	3	2	5
5:18 PM	3	1	4
5:19 PM	4	1	5
5:20 PM	3	1	4
5:21 PM	4	0	4
5:22 PM	4	0	4
5:23 PM	4	0	4
5:24 PM	2	0	2
5:25 PM	3	0	3
5:26 PM	3	1	4
5:27 PM	3	0	3
5:28 PM	2	2	4
5:29 PM	4	1	5
5:30 PM	5	1	6
5:31 PM	4	1	5
5:32 PM	4	0	4
5:33 PM	4	0	4
5:34 PM	3	0	3
5:35 PM	1	0	1
5:36 PM	0	0	0
5:37 PM	2	0	2
5:38 PM	3	1	4
5:39 PM	4	0	4
5:40 PM	3	2	5
5:41 PM	3	2	5
5:42 PM	3	0	3
5:43 PM	5	0	5
5:44 PM	4	0	4
5:45 PM	2	0	2
5:46 PM	1	0	1
5:47 PM	1	0	1
5:48 PM	2	1	3
5:49 PM	3	0	3
5:50 PM	2	2	4
5:51 PM	2	0	2
5:52 PM	2	0	2
5:53 PM	1	0	1
5:54 PM	2	1	3
5:55 PM	3	1	4
5:56 PM	3	0	3
5:57 PM	2	0	2
5:58 PM	0	0	0
5:59 PM	1	0	1
6:00 PM	1	0	1
6:01 PM	0	0	0
6:02 PM	1	0	1
6:03 PM	0	1	1
6:04 PM	0	1	1
6:05 PM	2	0	2
6:06 PM	1	0	1
6:07 PM	1	0	1
6:08 PM	2	0	2
6:09 PM	4	0	4
6:10 PM	5	0	5
6:11 PM	6	0	6
6:12 PM	7	0	7
6:13 PM	6	0	6
6:14 PM	6	0	6
6:15 PM	5	1	6
6:16 PM	5	0	5
6:17 PM	5	0	5
6:18 PM	3	0	3
6:19 PM	2	0	2

Project: 11066 Magnolia Ave Riverside  
 City: Riverside,CA

Date: 3/30/2019  
 Day: Saturday

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
1:20 PM	5	7	12
1:21 PM	5	6	11
1:22 PM	5	5	10
1:23 PM	5	3	8
1:24 PM	3	4	7
1:25 PM	2	4	6
1:26 PM	4	2	6
1:27 PM	6	2	8
1:28 PM	5	1	6
1:29 PM	4	4	8
1:30 PM	7	3	10
1:31 PM	6	4	10
1:32 PM	5	3	8
1:33 PM	4	5	9
1:34 PM	5	3	8
1:35 PM	4	6	10
1:36 PM	3	6	9
1:37 PM	4	8	12
1:38 PM	4	6	10
1:39 PM	6	5	11
1:40 PM	4	6	10
1:41 PM	4	5	9
1:42 PM	5	5	10
1:43 PM	5	4	9
1:44 PM	5	3	8
1:45 PM	6	2	8
1:46 PM	7	3	10
1:47 PM	5	3	8
1:48 PM	5	2	7
1:49 PM	5	3	8
1:50 PM	3	5	8
1:51 PM	4	6	10
1:52 PM	6	3	9
1:53 PM	6	1	7
1:54 PM	6	1	7
1:55 PM	5	1	6
1:56 PM	6	2	8
1:57 PM	7	2	9
1:58 PM	6	2	8
1:59 PM	5	2	7

Arrival Time	Pick-up to Order Board	Behind Order Board	Total
6:20 PM	3	0	3
6:21 PM	1	0	1
6:22 PM	2	0	2
6:23 PM	2	0	2
6:24 PM	3	0	3
6:25 PM	3	0	3
6:26 PM	2	0	2
6:27 PM	2	0	2
6:28 PM	1	0	1
6:29 PM	2	0	2
6:30 PM	3	1	4
6:31 PM	4	2	6
6:32 PM	3	5	8
6:33 PM	4	4	8
6:34 PM	4	5	9
6:35 PM	3	3	6
6:36 PM	4	2	6
6:37 PM	4	0	4
6:38 PM	2	4	6
6:39 PM	5	4	9
6:40 PM	4	3	7
6:41 PM	5	3	8
6:42 PM	5	4	9
6:43 PM	3	5	8
6:44 PM	4	6	10
6:45 PM	3	5	8
6:46 PM	4	4	8
6:47 PM	4	7	11
6:48 PM	4	3	7
6:49 PM	3	6	9
6:50 PM	5	4	9
6:51 PM	5	3	8
6:52 PM	5	5	10
6:53 PM	3	3	6
6:54 PM	3	5	8
6:55 PM	3	4	7
6:56 PM	4	2	6
6:57 PM	4	1	5
6:58 PM	3	5	8
6:59 PM	4	3	7

**ATTACHMENT B**  
ITE QUEUING CALCULATION WORKSHEETS

## DRIVE-THROUGH QUEUING ANALYSIS

*Project:* Raising Cane's Restaurant  
*Location:* 1215 Ontario Avenue, Corona

### INPUT VALUES

Variable	Description	Value
A =	average number of vehicle arrivals per hour <sup>1</sup>	79
S =	service rate, number of vehicles per hour	87
I =	traffic intensity, utilization factor = A/S	0.91
Q =	queue capacity (vehicles)	34

### FORMULAS

Average Length of Queue

$$\text{Avg } Q = A^2 / S(S-A) = I^2 / 1-I \quad 8.67$$

Probability of Q Number of Vehicles in Queue

$$P(Q) = (I)^Q (1-I) \quad 0.32\%$$

Probability of Queue Exceeding Q Vehicles

$$\sum_{Q=0}^{Q=a} P(Q) \geq 0.95 \quad 3.09\%$$

<sup>1</sup> For a worst-case analysis, the peak arrival rate observed at the Orange Raising Cane's site is used here.

Source: Institute of Transportation Engineers (ITE)  
 Transportation Planning Handbook, 3rd Edition

## **APPENDIX H:**

### **ON-SITE CIRCULATION – TRASH PICK-UP TRUCKS**

<jly@TAIT.COM>

**Subject:** [External] RE: Looking for Trash Enclosure Approval-QQ & restaurants Corona

Greg,

Waste Management approves the trash enclosures as they are currently presented in the attached documents as well as the path of travel for our truck.

Thank you,

**Miguel Velazquez**

District Manager

[mvelazqu@wm.com](mailto:mvelazqu@wm.com)

**Waste Management**

800 South Temescal Street

Corona, CA 92879

Tel 951 817 2499

Cell 951 232 3507

---

**From:** Greg Fick <[gfick@TAIT.COM](mailto:gfick@TAIT.COM)>

**Sent:** Thursday, August 8, 2019 9:53 AM

**To:** Velazquez, Miguel <[MVelazqu@wm.com](mailto:MVelazqu@wm.com)>

**Cc:** Chris Costanzo <[ccostanzo@costanzoinv.com](mailto:ccostanzo@costanzoinv.com)>; Ambarish Mukherjee <[Ambarish.Mukherjee@lsa.net](mailto:Ambarish.Mukherjee@lsa.net)>; Joey Ly <[jly@TAIT.COM](mailto:jly@TAIT.COM)>

**Subject:** [EXTERNAL] RE: Looking for Trash Enclosure Approval-QQ & restaurants Corona

Hello Miguel,

Per the email below, you recently approved the trash enclosure locations for the proposed Quick Quack car wash. The City has also asked for us to reach out to you with regards to the other two drive-thru restaurants to ensure that the you approve the layout so that pick-ups will not interfere with the drive-thru operations. Could you please provide confirmation? For your reference, I have provided the Site Plan and all three site turning movements. Please do not hesitate to contact me if you have any questions.

**Greg Fick | TAIT & Associates, Inc.**

701 N. Parkcenter Drive, Santa Ana, CA 92705

P: 714-560-8678 C: 714-943-1383 F: 714-560-8211

[gfick@tait.com](mailto:gfick@tait.com) | [www.tait.com](http://www.tait.com)



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---

**From:** Velazquez, Miguel [<mailto:MVelazqu@wm.com>]  
**Sent:** Tuesday, August 6, 2019 3:09 PM  
**To:** Brian Firenze  
**Subject:** RE: Looking for Trash Enclosure Approval-QQ Corona

Brian,

Waste Management approves the trash enclosures as it is currently presented in the attached documents as well as the path of travel for our truck.

Thank you,

**Miguel Velazquez**  
District Manager  
[mvelazqu@wm.com](mailto:mvelazqu@wm.com)

**Waste Management**  
800 South Temescal Street  
Corona, CA 92879  
Tel 951 817 2499  
Cell 951 232 3507

---

**From:** Brian Firenze <[brianf@crmarchitects.com](mailto:brianf@crmarchitects.com)>  
**Sent:** Tuesday, August 6, 2019 2:30 PM  
**To:** Velazquez, Miguel <[MVelazqu@wm.com](mailto:MVelazqu@wm.com)>  
**Subject:** [EXTERNAL] RE: Looking for Trash Enclosure Approval-QQ Corona

Thank you Miquel. I really appreciate your quick response. Please see attached drawings and let me know if there is anything else you need.



**Brian Firenze**  
Project Coordinator

**Carissimi Rohrer McMullen Architects & Planners**  
5800 Stanford Ranch Road Suite 720  
Rocklin, CA. 95765  
916.451.1500 ext 102 Fax 916.451.1600

[www.crmarchitects.com](http://www.crmarchitects.com)

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---

**From:** Velazquez, Miguel [<mailto:MVelazqu@wm.com>]  
**Sent:** Tuesday, August 6, 2019 2:25 PM  
**To:** Brian Firenze  
**Subject:** RE: Looking for Trash Enclosure Approval-QQ Corona

Send the design over my way and I can get back to you with our recommendations or with an approval.

---

**From:** Brian Firenze <[brianf@crmarchitects.com](mailto:brianf@crmarchitects.com)>  
**Sent:** Tuesday, August 6, 2019 2:18 PM  
**To:** Velazquez, Miguel <[MVelazqu@wm.com](mailto:MVelazqu@wm.com)>  
**Subject:** [EXTERNAL] RE: Looking for Trash Enclosure Approval-QQ Corona

We have not submitted to the City as of yet. We need to know if Waste Management will approve our design and location of the Trash Enclosure. Please let me know if this is something that you can help with.

Thank You



**Brian Firenze**  
Project Coordinator

***Carissimi Rohrer McMullen Architects & Planners***

5800 Stanford Ranch Road Suite 720  
Rocklin, CA. 95765  
916.451.1500 ext 102 Fax 916.451.1600  
[www.crmarchitects.com](http://www.crmarchitects.com)

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**From:** Velazquez, Miguel [<mailto:MVelazqu@wm.com>]  
**Sent:** Monday, August 5, 2019 4:48 PM  
**To:** Brian Firenze  
**Cc:** Garcia, Xochilt  
**Subject:** RE: Looking for Trash Enclosure Approval-QQ Corona

Hello Brian,

We can assist you with your request.

What is the address and the name of the project? What is the applicant name that submitted the specs to the city?

---

**From:** Brian Firenze <[brianf@crmarchitects.com](mailto:brianf@crmarchitects.com)>  
**Sent:** Monday, August 5, 2019 4:20 PM  
**To:** CM SOCAL Dispatch <[CMSOCALDispatch@wm.com](mailto:CMSOCALDispatch@wm.com)>  
**Cc:** Gonzalez, Andrew <[agonza62@wm.com](mailto:agonza62@wm.com)>; Cordeiro, Russell <[rcordeir@wm.com](mailto:rcordeir@wm.com)>; Garcia, Xochilt <[Xgarcia@wm.com](mailto:Xgarcia@wm.com)>; Obregon, Lidia <[LObregon@wm.com](mailto:LObregon@wm.com)>; Velazquez, Miguel <[MVelazqu@wm.com](mailto:MVelazqu@wm.com)>  
**Subject:** [EXTERNAL] Looking for Trash Enclosure Approval-QQ Corona

Good afternoon-

I have been trying to get Waste Management approval for our Trash Enclosure Design for our upcoming project in Corona. Is there anyone who can help us with this. I have sent a site plan along with our trash enclosure specs out already. If someone could please help me out with a good contact number or email I would appreciate it. I am also looking for your specs and requirements so that I can pass this along to our designer.

Thank You!



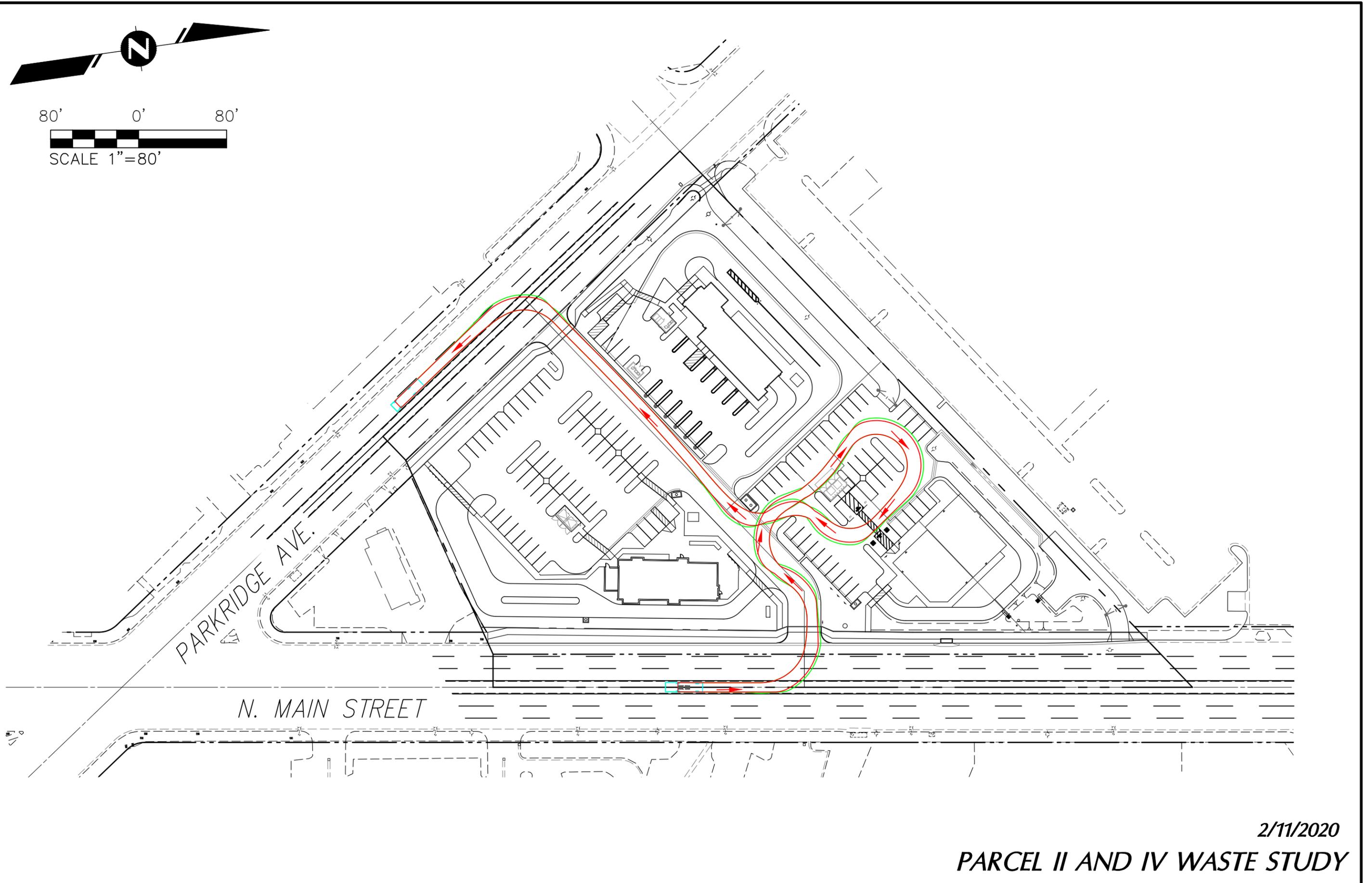
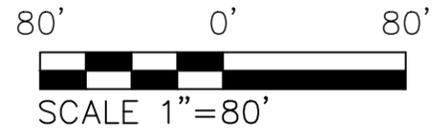
**Brian Firenze**  
Project Coordinator

**Carissimi Rohrer McMullen Architects & Planners**  
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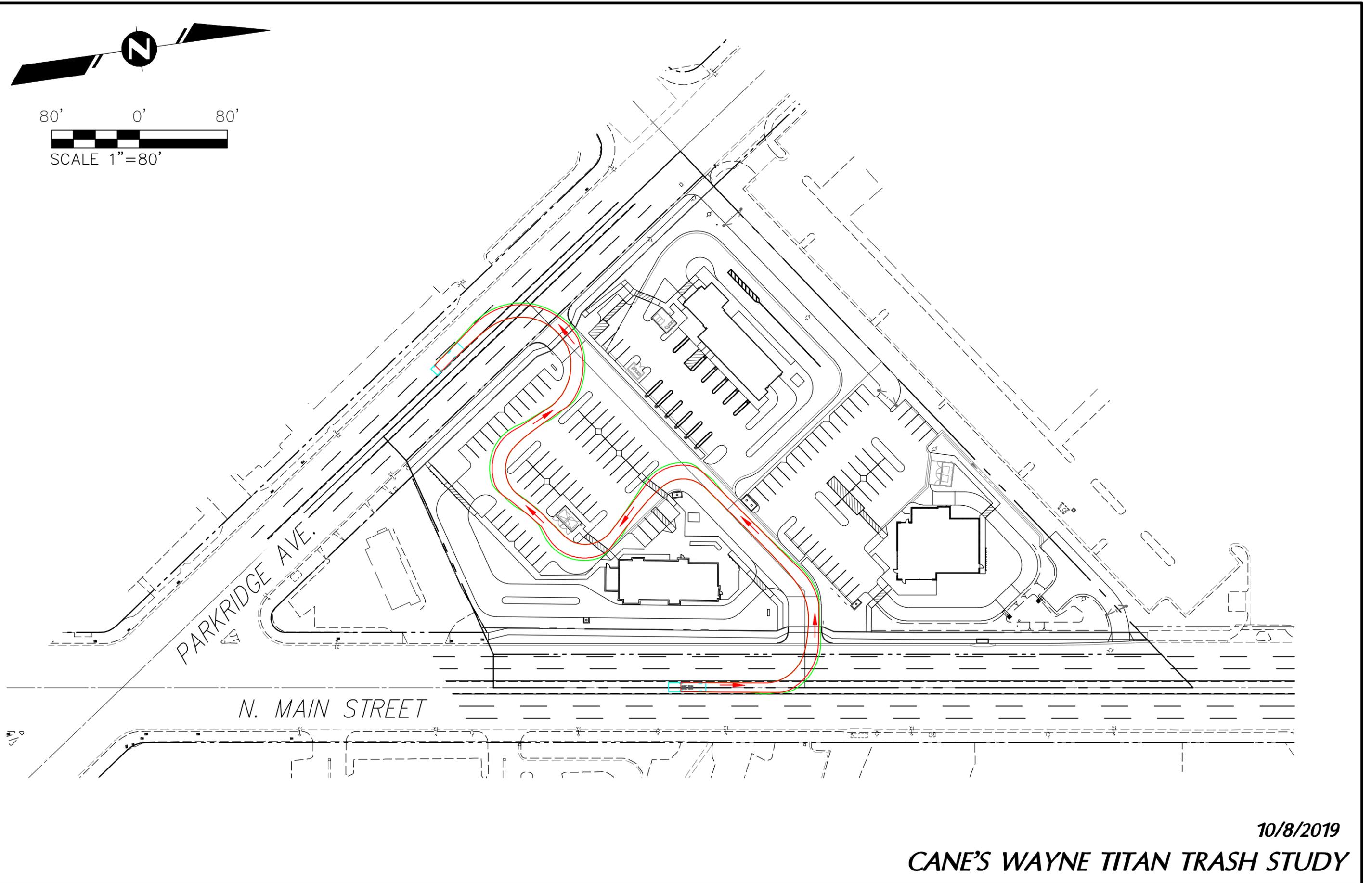
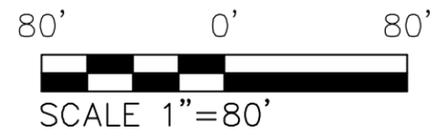
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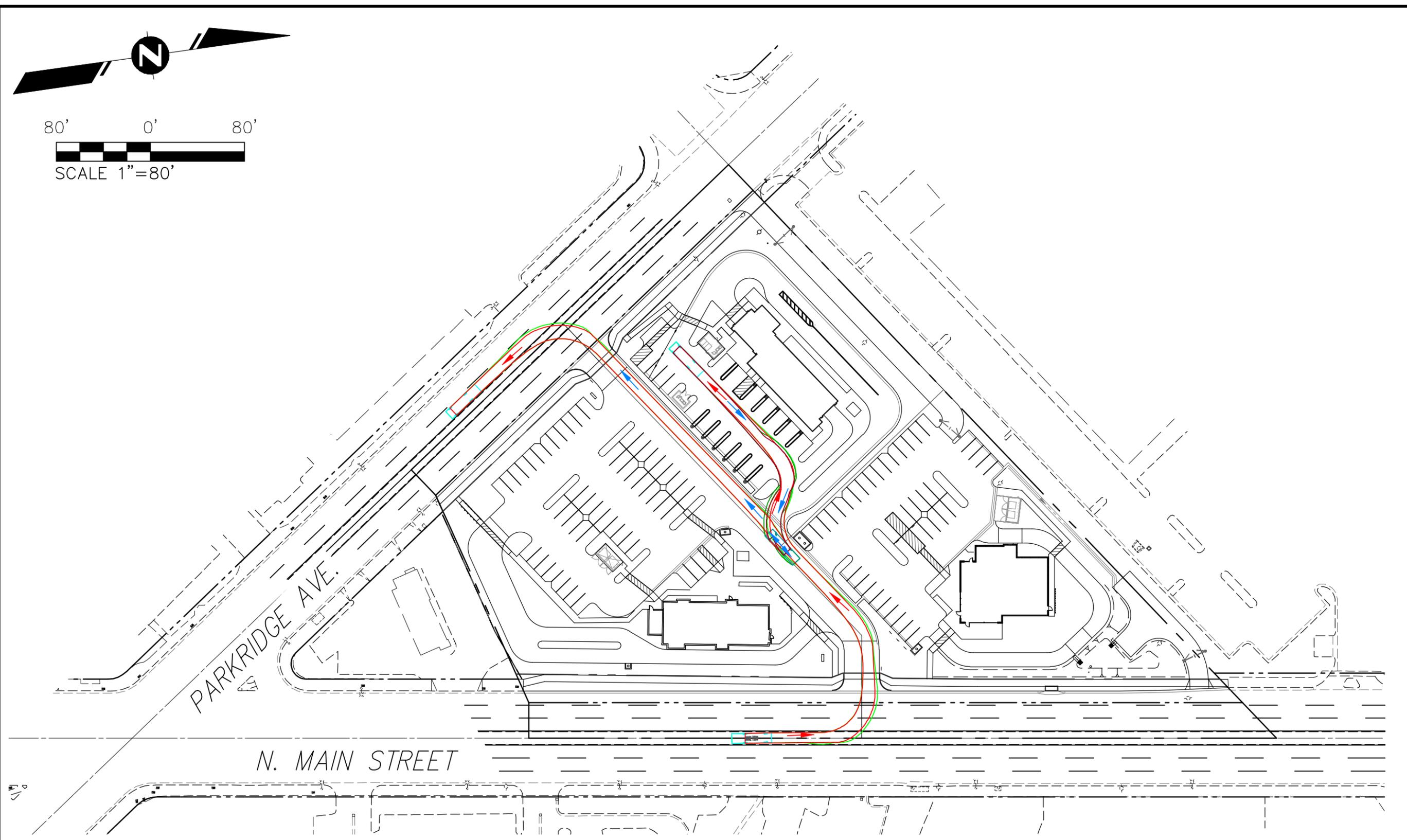
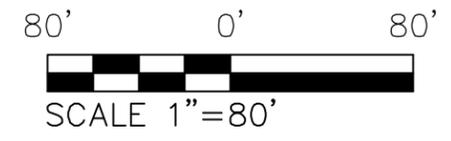
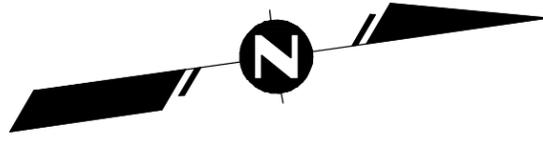
2/11/2020

# PARCEL II AND IV WASTE STUDY



10/8/2019

# CANE'S WAYNE TITAN TRASH STUDY

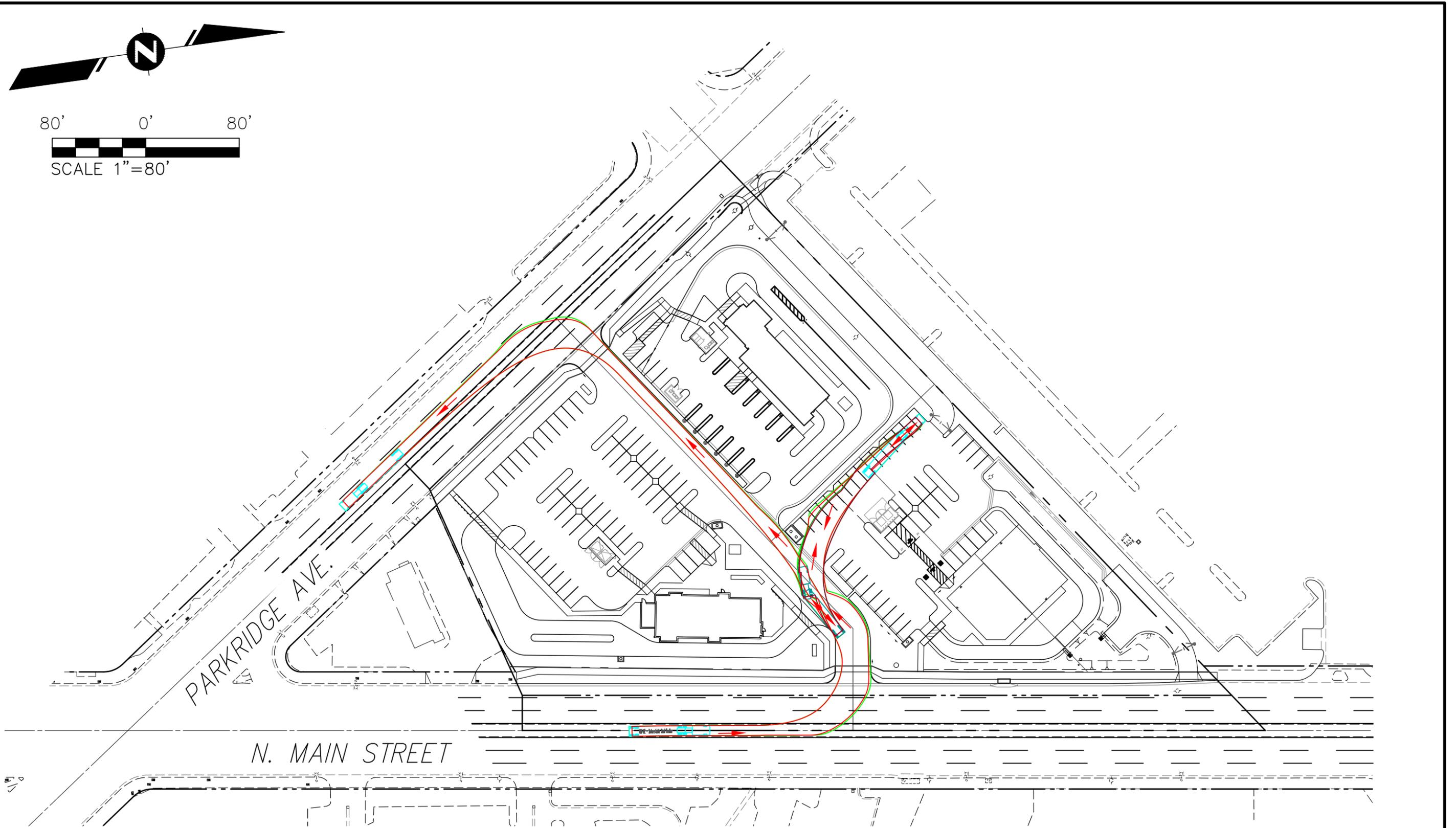
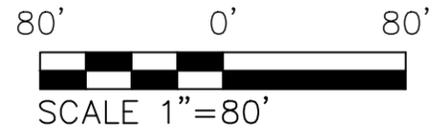


10/8/2019

# QUICK QUACK WAYNE TITAN TRASH STUDY

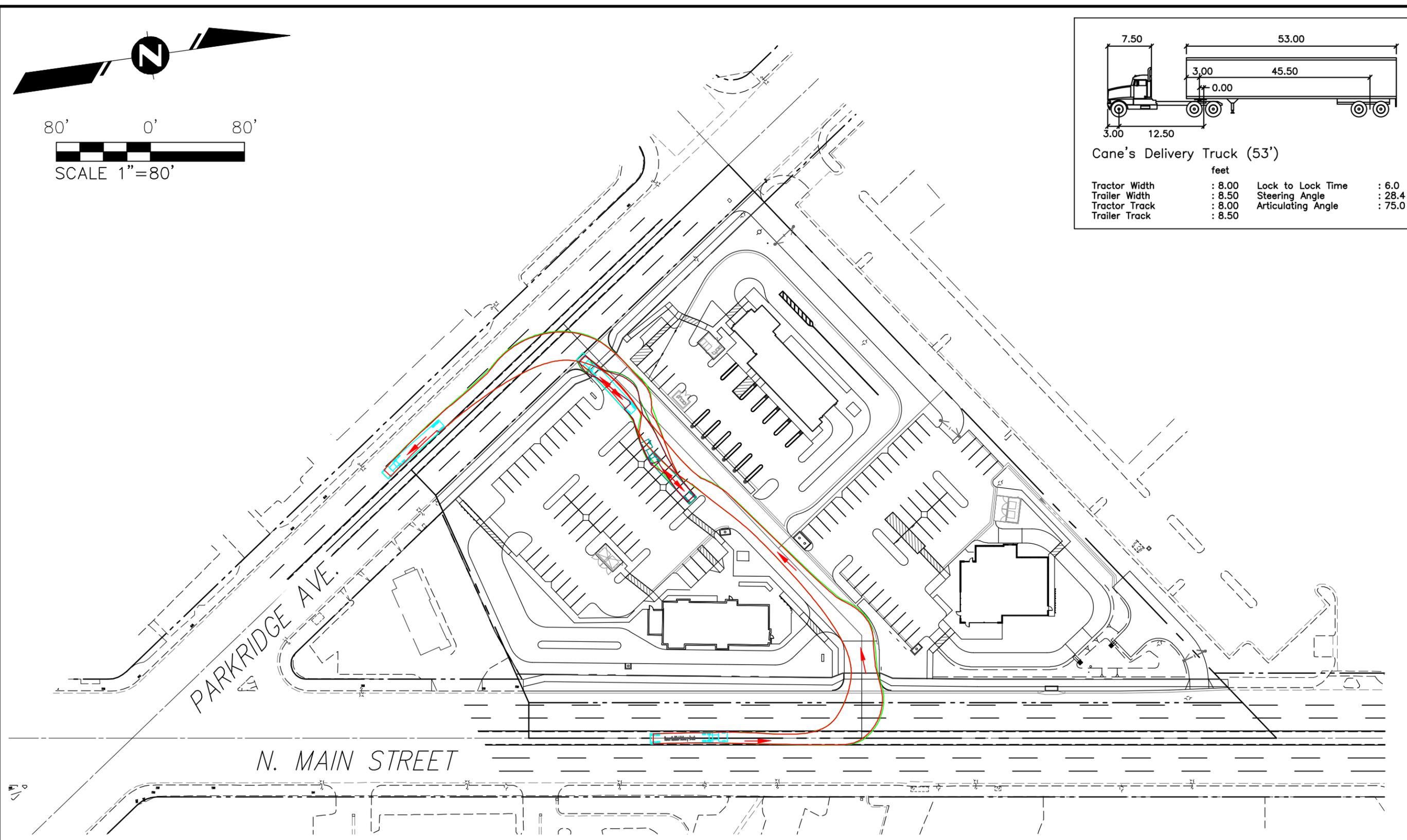
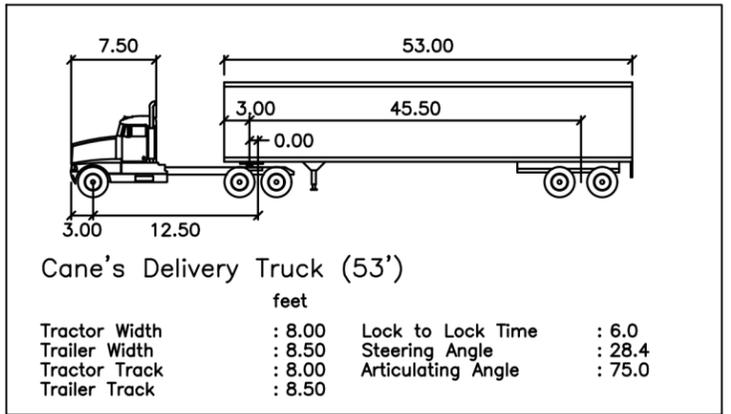
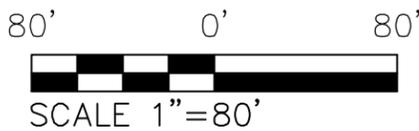
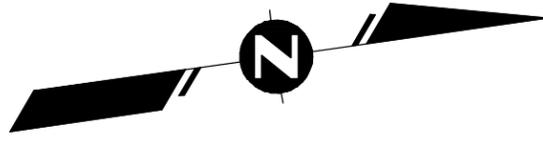
## **APPENDIX I:**

### **ON-SITE CIRCULATION AND TRUCK TURNING TEMPLATES – DELIVERY TRUCKS**



1/29/2020

# PARCEL II & IV LOADING EXHIBIT



10/8/2019

### ALTERNATIVE 2: CANE'S DELIVERY TRUCK CANES STUDY